CTA Bus Slow Zone Study
Final Project Report
CTA Route #66
Chicago Avenue

Prepared for:
Chicago Transit Authority
Chicago Department of Transportation

By:
Stanley Consultants Inc.
EJM Engineering Inc.

Final
June 2018

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APPENDIX A – Crash Tables

Table 1 - Crash Analysis for Western

Type of Collision	2010		2011		2012		2013		2014		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Rear End	7	36.8	9	36.0	8	29.6	8	33.3	5	20.8	37	31.1
Turning	4	21.1	4	16.0	8	29.6	6	25.0	5	20.8	27	22.7
Fixed Object	1	5.3	1	4.0	0	0.0	0	0.0	0	0.0	2	1.7
Head On	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pedestrian	1	5.3	1	4.0	3	11.1	0	0.0	2	8.3	7	5.9
Bicycle	0	0.0	1	4.0	1	3.7	0	0.0	2	8.3	4	3.4
Parked Vehicle	1	5.3	4	16.0	1	3.7	1	4.2	3	12.5	10	8.4
Animal	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sideswiped-Same Dir.	4	21.1	3	12.0	2	7.4	4	16.7	5	20.8	18	15.1
Sideswiped-Opp. Dir.	0	0.0	0	0.0	0	0.0	1	4.2	1	4.2	2	1.7
Angle	1	5.3	2	8.0	4	14.8	4	16.7	1	4.2	12	10.1
Overturned	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other Non Collision	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other Object	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	**19**	**100.0**	**25**	**100.0**	**27**	**100.0**	**24**	**100.0**	**24**	**100.0**	**119**	**100.0**
Fatal Crashes	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Type A Injury Crashes	0	0.0	2	8.0	2	7.4	0	0.0	0	0.0	4	3.4
Type B Injury Crashes	1	5.3	2	8.0	1	3.7	1	4.2	4	16.7	9	7.6
Type C Injury Crashes	2	10.5	1	4.0	2	7.4	0	0.0	1	4.2	6	5.0
Total Injury Crashes	**3**	**15.8**	**5**	**20.0**	**5**	**18.5**	**1**	**4.2**	**5**	**20.8**	**19**	**16.0**

Table 2 - Crash Analysis for Ogden-Milwaukee

Type of Collision	2010		2011		2012		2013		2014		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Rear End	20	31.3	8	13.6	8	12.3	18	27.3	14	21.2	68	21.3
Turning	13	20.3	16	27.1	16	24.6	10	15.2	11	16.7	66	20.6
Fixed Object	3	4.7	1	1.7	5	7.7	1	1.5	1	1.5	11	3.4
Head On	0	0.0	0	0.0	1	1.5	0	0.0	1	1.5	2	0.6
Pedestrian	1	1.6	3	5.1	1	1.5	3	4.5	0	0.0	8	2.5
Bicycle	11	17.2	12	20.3	11	16.9	13	19.7	18	27.3	65	20.3
Parked Vehicle	2	3.1	1	1.7	3	4.6	4	6.1	4	6.1	14	4.4
Animal	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sideswiped-Same Dir.	7	10.9	9	15.3	9	13.8	8	12.1	12	18.2	45	14.1
Sideswiped-Opp. Dir.	0	0.0	1	1.7	1	1.5	0	0.0	0	0.0	2	0.6
Angle	7	10.9	7	11.9	10	15.4	8	12.1	5	7.6	37	11.6
Overturned	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other Non Collision	0	0.0	1	1.7	0	0.0	1	1.5	0	0.0	2	0.6
Other Object	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	**64**	**100.0**	**59**	**100.0**	**65**	**100.0**	**66**	**100.0**	**66**	**100.0**	**320**	**100.0**
Fatal Crashes	0	0.0	0	0.0	1	1.5	0	0.0	0	0.0	1	0.3
Type A Injury Crashes	2	3.1	2	3.4	1	1.5	4	6.1	2	3.0	11	3.4
Type B Injury Crashes	13	20.3	9	15.3	14	21.5	9	13.6	11	16.7	56	17.5
Type C Injury Crashes	5	7.8	7	11.9	5	7.7	10	15.2	10	15.2	37	11.6
Total Injury Crashes	**20**	**31.3**	**18**	**30.5**	**21**	**32.3**	**23**	**34.8**	**23**	**34.8**	**105**	**32.8**

Table 3 - Crash Analysis for Larrabee

	2010		2011		2012		2013		2014		Total	
Type of Collision	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Rear End	10	35.7	14	42.4	14	40.0	14	53.8	8	32.0	60	40.8
Turning	6	21.4	8	24.2	4	11.4	1	3.8	4	16.0	23	15.6
Fixed Object	0	0.0	0	0.0	2	5.7	1	3.8	0	0.0	3	2.0
Head On	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pedestrian	3	10.7	0	0.0	1	2.9	0	0.0	1	4.0	5	3.4
Bicycle	3	10.7	0	0.0	2	5.7	1	3.8	2	8.0	8	5.4
Parked Vehicle	4	14.3	1	3.0	6	17.1	5	19.2	2	8.0	18	12.2
Animal	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sideswiped-Same Dir.	2	7.1	8	24.2	4	11.4	1	3.8	7	28.0	22	15.0
Sideswiped-Opp. Dir.	0	0.0	1	3.0	0	0.0	0	0.0	0	0.0	1	0.7
Angle	0	0.0	1	3.0	2	5.7	3	11.5	1	4.0	7	4.8
Overturned	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other Non Collision	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other Object	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	**28**	**100.0**	**33**	**100.0**	**35**	**100.0**	**26**	**100.0**	**25**	**100.0**	**147**	**100.0**
Fatal Crashes	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Type A Injury Crashes	1	3.6	0	0.0	3	8.6	1	3.8	3	12.0	8	5.4
Type B Injury Crashes	6	21.4	1	3.0	3	8.6	6	23.1	3	12.0	19	12.9
Type C Injury Crashes	1	3.6	1	3.0	2	5.7	1	3.8	0	0.0	5	3.4
Total Injury Crashes	**8**	**28.6**	**2**	**6.1**	**8**	**22.9**	**8**	**30.8**	**6**	**24.0**	**32**	**21.8**

Table 4 - Crash Analysis for Franklin to Fairbanks

	2010		2011		2012		2013		2014		Total	
Type of Collision	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Rear End	52	36.1	41	27.9	35	25.9	40	25.8	36	26.7	204	28.5
Turning	31	21.5	16	10.9	30	22.2	29	18.7	31	23.0	137	19.1
Fixed Object	0	0.0	2	1.4	1	0.7	1	0.6	0	0.0	4	0.6
Head On	0	0.0	2	1.4	0	0.0	0	0.0	0	0.0	2	0.3
Pedestrian	4	2.8	13	8.8	11	8.1	10	6.5	8	5.9	46	6.4
Bicycle	8	5.6	9	6.1	7	5.2	9	5.8	2	1.5	35	4.9
Parked Vehicle	16	11.1	14	9.5	10	7.4	15	9.7	12	8.9	67	9.4
Animal	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sideswiped-Same Dir.	22	15.3	32	21.8	26	19.3	39	25.2	35	25.9	154	21.5
Sideswiped-Opp. Dir.	3	2.1	1	0.7	2	1.5	2	1.3	1	0.7	9	1.3
Angle	7	4.9	16	10.9	12	8.9	9	5.8	8	5.9	52	7.3
Overturned	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other Non Collision	1	0.7	0	0.0	1	0.7	0	0.0	1	0.7	3	0.4
Other Object	0	0.0	1	0.7	0	0.0	1	0.6	1	0.7	3	0.4
Total	**144**	**100.0**	**147**	**100.0**	**135**	**100.0**	**155**	**100.0**	**135**	**100.0**	**716**	**100.0**
Fatal Crashes	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Type A Injury Crashes	1	0.7	4	2.7	7	5.2	3	1.9	3	2.2	18	2.5
Type B Injury Crashes	15	10.4	22	15.0	16	11.9	15	9.7	10	7.4	78	10.9
Type C Injury Crashes	11	7.6	11	7.5	14	10.4	18	11.6	8	5.9	62	8.7
Total Injury Crashes	**27**	**18.8**	**37**	**25.2**	**37**	**27.4**	**36**	**23.2**	**21**	**15.6**	**158**	**22.1**

APPENDIX B – CTA Training Map

66, N66 Chicago

Chicago Avenue/Kedzie Garages

Farebox 66

NOT DRAWN TO SCALE

Austin 6000W

cta

Laramie 5200W

Augusta

Cicero 4800W

Permission to depart timepoints early begins at Chicago/Kostner westbound between 05:00 and 22:00 ONLY

G

Kostner 00:00

R

Pulaski 4000W

G

Kedzie 3200W

Kedzie 3200 W

Troy 3100W

Van Buren

(Exit at California)

I-290

Grand

Western

Chicago 800N

Lower Wacker

Grand

Lower Wacker

Illinois

Wells

Grand

Ontario 00:00

Columbus

Fairbanks

Erie

Lake Shore Drive

(See Inset 1)

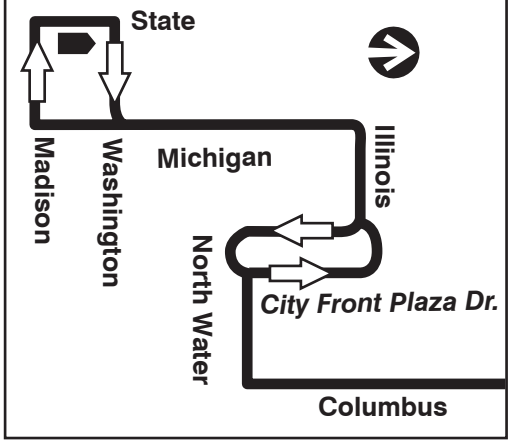
Streeter

R

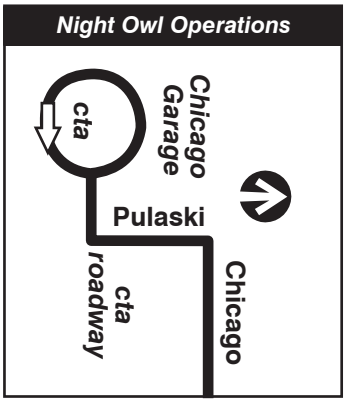
Navy Pier

Permission to depart timepoints early begins at Fairbanks/Ontario eastbound between 05:00 and 22:00 ONLY.

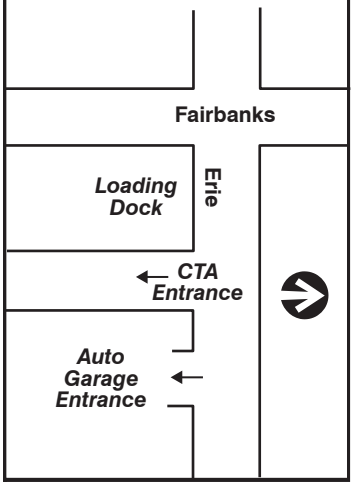
Night Owl Operations



Night Owl Operations



Inset 1



G GARAGE

LAYOVER

R RELIEF POINT

PULL IN PULL OUT

TURN BACK

00:00 Timepoints can be ignored beyond this point in indicated direction only between 05:00 and 22:00

EFFECTIVE DATE	6/26/15	DATE REVISED	6/26/15	SIGNAGE & WAYFINDING

APPENDIX C – Photo Logs

CTA Bus Slow Zone Project
Chicago-Western Photo Log

Prepared for:

Chicago Transit Authority

June 2017

Photo 1: Western Ave. – Looking North

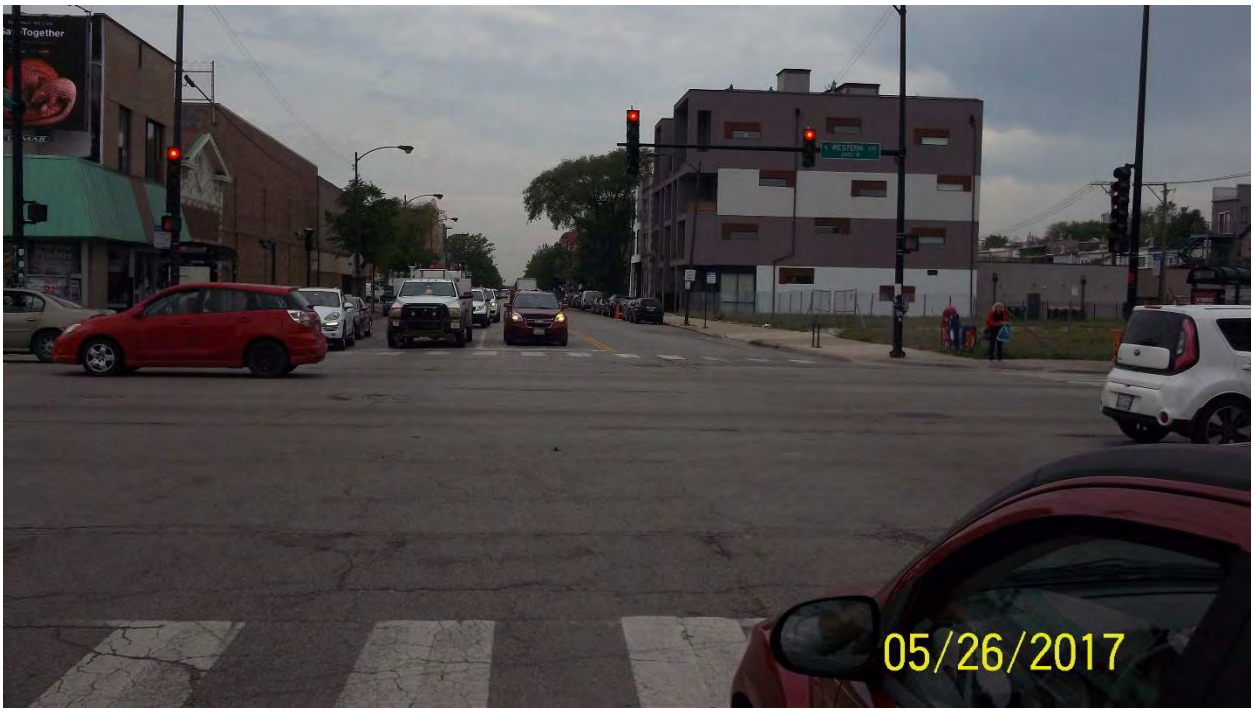


Photo 2: Chicago Ave. – Looking West

Photo 3: Western Ave. – Looking South

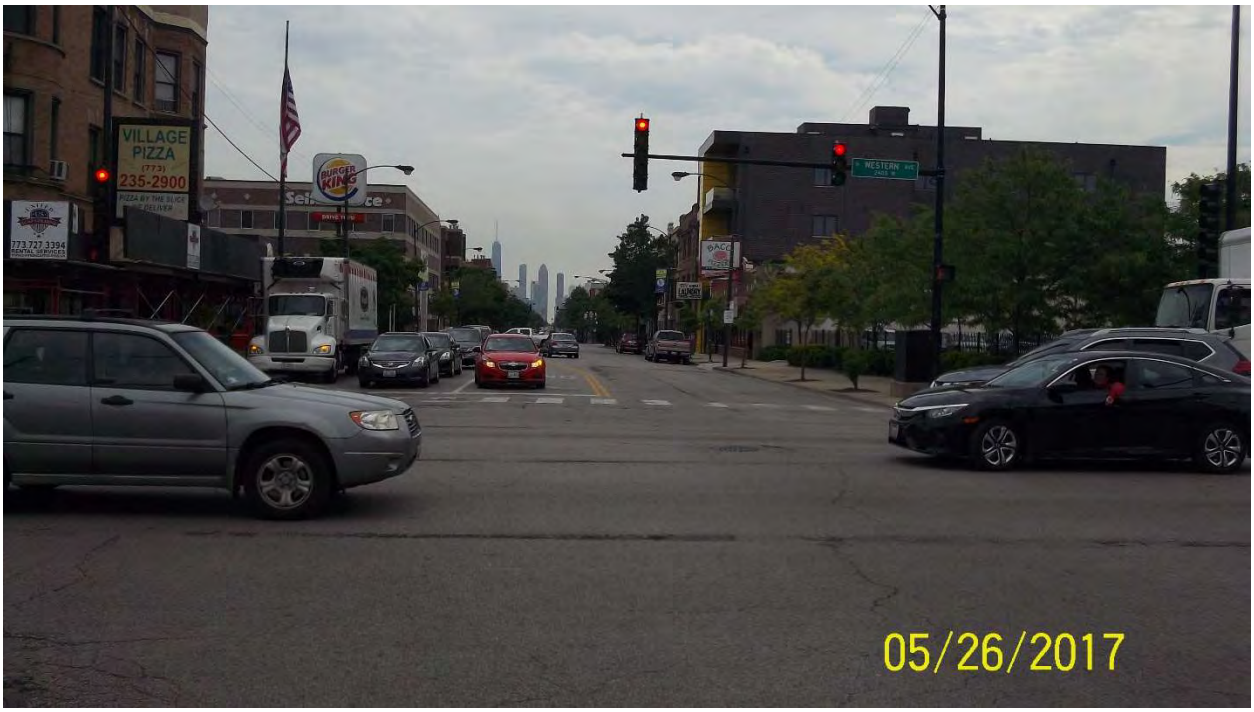


Photo 4: Chicago Ave. – Looking East

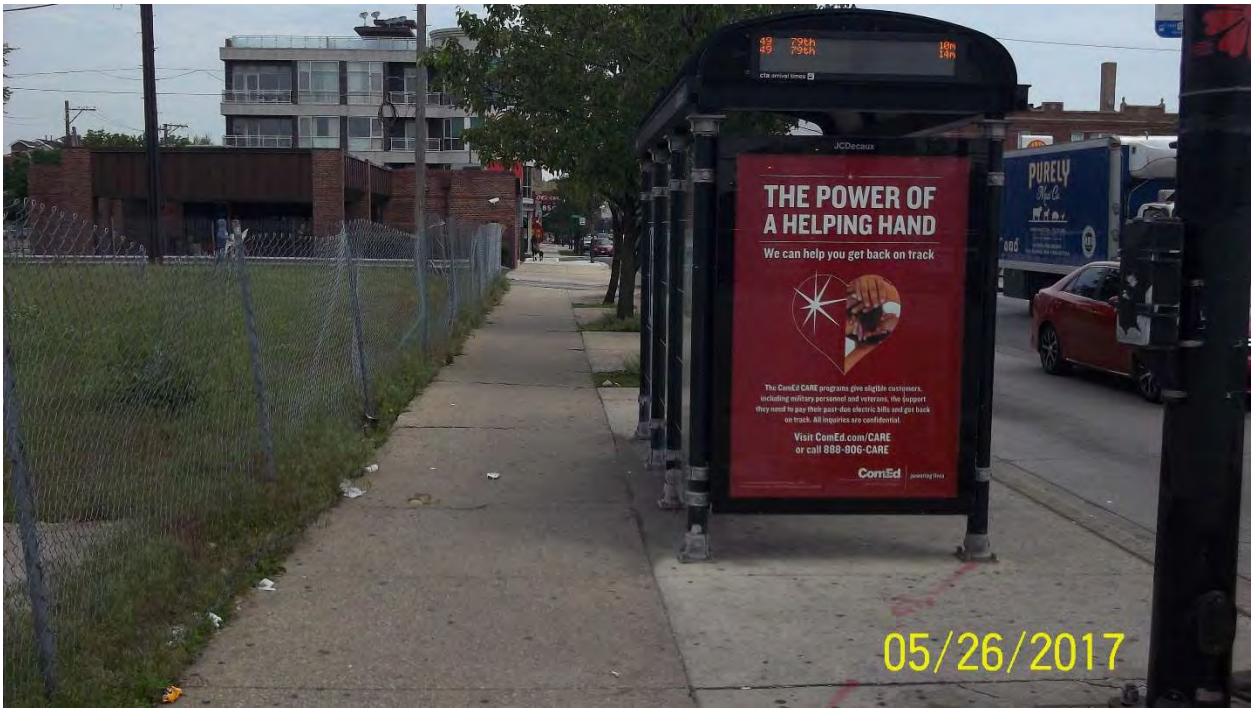


Photo 5: Northwest corner of Chicago Ave. / Western Ave. – Looking North

Photo 6: Northwest corner of Chicago Ave. / Western Ave. – Looking East

Photo 7: Northwest corner of Chicago Ave. / Western Ave. – Looking Southeast

Photo 8: Northwest corner of Chicago Ave. / Western Ave. – Looking South

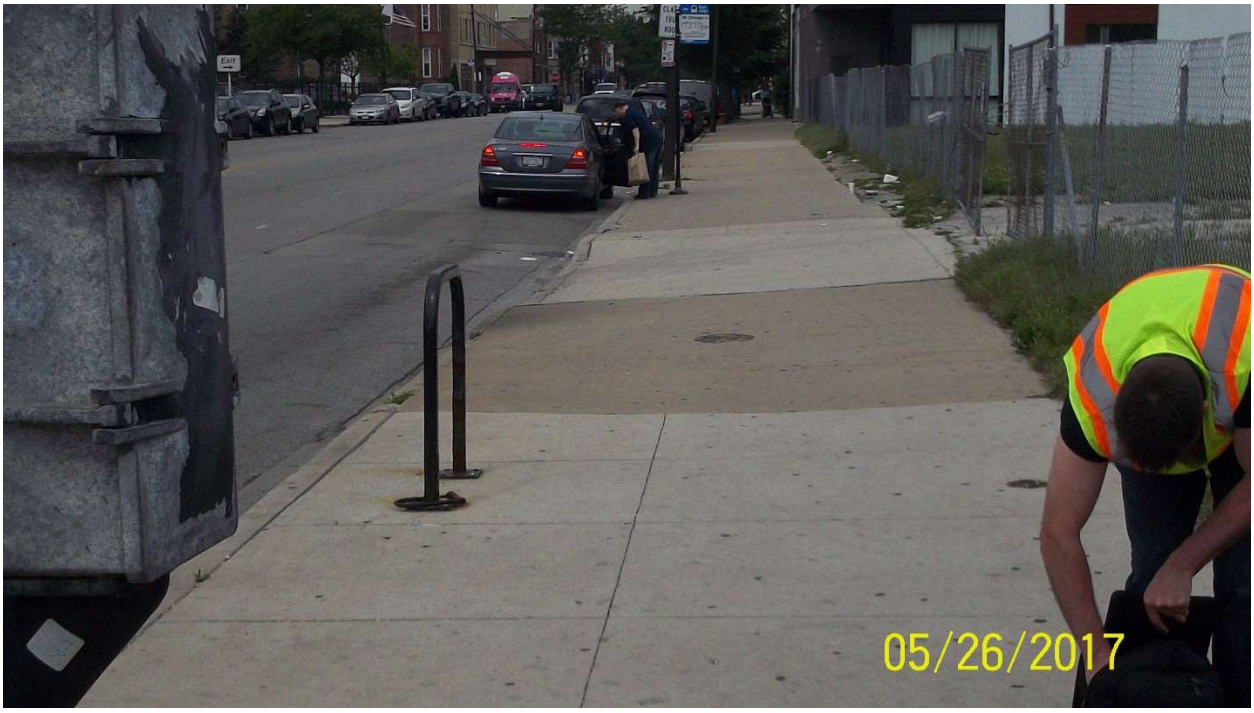


Photo 9: Northwest corner of Chicago Ave. / Western Ave. – Looking West

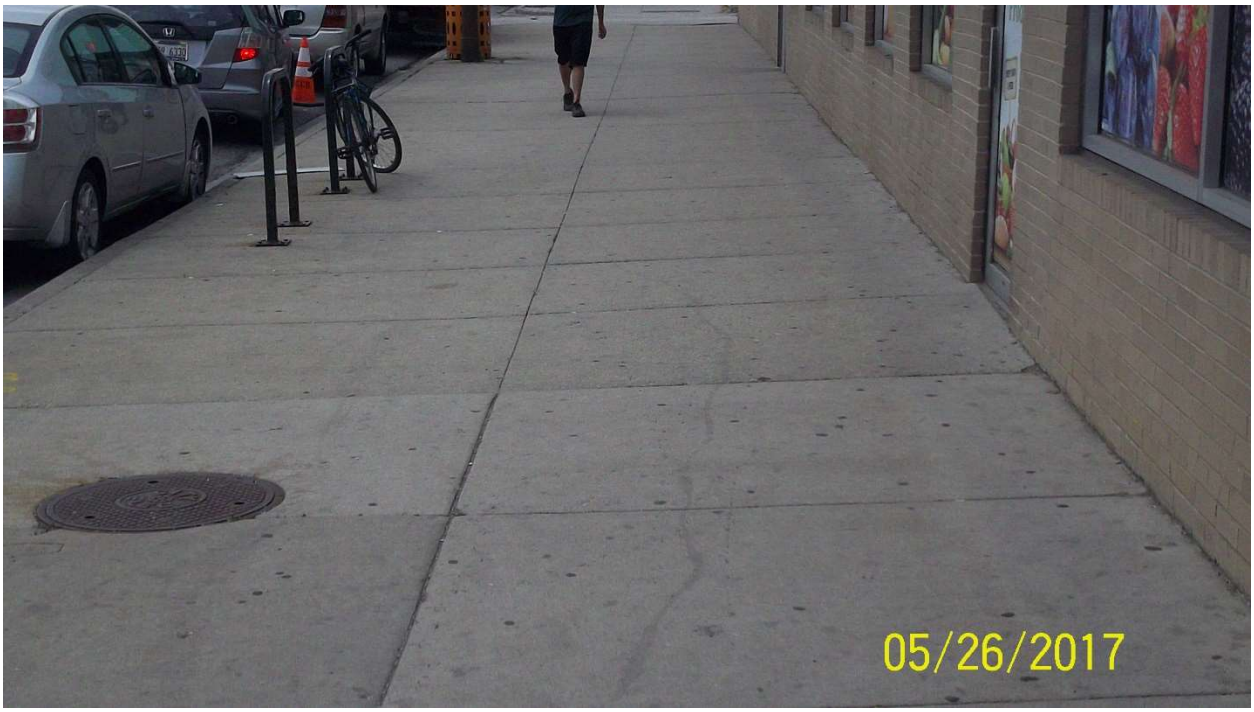


Photo 10: Southwest corner of Chicago Ave. / Western Ave. – Looking South

Photo 11: Southwest corner of Chicago Ave. / Western Ave. – Looking East

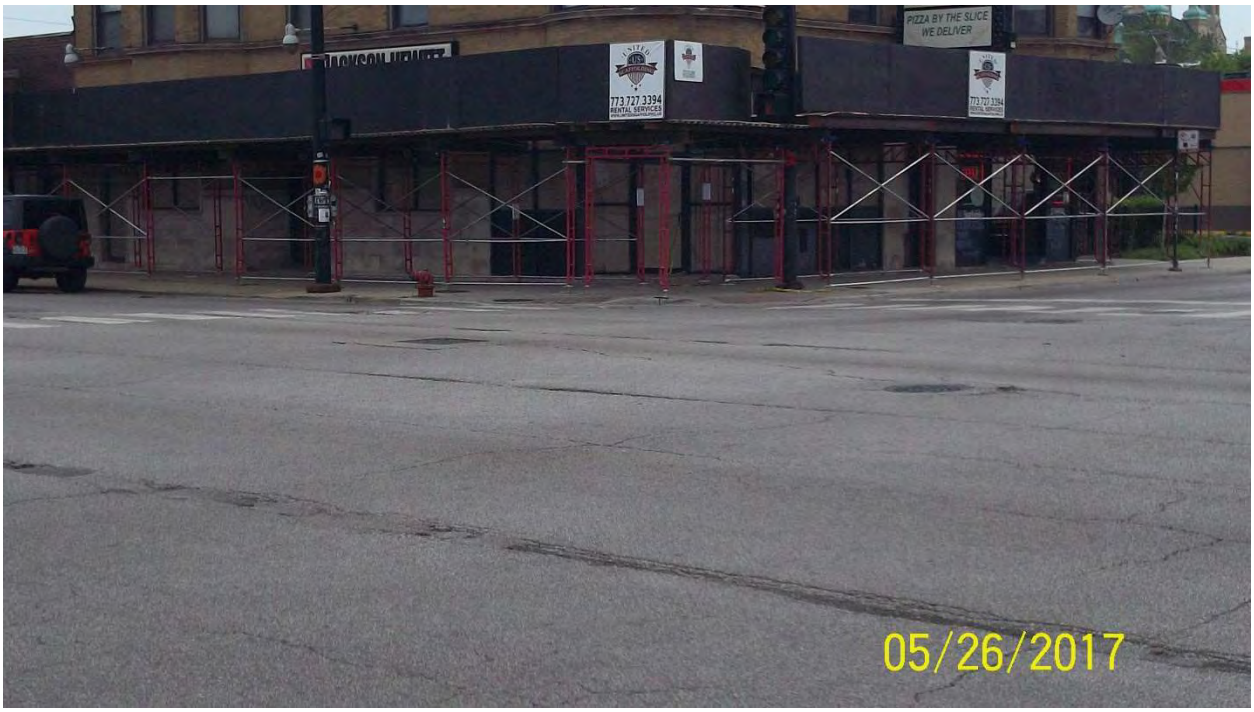


Photo 12: Southwest corner of Chicago Ave. / Western Ave. – Looking Northeast

Photo 13: Southwest corner of Chicago Ave. / Western Ave. – Looking North

Photo 14: Southwest corner of Chicago Ave. / Western Ave. – Looking West

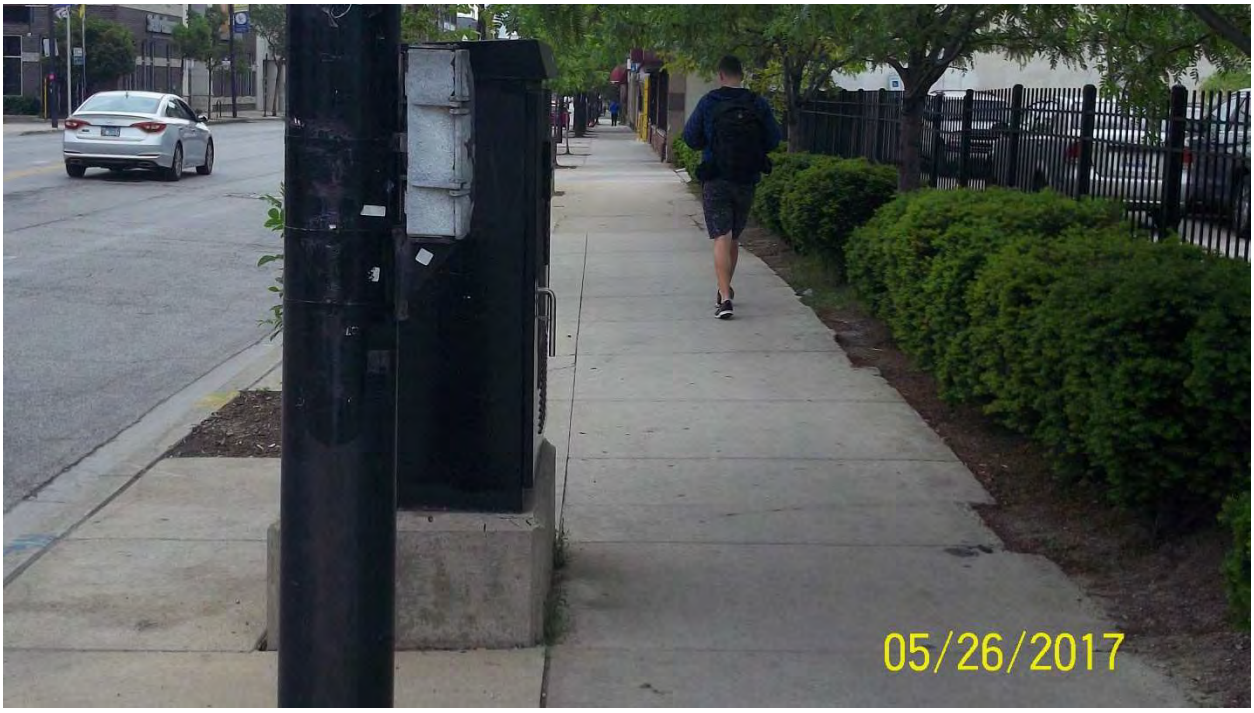


Photo 15: Southeast corner of Chicago Ave. / Western Ave. – Looking East

Photo 16: Southeast corner of Chicago Ave. / Western Ave. – Looking North

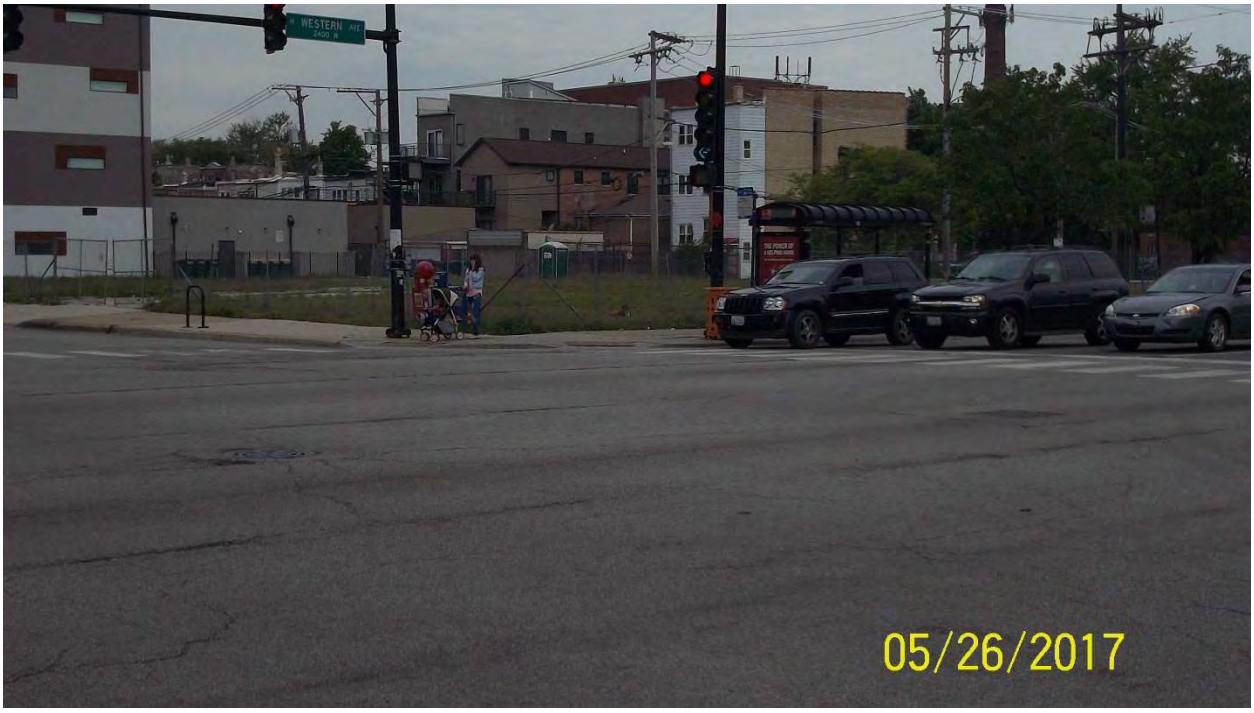


Photo 17: Southeast corner of Chicago Ave. / Western Ave. – Looking Northwest

Photo 18: Southeast corner of Chicago Ave. / Western Ave. – Looking West

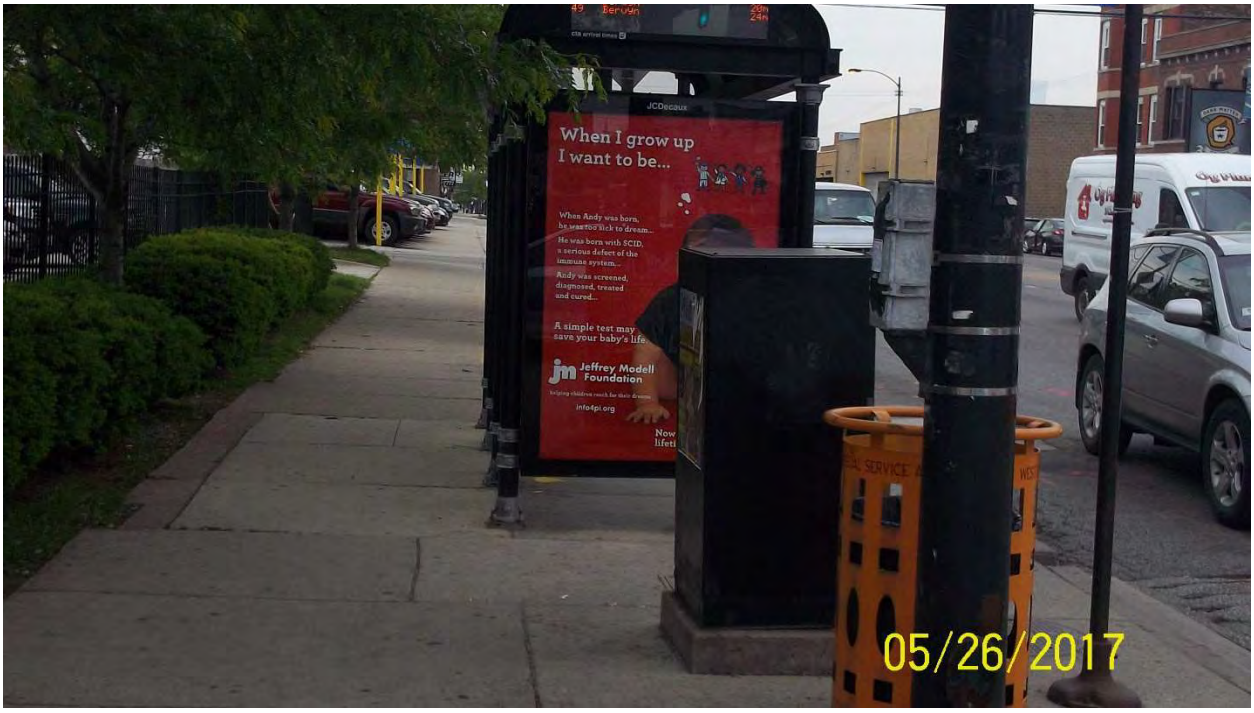


Photo 19: Southeast corner of Chicago Ave. / Western Ave. – Looking South

Photo 20: Southeast corner of Chicago Ave. / Western Ave. – Looking North

Photo 21: Southeast corner of Chicago Ave. / Western Ave. – Looking West

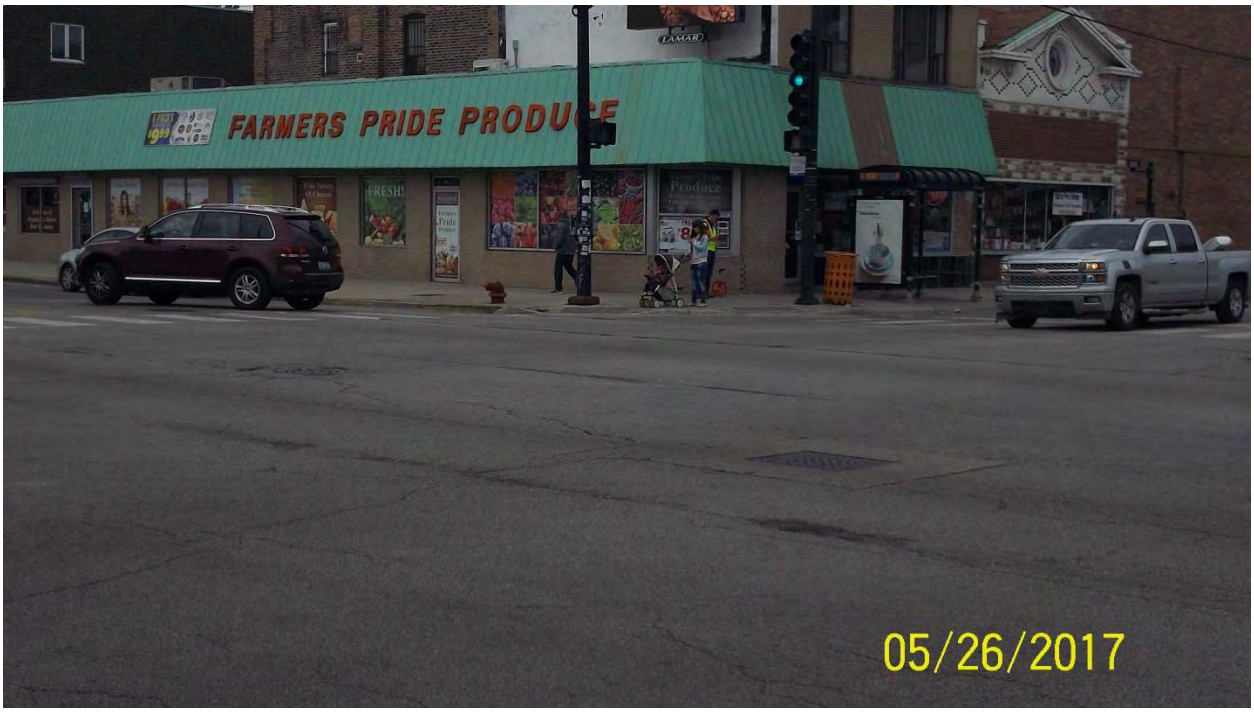


Photo 22: Southeast corner of Chicago Ave. / Western Ave. – Looking Southeast

Photo 23: Southeast corner of Chicago Ave. / Western Ave. – Looking South

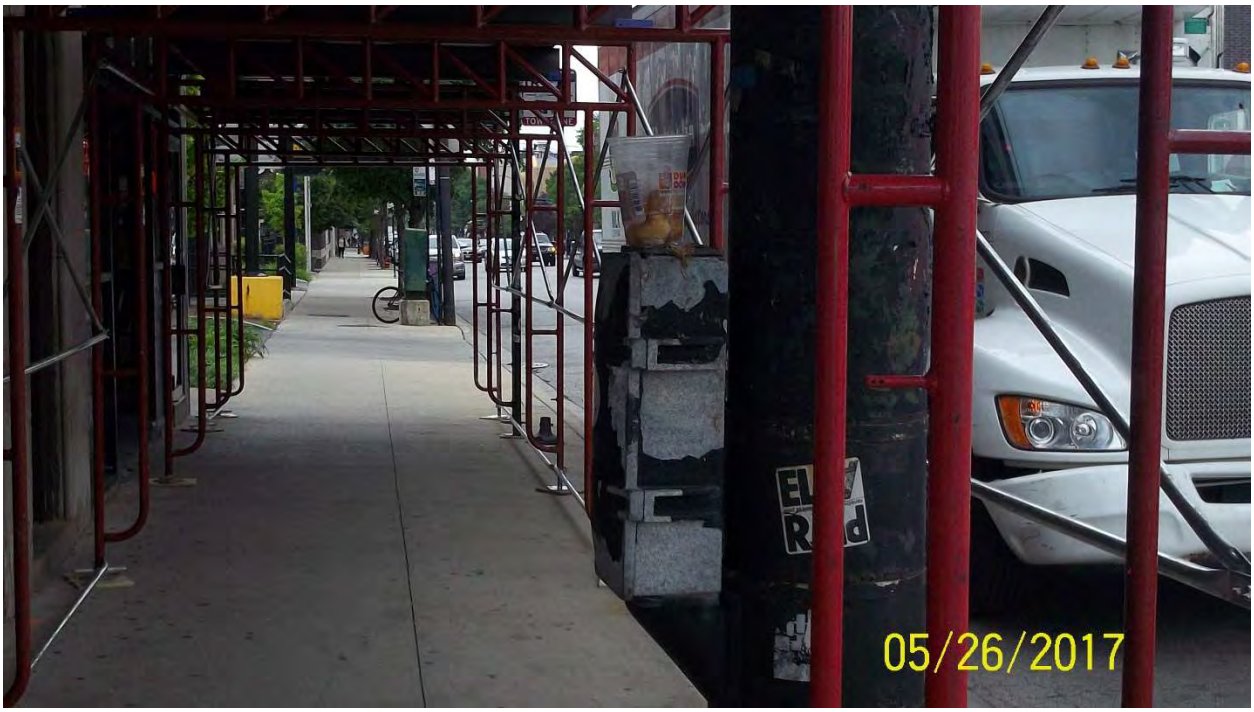


Photo 24: Southeast corner of Chicago Ave. / Western Ave. – Looking East

CTA Bus Slow Zone Project
Chicago-Ogden-Milwaukee Photo Log

Prepared for:
Chicago Transit Authority

Chicago Transit Authority

June 2017

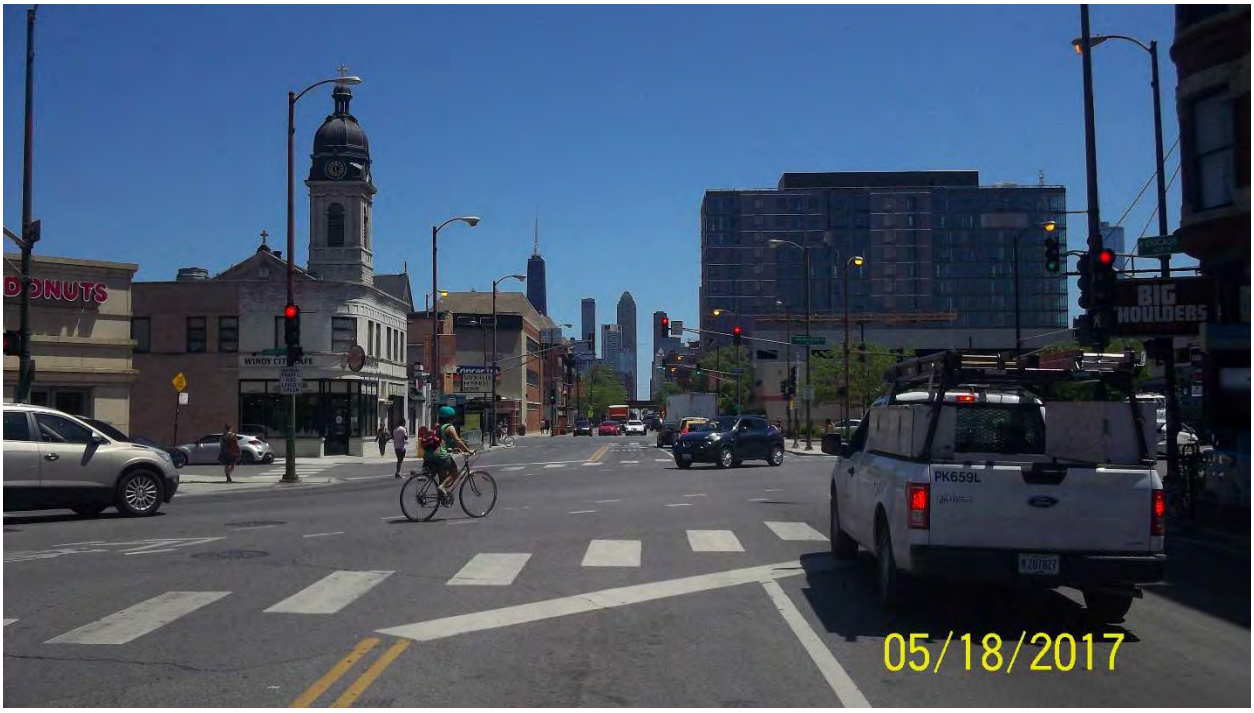


Photo 1: Chicago Ave./Milwaukee Ave. – Looking East

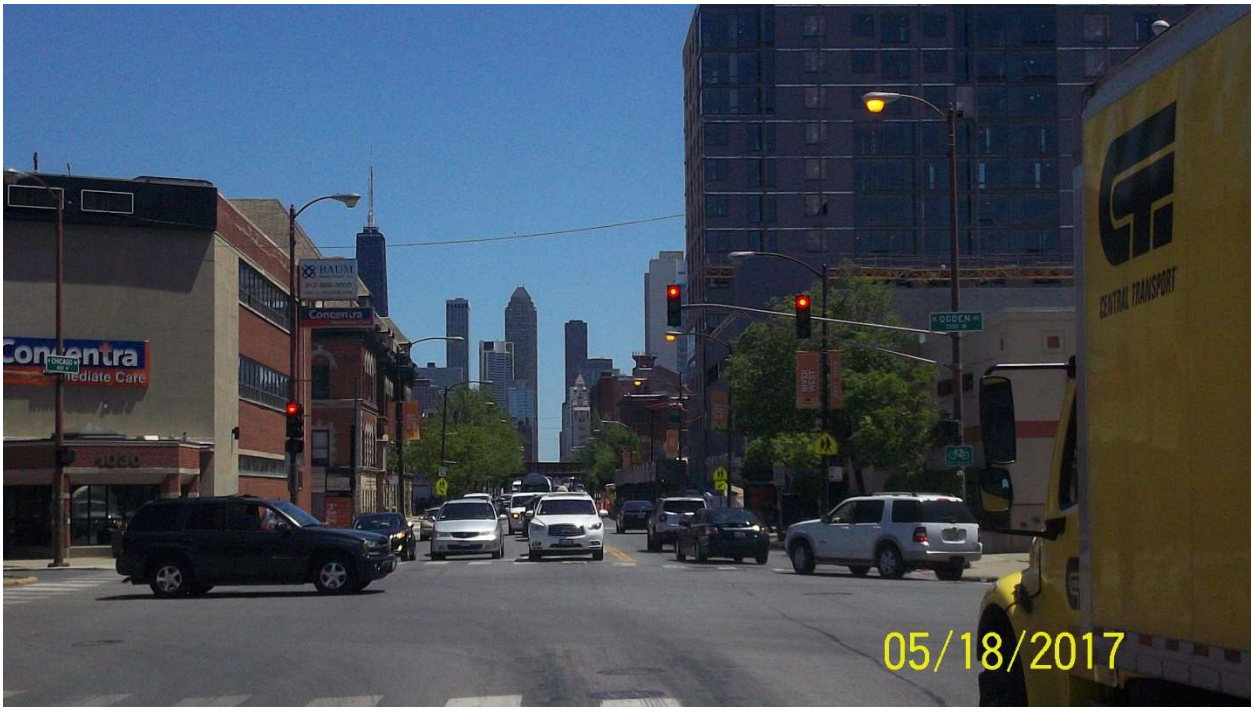


Photo 2: Chicago Ave./Ogden Ave. – Looking East

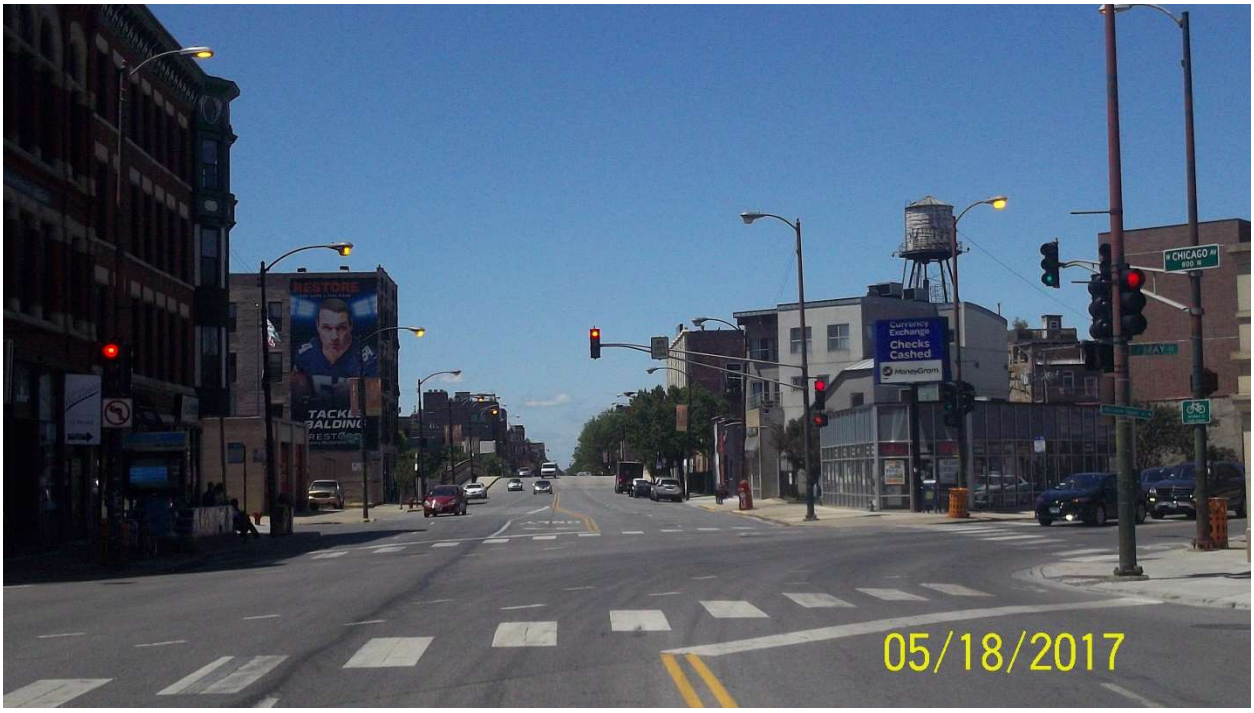


Photo 3: Chicago Ave./Milwaukee Ave. – Looking West

Photo 4: Chicago Ave./Ogden Ave. – Looking West

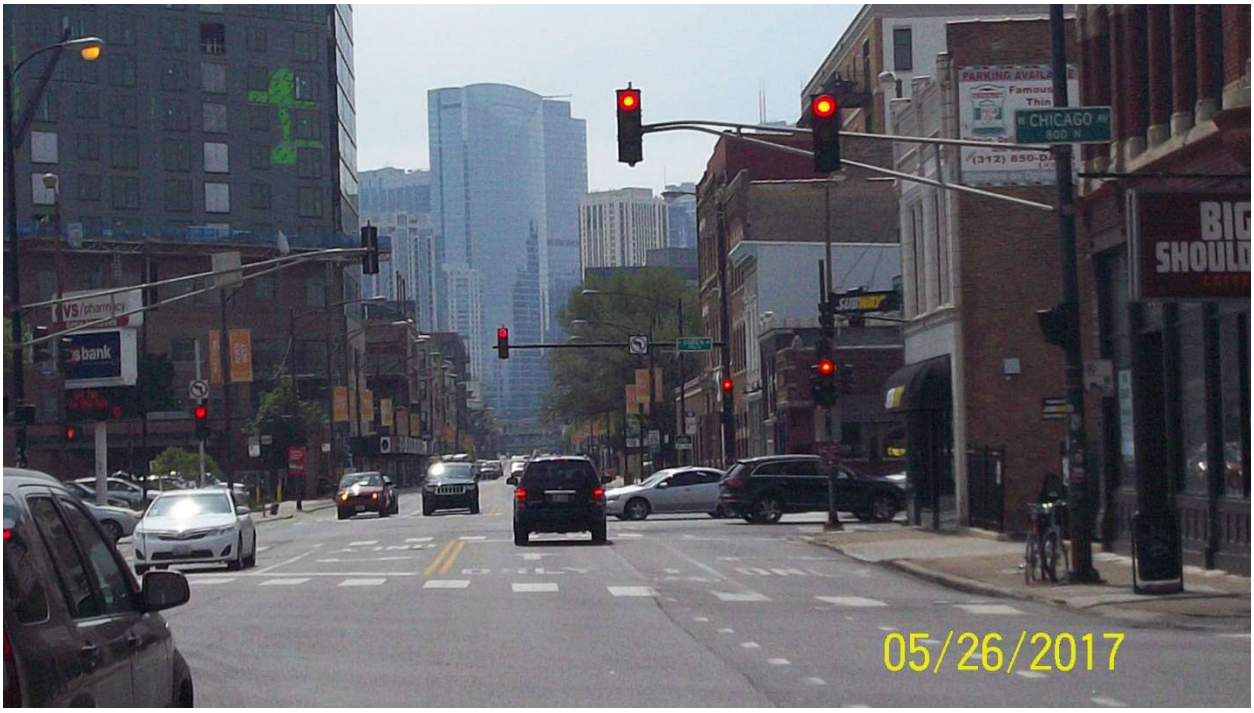


Photo 5: Milwaukee Ave./Chicago Ave. – Looking Southeast

Photo 6: Milwaukee Ave./Chicago Ave. – Looking Northwest

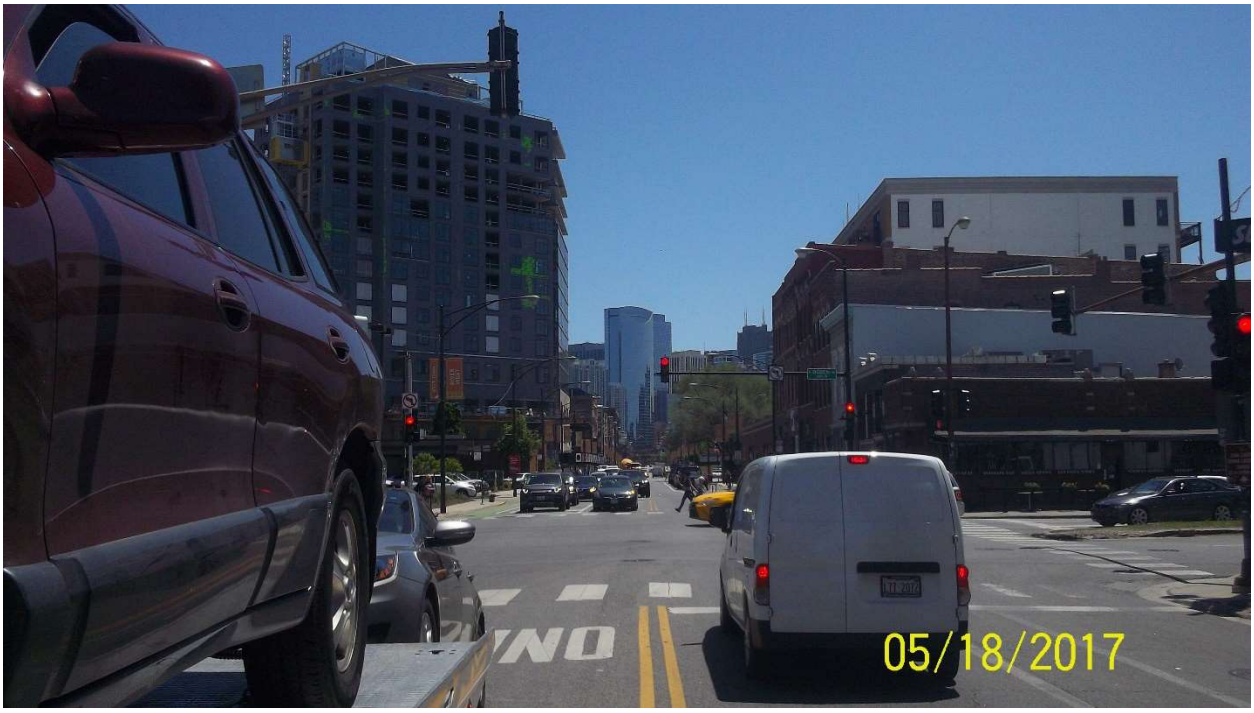


Photo 7: Milwaukee Ave./ Ogden Ave. – Looking Southeast

Photo 8: Milwaukee Ave./Ogden Ave. – Looking Northwest

Photo 9: Ogden Ave./Milwaukee Ave. – Looking Northeast

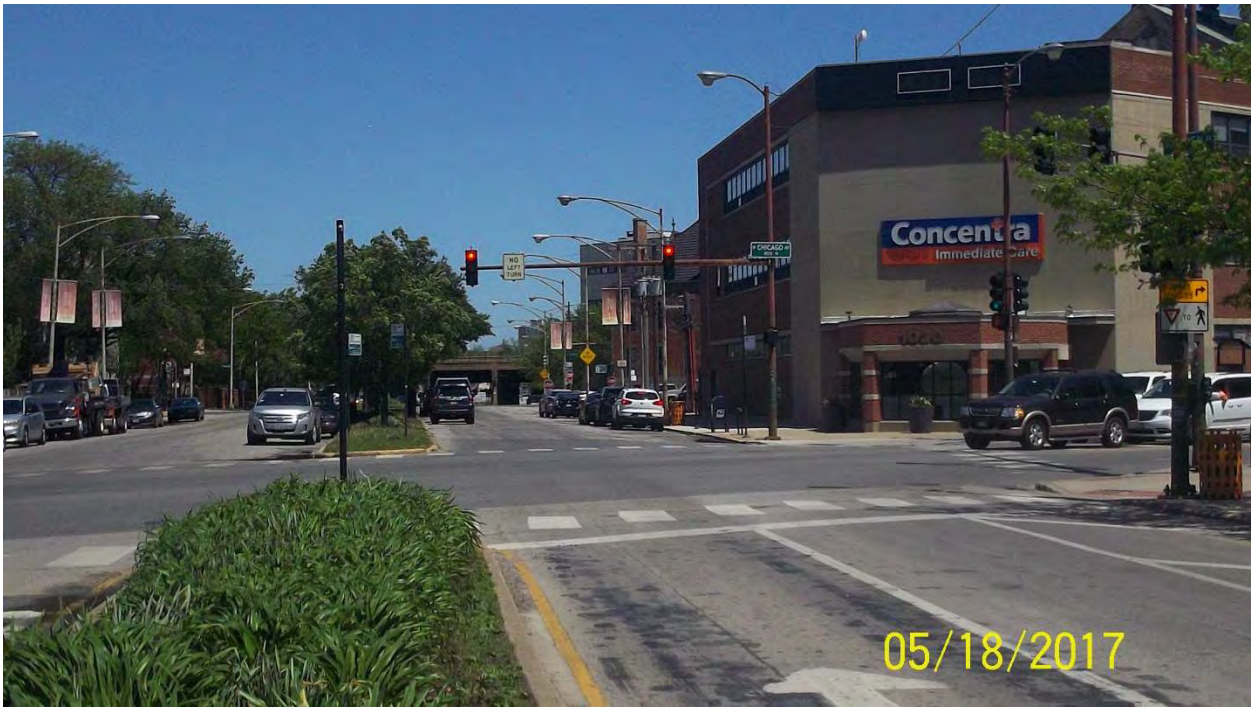


Photo 10: Ogden Ave./Chicago Ave. – Looking Northeast

Photo 11: Ogden Ave./Milwaukee Ave. – Looking Southwest

Photo 12: Ogden Ave./Chicago Ave. – Looking Southwest

Photo 13: Southwest corner of Chicago Ave. / Milwaukee Ave. – Looking West

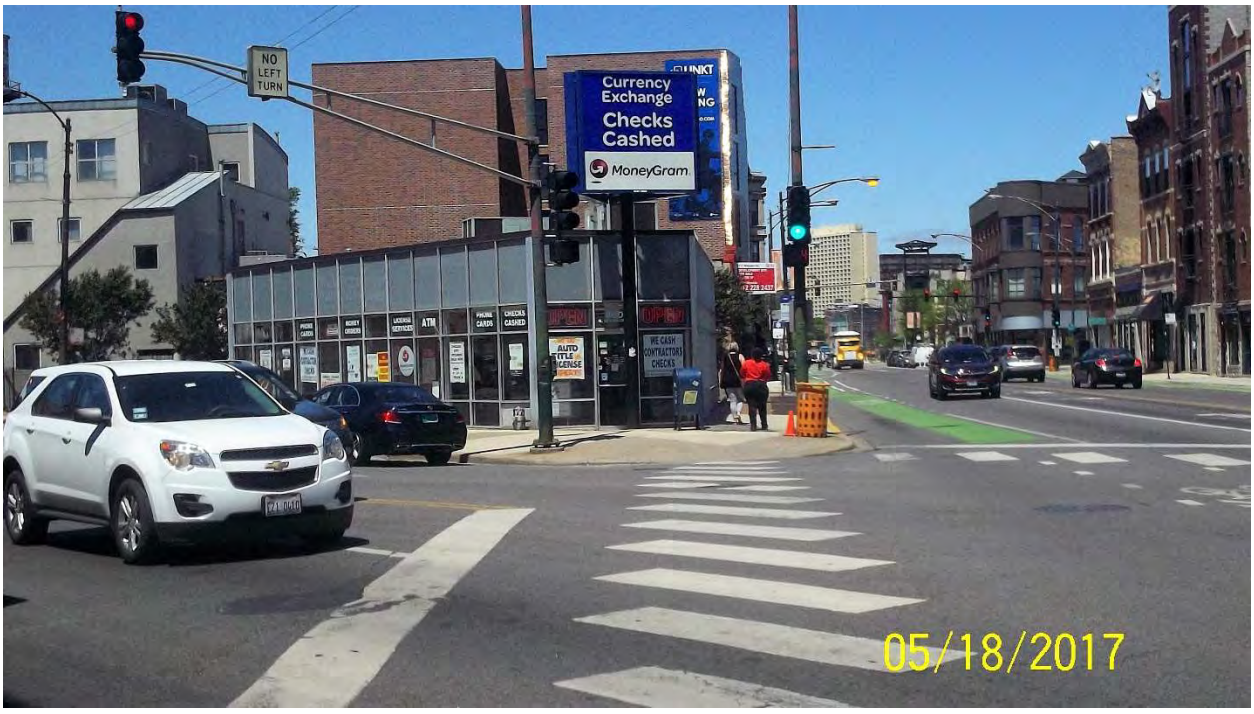


Photo 14: Southwest corner of Chicago Ave. / Milwaukee Ave. – Looking Northwest

Photo 15: Southwest corner of Chicago Ave. / Milwaukee Ave. – Looking North

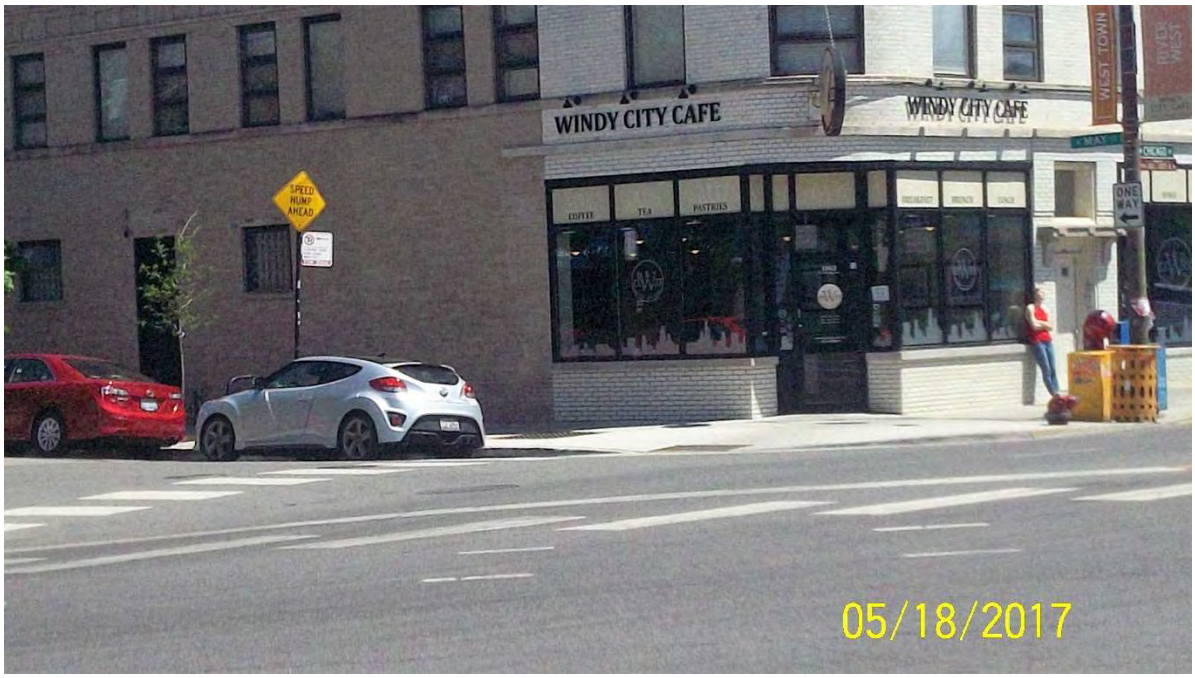


Photo 16: Southwest corner of Chicago Ave. / Milwaukee Ave. – Looking Northeast

Photo 17: Southwest corner of Chicago Ave. / Milwaukee Ave. – Looking East

Photo 18: Southwest corner of Chicago Ave. / Milwaukee Ave. – Looking Southeast

Photo 19: Southeast corner of Chicago Ave. / Milwaukee Ave. – Looking North

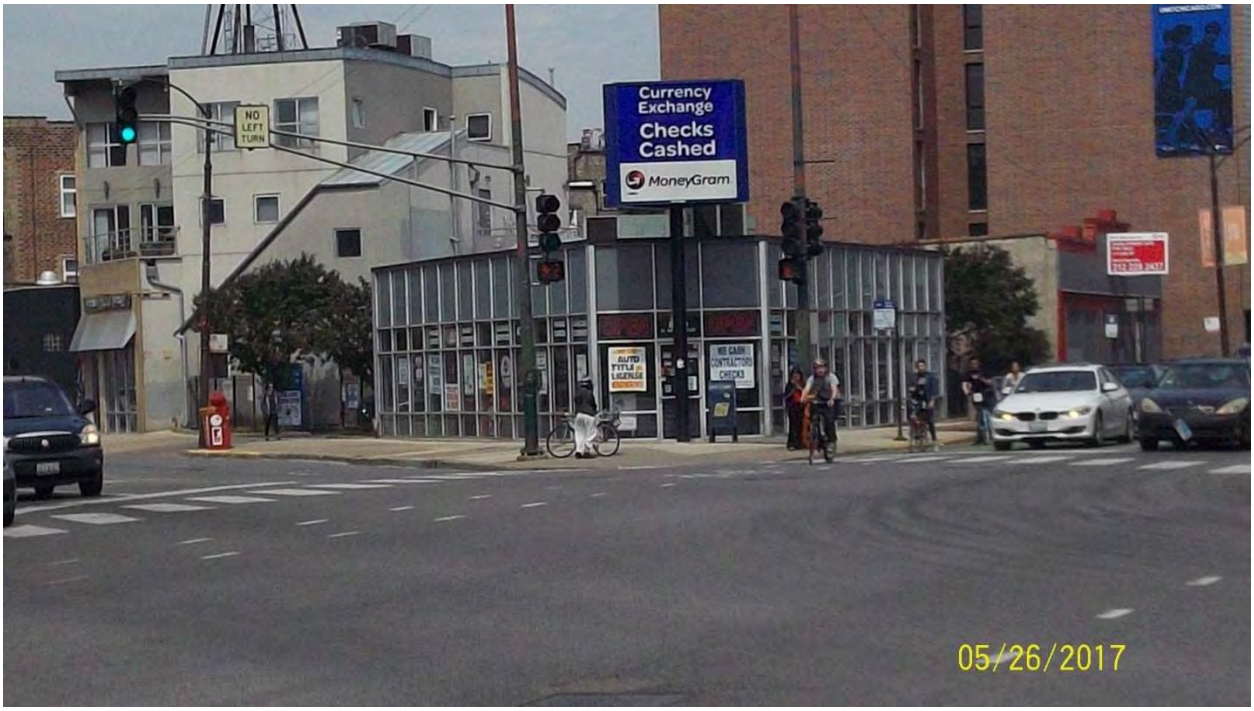


Photo 20: Southeast corner of Chicago Ave. / Milwaukee Ave. – Looking Northwest

Photo 21: Southeast corner of Chicago Ave. / Milwaukee Ave. – Looking West

Photo 22: Northeast corner of Chicago Ave. / Milwaukee Ave. – Looking West

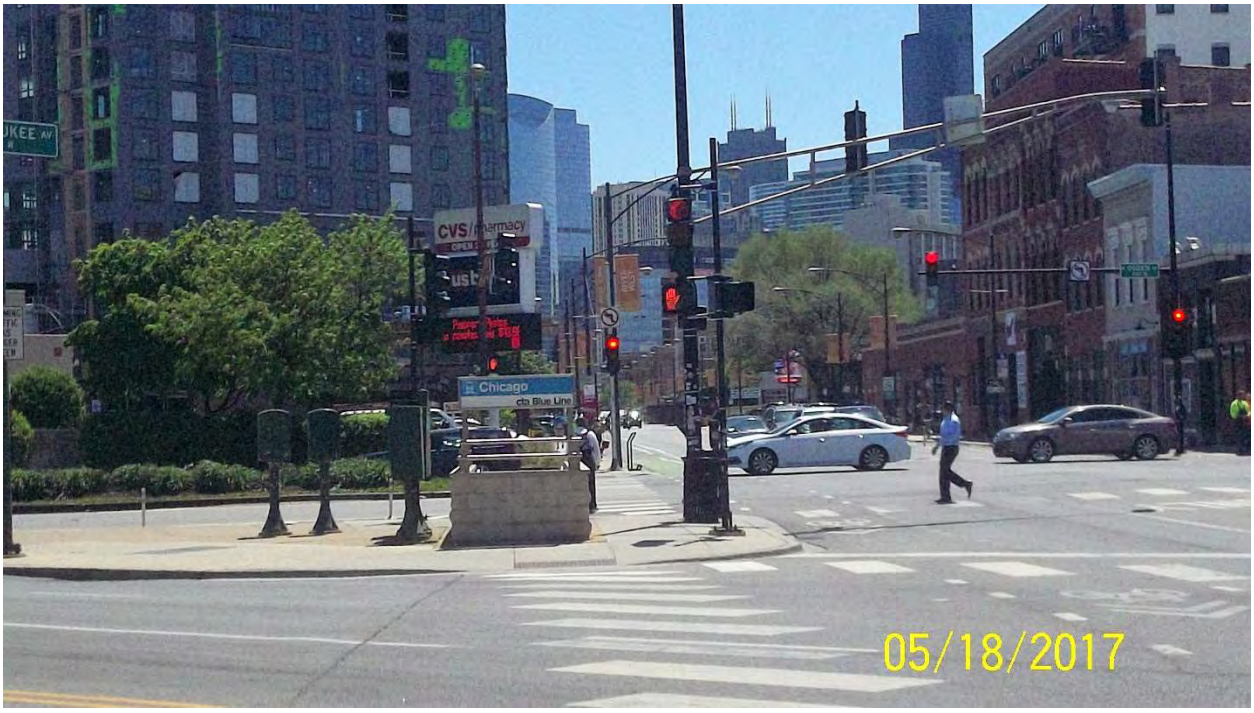


Photo 23: Northeast corner of Chicago Ave. / Milwaukee Ave. – Looking Southeast

Photo 24: Northeast corner of Chicago Ave. / Milwaukee Ave. – Looking Southwest

Photo 25: Northeast corner of Chicago Ave. / Milwaukee Ave. – Looking East

Photo 26: Northeast corner of Chicago Ave. / Milwaukee Ave. – Looking Northwest

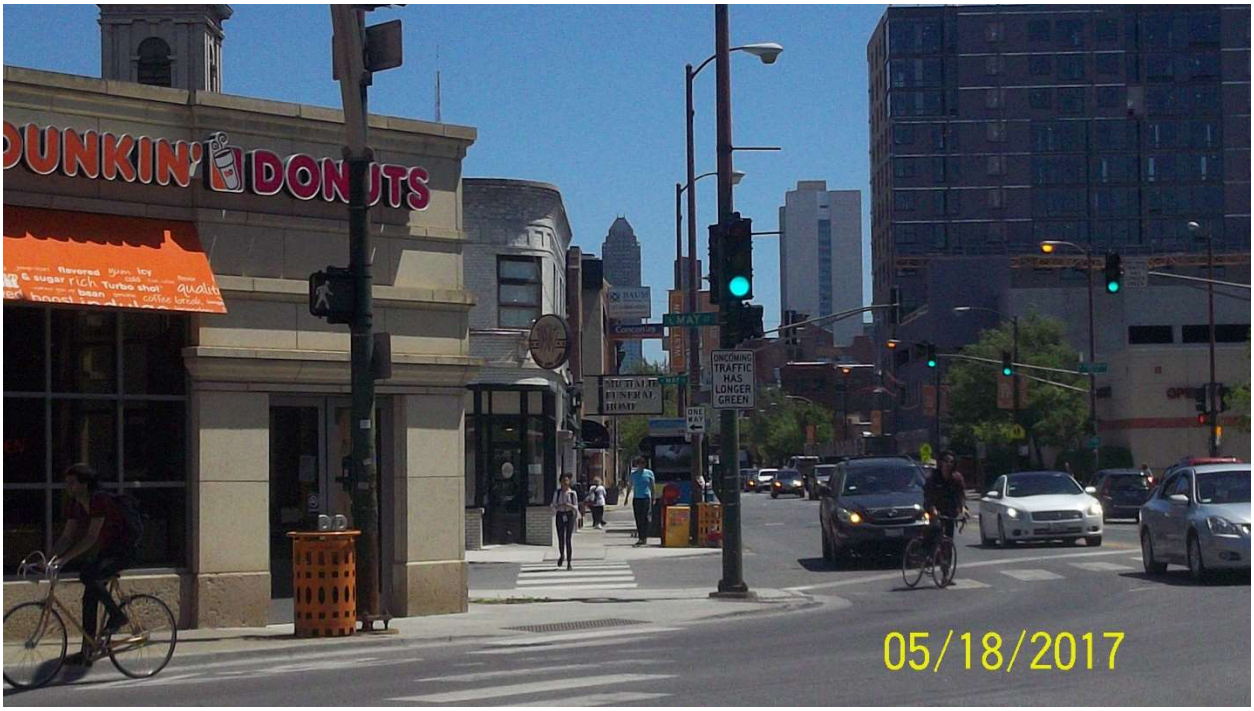


Photo 27: Northwest corner of Chicago Ave. / Milwaukee Ave. – Looking East

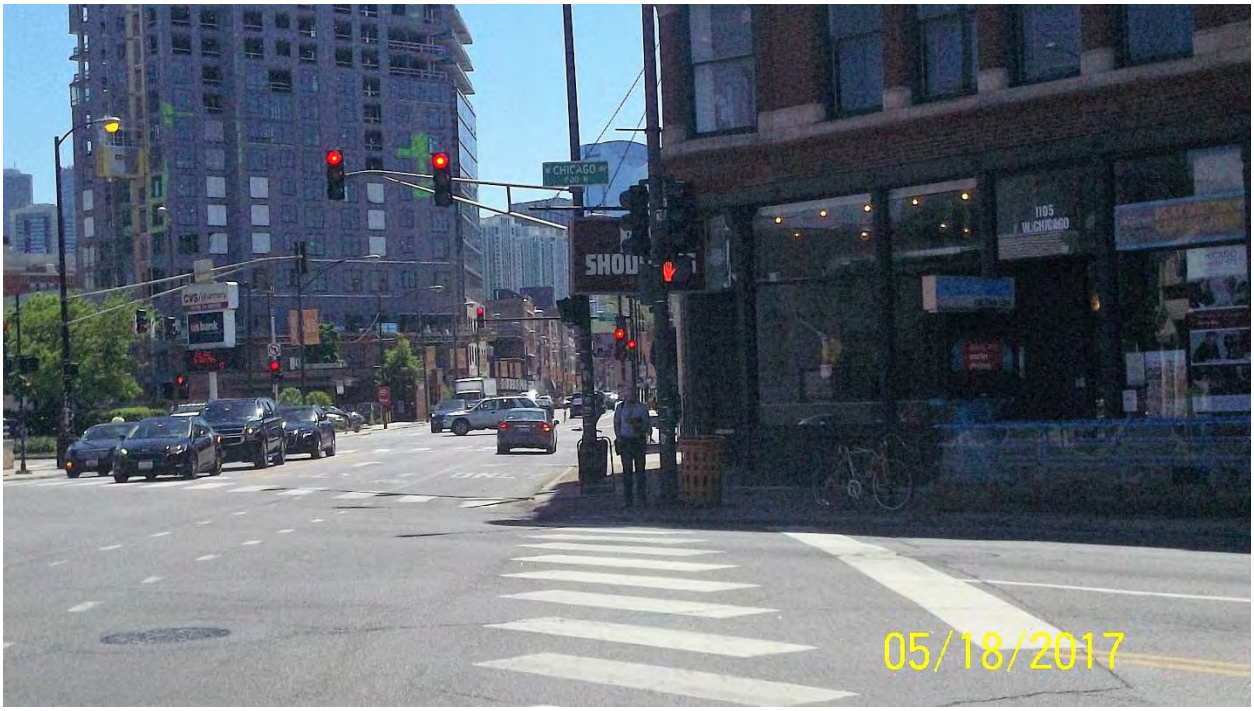


Photo 28: Northwest corner of Chicago Ave. / Milwaukee Ave. – Looking Southeast 1

Photo 29: Northwest corner of Chicago Ave. / Milwaukee Ave. – Looking Southeast 2

Photo 30: Northwest corner of Chicago Ave. / Milwaukee Ave. – Looking West

Photo 31: Northwest corner of Chicago Ave. / Milwaukee Ave. – Looking Northwest

Photo 32: Northwest corner of Chicago Ave. / Ogden Ave. – Looking Southwest

Photo 33: Northwest corner of Chicago Ave. / Ogden Ave. – Looking Southeast

Photo 34: Northwest corner of Chicago Ave. / Ogden Ave. – Looking East

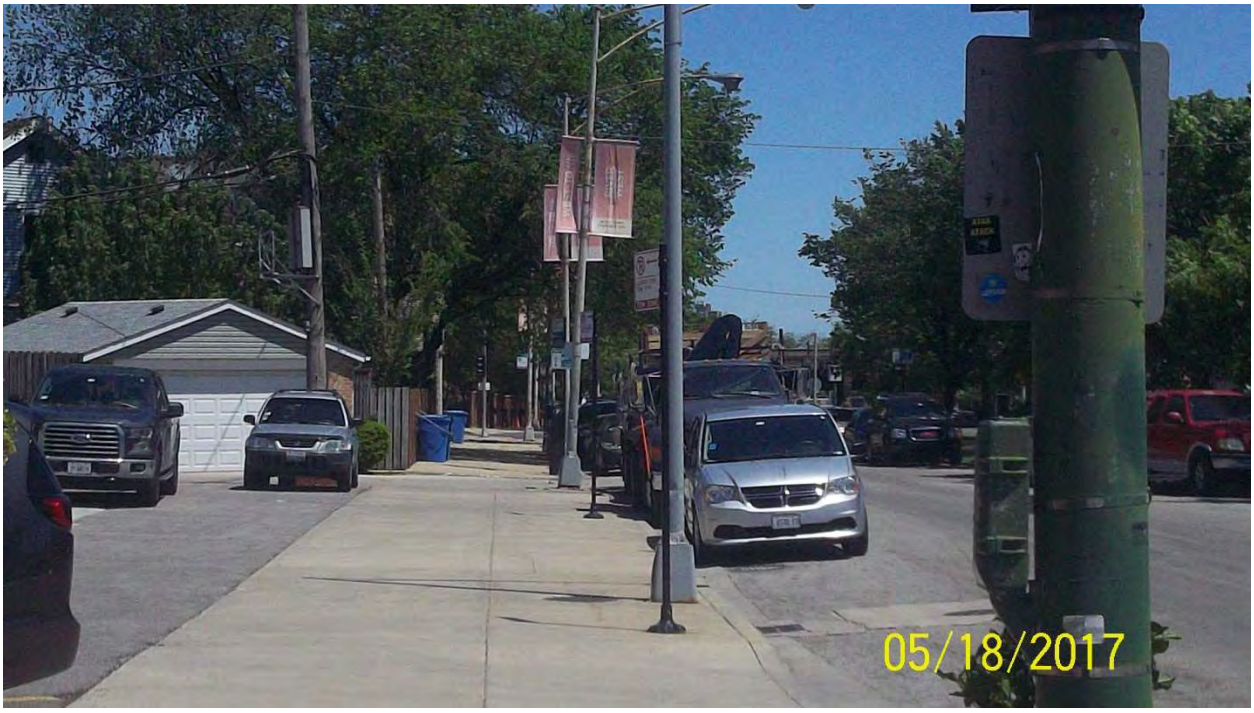


Photo 35: Northwest corner of Chicago Ave. / Ogden Ave. – Looking Northeast

Photo 36: Northwest corner of Chicago Ave. / Ogden Ave. – Looking West

Photo 37: Northeast corner of Chicago Ave. / Ogden Ave. – Looking West

Photo 38: Northeast corner of Chicago Ave. / Ogden Ave. – Looking Northeast

Photo 39: Northeast corner of Chicago Ave. / Ogden Ave. – Looking East

Photo 40: Northeast corner of Chicago Ave. / Ogden Ave. – Looking Southwest 1

Photo 41: Northeast corner of Chicago Ave. / Ogden Ave. – Looking Southwest 2

Photo 42: Southeast corner of Chicago Ave. / Ogden Ave. – Looking West

Photo 43: Southeast corner of Chicago Ave. / Ogden Ave. – Looking Northwest

Photo 44: Southeast corner of Chicago Ave. / Ogden Ave. – Looking Northeast

Photo 45: Southeast corner of Chicago Ave. / Ogden Ave. – Looking East

Photo 46: Southeast corner of Chicago Ave. / Ogden Ave. – Looking Southwest

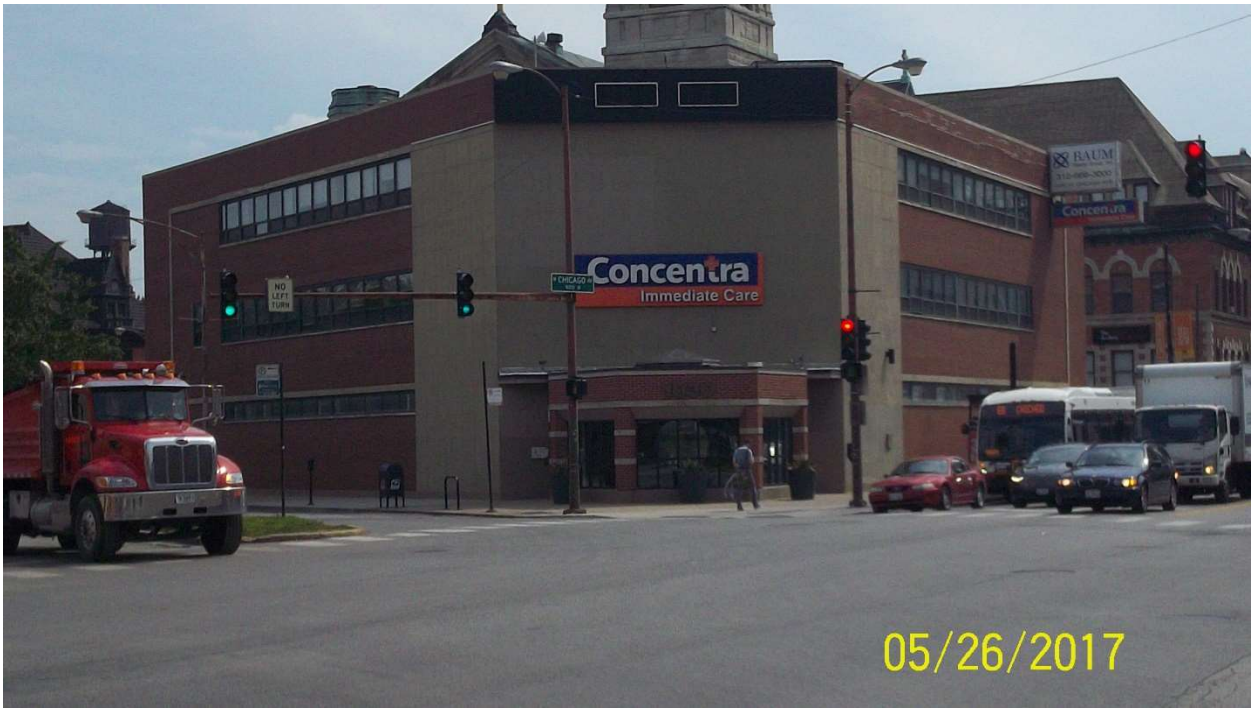


Photo 47: Southwest corner of Chicago Ave. / Ogden Ave. – Looking Northeast

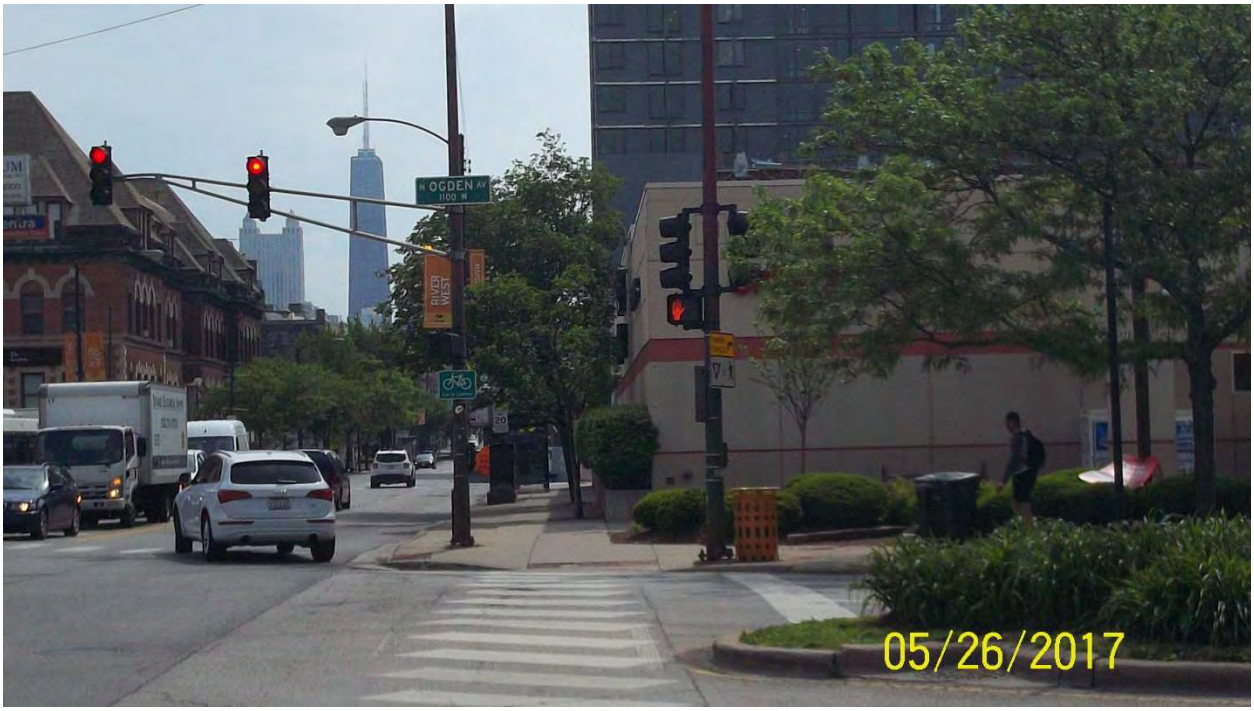


Photo 48: Southwest corner of Chicago Ave. / Ogden Ave. – Looking East

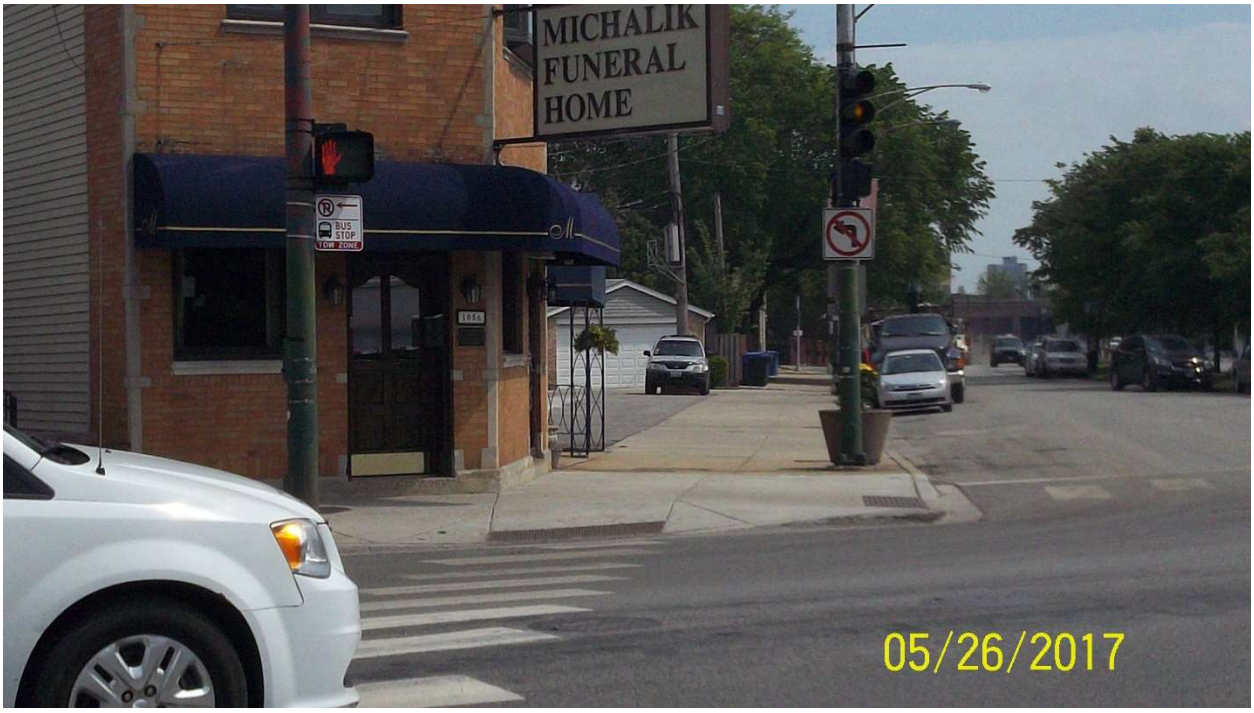


Photo 49: Southwest corner of Chicago Ave. / Ogden Ave. – Looking North

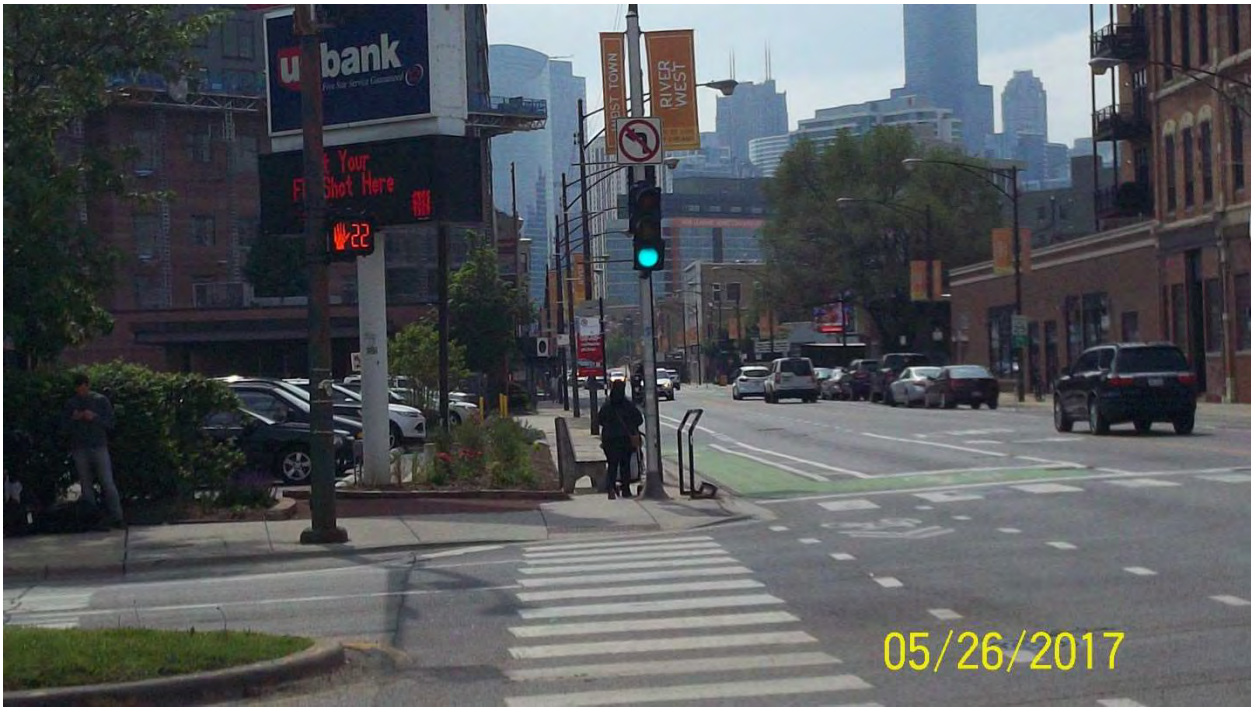


Photo 50: North corner of Milwaukee Ave. / Ogden Ave. – Looking Southeast

Photo 51: North corner of Milwaukee Ave. / Ogden Ave. – Looking South

Photo 52: North corner of Milwaukee Ave. / Ogden Ave. – Looking Southwest

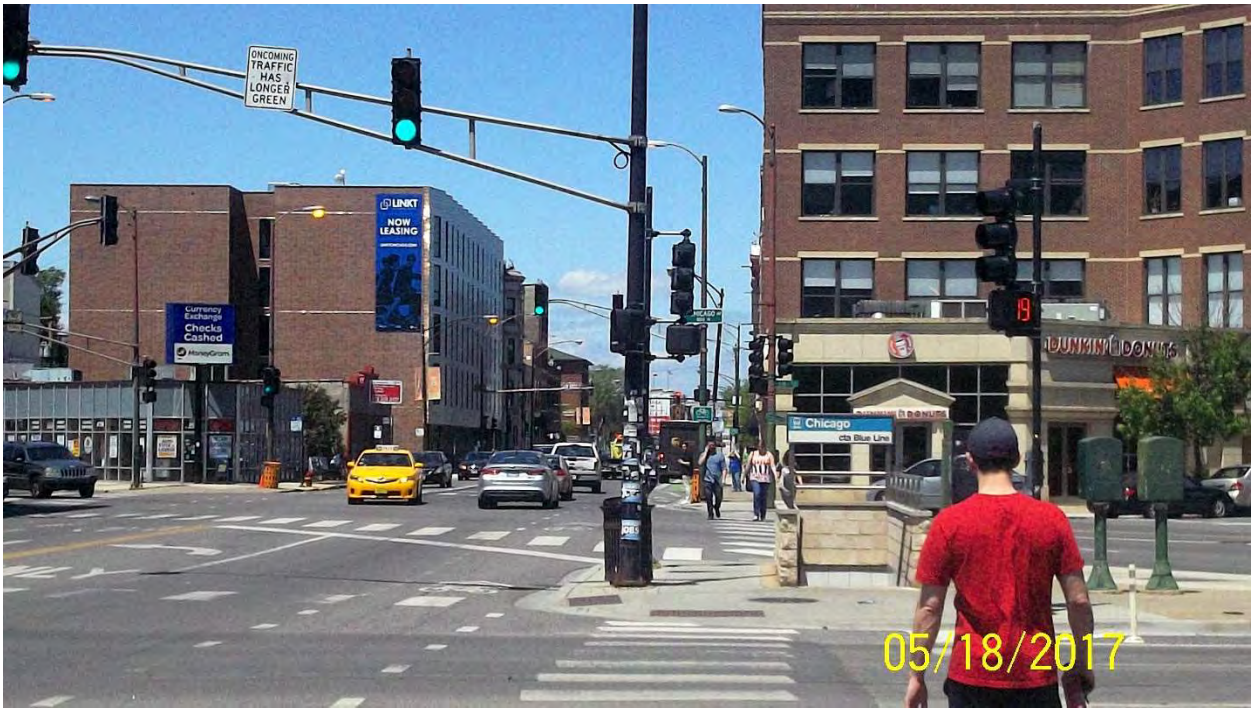


Photo 53: East corner of Milwaukee Ave. / Ogden Ave. – Looking Northwest

Photo 54: East corner of Milwaukee Ave. / Ogden Ave. – Looking Northeast

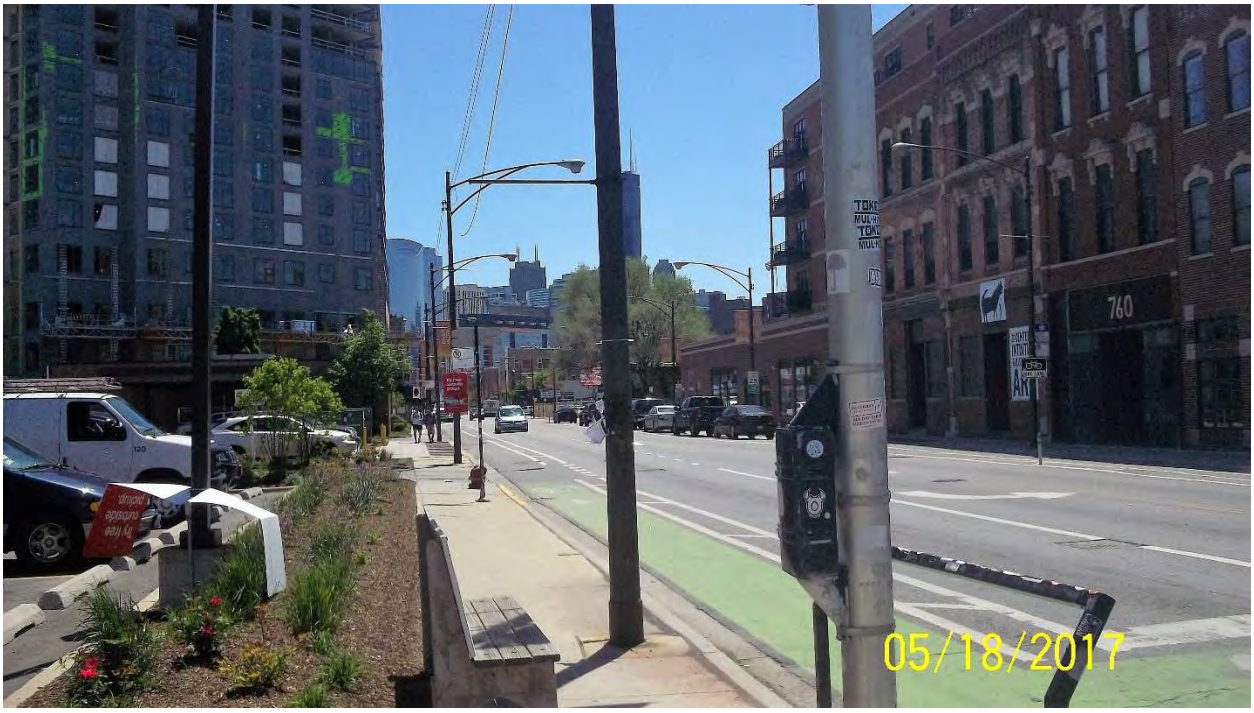


Photo 55: North corner of Milwaukee Ave. / Ogden Ave. – Looking Southeast

Photo 56: East corner of Milwaukee Ave. / Ogden Ave. – Southwest

Photo 57: East corner of Milwaukee Ave. / Ogden Ave. – Looking West

Photo 58: South corner of Milwaukee Ave. / Ogden Ave. – Looking Northwest

Photo 59: South corner of Milwaukee Ave. / Ogden Ave. – Looking North

Photo 60: South corner of Milwaukee Ave. / Ogden Ave. – Looking Northeast

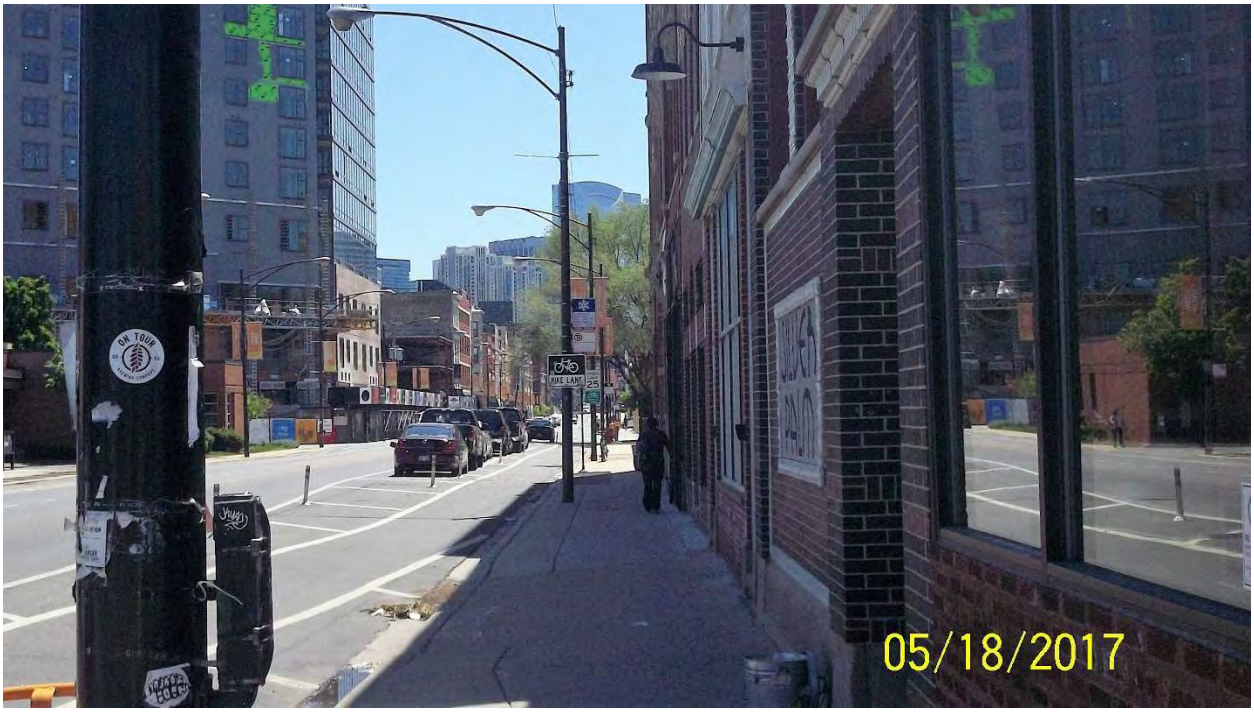


Photo 61: South corner of Milwaukee Ave. / Ogden Ave. – Looking Southeast

Photo 62: South corner of Milwaukee Ave. / Ogden Ave. – Looking Southwest

Photo 63: West corner of Milwaukee Ave. / Ogden Ave. – Looking East

Photo 64: West corner of Milwaukee Ave. / Ogden Ave. – Looking North

Photo 65: West corner of Milwaukee Ave. / Ogden Ave. – Looking Northwest

Photo 66: West corner of Milwaukee Ave. / Ogden Ave. – Looking Southwest

Photo 67: West corner of Milwaukee Ave. / Ogden Ave. – Looking Southeast

CTA Bus Slow Zone Project
Chicago-Larrabee Photo Log

Prepared for:

Chicago Transit Authority

June 2017

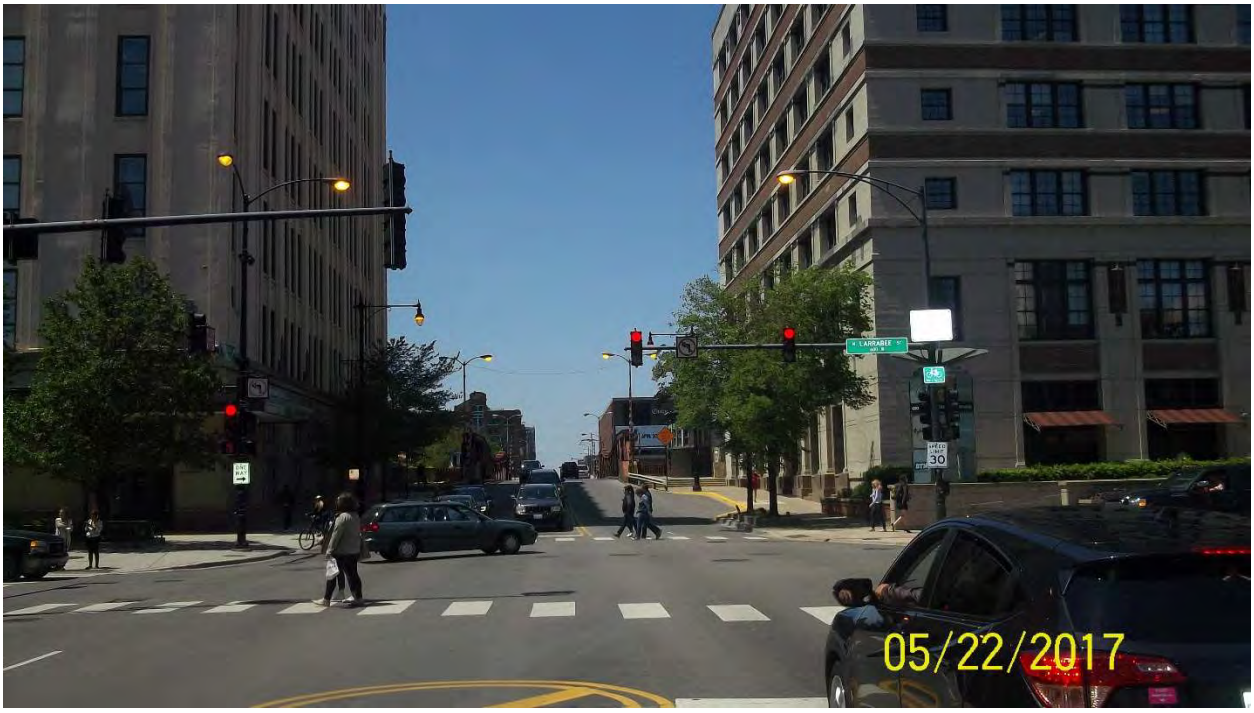


Photo 1: Chicago Ave. – Looking West

Photo 2: Larrabee St. – Looking North

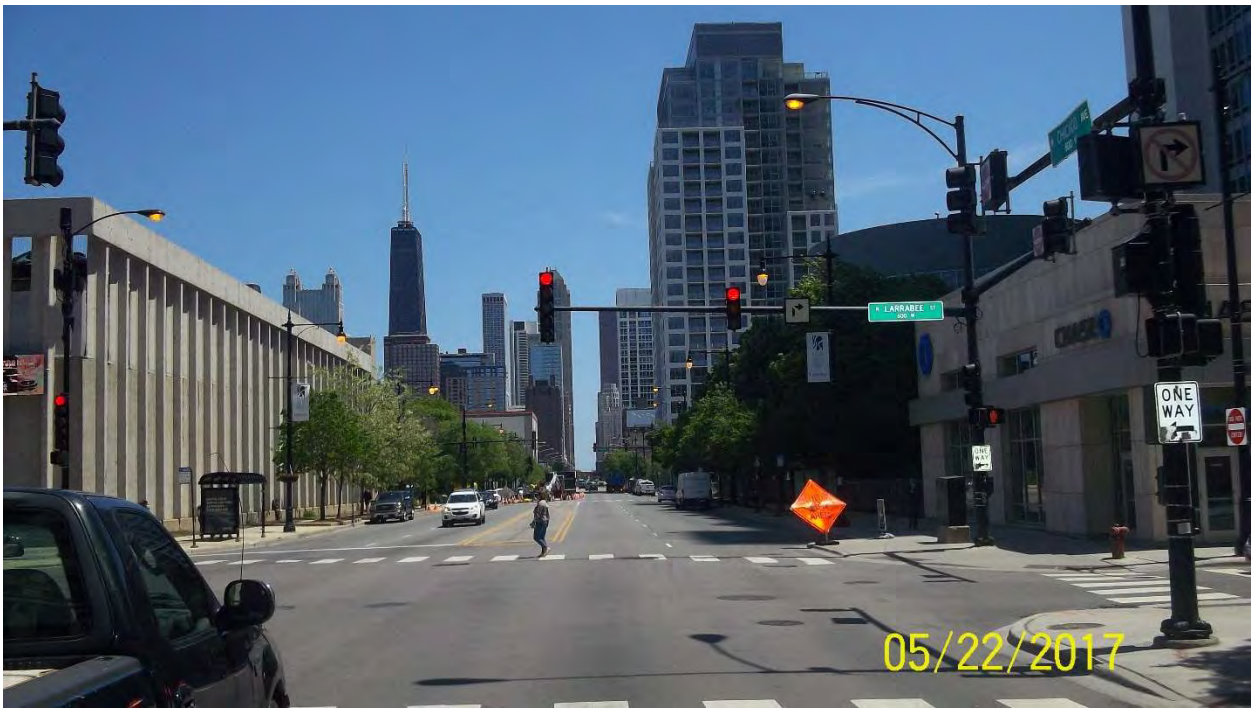


Photo 3: Chicago Ave. – Looking East

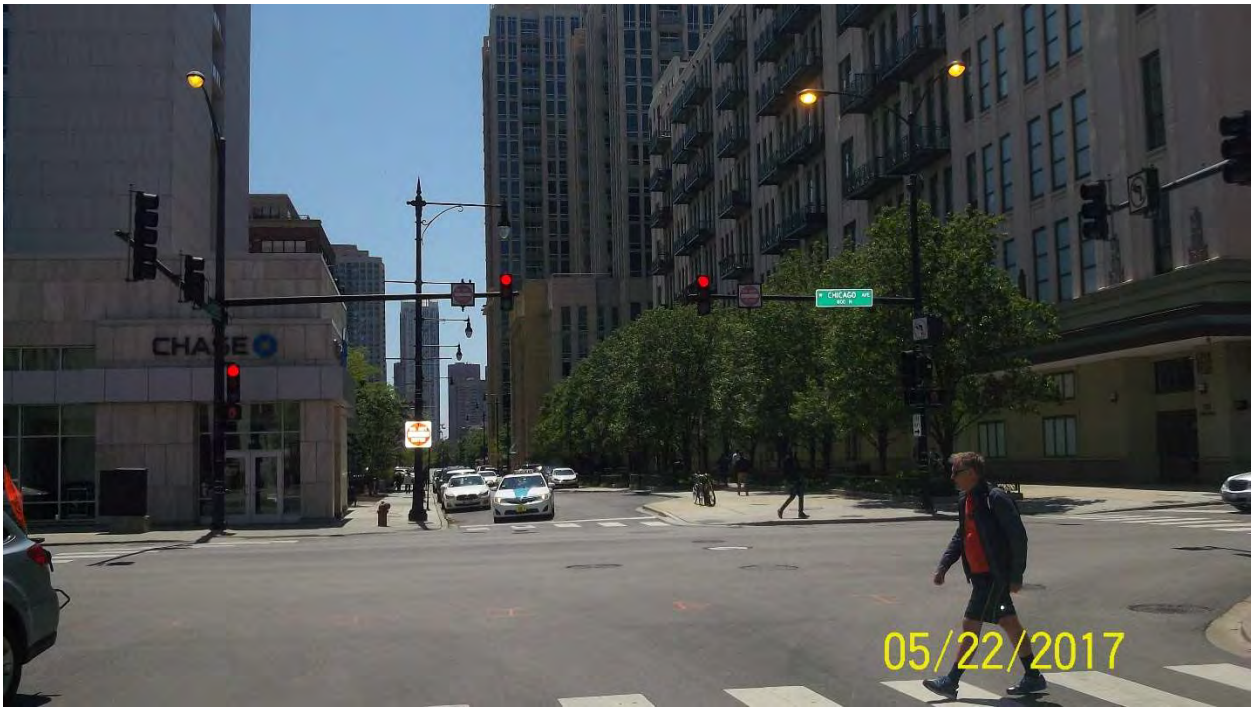


Photo 4: Larrabee St. – Looking South

Photo 5: Northeast corner of Chicago Ave. / Larrabee St. – Looking West

Photo 6: Northeast corner of Chicago Ave. / Larrabee St. – Looking Southwest

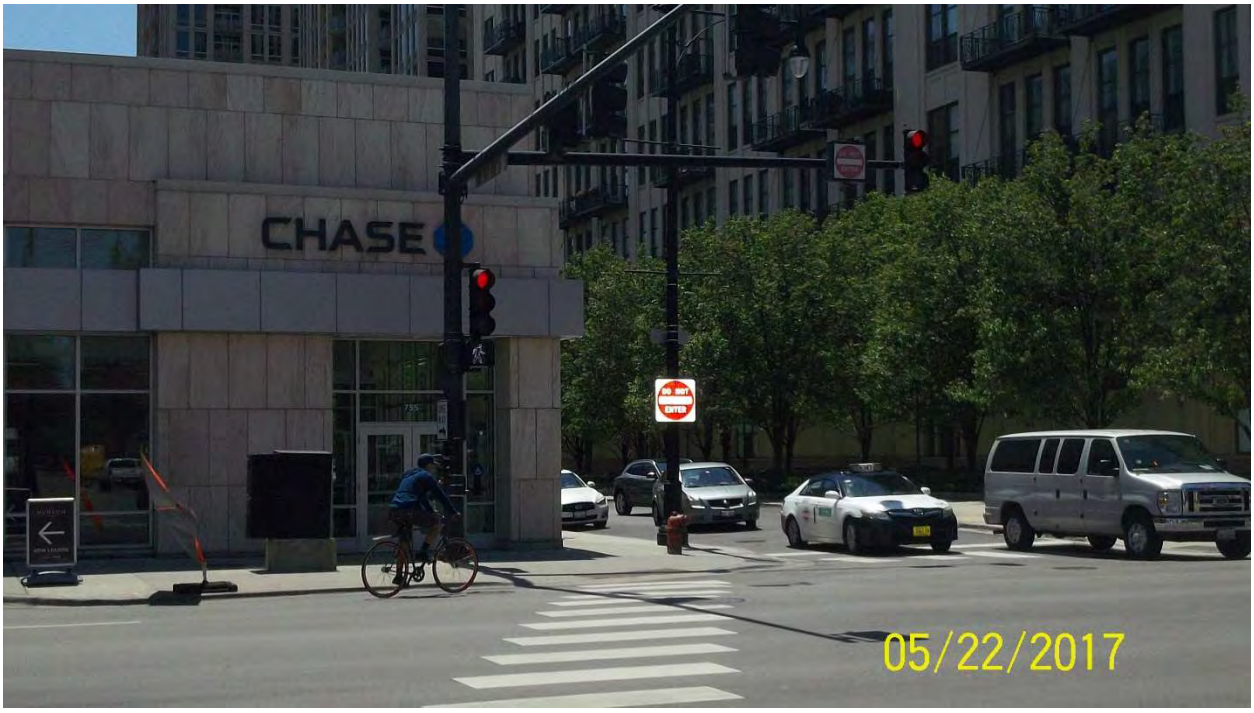


Photo 7: Northeast corner of Chicago Ave. / Larrabee St. – Looking South

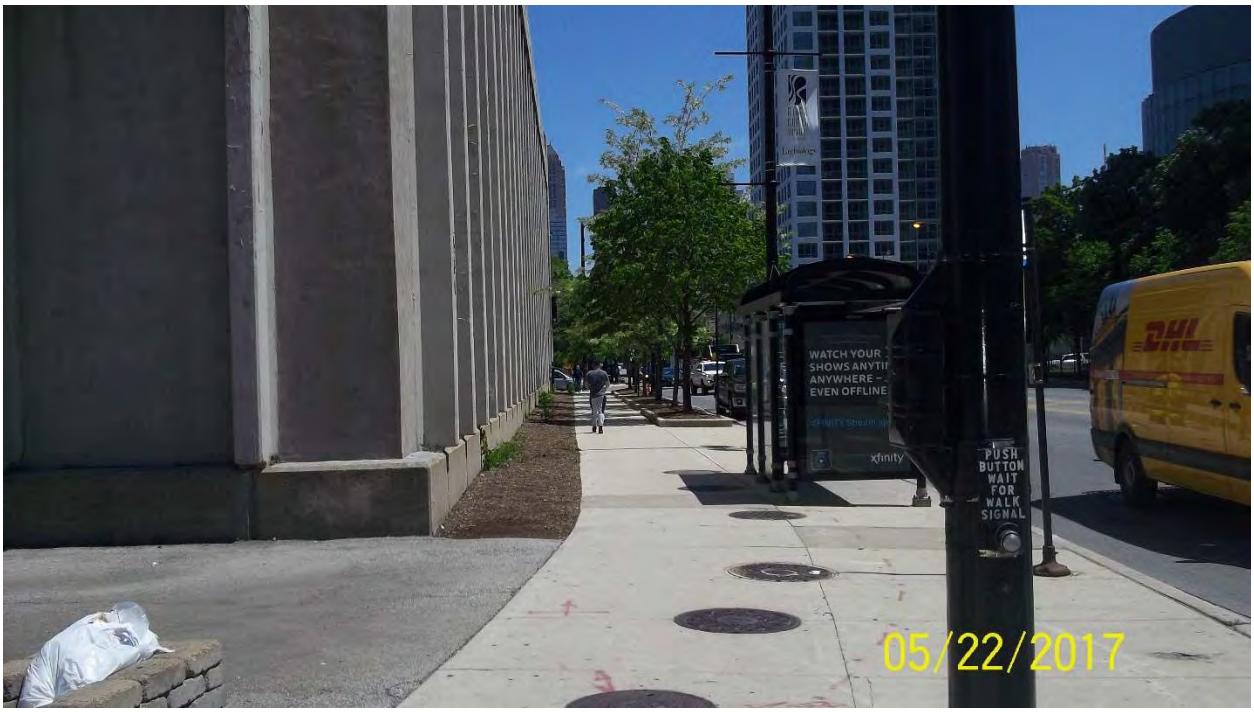


Photo 8: Northeast corner of Chicago Ave. / Larrabee St. – Looking East

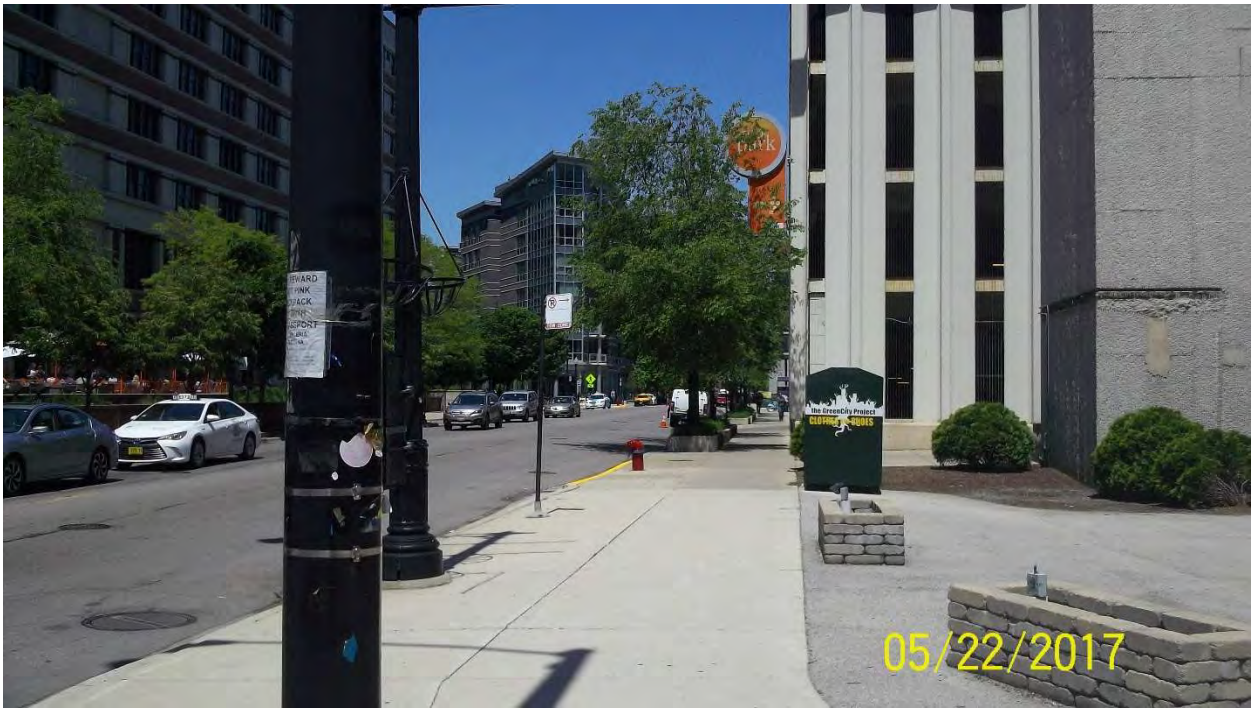


Photo 9: Northeast corner of Chicago Ave. / Larrabee St. – Looking North

Photo 10: Southeast corner of Chicago Ave. / Larrabee St. – Looking North

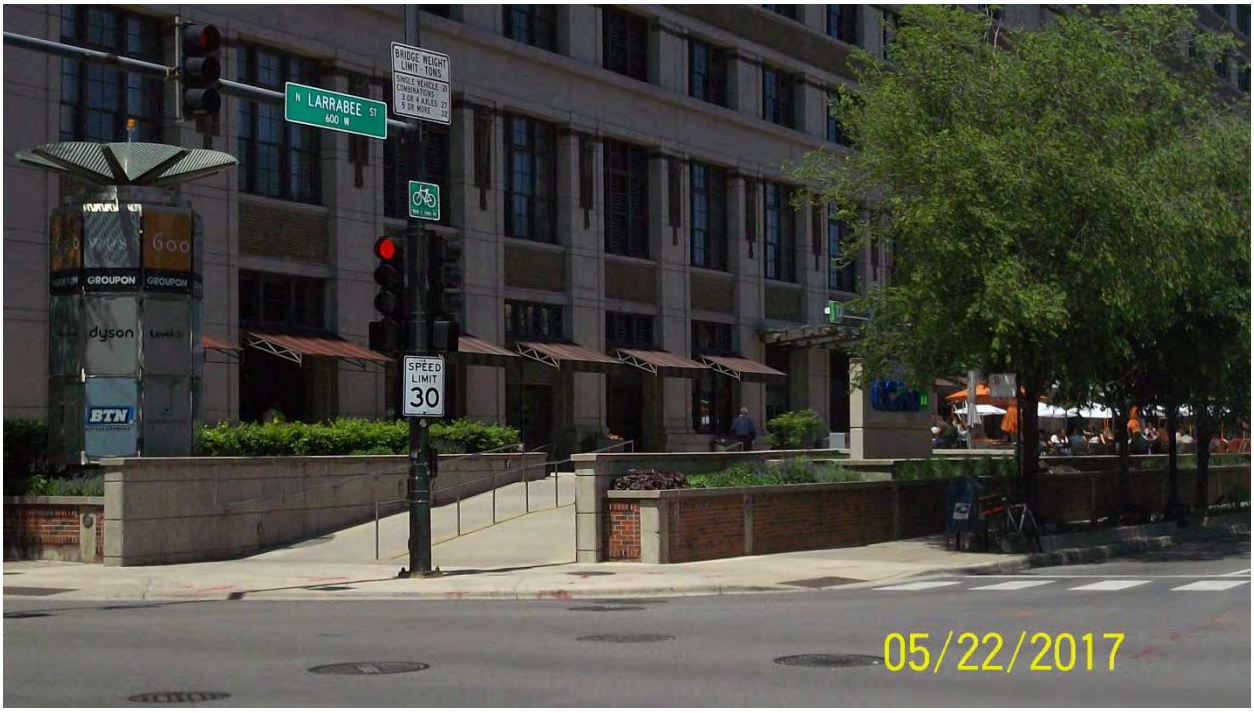


Photo 11: Southeast corner of Chicago Ave. / Larrabee St. – Looking Northwest

Photo 12: Southeast corner of Chicago Ave. / Larrabee St. – Looking West

Photo 13: Southeast corner of Chicago Ave. / Larrabee St. – Looking South

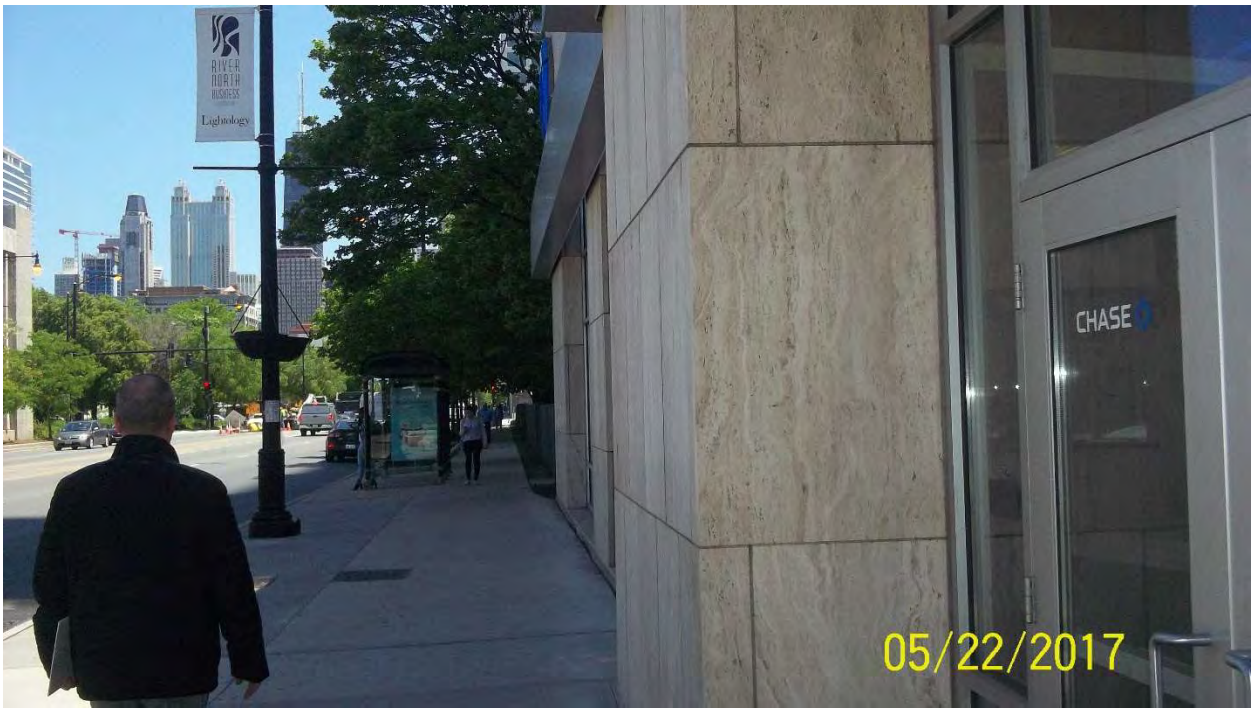


Photo 14: Southeast corner of Chicago Ave. / Larrabee St. – Looking East

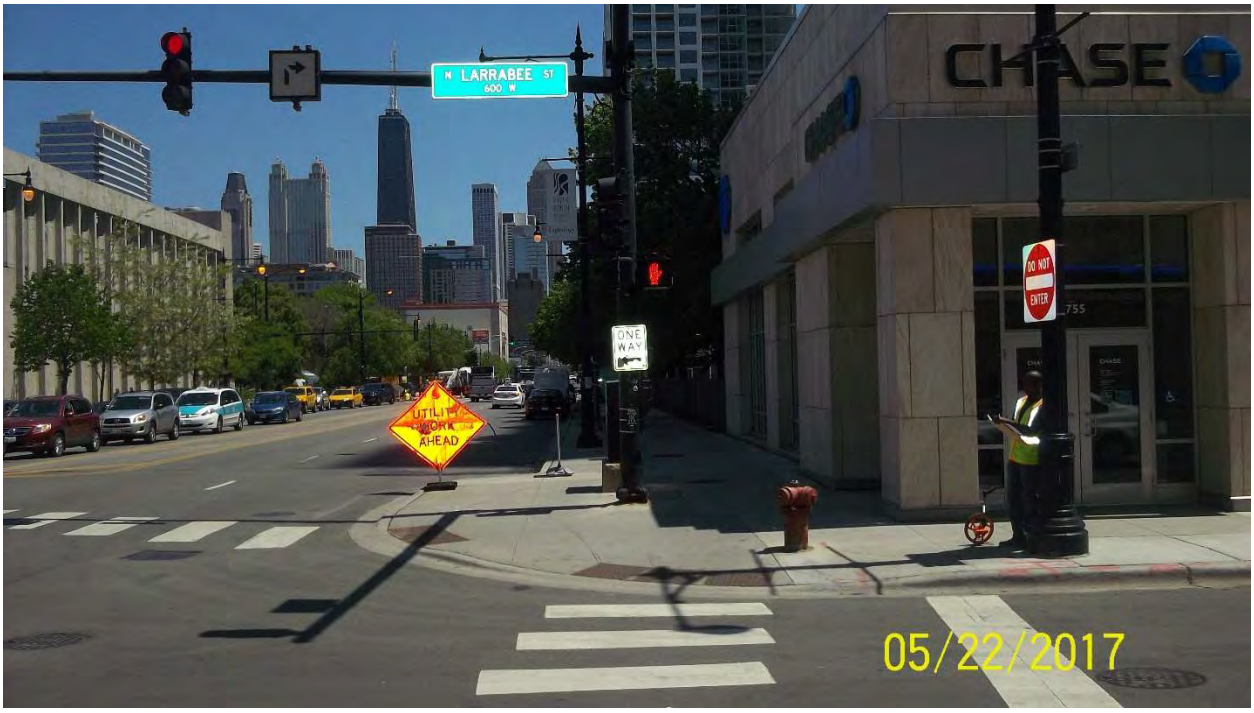


Photo 15: Southwest corner of Chicago Ave. / Larrabee St. – Looking East

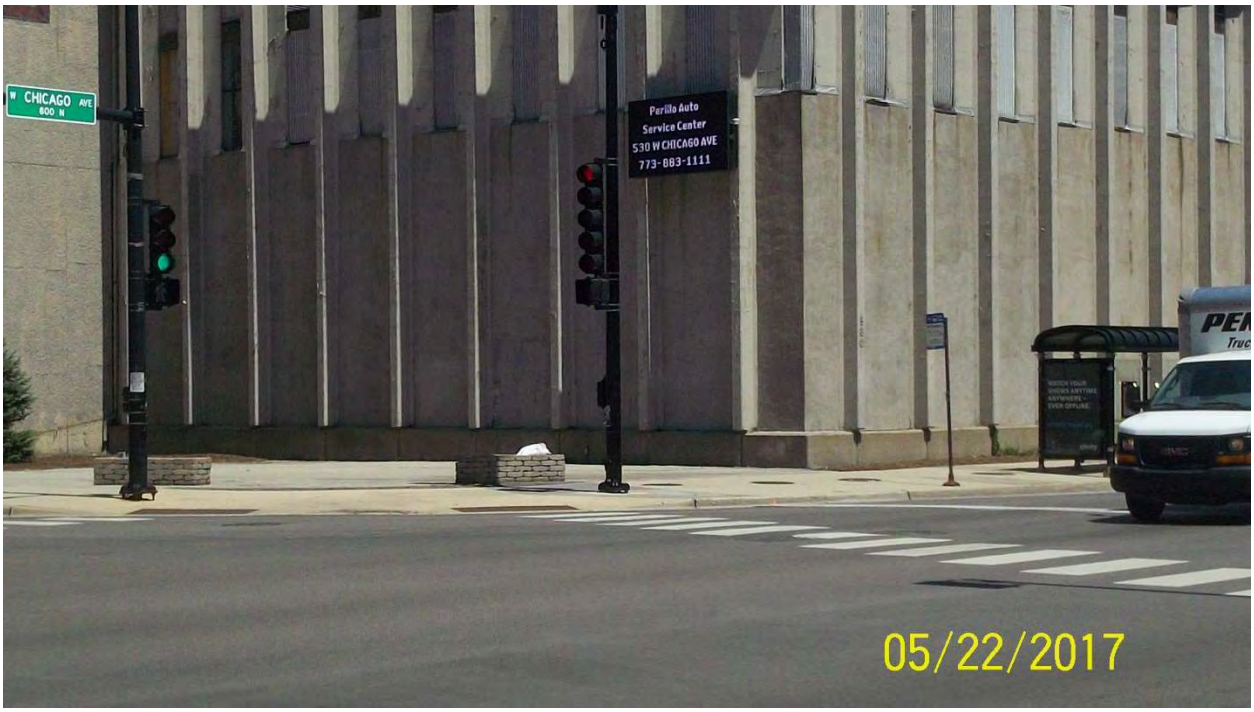


Photo 16: Southwest corner of Chicago Ave. / Larrabee St. – Looking Northwest

Photo 17: Southwest corner of Chicago Ave. / Larrabee St. – Looking North

Photo 18: Southwest corner of Chicago Ave. / Larrabee St. – Looking West

Photo 19: Southwest corner of Chicago Ave. / Larrabee St. – Looking South

Photo 20: Northwest corner of Chicago Ave. / Larrabee St. – Looking South

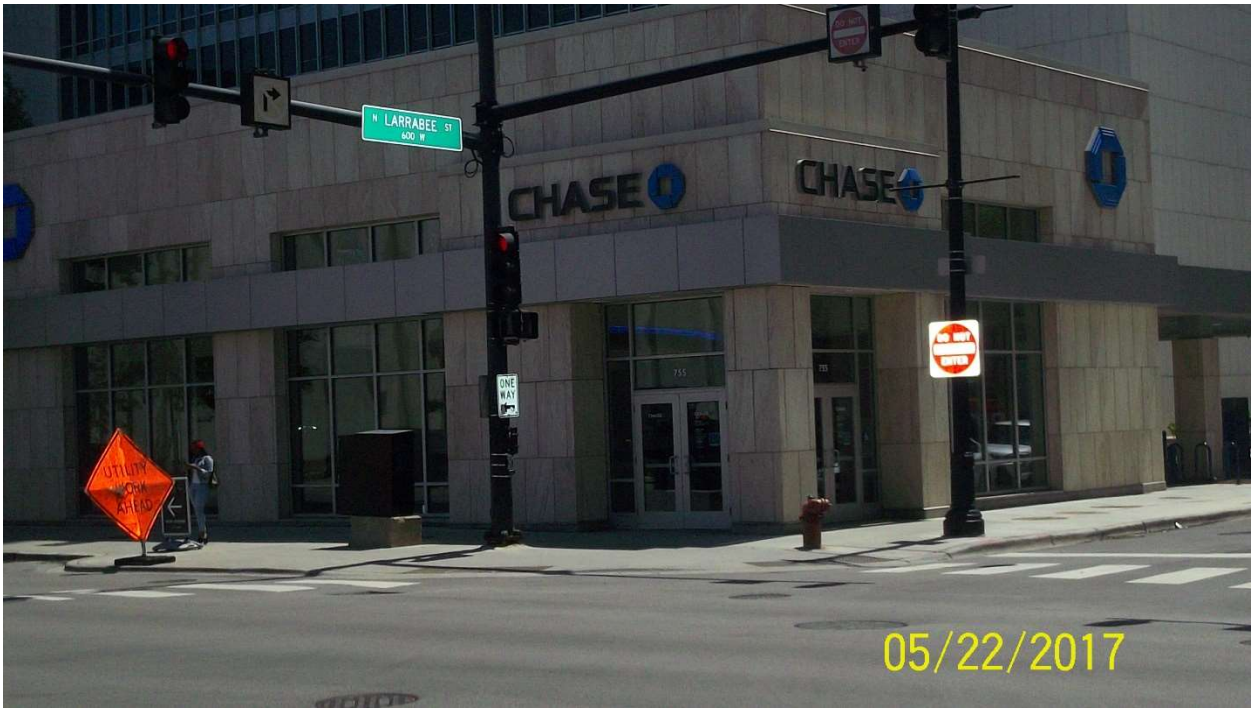


Photo 21: Northwest corner of Chicago Ave. / Larrabee St. – Looking Southeast

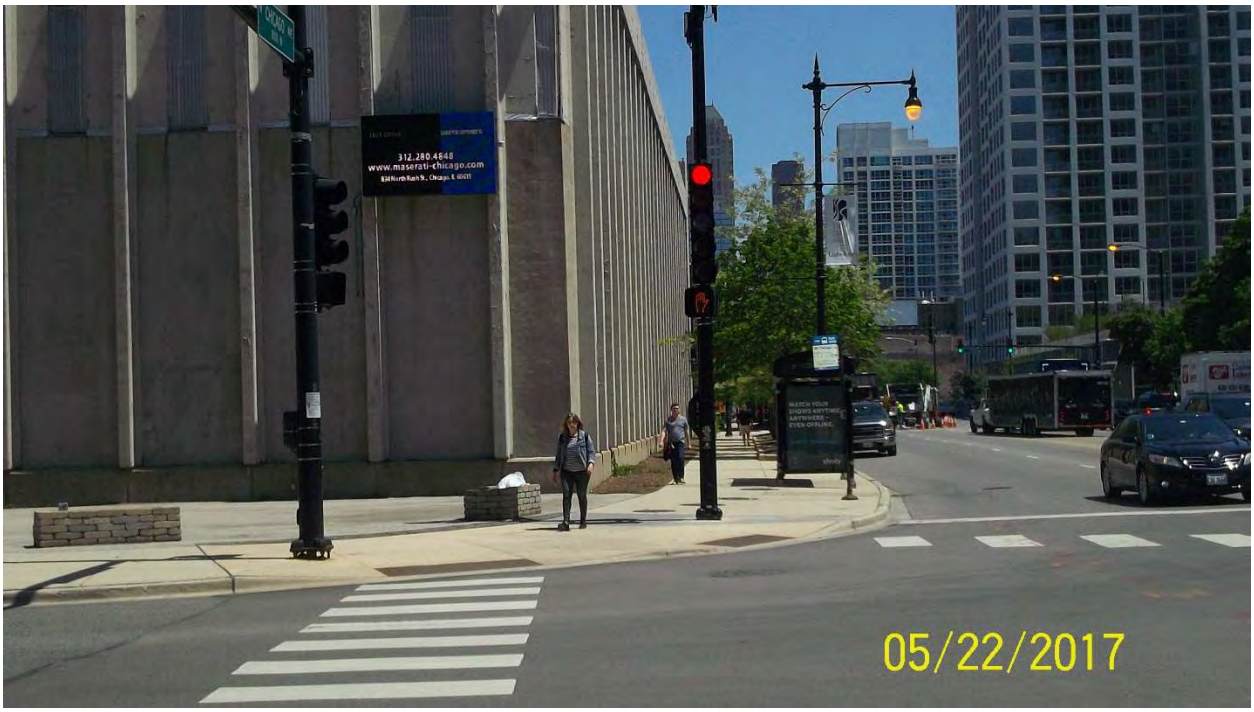


Photo 22: Northwest corner of Chicago Ave. / Larrabee St. – Looking East

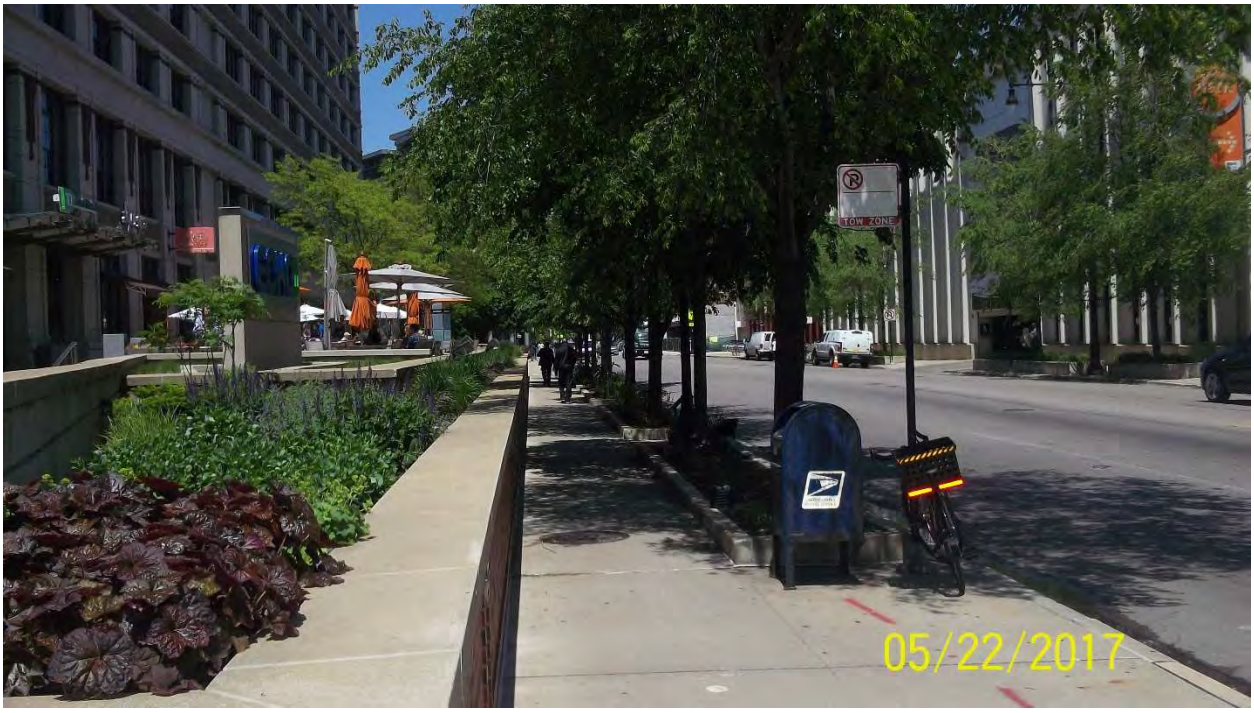


Photo 23: Northwest corner of Chicago Ave. / Larrabee St. – Looking North

Photo 24: Northwest corner of Chicago Ave. / Larrabee St. – Looking West

CTA Bus Slow Zone Project
Chicago-Franklin Photo Log

Prepared for:

Chicago Transit Authority

June 2017

Photo 1: Franklin St. – Looking South

Photo 2: Chicago Ave. – Looking East

Photo 3: Franklin St. – Looking North

Photo 4: Chicago Ave. – Looking West

Photo 5: Southwest corner of Chicago Ave. / Franklin St. – Looking East

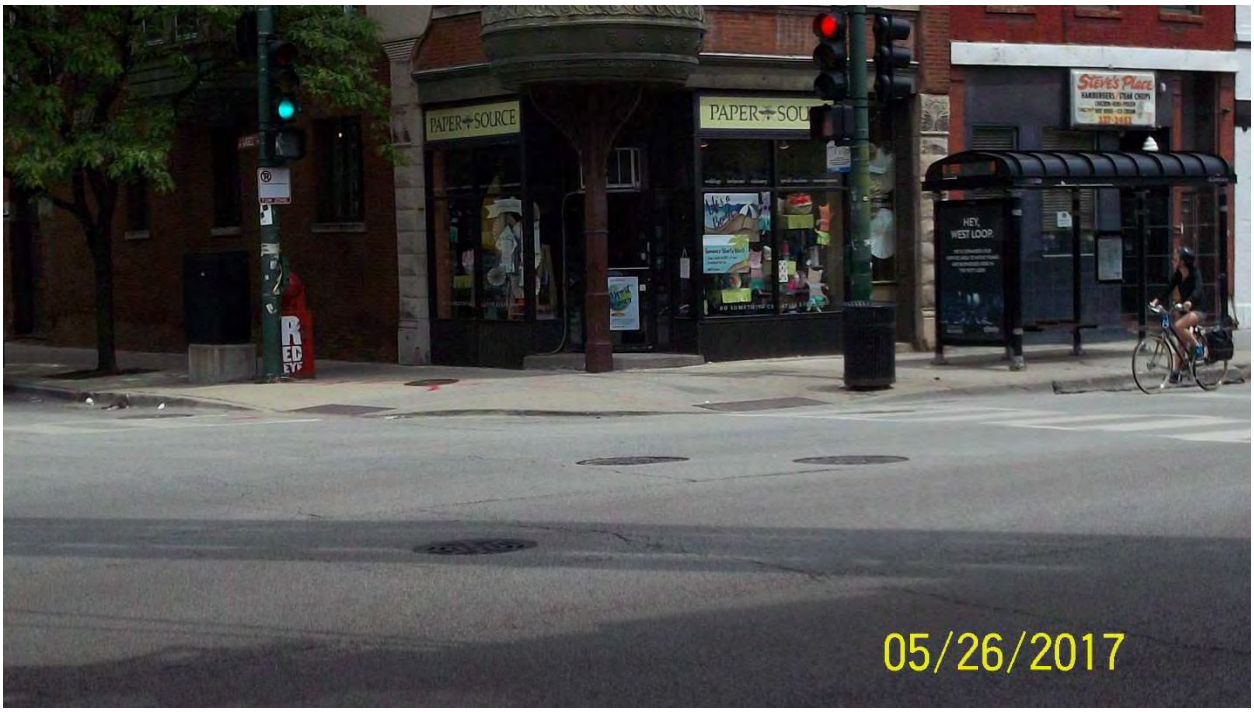


Photo 6: Southwest corner of Chicago Ave. / Franklin St. – Looking Northeast

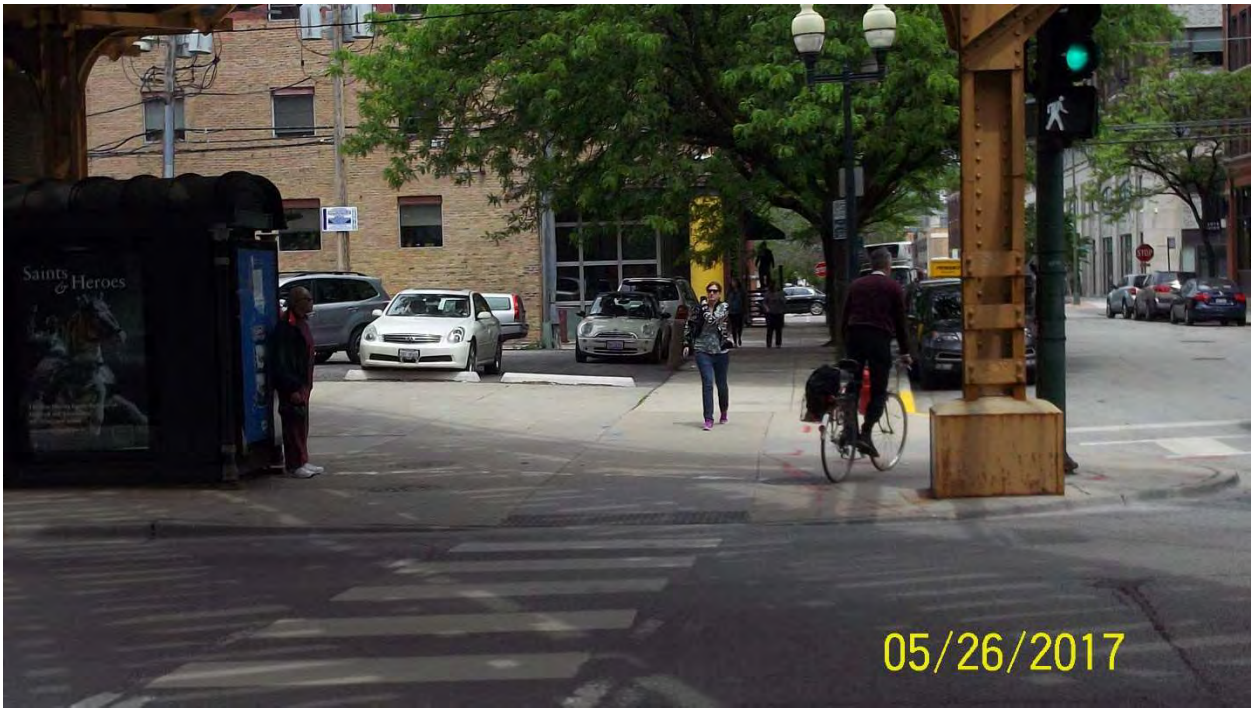


Photo 7: Southwest corner of Chicago Ave. / Franklin St. – Looking North

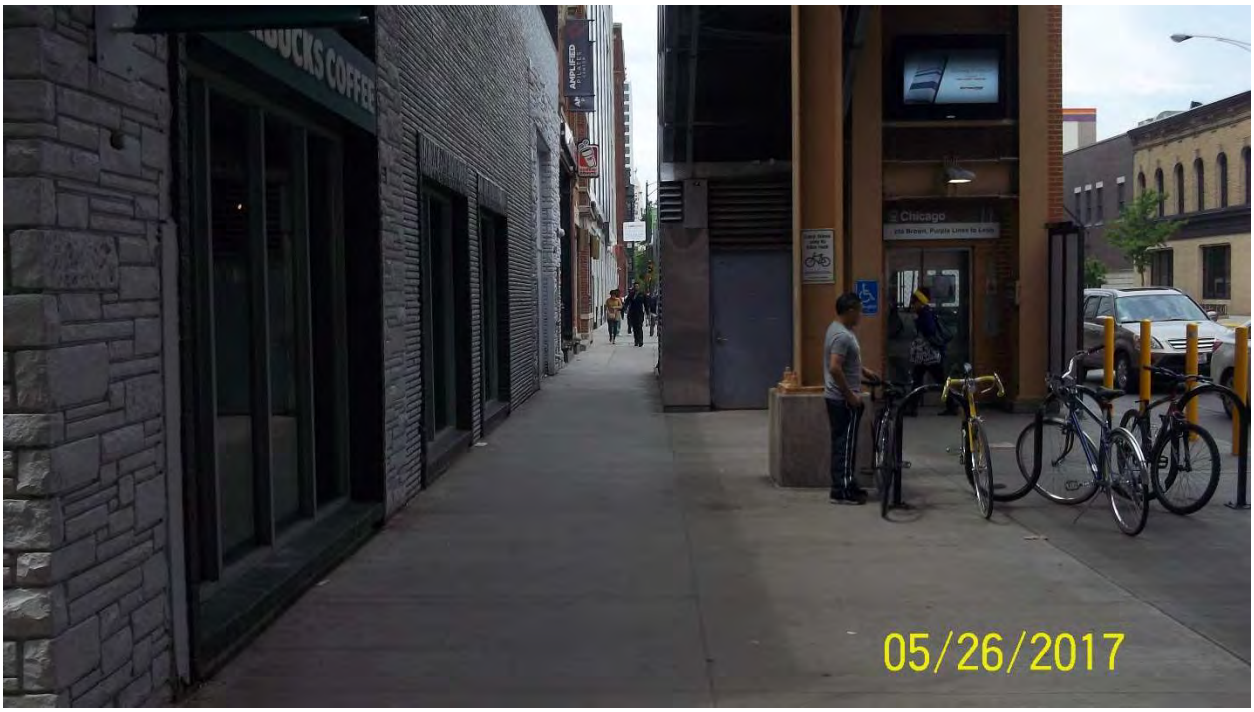


Photo 8: Southwest corner of Chicago Ave. / Franklin St. – Looking West

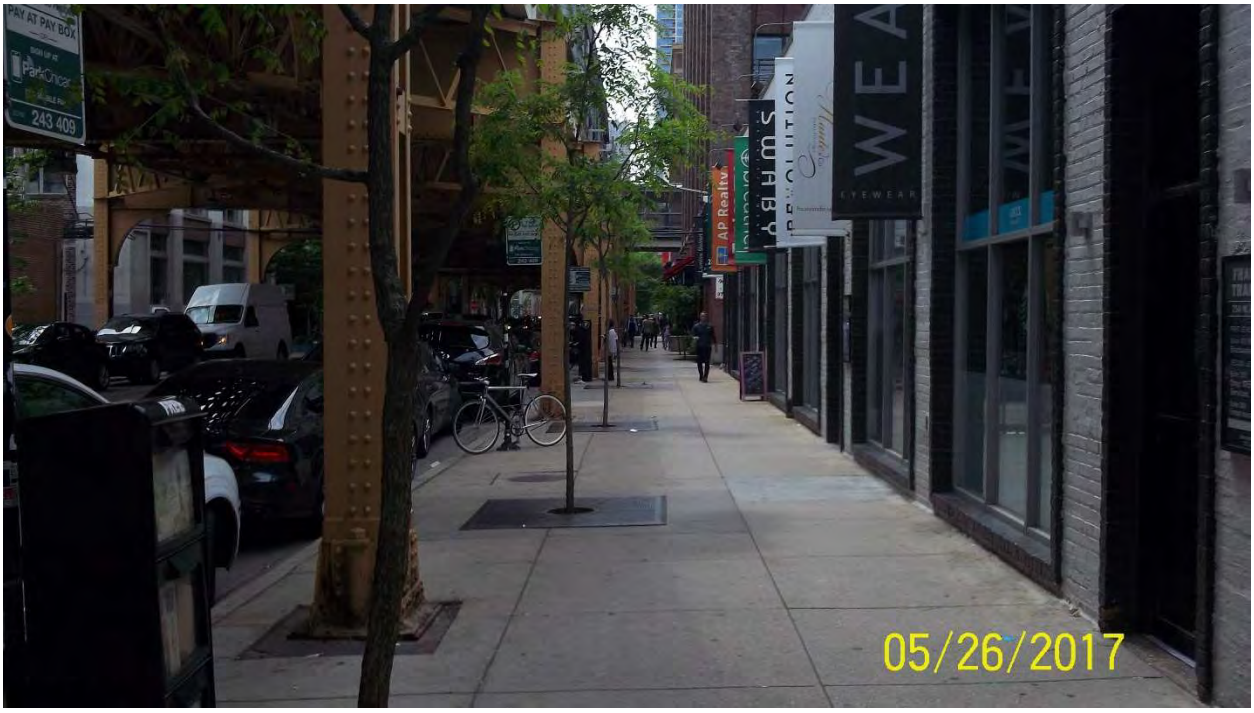


Photo 9: Southwest corner of Chicago Ave. / Franklin St. – Looking South

Photo 10: Southeast corner of Chicago Ave. / Franklin St. – Looking West

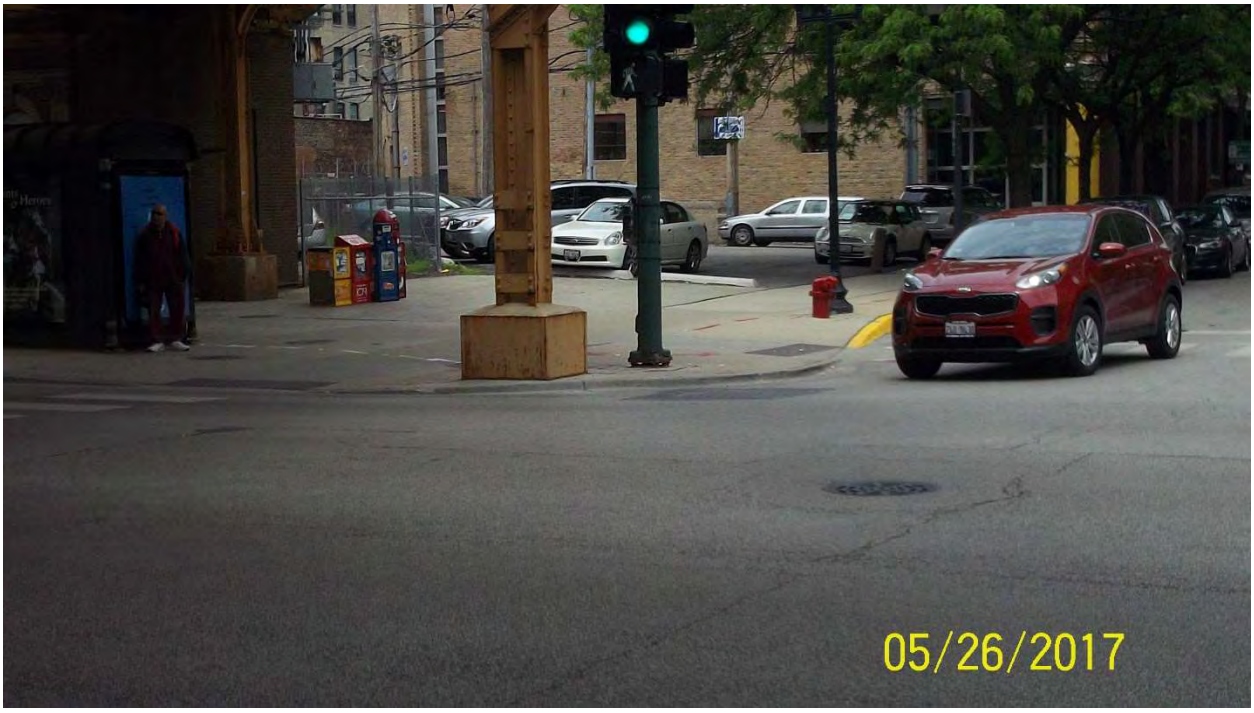


Photo 11: Southeast corner of Chicago Ave. / Franklin St. – Looking Northwest

Photo 12: Southeast corner of Chicago Ave. / Franklin St. – Looking North

Photo 13: Southeast corner of Chicago Ave. / Franklin St. – Looking East

Photo 14: Southeast corner of Chicago Ave. / Franklin St. – Looking South

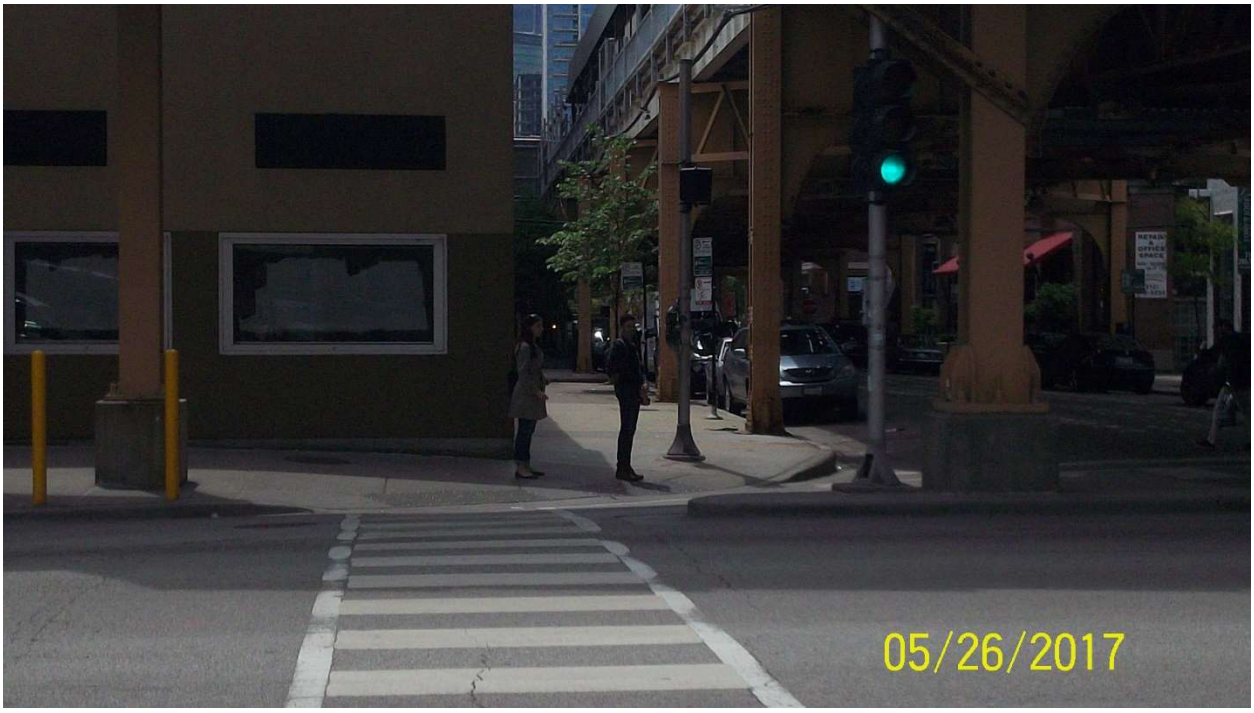


Photo 15: Northeast corner of Chicago Ave. / Franklin St. – Looking South

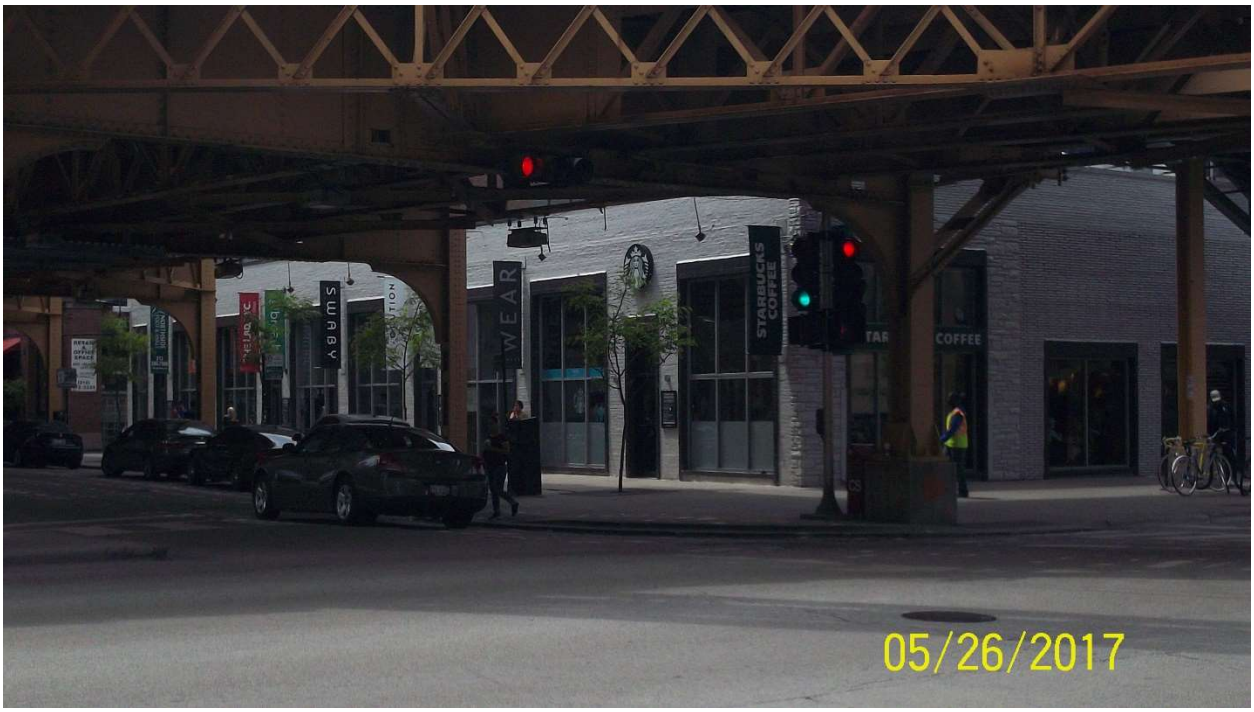


Photo 16: Northeast corner of Chicago Ave. / Franklin St. – Looking Southwest

Photo 17: Northeast corner of Chicago Ave. / Franklin St. – Looking West

Photo 18: Northeast corner of Chicago Ave. / Franklin St. – Looking North

Photo 19: Northeast corner of Chicago Ave. / Franklin St. – Looking East

Photo 20: Northwest corner of Chicago Ave. / Franklin St. – Looking East

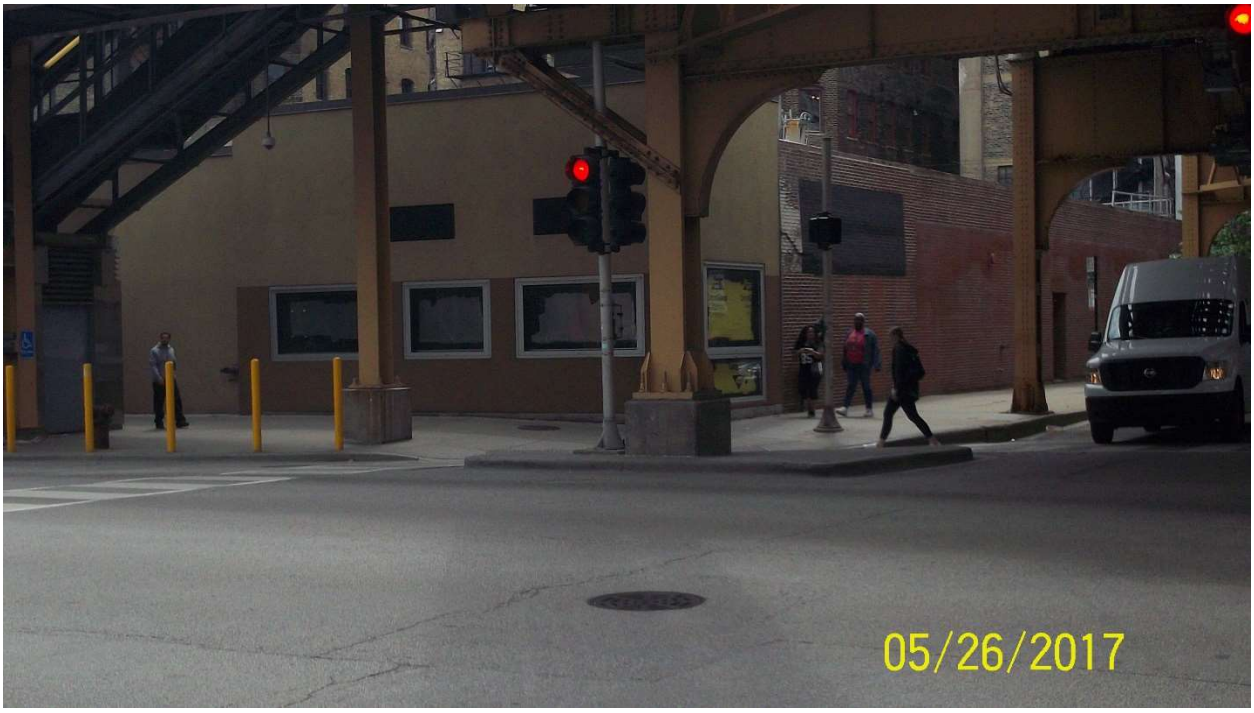


Photo 21: Northwest corner of Chicago Ave. / Franklin St. – Looking Southeast

Photo 22: Northwest corner of Chicago Ave. / Franklin St. – Looking South

Photo 23: Northwest corner of Chicago Ave. / Franklin St. – Looking West

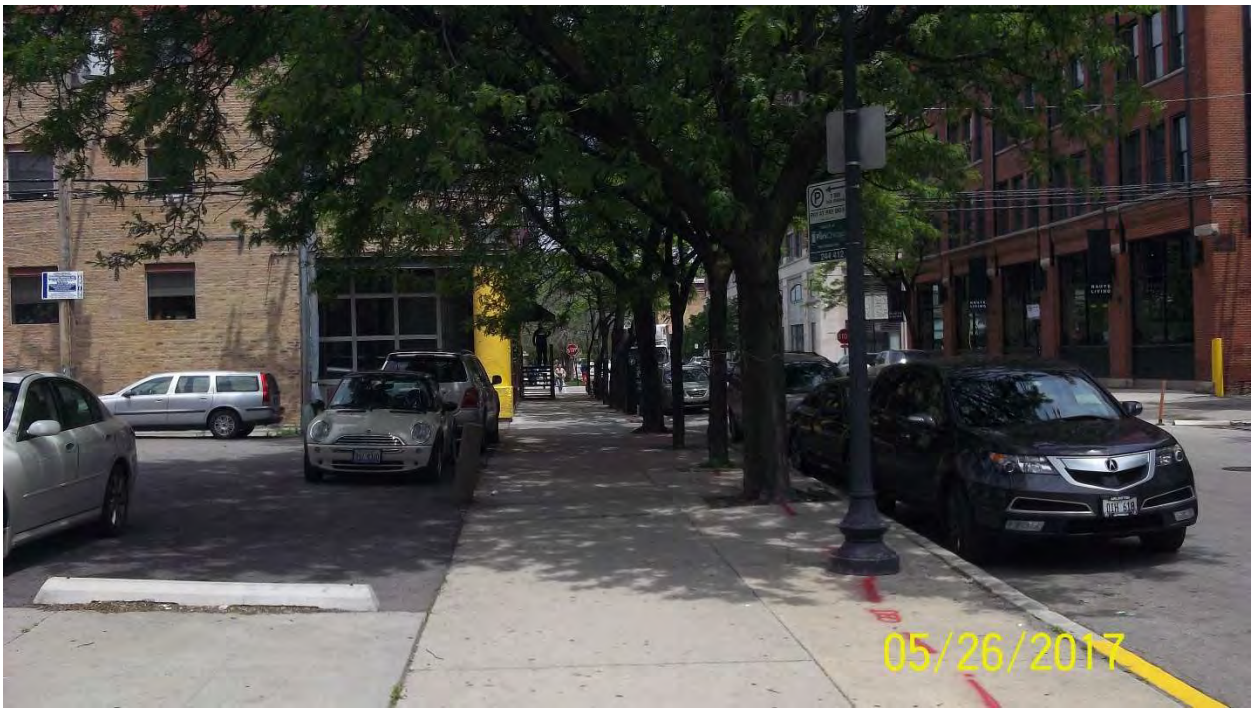


Photo 24: Northwest corner of Chicago Ave. / Franklin St. – Looking North

CTA Bus Slow Zone Project
Chicago-Wells Photo Log

Prepared for:

Chicago Transit Authority

June 2017

Photo 1: Chicago Ave. – Looking West

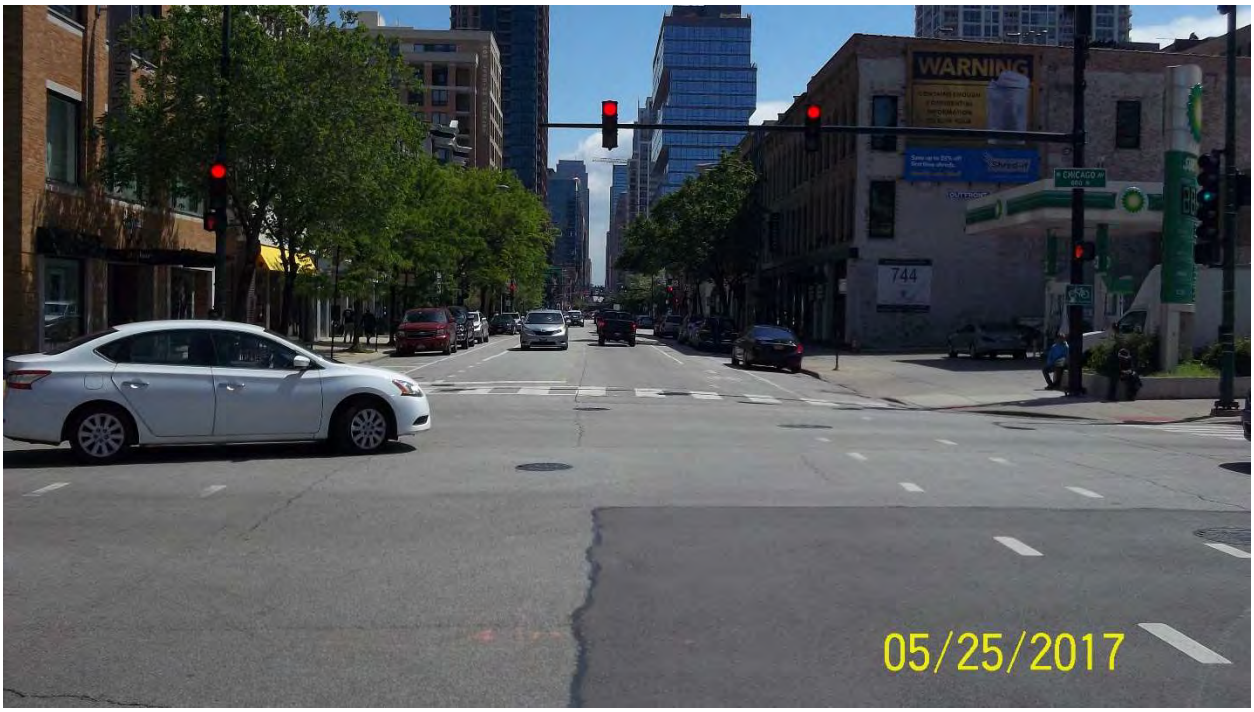


Photo 2: Wells St. – Looking South

Photo 3: Chicago Ave. – Looking East

Photo 4: Wells St. – Looking North

Photo 5: Southeast corner of Chicago Ave. / Wells St. – Looking East

Photo 6: Southeast corner of Chicago Ave. / Wells St. – Looking North

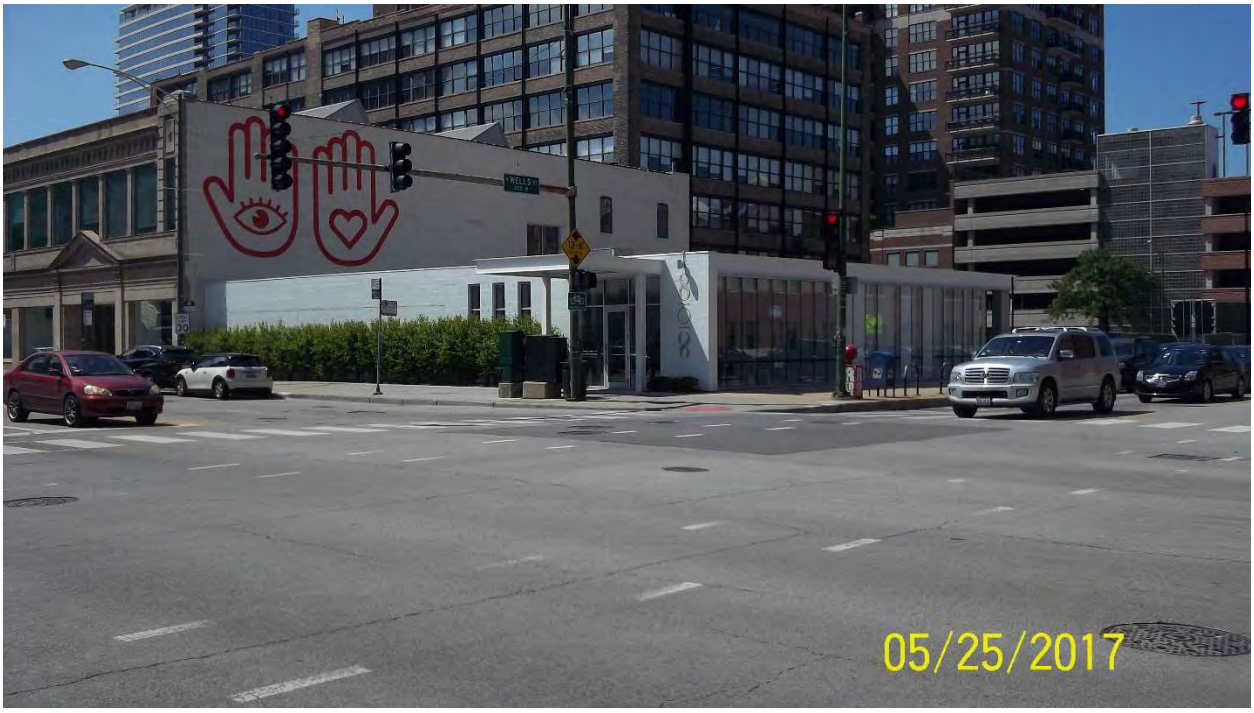


Photo 7: Southeast corner of Chicago Ave. / Wells St. – Looking Northwest

Photo 8: Southeast corner of Chicago Ave. / Wells St. – Looking West

Photo 9: Southeast corner of Chicago Ave. / Wells St. – Looking South

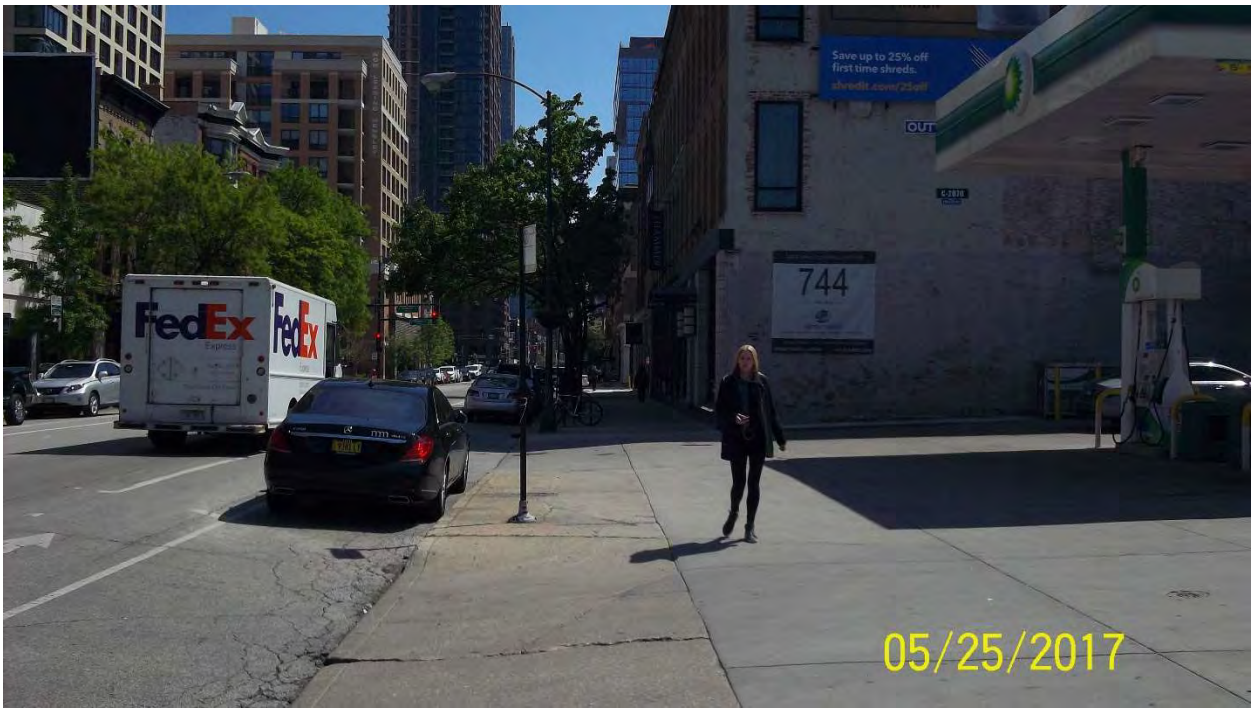


Photo 10: Southwest corner of Chicago Ave. / Wells St. – Looking South

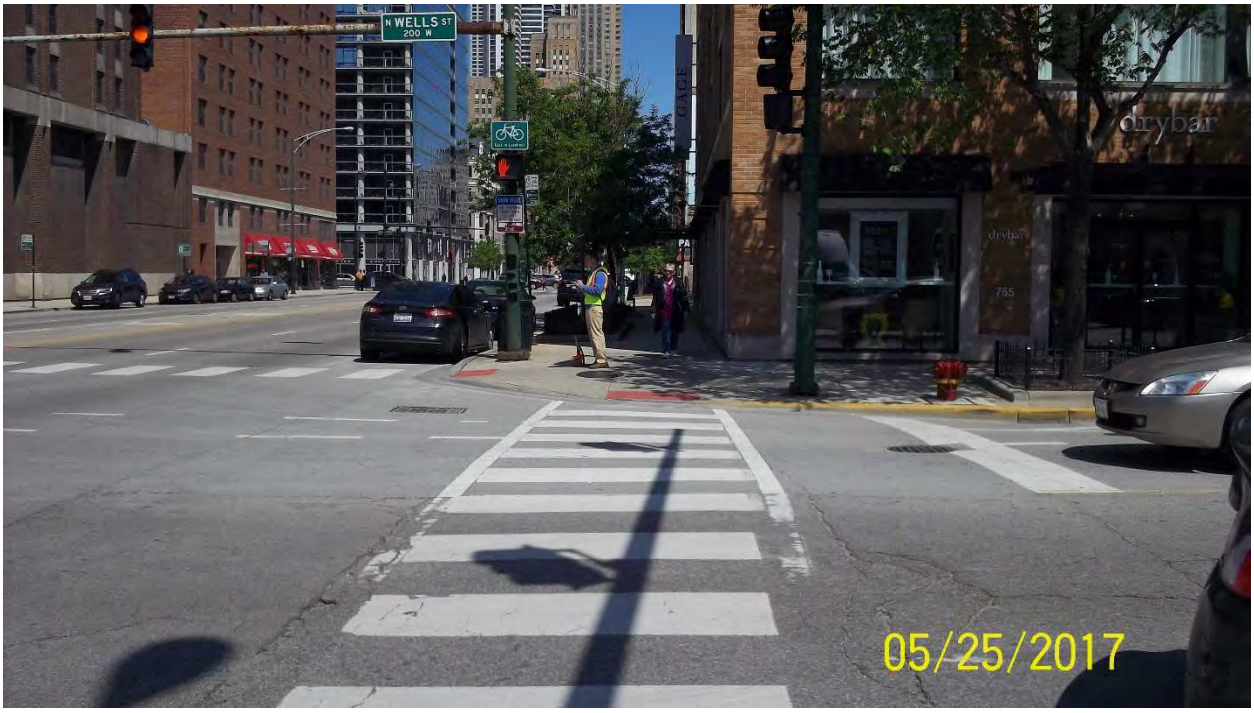


Photo 11: Southwest corner of Chicago Ave. / Wells St. – Looking East

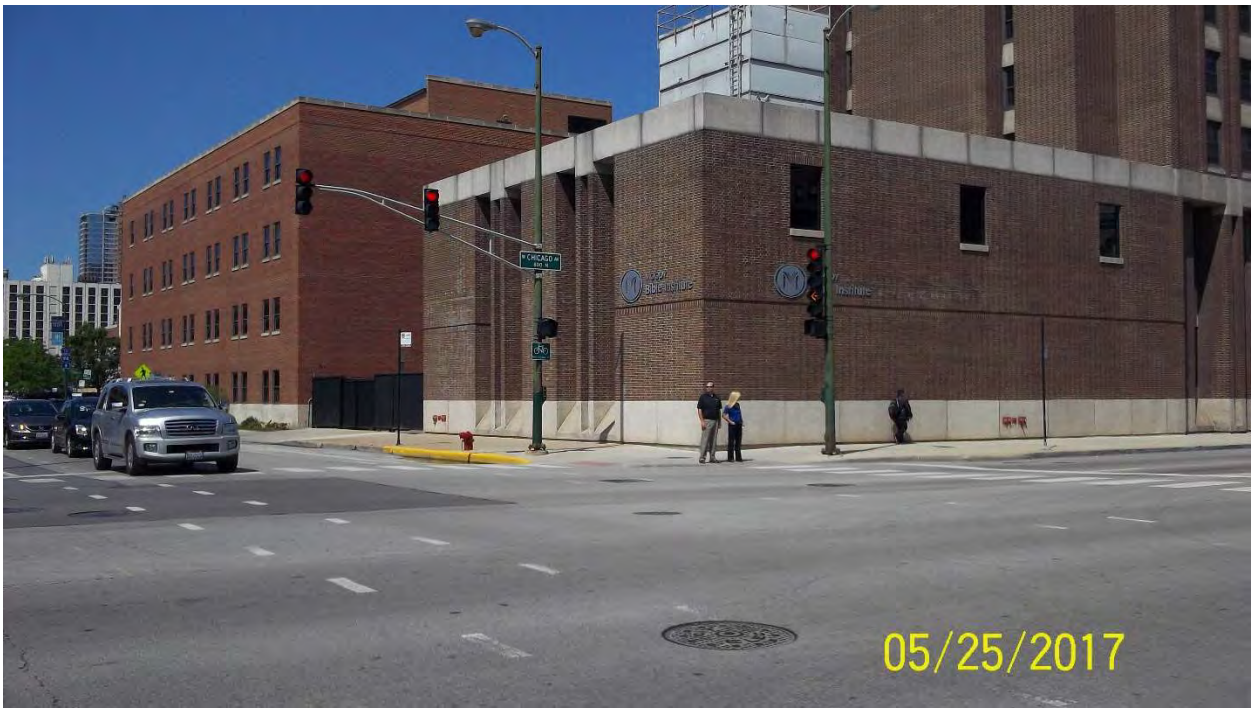


Photo 12: Southwest corner of Chicago Ave. / Wells St. – Looking Northeast

Photo 13: Southwest corner of Chicago Ave. / Wells St. – Looking North

Photo 14: Southwest corner of Chicago Ave. / Wells St. – Looking West

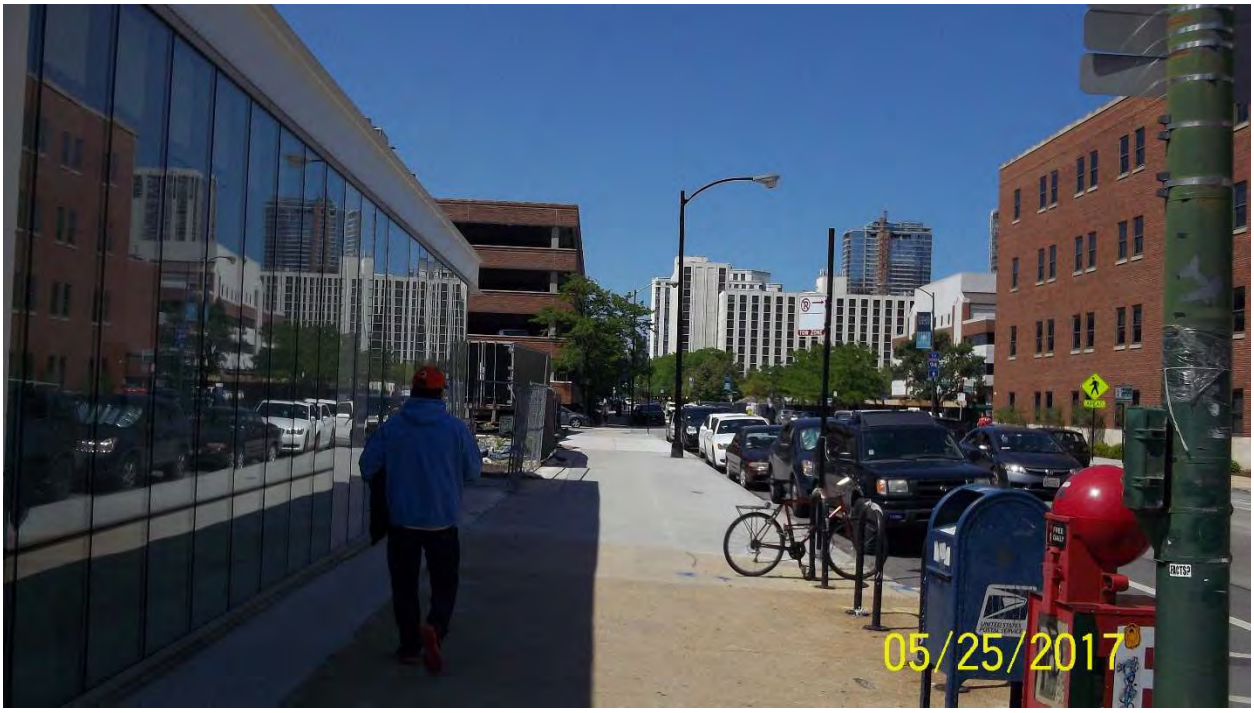


Photo 15: Northwest corner of Chicago Ave. / Wells St. – Looking North

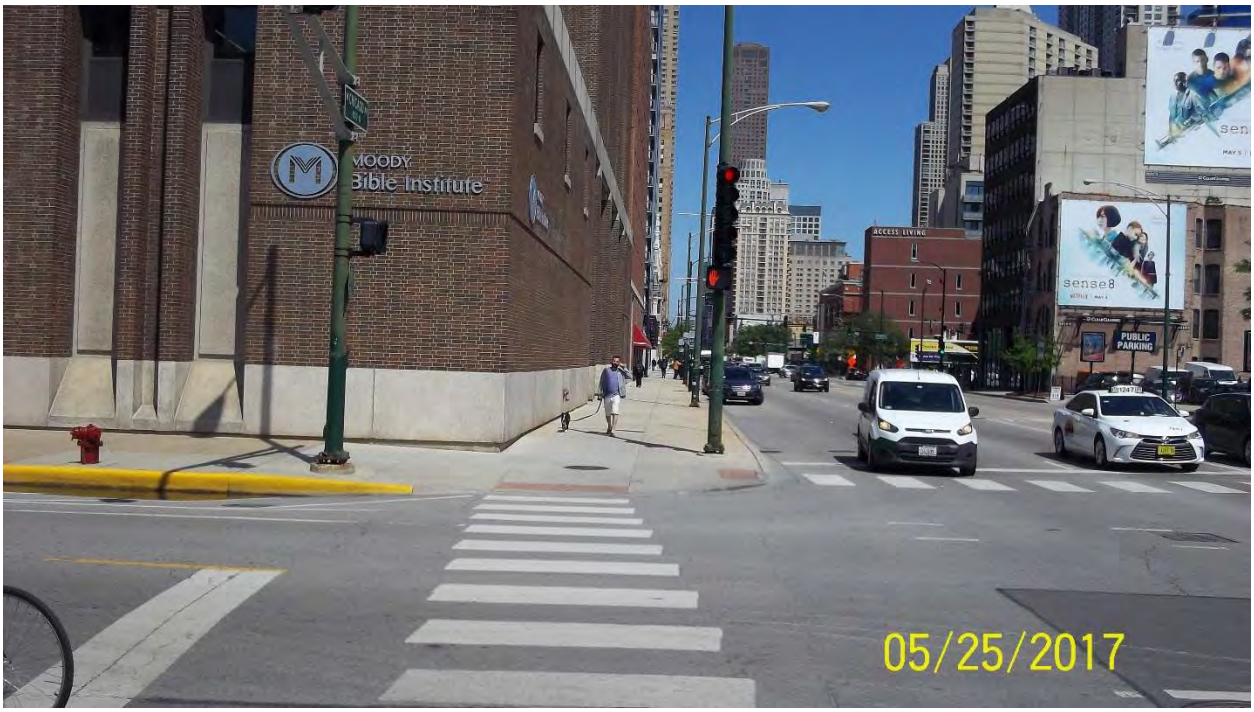


Photo 16: Northwest corner of Chicago Ave. / Wells St. – Looking East

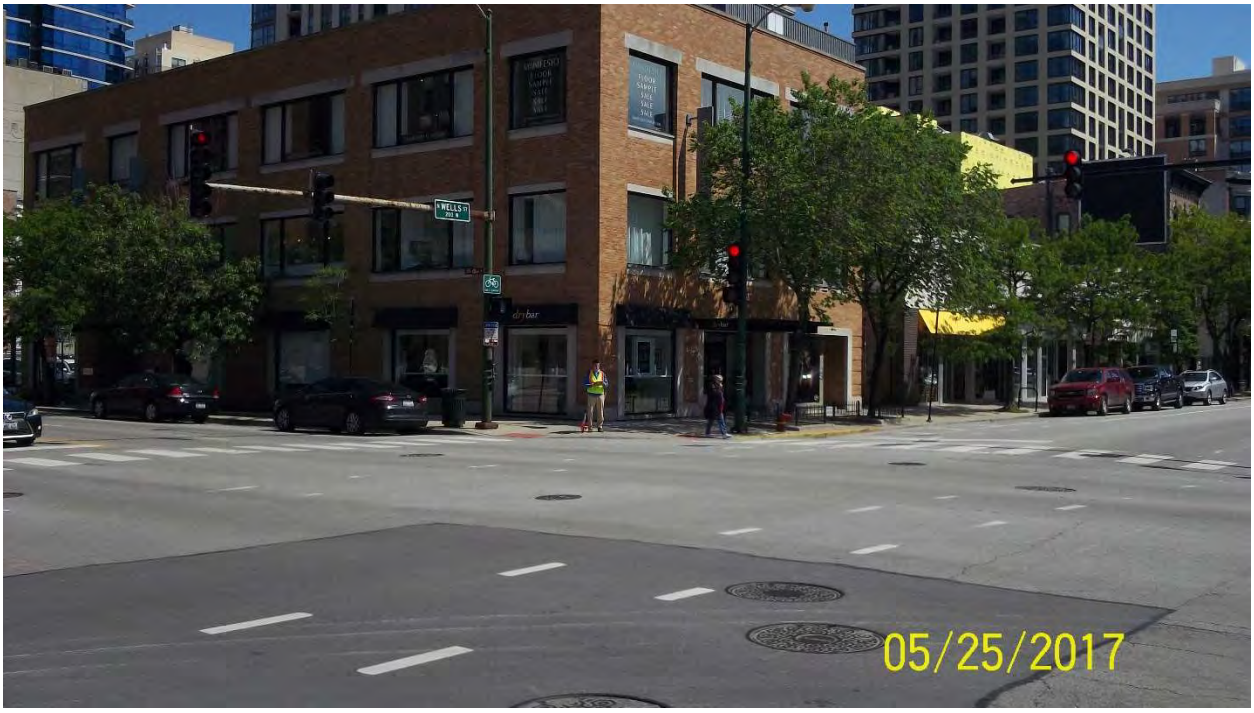


Photo 17: Northwest corner of Chicago Ave. / Wells St. – Looking Southeast

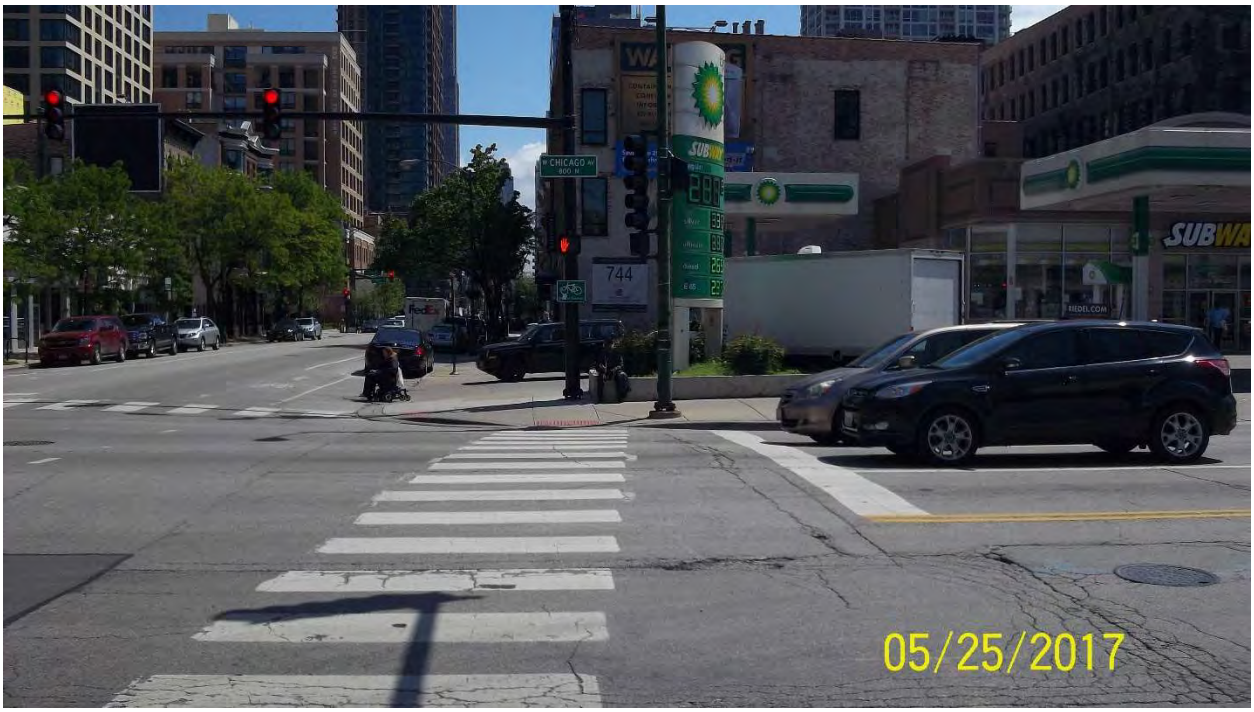


Photo 18: Northwest corner of Chicago Ave. / Wells St. – Looking South

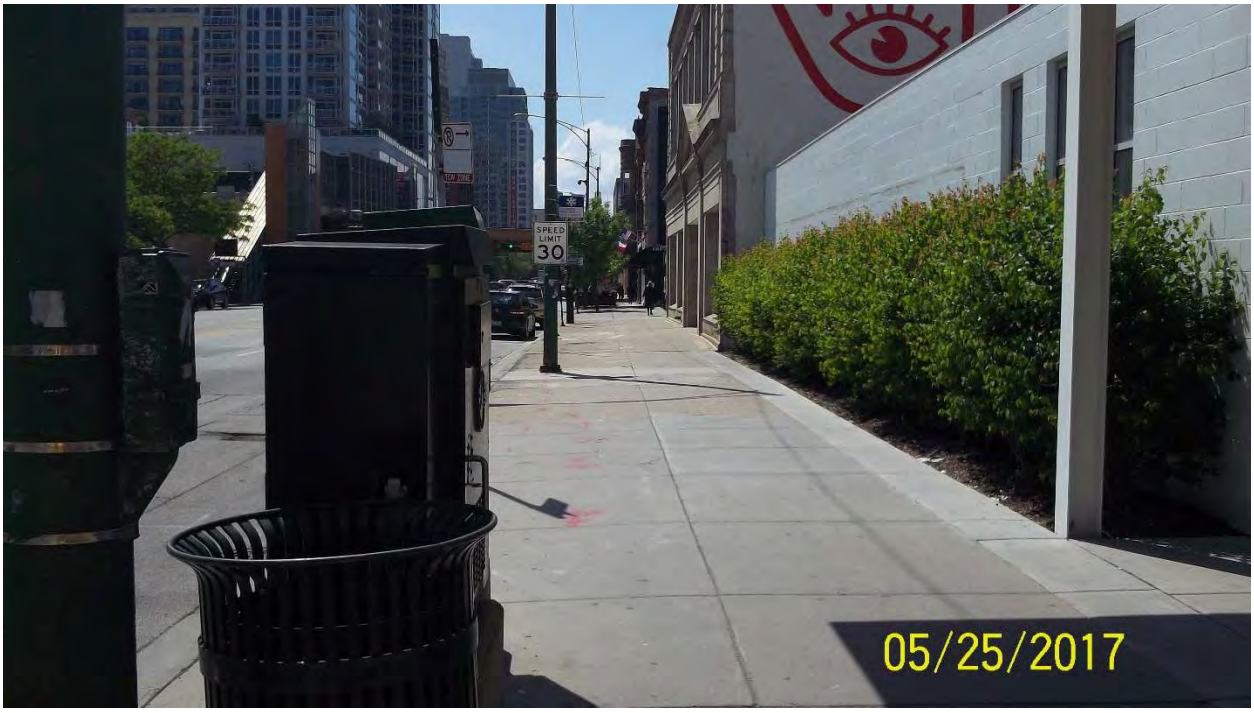


Photo 19: Northwest corner of Chicago Ave. / Wells St. – Looking West

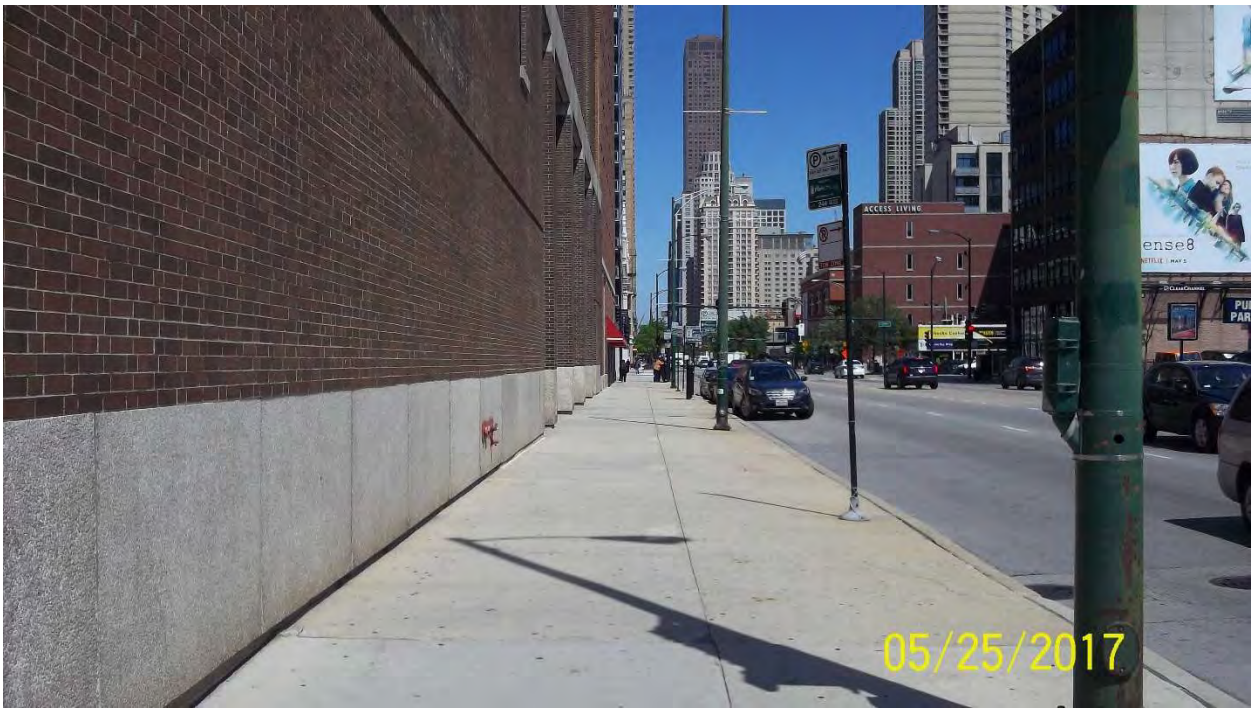


Photo 20: Northeast corner of Chicago Ave. / Wells St. – Looking East

Photo 21: Northeast corner of Chicago Ave. / Wells St. – Looking South

Photo 22: Northeast corner of Chicago Ave. / Wells St. – Looking Southwest

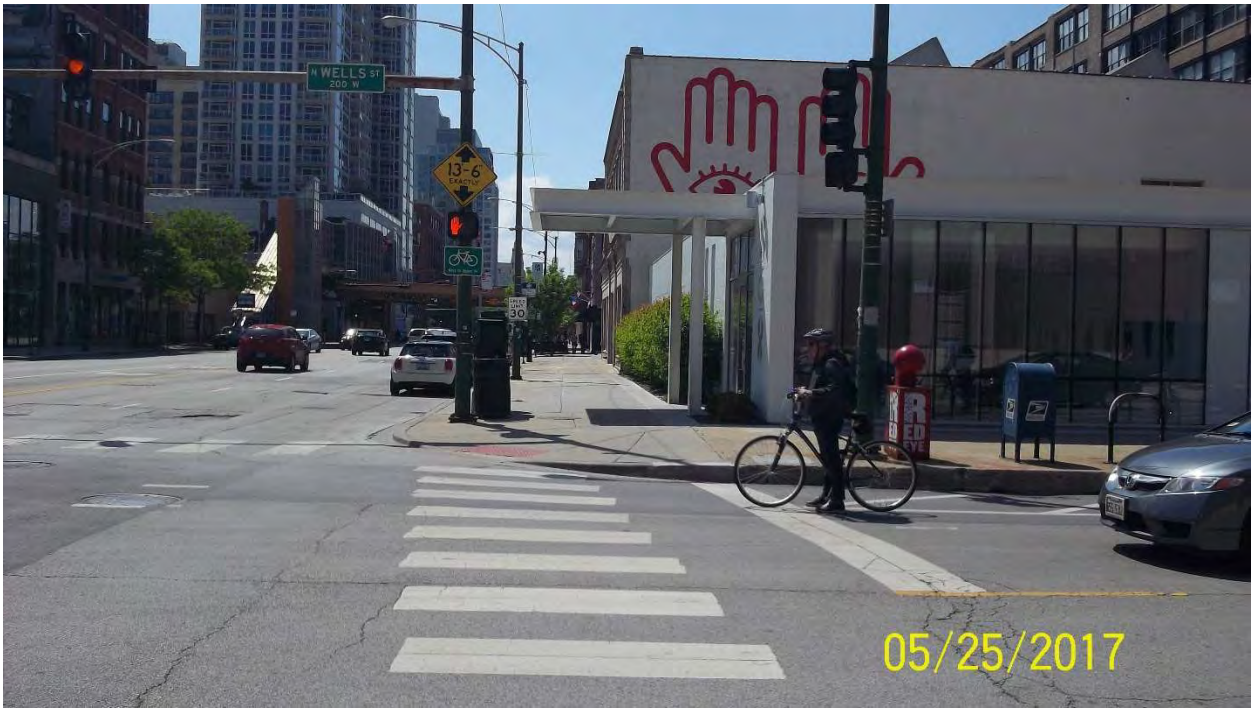


Photo 23: Northeast corner of Chicago Ave. / Wells St. – Looking West

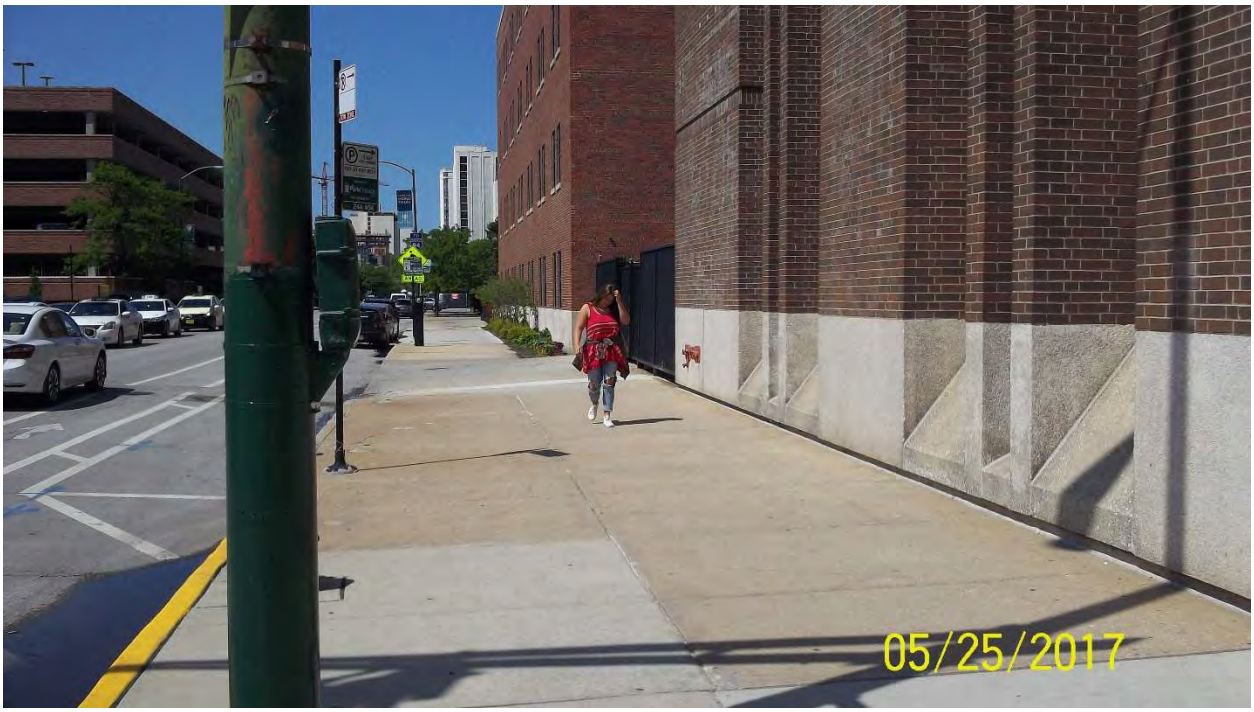


Photo 24: Northeast corner of Chicago Ave. / Wells St. – Looking North

CTA Bus Slow Zone Project
Chicago-LaSalle Photo Log

Prepared for:

Chicago Transit Authority

June 2017

Photo 1: LaSalle St. – Looking North

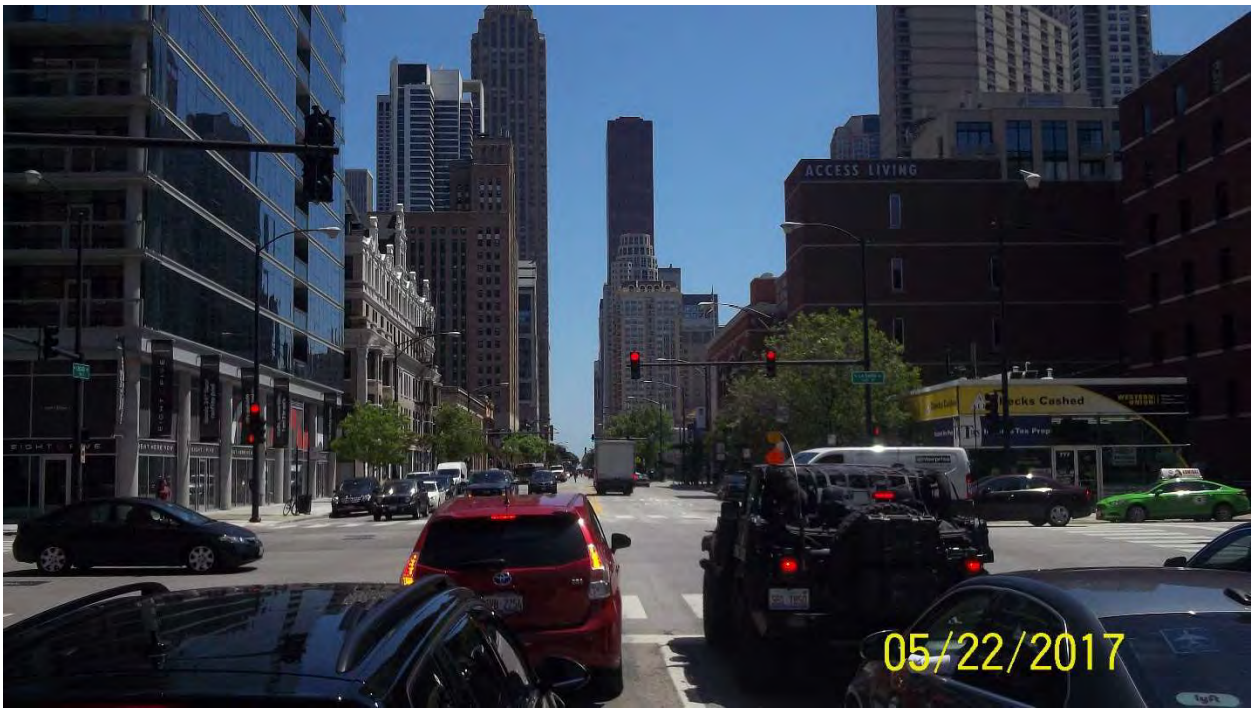


Photo 2: Chicago Ave. – Looking East

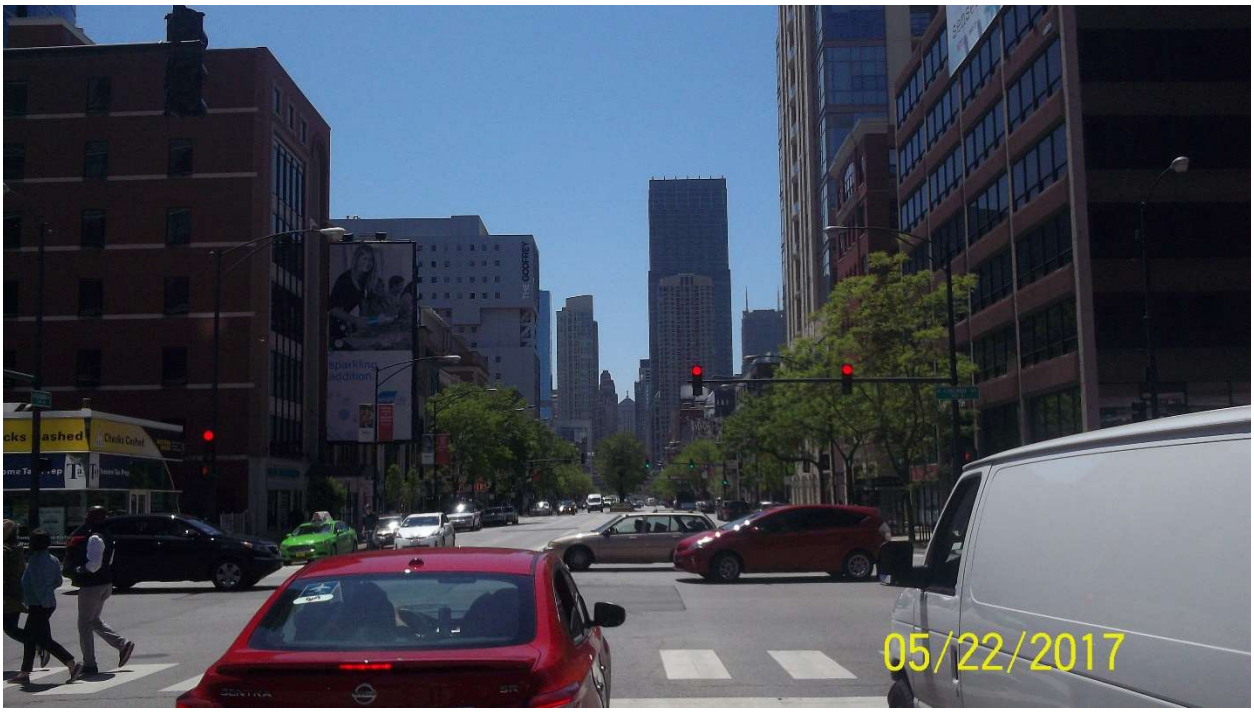


Photo 3: LaSalle St. – Looking South

Photo 4: Chicago Ave. – Looking West

Photo 5: Northeast corner of Chicago Ave. / LaSalle St. – Looking West

Photo 6: Northeast corner of Chicago Ave. / LaSalle St. – Looking Southwest

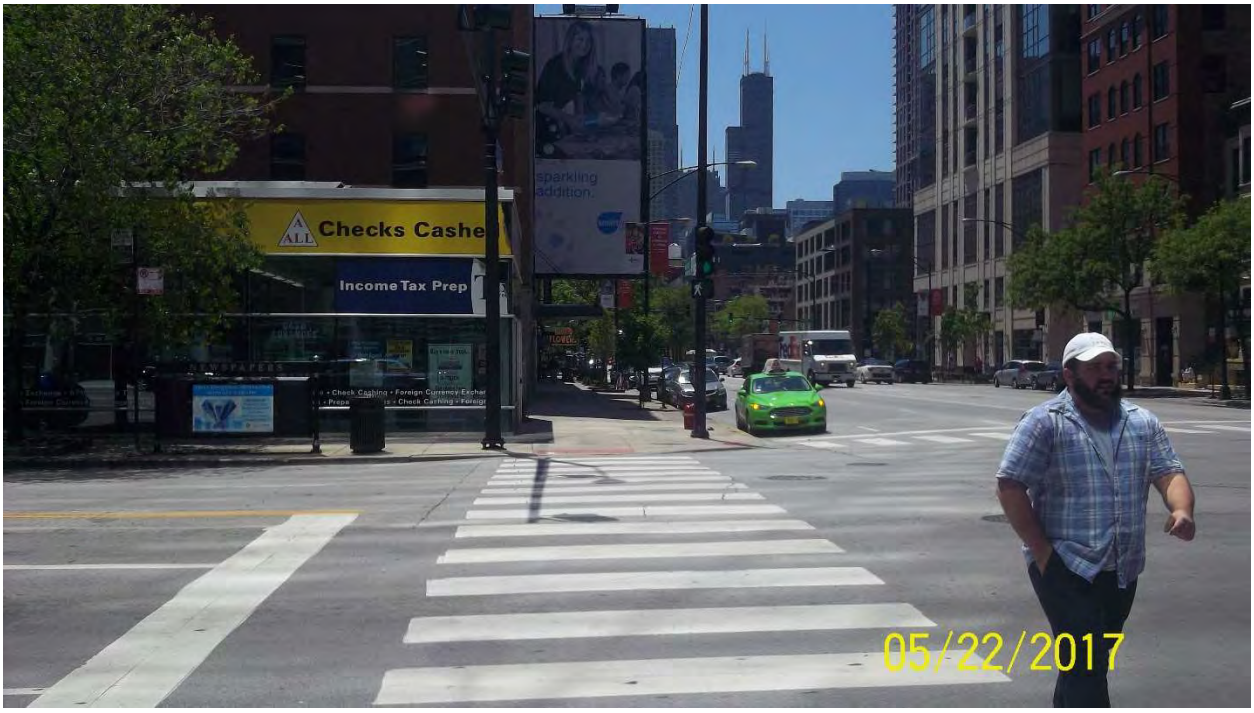


Photo 7: Northeast corner of Chicago Ave. / LaSalle St. – Looking South

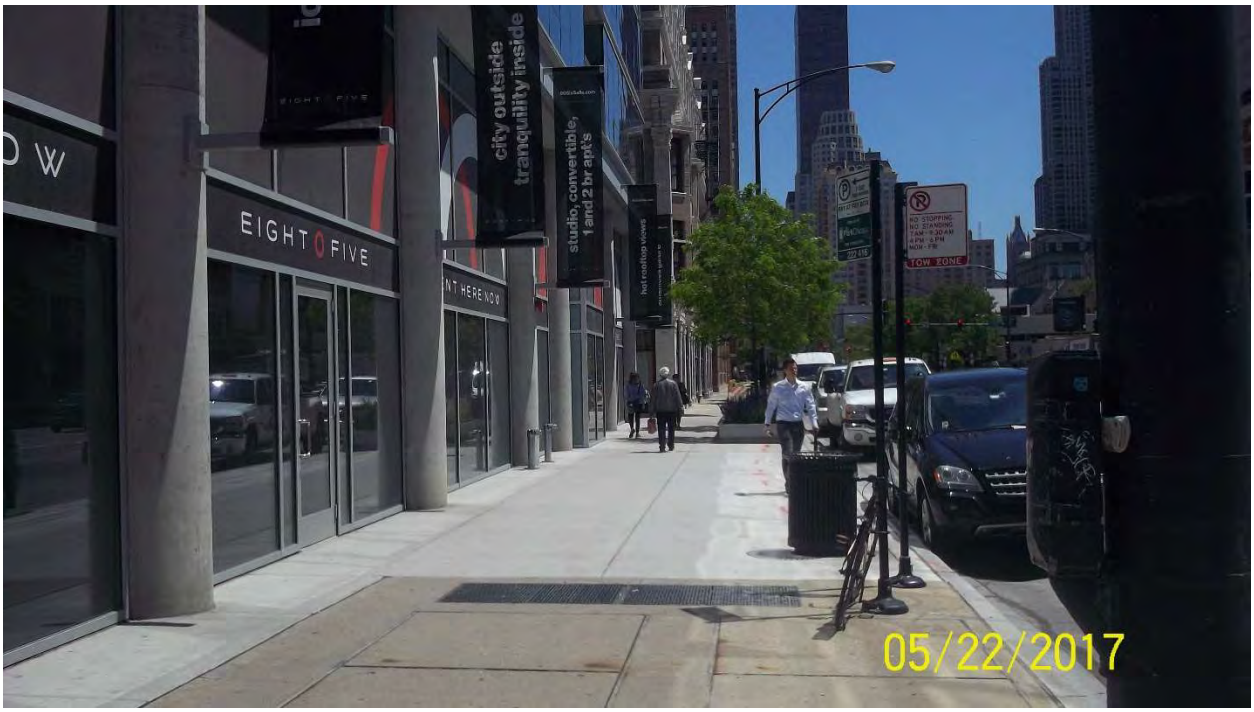


Photo 8: Northeast corner of Chicago Ave. / LaSalle St. – Looking East

Photo 9: Northeast corner of Chicago Ave. / LaSalle St. – Looking North

Photo 10: Northwest corner of Chicago Ave. / LaSalle St. – Looking South

Photo 11: Northwest corner of Chicago Ave. / LaSalle St. – Looking Southeast

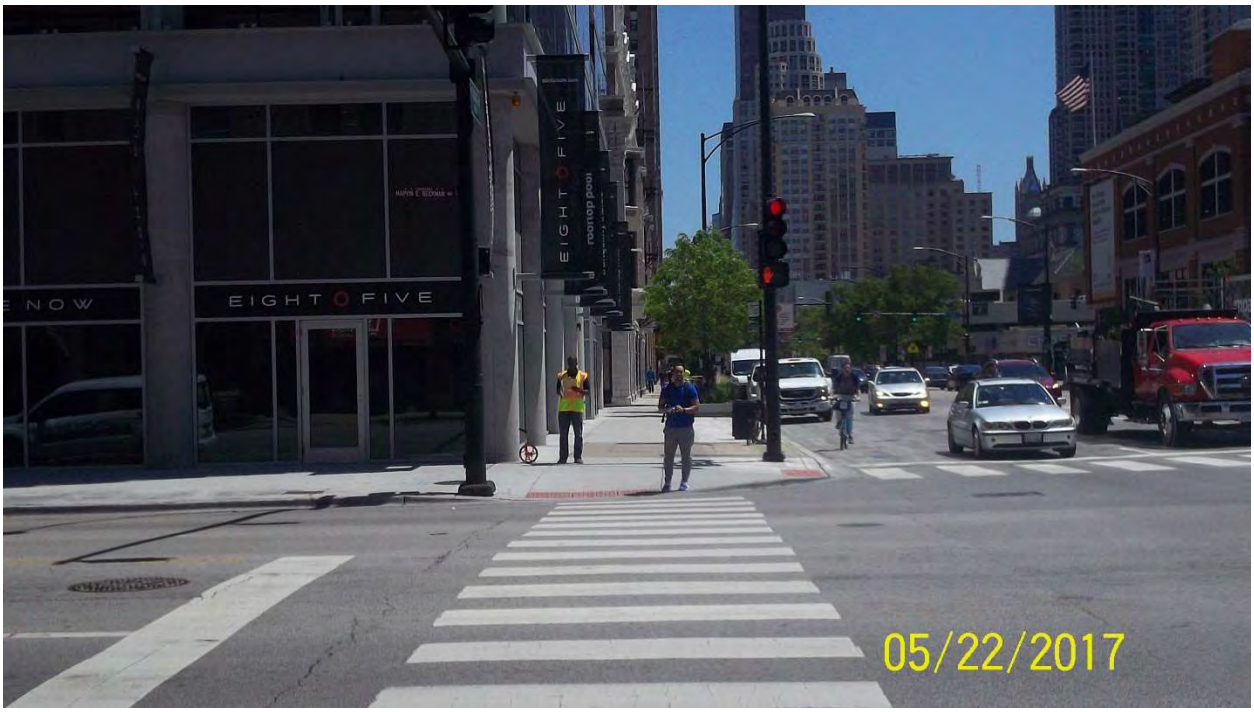


Photo 12: Northwest corner of Chicago Ave. / LaSalle St. – Looking East

Photo 13: Northwest corner of Chicago Ave. / LaSalle St. – Looking North

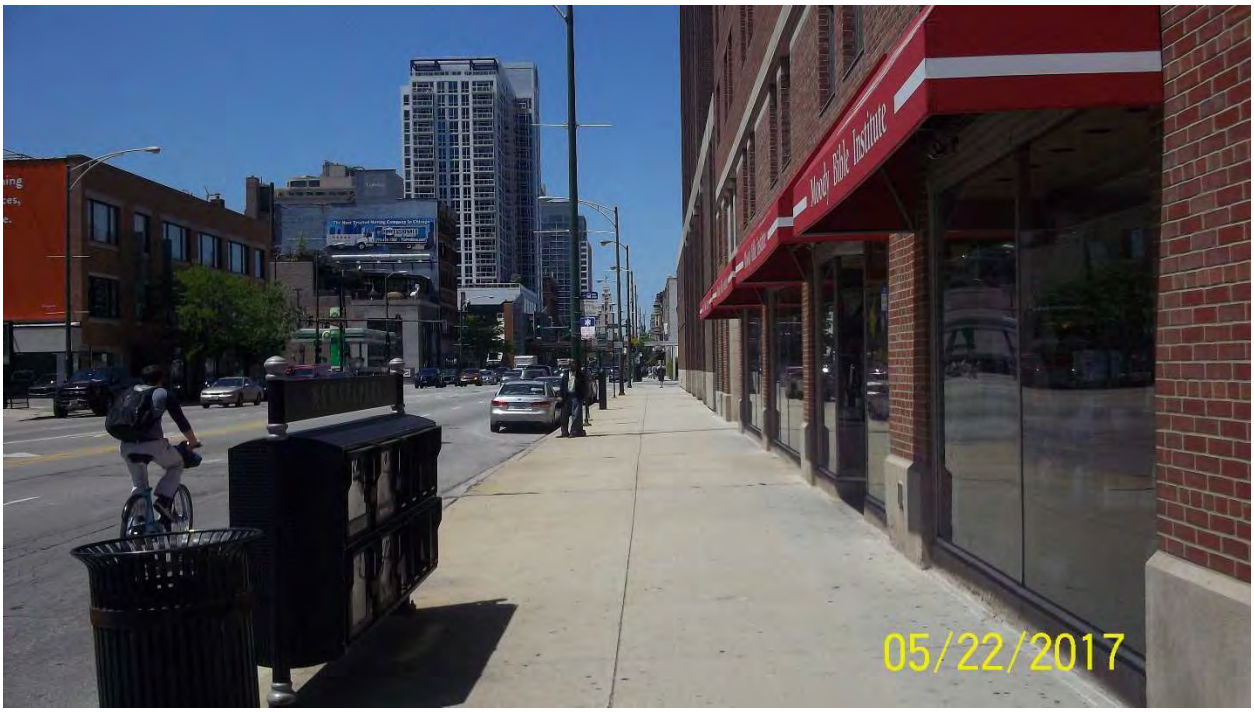


Photo 14: Northwest corner of Chicago Ave. / LaSalle St. – Looking West

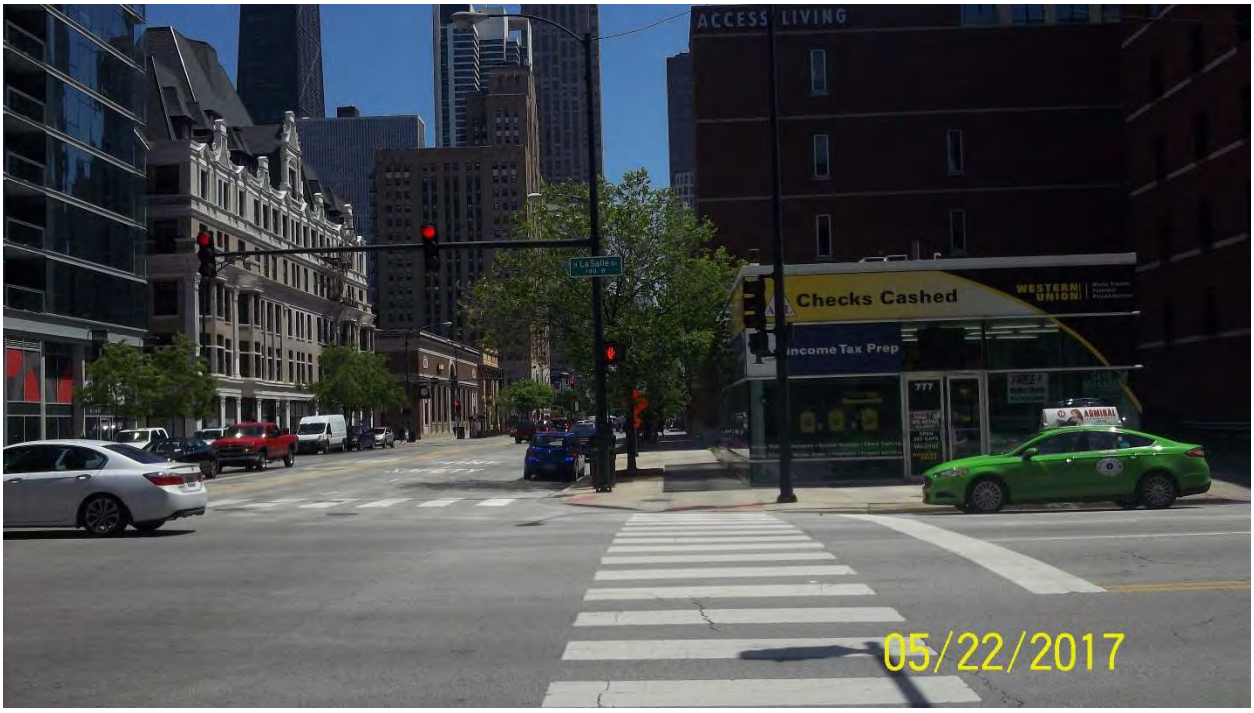


Photo 15 Southwest corner of Chicago Ave. / LaSalle St. – Looking East

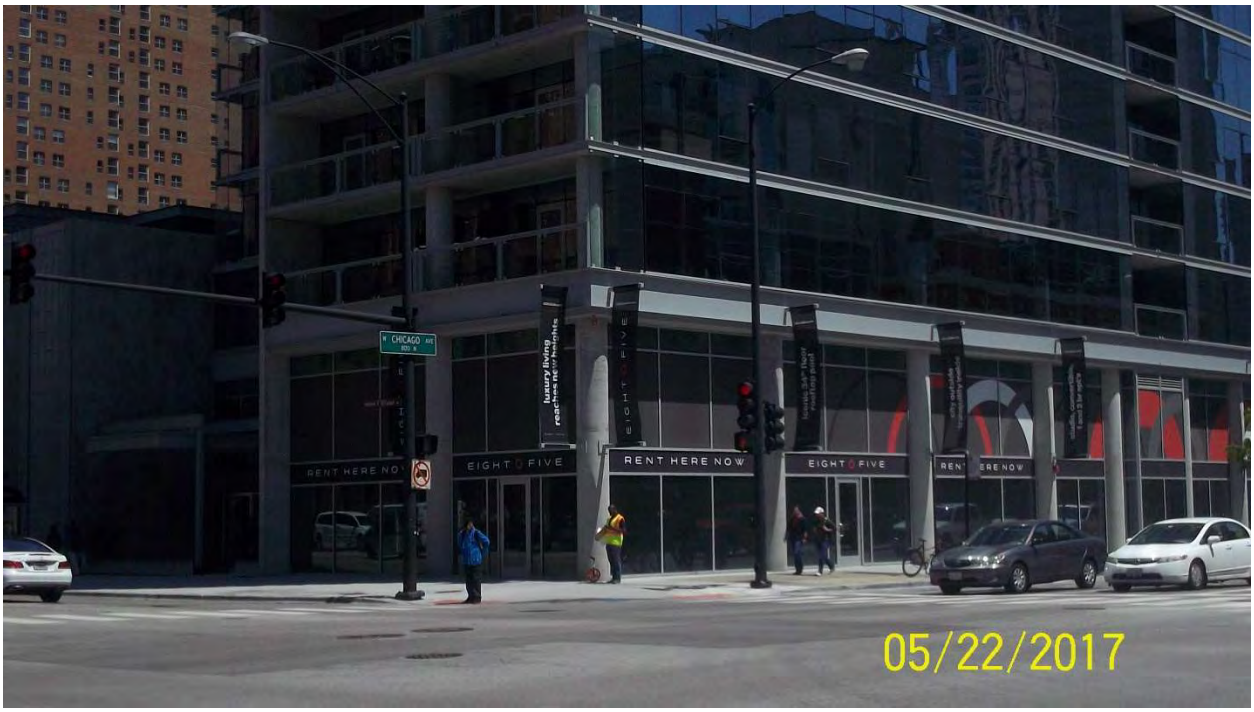


Photo 16: Southwest corner of Chicago Ave. / LaSalle St. – Looking Northeast

Photo 17: Southwest corner of Chicago Ave. / LaSalle St. – Looking North

Photo 18: Southwest corner of Chicago Ave. / LaSalle St. – Looking West

Photo 19: Southwest corner of Chicago Ave. / LaSalle St. – Looking South

Photo 20: Southeast corner of Chicago Ave. / LaSalle St. – Looking North

Photo 21: Southeast corner of Chicago Ave. / LaSalle St. – Looking Northwest

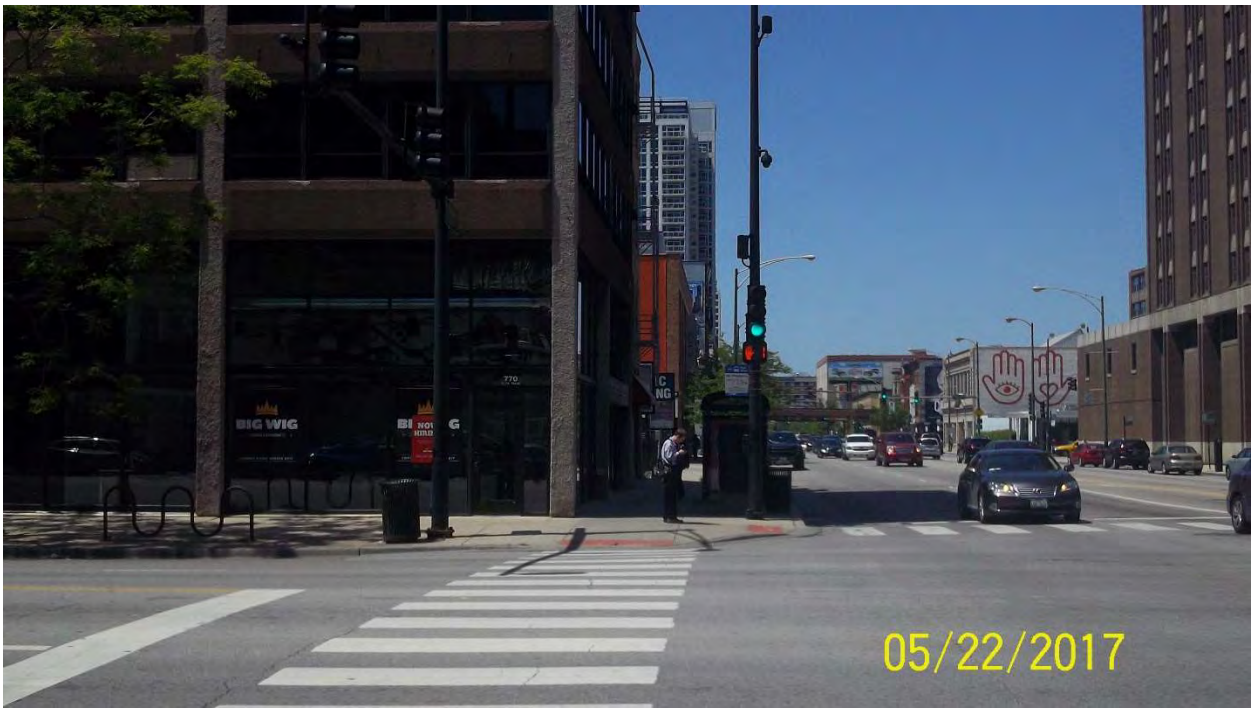


Photo 22: Southeast corner of Chicago Ave. / LaSalle St. – Looking West

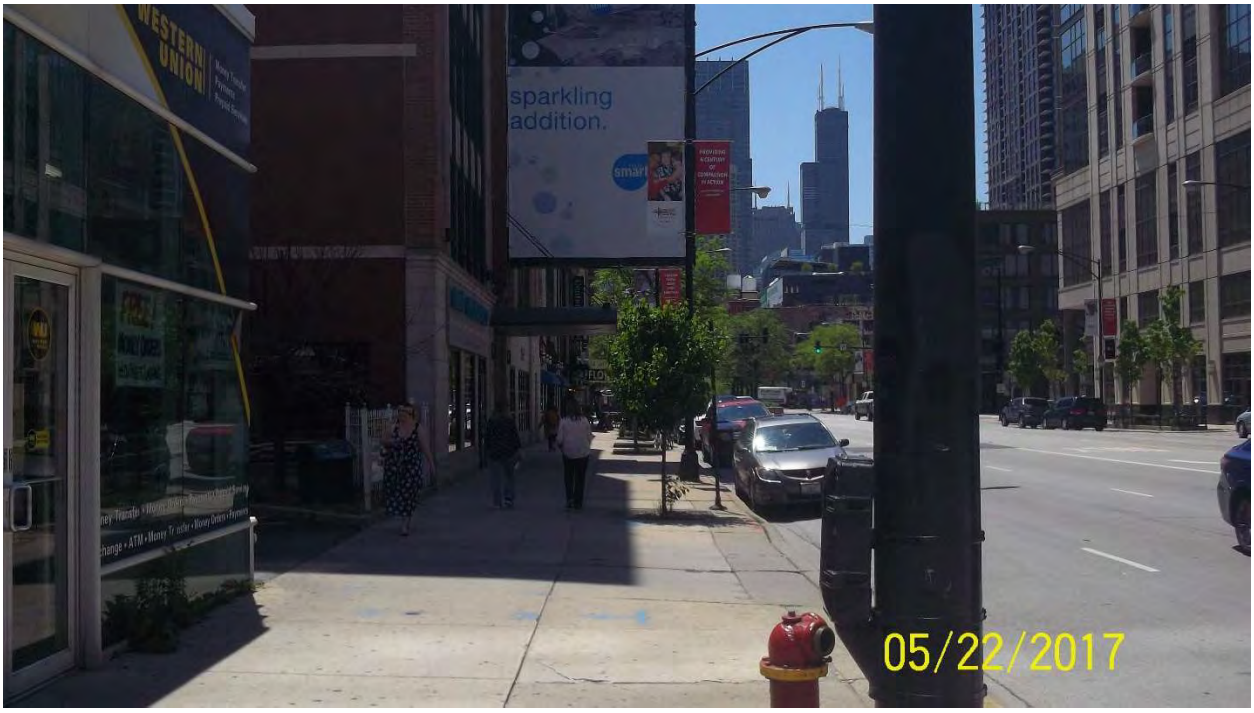


Photo 23: Southeast corner of Chicago Ave. / LaSalle St. – Looking South

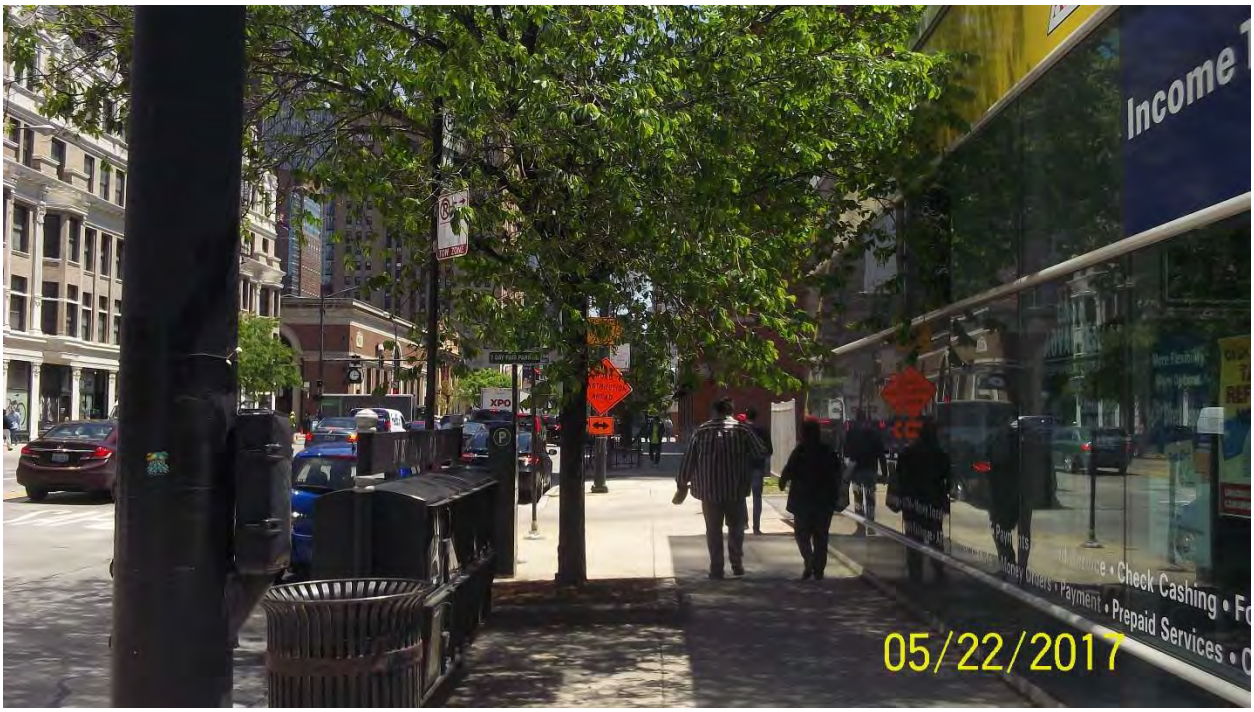


Photo 24: Southeast corner of Chicago Ave. / LaSalle St. – Looking East

CTA Bus Slow Zone Project
Chicago-Clark Photo Log

Prepared for:

Chicago Transit Authority

Chicago Transit Authority

June 2017

Photo 1: Clark St. – Looking North

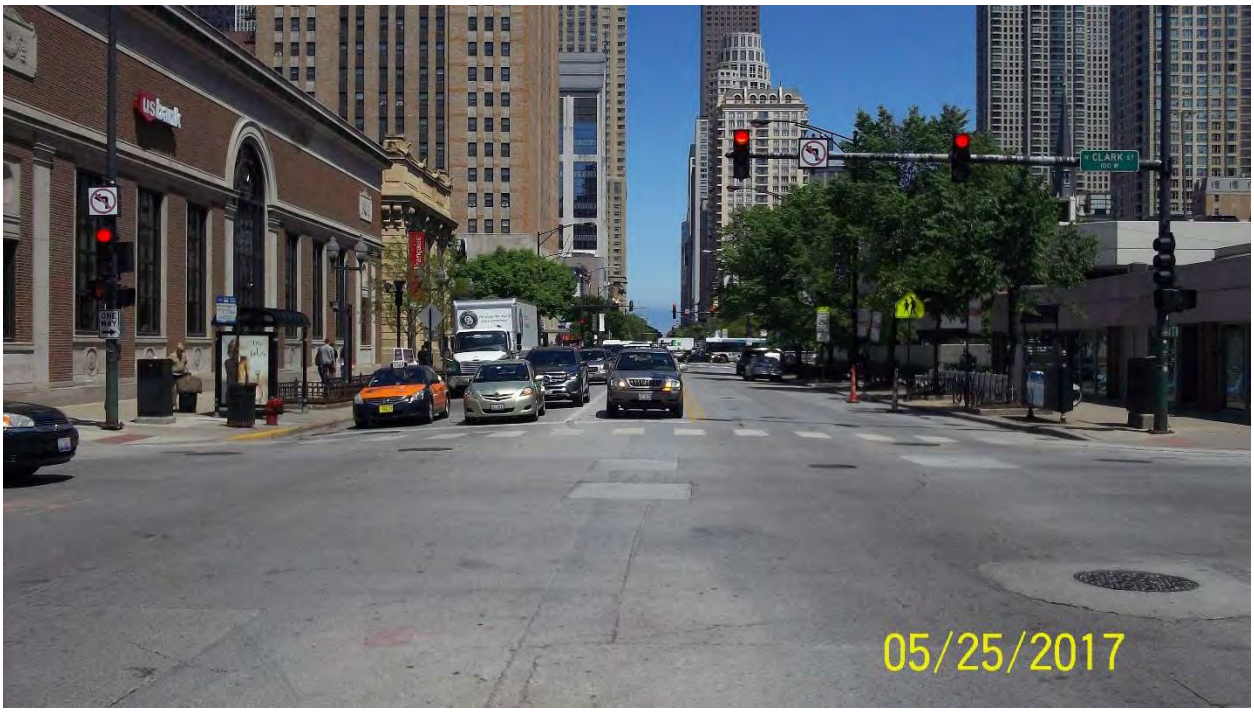


Photo 2: Chicago Ave. – Looking East

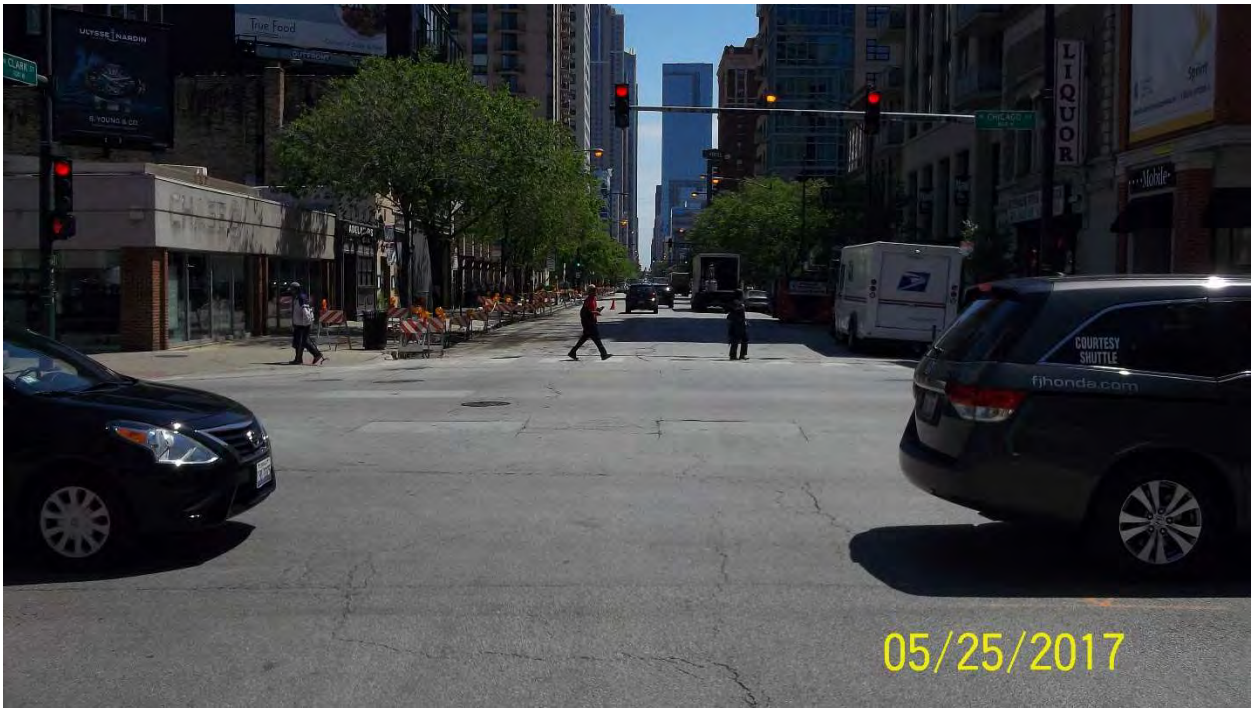


Photo 3: Clark St. – Looking South

Photo 4: Chicago Ave. – Looking West

Photo 5: Southeast corner of Chicago Ave. / Clark St. – Looking South

Photo 6: Southeast corner of Chicago Ave. / Clark St. – Looking West

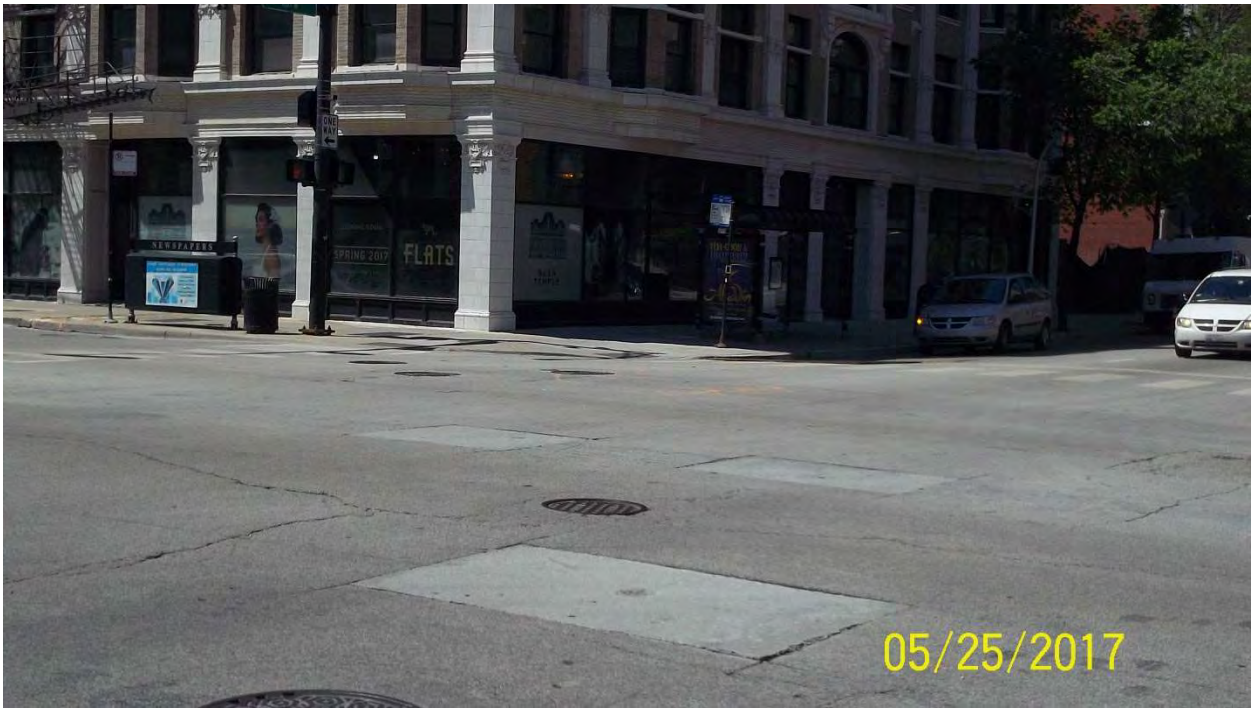


Photo 7: Southeast corner of Chicago Ave. / Clark St. – Looking Northwest

Photo 8: Southeast corner of Chicago Ave. / Clark St. – Looking North

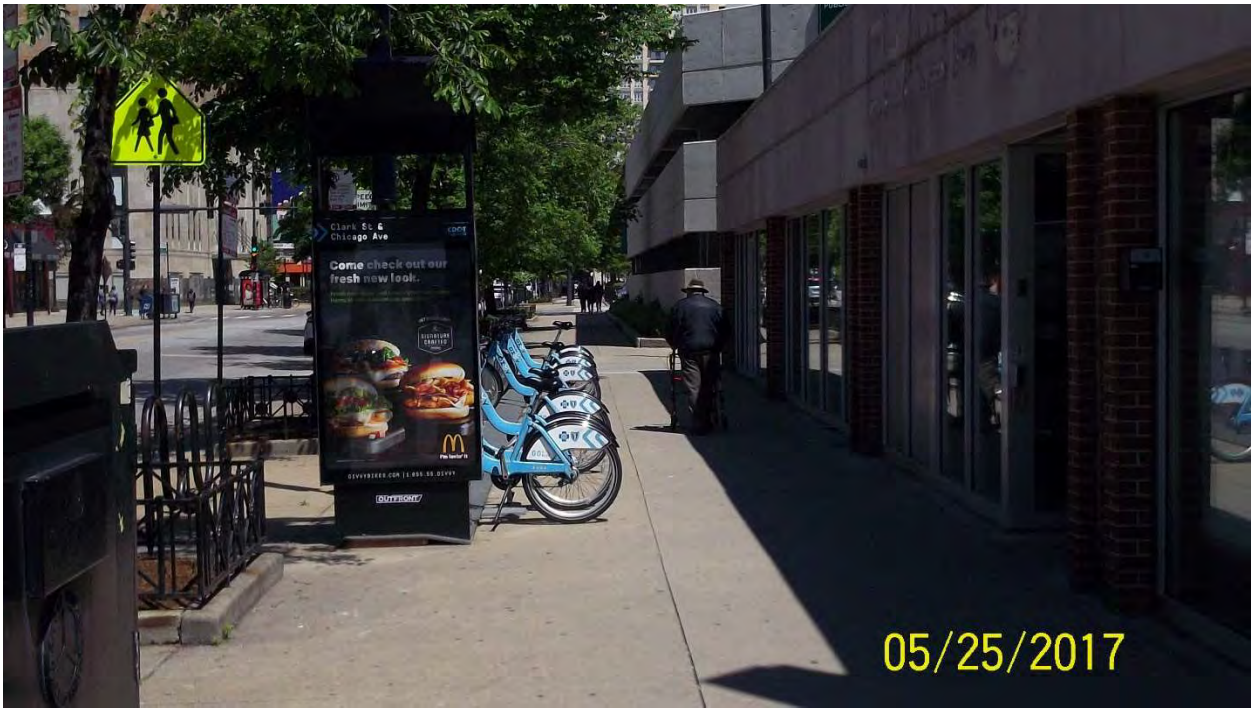


Photo 9: Southeast corner of Chicago Ave. / Clark St. – Looking East

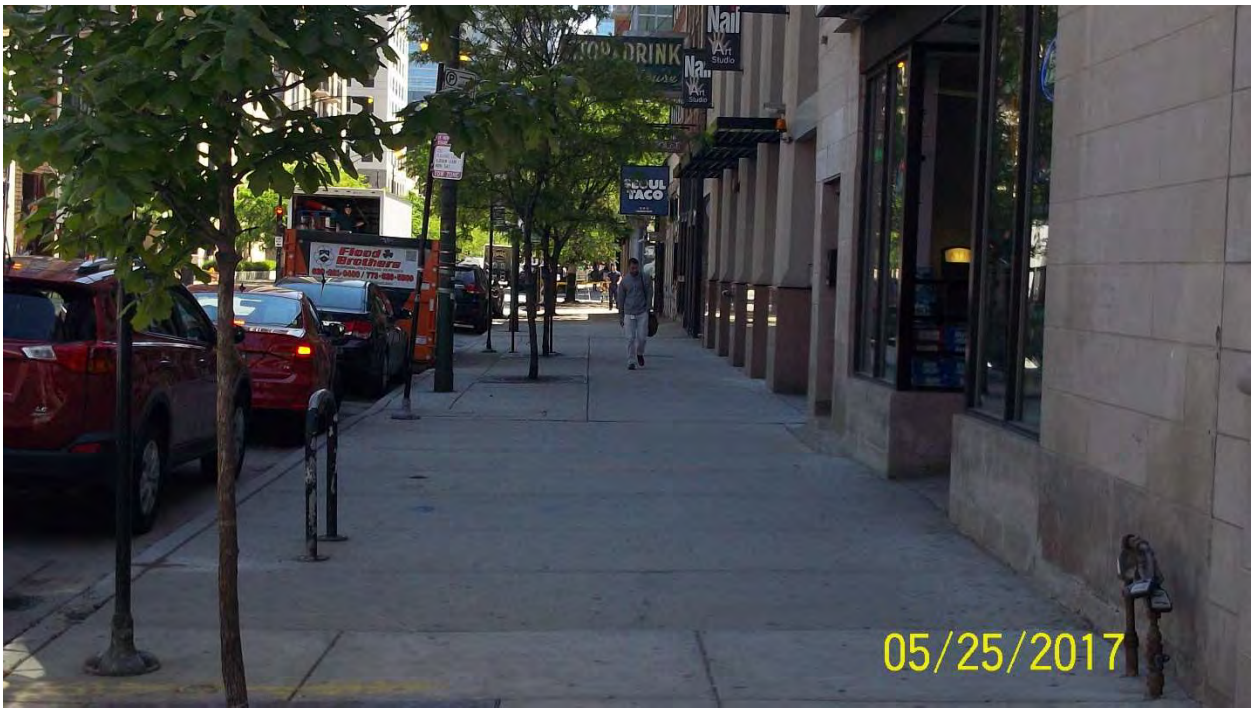


Photo 10: Southwest corner of Chicago Ave. / Clark St. – Looking South

Photo 11: Southwest corner of Chicago Ave. / Clark St. – Looking East

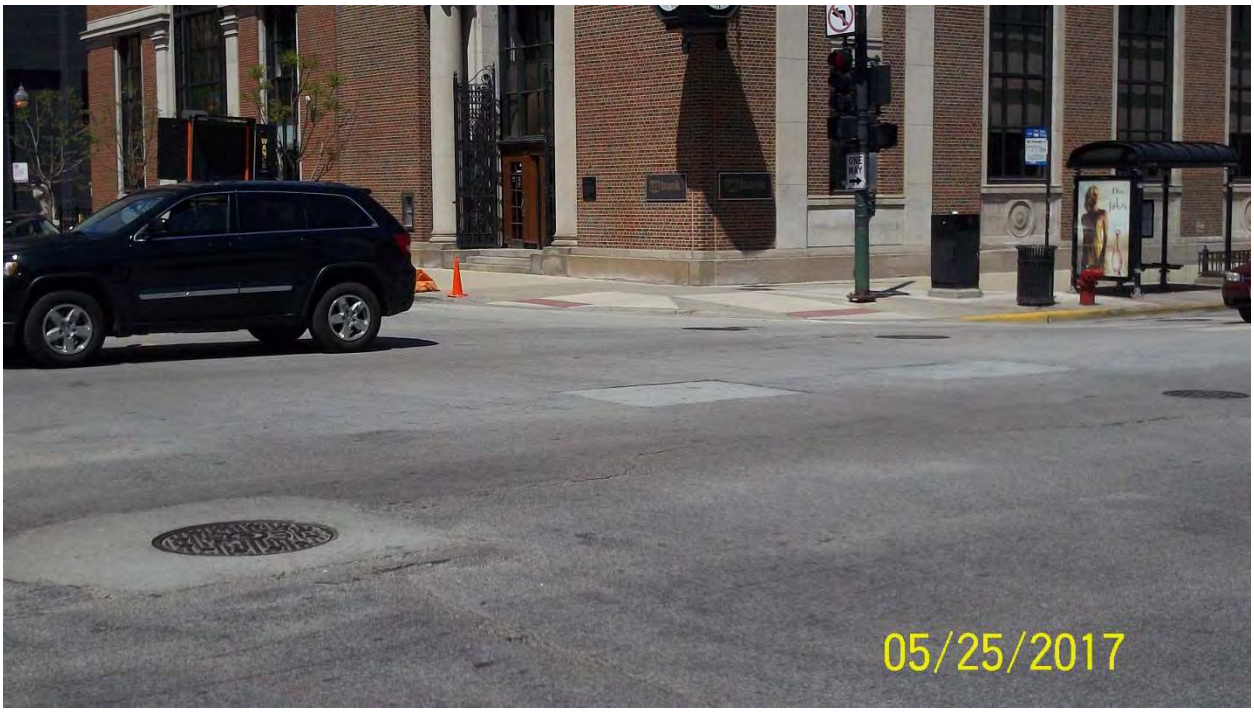


Photo 12: Southwest corner of Chicago Ave. / Clark St. – Looking Northeast

Photo 13: Southwest corner of Chicago Ave. / Clark St. – Looking North

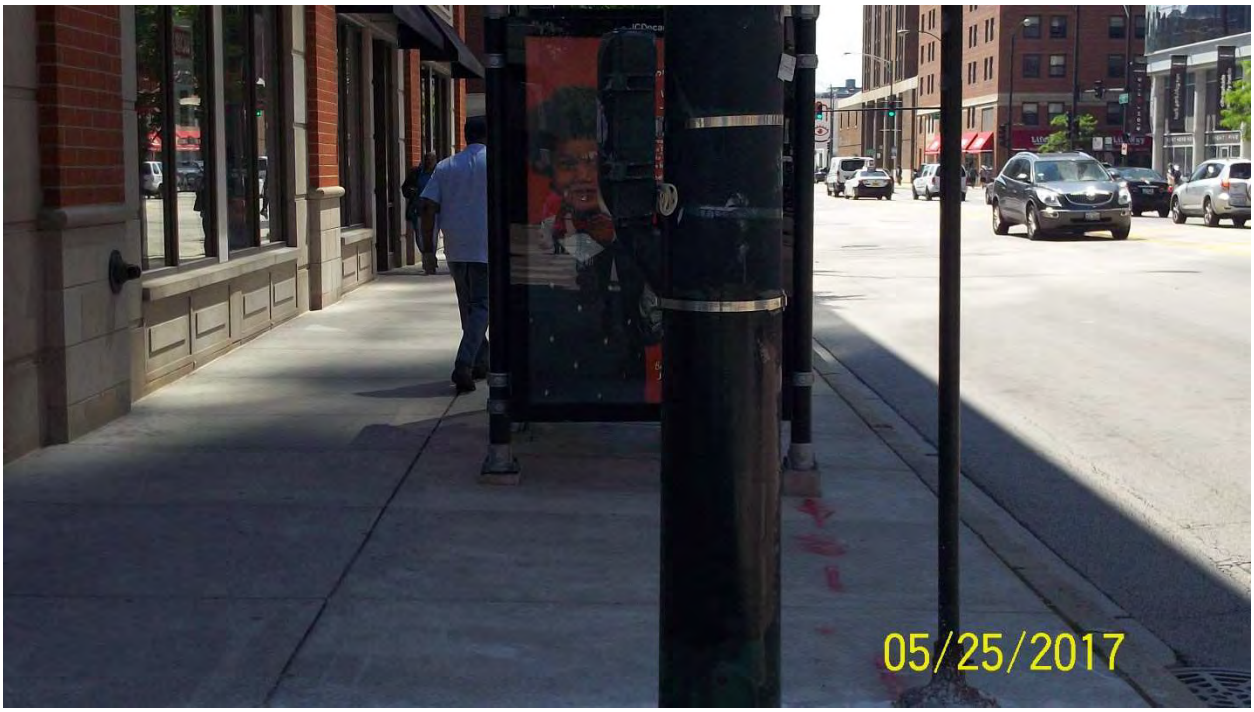


Photo 14: Southwest corner of Chicago Ave. / Clark St. – Looking West

Photo 15: Northwest corner of Chicago Ave. / Clark St. – Looking West

Photo 16: Northwest corner of Chicago Ave. / Clark St. – Looking South

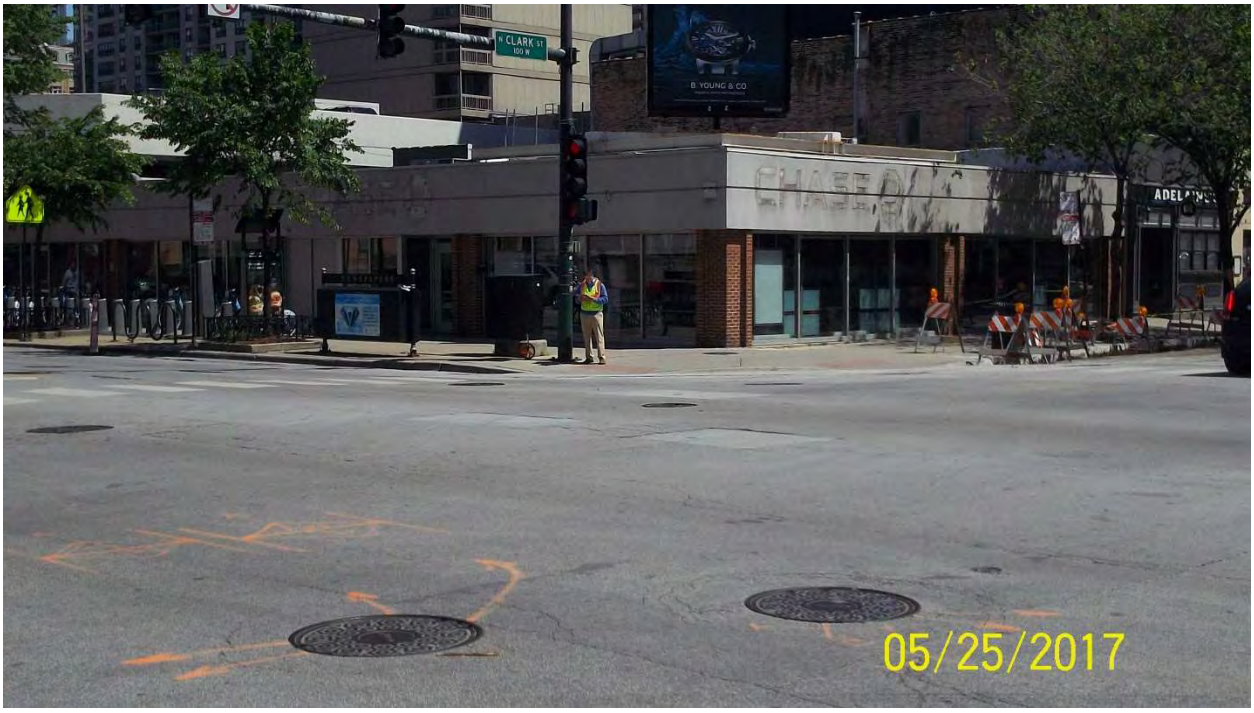


Photo 17: Northwest corner of Chicago Ave. / Clark St. – Looking Southeast

Photo 18: Northwest corner of Chicago Ave. / Clark St. – Looking East

Photo 19: Northwest corner of Chicago Ave. / Clark St. – Looking North

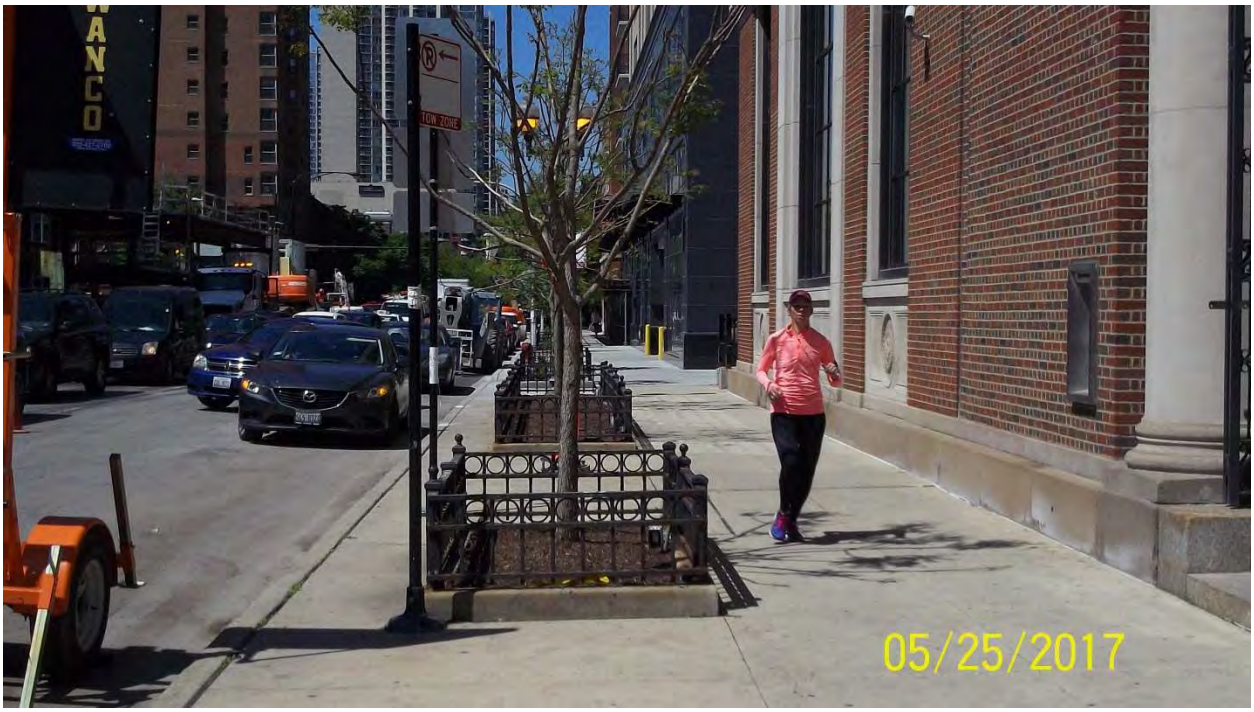


Photo 20: Northeast corner of Chicago Ave. / Clark St. – Looking North

Photo 21: Northeast corner of Chicago Ave. / Clark St. – Looking West

Photo 22: Northeast corner of Chicago Ave. / Clark St. – Looking Southwest

Photo 23: Northeast corner of Chicago Ave. / Clark St. – Looking South

Photo 24: Northeast corner of Chicago Ave. / Clark St. – Looking East

CTA Bus Slow Zone Project
Chicago-Dearborn Photo Log

Prepared for:

Chicago Transit Authority

June 2017

Photo 1: Chicago Ave. – Looking West

Photo 2: Dearborn St. – Looking South

Photo 3: Chicago Ave. – Looking East

Photo 4: Dearborn St. – Looking North

Photo 5: Southeast corner of Chicago Ave. / Dearborn St. – Looking East

Photo 6: Southeast corner of Chicago Ave. / Dearborn St. – Looking North

Photo 7: Southeast corner of Chicago Ave. / Dearborn St. – Looking Northwest

Photo 8: Southeast corner of Chicago Ave. / Dearborn St. – Looking West

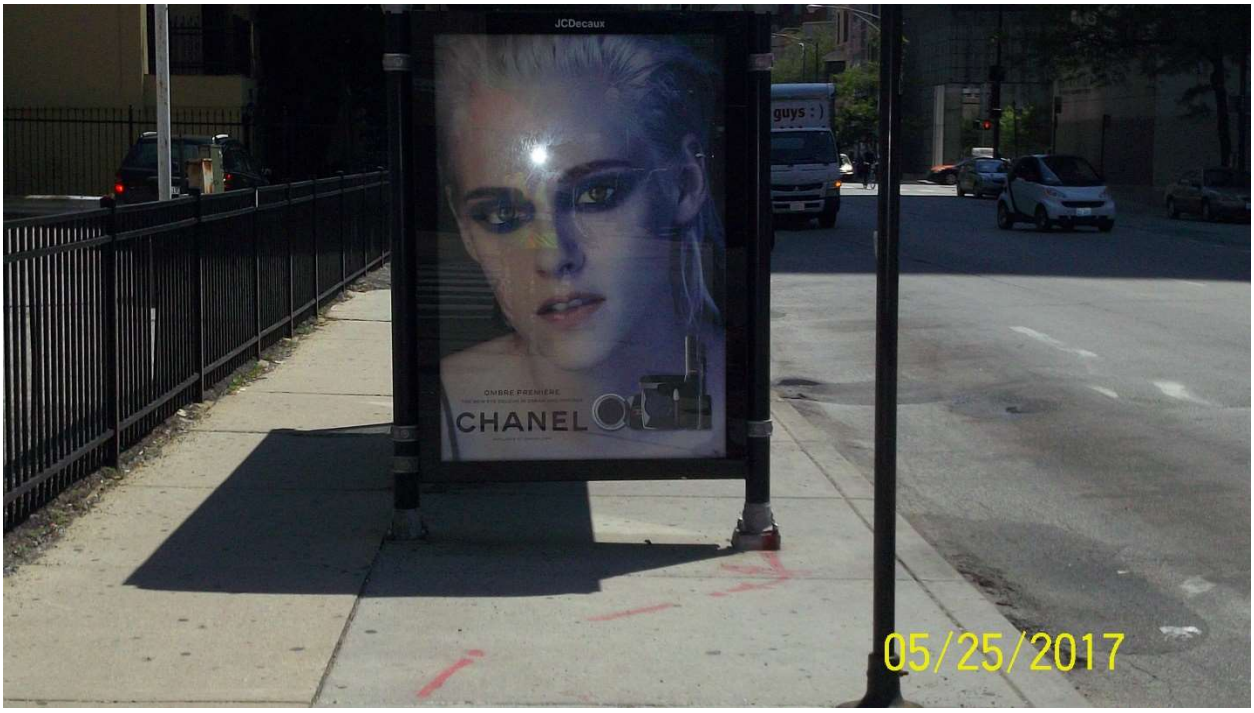


Photo 9: Southeast corner of Chicago Ave. / Dearborn St. – Looking South

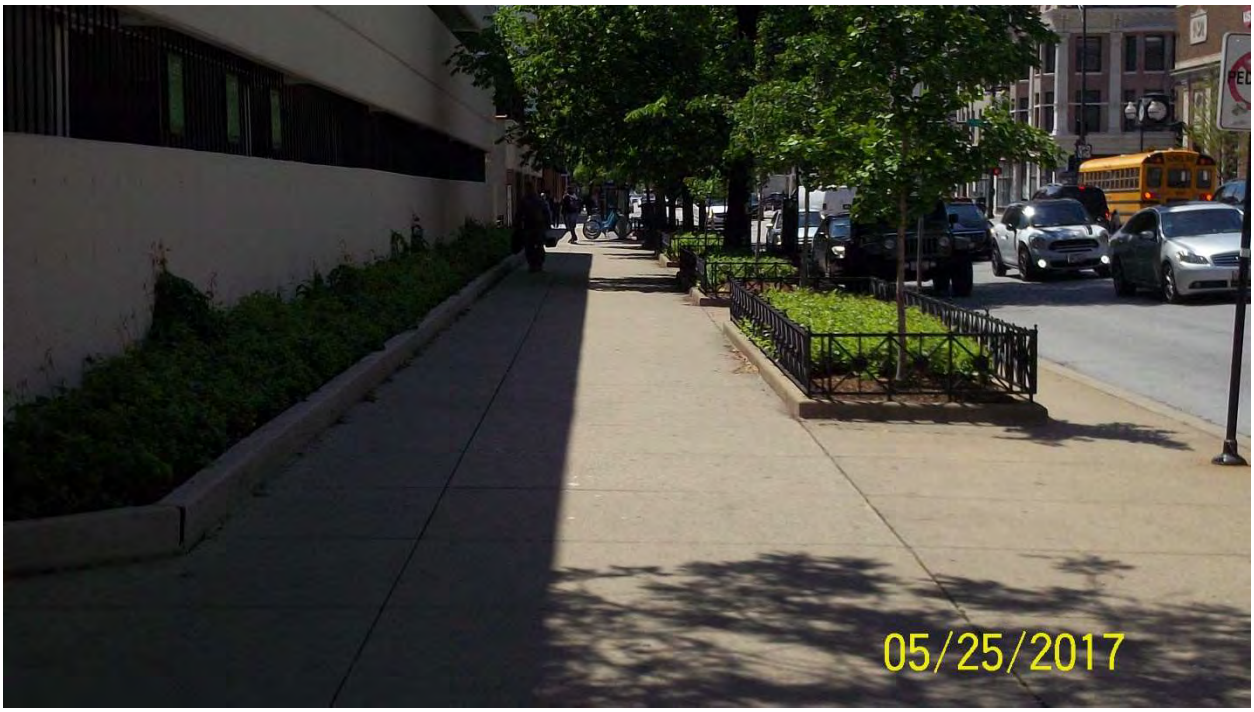


Photo 10: Southwest corner of Chicago Ave. / Dearborn St. – Looking West

Photo 11: Southwest corner of Chicago Ave. / Dearborn St. – Looking North

Photo 12: Southwest corner of Chicago Ave. / Dearborn St. – Looking Northeast

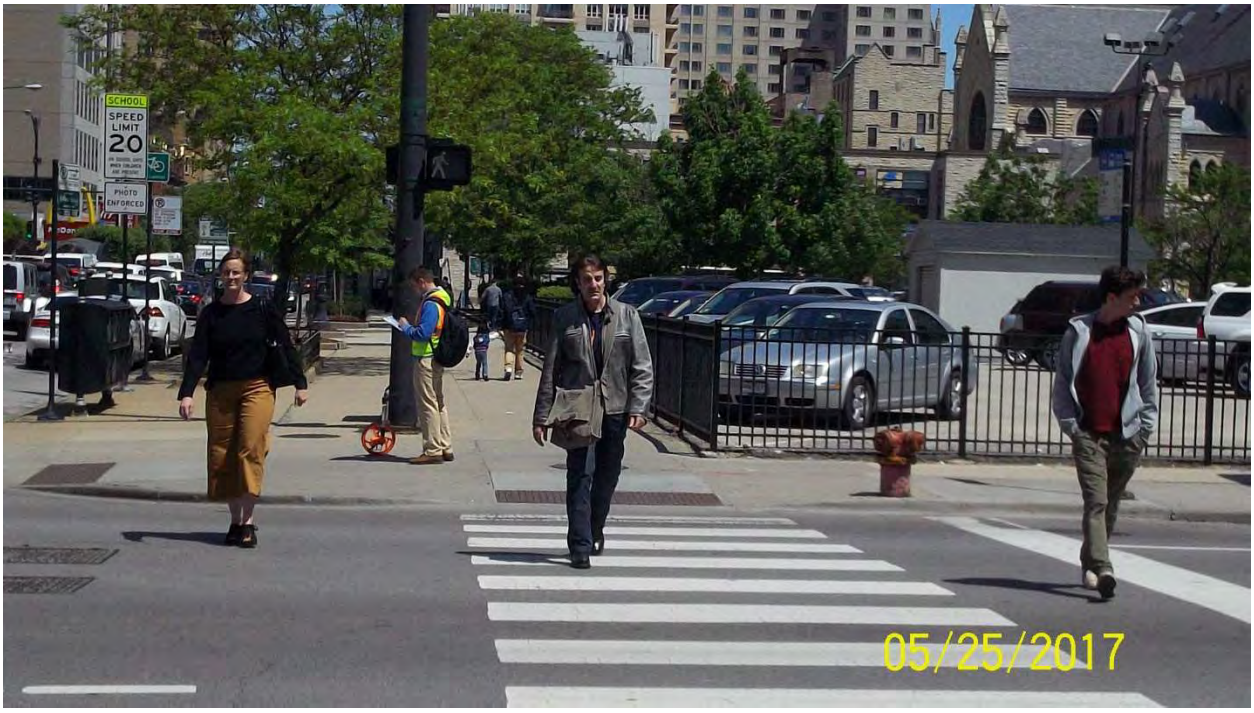


Photo 13: Southwest corner of Chicago Ave. / Dearborn St. – Looking East

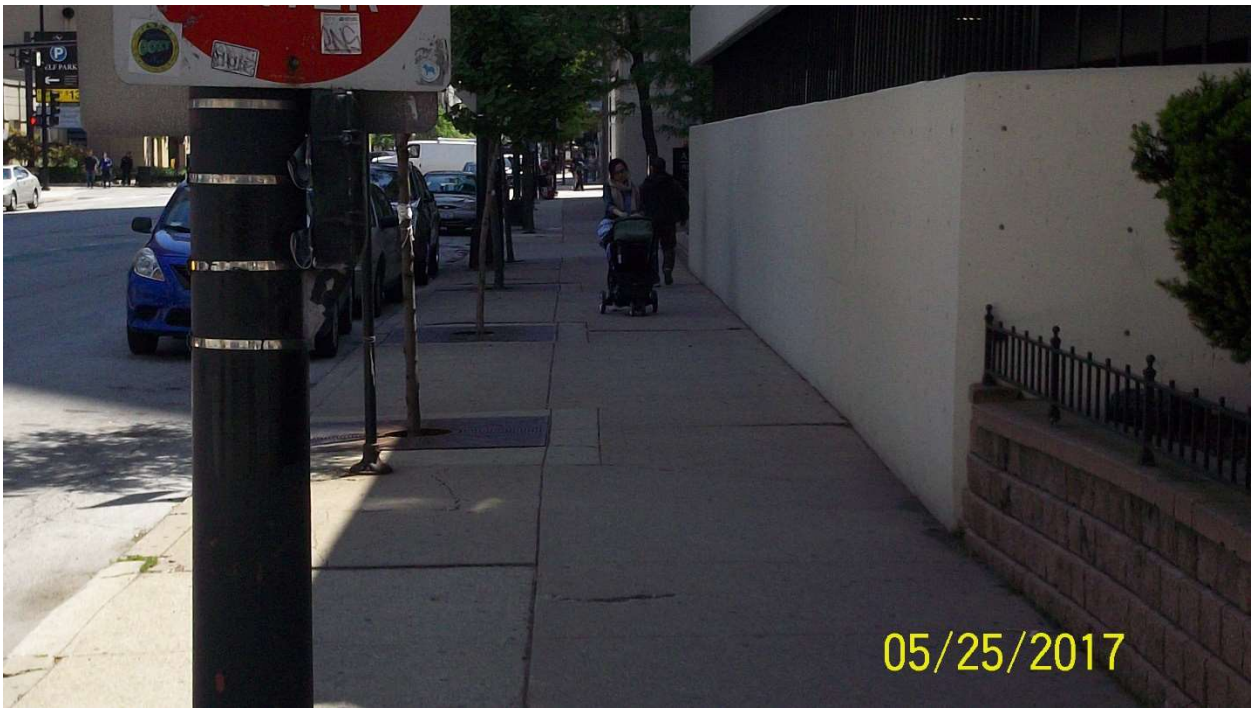


Photo 14: Southwest corner of Chicago Ave. / Dearborn St. – Looking South

Photo 15: Northwest corner of Chicago Ave. / Dearborn St. – Looking North

Photo 16: Northwest corner of Chicago Ave. / Dearborn St. – Looking East

Photo 17: Northwest corner of Chicago Ave. / Dearborn St. – Looking Southeast

Photo 18: Northwest corner of Chicago Ave. / Dearborn St. – Looking South

Photo 19: Northwest corner of Chicago Ave. / Dearborn St. – Looking West

Photo 20: Northeast corner of Chicago Ave. / Dearborn St. – Looking East

Photo 21: Northeast corner of Chicago Ave. / Dearborn St. – Looking South

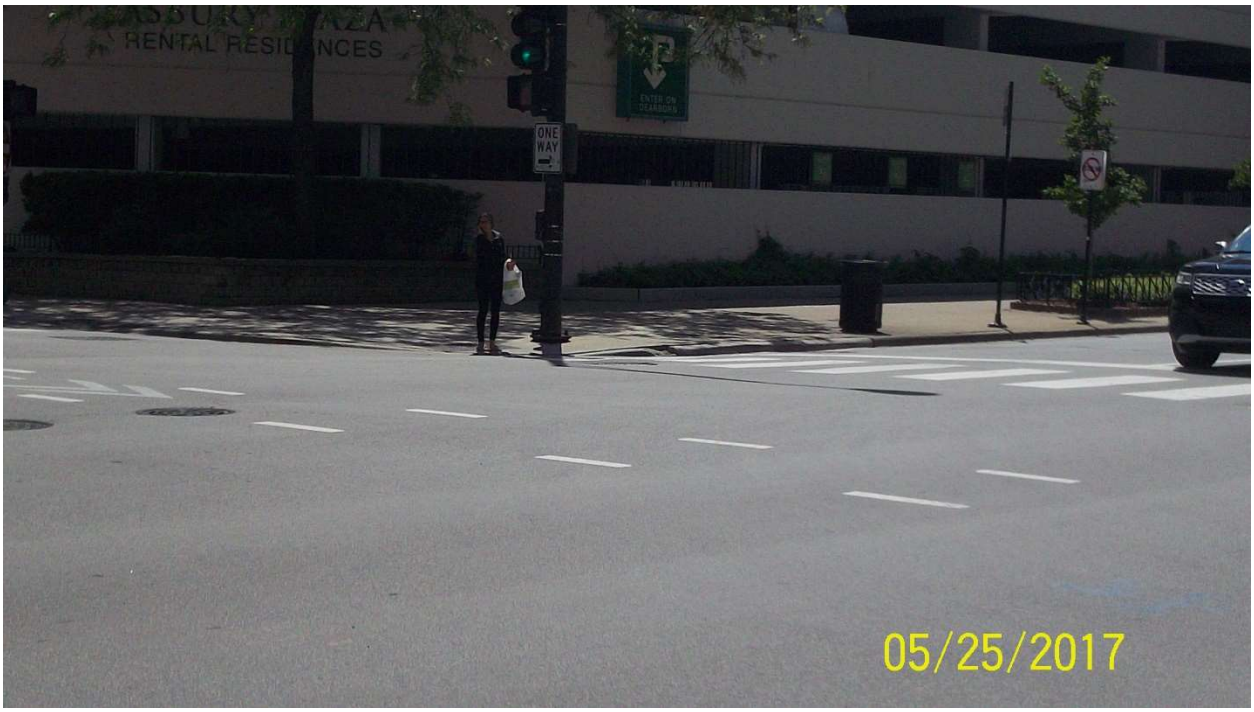


Photo 22: Northeast corner of Chicago Ave. / Dearborn St. – Looking Southwest

Photo 23: Northeast corner of Chicago Ave. / Dearborn St. – Looking West

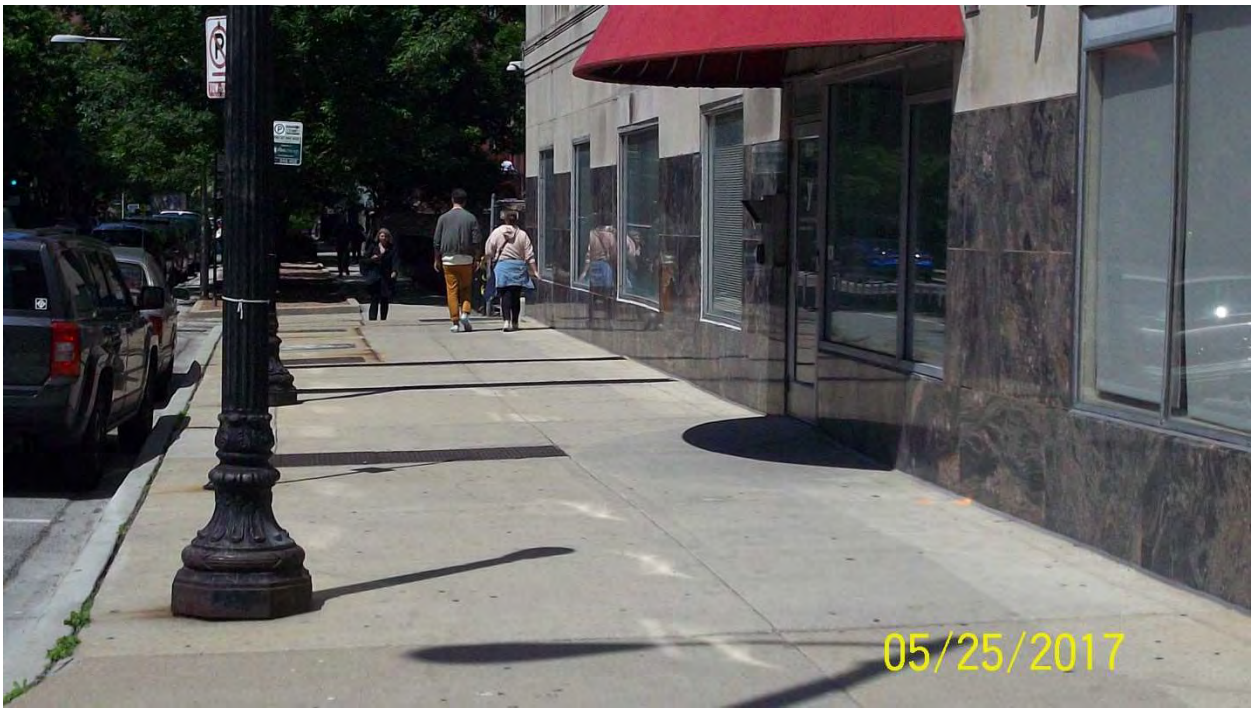


Photo 24: Northeast corner of Chicago Ave. / Dearborn St. – Looking North

CTA Bus Slow Zone Project
Chicago-State Photo Log

Prepared for:

Chicago Transit Authority

June 2017

Photo 1: Chicago Ave. – Looking West

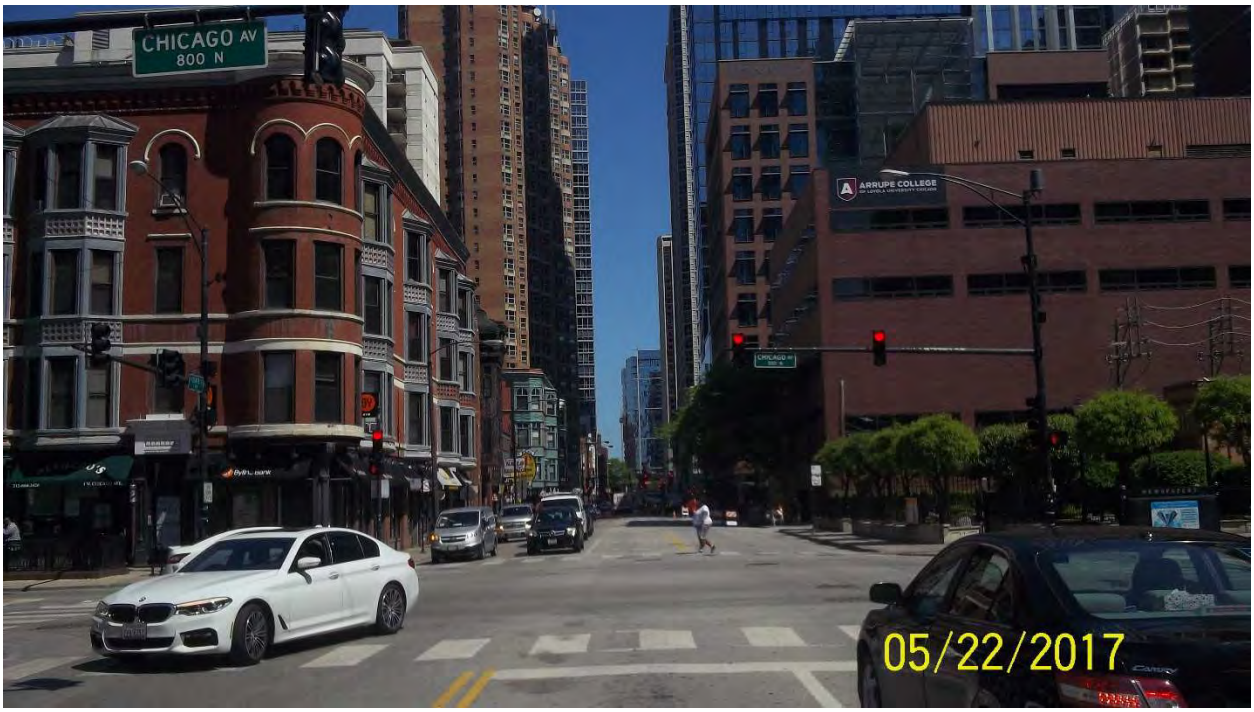


Photo 2: State St. – Looking North

Photo 3: Chicago Ave. – Looking East

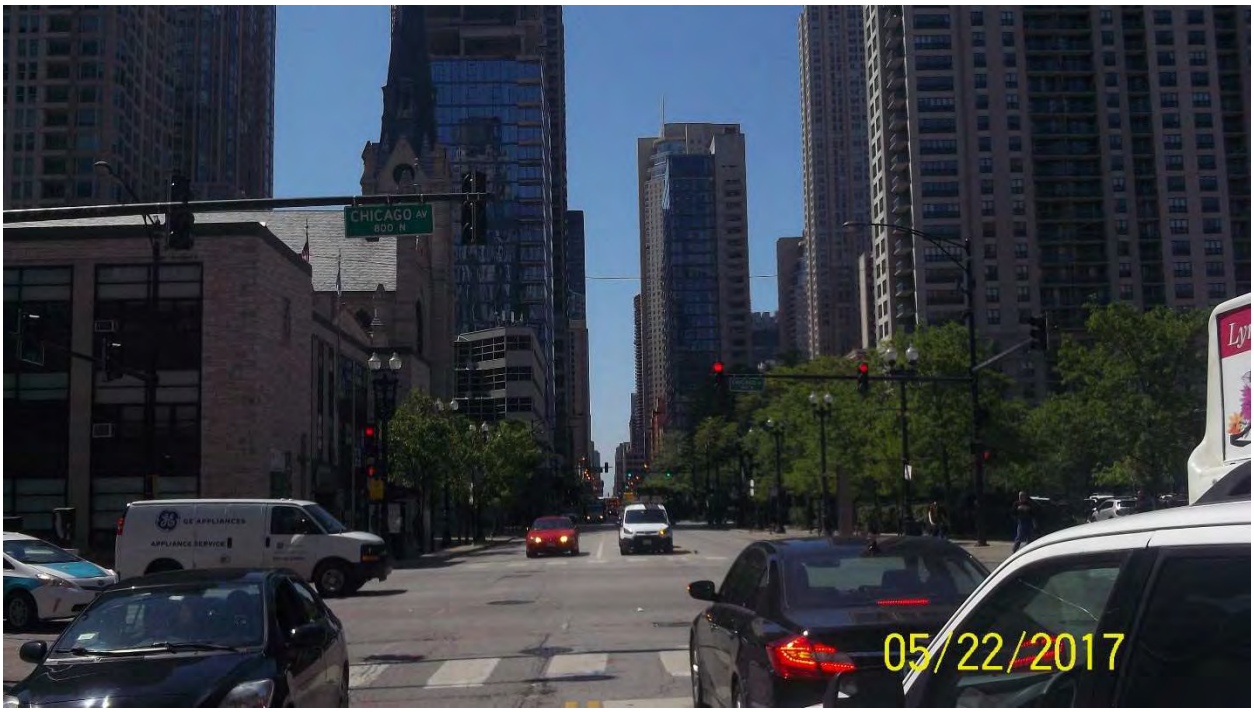


Photo 4: State St. – Looking South

Photo 5: Northeast corner of Chicago Ave. / State St. – Looking South

Photo 6: Northeast corner of Chicago Ave. / State St. – Looking Southwest

Photo 7: Northeast corner of Chicago Ave. / State St. – Looking West

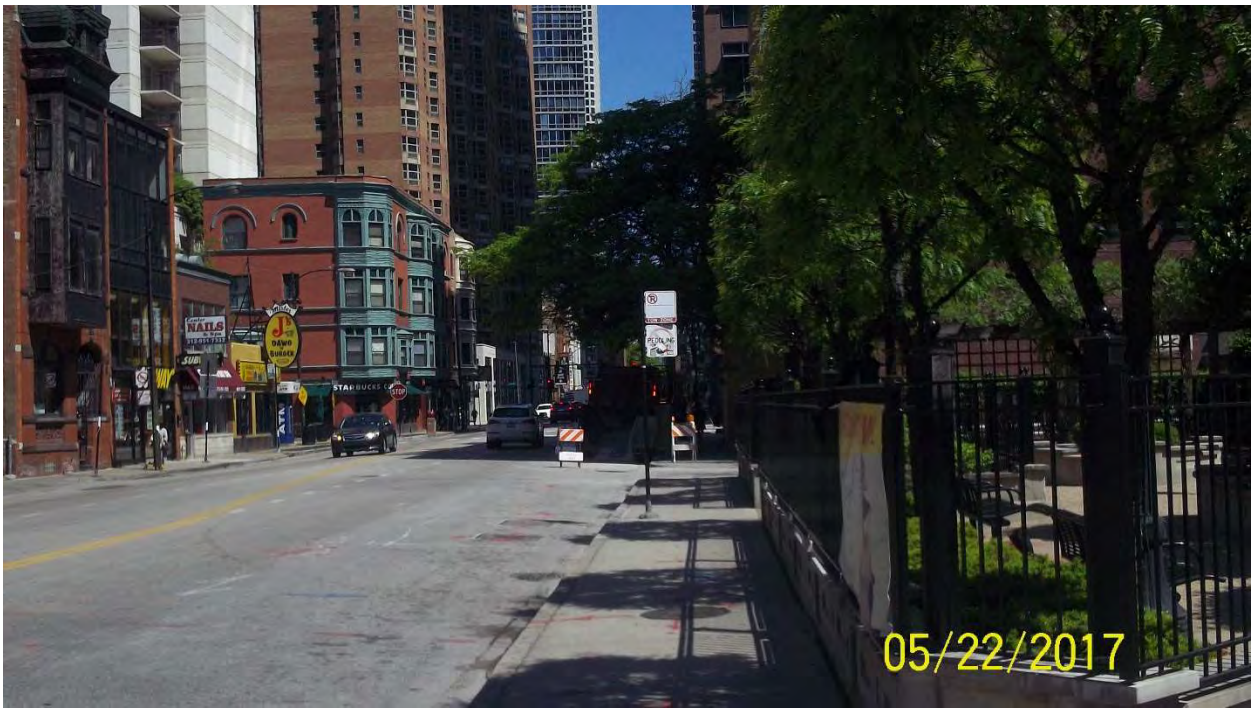


Photo 8: Northeast corner of Chicago Ave. / State St. – Looking North

Photo 9: Northeast corner of Chicago Ave. / State St. – Looking East

Photo 10: Southeast corner of Chicago Ave. / State St. – Looking North

Photo 11: Southeast corner of Chicago Ave. / State St. – Looking Northwest

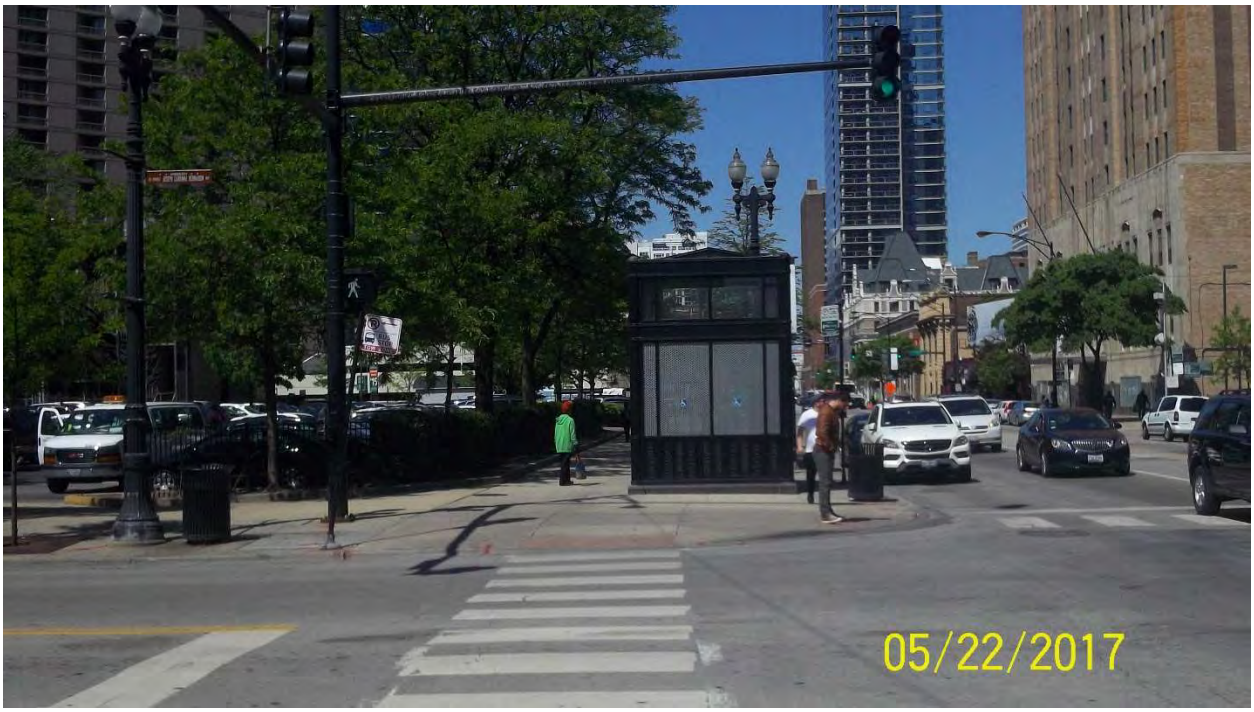


Photo 12: Southeast corner of Chicago Ave. / State St. – Looking West

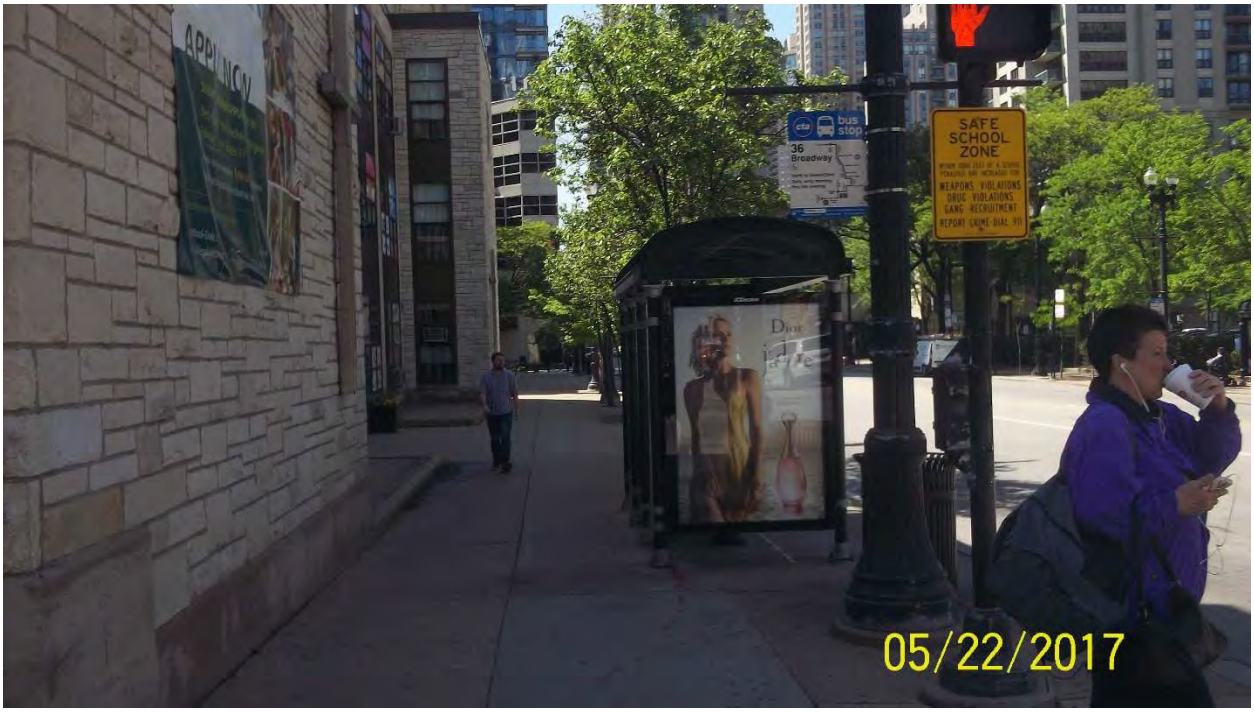


Photo 13: Southeast corner of Chicago Ave. / State St. – Looking South

Photo 14: Southeast corner of Chicago Ave. / State St. – Looking East

Photo 15: Southwest corner of Chicago Ave. / State St. – Looking East

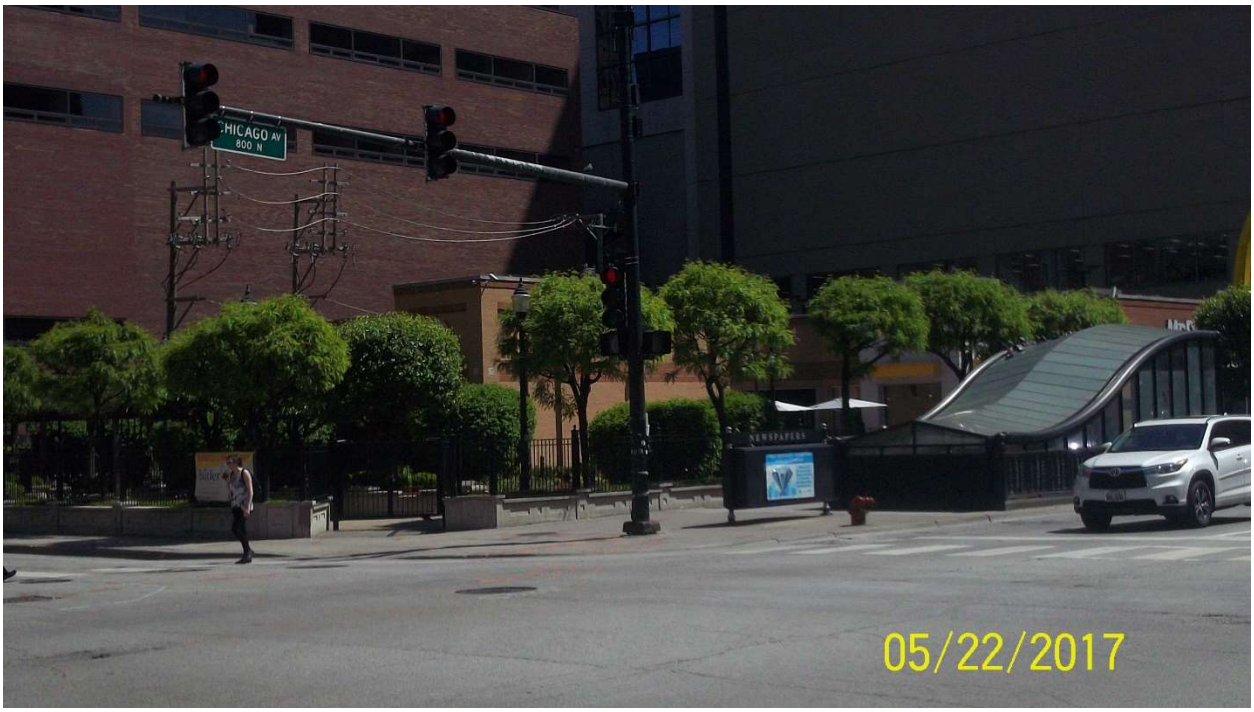


Photo 16: Southwest corner of Chicago Ave. / State St. – Looking Northeast

Photo 17: Southwest corner of Chicago Ave. / State St. – Looking North

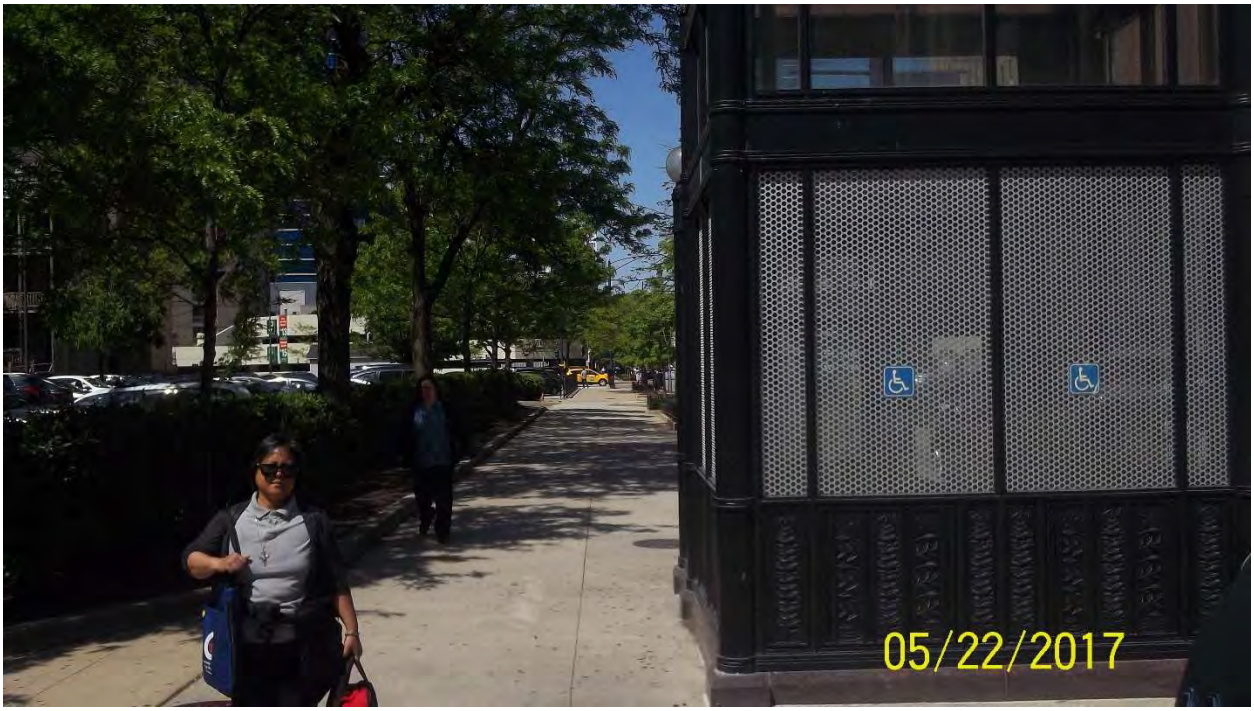


Photo 18: Southwest corner of Chicago Ave. / State St. – Looking West

Photo 19: Southwest corner of Chicago Ave. / State St. – Looking South

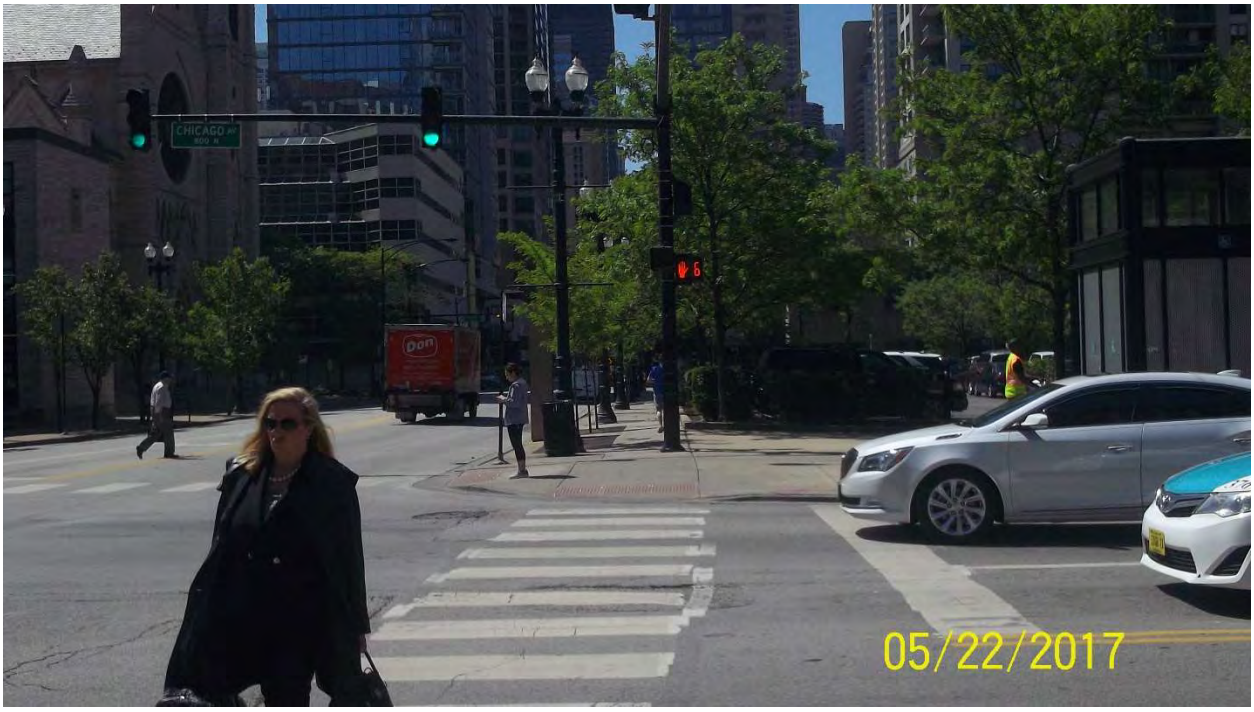


Photo 20: Northwest corner of Chicago Ave. / State St. – Looking South

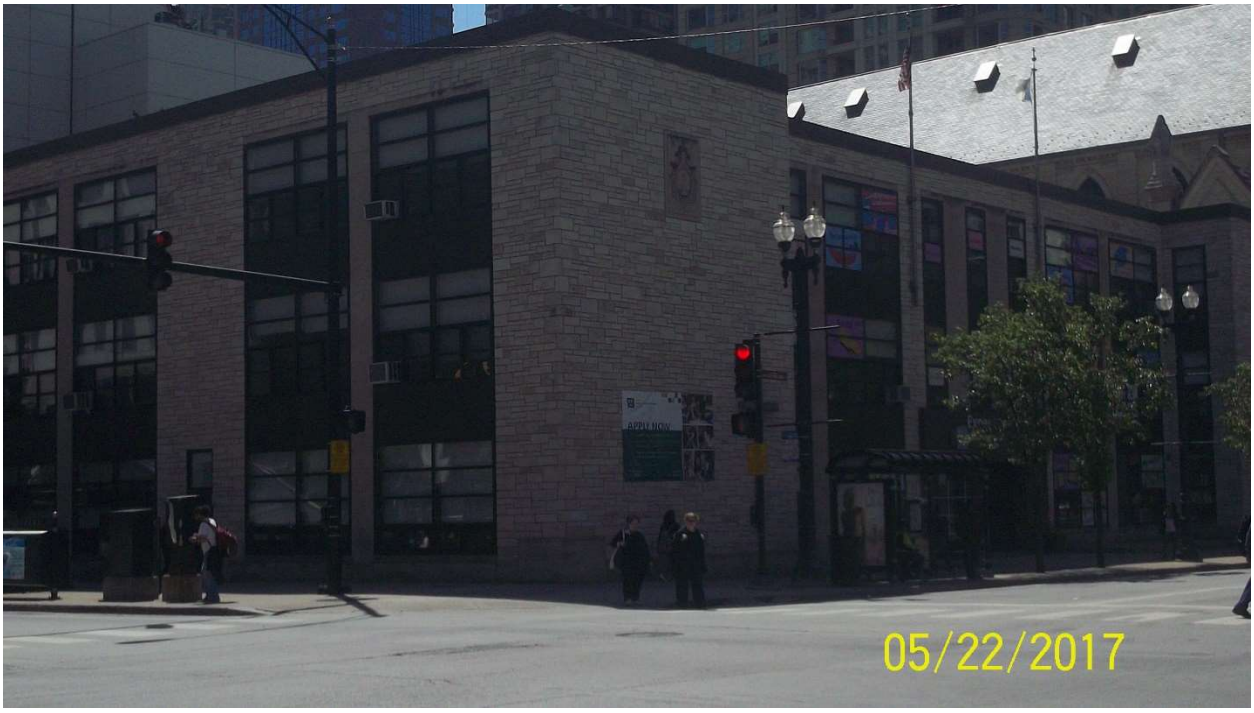


Photo 21: Northwest corner of Chicago Ave. / State St. – Looking Southeast

Photo 22: Northwest corner of Chicago Ave. / State St. – Looking East

Photo 23: Northwest corner of Chicago Ave. / State St. – Looking North

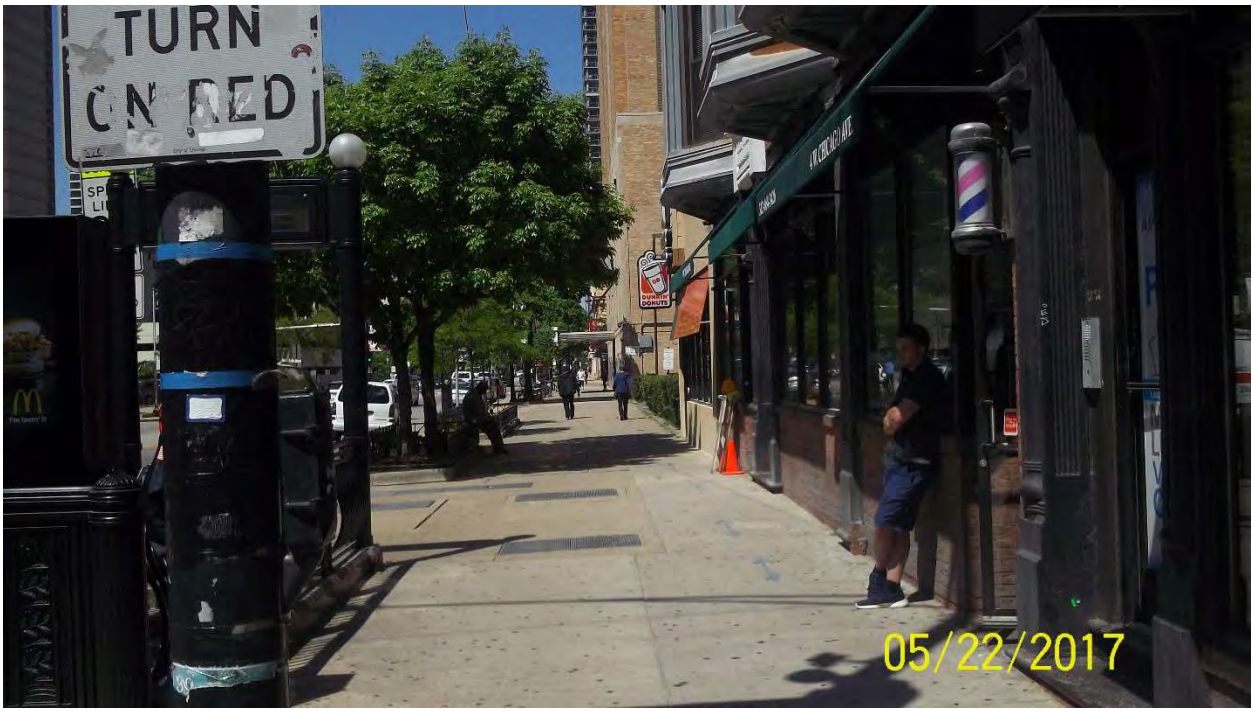


Photo 24: Northwest corner of Chicago Ave. / State St. – Looking West

CTA Bus Slow Zone Project
Chicago-Wabash Photo Log

Prepared for:

Chicago Transit Authority

June 2017

Photo 1: Chicago Ave. – Looking West

Photo 2: Wabash Ave. – Looking North

Photo 3: Chicago Ave. – Looking East

Photo 4: Wabash Ave. – Looking South

Photo 5: Northeast corner of Chicago Ave. / Wabash Ave. – Looking East

Photo 6: Northeast corner of Chicago Ave. / Wabash Ave. – Looking South

Photo 7: Northeast corner of Chicago Ave. / Wabash Ave. – Looking Southwest

Photo 8: Northeast corner of Chicago Ave. / Wabash Ave. – Looking West

Photo 9: Northeast corner of Chicago Ave. / Wabash Ave. – Looking North

Photo 10: Northwest corner of Chicago Ave. / Wabash Ave. – Looking North

Photo 11: Northwest corner of Chicago Ave. / Wabash Ave. – Looking East

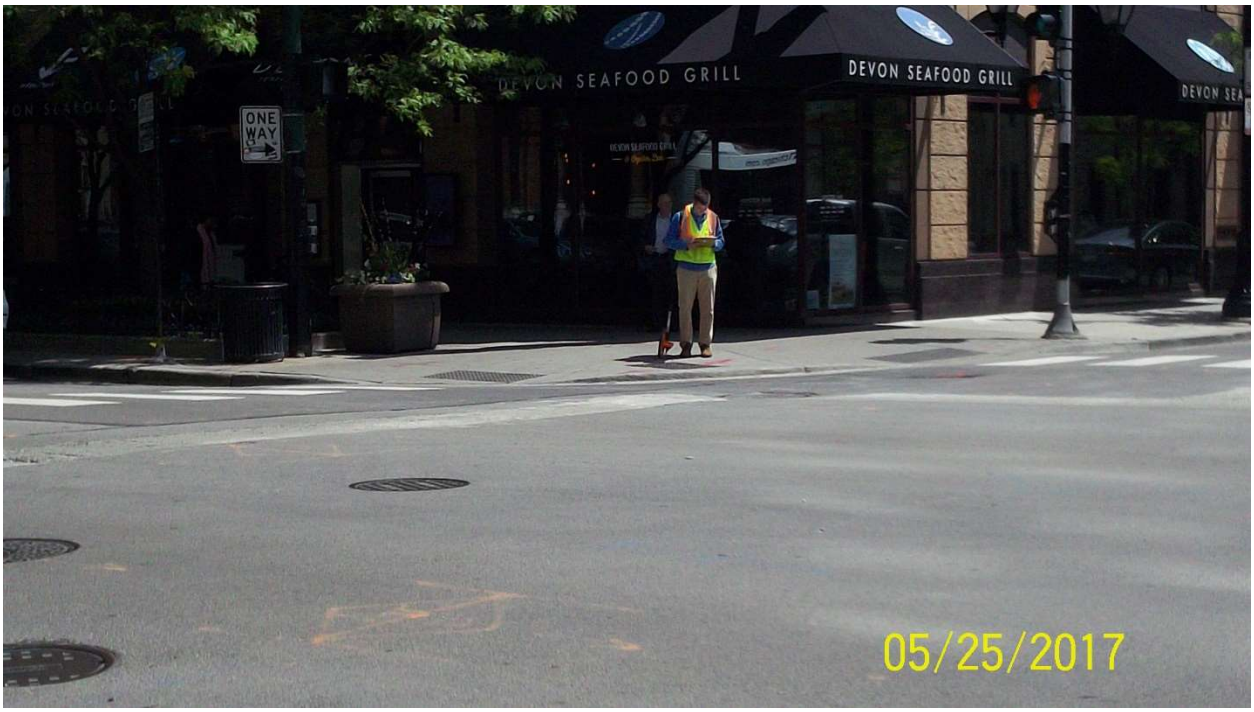


Photo 12: Northwest corner of Chicago Ave. / Wabash Ave. – Looking Southeast

Photo 13: Northwest corner of Chicago Ave. / Wabash Ave. – Looking South

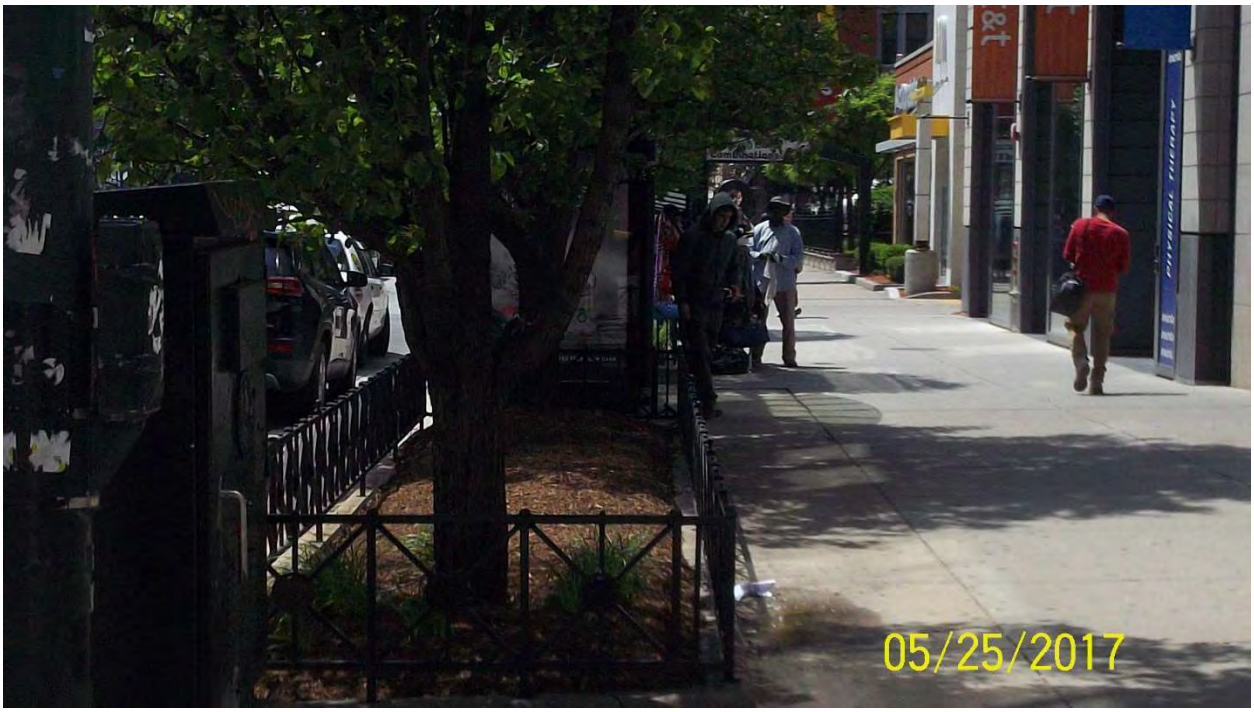


Photo 14: Northwest corner of Chicago Ave. / Wabash Ave. – Looking West

Photo 15: Southwest corner of Chicago Ave. / Wabash Ave. – Looking South

Photo 16: Southwest corner of Chicago Ave. / Wabash Ave. – Looking East

Photo 17: Southwest corner of Chicago Ave. / Wabash Ave. – Looking Northeast

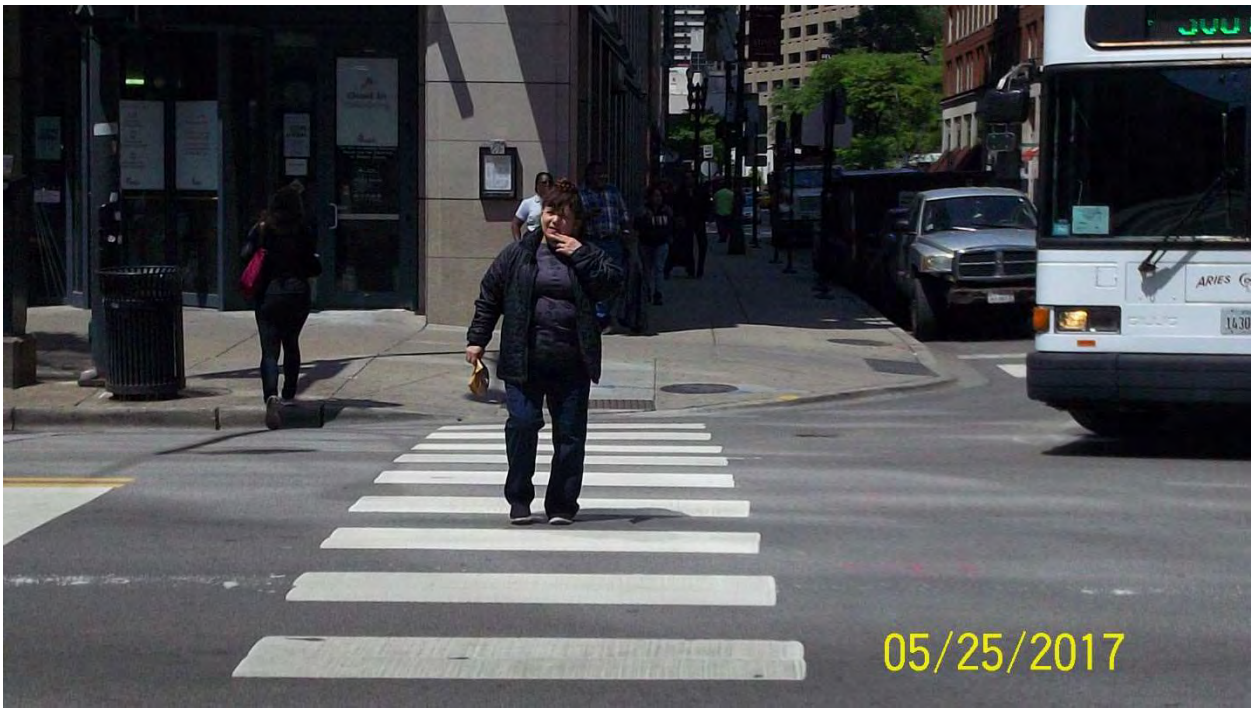


Photo 18: Southwest corner of Chicago Ave. / Wabash Ave. – Looking North

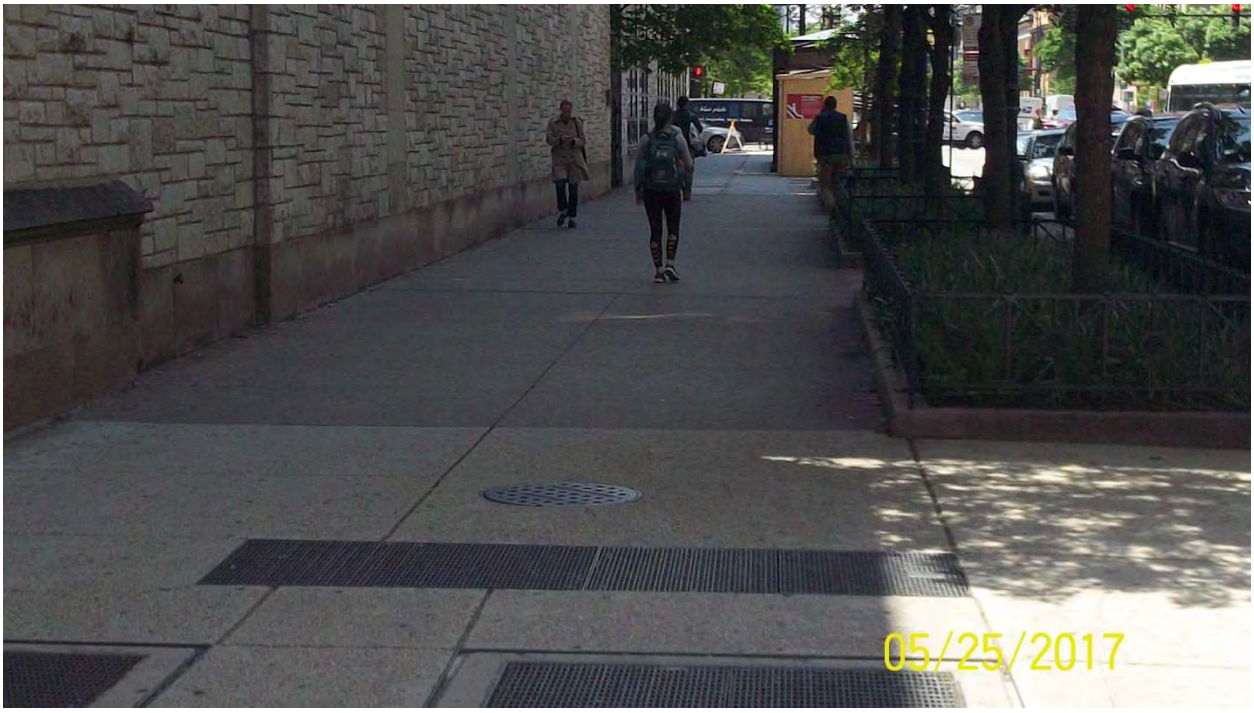


Photo 19: Southwest corner of Chicago Ave. / Wabash Ave. – Looking West

Photo 20: Southeast corner of Chicago Ave. / Wabash Ave. – Looking South

Photo 21: Southeast corner of Chicago Ave. / Wabash Ave. – Looking West

Photo 22: Southeast corner of Chicago Ave. / Wabash Ave. – Looking Northwest

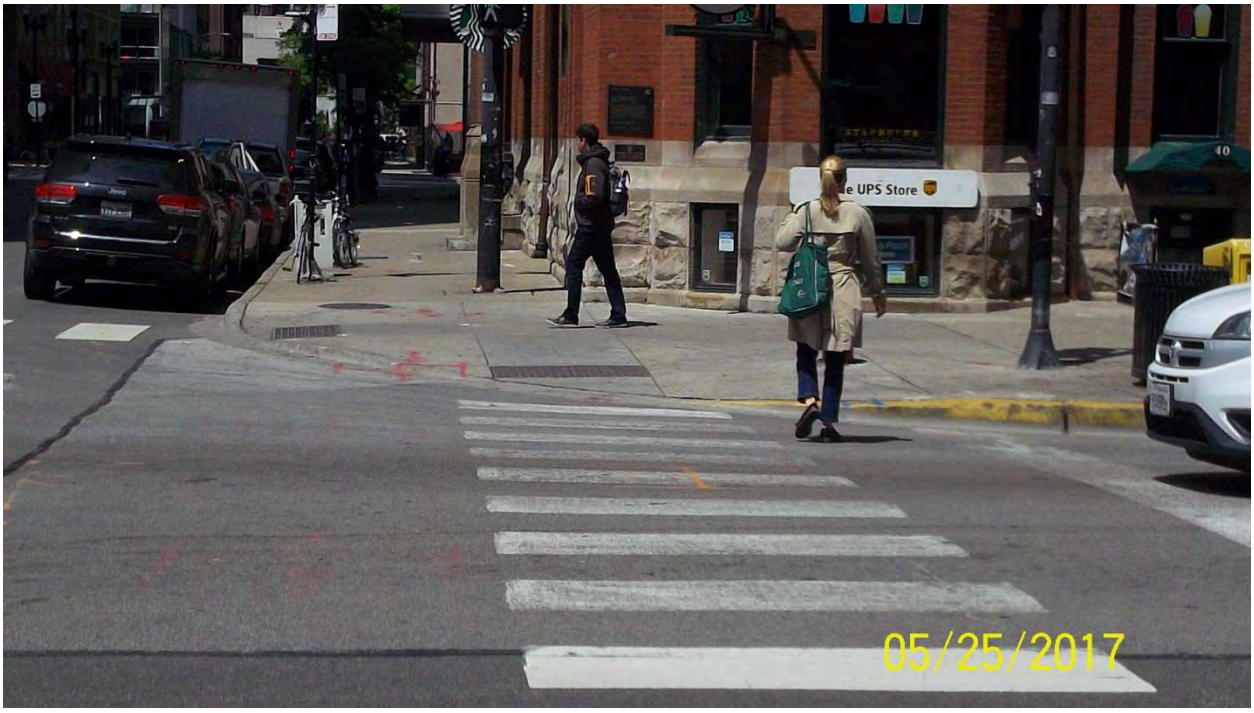


Photo 23: Southeast corner of Chicago Ave. / Wabash Ave. – Looking North

Photo 24: Southeast corner of Chicago Ave. / Wabash Ave. – Looking East

CTA Bus Slow Zone Project
Chicago-Rush Photo Log

Prepared for:

Chicago Transit Authority

June 2017

Photo 1: Chicago Ave. – Looking East

Photo 2: Chicago Ave. – Looking West

Photo 3: Rush St. – Looking North

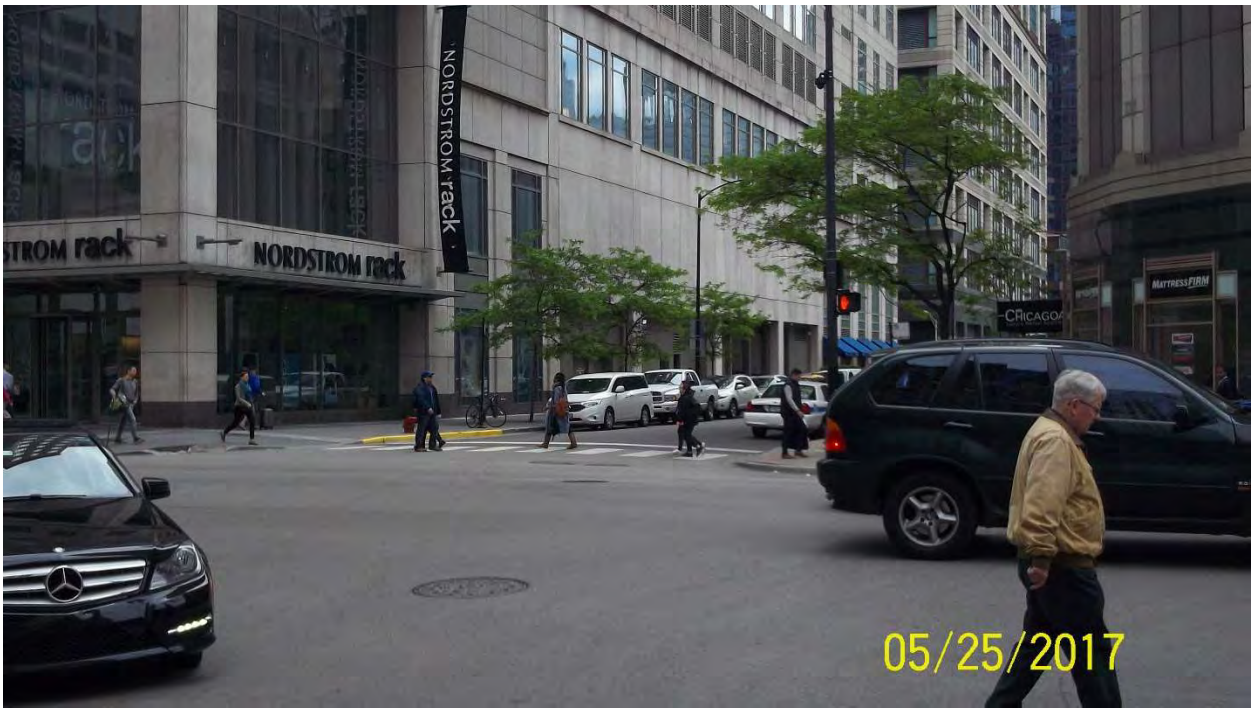


Photo 4: Rush St. – Looking South

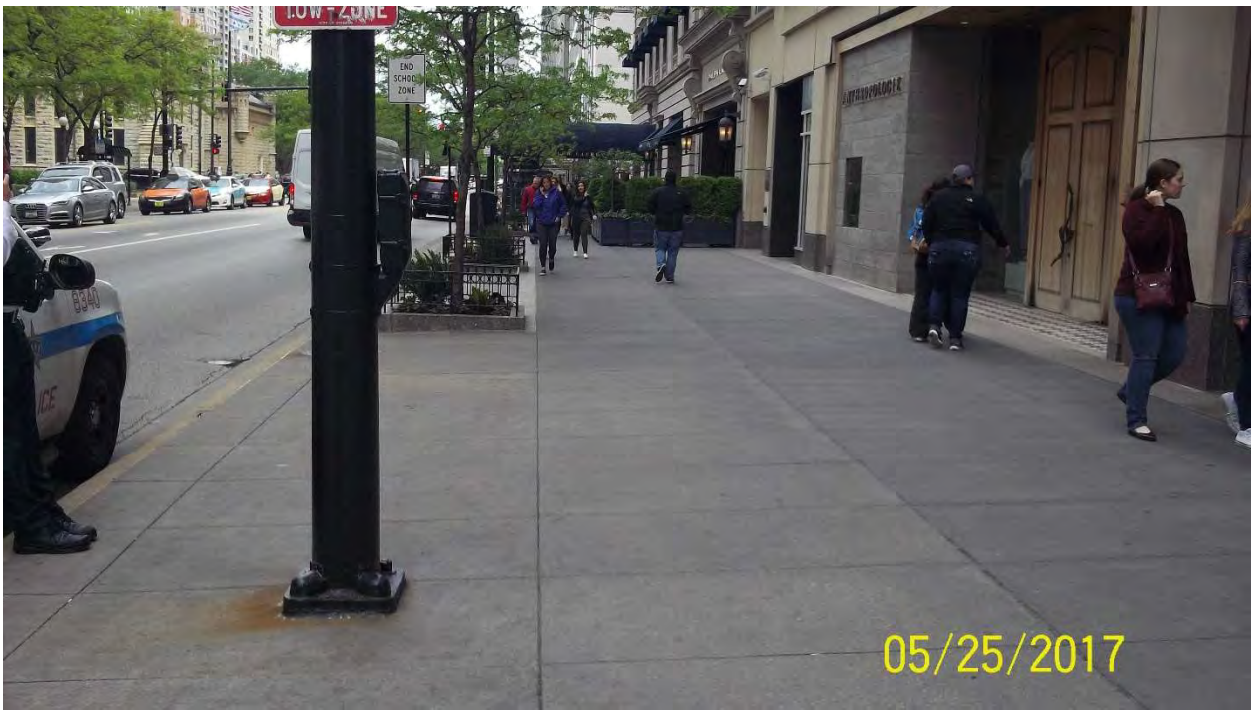


Photo 5: Southeast corner of Chicago Ave. / Rush St. – Looking East

Photo 6: Southeast corner of Chicago Ave. / Rush St. – Looking North

Photo 7: Southeast corner of Chicago Ave. / Rush St. – Looking Northwest

Photo 8: Southeast corner of Chicago Ave. / Rush St. – Looking West

Photo 9: Southeast corner of Chicago Ave. / Rush St. – Looking South

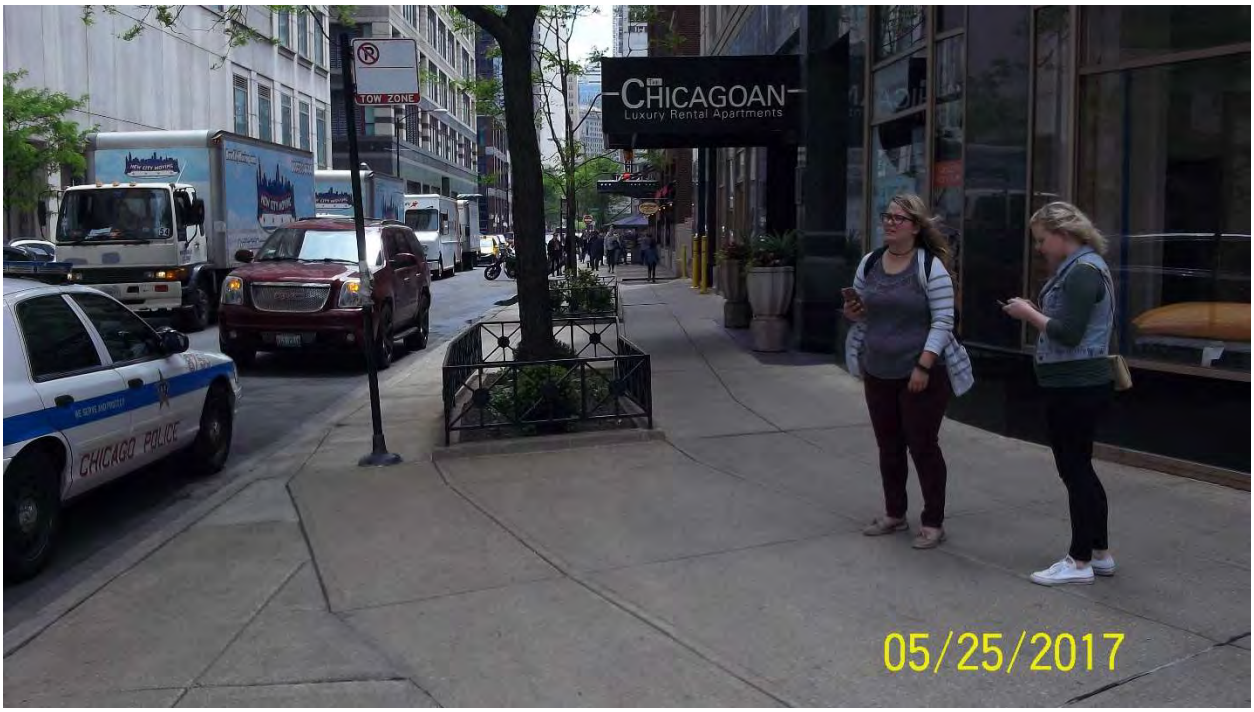


Photo 10: Southwest corner of Chicago Ave. / Rush St. – Looking South

Photo 11: Southwest corner of Chicago Ave. / Rush St. – Looking East

Photo 12: Southwest corner of Chicago Ave. / Rush St. – Looking Northeast

Photo 13: Southwest corner of Chicago Ave. / Rush St. – Looking North

Photo 14: Southwest corner of Chicago Ave. / Rush St. – Looking West

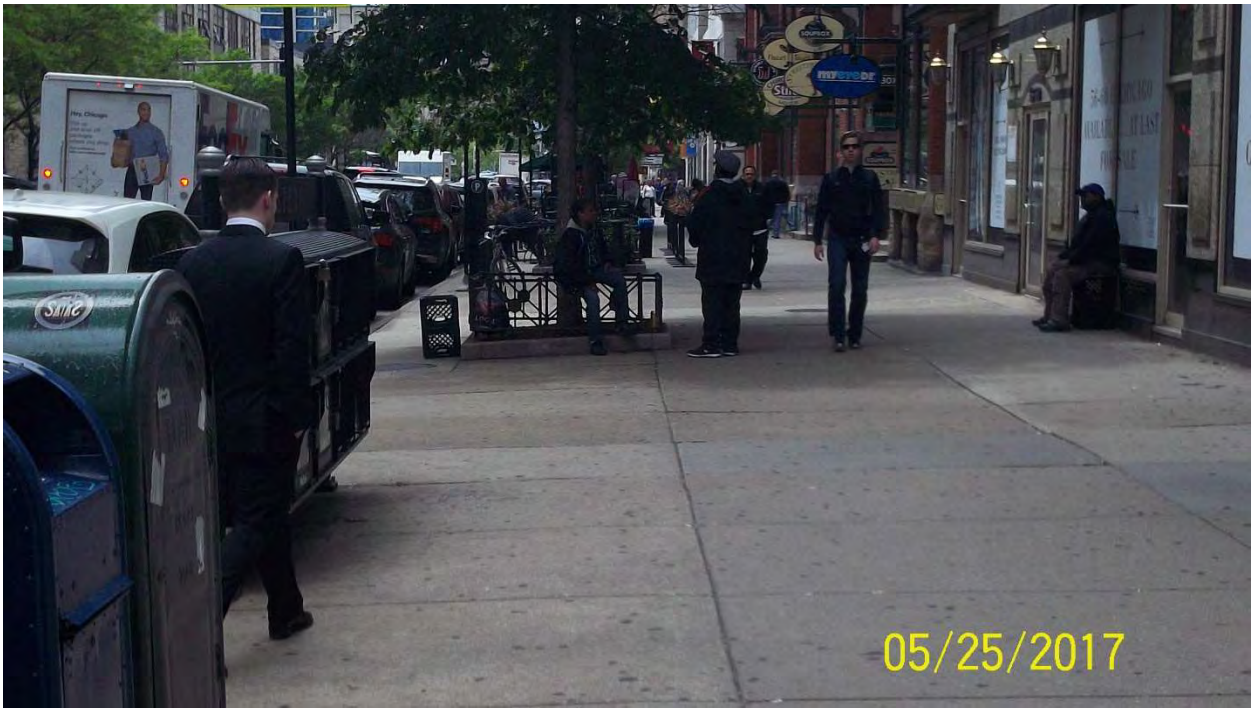


Photo 15: Northwest corner of Chicago Ave. / Rush St. – Looking West

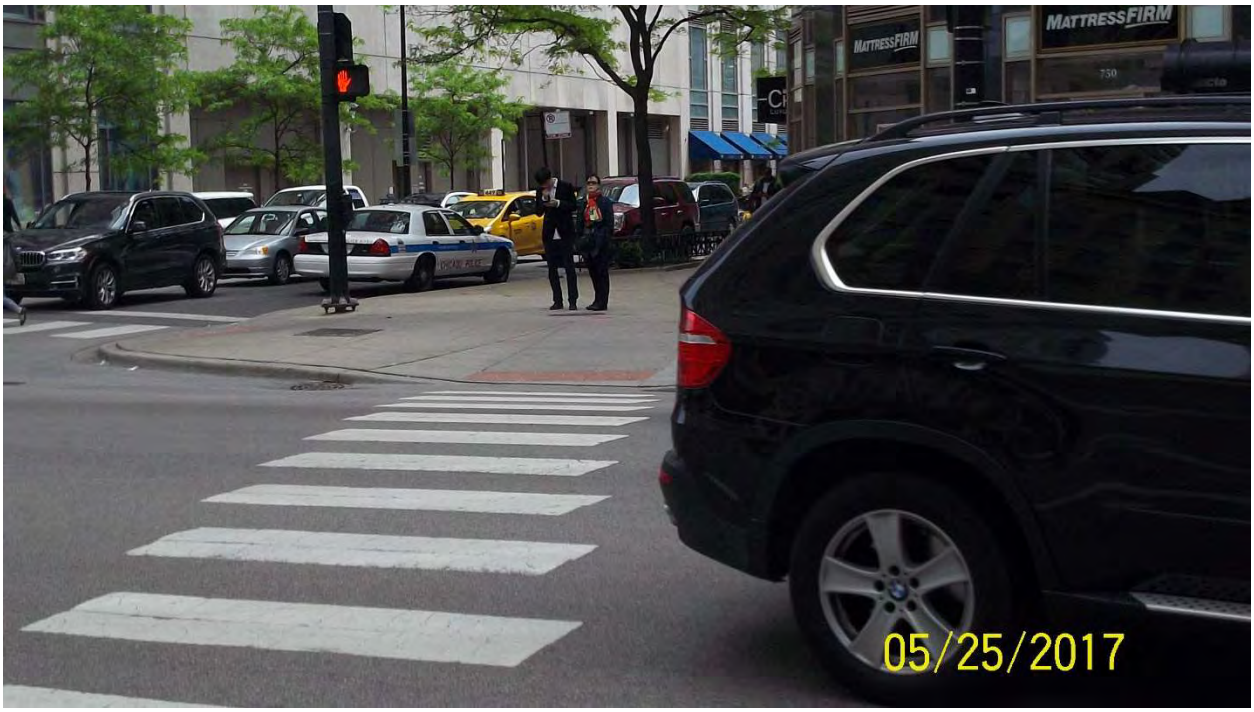


Photo 16: Northwest corner of Chicago Ave. / Rush St. – Looking South

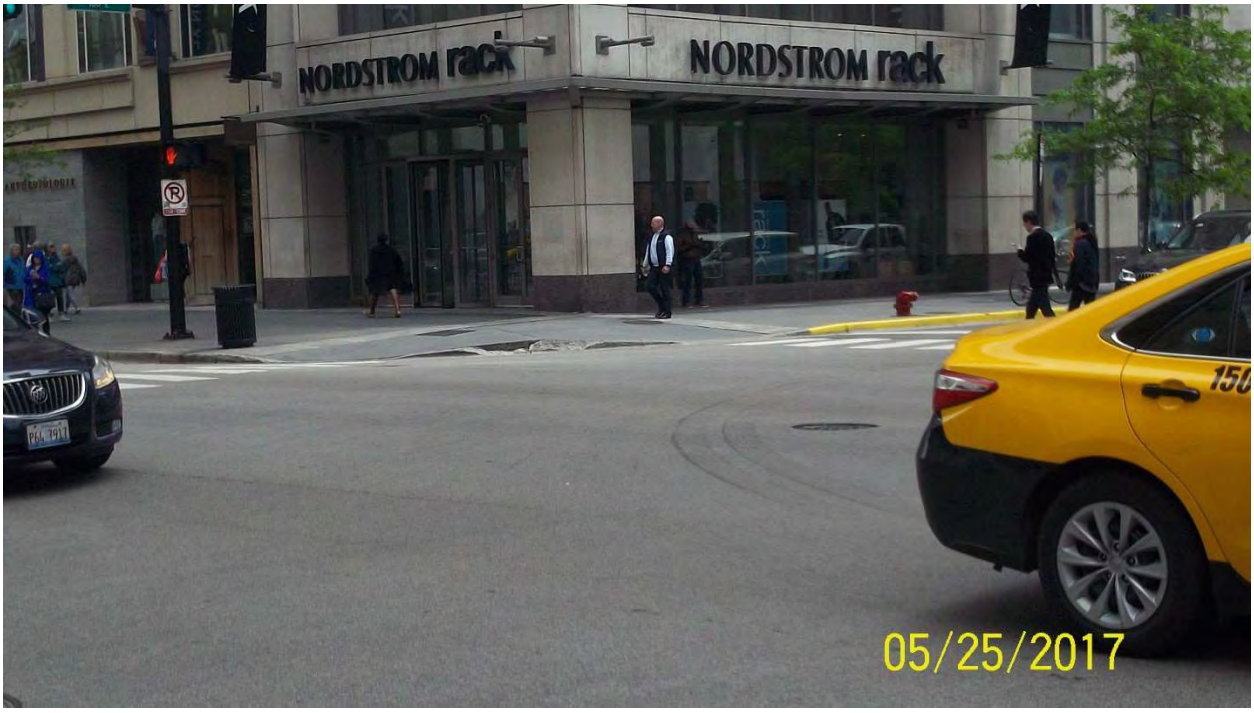


Photo 17: Northwest corner of Chicago Ave. / Rush St. – Looking Southeast

Photo 18: Northwest corner of Chicago Ave. / Rush St. – Looking East

Photo 19: Northwest corner of Chicago Ave. / Rush St. – Looking North

Photo 20: Northeast corner of Chicago Ave. / Rush St. – Looking North

Photo 21: Northeast corner of Chicago Ave. / Rush St. – Looking West

Photo 22: Northeast corner of Chicago Ave. / Rush St. – Looking Southwest

Photo 23: Northeast corner of Chicago Ave. / Rush St. – Looking South

Photo 24: Northeast corner of Chicago Ave. / Rush St. – Looking East

CTA Bus Slow Zone Project
Chicago-Michigan Photo Log

Prepared for:

Chicago Transit Authority

June 2017

Photo 1: Chicago Ave. – Looking East

Photo 2: Michigan Ave. – Looking South

Photo 3: Chicago Ave. – Looking West

Photo 4: Michigan Ave. – Looking North

Photo 5: Southwest corner of Chicago Ave. / Michigan Ave. – Looking East

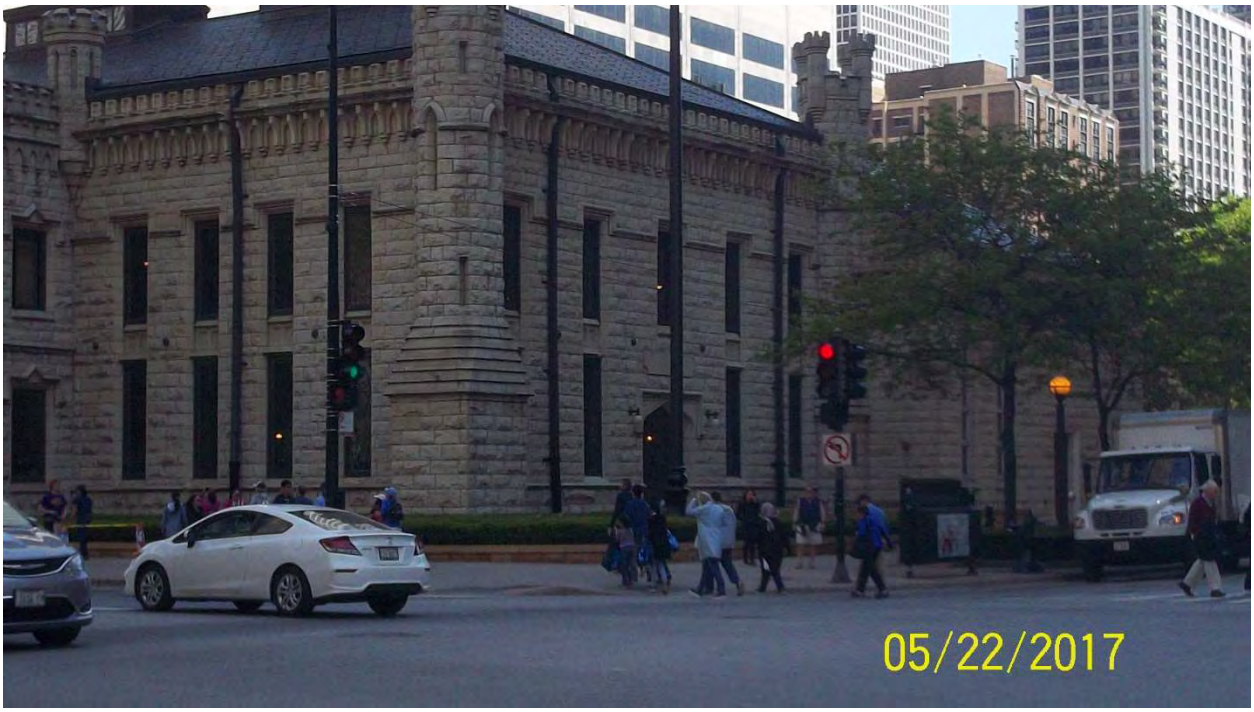


Photo 6: Southwest corner of Chicago Ave. / Michigan Ave. – Looking Northeast

Photo 7: Southwest corner of Chicago Ave. / Michigan Ave. – Looking North

Photo 8: Southwest corner of Chicago Ave. / Michigan Ave. – Looking West

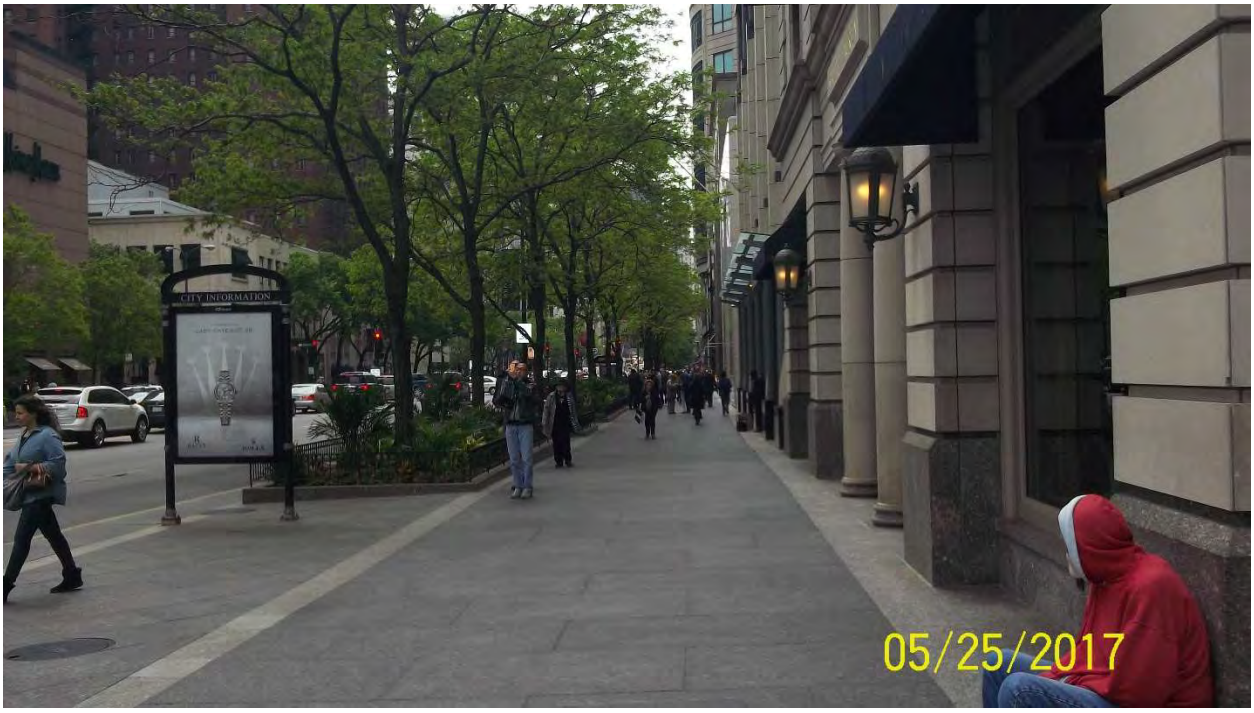


Photo 9: Southwest corner of Chicago Ave. / Michigan Ave. – Looking South

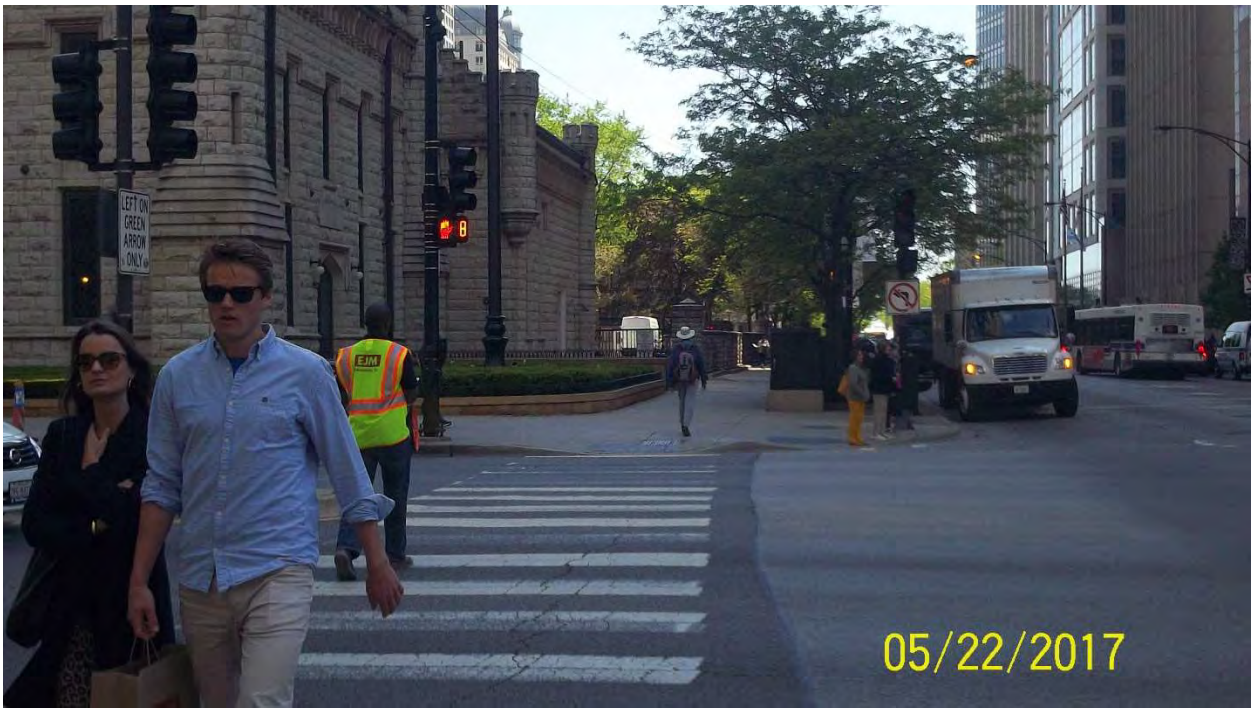


Photo 10: Northwest corner of Chicago Ave. / Michigan Ave. – Looking East

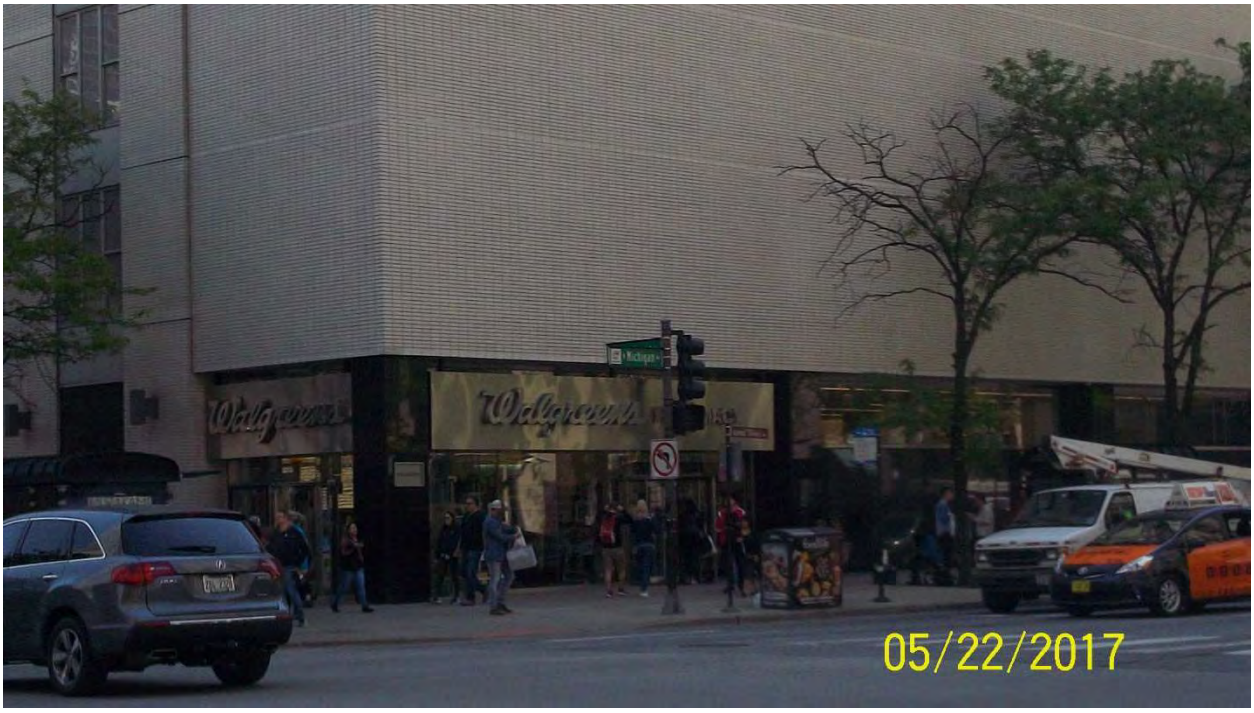


Photo 11 Northwest corner of Chicago Ave. / Michigan Ave. – Looking Southeast

Photo 12: Northwest corner of Chicago Ave. / Michigan Ave. – Looking South

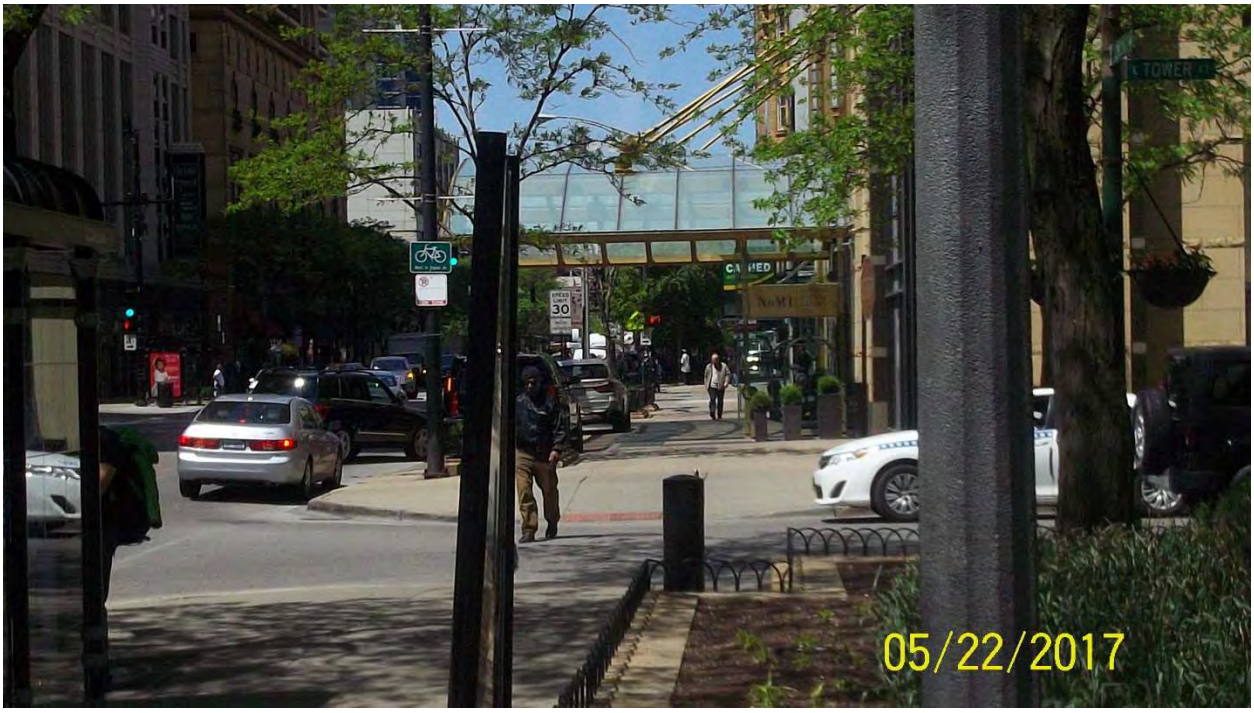


Photo 13: Northwest corner of Chicago Ave. / Michigan Ave. – Looking West

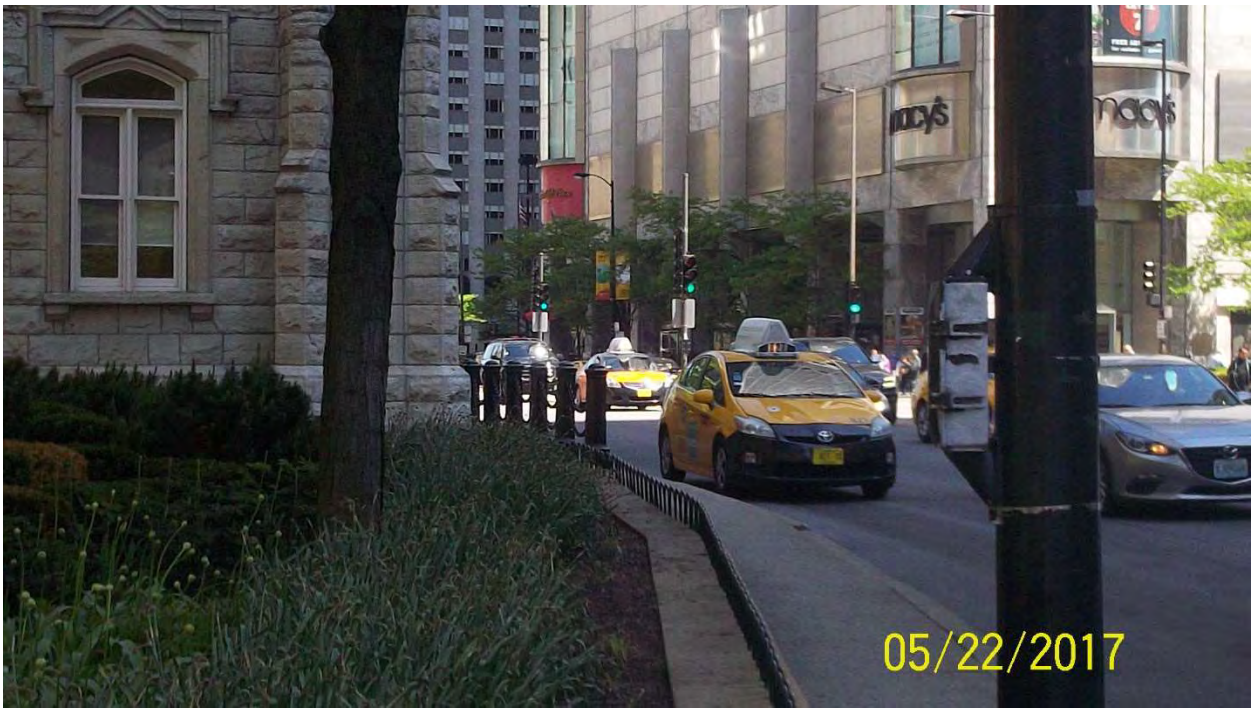


Photo 14: Northwest corner of Chicago Ave. / Michigan Ave. – Looking North

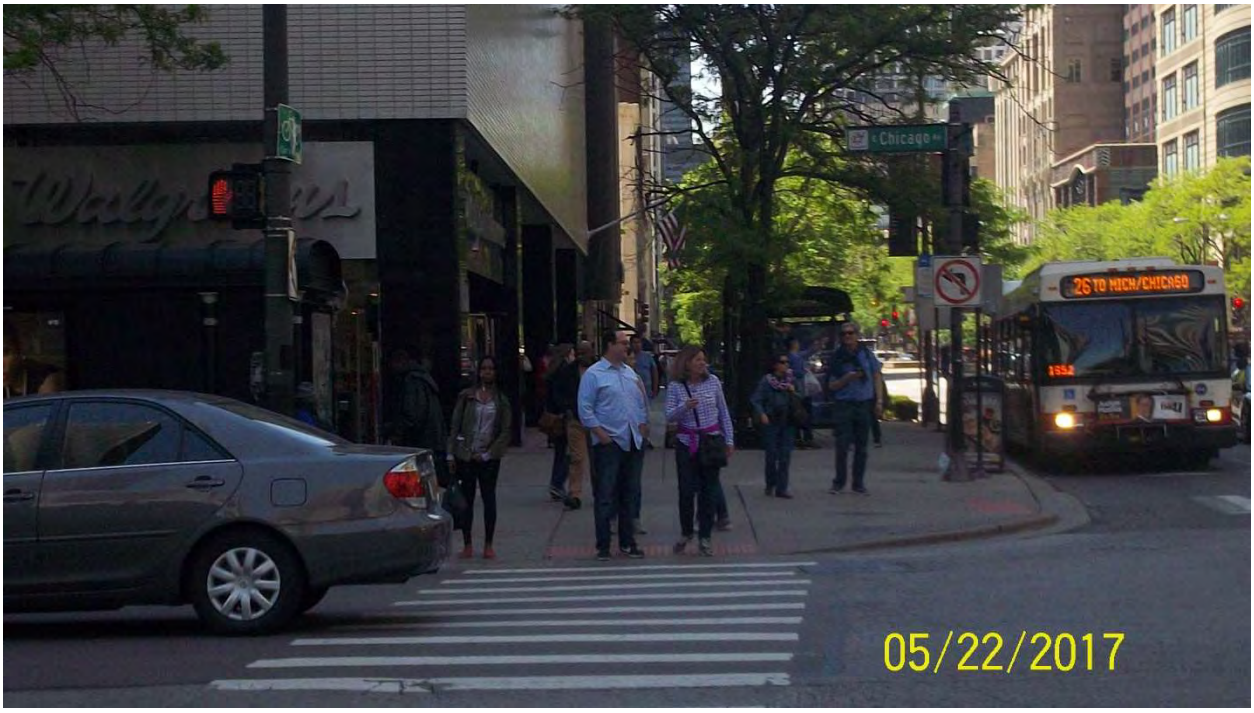


Photo 15: Northeast corner of Chicago Ave. / Michigan Ave. – Looking South

Photo 16: Northeast corner of Chicago Ave. / Michigan Ave. – Looking Southwest

Photo 17: Northeast corner of Chicago Ave. / Michigan Ave. – Looking West

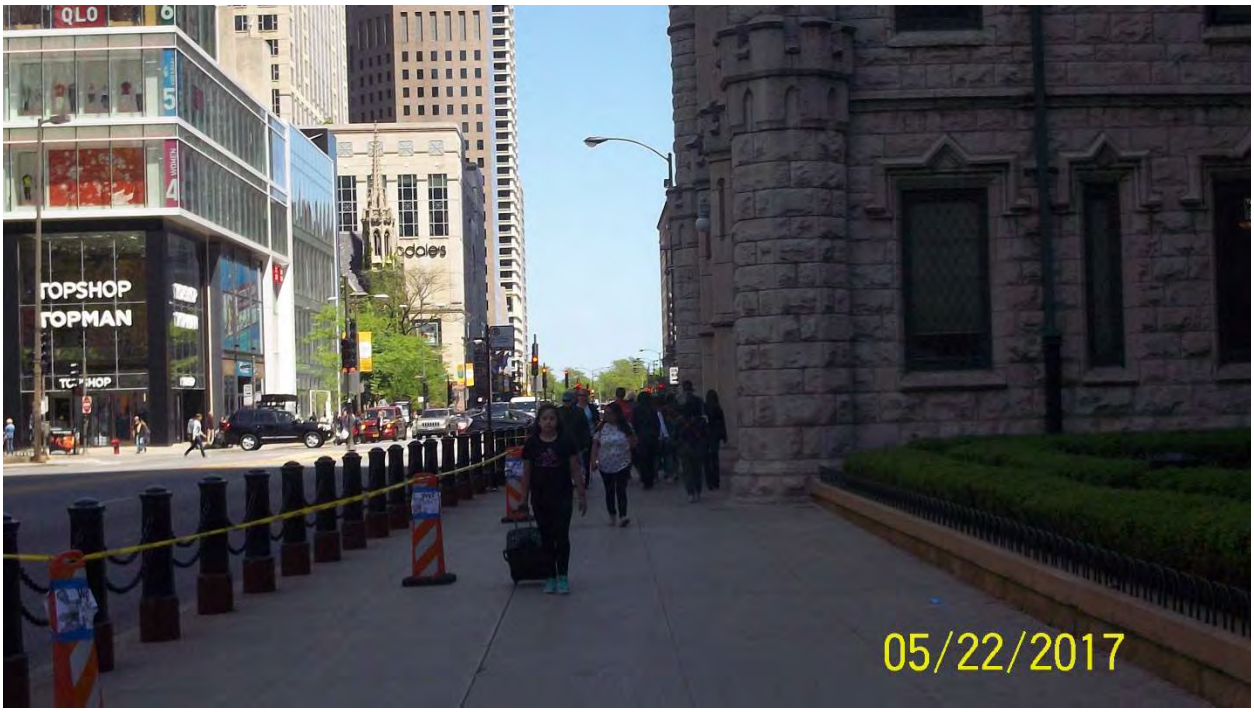


Photo 18: Northeast corner of Chicago Ave. / Michigan Ave. – Looking North

Photo 19: Northeast corner of Chicago Ave. / Michigan Ave. – Looking East

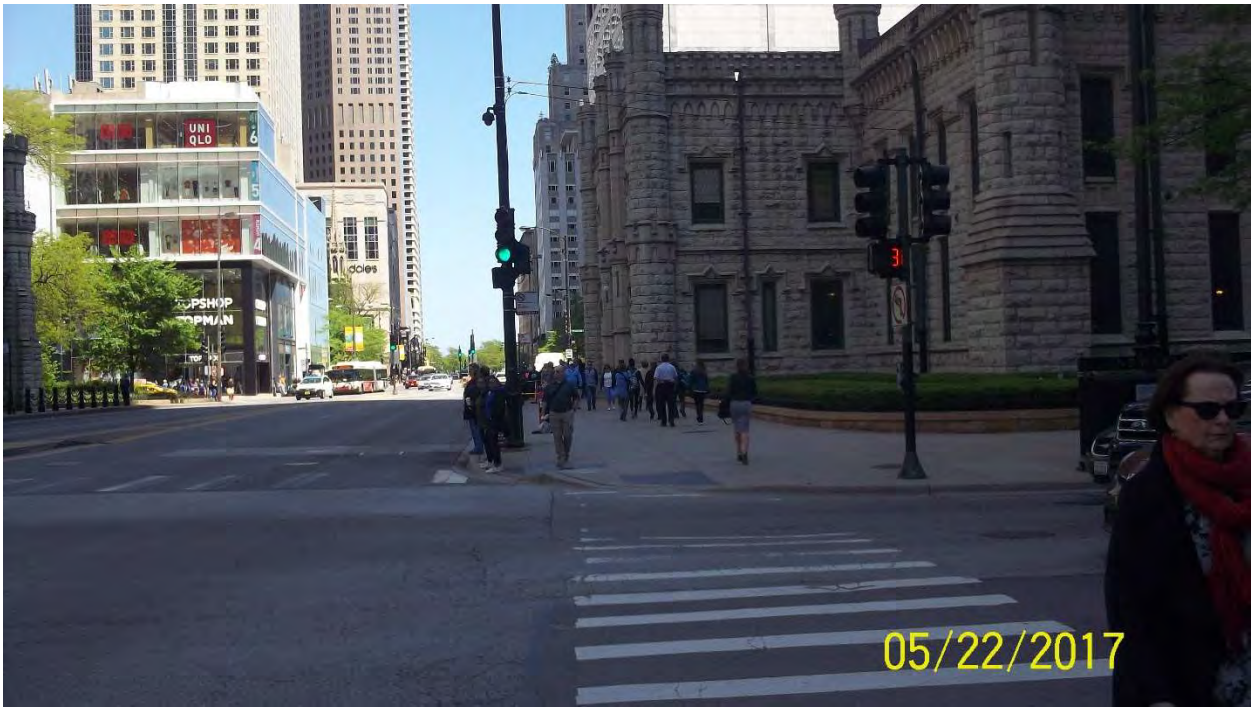


Photo 20: Southeast corner of Chicago Ave. / Michigan Ave. – Looking North

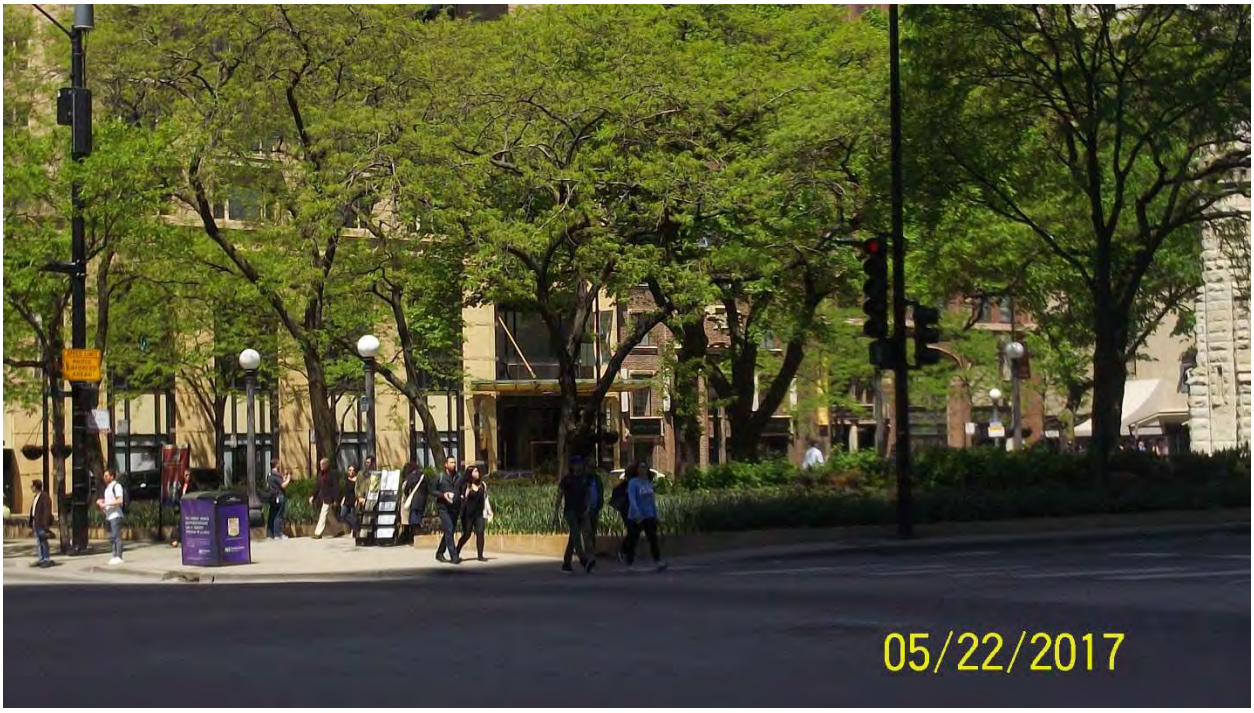


Photo 21: Southeast corner of Chicago Ave. / Michigan Ave. – Looking Northwest

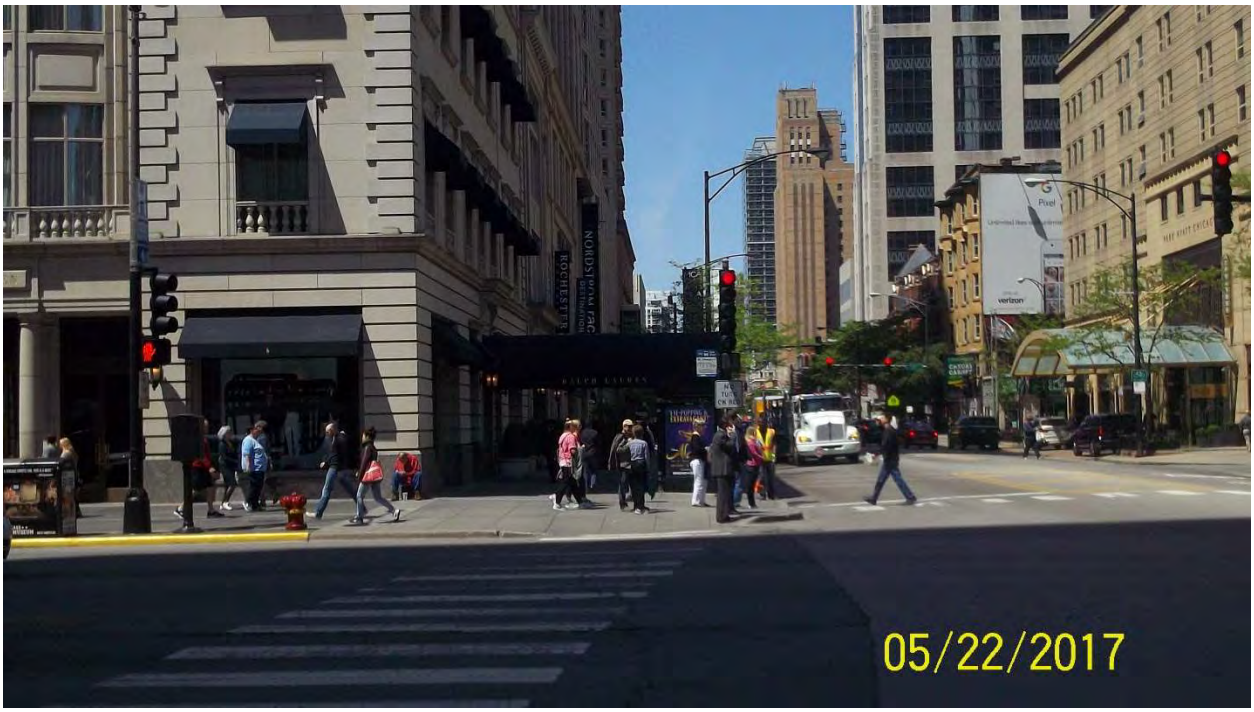


Photo 22: Southeast corner of Chicago Ave. / Michigan Ave. – Looking West

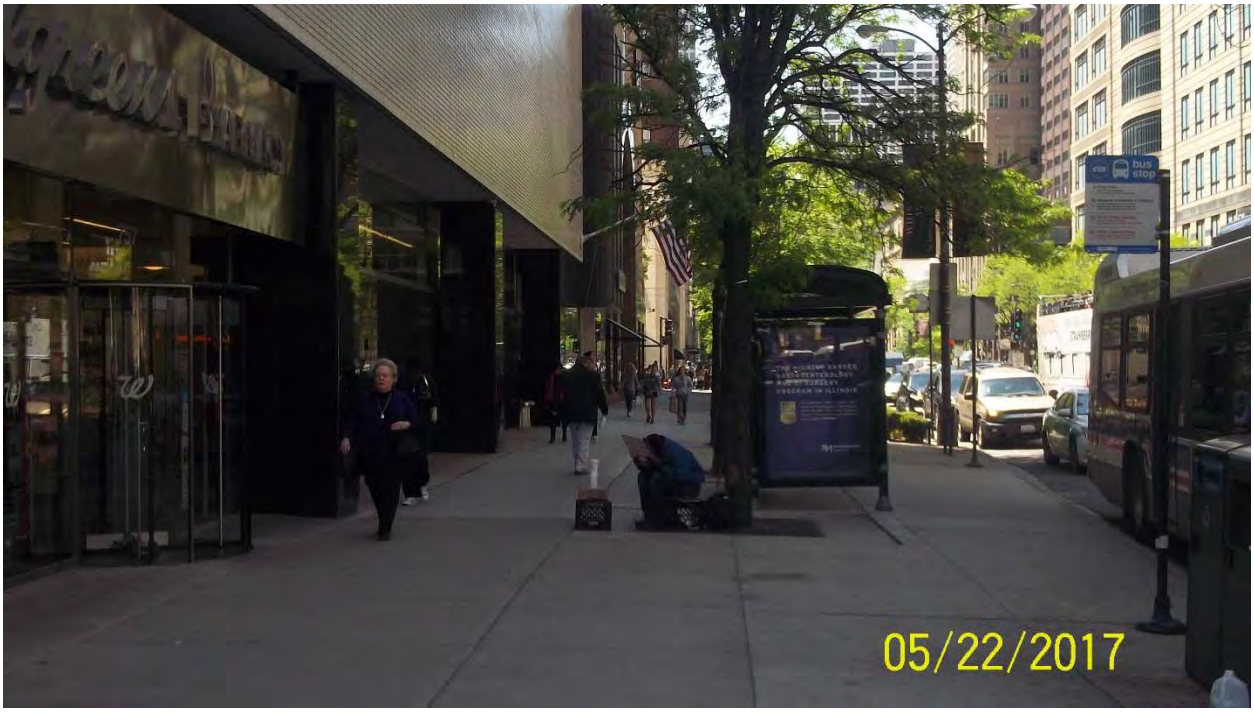


Photo 23: Southeast corner of Chicago Ave. / Michigan Ave. – Looking South

Photo 24: Southeast corner of Chicago Ave. / Michigan Ave. – Looking East

CTA Bus Slow Zone Project
Chicago-Mies van der Rohe Photo Log

Prepared for:

Chicago Transit Authority

June 2017

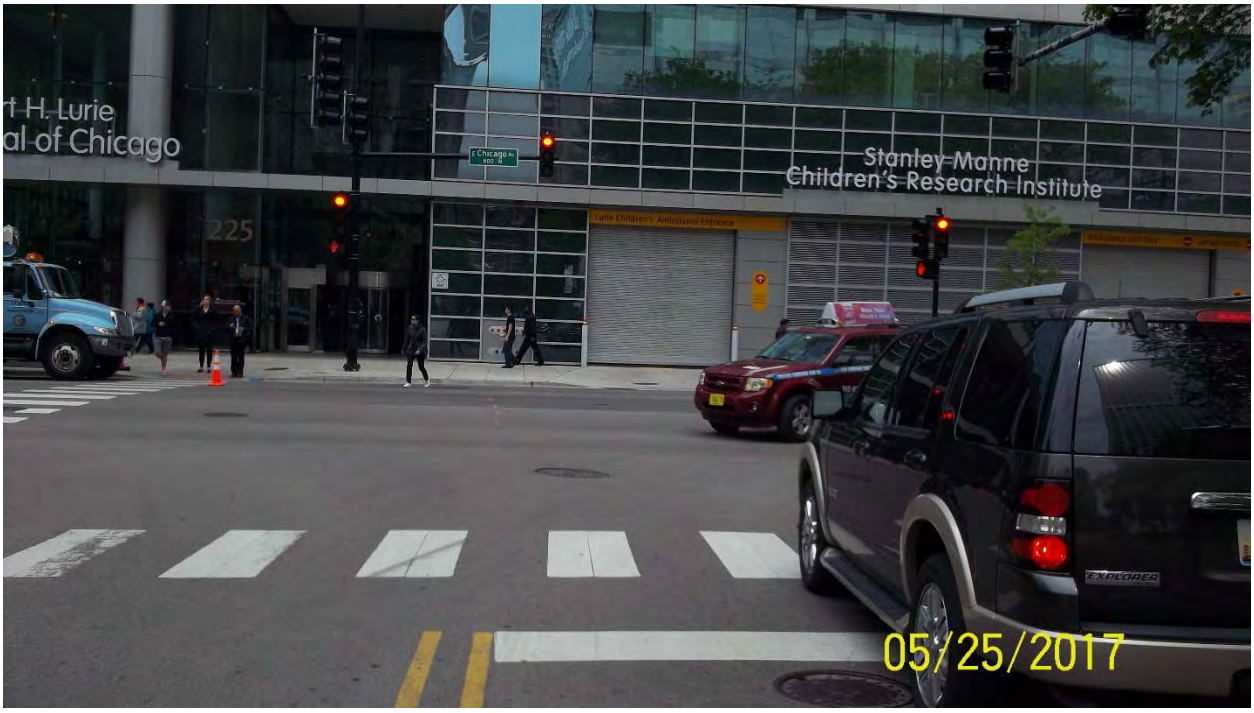


Photo 1: Mies van der Rohe – Looking South

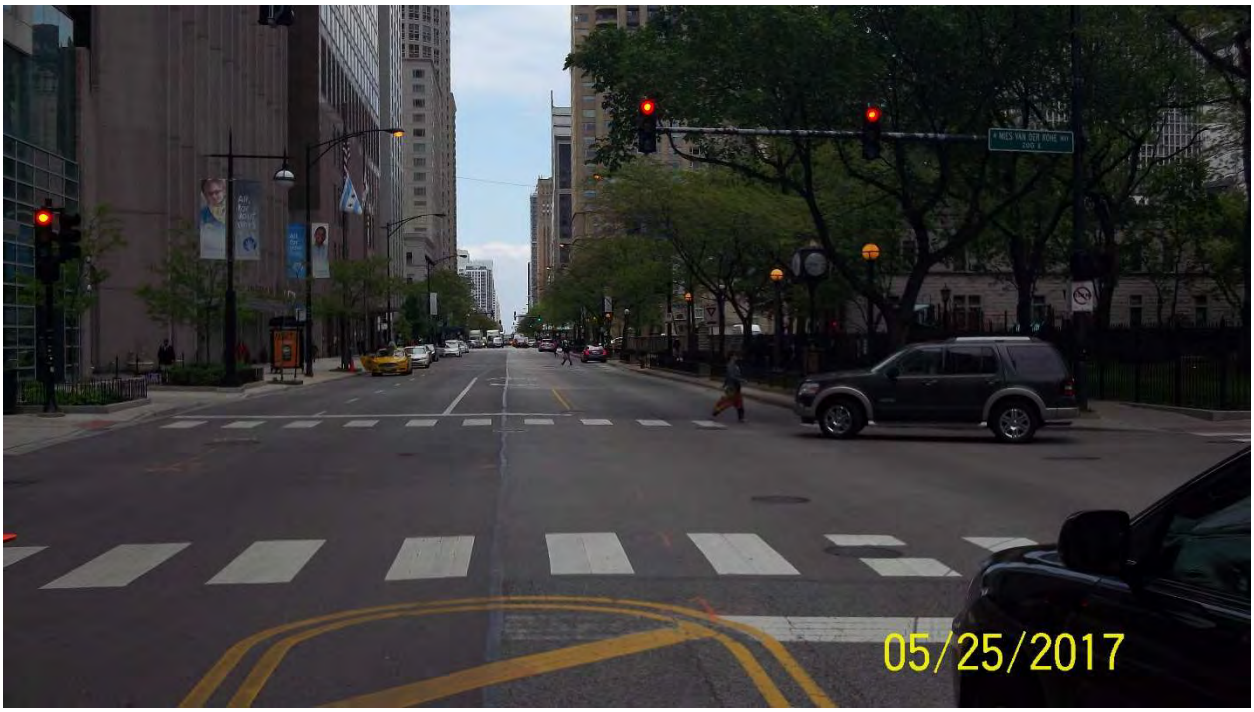


Photo 2: Chicago Ave. – Looking West

Photo 3: Chicago Ave. – Looking East

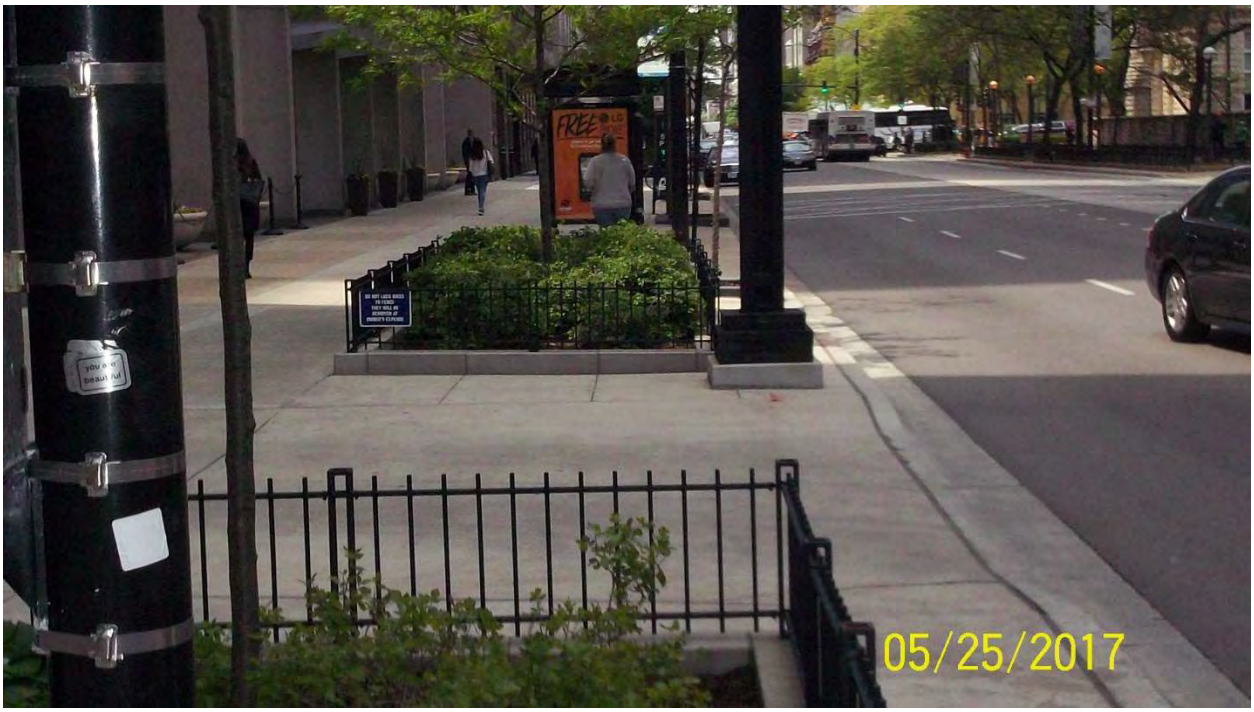


Photo 4: Southwest corner of Chicago Ave. / Mies van der Rohe – Looking West

Photo 5: Southwest corner of Chicago Ave. / Mies van der Rohe – Looking North

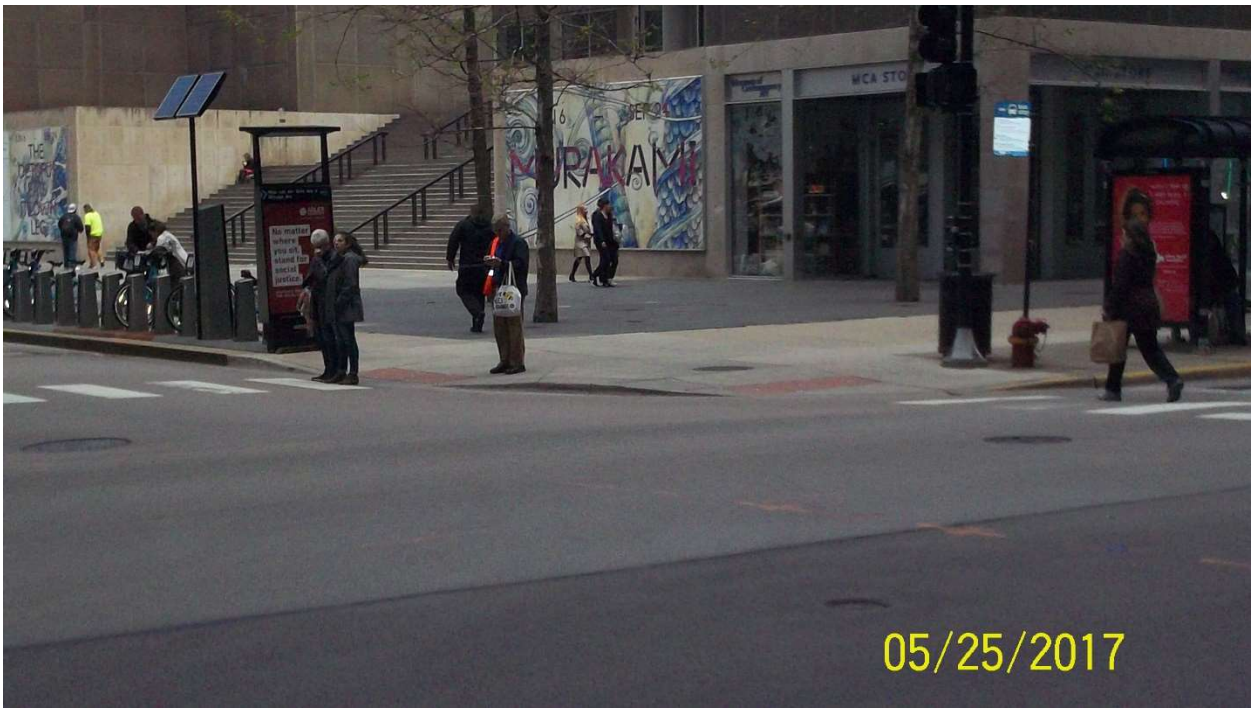


Photo 6: Southwest corner of Chicago Ave. / Mies van der Rohe – Looking Northeast

Photo 7: Southwest corner of Chicago Ave. / Mies van der Rohe – Looking East

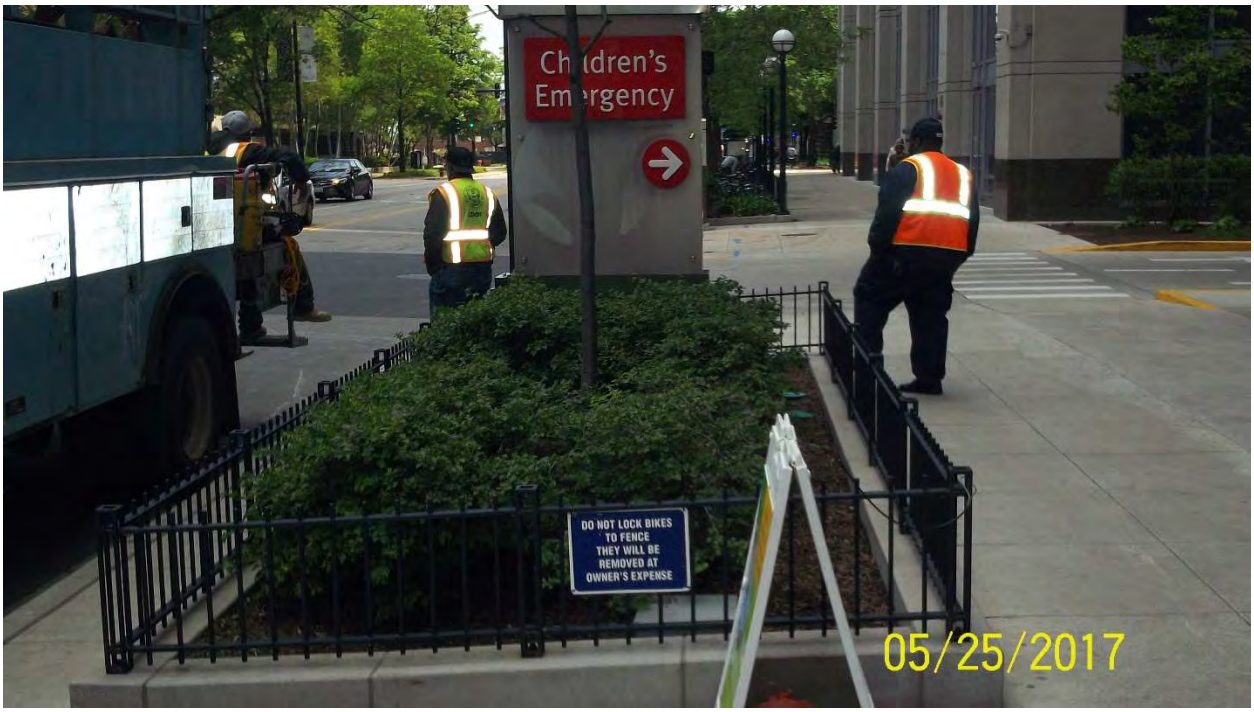


Photo 8: Southeast corner of Chicago Ave. / Mies van der Rohe – Looking East

Photo 9: Southeast corner of Chicago Ave. / Mies van der Rohe – Looking North

Photo 10: Southeast corner of Chicago Ave. / Mies van der Rohe – Looking Northwest

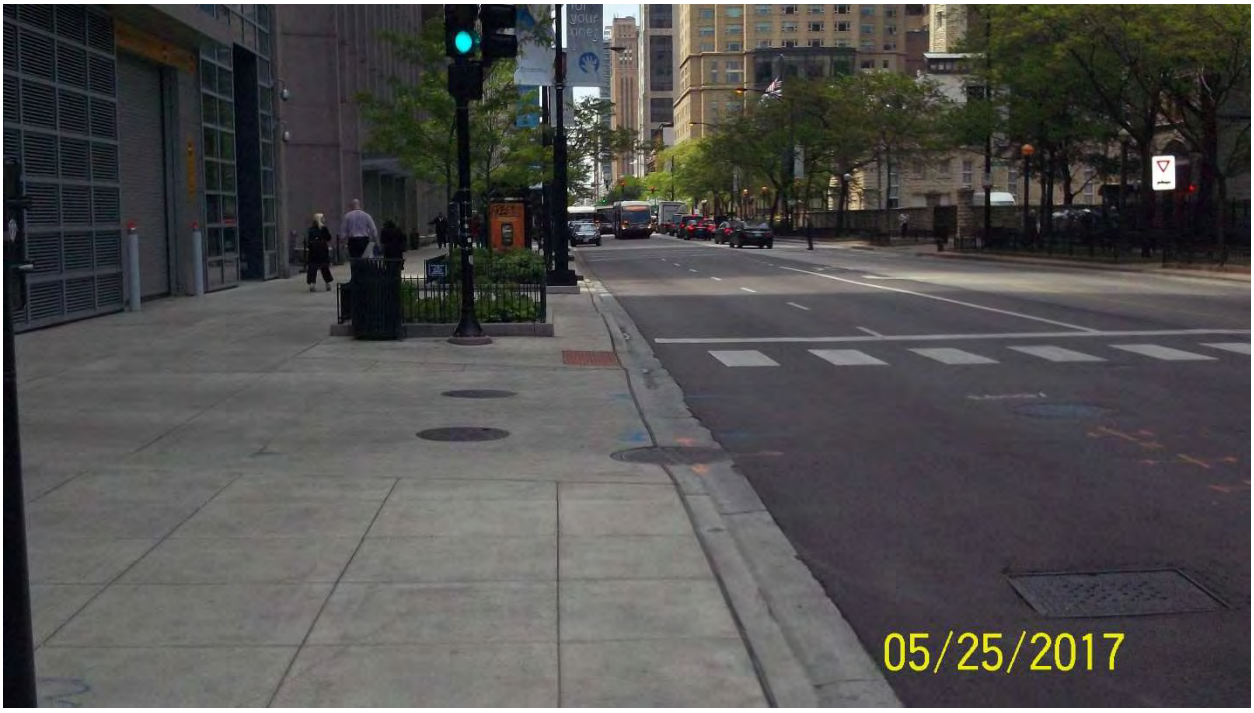


Photo 11: Southeast corner of Chicago Ave. / Mies van der Rohe – Looking West

Photo 12: Northeast corner of Chicago Ave. / Mies van der Rohe – Looking East

Photo 13: Northeast corner of Chicago Ave. / Mies van der Rohe – Looking South

Photo 14: Northeast corner of Chicago Ave. / Mies van der Rohe – Looking Southwest

Photo 15: Northeast corner of Chicago Ave. / Mies van der Rohe – Looking West

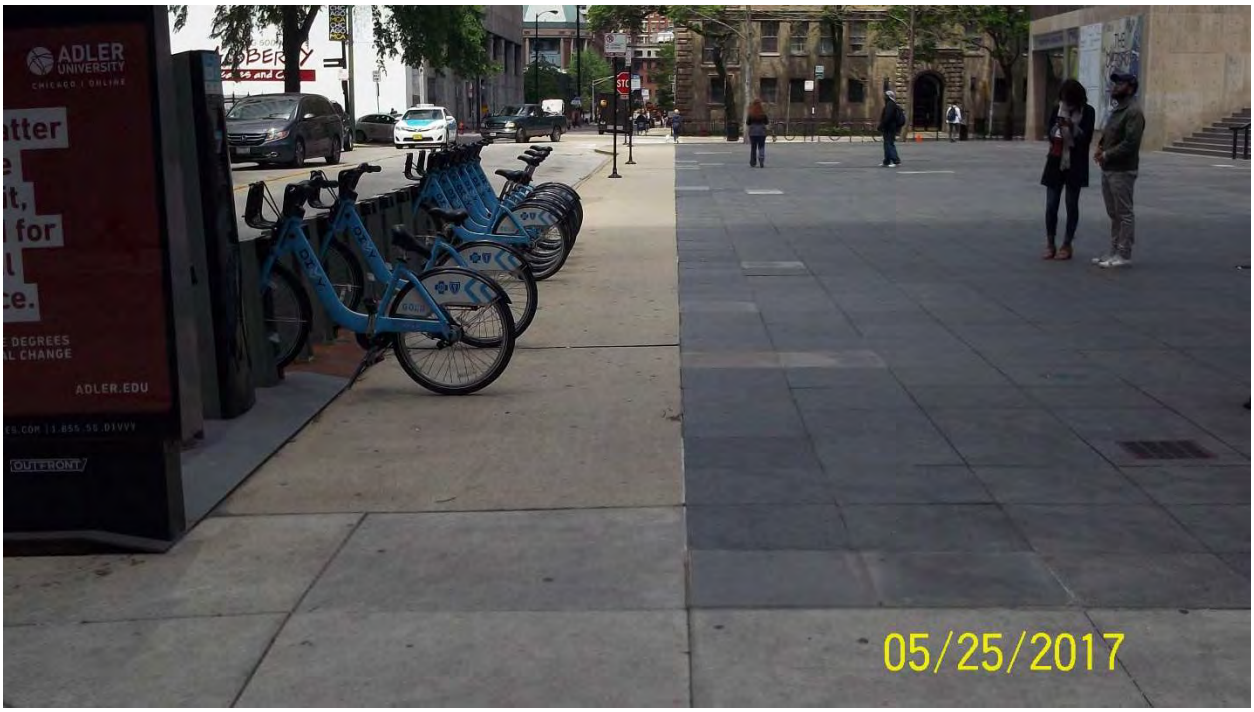


Photo 16: Northeast corner of Chicago Ave. / Mies van der Rohe – Looking North

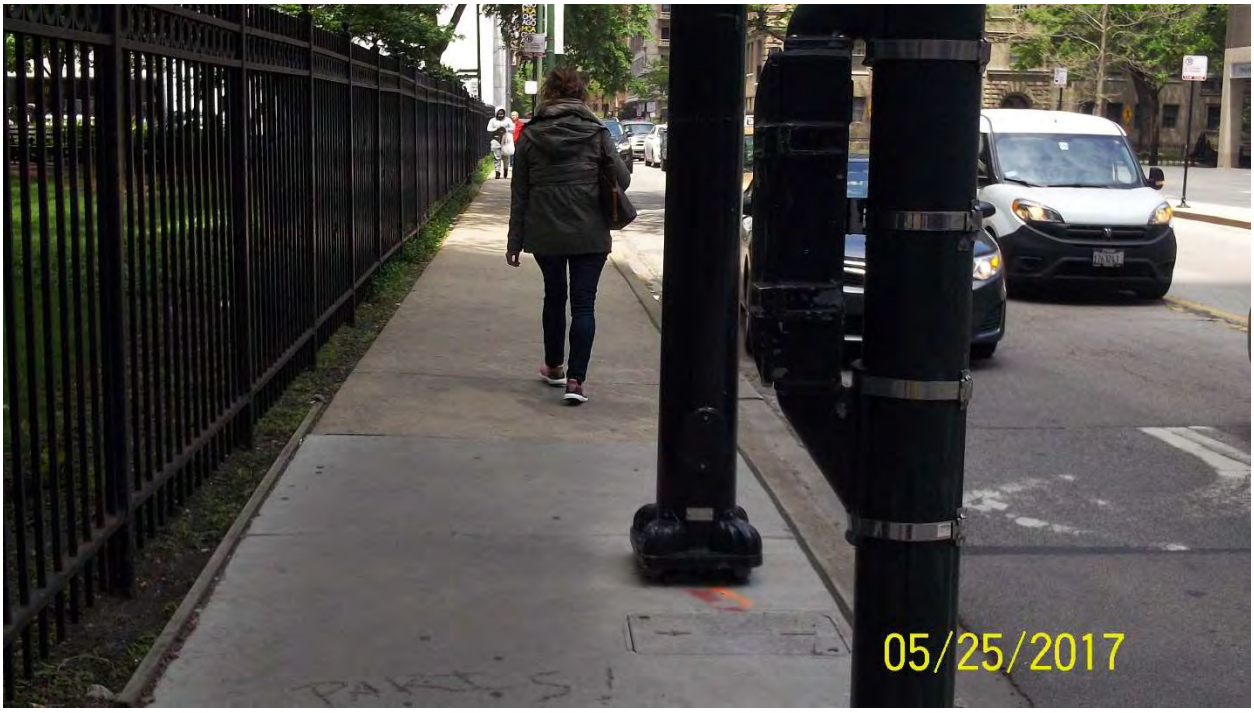


Photo 17: Northwest corner of Chicago Ave. / Mies van der Rohe – Looking North

Photo 18: Northwest corner of Chicago Ave. / Mies van der Rohe – Looking South

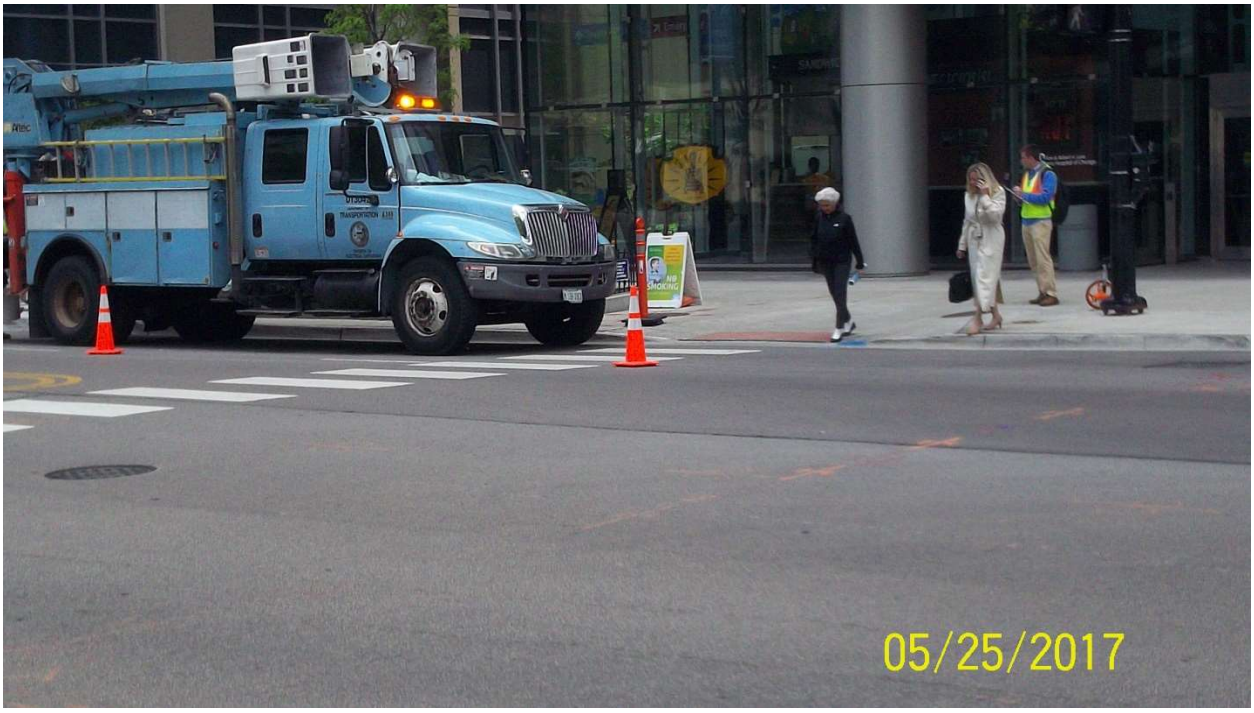


Photo 19: Northwest corner of Chicago Ave. / Mies van der Rohe – Looking Southeast

Photo 20: Northwest corner of Chicago Ave. / Mies van der Rohe – Looking South

Photo 21: Northwest corner of Chicago Ave. / Mies van der Rohe – Looking West

CTA Bus Slow Zone Project
Chicago-Fairbanks Photo Log

Prepared for:

Chicago Transit Authority

June 2017

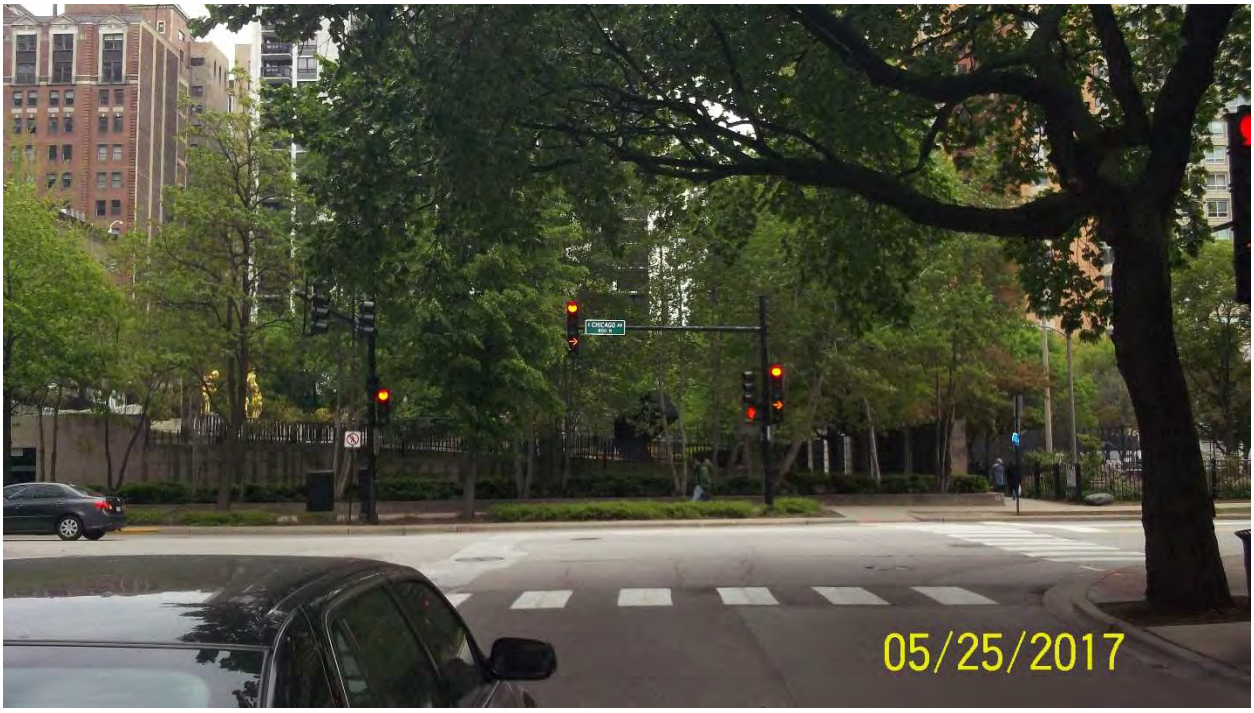


Photo 1: Fairbanks Ct. – Looking North

Photo 2: Chicago Ave. – Looking West

Photo 3: Chicago Ave. – Looking East

Photo 4: Southeast corner of Chicago Ave. / Fairbanks Ct. – Looking North

Photo 5: Southeast corner of Chicago Ave. / Fairbanks Ct. – Looking Northwest

Photo 6: Southeast corner of Chicago Ave. / Fairbanks Ct. – Looking West

Photo 7: Southeast corner of Chicago Ave. / Fairbanks Ct. – Looking South

Photo 8: Southeast corner of Chicago Ave. / Fairbanks Ct. – Looking East

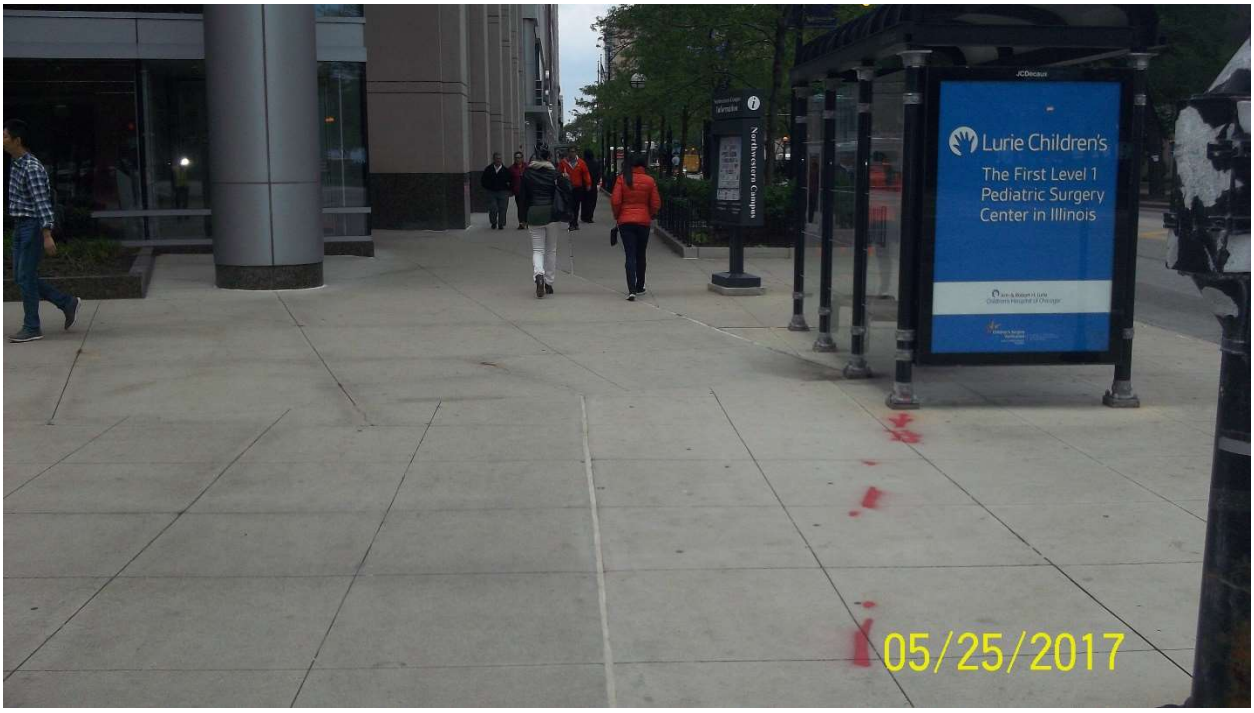


Photo 9: Southwest corner of Chicago Ave. / Fairbanks Ct. – Looking West

Photo 10: Southwest corner of Chicago Ave. / Fairbanks Ct. – Looking North

Photo 11: Southwest corner of Chicago Ave. / Fairbanks Ct. – Looking Northeast

Photo 12: Southwest corner of Chicago Ave. / Fairbanks Ct. – Looking East

Photo 13: Southwest corner of Chicago Ave. / Fairbanks Ct. – Looking South

Photo 14: Northeast corner of Chicago Ave. / Fairbanks Ct. – Looking East

Photo 15: Northeast corner of Chicago Ave. / Fairbanks Ct. – Looking South

Photo 16: Northeast corner of Chicago Ave. / Fairbanks Ct. – Looking Southwest

Photo 17: Northeast corner of Chicago Ave. / Fairbanks Ct. – Looking West

Photo 18: Northwest corner of Chicago Ave. / Fairbanks Ct. – Looking West

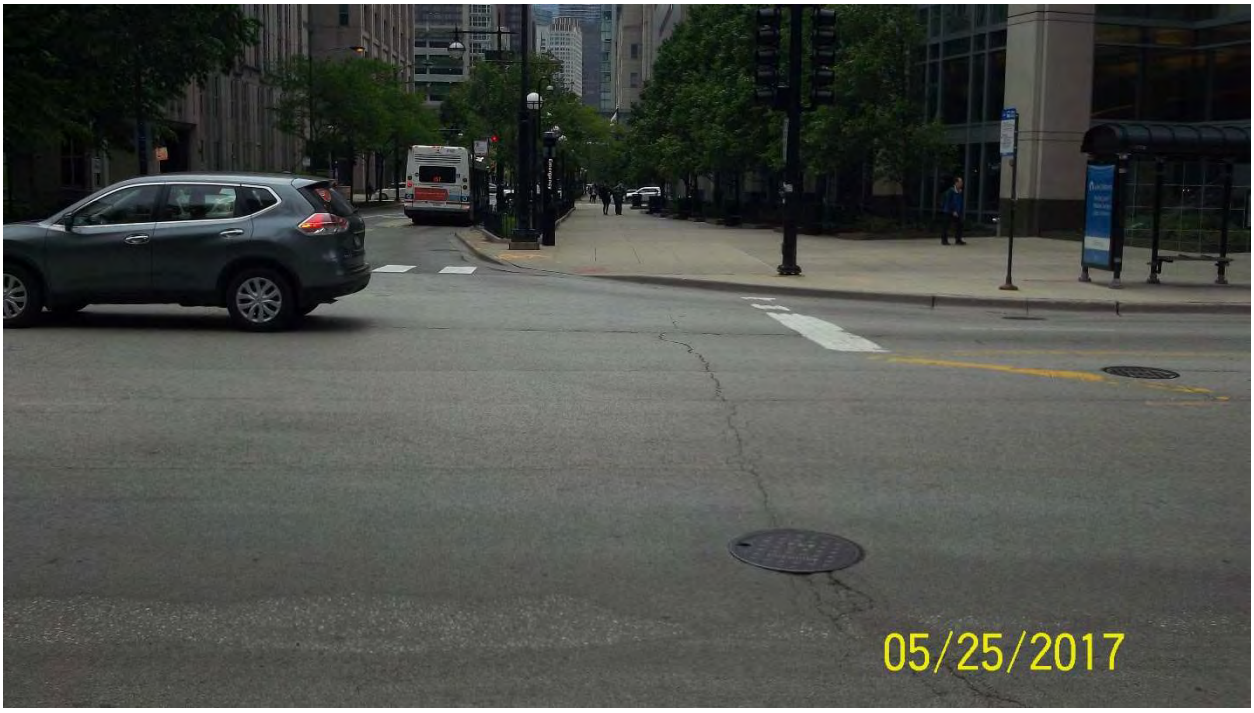
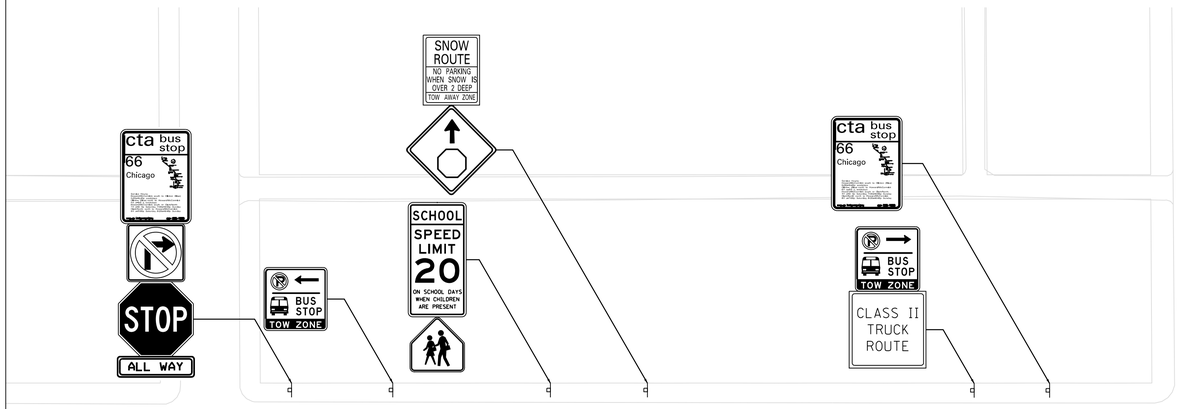


Photo 19: Northwest corner of Chicago Ave. / Fairbanks Ct. – Looking South

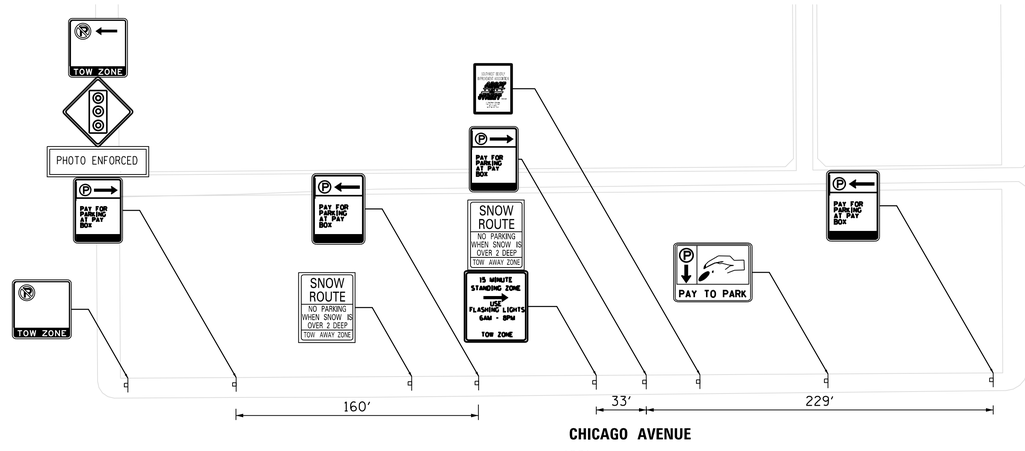
Photo 20: Northwest corner of Chicago Ave. / Fairbanks Ct. – Looking Southwest

Photo 21: Northwest corner of Chicago Ave. / Fairbanks Ct. – Looking East

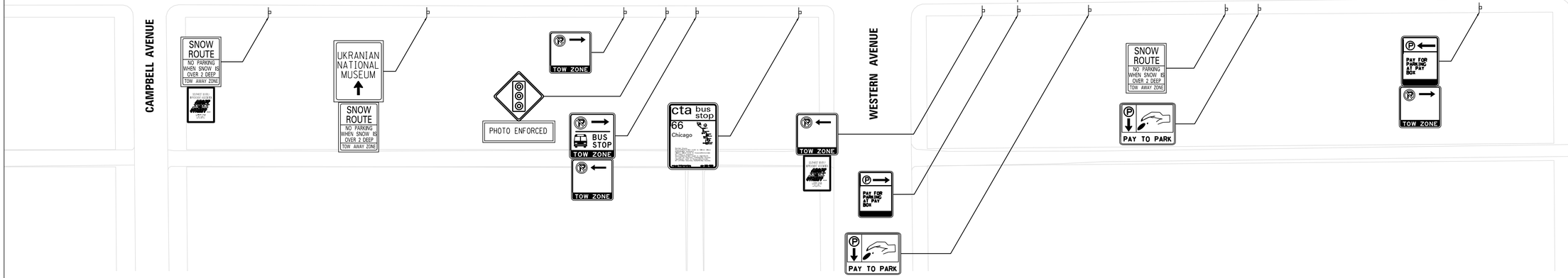
APPENDIX E – Curbside Signs



CHICAGO AVENUE



CHICAGO AVENUE



EJM ENGINEERING, INC.
418 South Wells Street Suite 1000
Chicago, Illinois 60607

Stanley Consultants INC.

USER NAME = $USER$	DESIGNED - RD	REVISED -	
	CHECKED - JAW	REVISED -	
PLOT SCALE = $SCALE$	DRAWN - RD	REVISED -	
PLOT DATE = $DATE$	CHECKED - JAW	REVISED -	

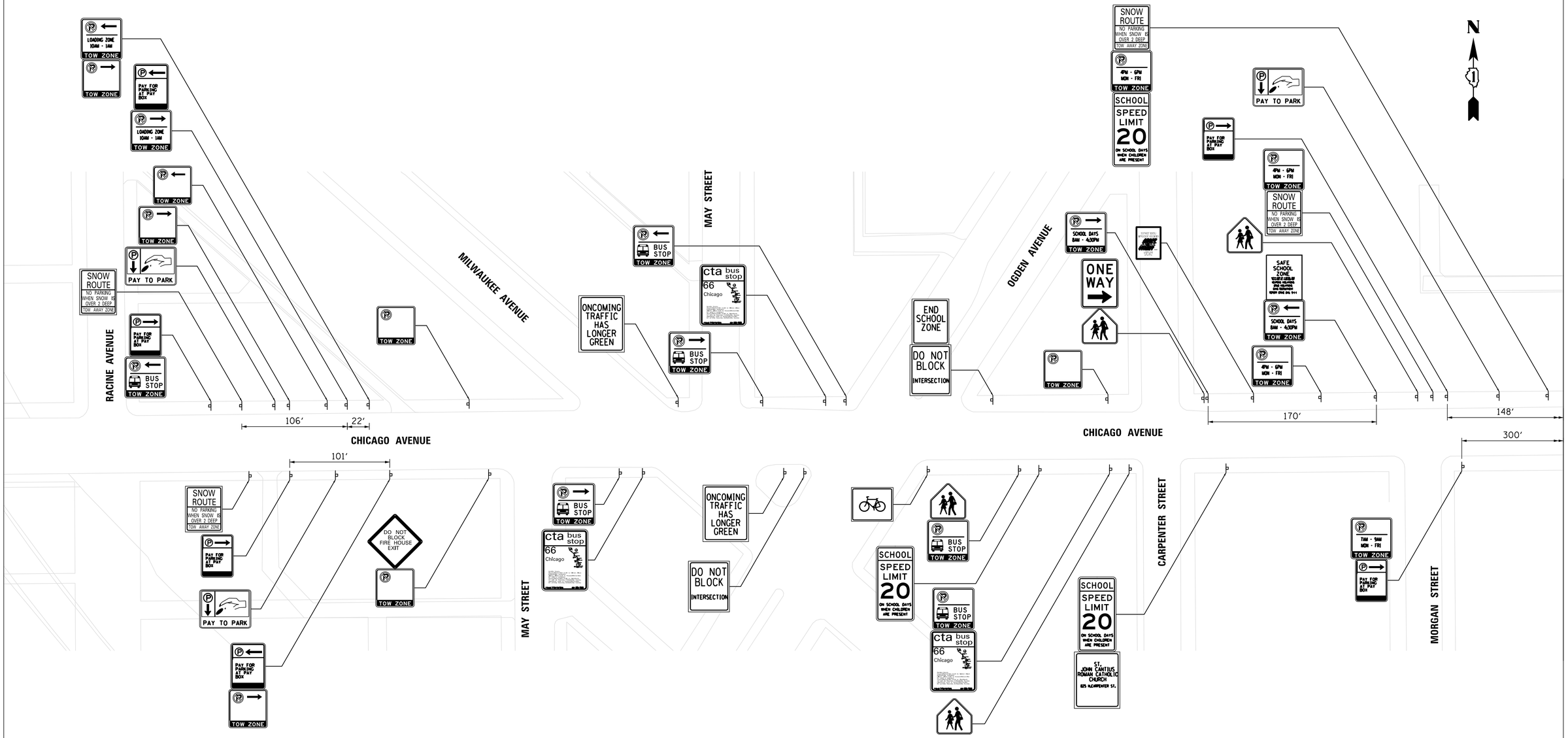
CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

TRANSPORTATION ENGINEERING SERVICES FOR CTA BUS SLOW ZONES

CURBSIDE SIGNAGE FOR CHICAGO AVENUE – WESTERN AVENUE

F.A.P. RTE.	SECTION	COUNTY	SHEET NO.
XXXX	XX-XXXXX-XX-XX	COOK	
CDOT PROJECT NO. B-6-227			OF $TOTAL

$SDGN$$
$SYTIME$



EJM ENGINEERING, INC.
49 South Wells Street Suite 1000
Chicago, Illinois 60607

Stanley Consultants INC.

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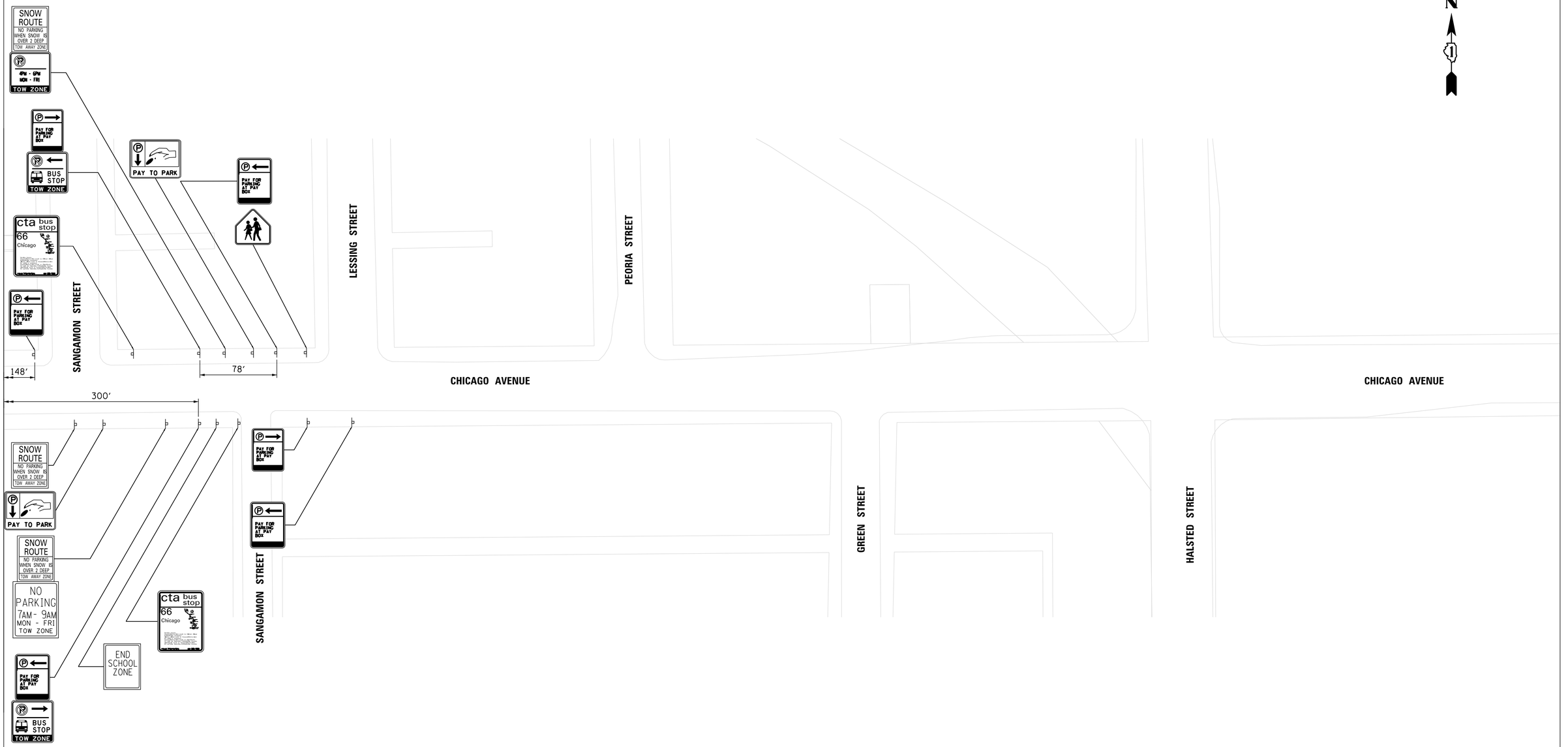
CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

TRANSPORTATION ENGINEERING SERVICES FOR CTA BUS SLOW ZONES

CURBSIDE SIGNAGE FOR CHICAGO AVENUE – MILWAUKEE AVENUE / OGDEN AVENUE (1 OF 2)

F.A.P. RTE.	SECTION	COUNTY	SHEET NO.
XXXX	XX-XXXXX-XX-XX	COOK	
CDOT PROJECT NO. B-6-227			OF $TOTAL

$$DGN$$
$$YTIME$$



EJM ENGINEERING, INC.
41 South Wells Street Suite 1000
Chicago, Illinois 60607

Stanley Consultants INC.

USER NAME = $USER$	DESIGNED - RD	REVISED -
	CHECKED - JAW	REVISED -
PLOT SCALE = $SCALE$	DRAWN - RD	REVISED -
PLOT DATE = $DATE$	CHECKED - JAW	REVISED -

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

TRANSPORTATION ENGINEERING SERVICES FOR CTA BUS SLOW ZONES

CURBSIDE SIGNAGE FOR CHICAGO AVENUE – MILWAUKEE AVENUE / OGDEN AVENUE (2 OF 2)

F.A.P. RTE.	SECTION	COUNTY	SHEET NO.
XXXX	XX-XXXXX-XX-XX	COOK	
CDOT PROJECT NO. B-6-227			OF $TOTAL

$SDGN$$
$SYTIME$

N

LARRABEE STREET

CAMPBRIDGE AVENUE

CLEVELAND AVENUE

CHICAGO AVENUE

CHICAGO AVENUE

SHARED LANE YIELD TO BIKES

SPEED LIMIT 30

cta bus stop 66 Chicago

PAY FOR PARKING AT PAY BOX

BUS STOP TOW ZONE

PAY TO PARK

7 DAY PAID PARKING

108'

189'

TOW ZONE

TOW ZONE

ONE WAY

ONE WAY

cta bus stop 66 Chicago

PAY FOR PARKING AT PAY BOX

BUS STOP TOW ZONE

PAY TO PARK

7 DAY PAID PARKING

PAY FOR PARKING AT PAY BOX

TOW ZONE

CHICAGO RIVER

KINGSBURY STREET

HUDSON AVENUE

EJM ENGINEERING, INC.
418 South Wells Street Suite 1000
Chicago, Illinois 60607

Stanley Consultants INC.

$SDGN$$
$SYTIME$

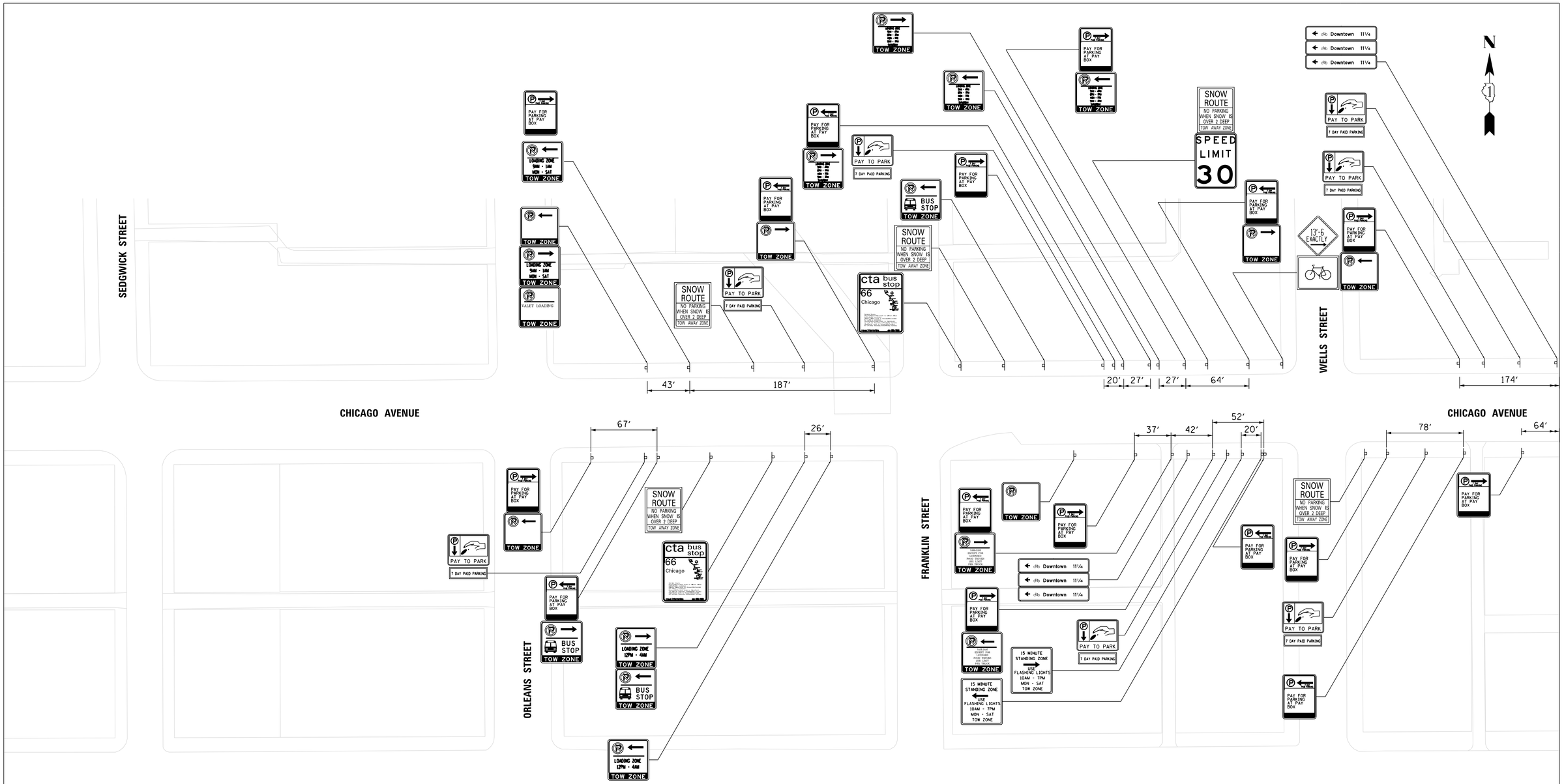
USER NAME = $USER$	DESIGNED - RD	REVISED -	
	CHECKED - JAW	REVISED -	
PLOT SCALE = $SCALE$	DRAWN - RD	REVISED -	
PLOT DATE = $DATE$	CHECKED - JAW	REVISED -	

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

TRANSPORTATION ENGINEERING SERVICES FOR CTA BUS SLOW ZONES

CURBSIDE SIGNAGE FOR CHICAGO AVENUE – LARRABEE STREET

F.A.P. RTE.	SECTION	COUNTY	SHEET NO.
XXXX	XX-XXXXX-XX-XX	COOK	
CDOT PROJECT NO. B-6-227			OF $TOTAL



EJM ENGINEERING, INC.
41 South Wells Street Suite 1000
Chicago, Illinois 60607

Stanley Consultants INC.

USER NAME = $USER$	DESIGNED - RD	REVISED -	
	CHECKED - JAW	REVISED -	
PLOT SCALE = $SCALE$	DRAWN - RD	REVISED -	
PLOT DATE = $DATE$	CHECKED - JAW	REVISED -	

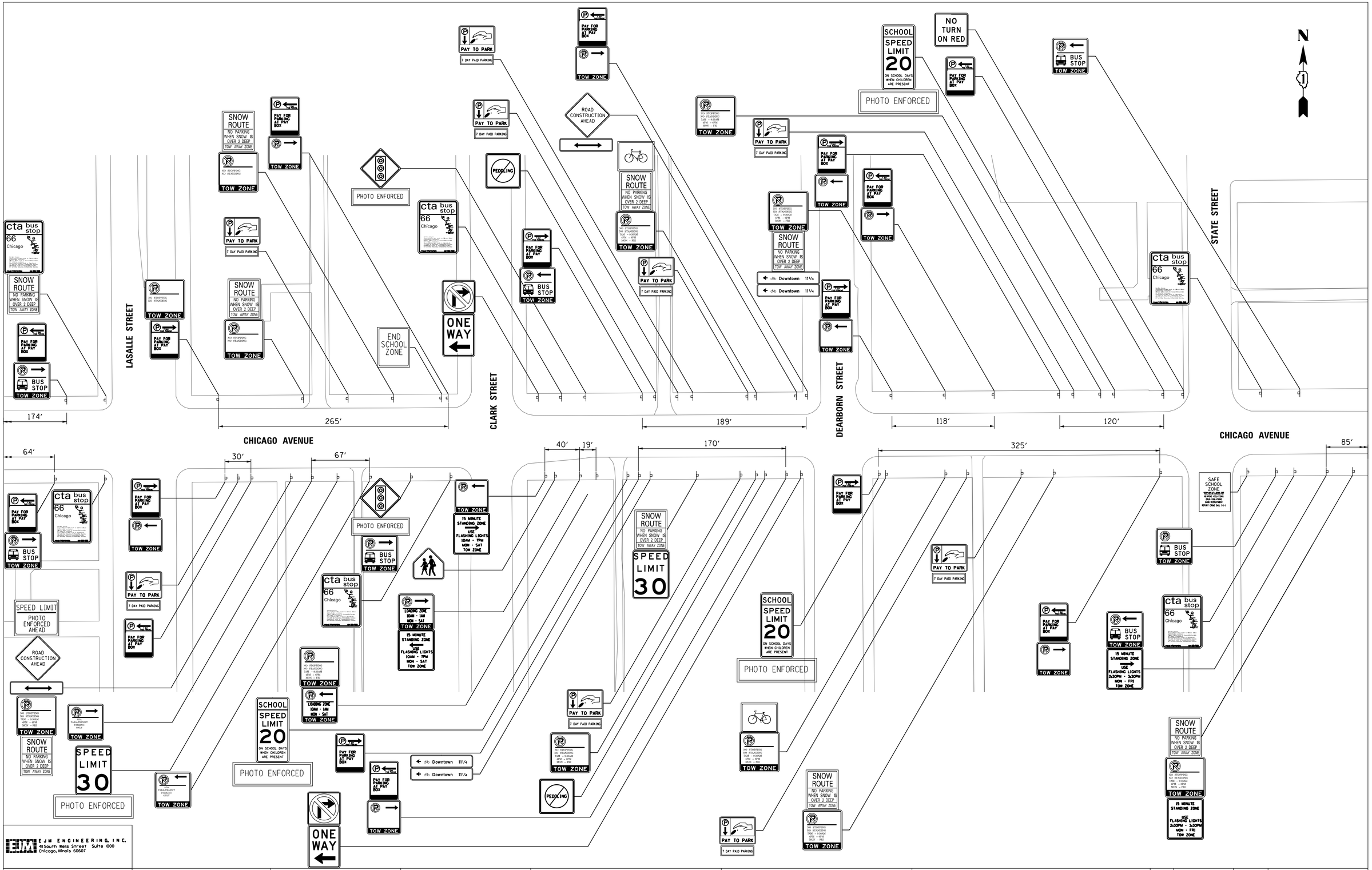
CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

TRANSPORTATION ENGINEERING SERVICES FOR CTA BUS SLOW ZONES

CURBSIDE SIGNAGE FOR CHICAGO AVENUE – BROWN LINE TO LAKEFRONT (1 OF 4)

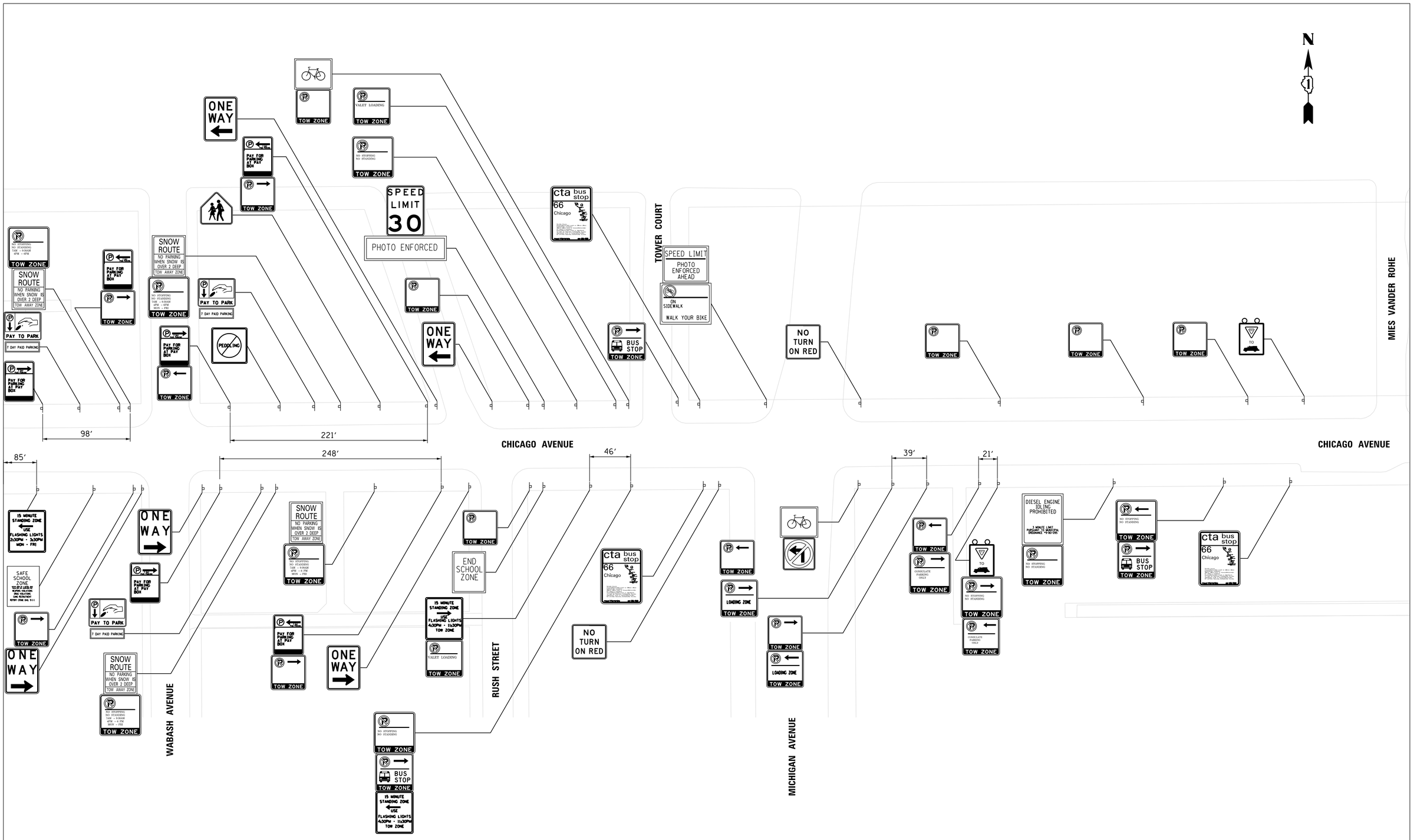
F.A.P. RTE.	SECTION	COUNTY	SHEET NO.
XXXX	XX-XXXXX-XX-XX	COOK	
CDOT PROJECT NO. B-6-227			OF $TOTAL

$$DGN$$
$$YTIME$$



EJM ENGINEERING, INC. 411 South Wells Street Suite 1000 Chicago, Illinois 60607	USER NAME = $USER$	DESIGNED - RD	REVISED -	*CITY OF CHICAGO* *DEPARTMENT OF TRANSPORTATION* *DIVISION OF ENGINEERING*	TRANSPORTATION ENGINEERING SERVICES FOR CTA BUS SLOW ZONES	CURBSIDE SIGNAGE FOR CHICAGO AVENUE – BROWN LINE TO LAKEFRONT (2 OF 4)	F.A.P. RTE. / SECTION / COUNTY / SHEET NO.
Stanley Consultants INC.		CHECKED - JAW	REVISED -				XXXX / XX-XXXXX-XX-XX / COOK /
	PLOT SCALE = $SCALE$	DRAWN - RD	REVISED -				CDOT PROJECT NO. B-6-227 / OF $TOTAL
	PLOT DATE = $DATE$	CHECKED - JAW	REVISED -				

$SDGN$$
$SYTIME$



EJM ENGINEERING, INC.
49 South Wells Street Suite 1000
Chicago, Illinois 60607

Stanley Consultants INC.

$SDGN$$
$SYTIME$

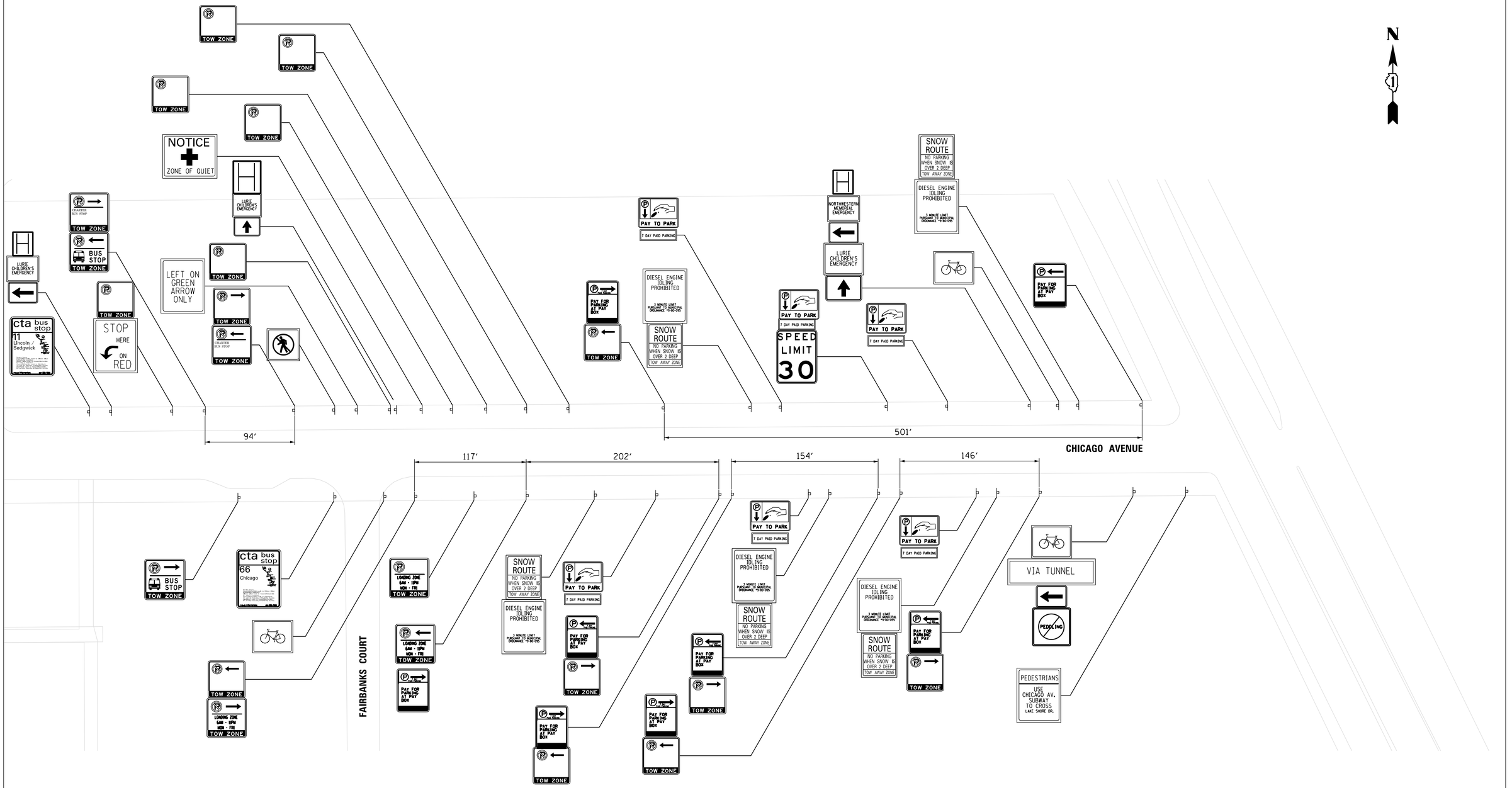
USER NAME = $USER$	DESIGNED - RD	REVISED -	
	CHECKED - JAW	REVISED -	
PLOT SCALE = $SCALE$	DRAWN - RD	REVISED -	
PLOT DATE = $DATE$	CHECKED - JAW	REVISED -	

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

TRANSPORTATION ENGINEERING SERVICES FOR CTA BUS SLOW ZONES

CURBSIDE SIGNAGE FOR CHICAGO AVENUE – BROWN LINE TO LAKEFRONT (3 OF 4)

F.A.P. RTE.	SECTION	COUNTY	SHEET NO.
XXXX	XX-XXXXX-XX-XX	COOK	
CDOT PROJECT NO. B-6-227			OF $TOTAL



EJM ENGINEERING, INC.
49 South Wells Street Suite 1000
Chicago, Illinois 60607

$SDGN$$
$SYTIME$

Stanley Consultants INC.

USER NAME = $USER$	DESIGNED - RD	REVISED -	
	CHECKED - JAW	REVISED -	
PLOT SCALE = $SCALE$	DRAWN - RD	REVISED -	
PLOT DATE = $DATE$	CHECKED - JAW	REVISED -	

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

TRANSPORTATION ENGINEERING SERVICES FOR CTA BUS SLOW ZONES

CURBSIDE SIGNAGE FOR CHICAGO AVENUE – BROWN LINE TO LAKEFRONT (4 OF 4)

F.A.P. RTE.	SECTION	COUNTY	SHEET NO.
XXXX	XX-XXXXX-XX-XX	COOK	
CDOT PROJECT NO. B-6-227			OF $TOTAL

APPENDIX F – Alternative Analysis

Alternative Analysis - Chicago Avenue

Slow Zone	Direction	Bus Stops within Slow Zone	Stop Location	Ridership Boarding-AM (PM) Alighting-AM (PM)	Crossing Bus Routes	Description of Issues/ Limitations	Potential Solution(s)	Benefit(s)	Potential Impacts(s)	Feasibility	Recommendation	Consideration
Western Ave	Eastbound	WESTERN	Nearside	97 (54) 44 (46)	49 49X	Congested conditions	Review and adjust signal timing.	Reduce delay.	None.	Yes	Yes	TSP not considered due to TSP on crossing route.
							Relocate EB to Farside stop	More space for passengers to congregate, allows bus to clear intersection before stopping.	None.	Yes	Yes	
							Raise curb to create near-level boarding at EB and WB stops.	Allows all passenger to board the bus at a faster pace. Reduces the need for the bus to kneel at the stop.	Possible ADA impacts at intersection corner. Utility and tree impacts.	Yes	No	
	Westbound	WESTERN	Farside	46 (36) 51 (87)	49 49X		EB and WB peak hour bus lanes and combined right turn and bus only lanes at Western Avenue.	Allows bus to bypass any queues that form at Western Avenue.	Roadway reconfiguration, peak hour parking restrictions and paid parking impacts.	Yes	Yes	Implement only combined right turn and bus lanes.
							Enforcement of parking restrictions.	Reduce conflicts with buses.	None.	Yes	Yes	The City will be responsible.
						Roadway and pavement markings in poor condtion, lack of visable markings can create driver confusion.	Roadway resurfacing and refresh pavement markings.	Improved lane delination and surface conditions may improve traffic throughput.	None.	Yes	Yes	

Alternative Analysis - Chicago Avenue

Slow Zone	Direction	Bus Stops within Slow Zone	Stop Location	Ridership Boarding-AM (PM) Alighting-AM (PM)	Crossing Bus Routes	Description of Issues/ Limitations	Potential Solution(s)	Benefit(s)	Potential Impacts(s)	Feasibility	Recommendation	Consideration
Milwaukee Ave/ Ogden Ave	Eastbound	MILWAUKEE	Nearside	390 (82) 82 (69)	56	Congested conditions. Complex intersection geometry. Three signals closely spaced. WB and EB congested bus stop location.	Review and adjust signal timings at all 3 intersections.	Reduce delay.	May increase delay on crossing street.	Yes	Yes	
							Convert south May St SB traffic only.	Reduced conflict on Chicago Ave.	Traffic and conflicts transferred to Odgen Ave.	Yes	No	
							Bump-out into south May St.	Allow for a larger boarding/alighting area at May St. Allows for multiple buses to board at the same time.	May require moving the bench. May affect truck access onto May St.	Yes	Yes	
							Review EB bus stop pole, bench and light pole.	Easy access to bus and CTA station.	Relocation of light pole	Yes	Yes	
							EB Near level boarding platform.	Allows all passenger to board the bus at a faster pace. Reduces the need for the bus to kneel at the stop.	Possible ADA impacts. Could be cost prohibitive.	No	No	Several business entrances conflict with height requirements.
							Implement EB speed boarding (prepayment, multiple door, and or near level boarding).	Reduced bus delay.	Access to businesses.	No	No	Potential space constraints.
							Remove access to north May St from Chicago Avenue, implement cul-de-sac improvement.	Allows exsting bus stop and shelter reloaction. Potential near level boarding improvement.	Political impacts from removing access, loss of loading zone access.	Yes	Yes	Switch north May St to one-way northbound, reloacte exsiting stop.
	Westbound	OGDEN	Midblock	59 (344) 120 (452)	56		Reloacte existing bus stop and shelter.	Reduces boarding time by elimiating congested loading/alighting area.	None.	Yes	Yes	Near level boarding platform.
							WB near level boarding platform.	Removes need for bus to kneel, improved loading/aligting times.	None.	Yes	Yes	Possible speed boarding location.
							Implement WB speed boarding (prepayment, multiple door, and or near level boarding).	Reduces boarding times.	Potential spacing and implemntation restrictions, increased resoureses required to avoid fare evasion.	No	No	Space, prepaid system functionality are contraints
							Remove EB stop and shelter east of Ogden Ave.	Consolidate stops, reduces delay from stopping.	Increased distance to bus stop	Yes	Yes	
							Bump-outs into Ogden Ave.	Extends WB bus stop allowing additional boarding/alighting area. Allows multiple buses to board at same time. Shortens E/W crossing on Ogden Ave.	Extends or removes N/S crossing on Chicago Ave. May raffect truck access onto Ogden Ave.	Yes	Yes	
							EB and WB dedicated bus lane from viaduct to I-94 bridge.	Allows WB buses to bypass massive queues along Chicago Avenue.	Removes parking spaces on north curb near viaduct. Reduces capacity along Chicago Ave.	Yes	Impacts, requires evaluation	
							Extend WB left turn lane.	Longer storage and reduces blocking of other lanes.	Requires relocation of bus stop and pavement widening to the south.	Yes	Yes	Left turn phase and signal.
							Add WB protected left turn phase and signal head.	Impromves intersection saftey and allows turning vehiles to clear through lane.	Possible reduction in service to other movements.	Yes	Yes	

Alternative Analysis - Chicago Avenue

Slow Zone	Direction	Bus Stops within Slow Zone	Stop Location	Ridership Boarding-AM (PM) Alighting-AM (PM)	Crossing Bus Routes	Description of Issues/ Limitations	Potential Solution(s)	Benefit(s)	Potential Impacts(s)	Feasibility	Recommendation	Consideration
Larabee Street	Eastbound	LARRABEE	Farside	60 (94) 160 (25)	N/A	Split phase on Larabee causes delays and disproportionate green time. Capacity challenge with lane reduction at bridge to east of intersection.	Retime signals at intersection.	Provide more green time to Chicago Ave than Larabee.	Could increase delays and queue along other legs.	Yes	Yes	
							Enforcement of parking restrictions.	removes illegally parked cars from blocking bus route.	None	Yes	Yes	
							Raise curbs at EB stop.	Allows all passenger to board the bus at a faster pace. Reduces the need for the bus to kneel at the stop.	Possible ADA impacts. Could be cost prohibitive.	Yes	Yes	space is available
							Evaluate intersection geometry, realign crosswalk to 90 degree angle on the east approach.	Reduces length of crosswalk, reduces min ped crossing time allowing more time for Chicago Ave.	Requires moving traffic equipment.	Yes	Yes	
	Westbound	LARRABEE	Nearside	30 (134) 276 (40)	N/A		Evaluate intersection geometry, Convert Larabee Rd to SB only. Elimination of NB signal.	Removes split phasing.	Displaces traffic to Kingsbury St/Cambridge Ave.	Yes	Yes	
							Raise curbs at WB stop.	Allows all passenger to board the bus at a faster pace. Reduces the need for the bus to kneel at the stop.	Possible ADA impacts. Could be cost prohibitive.	Yes	Yes	space is available
							WB queue jump lane.	Increase bus travel speeds. Allows bus to jump traffic queue.	Signal modernization required.	Yes	Yes	
							Dedicated bus lane from Larabee St to Orelans St.	Increase bus travel speeds. Provides more reliable travel times	Restriction or elimination of parking along corridor. Combined right turn lanes at signalized intersections.	Yes	Yes	Bus lane, dedicated or peak hour, recommended east of Larrabee St

Alternative Analysis - Chicago Avenue

Slow Zone	Direction	Bus Stops within Slow Zone	Stop Location	Ridership Boarding AM (PM) Alighting AM (PM)	Crossing Bus Route	Description of Issues/ Limitations	Potential Solution(s)	Benefit(s)	Potential Impacts(s)	Feasibility	Recommendation	Consideration
Brown line to Lakefront	Corridor	-	-	-	3, 26, 125, 37, 156, 22, 36, 143, 146, 147, 148, 151	Congested conditions High boarding areas at rail transfer stations and near Michigan Ave	Signal retiming.	Reduction in delay.	May increase delay on crossing street.	Yes	Yes	
							Enforcement of parking restrictions.	Minimize conflicts.	None.	Yes	Yes	City is responsible for parking enforcement
							Pavement marking improvements.	Minimize confusion.	None.	Yes	Yes	
							Dedicated bus lane.	Increases bus travel speeds. Provides more reliable travel times.	Requires elimination of parking along corridor and requires narrow left and through lanes.	Yes	Requires Alderman and public input.	Consider peak hour bus lanes.
							Peak period bus lane, parking restrictions, and combined right turn and bus lanes at intersections.	Increase bus travel speeds. Provides more reliable travel times during peak times.	Requires parking enforcement, extensive signage (possibly digital). Reduced left and through lane width.	Yes	Requires Alderman and public input.	
	EB/WB	Orleans St	EB Nearside, WB Farside w/ Shelter	N/A	-	Closely spaced bus stops.	Remove bus stops at Orleans St.	Reduction in delay.	None.	Yes	Yes	
	Eastbound	FRANKLIN (BROWN LINE)	Nearside	67 (47) 301 (122)	-	Congested conditions High boarding Bus Delays	Implement EB near level boarding.	Eliminates need for bus to kneel and merge back into through traffic. Decrease in bus delay.	Requires relocation of loading zone and impact to through traffic in curb lane.	Yes	No	Not desired to have bus stop in through lanes, loading zone relocation.
							Restrict EB and WB left turns onto Franklin St.	Increased throughput and intersection saftey.	Increased traffic on Orelans St and Wells St.	Yes	Yes	
	Westbound	FRANKLIN (BROWN LINE)	Nearside w/ Shelter	162 (175) 64 (62)	-		Implement WB queue jump.	Allow bus to bypass queue and re-enter through traffic.	None.	Yes	Yes	
							Near level boarding-assuming farside relocation of WB bus stop.	Reduction in delay.	None	No	No	Stop to be maintained in existing location
	EB/WB	LaSalle Dr	N/A	N/A	-	No protected left turn phase	Provide left turn signal with protected phase.	Improves safety for left turning traffic and could reduce queuing.	Reduces green time for LaSalle St.	Yes	No, not warranted	
	EB	Clark St	Nearside w/ Shelter	N/A	-	Nearside stop	Relocate far side.	Better for TSP implementation.	Loading zone impact, tree removal, newspaper stand removal, parking impact and Divvy station relocation.	Yes	No	Divvy, Tree and Newspaper stand are conflicts.
	WB	Clark St	Nearside w/ Shelter	N/A		Nearside stop	Relocate far side.	Better for TSP implementation.	Parking impacts.	Yes	No	Tree and Newspaper stand are conflicts.

Alternative Analysis - Chicago Avenue

Slow Zone	Direction	Bus Stops within Slow Zone	Stop Location	Ridership Boarding AM (PM) Alighting AM (PM)	Crossing Bus Route	Description of Issues/ Limitations	Potential Solution(s)	Benefit(s)	Potential Impacts(s)	Feasibility	Recommendation	Consideration
Brown line to Lakefront	EB	STATE (RED LINE)	Farside	145 (36) 196 (186)	36	Congested conditions High boarding	Relocate shelter and bench from nearside to farside where bus stop is located.	Eliminates rider confusion related to location of bus stop	None	NA	NA	Completed by CTA
	WB	STATE (RED LINE)	Nearside w/ Shelter	224 (221) 42 (136)	36		Relocate far side	Better for TSP implementation.	Trash can and Mailbox	Yes	No, existing location preferred	
	Eastbound	MICHIGAN	Nearside w/ Shelter	23(29) 229 (140)	3, 26, 125, 37, 156, 22, 36, 143, 146, 147, 148, 151	Congested conditions High boarding High pedestrian crossing volumes	Relocate EB stop to far side	Bus will not get stuck behind RT vehicles that conflict with peds.	Impacts a loading zone	Yes	Requires Alderman and public input	
							Consolidate bus stop at Rush St and Michigan Ave to a new location east of Rush St	Fewer stops, reduced delay, better far side stop location with more standing space	None	NA	NA	The bus stop at Rush St removed by CTA
	Westbound	MICHIGAN	Farside w/ Shelter	128 (259) 8 (37)	3, 26, 125, 37, 156, 22, 36, 143, 146, 147, 148, 151		Raise WB curb area	Closer to near level boarding	Challenge to meet ADA grades	Yes	No	
							Provide bump-out at Tower Dr in northeast corner	Area to lengthen bus stop	None	Yes	No	Parking on Tower Dr is on the west side of the street
	Westbound	MIES VAN DER ROHE	Nearside w/ Shelter	N/A	-	Congested conditions High boarding	Relocate EB stop to first stop bar	Will prevent confusion on which stop bar to stop at, will allow emergency vehiles to bypass stopped bus.	None	Yes	Yes	No sidewalk/bus pad at proposed stop
							Bus pad and sidewalk at new location.	Transit users wont have to stand on dirt.	None.	Yes	Yes	

APPENDIX G – Traffic Analysis Summary

Chicago Avenue Slow Zone

1: Western Avenue & Chicago Avenue

Scenario	Eastbound								Westbound								Northbound								Southbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	17.7	55.5	29.4	54.3	-		27.4	54.5	19.6	30.5	30.3	95.7	-		28.4	90.2	22.6	17.1	67.1	64.9	-		65.4	60.4	83.6	39.6	78	27.7	-		78.8	29.1	Intersection Signal Delay: 56.9	Intersection Signal Delay: 56.1
	B	E	C	D			C	D	B	C	C	F			C	F	C	B	E	E			E	E	F	D	E	C			E	C	Intersection LOS: E	Intersection LOS: E
Ex Volumes Ex Geometry Optimized	25.3	63.2	45.8	57.7	-		42.3	58.6	19.8	33.7	23.6	58.5	-		23	56.4	14	18.9	35.9	50.3	-		35	47.4	26.3	61.9	33	35.2	-		32	38.3	Intersection Signal Delay: 33.7	Intersection Signal Delay: 48.2
	C	E	D	E			D	E	B	C	C	E			C	E	B	B	D	D			D	D	C	E	C	D			C	D	Intersection LOS: C	Intersection LOS: D
Ex Volumes Pr Geometry Optimized	26.7	77.7	65.8	78.1	-		53.4	68.9	26.2	28.4	34.1	79.5	-		28.1	64.4	30.2	29.8	60.8	74.9	-		59.6	70.7	64.2	166	53.5	43.3	-		55	57.8	Intersection Signal Delay: 52.1	Intersection Signal Delay: 65.7
	C	E	E	E			E	E	C	C	C	E			C	E	C	C	E	E			E	E	E	F	D	D			E	E	Intersection LOS: E	Intersection LOS: E
2040 Volumes Ex Geometry Optimized	30.4	72	55.5	63.5	-		51.2	64.9	24.4	29.7	27	89.3	-		26.5	84.3	14.2	17.3	37	60.3	-		36.2	56.3	25.4	81.2	30.9	29.9	-		30.1	35.9	Intersection Signal Delay: 35.8	Intersection Signal Delay: 57.0
	C	E	E	E			D	E	C	C	C	F			C	F	B	B	D	E			D	E	C	F	C	C			C	D	Intersection LOS: D	Intersection LOS: E
2040 Volumes Pr Geometry Optimized	27	107	80	100	-		63.9	89.5	26.7	29.9	35.6	111	-		29.2	88.4	31.1	30.8	74.3	110	-		72.7	103	77.4	148	61.6	46	-		63.9	58	Intersection Signal Delay: 61.4	Intersection Signal Delay: 85.9
	C	F	F	F			E	F	C	C	D	F			C	F	C	C	E	F			E	F	E	F	E	D			E	E	Intersection LOS: E	Intersection LOS: F

Chicago Avenue Slow Zone

3: Milwaukee Avenue & Chicago Avenue

Scenario	Eastbound								Westbound								Northwestbound								Southeastbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	25.1	66.4	31.8	28	-		31.5	31	-		10.7	60.2	-		10.7	60.2	19.2	53.6	9.7	72.9	-		11	70.2	47.5	96.8	100	99.3	0.1	19.2	83.6	93.8	Intersection Signal Delay: 41.7	Intersection Signal Delay: 66.3
	C	E	C	C			C	C			B	E			B	E	B	D	A	E			B	E	D	F	F	F	A	B	F	F	Intersection LOS: D	Intersection LOS: C
Ex Volumes Ex Geometry Optimized	31.8	60.3	46.1	26.6	-		45.4	29.2	-		11.4	21.4	-		11.4	21.4	10.8	16.4	11.4	30.6	-		11.3	28.6	25.5	37.9	34.3	49.1	0.1	3.2	31.3	44.5	Intersection Signal Delay: 27.4	Intersection Signal Delay: 30.3
	C	E	D	C			D	C			B	C			B	C	B	B	B	C			B	C	C	D	C	D	A	A	C	D	Intersection LOS: C	Intersection LOS: C
Ex Volumes Pr Geometry Optimized	28.3	62.3	48.3	25.6	-		47.4	28.4	-		8.9	81.2	-		8.9	81.2	17.9	42.1	45.3	84.1	-		41.5	78.1	37.4	56.3	96.8	97.2	16.7	22.2	78.4	86.1	Intersection Signal Delay: 47.9	Intersection Signal Delay: 72.9
	C	E	D	C			D	C			A	F			A	F	B	D	D	F			D	E	D	E	F	F	B	C	E	F	Intersection LOS: D	Intersection LOS: E
2040 Volumes Ex Geometry Optimized	28.6	180	40.7	35	-		40.2	46	-		39.7	64.3	-		39.7	64.3	84.5	72.2	13.9	67.4	-		23.7	68.1	118	103	138	72.5	0.1	8.5	130	73.1	Intersection Signal Delay: 68.5	Intersection Signal Delay: 64.2
	C	F	D	D			D	D			D	E			D	E	F	E	B	E			C	E	F	F	F	E	A	A	F	E	Intersection LOS: E	Intersection LOS: E
2040 Volumes Pr Geometry Optimized	39.3	179	66.7	34.8	-		65.5	45.7	-		13.3	78	-		13.3	78	16	114	29	88.7	-		27.2	92.3	40.5	134	94.2	105	13.9	21.9	77.5	104	Intersection Signal Delay: 51.3	Intersection Signal Delay: 82.1
	D	F	E	C			E	D			B	E			B	E	B	F	C	F			C	F	D	F	F	F	B	C	E	F	Intersection LOS: D	Intersection LOS: F

Chicago Avenue Slow Zone

4: Ogden Avenue & Chicago Avenue

Scenario	Eastbound								Westbound								Northbound								Southbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	-		14	11	-		14	11	200	170	36.3	139	-		80.3	145	-		6.4	5.6	74.3	125	60.7	92.3	0	28.8	33.8	31.8	0.4	30.2	28.6	30.9	Intersection Signal Delay: 49.8	Intersection Signal Delay: 94.8
			B	B			B	B	F	F	D	F			F	F			A	A	E	F	E	F	0	C	C	C	A	C	C	C	Intersection LOS: D	Intersection LOS: F
Ex Volumes Ex Geometry Optimized	-		7	7.5	-		6.9	7.5	62	69.5	17	39.5	-		29.2	45.1	-		107	108	101	94.2	102	98.1	26.4	21.1	28.9	23.2	0.3	2.9	24	16.8	Intersection Signal Delay: 37.5	Intersection Signal Delay: 44.7
			A	A			A	A	E	E	B	D			C	D			F	F	F	F	F	F	C	C	C	C	A	A	C	B	Intersection LOS: D	Intersection LOS: D
Ex Volumes Pr Geometry Optimized	12.6	23.3	33.9	24.3	-		32.9	24.3	118	84.7	22.8	77.7	-		48.4	79	-		6.8	19.9	88.8	95.4	72.4	74.6	25	32.4	29.1	41.3	-		28.3	40	Intersection Signal Delay: 47	Intersection Signal Delay: 62.6
	B	C	C	C			C	C	F	F	C	E			D	E			A	B	F	F	E	E	C	C	C	D			C	D	Intersection LOS: D	0
2040 Volumes Ex Geometry Optimized	-		46	6.6	-		44.8	6.6	426	41	73.4	22.7	-		168	26.1	-		5.3	153	77.7	116	63.2	126	28.5	45.6	31.4	104	0.4	14.3	26.1	69.1	Intersection Signal Delay: 92.6	Intersection Signal Delay: 44.1
			D	A			D	A	F	D	E	C			F	C			A	F	E	F	E	F	C	D	C	F	A	B	C	E	Intersection LOS: F	Intersection LOS: D
2040 Volumes Pr Geometry Optimized	4.8	12.1	71.2	26.2	-		68.4	25.7	120	89.3	25.7	85.5	-		51.1	86.2	-		6	25.8	82.2	96.6	66.9	77.2	25.2	32.7	29.7	42.8	-		28.9	41.4	Intersection Signal Delay: 58.9	Intersection Signal Delay: 61.3
	A	B	E	C			E	C	F	F	C	E			D	F			A	C	F	F	E	E	C	C	C	D			C	D	Intersection LOS: D	0

Chicago Avenue Slow Zone

5: Ogden Avenue & Milwaukee Avenue

Scenario	Southeastbound								Northwestbound								Northbound								Southbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	12.1	11.5	58.1	33.8	-		56.1	32.3	46.4	200	25.6	83.4	-		31.4	109	66.1	148	57.1	82	-		58.8	96	12.1	11.5	58.1	33.8	-		56.1	32.3	Intersection Signal Delay: 51.3	Intersection Signal Delay: 77.6
	B	B	E	C			E	C	D	F	C	F			C	F	E	F	E	F			E	F	B	B	E	C			E	C	Intersection LOS: D	Intersection LOS: E
Ex Volumes Ex Geometry Optimized	20.6	22.9	57.2	60.5	-		55.6	58	34.3	86.5	20.9	43	-		24.7	52.5	48.5	81.8	52.7	89.7	-		51.9	88	20.6	22.9	57.2	60.5	-		55.6	58	Intersection Signal Delay: 34.9	Intersection Signal Delay: 52.9
	C	C	E	E			E	E	C	F	C	D			C	D	D	F	D	F			D	F	C	C	E	E			E	E	Intersection LOS: C	Intersection LOS: D
Ex Volumes Pr Geometry Optimized	26.1	33.8	85.9	87.9	-		83.2	84.3	28	33.1	20.3	27.3	-		22.4	28.5	58.4	130	40.1	44.7	-		43.6	62.7	26.1	33.8	85.9	87.9	-		83.2	84.3	Intersection Signal Delay: 55.8	Intersection Signal Delay: 56.4
	C	C	F	F			F	F	C	C	C	C			C	C	E	F	D	D			D	E	C	C	F	F			F	F	Intersection LOS: E	Intersection LOS: E
2040 Volumes Ex Geometry Optimized	11.8	39.7	70.8	92.5	-		68.3	89	157	84.3	27.3	40	-		63.2	49.7	111	146	97.5	102	-		99.9	111	11.8	39.7	70.8	92.5	-		68.3	89	Intersection Signal Delay: 72.4	Intersection Signal Delay: 66.9
	B	D	E	F			E	F	F	F	C	D			E	D	F	F	F	F			F	F	B	D	E	F			E	F	Intersection LOS: E	Intersection LOS: E
2040 Volumes Pr Geometry Optimized	16.9	31	77.9	85.7	-		75.4	82	52.2	84.3	21.1	45.7	-		29.7	54.2	71.9	149	53.8	59.7	-		57.2	78.6	16.9	31	77.9	85.7	-		75.4	82	Intersection Signal Delay: 60.7	Intersection Signal Delay: 68.5
	B	C	E	F			E	F	D	F	C	D			C	D	E	F	D	E			E	E	B	C	E	F			E	F	Intersection LOS: E	Intersection LOS: E

Chicago Avenue Slow Zone

7: Larrabee Street & Chicago Avenue

Scenario	Eastbound								Westbound								Northbound								Southbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	281	391	27.5	25.8	-		80.3	112	-		98.9	204	-		98.9	204	-		61.5	65.1	-		61.5	65.1	372	469	-		12.3	15.8	248	264	Intersection Signal Delay: 123.0	Intersection Signal Delay: 176.6
	F	F	C	C			F	F			F	F			F	F			E	E			E	E	F	F			B	B	F	F	Intersection LOS: F	Intersection LOS: F
Ex Volumes Ex Geometry Optimized	211	130	33.9	24.2	-		70.7	49.1	-		76	102	-		76	102	-		186	139	-		186	139	163	123	-		8.2	10.6	109	72	Intersection Signal Delay: 87.2	Intersection Signal Delay: 78.9
	F	F	C	C			E	D			E	F			E	F			F	F			F	F	F	F			A	B	F	E	Intersection LOS: F	Intersection LOS: E
Ex Volumes Pr Geometry Optimized	81.1	88.9	37.5	26.2	-		47.7	40.2	24.1	22	42.9	45.9	11.7	12	35.1	40.3	-		-		-		-		-		62.6	81.6	12.2	18.8	45.8	53.2	Intersection Signal Delay: 42.6	Intersection Signal Delay: 43.3
	F	F	D	C			D	D	C	C	D	D	B	B	D	D											E	F	B	B	D	D	Intersection LOS: D	Intersection LOS: D
2040 Volumes Ex Geometry Optimized	466	325	32	30.9	-		122	99.7	-		158	199	-		158	199	-		65	349	-		65	349	479	312	-		13	20.2	318	180	Intersection Signal Delay: 173.7	Intersection Signal Delay: 168.9
	F	F	C	C			F	F			F	F			F	F			E	F			E	F	F	F			B	C	F	F	Intersection LOS: F	Intersection LOS: F
2040 Volumes Pr Geometry Optimized	91.9	119	46.3	28.2	-		55.8	49.4	25.6	20.6	46.9	61.8	15.2	14.1	38.5	53.7	-		-		-		-		-		78.7	127	12.8	23	56.1	81.6	Intersection Signal Delay: 50.0	Intersection Signal Delay: 58.9
	F	F	D	C			E	D	C	C	D	E	B	B	D	D											E	F	B	C	E	E	Intersection LOS: D	Intersection LOS: E

Chicago Avenue Slow Zone

10: Franklin Street & Chicago Avenue

Scenario	Eastbound								Westbound								Northbound								Southbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	-		13.2	12.7	-		13.2	12.7	-		25.5	11.9	-		25.5	11.9	-		22.4	29.1	-		22.4	29.1	-		17	24.1	-		17	24.1	Intersection Signal Delay: 18.5	Intersection Signal Delay: 14.5
			B	B			B	B			C	B			C	B			C	C			C	C			B	C			B	C	Intersection LOS: B	Intersection LOS: B
Ex Volumes Ex Geometry Optimized	-		8.7	12.6	-		8.7	12.6	-		3.5	7.8	-		3.5	7.8	-		36.4	39	-		36.4	39	-		32.9	33.5	-		32.9	33.5	Intersection Signal Delay: 9.5	Intersection Signal Delay: 14.4
			A	B			A	B			A	A			A	A			D	D			D	D			C	C			C	C	Intersection LOS: A	Intersection LOS: B
Ex Volumes Pr Geometry Optimized	-		31.1	26.6	-		31.1	26.6	-		22.7	41.3	-		22.4	42.5	-		47.5	50	-		47.5	50	-		43	44.4	-		43	44.4	Intersection Signal Delay: 29.5	Intersection Signal Delay: 30.6
			C	C			C	C			C	D			C	D			D	D			D	D			D	D			D	D	Intersection LOS: C	Intersection LOS: D
2040 Volumes Ex Geometry Optimized	-		16.2	11	-		16.2	11	-		26.3	30.2	-		26.3	30.2	-		22.6	27.1	-		22.6	27.1	-		17	23.8	-		17	23.8	Intersection Signal Delay: 20.4	Intersection Signal Delay: 20.5
			B	B			B	B			C	C			C	C			C	C			C	C			B	C			B	C	Intersection LOS: C	Intersection LOS: C
2040 Volumes Pr Geometry Optimized	-		25.1	22.7	-		25.1	22.7	-		26.1	24.5	-		25.6	26.4	-		54.3	50	-		54.3	50	-		48.5	44.4	-		48.5	44.4	Intersection Signal Delay: 29.4	Intersection Signal Delay: 27.9
			C	C			C	C			C	C			C	C			D	D			D	D			D	D			D	D	Intersection LOS: C	Intersection LOS: C

Chicago Avenue Slow Zone

12: La Salle Street & Chicago Avenue

Scenario	Eastbound								Westbound								Northbound								Southbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	21	56.7	36.8	21.4	-		35.2	26.8	27.8	21.5	15.6	17.5	-		16.4	17.9	59.9	34.6	11.2	17.3	-		17.1	19.2	16.4	113	13.9	13.5	-		14.1	25.7	Intersection Signal Delay: 20.4	Intersection Signal Delay: 22.1
	C	E	D	C			D	C	C	C	B	B			B	B	E	C	B	B			B	B	B	F	B	B			B	C	Intersection LOS: C	Intersection LOS: C
Ex Volumes Ex Geometry Optimized	15.8	64.7	20.9	15.3	-		20.4	22.9	32.2	28.6	23.9	26.1	-		24.4	26.4	66	39.6	15.9	22.3	-		21.9	24.2	22.1	111	19.4	17.5	-		19.6	29	Intersection Signal Delay: 21.1	Intersection Signal Delay: 25.4
	B	E	C	B			C	C	C	C	C	C			C	C	E	D	B	C			C	C	C	F	B	B			B	C	Intersection LOS: C	Intersection LOS: C
Ex Volumes Pr Geometry Optimized	28.6	61.4	23.8	8	-		23.5	15.9	45.1	18.1	40	14.9	-		39.6	14.7	52.5	32.6	16.1	20.5	-		20.4	21.8	60.9	77.4	19.5	17	-		22.5	24.4	Intersection Signal Delay: 25.0	Intersection Signal Delay: 19.6
	C	E	C	A			C	B	D	B	D	B			D	B	D	C	B	C			C	C	E	E	B	B			C	C	Intersection LOS: C	Intersection LOS: B
2040 Volumes Ex Geometry Optimized	25.6	315	53.2	19.3	-		50.2	64.2	31.4	47	16.9	21.1	-		17.8	23.5	114	32.6	11.5	14.8	-		24	16.7	18.8	116	14.8	11.6	-		15.1	24.4	Intersection Signal Delay: 26.1	Intersection Signal Delay: 30.3
	C	F	D	B			D	E	C	D	B	C			B	C	F	C	B	B			C	B	B	F	B	B			B	C	Intersection LOS: C	Intersection LOS: C
2040 Volumes Pr Geometry Optimized	44.3	98.5	39.4	9	-		38.2	22.3	49.6	23.4	42.5	17.3	-		42	17.3	88.1	41.6	16.4	21.5	-		25.1	23.7	32	133	20.4	17.4	-		21.2	31.5	Intersection Signal Delay: 29.6	Intersection Signal Delay: 23.8
	D	F	D	A			D	C	D	C	D	B			D	B	F	D	B	C			C	C	C	F	C	B			C	C	Intersection LOS: C	Intersection LOS: C

Chicago Avenue Slow Zone

13: Clark Street & Chicago Avenue

Scenario	Eastbound								Westbound								Northbound								Southbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	-		70.8	23.7	-		70.8	23.7	8.4	9.7	14	168	-		13.5	160	-		-		-		-		-		81.4	40	-		81.4	40	Intersection Signal Delay: 64.2	Intersection Signal Delay: 69.8
			E	C			E	C	A	A	B	F			B	F											F	D			F	D	Intersection LOS: E	Intersection LOS: E
Ex Volumes Ex Geometry Optimized	-		19.2	10.2	-		19.2	10.2	10.6	8	21.8	57.3	-		20.7	54.8	-		-		-		-		-		36.6	59.9	-		36.6	59.9	Intersection Signal Delay: 27.4	Intersection Signal Delay: 43.7
			B	B			B	B	B	A	C	E			C	D											D	E			D	E	Intersection LOS: C	Intersection LOS: D
Ex Volumes Pr Geometry Optimized	-		119	29.2	-		108	27.8	38.3	10	122	100	-		114	95.7	-		-		-		-		-		44.1	65.7	-		44.1	65.7	Intersection Signal Delay: 80.4	Intersection Signal Delay: 63.1
			F	C			F	C	D	A	F	F			F	F											D	E			D	E	Intersection LOS: F	Intersection LOS: E
2040 Volumes Ex Geometry Optimized	-		90.3	48.9	-		90.3	48.9	9.7	6.5	15.4	133	-		14.9	127	-		-		-		-		-		86	87.5	-		86	87.5	Intersection Signal Delay: 73.6	Intersection Signal Delay: 87.4
			F	D			F	D	A	A	B	F			B	F											F	F			F	F	Intersection LOS: E	Intersection LOS: F
2040 Volumes Pr Geometry Optimized	-		119	32.7	-		108	31.1	40.9	8.4	122	130	-		114	124	-		-		-		-		-		49.7	89.6	-		49.7	89.6	Intersection Signal Delay: 82.4	Intersection Signal Delay: 82.1
			F	C			F	C	D	A	F	F			F	F											D	F			D	F	Intersection LOS: F	Intersection LOS: F

Chicago Avenue Slow Zone

14: Dearborn Street & Chicago Avenue

Scenario	Eastbound								Westbound								Northbound								Southbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	26.1	51.5	65.5	79.5	-		59.1	74.1	-		61	216	0.8	0.8	57.3	204	20.8	40.1	19.8	26.7	6.3	14.3	18.8	28.3	-		-		-		-		Intersection Signal Delay: 43.8	Intersection Signal Delay: 86.1
	C	D	E	E			E	E			E	F	A	A	E	F	C	D	B	C	A	B	B	C									Intersection LOS: D	Intersection LOS: F
Ex Volumes Ex Geometry Optimized	2.7	26.8	16.4	15.8	-		14.2	17.9	-		27.3	66.2	0.6	2.8	25.7	62.8	50.4	77.8	39.2	42	13.1	30.4	39.3	48.3	-		-		-		-		Intersection Signal Delay: 26.1	Intersection Signal Delay: 43.0
	A	C	B	B			B	B			C	E	A	A	C	E	D	E	D	D	B	C	D	D									Intersection LOS: C	Intersection LOS: D
Ex Volumes Pr Geometry Optimized	23	21.6	108	25.2	-		94.1	24.5	-		68.1	86.3	10	14.5	64.6	82.5	145	86.2	45.2	59.2	49.9	53.9	67	64.2	-		-		-		-		Intersection Signal Delay: 77.4	Intersection Signal Delay: 57.1
	C	C	F	C			F	C			E	F	A	B	E	F	F	F	D	E	D	D	E	E									Intersection LOS: E	Intersection LOS: E
2040 Volumes Ex Geometry Optimized	30.1	53.8	104	57.3	-		90.9	56.6	-		86.5	246	1.1	0.7	81.2	233	21.3	27.2	20.1	28.8	6.8	12	19.2	27	-		-		-		-		Intersection Signal Delay: 63.0	Intersection Signal Delay: 87.7
	C	D	F	E			F	E			F	F	A	A	F	F	C	C	C	C	A	B	B	C									Intersection LOS: E	Intersection LOS: F
2040 Volumes Pr Geometry Optimized	23.4	30.6	113	50.3	-		98.4	46.5	-		74	90.3	10.5	14.2	66.7	86.2	147	98.5	46.1	68.9	51.1	56.7	68.2	73.9	-		-		-		-		Intersection Signal Delay: 79.7	Intersection Signal Delay: 68.9
	C	C	F	D			F	D			E	F	B	B	E	F	F	F	D	E	D	E	E	E									Intersection LOS: E	Intersection LOS: E

Chicago Avenue Slow Zone

15: State Street & Chicago Avenue

Scenario	Eastbound								Westbound								Northbound								Southbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	20.7	22.5	68.4	39.3	5.4	4.2	57.9	33.6	16.8	14.1	14.3	18.5	1	5.1	13.6	16.1	33.2	61.8	24.6	30.2	8.9	7.5	23.7	34	19.1	34.8	22.7	30.6	10.1	25.8	19.5	30.5	Intersection Signal Delay: 33.3	Intersection Signal Delay: 28.7
	C	C	E	D	A	A	E	C	B	B	B	B	A	A	B	B	C	E	C	C	A	A	C	C	B	C	C	C	B	C	B	C	Intersection LOS: C	Intersection LOS: C
Ex Volumes Ex Geometry Optimized	8.6	17.3	55.3	44	1.4	1.9	45.5	36.2	12	13.4	13.1	23	1	15	12.1	21	48.3	63.6	35.3	33	20.7	12.9	35.6	36.9	30.3	38.7	33.1	33.2	21.1	145	30.1	53.7	Intersection Signal Delay: 33.8	Intersection Signal Delay: 36.9
	A	B	E	D	A	A	D	D	B	B	B	C	A	B	B	C	D	E	D	C	C	B	D	D	C	D	C	C	C	F	C	D	Intersection LOS: C	Intersection LOS: D
Ex Volumes Pr Geometry Optimized	8.5	15.8	29.5	33.6	6.9	10.6	25.2	28.8	14.1	22.2	18.6	35.1	12.6	23.5	17.6	32.2	55.3	53.3	41.8	38.1	46.7	30.8	45.8	40.4	37.2	45	39.3	38.3	47.6	40.5	40.9	39.9	Intersection Signal Delay: 32.4	Intersection Signal Delay: 35.1
	A	B	C	C	A	B	C	C	B	C	B	D	B	C	B	C	E	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	Intersection LOS: C	Intersection LOS: D
2040 Volumes Ex Geometry Optimized	20.2	28.5	96.1	61.9	6.3	7.4	79.2	52	19.5	25.1	14.5	46	1	10.5	14.2	38.8	36.8	57.1	26	33.8	9.6	7.3	25.5	35.3	19.7	37.2	23.6	34.2	11.2	13.7	20.4	31.2	Intersection Signal Delay: 41.9	Intersection Signal Delay: 39.8
	C	C	F	E	A	A	E	D	B	C	B	D	A	B	B	D	D	E	C	C	A	A	C	D	B	D	C	C	B	B	C	C	Intersection LOS: D	Intersection LOS: D
2040 Volumes Pr Geometry Optimized	9.1	16.7	48.3	47.4	6.8	10.3	40.3	39.5	15.7	22.1	25.7	48.6	12.7	23.4	23.1	42.4	63.9	76.8	43.6	40.8	50.2	31.6	49.5	47.2	38.7	53.1	40.6	41.1	50.4	43.8	42.6	43.7	Intersection Signal Delay: 39.3	Intersection Signal Delay: 43.1
	A	B	D	D	A	B	D	D	B	C	C	D	B	C	C	D	E	E	D	D	D	C	D	D	D	D	D	D	D	D	D	D	Intersection LOS: D	Intersection LOS: D

Chicago Avenue Slow Zone

18: Michigan Avenue & Chicago Avenue

Scenario	Eastbound								Westbound								Northbound								Southbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	-		38.4	94.2	14.4	16	30.4	75.3	30.3	46.3	24.7	29.5	2.5	14.7	24.7	30.4	83.8	63.4	24.4	70.5	-		30.3	70	-		193	196	0	0	193	196	Intersection Signal Delay: 101.8	Intersection Signal Delay: 108.0
			D	F	B	B	C	E	C	D	C	C	A	B	C	C	F	E	C	E			C	E			F	F	0	0	F	F	Intersection LOS: F	Intersection LOS: F
Ex Volumes Ex Geometry Optimized	-		54.3	93.9	19.3	10	42.6	73.7	84.5	122	36.5	36.1	0.7	14.2	50.8	51.3	151	157	17.3	40.7	-		30.6	47.9	-		55.5	73.1	0	0	55.5	73.1	Intersection Signal Delay: 44.9	Intersection Signal Delay: 60.3
			D	F	B	B	D	E	F	F	D	D	A	B	D	D	F	F	B	D			C	D			E	E	0	0	E	E	Intersection LOS: D	Intersection LOS: E
Ex Volumes Pr Geometry Optimized	-		96.3	83.3	75.7	25.2	89.4	69.3	82.8	76.6	41.1	34.6	35.9	28.3	55.8	42.9	156	178	19.6	50.1	-		33.2	58	-		56.8	77.3	0	0	56.8	77.3	Intersection Signal Delay: 52.8	Intersection Signal Delay: 64.0
			F	F	E	C	F	E	F	E	D	C	D	C	E	D	F	F	B	D			C	E			E	E	0	0	E	E	Intersection LOS: D	Intersection LOS: E
2040 Volumes Ex Geometry Optimized	-		43.1	117	16.7	15.9	34.2	92.3	32.1	73.2	24.9	32.1	2.6	14.7	25.4	38.1	84.6	74.1	24.5	53.3	-		30.5	54.5	-		196	129	0	0	196	129	Intersection Signal Delay: 103.2	Intersection Signal Delay: 82.6
			D	F	B	B	C	F	C	E	C	C	A	B	C	D	F	E	C	D			C	D			F	F	0	0	F	F	Intersection LOS: F	Intersection LOS: F
2040 Volumes Pr Geometry Optimized	-		123	94.4	78.1	28.1	109	78.4	139	104	66.8	35	36	28.5	80.9	49.5	152	177	19.7	51.2	-		33	59	-		58.2	79.6	0	0	58.2	79.6	Intersection Signal Delay: 60.1	Intersection Signal Delay: 67.3
			F	F	E	C	F	E	F	F	E	D	D	C	F	D	F	F	B	D			C	E			E	E	0	0	E	E	Intersection LOS: E	Intersection LOS: E

Chicago Avenue Slow Zone

20: Fairbanks Ct. & Chicago Avenue

Scenario	Eastbound								Westbound								Northbound								Southbound								Overall Intersection	
	Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach		Left		Through		Right		Approach			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ex Volumes Ex Geometry Unoptimized	-		14.3	27	6.3	1.4	9.8	20.5	34.4	36.5	9.3	10.4	-		17.3	16.5	27.1	45	-		4	28.5	20.8	38.1	-		-		-		-		Intersection Signal Delay: 15.0	Intersection Signal Delay: 27.6
			B	C	A	A	A	C	C	D	A	B			B	B	C	D			A	C	C	D									Intersection LOS: B	Intersection LOS: C
Ex Volumes Ex Geometry Optimized	-		21.4	32.7	2.7	2.8	10.9	25.1	22.2	45.6	0.7	6.1	-		7.6	15.3	19.7	36.7	-		4.5	17.2	15.6	28.6	-		-		-		-		Intersection Signal Delay: 12.2	Intersection Signal Delay: 25.1
			C	C	A	A	B	C	C	D	A	A			A	B	B	D			A	B	B	C									Intersection LOS: B	Intersection LOS: C
Ex Volumes Pr Geometry Optimized	-		25.9	33.7	2.8	2	12.9	25.7	62.6	82.5	2.4	6	-		21.6	23.9	19.9	25.5	-		10.2	17.6	17.2	22.2	-		-		-		-		Intersection Signal Delay: 15.7	Intersection Signal Delay: 23.9
			C	C	A	A	B	C	E	F	A	A			C	C	B	C			B	B	B	C									Intersection LOS: B	Intersection LOS: C
2040 Volumes Ex Geometry Optimized	-		14.4	33.6	6.5	3.3	9.9	25.8	34.5	36.6	9.3	10.4	-		17.3	16.5	30.4	83.8	-		5.3	23	23.6	58.5	-		-		-		-		Intersection Signal Delay: 16.7	Intersection Signal Delay: 40.4
			B	C	A	A	A	C	C	D	A	B			B	B	C	F			A	C	C	E									Intersection LOS: B	Intersection LOS: D
2040 Volumes Pr Geometry Optimized	-		26.7	32.6	3.7	2.1	15.3	24.8	50	83.8	9.6	6.2	-		14.2	24.3	24.7	37.4	-		10.7	24.5	21.4	32	-		-		-		-		Intersection Signal Delay: 17.0	Intersection Signal Delay: 28.3
			C	C	A	A	B	C	D	F	A	A			B	C	C	D			B	C	C	C									Intersection LOS: B	Intersection LOS: C

APPENDIX H – Synchro Reports

Synchro Reports -

Existing Volumes

Existing Geometry

Unoptimized

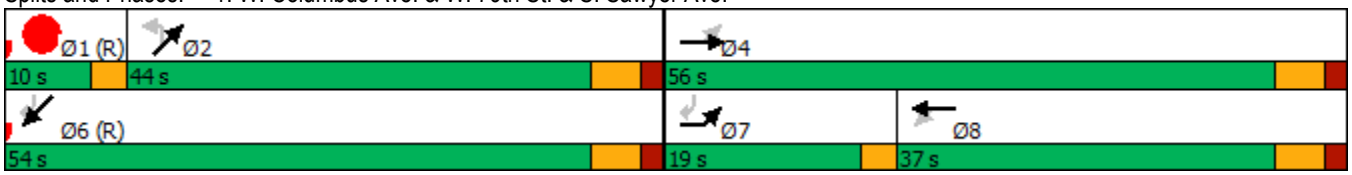
AM Reports

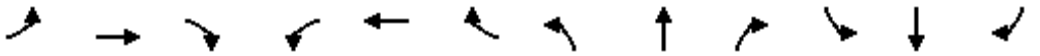
Lane Group	EBL	EBT	EBR	WBL	WBT	SBR2	NEL2	NET	NER	SWT	SWR	Ø1
Lane Configurations												
Traffic Volume (vph)	277	424	6	97	314	3	1	777	120	479	133	
Future Volume (vph)	277	424	6	97	314	3	1	777	120	479	133	
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	
Lane Width (ft)	9	11	9	10	12	12	12	12	12	11	11	
Storage Length (ft)	180		100	0					0		0	
Storage Lanes	1		0	1					0		0	
Taper Length (ft)	75			0								
Satd. Flow (prot)	1248	3644	0	1306	2577	1401	1539	2925	0	2736	0	
Flt Permitted	0.452			0.474			0.399					
Satd. Flow (perm)	594	3644	0	652	2577	1401	646	2925	0	2736	0	
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		3				212		17				
Link Speed (mph)		30			30			30		30		
Link Distance (ft)		317			345			696		414		
Travel Time (s)		7.2			7.8			15.8		9.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	11%	13%	0%	10%	18%	0%	0%	3%	4%	3%	13%	
Bus Blockages (#/hr)	0	0	6	0	6	0	0	0	0	0	0	
Parking (#/hr)		2										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	301	468	0	105	341	3	1	975	0	666	0	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right	
Median Width(ft)		10			10			12		12		
Link Offset(ft)		0			0			0		0		
Crosswalk Width(ft)		16			16			16		16		
Two way Left Turn Lane												
Headway Factor	1.39	1.34	1.39	1.33	1.24	1.22	1.22	1.22	1.22	1.28	1.28	
Turning Speed (mph)	15		9	15		9	15		9		9	
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		NA		
Protected Phases	7	4			8			2		6		1
Permitted Phases	4			8		6 7	2					
Minimum Split (s)	8.0	33.0		33.0	33.0		44.0	44.0		45.0		5.0
Total Split (s)	19.0	56.0		37.0	37.0		44.0	44.0		54.0		10.0
Total Split (%)	17.3%	50.9%		33.6%	33.6%		40.0%	40.0%		49.1%		9%
Yellow Time (s)	3.0	4.0		4.0	4.0		4.0	4.0		4.0		3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		2.0	2.0		2.0		0.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0		
Total Lost Time (s)	4.0	7.0		7.0	7.0		7.0	7.0		7.0		
Lead/Lag	Lead			Lag	Lag		Lag	Lag				Lead
Lead-Lag Optimize?												
Act Effct Green (s)	52.0	49.0		30.0	30.0	66.0	37.0	37.0		47.0		
Actuated g/C Ratio	0.47	0.45		0.27	0.27	0.60	0.34	0.34		0.43		
v/c Ratio	0.82	0.29		0.59	0.49	0.00	0.00	0.98		0.57		
Control Delay	40.9	19.9		30.4	18.0	0.0	24.0	60.2		26.6		
Queue Delay	1.0	0.0		0.0	0.0	0.0	0.0	4.4		0.6		
Total Delay	41.9	19.9		30.4	18.0	0.0	24.0	64.7		27.2		
LOS	D	B		C	B	A	C	E		C		

Lane Group	EBL	EBT	EBR	WBL	WBT	SBR2	NEL2	NET	NER	SWT	SWR	Ø1
Approach Delay		28.5			20.9			64.6		27.2		
Approach LOS		C			C			E		C		
Queue Length 50th (ft)	143	74		65	61	0	1	351		223		
Queue Length 95th (ft)	#277	100		m123	m86	0	4	#497		285		
Internal Link Dist (ft)		237			265			616		334		
Turn Bay Length (ft)	180						115					
Base Capacity (vph)	369	1624		177	702	925	217	995		1169		
Starvation Cap Reductn	0	0		0	0	0	0	0		200		
Spillback Cap Reductn	9	0		0	0	0	0	21		0		
Storage Cap Reductn	0	0		0	0	0	0	0		0		
Reduced v/c Ratio	0.84	0.29		0.59	0.49	0.00	0.00	1.00		0.69		

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 7 (6%), Referenced to phase 1:Hold and 6:SWT, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 39.3		Intersection LOS: D	
Intersection Capacity Utilization 105.0%		ICU Level of Service G	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 1: W. Columbus Ave. & W. 79th St. & S. Sawyer Ave.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	461	83	7	326	36	81	527	21	8	401	4
Future Volume (vph)	0	461	83	7	326	36	81	527	21	8	401	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	10	9	11	12	12	11	12	12	11	12
Storage Length (ft)	0		0	40		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		0
Taper Length (ft)	0			25			0			0		
Satd. Flow (prot)	0	2773	1206	1074	2535	0	0	2851	0	0	2851	0
Flt Permitted				0.468				0.724			0.937	
Satd. Flow (perm)	0	2773	1206	529	2535	0	0	2076	0	0	2674	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			90		11			4			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		345			652			668			245	
Travel Time (s)		7.8			14.8			15.2			5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	11%	4%	29%	16%	12%	3%	3%	10%	0%	3%	0%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	0	0	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	501	90	8	393	0	0	684	0	0	449	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.22	1.37	1.39	1.28	1.22	1.22	1.28	1.22	1.22	1.30	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases			4	8			2			6		
Minimum Split (s)		23.0	23.0	23.0	23.0		9.0	34.0		34.0	34.0	
Total Split (s)		59.0	59.0	41.0	41.0		9.0	51.0		42.0	42.0	
Total Split (%)		53.6%	53.6%	37.3%	37.3%		8.2%	46.4%		38.2%	38.2%	
Yellow Time (s)		4.0	4.0	4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)		1.0	1.0	1.0	1.0		0.0	2.0		2.0	2.0	
Lost Time Adjust (s)		1.0	1.0	1.0	1.0			1.0			1.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0			7.0			7.0	
Lead/Lag				Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?												
Act Effct Green (s)		53.0	53.0	35.0	35.0			44.0			35.0	
Actuated g/C Ratio		0.48	0.48	0.32	0.32			0.40			0.32	
v/c Ratio		0.38	0.14	0.05	0.48			0.81			0.53	
Control Delay		9.1	0.7	27.3	31.7			37.7			9.8	
Queue Delay		0.2	0.0	0.0	0.0			0.0			0.3	
Total Delay		9.3	0.7	27.3	31.7			37.7			10.1	
LOS		A	A	C	C			D			B	
Approach Delay		8.0			31.6			37.7			10.1	

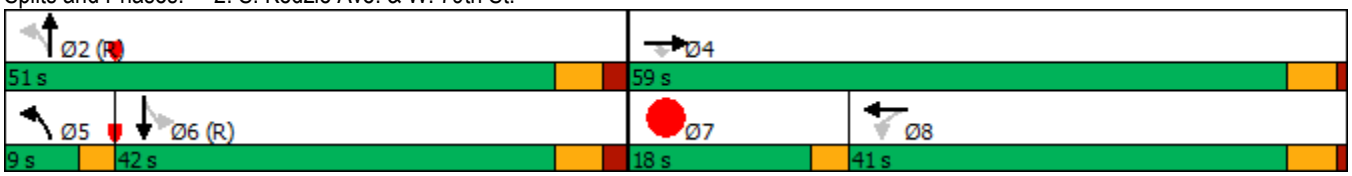
Lane Group	Ø7
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	7
Permitted Phases	
Minimum Split (s)	5.0
Total Split (s)	18.0
Total Split (%)	16%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A			C			D			B	
Queue Length 50th (ft)		51	0	4	113			196			28	
Queue Length 95th (ft)		m63	m2	16	162			258			61	
Internal Link Dist (ft)		265			572			588			165	
Turn Bay Length (ft)				40								
Base Capacity (vph)		1336	627	168	814			846			851	
Starvation Cap Reductn		250	0	0	0			0			84	
Spillback Cap Reductn		0	0	0	0			0			0	
Storage Cap Reductn		0	0	0	0			0			0	
Reduced v/c Ratio		0.46	0.14	0.05	0.48			0.81			0.59	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 8 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 22.5		Intersection LOS: C	
Intersection Capacity Utilization 78.3%		ICU Level of Service D	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: S. Kedzie Ave. & W. 79th St.



Lane Group	Ø7
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

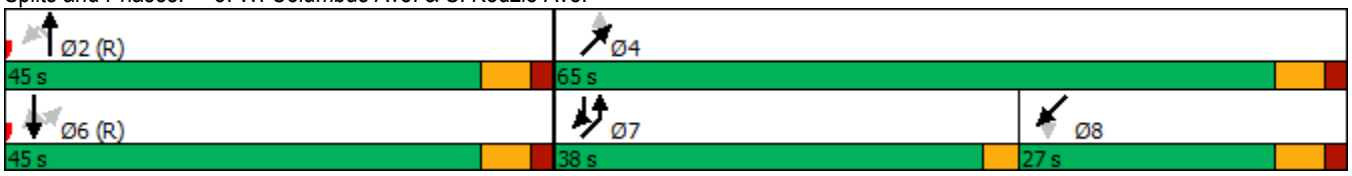
Intersection Summary

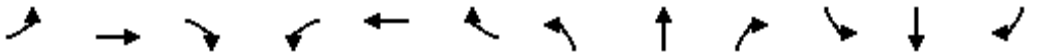
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	1	452	110	6	348	353	449	602	3	62	258	48
Future Volume (vph)	1	452	110	6	348	353	449	602	3	62	258	48
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	12	12	10	10	11	11	11	10	11	12
Storage Length (ft)	0		0	0		100	0		0	90		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	0			0			0			25		
Satd. Flow (prot)	0	2778	0	0	2738	1224	1417	2854	0	1422	2699	0
Flt Permitted		0.955			0.942		0.398			0.402		
Satd. Flow (perm)	0	2653	0	0	2581	1224	594	2854	0	602	2699	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30				143		1			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		245			494			414			728	
Travel Time (s)		5.6			11.2			9.4			16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	4%	50%	4%	5%	5%	4%	33%	1%	8%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	612	0	0	385	384	488	657	0	67	332	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.28	1.22	1.22	1.33	1.33	1.28	1.28	1.28	1.33	1.28	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		Perm	NA	
Protected Phases		2			6	7	7	4			8	
Permitted Phases	2			6		6	4			8		
Minimum Split (s)	28.0	28.0		28.0	28.0	8.0	8.0	26.0		26.0	26.0	
Total Split (s)	45.0	45.0		45.0	45.0	38.0	38.0	65.0		27.0	27.0	
Total Split (%)	40.9%	40.9%		40.9%	40.9%	34.5%	34.5%	59.1%		24.5%	24.5%	
Yellow Time (s)	4.0	4.0		4.0	4.0	3.0	3.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	0.0	0.0	2.0		2.0	2.0	
Lost Time Adjust (s)		1.0			1.0	1.0	1.0	1.0		1.0	1.0	
Total Lost Time (s)		7.0			7.0	4.0	4.0	7.0		7.0	7.0	
Lead/Lag						Lead	Lead			Lag	Lag	
Lead-Lag Optimize?												
Act Effct Green (s)		38.0			38.0	79.0	61.0	58.0		20.0	20.0	
Actuated g/C Ratio		0.35			0.35	0.72	0.55	0.53		0.18	0.18	
v/c Ratio		0.65			0.43	0.42	0.84	0.44		0.61	0.66	
Control Delay		12.5			29.6	5.1	21.8	12.0		67.0	46.7	
Queue Delay		2.0			0.1	0.0	9.9	1.0		0.0	0.0	
Total Delay		14.5			29.6	5.1	31.7	13.0		67.0	46.7	
LOS		B			C	A	C	B		E	D	
Approach Delay		14.5			17.4			21.0			50.1	
Approach LOS		B			B			C			D	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Queue Length 50th (ft)		30			109	52	288	164		44	110	
Queue Length 95th (ft)		m79			154	100	m325	m200		#111	160	
Internal Link Dist (ft)		165			414			334			648	
Turn Bay Length (ft)						100				90		
Base Capacity (vph)		936			891	919	583	1505		109	504	
Starvation Cap Reductn		185			0	0	75	551		0	0	
Spillback Cap Reductn		0			42	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.81			0.45	0.42	0.96	0.69		0.61	0.66	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 22.6		Intersection LOS: C	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: W. Columbus Ave. & S. Kedzie Ave.





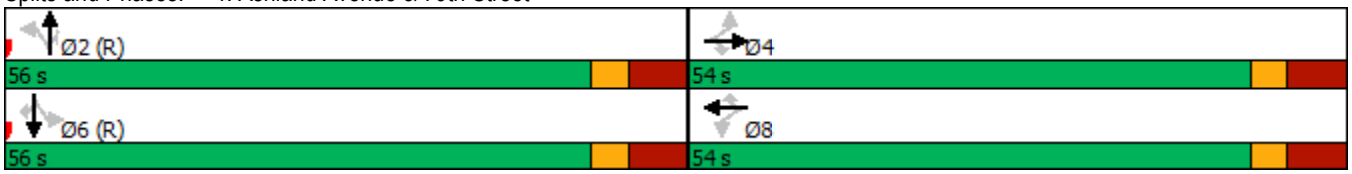
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	465	42	35	336	53	51	630	55	34	372	44
Future Volume (vph)	95	465	42	35	336	53	51	630	55	34	372	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	9	9	10	9	10	11	11	10	11	11
Storage Length (ft)	80		30	60		30	100		30	100		30
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1385	1141	1152	1345	1189	1110	1282	2400	880	1355	2394	816
Flt Permitted	0.448			0.298			0.512			0.331		
Satd. Flow (perm)	638	1141	1071	413	1189	1047	638	2400	760	455	2394	691
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50			50			50			50
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		664			1315			665			670	
Travel Time (s)		15.1			29.9			15.1			15.2	
Confl. Peds. (#/hr)	41		54	54		41	47		41	41		47
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	10%	5%	3%	10%	9%	12%	6%	4%	6%	5%	9%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	8	0	0	8
Parking (#/hr)		14			7			38	38		42	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	511	46	38	369	58	56	692	60	37	409	48
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.67	1.44	1.39	1.59	1.44	1.33	1.54	1.99	1.33	1.57	2.06
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	38.0	27.0	27.0	27.0	27.0	27.0	27.0
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	56.0	56.0	56.0	56.0	56.0	56.0
Total Split (%)	49.1%	49.1%	49.1%	49.1%	49.1%	49.1%	50.9%	50.9%	50.9%	50.9%	50.9%	50.9%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	45.0	45.0	45.0	45.0	45.0	45.0	47.0	47.0	47.0	47.0	47.0	47.0
Actuated g/C Ratio	0.41	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.43
v/c Ratio	0.40	1.10	0.10	0.23	0.76	0.13	0.21	0.68	0.17	0.19	0.40	0.15
Control Delay	28.7	102.9	5.7	25.7	39.8	7.8	22.4	29.4	8.2	23.0	23.2	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.7	102.9	5.7	25.7	39.8	7.8	22.4	29.4	8.2	23.0	23.2	6.4

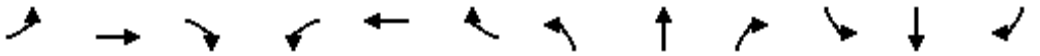
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	F	A	C	D	A	C	C	A	C	C	A
Approach Delay		84.5			34.6			27.4			21.6	
Approach LOS		F			C			C			C	
Queue Length 50th (ft)	51	~409	0	17	219	3	24	202	4	16	102	0
Queue Length 95th (ft)	103	#617	21	45	#358	29	54	272	31	41	145	22
Internal Link Dist (ft)		584			1235			585			590	
Turn Bay Length (ft)	80		30	60		30	100		30	100		30
Base Capacity (vph)	261	466	467	168	486	457	272	1025	353	194	1022	323
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	1.10	0.10	0.23	0.76	0.13	0.21	0.68	0.17	0.19	0.40	0.15

Intersection Summary

Area Type: CBD
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 3 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 1.10
Intersection Signal Delay: 43.1 Intersection LOS: D
Intersection Capacity Utilization 120.0% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Ashland Avenue & 79th Street



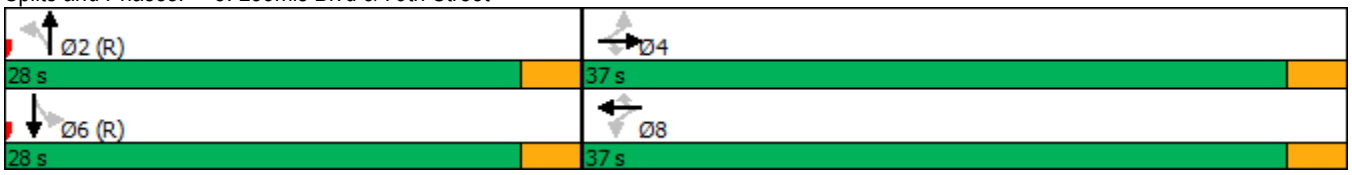


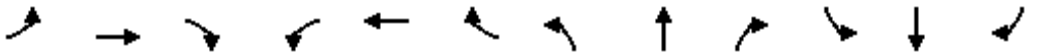
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	504	25	25	374	25	25	100	25	25	100	25
Future Volume (vph)	25	504	25	25	374	25	25	100	25	25	100	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	60		30	60		30	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			0			0		
Satd. Flow (prot)	1509	1429	1318	1509	1429	1350	0	1541	0	0	1541	0
Flt Permitted	0.438			0.320				0.946			0.946	
Satd. Flow (perm)	696	1429	1318	508	1429	1350	0	1469	0	0	1469	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			12			16		17			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1315			357			644			631	
Travel Time (s)		29.9			8.1			14.6			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Bus Blockages (#/hr)	0	0	6	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	548	27	27	407	27	0	163	0	0	163	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.26	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	17.0	17.0	17.0	17.0	17.0	17.0	18.0	18.0		18.0	18.0	
Total Split (s)	37.0	37.0	37.0	37.0	37.0	37.0	28.0	28.0		28.0	28.0	
Total Split (%)	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%	43.1%	43.1%		43.1%	43.1%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0			1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	33.0	33.0	33.0	33.0	33.0	33.0		24.0			24.0	
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51		0.37			0.37	
v/c Ratio	0.08	0.76	0.04	0.11	0.56	0.04		0.29			0.29	
Control Delay	9.0	21.5	6.1	9.7	14.8	5.4		14.7			14.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	9.0	21.5	6.1	9.7	14.8	5.4		14.7			14.7	
LOS	A	C	A	A	B	A		B			B	
Approach Delay		20.2			13.9			14.7			14.7	
Approach LOS		C			B			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	5	161	3	5	103	2		39			39	
Queue Length 95th (ft)	17	#330	13	18	181	13		81			81	
Internal Link Dist (ft)		1235			277			564			551	
Turn Bay Length (ft)	60		30	60		30						
Base Capacity (vph)	353	725	675	257	725	693		553			553	
Starvation Cap Reductn	0	0	0	0	0	0		0			0	
Spillback Cap Reductn	0	0	0	0	0	0		0			0	
Storage Cap Reductn	0	0	0	0	0	0		0			0	
Reduced v/c Ratio	0.08	0.76	0.04	0.11	0.56	0.04		0.29			0.29	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 16.8		Intersection LOS: B	
Intersection Capacity Utilization 50.6%		ICU Level of Service A	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: Loomis Blvd & 79th Street





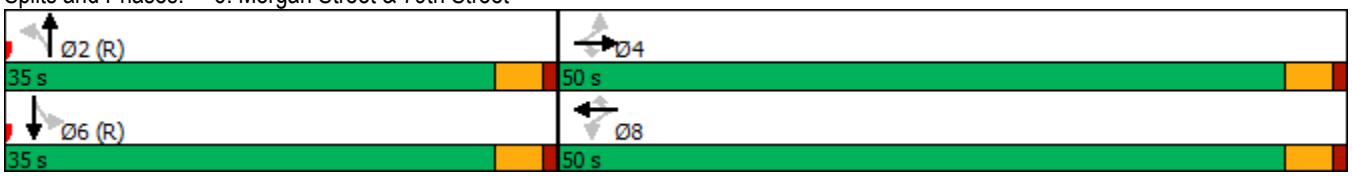
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	511	25	25	398	25	25	100	25	25	100	25
Future Volume (vph)	25	511	25	25	398	25	25	100	25	25	100	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	100		30	100		30	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			0			0		
Satd. Flow (prot)	1509	1429	1350	1509	1414	1350	0	1541	0	0	1541	0
Flt Permitted	0.424			0.326				0.940			0.940	
Satd. Flow (perm)	673	1429	1350	518	1414	1350	0	1460	0	0	1460	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			13			13		13			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		323			1321			593			659	
Travel Time (s)		7.3			30.0			13.5			15.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0			2							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	555	27	27	433	27	0	163	0	0	163	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.22	1.22	1.41	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	17.0	17.0	17.0	17.0	17.0	17.0	21.0	21.0		21.0	21.0	
Total Split (s)	50.0	50.0	50.0	50.0	50.0	50.0	35.0	35.0		35.0	35.0	
Total Split (%)	58.8%	58.8%	58.8%	58.8%	58.8%	58.8%	41.2%	41.2%		41.2%	41.2%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0			1.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	45.0	45.0	45.0	45.0	45.0	45.0		30.0			30.0	
Actuated g/C Ratio	0.53	0.53	0.53	0.53	0.53	0.53		0.35			0.35	
v/c Ratio	0.08	0.73	0.04	0.10	0.58	0.04		0.31			0.31	
Control Delay	10.6	22.6	6.7	3.4	5.0	0.9		20.4			20.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	10.6	22.6	6.7	3.4	5.0	0.9		20.4			20.4	
LOS	B	C	A	A	A	A		C			C	
Approach Delay		21.4			4.6			20.4			20.4	
Approach LOS		C			A			C			C	
Queue Length 50th (ft)	7	214	3	1	25	0		57			57	

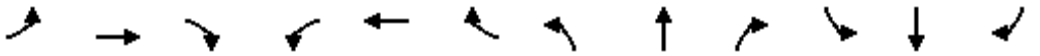
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	20	349	15	m3	m38	m1		107			107	
Internal Link Dist (ft)		243			1241			513			579	
Turn Bay Length (ft)	100		30	100		30						
Base Capacity (vph)	356	756	720	274	748	720		523			523	
Starvation Cap Reductn	0	0	0	0	0	0		0			0	
Spillback Cap Reductn	0	0	0	0	0	0		0			0	
Storage Cap Reductn	0	0	0	0	0	0		0			0	
Reduced v/c Ratio	0.08	0.73	0.04	0.10	0.58	0.04		0.31			0.31	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 7 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 15.4		Intersection LOS: B	
Intersection Capacity Utilization 54.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Morgan Street & 79th Street





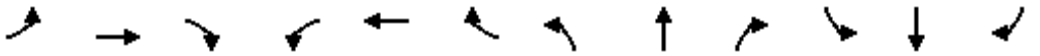
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	462	61	28	349	33	62	462	53	29	220	37
Future Volume (vph)	38	462	61	28	349	33	62	462	53	29	220	37
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	9	9	10	9	10	11	13	10	10	13
Storage Length (ft)	100		30	60		30	100		100	100		100
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1385	1237	1215	1385	1221	1203	1436	1520	1368	1395	1426	1355
Flt Permitted	0.399			0.239			0.610			0.374		
Satd. Flow (perm)	582	1237	1215	348	1221	1203	922	1520	1368	549	1426	1355
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			51			51			51			51
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1321			665			631			665	
Travel Time (s)		30.0			15.1			14.3			15.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	10%	2%	0%	9%	3%	0%	3%	4%	3%	6%	5%
Parking (#/hr)		0			4							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	502	66	30	379	36	67	502	58	32	239	40
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.52	1.39	1.39	1.56	1.39	1.33	1.28	1.18	1.33	1.33	1.18
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	27.0	27.0	27.0	27.0
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	49.0	49.0	49.0	49.0	49.0	49.0
Total Split (%)	42.4%	42.4%	42.4%	42.4%	42.4%	42.4%	57.6%	57.6%	57.6%	57.6%	57.6%	57.6%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	28.0	28.0	28.0	28.0	28.0	28.0	41.0	41.0	41.0	41.0	41.0	41.0
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.33	0.33	0.48	0.48	0.48	0.48	0.48	0.48
v/c Ratio	0.21	1.23	0.15	0.26	0.94	0.08	0.15	0.68	0.08	0.12	0.35	0.06
Control Delay	17.3	145.7	9.0	28.4	62.9	4.4	13.5	23.0	4.7	13.7	15.5	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.3	145.7	9.0	28.4	62.9	4.4	13.5	23.0	4.7	13.7	15.5	3.1
LOS	B	F	A	C	E	A	B	C	A	B	B	A
Approach Delay		122.2			55.8			20.3			13.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		F			E			C			B	
Queue Length 50th (ft)	18	~346	18	12	195	0	19	198	2	9	76	0
Queue Length 95th (ft)	m22	#541	m21	37	#368	14	44	315	21	26	130	13
Internal Link Dist (ft)		1241			585			551			585	
Turn Bay Length (ft)	100		30	60		30	100		100	100		100
Base Capacity (vph)	191	407	434	114	402	430	444	733	686	264	687	679
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	1.23	0.15	0.26	0.94	0.08	0.15	0.68	0.08	0.12	0.35	0.06

Intersection Summary

Area Type: CBD
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 53 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 1.23
Intersection Signal Delay: 58.4 Intersection LOS: E
Intersection Capacity Utilization 102.2% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Halsted Street & 79th Street

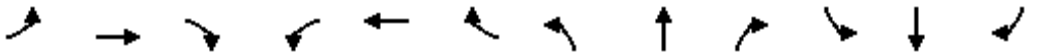


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	733	10	10	424	10	10	10	10	10	10	10
Future Volume (vph)	10	733	10	10	424	10	10	10	10	10	10	10
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	1425	0	0	1424	0	0	1492	0	0	1492	0
Flt Permitted		0.994			0.982			0.932			0.932	
Satd. Flow (perm)	0	1418	0	0	1399	0	0	1414	0	0	1414	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			3			11			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		558			495			173			227	
Travel Time (s)		12.7			11.3			3.9			5.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	819	0	0	483	0	0	33	0	0	33	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			-30	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.22	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	9.0	9.0		9.0	9.0		21.0	21.0		21.0	21.0	
Total Split (s)	62.0	62.0		62.0	62.0		23.0	23.0		23.0	23.0	
Total Split (%)	72.9%	72.9%		72.9%	72.9%		27.1%	27.1%		27.1%	27.1%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0			57.0			18.0			18.0	
Actuated g/C Ratio		0.67			0.67			0.21			0.21	
v/c Ratio		0.86			0.51			0.11			0.11	
Control Delay		22.7			6.3			21.4			21.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		22.7			6.3			21.4			21.4	
LOS		C			A			C			C	
Approach Delay		22.7			6.3			21.4			21.4	
Approach LOS		C			A			C			C	
Queue Length 50th (ft)		296			62			9			9	
Queue Length 95th (ft)		#606			113			33			33	
Internal Link Dist (ft)		478			415			93			147	
Turn Bay Length (ft)												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		951			939			308			308	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.86			0.51			0.11			0.11	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 17 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 74.1%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: 79th Street & 150 W.



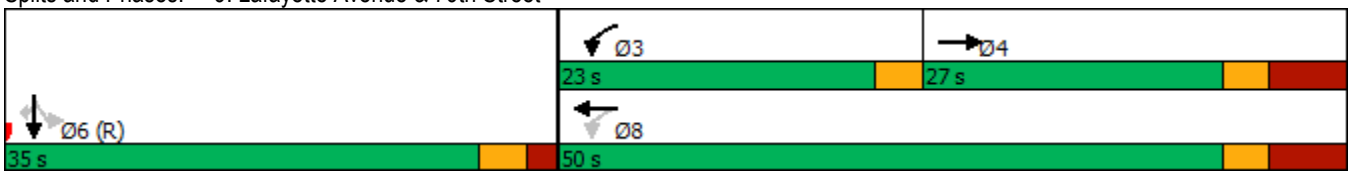
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	576	177	187	327	0	0	0	0	244	185	117
Future Volume (vph)	0	576	177	187	327	0	0	0	0	244	185	117
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	11	11	12	12	12	12	12	12	12	10	8
Storage Length (ft)	100		0	0		0	0		0	0		0
Storage Lanes	2		0	1		0	0		0	1		1
Taper Length (ft)	25			0			0			0		
Satd. Flow (prot)	0	4359	0	1494	2509	0	0	0	0	1203	3553	978
Flt Permitted				0.241						0.950	0.980	
Satd. Flow (perm)	0	4359	0	353	2509	0	0	0	0	1203	3553	949
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		83										127
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		330			322			703			664	
Travel Time (s)		7.5			7.3			16.0			15.1	
Confl. Peds. (#/hr)	5		130	130		5	20					20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	9%	19%	3%	8%	2%	2%	2%	2%	10%	6%	22%
Bus Blockages (#/hr)	0	0	0	0	15	0	0	0	0	0	0	0
Parking (#/hr)					17							
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	818	0	203	355	0	0	0	0	132	334	127
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.28	1.28	1.28	1.22	1.43	1.22	1.22	1.22	1.22	1.22	1.33	1.46
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases				8						6		6
Minimum Split (s)		20.0		8.0	26.0					33.0	33.0	33.0
Total Split (s)		27.0		23.0	50.0					35.0	35.0	35.0
Total Split (%)		31.8%		27.1%	58.8%					41.2%	41.2%	41.2%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		5.0		0.0	5.0					2.0	2.0	2.0
Lost Time Adjust (s)		1.0		1.0	1.0					1.0	1.0	1.0
Total Lost Time (s)		9.0		4.0	9.0					6.0	6.0	6.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Act Effct Green (s)		18.0		46.0	41.0					29.0	29.0	29.0
Actuated g/C Ratio		0.21		0.54	0.48					0.34	0.34	0.34
v/c Ratio		0.83		0.46	0.29					0.32	0.28	0.31
Control Delay		36.7		9.5	8.2					23.5	21.1	6.3
Queue Delay		0.0		0.0	0.0					0.0	0.0	0.0
Total Delay		36.7		9.5	8.2					23.5	21.1	6.3

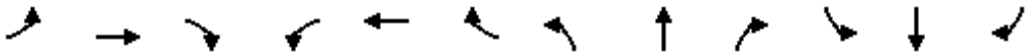
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D		A	A					C	C	A
Approach Delay		36.7			8.7						18.5	
Approach LOS		D			A						B	
Queue Length 50th (ft)		82		70	65					60	49	0
Queue Length 95th (ft)		m105		m86	m76					115	74	37
Internal Link Dist (ft)		250			242			623			584	
Turn Bay Length (ft)												
Base Capacity (vph)		988		446	1210					410	1212	407
Starvation Cap Reductn		0		0	0					0	0	0
Spillback Cap Reductn		0		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.83		0.46	0.29					0.32	0.28	0.31

Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 23.3		Intersection LOS: C	
Intersection Capacity Utilization 71.0%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Lafayette Avenue & 79th Street





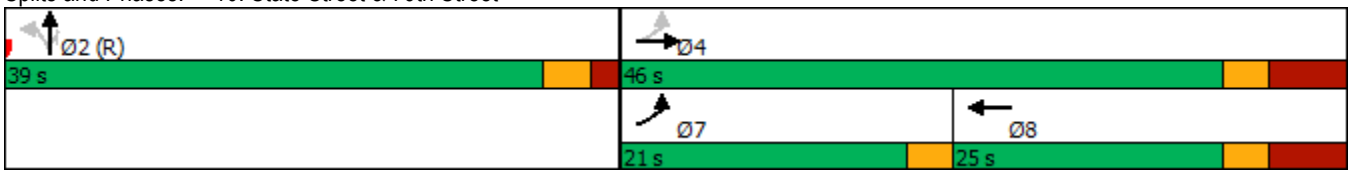
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	422	398	0	0	313	144	201	892	84	0	0	0
Future Volume (vph)	422	398	0	0	313	144	201	892	84	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	11	16	12	12	12
Satd. Flow (prot)	2927	2583	0	0	2703	0	1373	2791	1530	0	0	0
Flt Permitted	0.278						0.950	0.999				
Satd. Flow (perm)	783	2583	0	0	2703	0	1363	2791	1314	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					49				103			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		322			463			683			659	
Travel Time (s)		7.3			10.5			15.5			15.0	
Confl. Peds. (#/hr)	82		240	240		82	8		145	145		8
Peak Hour Factor	0.89	0.90	0.92	0.92	0.90	0.78	0.91	0.95	0.78	0.92	0.92	0.92
Bus Blockages (#/hr)	0	15	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		27										
Shared Lane Traffic (%)							10%					
Lane Group Flow (vph)	474	442	0	0	533	0	199	961	108	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.48	1.22	1.22	1.22	1.22	1.22	1.28	1.05	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4						2		2			
Minimum Split (s)	8.0	26.0			22.0		33.0	33.0	33.0			
Total Split (s)	21.0	46.0			25.0		39.0	39.0	39.0			
Total Split (%)	24.7%	54.1%			29.4%		45.9%	45.9%	45.9%			
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0	3.0			
All-Red Time (s)	0.0	5.0			5.0		2.0	2.0	2.0			
Lost Time Adjust (s)	1.0	1.0			1.0		1.0	1.0	1.0			
Total Lost Time (s)	4.0	9.0			9.0		6.0	6.0	6.0			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Act Effct Green (s)	42.0	37.0			16.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.49	0.44			0.19		0.39	0.39	0.39			
v/c Ratio	0.58	0.39			0.97		0.38	0.89	0.19			
Control Delay	9.5	9.0			65.3		21.3	36.1	5.1			
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0			
Total Delay	9.5	9.0			65.3		21.3	36.1	5.1			
LOS	A	A			E		C	D	A			
Approach Delay		9.2			65.3			31.1				
Approach LOS		A			E			C				
Queue Length 50th (ft)	88	89			137		81	257	2			

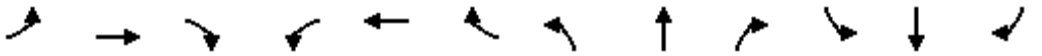
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	m98	m117			#243		143	#384	23			
Internal Link Dist (ft)		242			383			603			579	
Turn Bay Length (ft)												
Base Capacity (vph)	815	1124			548		529	1083	573			
Starvation Cap Reductn	0	0			0		0	0	0			
Spillback Cap Reductn	0	0			0		0	0	0			
Storage Cap Reductn	0	0			0		0	0	0			
Reduced v/c Ratio	0.58	0.39			0.97		0.38	0.89	0.19			

Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 37 (44%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 30.4		Intersection LOS: C	
Intersection Capacity Utilization 71.0%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: State Street & 79th Street



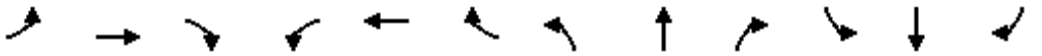


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	394	88	25	388	0	0	0	0	25	25	69
Future Volume (vph)	0	394	88	25	388	0	0	0	0	25	25	69
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		30	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	0			0			0			0		
Satd. Flow (prot)	0	1429	1339	0	1425	0	0	0	0	0	1450	0
Flt Permitted					0.964						0.990	
Satd. Flow (perm)	0	1429	1339	0	1378	0	0	0	0	0	1450	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			63								75	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		869			1306			672			662	
Travel Time (s)		19.8			29.7			15.3			15.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	428	96	0	449	0	0	0	0	0	129	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.24	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Minimum Split (s)		18.0	18.0	18.0	18.0					19.0	19.0	
Total Split (s)		43.0	43.0	43.0	43.0					22.0	22.0	
Total Split (%)		66.2%	66.2%	66.2%	66.2%					33.8%	33.8%	
Yellow Time (s)		3.0	3.0	3.0	3.0					3.0	3.0	
All-Red Time (s)		2.0	2.0	2.0	2.0					1.0	1.0	
Lost Time Adjust (s)		1.0	1.0		1.0						1.0	
Total Lost Time (s)		6.0	6.0		6.0						5.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		37.0	37.0		37.0						17.0	
Actuated g/C Ratio		0.57	0.57		0.57						0.26	
v/c Ratio		0.53	0.12		0.57						0.30	
Control Delay		11.6	3.4		5.9						11.5	
Queue Delay		0.0	0.0		0.0						0.0	
Total Delay		11.6	3.4		5.9						11.5	
LOS		B	A		A						B	
Approach Delay		10.1			5.9						11.5	
Approach LOS		B			A						B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		94	5		22						16	
Queue Length 95th (ft)		164	22		m30						55	
Internal Link Dist (ft)		789			1226			592			582	
Turn Bay Length (ft)			30									
Base Capacity (vph)		813	789		784						434	
Starvation Cap Reductn		0	0		0						0	
Spillback Cap Reductn		0	0		0						0	
Storage Cap Reductn		0	0		0						0	
Reduced v/c Ratio		0.53	0.12		0.57						0.30	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 32 (49%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 8.6		Intersection LOS: A	
Intersection Capacity Utilization 69.7%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 11: Indiana Avenue & 79th Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	312	71	50	295	43	87	308	54	45	243	31
Future Volume (vph)	36	312	71	50	295	43	87	308	54	45	243	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	75		30	60		30	60		30	50		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	1282	1260	1408	1275	1260	1408	1482	1260	1408	1482	1260
Flt Permitted	0.470			0.445			0.429			0.559		
Satd. Flow (perm)	651	1282	1086	615	1275	1095	614	1482	1116	779	1482	1163
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			67			67			44			84
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1306			1324			671			675	
Travel Time (s)		29.7			30.1			15.3			15.3	
Confl. Peds. (#/hr)	73		78	78		73	36		59	59		36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		7			8							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	339	77	54	321	47	95	335	59	49	264	34
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.59	1.33	1.33	1.60	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	8.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	27.0	27.0	27.0	27.0	27.0	27.0	13.0	38.0	38.0	25.0	25.0	25.0
Total Split (%)	41.5%	41.5%	41.5%	41.5%	41.5%	41.5%	20.0%	58.5%	58.5%	38.5%	38.5%	38.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	4.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?												
Act Effct Green (s)	21.0	21.0	21.0	21.0	21.0	21.0	34.0	33.0	33.0	20.0	20.0	20.0
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.32	0.32	0.52	0.51	0.51	0.31	0.31	0.31
v/c Ratio	0.19	0.82	0.19	0.27	0.78	0.12	0.22	0.45	0.10	0.21	0.58	0.08
Control Delay	10.1	29.8	2.4	13.1	28.2	1.3	9.4	12.6	4.4	19.4	25.0	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	29.8	2.4	13.1	28.2	1.3	9.4	12.6	4.4	19.4	25.0	0.9
LOS	B	C	A	B	C	A	A	B	A	B	C	A
Approach Delay		23.4			23.3			11.0			21.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			C			B			C	
Queue Length 50th (ft)	4	123	1	7	116	0	18	78	3	14	87	0
Queue Length 95th (ft)	m9	#259	m2	m20	#241	m1	39	137	19	39	157	3
Internal Link Dist (ft)		1226			1244			591			595	
Turn Bay Length (ft)	75		30	60		30	60		30	50		50
Base Capacity (vph)	210	414	396	198	411	399	431	752	588	239	456	416
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.82	0.19	0.27	0.78	0.12	0.22	0.45	0.10	0.21	0.58	0.08

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 19.5		Intersection LOS: B	
Intersection Capacity Utilization 90.8%		ICU Level of Service E	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: King Dr & 79th Street

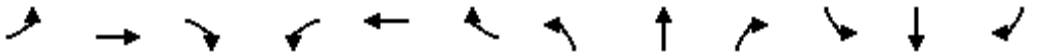
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	386	0	0	363	25	25	100	25	0	0	0
Future Volume (vph)	25	386	0	0	363	25	25	100	25	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		30	0		30	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	0			0			0			0		
Satd. Flow (prot)	0	1425	0	0	1429	1350	0	1541	0	0	0	0
Flt Permitted		0.967						0.992				
Satd. Flow (perm)	0	1382	0	0	1429	1350	0	1541	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						20		15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1324			660			692			656	
Travel Time (s)		30.1			15.0			15.7			14.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	447	0	0	395	27	0	163	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.22	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Minimum Split (s)	16.0	16.0			16.0	16.0	17.0	17.0				
Total Split (s)	43.0	43.0			43.0	43.0	22.0	22.0				
Total Split (%)	66.2%	66.2%			66.2%	66.2%	33.8%	33.8%				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0	1.0	1.0	1.0				
Lost Time Adjust (s)		1.0			1.0	1.0		1.0				
Total Lost Time (s)		5.0			5.0	5.0		5.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		38.0			38.0	38.0		17.0				
Actuated g/C Ratio		0.58			0.58	0.58		0.26				
v/c Ratio		0.55			0.47	0.03		0.39				
Control Delay		7.2			10.1	3.4		21.3				
Queue Delay		0.0			0.0	0.0		0.0				
Total Delay		7.2			10.1	3.4		21.3				
LOS		A			B	A		C				
Approach Delay		7.2			9.7			21.3				
Approach LOS		A			A			C				
Queue Length 50th (ft)		33			80	1		48				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		m41			140	10		97				
Internal Link Dist (ft)		1244			580			612			576	
Turn Bay Length (ft)						30						
Base Capacity (vph)		807			835	797		414				
Starvation Cap Reductn		0			0	0		0				
Spillback Cap Reductn		0			0	0		0				
Storage Cap Reductn		0			0	0		0				
Reduced v/c Ratio		0.55			0.47	0.03		0.39				

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 32 (49%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 67.0%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: St Lawrence Avenue & 79th Street

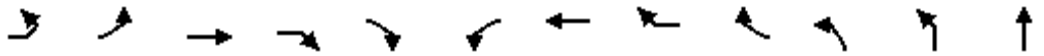


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	165	25	25	210	0	0	0	0	25	100	25
Future Volume (vph)	0	165	25	25	210	0	0	0	0	25	100	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	1404	0	0	1580	0	0	0	0	0	1541	0
Flt Permitted					0.962						0.992	
Satd. Flow (perm)	0	1404	0	0	1528	0	0	0	0	0	1541	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19									15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		351			1665			668			659	
Travel Time (s)		8.0			37.8			15.2			15.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	206	0	0	255	0	0	0	0	0	163	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Minimum Split (s)		16.0		16.0	16.0					17.0	17.0	
Total Split (s)		42.0		42.0	42.0					23.0	23.0	
Total Split (%)		64.6%		64.6%	64.6%					35.4%	35.4%	
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	
Lost Time Adjust (s)		1.0			1.0						1.0	
Total Lost Time (s)		5.0			5.0						5.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		37.0			37.0						18.0	
Actuated g/C Ratio		0.57			0.57						0.28	
v/c Ratio		0.26			0.29						0.37	
Control Delay		7.4			20.5						20.2	
Queue Delay		0.0			0.0						0.0	
Total Delay		7.4			20.5						20.2	
LOS		A			C						C	
Approach Delay		7.4			20.5						20.2	
Approach LOS		A			C						C	
Queue Length 50th (ft)		33			149						47	
Queue Length 95th (ft)		65			m181						94	
Internal Link Dist (ft)		271			1585			588			579	
Turn Bay Length (ft)												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		807			869						437	
Starvation Cap Reductn		0			0						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.26			0.29						0.37	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 32 (49%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 40			
Control Type: Pretimed			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 16.1		Intersection LOS: B	
Intersection Capacity Utilization 49.9%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 14: Kenwood Avenue & 79th Street



Lane Group	EBL2	EBL	EBT	EBR	EBR2	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT
Lane Configurations												
Traffic Volume (vph)	1	23	136	22	8	100	161	52	30	11	126	1134
Future Volume (vph)	1	23	136	22	8	100	161	52	30	11	126	1134
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)		100		100		175		150			90	
Storage Lanes		1		1		1		1			1	
Taper Length (ft)		25				25					25	
Satd. Flow (prot)	0	1509	1588	1350	0	1509	1588	1350	0	0	1509	4336
Flt Permitted		0.394				0.492					0.950	
Satd. Flow (perm)	0	626	1588	1350	0	781	1588	1350	0	0	1509	4336
Right Turn on Red					Yes				Yes			
Satd. Flow (RTOR)				134				134				
Link Speed (mph)			30				30					30
Link Distance (ft)			1665				377					254
Travel Time (s)			37.8				8.6					5.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	143	31	0	105	169	87	0	0	145	1194
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Right	Left	Left	Right	Right	Left	Left	Left
Median Width(ft)			12				12					12
Link Offset(ft)			0				0					0
Crosswalk Width(ft)			16				16					16
Two way Left Turn Lane												
Headway Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15	15		9	9	15		9	9	15	15	
Turn Type	Perm	Perm	NA	Perm		Perm	NA	Perm		Prot	Prot	NA
Protected Phases			4				8			5	5	2
Permitted Phases	4	4		4		8		8				
Detector Phase	4	4	4	4		8	8	8		5	5	2
Switch Phase												
Minimum Initial (s)	16.0	16.0	16.0	16.0		16.0	16.0	16.0		5.0	5.0	27.0
Minimum Split (s)	21.0	21.0	21.0	21.0		21.0	21.0	21.0		8.0	8.0	34.0
Total Split (s)	21.0	21.0	21.0	21.0		21.0	21.0	21.0		26.0	26.0	67.0
Total Split (%)	16.2%	16.2%	16.2%	16.2%		16.2%	16.2%	16.2%		20.0%	20.0%	51.5%
Yellow Time (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0		2.0	2.0	2.0		0.0	0.0	3.0
Lost Time Adjust (s)		1.0	1.0	1.0		1.0	1.0	1.0			1.0	1.0
Total Lost Time (s)		6.0	6.0	6.0		6.0	6.0	6.0			4.0	8.0
Lead/Lag										Lead	Lead	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None		None	None	None		None	None	C-Max
Act Effct Green (s)		15.0	15.0	15.0		15.0	15.0	15.0			16.4	59.0
Actuated g/C Ratio		0.12	0.12	0.12		0.12	0.12	0.12			0.13	0.45
v/c Ratio		0.35	0.78	0.11		1.17	0.92	0.32			0.76	0.61
Control Delay		66.9	82.5	2.1		197.7	109.9	14.0			79.1	28.4
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0			0.0	0.0
Total Delay		66.9	82.5	2.1		197.7	109.9	14.0			79.1	28.4
LOS		E	F	A		F	F	B			E	C

Lane Group	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	SET	SER	SER2	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	73	14	18	58	712	61	9	187	73	2	200	65
Future Volume (vph)	73	14	18	58	712	61	9	187	73	2	200	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	130			0		0			0			0
Storage Lanes	2			1		1			0			0
Taper Length (ft)				0								
Satd. Flow (prot)	1350	0	0	1509	4336	1350	0	2888	0	0	2903	0
Flt Permitted				0.950								
Satd. Flow (perm)	1350	0	0	1509	4336	1350	0	2888	0	0	2903	0
Right Turn on Red		Yes					Yes			Yes		
Satd. Flow (RTOR)	92					117					1	
Link Speed (mph)					30			30			30	
Link Distance (ft)					690			712			889	
Travel Time (s)					15.7			16.2			20.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	0	0	80	749	73	0	276	0	0	282	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Right	Right	Left	Left	Left	Right	Right	Left	Right	Right	Left	Right
Median Width(ft)					12			0			0	
Link Offset(ft)					0			0			0	
Crosswalk Width(ft)					16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	9	9	15	15		9	9		9	9		9
Turn Type	Perm		Prot	Prot	NA	Perm		NA			NA	
Protected Phases			1	1	6			10			14	
Permitted Phases	2					6						
Detector Phase	2		1	1	6	6		10			14	
Switch Phase												
Minimum Initial (s)	27.0		5.0	5.0	38.0	38.0		25.0			25.0	
Minimum Split (s)	34.0		8.0	8.0	45.0	45.0		31.0			31.0	
Total Split (s)	67.0		11.0	11.0	52.0	52.0		31.0			31.0	
Total Split (%)	51.5%		8.5%	8.5%	40.0%	40.0%		23.8%			23.8%	
Yellow Time (s)	4.0		3.0	3.0	4.0	4.0		4.0			4.0	
All-Red Time (s)	3.0		0.0	0.0	3.0	3.0		2.0			2.0	
Lost Time Adjust (s)	1.0			1.0	1.0	1.0		1.0			1.0	
Total Lost Time (s)	8.0			4.0	8.0	8.0		7.0			7.0	
Lead/Lag	Lag		Lead	Lead	Lag	Lag						
Lead-Lag Optimize?												
Recall Mode	C-Max		None	None	C-Max	C-Max		None			None	
Act Effct Green (s)	59.0			7.0	49.6	49.6		24.0			24.0	
Actuated g/C Ratio	0.45			0.05	0.38	0.38		0.18			0.18	
v/c Ratio	0.14			0.99	0.45	0.12		0.52			0.53	
Control Delay	4.4			157.5	31.9	1.5		51.8			51.8	
Queue Delay	0.0			0.0	0.0	0.0		0.0			0.0	
Total Delay	4.4			157.5	31.9	1.5		51.8			51.8	
LOS	A			F	C	A		D			D	

Lane Group	NWR2
Lane Configurations	
Traffic Volume (vph)	3
Future Volume (vph)	3
Ideal Flow (vphpl)	1800
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.95
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.22
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	

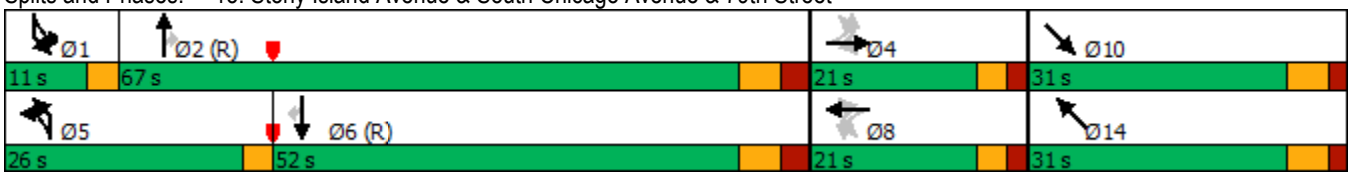
Lane Group	EBL2	EBL	EBT	EBR	EBR2	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT
Approach Delay			68.1				112.3					32.0
Approach LOS			E				F					C
Queue Length 50th (ft)		20	123	0		~109	152	4			120	272
Queue Length 95th (ft)		52	#234	2		#233	#293	36			186	321
Internal Link Dist (ft)			1585				297					174
Turn Bay Length (ft)		100		100		175		150			90	
Base Capacity (vph)		72	183	274		90	183	274			255	1967
Starvation Cap Reductn		0	0	0		0	0	0			0	0
Spillback Cap Reductn		0	0	0		0	0	0			0	0
Storage Cap Reductn		0	0	0		0	0	0			0	0
Reduced v/c Ratio		0.35	0.78	0.11		1.17	0.92	0.32			0.57	0.61

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.17			
Intersection Signal Delay: 47.9		Intersection LOS: D	
Intersection Capacity Utilization 113.9%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 15: Stony Island Avenue & South Chicago Avenue & 79th Street

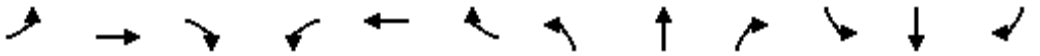


Lane Group	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	SET	SER	SER2	NWT	NWR
Approach Delay					40.6			51.8			51.8	
Approach LOS					D			D			D	
Queue Length 50th (ft)	0			69	172	0		111			113	
Queue Length 95th (ft)	31			#176	227	8		158			161	
Internal Link Dist (ft)					610			632			809	
Turn Bay Length (ft)	130											
Base Capacity (vph)	662			81	1654	587		533			536	
Starvation Cap Reductn	0			0	0	0		0			0	
Spillback Cap Reductn	0			0	0	0		0			0	
Storage Cap Reductn	0			0	0	0		0			0	
Reduced v/c Ratio	0.14			0.99	0.45	0.12		0.52			0.53	

Intersection Summary

Lane Group	NWR2
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



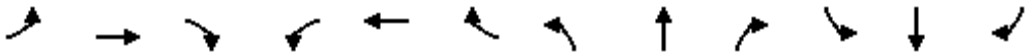
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	205	0	0	318	25	25	100	25	0	0	0
Future Volume (vph)	25	205	0	0	318	25	25	100	25	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	1417	0	0	1572	0	0	1541	0	0	0	0
Flt Permitted		0.947						0.992				
Satd. Flow (perm)	0	1348	0	0	1572	0	0	1541	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6			24				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			328			89			657	
Travel Time (s)		21.5			7.5			2.0			14.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Bus Blockages (#/hr)	0	1	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	250	0	0	373	0	0	163	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.40	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	15.0	15.0			15.0		19.0	19.0				
Minimum Split (s)	19.0	19.0			19.0		23.0	23.0				
Total Split (s)	25.0	25.0			25.0		40.0	40.0				
Total Split (%)	38.5%	38.5%			38.5%		61.5%	61.5%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)		1.0			1.0			1.0				
Total Lost Time (s)		5.0			5.0			5.0				
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max			C-Max		None	None				
Act Effct Green (s)		42.6			42.6			18.0				
Actuated g/C Ratio		0.66			0.66			0.28				
v/c Ratio		0.28			0.36			0.37				
Control Delay		16.1			8.4			18.9				
Queue Delay		0.0			0.0			0.0				
Total Delay		16.1			8.4			18.9				
LOS		B			A			B				
Approach Delay		16.1			8.4			18.9				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			A			B				
Queue Length 50th (ft)		127			73			44				
Queue Length 95th (ft)		m164			127			91				
Internal Link Dist (ft)		866			248			9			577	
Turn Bay Length (ft)												
Base Capacity (vph)		883			1032			840				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.28			0.36			0.19				

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 13.0		Intersection LOS: B	
Intersection Capacity Utilization 61.4%		ICU Level of Service B	
Analysis Period (min) 15			

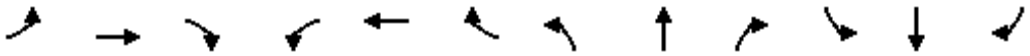
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: 79th Street & Cregier Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	540	0	0	419	0	8	0	28	29	0	5
Future Volume (vph)	0	540	0	0	419	0	8	0	28	29	0	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	1306	0	0	1274	0	0	1393	0	0	1434	0
Flt Permitted								0.989			0.962	
Satd. Flow (perm)	0	1306	0	0	1274	0	0	1393	0	0	1434	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		664			664			657			669	
Travel Time (s)		15.1			15.1			14.9			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.67	0.92	0.70	0.66	0.92	0.42
Heavy Vehicles (%)	2%	11%	2%	2%	10%	2%	0%	2%	4%	7%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	6	0	0	0	0	0	0
Parking (#/hr)		1			7							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	587	0	0	455	0	0	52	0	0	56	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.40	1.22	1.22	1.46	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	CBD		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.5%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	519	0	0	408	16	2	8	8	0	0	0
Future Volume (vph)	25	519	0	0	408	16	2	8	8	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	1311	0	0	1322	0	0	1515	0	0	0	0
Flt Permitted		0.996						0.993				
Satd. Flow (perm)	0	1311	0	0	1322	0	0	1515	0	0	0	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		665			358			654			664	
Travel Time (s)		15.1			8.1			14.9			15.1	
Peak Hour Factor	0.52	0.95	0.92	0.92	0.96	0.50	0.50	0.67	0.67	0.92	0.92	0.92
Heavy Vehicles (%)	8%	11%	2%	2%	10%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	594	0	0	457	0	0	28	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.22	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	CBD		
Control Type: Unsignalized			
Intersection Capacity Utilization	67.6%	ICU Level of Service C	
Analysis Period (min)	15		

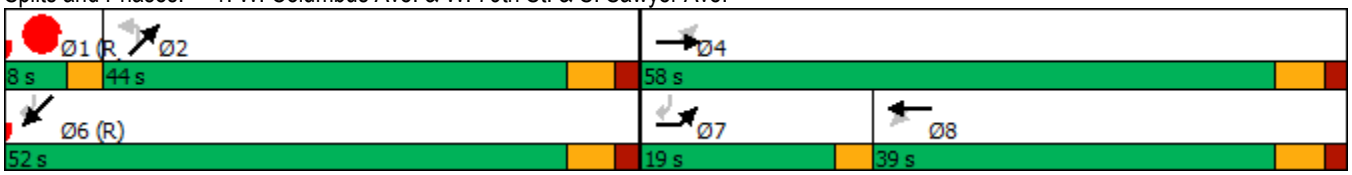
PM Reports

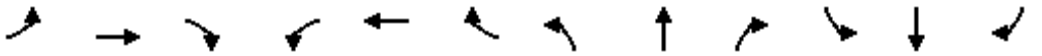
Lane Group	EBL	EBT	EBR	WBL	WBT	SBR2	NEL2	NET	NER	SWT	SWR	Ø1
Lane Configurations												
Traffic Volume (vph)	211	523	5	135	476	3	21	511	147	669	22	
Future Volume (vph)	211	523	5	135	476	3	21	511	147	669	22	
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	
Lane Width (ft)	9	11	9	10	12	12	12	12	12	11	11	
Storage Length (ft)	180		100	0					0		0	
Storage Lanes	1		0	1					0		0	
Taper Length (ft)	75			0								
Satd. Flow (prot)	1248	3645	0	1306	2577	1401	1539	2880	0	2865	0	
Flt Permitted	0.322			0.426			0.334					
Satd. Flow (perm)	423	3645	0	586	2577	1401	541	2880	0	2865	0	
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		1				103		37				
Link Speed (mph)		30			30			30		30		
Link Distance (ft)		317			345			672		414		
Travel Time (s)		7.2			7.8			15.3		9.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	11%	13%	0%	10%	18%	0%	0%	3%	4%	3%	13%	
Bus Blockages (#/hr)	0	0	6	0	6	0	0	0	0	0	0	
Parking (#/hr)		2										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	229	573	0	147	517	3	23	715	0	751	0	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right	
Median Width(ft)		10			10			12		12		
Link Offset(ft)		0			0			0		0		
Crosswalk Width(ft)		16			16			16		16		
Two way Left Turn Lane												
Headway Factor	1.39	1.34	1.39	1.33	1.24	1.22	1.22	1.22	1.22	1.28	1.28	
Turning Speed (mph)	15		9	15		9	15		9		9	
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		NA		
Protected Phases	7	4			8			2		6		1
Permitted Phases	4			8		6 7	2					
Minimum Split (s)	8.0	33.0		33.0	33.0		44.0	44.0		45.0		5.0
Total Split (s)	19.0	58.0		39.0	39.0		44.0	44.0		52.0		8.0
Total Split (%)	17.3%	52.7%		35.5%	35.5%		40.0%	40.0%		47.3%		7%
Yellow Time (s)	3.0	4.0		4.0	4.0		4.0	4.0		4.0		3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		2.0	2.0		2.0		0.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0		
Total Lost Time (s)	4.0	7.0		7.0	7.0		7.0	7.0		7.0		
Lead/Lag	Lead			Lag	Lag		Lag	Lag				Lead
Lead-Lag Optimize?												
Act Effct Green (s)	54.0	51.0		32.0	32.0	64.0	37.0	37.0		45.0		
Actuated g/C Ratio	0.49	0.46		0.29	0.29	0.58	0.34	0.34		0.41		
v/c Ratio	0.72	0.34		0.86	0.69	0.00	0.13	0.72		0.64		
Control Delay	32.0	19.4		52.8	18.3	0.0	27.7	35.1		24.0		
Queue Delay	0.5	0.0		0.0	0.3	0.0	0.0	0.0		1.2		
Total Delay	32.5	19.4		52.8	18.5	0.0	27.7	35.1		25.2		
LOS	C	B		D	B	A	C	D		C		

Lane Group	EBL	EBT	EBR	WBL	WBT	SBR2	NEL2	NET	NER	SWT	SWR	Ø1
Approach Delay		23.2			26.1			34.9		25.2		
Approach LOS		C			C			C		C		
Queue Length 50th (ft)	97	91		101	84	0	11	219		224		
Queue Length 95th (ft)	#171	120		m#192	m117	0	32	291		291		
Internal Link Dist (ft)		237			265			592		334		
Turn Bay Length (ft)	180						115					
Base Capacity (vph)	320	1690		170	749	858	181	993		1172		
Starvation Cap Reductn	0	0		0	28	0	0	0		215		
Spillback Cap Reductn	9	0		0	0	0	0	0		0		
Storage Cap Reductn	0	0		0	0	0	0	0		0		
Reduced v/c Ratio	0.74	0.34		0.86	0.72	0.00	0.13	0.72		0.78		

Intersection Summary	
Area Type:	CBD
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 109 (99%), Referenced to phase 1:Hold and 6:SWT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 27.3	Intersection LOS: C
Intersection Capacity Utilization 105.0%	ICU Level of Service G
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1: W. Columbus Ave. & W. 79th St. & S. Sawyer Ave.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	522	148	26	500	45	107	433	32	25	619	4
Future Volume (vph)	0	522	148	26	500	45	107	433	32	25	619	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	10	9	11	12	12	11	12	12	11	12
Storage Length (ft)	0		0	40		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		0
Taper Length (ft)	0			25			0			0		
Satd. Flow (prot)	0	2773	1206	1074	2541	0	0	2829	0	0	2849	0
Flt Permitted				0.439				0.581			0.906	
Satd. Flow (perm)	0	2773	1206	496	2541	0	0	1659	0	0	2587	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			161		9			7			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		345			652			563			245	
Travel Time (s)		7.8			14.8			12.8			5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	11%	4%	29%	16%	12%	3%	3%	10%	0%	3%	0%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	0	0	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	567	161	28	592	0	0	622	0	0	704	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.22	1.37	1.39	1.28	1.22	1.22	1.28	1.22	1.22	1.30	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases			4	8			2			6		
Minimum Split (s)		23.0	23.0	23.0	23.0		9.0	34.0		34.0	34.0	
Total Split (s)		54.0	54.0	44.0	44.0		11.0	56.0		45.0	45.0	
Total Split (%)		49.1%	49.1%	40.0%	40.0%		10.0%	50.9%		40.9%	40.9%	
Yellow Time (s)		4.0	4.0	4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)		1.0	1.0	1.0	1.0		0.0	2.0		2.0	2.0	
Lost Time Adjust (s)		1.0	1.0	1.0	1.0			1.0			1.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0			7.0			7.0	
Lead/Lag				Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?												
Act Effct Green (s)		48.0	48.0	38.0	38.0			49.0			38.0	
Actuated g/C Ratio		0.44	0.44	0.35	0.35			0.45			0.35	
v/c Ratio		0.47	0.26	0.16	0.67			0.79			0.79	
Control Delay		11.8	1.1	28.2	34.7			33.5			10.1	
Queue Delay		0.2	0.0	0.0	0.0			0.0			0.2	
Total Delay		12.0	1.1	28.2	34.7			33.5			10.3	
LOS		B	A	C	C			C			B	
Approach Delay		9.6			34.4			33.5			10.3	

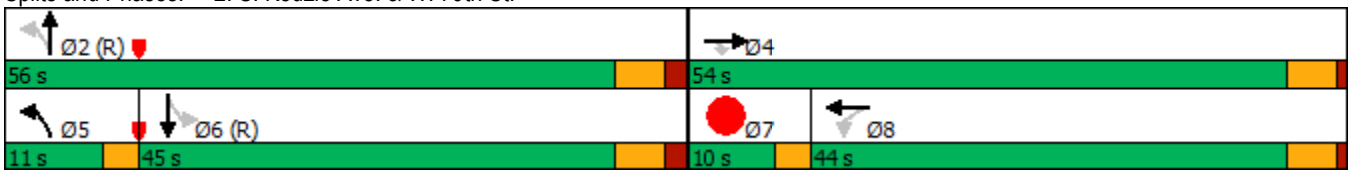
Lane Group	Ø7
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	7
Permitted Phases	
Minimum Split (s)	5.0
Total Split (s)	10.0
Total Split (%)	9%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A			C			C			B	
Queue Length 50th (ft)		68	0	14	183			158			38	
Queue Length 95th (ft)		87	m2	37	247			211			46	
Internal Link Dist (ft)		265			572			483			165	
Turn Bay Length (ft)				40								
Base Capacity (vph)		1210	617	171	883			785			894	
Starvation Cap Reductn		171	0	0	0			0			17	
Spillback Cap Reductn		0	0	0	3			0			0	
Storage Cap Reductn		0	0	0	0			0			0	
Reduced v/c Ratio		0.55	0.26	0.16	0.67			0.79			0.80	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 4 (4%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 21.1		Intersection LOS: C	
Intersection Capacity Utilization 88.7%		ICU Level of Service E	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: S. Kedzie Ave. & W. 79th St.



Lane Group	Ø7
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

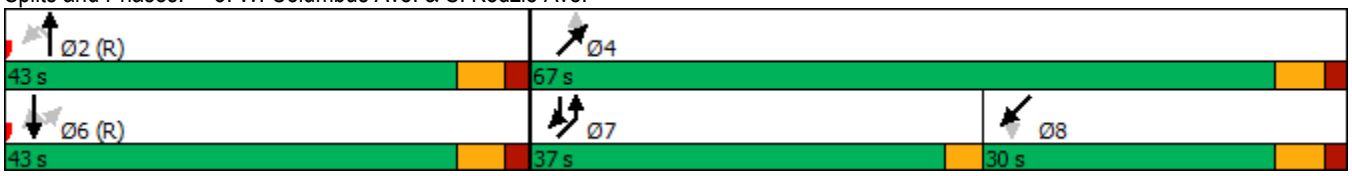
Intersection Summary

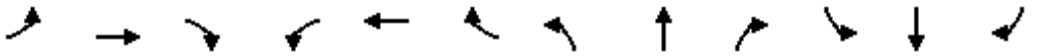
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	401	77	8	559	481	354	365	3	86	410	11
Future Volume (vph)	0	401	77	8	559	481	354	365	3	86	410	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	12	12	10	10	11	11	11	10	11	12
Storage Length (ft)	0		0	0		100	0		0	90		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	0			0			0			25		
Satd. Flow (prot)	0	2792	0	0	2742	1224	1417	2852	0	1422	2745	0
Flt Permitted					0.945		0.299			0.516		
Satd. Flow (perm)	0	2792	0	0	2594	1224	446	2852	0	772	2745	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				63		1			2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		245			494			414			680	
Travel Time (s)		5.6			11.2			9.4			15.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	4%	50%	4%	5%	5%	4%	33%	1%	8%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	520	0	0	617	523	385	400	0	93	458	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.28	1.22	1.22	1.33	1.33	1.28	1.28	1.28	1.33	1.28	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		Perm	NA	
Protected Phases		2			6	7	7	4			8	
Permitted Phases	2			6		6	4			8		
Minimum Split (s)	28.0	28.0		28.0	28.0	8.0	8.0	26.0		26.0	26.0	
Total Split (s)	43.0	43.0		43.0	43.0	37.0	37.0	67.0		30.0	30.0	
Total Split (%)	39.1%	39.1%		39.1%	39.1%	33.6%	33.6%	60.9%		27.3%	27.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0	3.0	3.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	0.0	0.0	2.0		2.0	2.0	
Lost Time Adjust (s)		1.0			1.0	1.0	1.0	1.0		1.0	1.0	
Total Lost Time (s)		7.0			7.0	4.0	4.0	7.0		7.0	7.0	
Lead/Lag						Lead	Lead			Lag	Lag	
Lead-Lag Optimize?												
Act Effct Green (s)		36.0			36.0	76.0	63.0	60.0		23.0	23.0	
Actuated g/C Ratio		0.33			0.33	0.69	0.57	0.55		0.21	0.21	
v/c Ratio		0.56			0.73	0.60	0.71	0.26		0.58	0.80	
Control Delay		14.0			38.6	11.3	23.7	14.6		55.0	52.6	
Queue Delay		2.8			0.8	0.0	1.8	0.0		0.0	0.0	
Total Delay		16.8			39.4	11.3	25.5	14.6		55.0	52.6	
LOS		B			D	B	C	B		E	D	
Approach Delay		16.8			26.5			19.9			53.0	
Approach LOS		B			C			B			D	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Queue Length 50th (ft)		35			201	152	210	110		60	162	
Queue Length 95th (ft)		m73			270	250	326	154		#126	#236	
Internal Link Dist (ft)		165			414			334			600	
Turn Bay Length (ft)						100				90		
Base Capacity (vph)		928			848	865	546	1556		161	575	
Starvation Cap Reductn		288			0	0	62	0		0	0	
Spillback Cap Reductn		0			63	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.81			0.79	0.60	0.80	0.26		0.58	0.80	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 28.0		Intersection LOS: C	
Intersection Capacity Utilization 84.9%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: W. Columbus Ave. & S. Kedzie Ave.





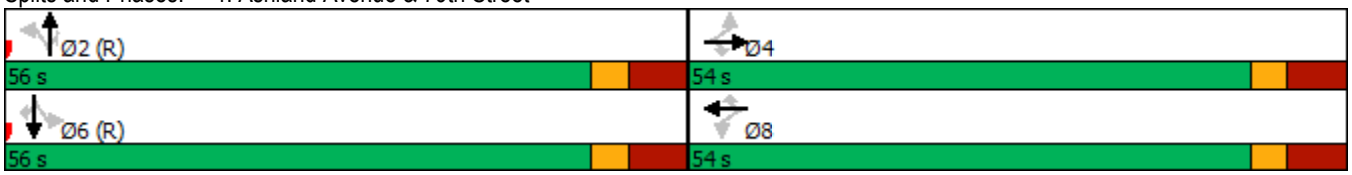
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	379	30	63	439	67	62	368	57	48	826	96
Future Volume (vph)	75	379	30	63	439	67	62	368	57	48	826	96
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	9	9	10	9	10	11	11	10	11	11
Storage Length (ft)	80		30	60		30	100		30	100		30
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1385	1072	1152	1345	1189	1110	1282	2400	880	1355	2394	816
Flt Permitted	0.328			0.397			0.222			0.514		
Satd. Flow (perm)	470	1072	1071	547	1189	1047	292	2400	760	684	2394	691
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50			50			50			50
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		666			1315			665			670	
Travel Time (s)		15.1			29.9			15.1			15.2	
Confl. Peds. (#/hr)	41		54	54		41	47		41	41		47
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	10%	5%	3%	10%	9%	12%	6%	4%	6%	5%	9%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	8	0	0	8
Parking (#/hr)		24			7			38	38		42	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	82	416	33	69	482	74	68	404	63	53	908	105
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.79	1.44	1.39	1.59	1.44	1.33	1.54	1.99	1.33	1.57	2.06
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	38.0	27.0	27.0	27.0	27.0	27.0	27.0
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	56.0	56.0	56.0	56.0	56.0	56.0
Total Split (%)	49.1%	49.1%	49.1%	49.1%	49.1%	49.1%	50.9%	50.9%	50.9%	50.9%	50.9%	50.9%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	45.0	45.0	45.0	45.0	45.0	45.0	47.0	47.0	47.0	47.0	47.0	47.0
Actuated g/C Ratio	0.41	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.43
v/c Ratio	0.43	0.95	0.07	0.31	0.99	0.16	0.55	0.39	0.18	0.18	0.89	0.33
Control Delay	31.9	65.0	3.1	26.9	72.5	9.7	43.5	23.1	8.6	21.7	41.3	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.9	65.0	3.1	26.9	72.5	9.7	43.5	23.1	8.6	21.7	41.3	14.6

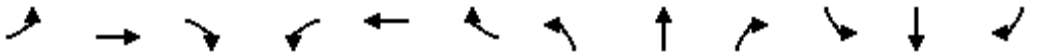
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	E	A	C	E	A	D	C	A	C	D	B
Approach Delay		56.1			60.0			24.0			37.7	
Approach LOS		E			E			C			D	
Queue Length 50th (ft)	41	279	0	32	333	10	35	101	5	23	304	24
Queue Length 95th (ft)	90	#483	12	71	#555	40	#101	143	33	52	#435	67
Internal Link Dist (ft)		586			1235			585			590	
Turn Bay Length (ft)	80		30	60		30	100		30	100		30
Base Capacity (vph)	192	438	467	223	486	457	124	1025	353	292	1022	323
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.95	0.07	0.31	0.99	0.16	0.55	0.39	0.18	0.18	0.89	0.33

Intersection Summary

Area Type: CBD
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 65 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 0.99
Intersection Signal Delay: 43.6 Intersection LOS: D
Intersection Capacity Utilization 124.7% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Ashland Avenue & 79th Street



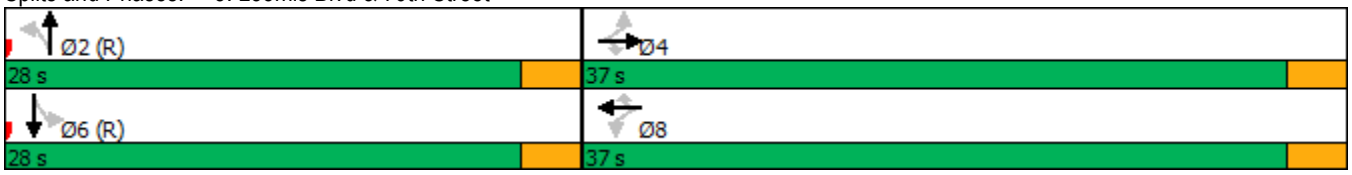


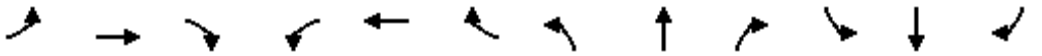
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	504	25	25	374	25	25	100	25	25	100	25
Future Volume (vph)	25	504	25	25	374	25	25	100	25	25	100	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	60		30	60		30	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			0			0		
Satd. Flow (prot)	1509	1429	1318	1509	1429	1350	0	1541	0	0	1541	0
Flt Permitted	0.438			0.320				0.946			0.946	
Satd. Flow (perm)	696	1429	1318	508	1429	1350	0	1469	0	0	1469	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			12			16		17			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1315			357			644			631	
Travel Time (s)		29.9			8.1			14.6			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Bus Blockages (#/hr)	0	0	6	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	548	27	27	407	27	0	163	0	0	163	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.26	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	17.0	17.0	17.0	17.0	17.0	17.0	18.0	18.0		18.0	18.0	
Total Split (s)	37.0	37.0	37.0	37.0	37.0	37.0	28.0	28.0		28.0	28.0	
Total Split (%)	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%	43.1%	43.1%		43.1%	43.1%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0			1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	33.0	33.0	33.0	33.0	33.0	33.0		24.0			24.0	
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51		0.37			0.37	
v/c Ratio	0.08	0.76	0.04	0.11	0.56	0.04		0.29			0.29	
Control Delay	9.0	21.5	6.1	9.7	14.8	5.4		14.7			14.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	9.0	21.5	6.1	9.7	14.8	5.4		14.7			14.7	
LOS	A	C	A	A	B	A		B			B	
Approach Delay		20.2			13.9			14.7			14.7	
Approach LOS		C			B			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	5	161	3	5	103	2		39			39	
Queue Length 95th (ft)	17	#330	13	18	181	13		81			81	
Internal Link Dist (ft)		1235			277			564			551	
Turn Bay Length (ft)	60		30	60		30						
Base Capacity (vph)	353	725	675	257	725	693		553			553	
Starvation Cap Reductn	0	0	0	0	0	0		0			0	
Spillback Cap Reductn	0	0	0	0	0	0		0			0	
Storage Cap Reductn	0	0	0	0	0	0		0			0	
Reduced v/c Ratio	0.08	0.76	0.04	0.11	0.56	0.04		0.29			0.29	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 16.8		Intersection LOS: B	
Intersection Capacity Utilization 50.6%		ICU Level of Service A	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: Loomis Blvd & 79th Street





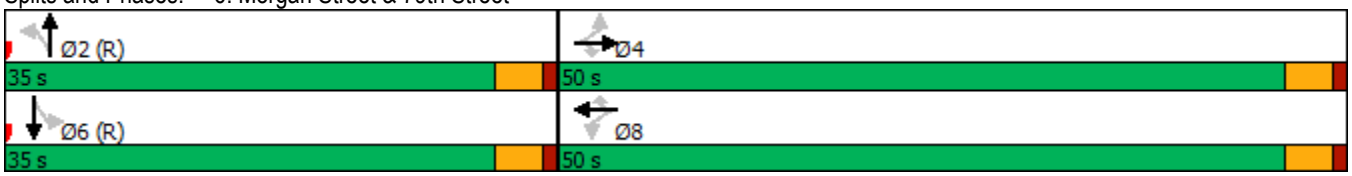
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	511	25	25	398	25	25	100	25	25	100	25
Future Volume (vph)	25	511	25	25	398	25	25	100	25	25	100	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	100		30	100		30	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			0			0		
Satd. Flow (prot)	1509	1429	1350	1509	1414	1350	0	1541	0	0	1541	0
Flt Permitted	0.424			0.326				0.940			0.940	
Satd. Flow (perm)	673	1429	1350	518	1414	1350	0	1460	0	0	1460	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			13			13		13			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		323			1321			593			659	
Travel Time (s)		7.3			30.0			13.5			15.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0			2							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	555	27	27	433	27	0	163	0	0	163	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.22	1.22	1.41	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	17.0	17.0	17.0	17.0	17.0	17.0	21.0	21.0		21.0	21.0	
Total Split (s)	50.0	50.0	50.0	50.0	50.0	50.0	35.0	35.0		35.0	35.0	
Total Split (%)	58.8%	58.8%	58.8%	58.8%	58.8%	58.8%	41.2%	41.2%		41.2%	41.2%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0			1.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	45.0	45.0	45.0	45.0	45.0	45.0		30.0			30.0	
Actuated g/C Ratio	0.53	0.53	0.53	0.53	0.53	0.53		0.35			0.35	
v/c Ratio	0.08	0.73	0.04	0.10	0.58	0.04		0.31			0.31	
Control Delay	10.6	22.6	6.7	5.0	8.4	1.7		20.4			20.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	10.6	22.6	6.7	5.0	8.4	1.7		20.4			20.4	
LOS	B	C	A	A	A	A		C			C	
Approach Delay		21.4			7.8			20.4			20.4	
Approach LOS		C			A			C			C	
Queue Length 50th (ft)	7	214	3	3	43	0		57			57	

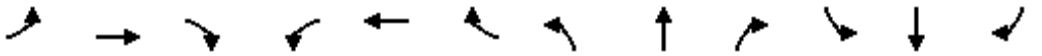
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	20	349	15	m4	m66	m1		107			107	
Internal Link Dist (ft)		243			1241			513			579	
Turn Bay Length (ft)	100		30	100		30						
Base Capacity (vph)	356	756	720	274	748	720		523			523	
Starvation Cap Reductn	0	0	0	0	0	0		0			0	
Spillback Cap Reductn	0	0	0	0	0	0		0			0	
Storage Cap Reductn	0	0	0	0	0	0		0			0	
Reduced v/c Ratio	0.08	0.73	0.04	0.10	0.58	0.04		0.31			0.31	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 80 (94%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 16.5		Intersection LOS: B	
Intersection Capacity Utilization 54.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Morgan Street & 79th Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	463	70	74	382	38	78	313	83	73	594	53
Future Volume (vph)	53	463	70	74	382	38	78	313	83	73	594	53
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	9	9	10	9	10	11	13	10	10	13
Storage Length (ft)	100		30	60		30	100		100	100		100
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1385	1155	1215	1385	1221	1203	1436	1520	1368	1395	1426	1355
Flt Permitted	0.400			0.302			0.193			0.504		
Satd. Flow (perm)	583	1155	1215	440	1221	1203	292	1520	1368	740	1426	1355
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			51			51			90			51
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1321			667			631			665	
Travel Time (s)		30.0			15.2			14.3			15.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	10%	2%	0%	9%	3%	0%	3%	4%	3%	6%	5%
Parking (#/hr)		12			4							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	58	503	76	80	415	41	85	340	90	79	646	58
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.64	1.39	1.39	1.56	1.39	1.33	1.28	1.18	1.33	1.33	1.18
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	27.0	27.0	27.0	27.0
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	44.0	44.0	44.0	44.0	44.0	44.0
Total Split (%)	48.2%	48.2%	48.2%	48.2%	48.2%	48.2%	51.8%	51.8%	51.8%	51.8%	51.8%	51.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	33.0	33.0	33.0	33.0	33.0	33.0	36.0	36.0	36.0	36.0	36.0	36.0
Actuated g/C Ratio	0.39	0.39	0.39	0.39	0.39	0.39	0.42	0.42	0.42	0.42	0.42	0.42
v/c Ratio	0.26	1.12	0.15	0.47	0.88	0.08	0.69	0.53	0.14	0.25	1.07	0.10
Control Delay	14.0	99.6	6.3	30.7	46.0	4.5	52.8	21.9	4.1	18.6	83.7	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.0	99.6	6.3	30.7	46.0	4.5	52.8	21.9	4.1	18.6	83.7	5.8
LOS	B	F	A	C	D	A	D	C	A	B	F	A
Approach Delay		80.7			40.5			23.9			71.4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		F			D			C			E	
Queue Length 50th (ft)	23	~320	17	31	201	0	36	131	0	26	~387	2
Queue Length 95th (ft)	m28	#514	m19	79	#375	16	#117	212	26	60	#590	24
Internal Link Dist (ft)		1241			587			551			585	
Turn Bay Length (ft)	100		30	60		30	100		100	100		100
Base Capacity (vph)	226	448	502	170	474	498	123	643	631	313	603	603
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	1.12	0.15	0.47	0.88	0.08	0.69	0.53	0.14	0.25	1.07	0.10

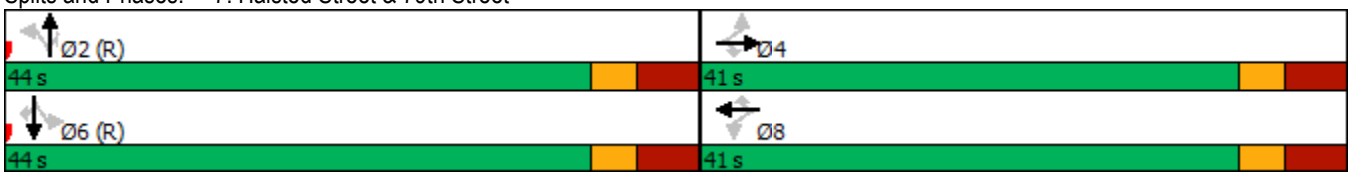
Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 40 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 57.2		Intersection LOS: E	
Intersection Capacity Utilization 127.7%		ICU Level of Service H	
Analysis Period (min) 15			

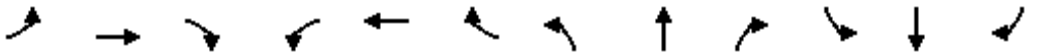
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Halsted Street & 79th Street



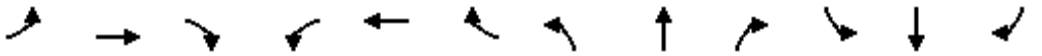


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	733	10	10	424	10	10	10	10	10	10	10
Future Volume (vph)	10	733	10	10	424	10	10	10	10	10	10	10
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	1425	0	0	1424	0	0	1492	0	0	1492	0
Flt Permitted		0.994			0.982			0.932			0.932	
Satd. Flow (perm)	0	1418	0	0	1399	0	0	1414	0	0	1414	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			3			11			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		558			495			173			227	
Travel Time (s)		12.7			11.3			3.9			5.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	819	0	0	483	0	0	33	0	0	33	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			-30	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.22	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	9.0	9.0		9.0	9.0		21.0	21.0		21.0	21.0	
Total Split (s)	62.0	62.0		62.0	62.0		23.0	23.0		23.0	23.0	
Total Split (%)	72.9%	72.9%		72.9%	72.9%		27.1%	27.1%		27.1%	27.1%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0			57.0			18.0			18.0	
Actuated g/C Ratio		0.67			0.67			0.21			0.21	
v/c Ratio		0.86			0.51			0.11			0.11	
Control Delay		22.7			4.7			21.4			21.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		22.7			4.7			21.4			21.4	
LOS		C			A			C			C	
Approach Delay		22.7			4.7			21.4			21.4	
Approach LOS		C			A			C			C	
Queue Length 50th (ft)		296			44			9			9	
Queue Length 95th (ft)		#606			68			33			33	
Internal Link Dist (ft)		478			415			93			147	
Turn Bay Length (ft)												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		951			939			308			308	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.86			0.51			0.11			0.11	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 17 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 16.3		Intersection LOS: B	
Intersection Capacity Utilization 74.1%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: 79th Street & 150 W.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	577	193	239	439	0	0	0	0	165	1110	77
Future Volume (vph)	0	577	193	239	439	0	0	0	0	165	1110	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	11	11	12	12	12	12	12	12	12	10	8
Storage Length (ft)	100		0	0		0	0		0	0		0
Storage Lanes	2		0	1		0	0		0	1		1
Taper Length (ft)	25			0			0			0		
Satd. Flow (prot)	0	4318	0	1494	2557	0	0	0	0	1203	3674	978
Flt Permitted				0.237						0.950	0.999	
Satd. Flow (perm)	0	4318	0	348	2557	0	0	0	0	1203	3674	949
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		92										103
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		330			322			676			495	
Travel Time (s)		7.5			7.3			15.4			11.3	
Confl. Peds. (#/hr)	5		130	130		5	20					20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	9%	19%	3%	8%	2%	2%	2%	2%	10%	6%	22%
Bus Blockages (#/hr)	0	0	0	0	15	0	0	0	0	0	0	0
Parking (#/hr)					10							
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	837	0	260	477	0	0	0	0	161	1225	84
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.28	1.28	1.28	1.22	1.40	1.22	1.22	1.22	1.22	1.22	1.33	1.46
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases				8						6		6
Minimum Split (s)		20.0		8.0	26.0					33.0	33.0	33.0
Total Split (s)		28.0		23.0	51.0					34.0	34.0	34.0
Total Split (%)		32.9%		27.1%	60.0%					40.0%	40.0%	40.0%
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	3.0
All-Red Time (s)		5.0		0.0	5.0					2.0	2.0	2.0
Lost Time Adjust (s)		1.0		1.0	1.0					1.0	1.0	1.0
Total Lost Time (s)		9.0		4.0	9.0					6.0	6.0	6.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Act Effct Green (s)		19.0		47.0	42.0					28.0	28.0	28.0
Actuated g/C Ratio		0.22		0.55	0.49					0.33	0.33	0.33
v/c Ratio		0.81		0.58	0.38					0.41	1.01	0.22
Control Delay		35.2		11.9	5.8					25.9	58.8	4.7
Queue Delay		0.0		0.2	0.0					0.0	0.0	0.0
Total Delay		35.2		12.0	5.8					25.9	58.8	4.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D		B	A					C	E	A
Approach Delay		35.2			8.0						52.1	
Approach LOS		D			A						D	
Queue Length 50th (ft)		83		52	56					76	~256	0
Queue Length 95th (ft)		m107		m83	m69					141	#364	23
Internal Link Dist (ft)		250			242			596			415	
Turn Bay Length (ft)												
Base Capacity (vph)		1036		448	1263					396	1210	381
Starvation Cap Reductn		0		14	0					0	0	0
Spillback Cap Reductn		0		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.81		0.60	0.38					0.41	1.01	0.22

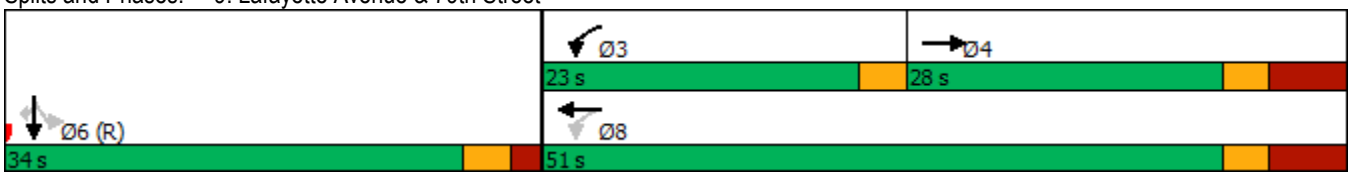
Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 36.8		Intersection LOS: D	
Intersection Capacity Utilization 70.0%		ICU Level of Service C	
Analysis Period (min) 15			

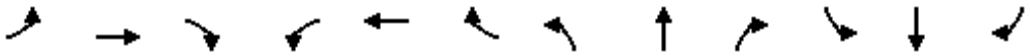
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Lafayette Avenue & 79th Street





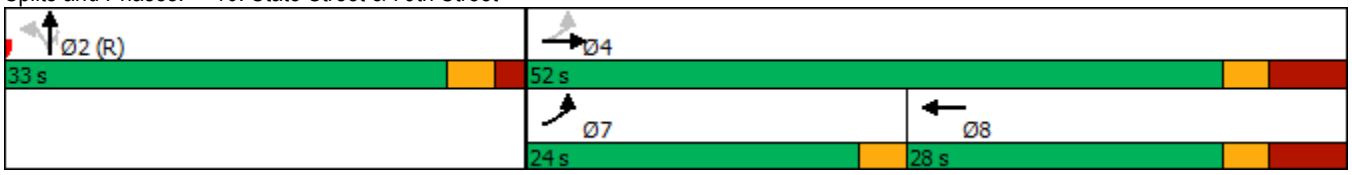
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	412	0	0	386	152	292	212	214	0	0	0
Future Volume (vph)	330	412	0	0	386	152	292	212	214	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	11	16	12	12	12
Satd. Flow (prot)	2927	2649	0	0	2733	0	1373	2741	1530	0	0	0
Flt Permitted	0.240						0.950	0.981				
Satd. Flow (perm)	689	2649	0	0	2733	0	1363	2733	1314	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					80				103			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		322			463			632			634	
Travel Time (s)		7.3			10.5			14.4			14.4	
Confl. Peds. (#/hr)	82		240	240		82	8		145	145		8
Peak Hour Factor	0.89	0.90	0.92	0.92	0.90	0.78	0.91	0.95	0.78	0.92	0.92	0.92
Bus Blockages (#/hr)	0	15	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		18										
Shared Lane Traffic (%)							45%					
Lane Group Flow (vph)	371	458	0	0	624	0	177	367	274	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.44	1.22	1.22	1.22	1.22	1.22	1.28	1.05	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4						2		2			
Minimum Split (s)	8.0	26.0			22.0		33.0	33.0	33.0			
Total Split (s)	24.0	52.0			28.0		33.0	33.0	33.0			
Total Split (%)	28.2%	61.2%			32.9%		38.8%	38.8%	38.8%			
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0	3.0			
All-Red Time (s)	0.0	5.0			5.0		2.0	2.0	2.0			
Lost Time Adjust (s)	1.0	1.0			1.0		1.0	1.0	1.0			
Total Lost Time (s)	4.0	9.0			9.0		6.0	6.0	6.0			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Act Effct Green (s)	48.0	43.0			19.0		27.0	27.0	27.0			
Actuated g/C Ratio	0.56	0.51			0.22		0.32	0.32	0.32			
v/c Ratio	0.41	0.34			0.93		0.41	0.42	0.56			
Control Delay	7.3	8.5			50.4		26.3	24.7	19.9			
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0			
Total Delay	7.3	8.5			50.4		26.3	24.7	19.9			
LOS	A	A			D		C	C	B			
Approach Delay		7.9			50.4			23.4				
Approach LOS		A			D			C				
Queue Length 50th (ft)	65	98			152		80	84	73			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	m71	m134			#258		143	125	117			
Internal Link Dist (ft)		242			383			552			554	
Turn Bay Length (ft)												
Base Capacity (vph)	915	1340			673		432	868	487			
Starvation Cap Reductn	0	0			0		0	0	0			
Spillback Cap Reductn	0	0			0		0	0	0			
Storage Cap Reductn	0	0			0		0	0	0			
Reduced v/c Ratio	0.41	0.34			0.93		0.41	0.42	0.56			

Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 43 (51%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 25.2		Intersection LOS: C	
Intersection Capacity Utilization 70.0%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: State Street & 79th Street

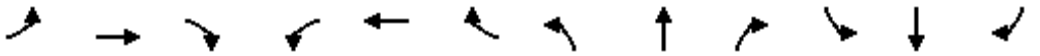


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	394	88	25	388	0	0	0	0	25	25	69
Future Volume (vph)	0	394	88	25	388	0	0	0	0	25	25	69
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		30	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	0			0			0			0		
Satd. Flow (prot)	0	1429	1339	0	1425	0	0	0	0	0	1450	0
Flt Permitted					0.963						0.990	
Satd. Flow (perm)	0	1429	1339	0	1377	0	0	0	0	0	1450	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			61								75	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		869			1306			665			683	
Travel Time (s)		19.8			29.7			15.1			15.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	428	96	0	449	0	0	0	0	0	129	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.24	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Minimum Split (s)		18.0	18.0	18.0	18.0					19.0	19.0	
Total Split (s)		42.0	42.0	42.0	42.0					23.0	23.0	
Total Split (%)		64.6%	64.6%	64.6%	64.6%					35.4%	35.4%	
Yellow Time (s)		3.0	3.0	3.0	3.0					3.0	3.0	
All-Red Time (s)		2.0	2.0	2.0	2.0					1.0	1.0	
Lost Time Adjust (s)		1.0	1.0		1.0						1.0	
Total Lost Time (s)		6.0	6.0		6.0						5.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		36.0	36.0		36.0						18.0	
Actuated g/C Ratio		0.55	0.55		0.55						0.28	
v/c Ratio		0.54	0.12		0.59						0.28	
Control Delay		12.5	3.8		4.6						10.9	
Queue Delay		0.0	0.0		0.0						0.0	
Total Delay		12.5	3.8		4.6						10.9	
LOS		B	A		A						B	
Approach Delay		10.9			4.6						10.9	
Approach LOS		B			A						B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		98	6		27						16	
Queue Length 95th (ft)		171	24		m34						54	
Internal Link Dist (ft)		789			1226			585			603	
Turn Bay Length (ft)			30									
Base Capacity (vph)		791	768		762						455	
Starvation Cap Reductn		0	0		0						0	
Spillback Cap Reductn		0	0		0						0	
Storage Cap Reductn		0	0		0						0	
Reduced v/c Ratio		0.54	0.13		0.59						0.28	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 32 (49%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 8.3		Intersection LOS: A	
Intersection Capacity Utilization 69.7%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 11: Indiana Avenue & 79th Street



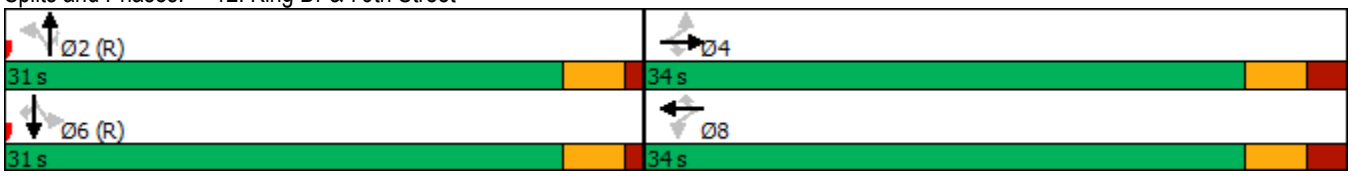
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	337	48	56	404	41	59	282	52	58	525	18
Future Volume (vph)	29	337	48	56	404	41	59	282	52	58	525	18
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	75		30	60		30	60		30	50		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	1156	1260	1408	1275	1260	1408	1482	1260	1408	1482	1260
Flt Permitted	0.400			0.476			0.223			0.507		
Satd. Flow (perm)	562	1156	1086	659	1275	1095	325	1482	1116	708	1482	1163
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			30			22			38			34
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1306			1333			676			668	
Travel Time (s)		29.7			30.3			15.4			15.2	
Confl. Peds. (#/hr)	73		78	78		73	36		59	59		36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		24			8							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	366	52	61	439	45	64	307	57	63	571	20
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.79	1.33	1.33	1.60	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (%)	52.3%	52.3%	52.3%	52.3%	52.3%	52.3%	47.7%	47.7%	47.7%	47.7%	47.7%	47.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	28.0	28.0	28.0	28.0	28.0	28.0	26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.43	0.43	0.43	0.43	0.43	0.43	0.40	0.40	0.40	0.40	0.40	0.40
v/c Ratio	0.13	0.74	0.11	0.22	0.80	0.09	0.49	0.52	0.12	0.22	0.96	0.04
Control Delay	5.9	20.0	3.0	9.7	25.8	3.8	31.0	18.6	7.1	15.5	51.7	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.9	20.0	3.0	9.7	25.8	3.8	31.0	18.6	7.1	15.5	51.7	3.3
LOS	A	B	A	A	C	A	C	B	A	B	D	A
Approach Delay		17.0			22.2			19.0			46.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			C			B			D	
Queue Length 50th (ft)	5	129	6	15	154	5	18	89	4	16	213	0
Queue Length 95th (ft)	m8	#260	m8	m31	#307	m11	#69	158	24	41	#408	8
Internal Link Dist (ft)		1226			1253			596			588	
Turn Bay Length (ft)	75		30	60		30	60		30	50		50
Base Capacity (vph)	242	497	484	283	549	484	130	592	469	283	592	485
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.74	0.11	0.22	0.80	0.09	0.49	0.52	0.12	0.22	0.96	0.04

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 28.1		Intersection LOS: C	
Intersection Capacity Utilization 109.8%		ICU Level of Service H	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: King Dr & 79th Street



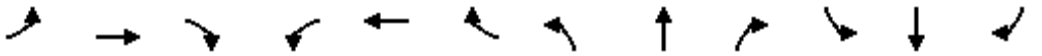
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	386	0	0	363	25	25	100	25	0	0	0
Future Volume (vph)	25	386	0	0	363	25	25	100	25	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		30	0		30	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	0			0			0			0		
Satd. Flow (prot)	0	1425	0	0	1429	1350	0	1541	0	0	0	0
Flt Permitted		0.967						0.992				
Satd. Flow (perm)	0	1382	0	0	1429	1350	0	1541	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						20		15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1333			660			688			650	
Travel Time (s)		30.3			15.0			15.6			14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	447	0	0	395	27	0	163	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.22	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Minimum Split (s)	16.0	16.0			16.0	16.0	17.0	17.0				
Total Split (s)	43.0	43.0			43.0	43.0	22.0	22.0				
Total Split (%)	66.2%	66.2%			66.2%	66.2%	33.8%	33.8%				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0	1.0	1.0	1.0				
Lost Time Adjust (s)		1.0			1.0	1.0		1.0				
Total Lost Time (s)		5.0			5.0	5.0		5.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		38.0			38.0	38.0		17.0				
Actuated g/C Ratio		0.58			0.58	0.58		0.26				
v/c Ratio		0.55			0.47	0.03		0.39				
Control Delay		6.0			10.1	3.4		21.3				
Queue Delay		0.0			0.0	0.0		0.0				
Total Delay		6.0			10.1	3.4		21.3				
LOS		A			B	A		C				
Approach Delay		6.0			9.7			21.3				
Approach LOS		A			A			C				
Queue Length 50th (ft)		38			80	1		48				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		m61			140	10		97				
Internal Link Dist (ft)		1253			580			608			570	
Turn Bay Length (ft)						30						
Base Capacity (vph)		807			835	797		414				
Starvation Cap Reductn		0			0	0		0				
Spillback Cap Reductn		0			0	0		0				
Storage Cap Reductn		0			0	0		0				
Reduced v/c Ratio		0.55			0.47	0.03		0.39				

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 32 (49%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 9.9		Intersection LOS: A	
Intersection Capacity Utilization 67.0%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: St Lawrence Avenue & 79th Street

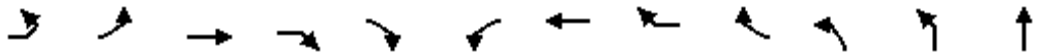


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	165	25	25	210	0	0	0	0	25	100	25
Future Volume (vph)	0	165	25	25	210	0	0	0	0	25	100	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	1404	0	0	1580	0	0	0	0	0	1541	0
Flt Permitted					0.962						0.992	
Satd. Flow (perm)	0	1404	0	0	1528	0	0	0	0	0	1541	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19									16	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		344			1665			665			649	
Travel Time (s)		7.8			37.8			15.1			14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	206	0	0	255	0	0	0	0	0	163	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Minimum Split (s)		16.0		16.0	16.0					17.0	17.0	
Total Split (s)		41.0		41.0	41.0					24.0	24.0	
Total Split (%)		63.1%		63.1%	63.1%					36.9%	36.9%	
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	
Lost Time Adjust (s)		1.0			1.0						1.0	
Total Lost Time (s)		5.0			5.0						5.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		36.0			36.0						19.0	
Actuated g/C Ratio		0.55			0.55						0.29	
v/c Ratio		0.26			0.30						0.35	
Control Delay		7.9			13.1						19.0	
Queue Delay		0.0			0.0						0.0	
Total Delay		7.9			13.1						19.0	
LOS		A			B						B	
Approach Delay		7.9			13.1						19.0	
Approach LOS		A			B						B	
Queue Length 50th (ft)		35			89						45	
Queue Length 95th (ft)		68			m93						92	
Internal Link Dist (ft)		264			1585			585			569	
Turn Bay Length (ft)												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		786			846						461	
Starvation Cap Reductn		0			0						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.26			0.30						0.35	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 32 (49%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 40			
Control Type: Pretimed			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 12.9		Intersection LOS: B	
Intersection Capacity Utilization 49.9%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 14: Kenwood Avenue & 79th Street



Lane Group	EBL2	EBL	EBT	EBR	EBR2	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT
Lane Configurations												
Traffic Volume (vph)	3	30	157	29	15	79	176	55	33	13	82	825
Future Volume (vph)	3	30	157	29	15	79	176	55	33	13	82	825
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)		100		100		175		150			90	
Storage Lanes		1		1		1		1			1	
Taper Length (ft)		25				25					25	
Satd. Flow (prot)	0	1509	1588	1350	0	1509	1342	1350	0	0	1509	4336
Flt Permitted		0.334				0.409					0.950	
Satd. Flow (perm)	0	530	1588	1350	0	650	1342	1350	0	0	1509	4336
Right Turn on Red					Yes				Yes			
Satd. Flow (RTOR)				134				134				
Link Speed (mph)			30				30					30
Link Distance (ft)			1665				377					254
Travel Time (s)			37.8				8.6					5.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)							11					
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	35	165	47	0	83	185	93	0	0	100	868
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Right	Left	Left	Right	Right	Left	Left	Left
Median Width(ft)			12				12					12
Link Offset(ft)			0				0					0
Crosswalk Width(ft)			16				16					16
Two way Left Turn Lane												
Headway Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.50	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15	15		9	9	15		9	9	15	15	
Turn Type	Perm	Perm	NA	Perm		Perm	NA	Perm		Prot	Prot	NA
Protected Phases			4				8			5	5	2
Permitted Phases	4	4		4		8		8				
Minimum Split (s)	21.0	21.0	21.0	21.0		21.0	21.0	21.0		8.0	8.0	34.0
Total Split (s)	21.0	21.0	21.0	21.0		21.0	21.0	21.0		11.0	11.0	49.0
Total Split (%)	16.2%	16.2%	16.2%	16.2%		16.2%	16.2%	16.2%		8.5%	8.5%	37.7%
Yellow Time (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0		2.0	2.0	2.0		0.0	0.0	3.0
Lost Time Adjust (s)		1.0	1.0	1.0		1.0	1.0	1.0			1.0	1.0
Total Lost Time (s)		6.0	6.0	6.0		6.0	6.0	6.0			4.0	8.0
Lead/Lag										Lead	Lead	Lag
Lead-Lag Optimize?												
Act Effct Green (s)		15.0	15.0	15.0		15.0	15.0	15.0			7.0	41.0
Actuated g/C Ratio		0.12	0.12	0.12		0.12	0.12	0.12			0.05	0.32
v/c Ratio		0.57	0.90	0.17		1.11	1.20	0.34			1.23	0.63
Control Delay		87.3	98.8	3.5		164.7	168.8	14.7			225.1	40.6
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0			0.0	0.0
Total Delay		87.3	98.8	3.5		164.7	168.8	14.7			225.1	40.6
LOS		F	F	A		F	F	B			F	D
Approach Delay			79.1				128.2					54.9
Approach LOS			E				F					D
Queue Length 50th (ft)		28	140	0		~82	~194	15			~104	228

Lane Group	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	SET	SER	SER2	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	83	3	26	152	1643	161	13	389	181	5	225	38
Future Volume (vph)	83	3	26	152	1643	161	13	389	181	5	225	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	130			0		0			0			0
Storage Lanes	2			1		1			0			0
Taper Length (ft)				0								
Satd. Flow (prot)	1350	0	0	1509	4336	1350	0	2870	0	0	2948	0
Flt Permitted				0.950								
Satd. Flow (perm)	1350	0	0	1509	4336	1350	0	2870	0	0	2948	0
Right Turn on Red		Yes					Yes			Yes		
Satd. Flow (RTOR)	117					92		1				
Link Speed (mph)					30			30			30	
Link Distance (ft)					675			738			886	
Travel Time (s)					15.3			16.8			20.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)												
Shared Lane Traffic (%)												
Lane Group Flow (vph)	90	0	0	187	1729	183	0	605	0	0	279	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Right	Right	Left	Left	Left	Right	Right	Left	Right	Right	Left	Right
Median Width(ft)					12			0			0	
Link Offset(ft)					0			0			0	
Crosswalk Width(ft)					16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	9	9	15	15		9	9		9	9		9
Turn Type	Perm		Prot	Prot	NA	Perm		NA			NA	
Protected Phases			1	1	6			10			14	
Permitted Phases	2					6						
Minimum Split (s)	34.0		8.0	8.0	45.0	45.0		31.0			31.0	
Total Split (s)	49.0		29.0	29.0	67.0	67.0		31.0			31.0	
Total Split (%)	37.7%		22.3%	22.3%	51.5%	51.5%		23.8%			23.8%	
Yellow Time (s)	4.0		3.0	3.0	4.0	4.0		4.0			4.0	
All-Red Time (s)	3.0		0.0	0.0	3.0	3.0		2.0			2.0	
Lost Time Adjust (s)	1.0			1.0	1.0	1.0		1.0			1.0	
Total Lost Time (s)	8.0			4.0	8.0	8.0		7.0			7.0	
Lead/Lag	Lag		Lead	Lead	Lag	Lag						
Lead-Lag Optimize?												
Act Effct Green (s)	41.0			25.0	59.0	59.0		24.0			24.0	
Actuated g/C Ratio	0.32			0.19	0.45	0.45		0.18			0.18	
v/c Ratio	0.18			0.64	0.88	0.28		1.14			0.51	
Control Delay	3.3			59.8	38.6	11.8		131.4			51.6	
Queue Delay	0.0			0.0	0.0	0.0		0.0			0.0	
Total Delay	3.3			59.8	38.6	11.8		131.4			51.6	
LOS	A			E	D	B		F			D	
Approach Delay					38.2			131.4			51.6	
Approach LOS					D			F			D	
Queue Length 50th (ft)	0			147	475	44		~313			112	

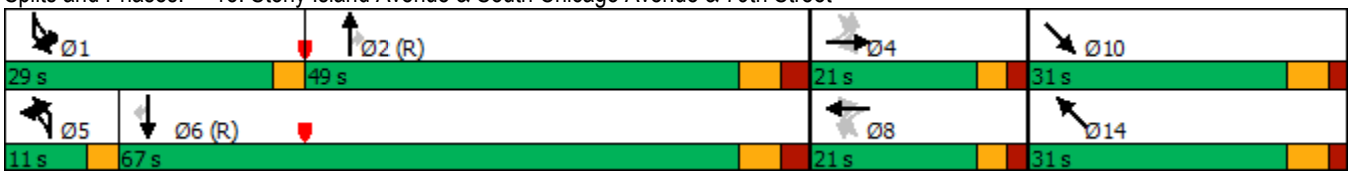
Lane Group	NWR2
Lane Configurations	
Traffic Volume (vph)	2
Future Volume (vph)	2
Ideal Flow (vphpl)	1800
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.95
Parking (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.22
Turning Speed (mph)	9
Turn Type	
Protected Phases	
Permitted Phases	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	

Lane Group	EBL2	EBL	EBT	EBR	EBR2	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT
Queue Length 95th (ft)		#82	#277	4		m#134	m#302	m28			#223	278
Internal Link Dist (ft)			1585				297					174
Turn Bay Length (ft)		100		100		175		150			90	
Base Capacity (vph)		61	183	274		75	154	274			81	1367
Starvation Cap Reductn		0	0	0		0	0	0			0	0
Spillback Cap Reductn		0	0	0		0	0	0			0	0
Storage Cap Reductn		0	0	0		0	0	0			0	0
Reduced v/c Ratio		0.57	0.90	0.17		1.11	1.20	0.34			1.23	0.63

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 125			
Control Type: Pretimed			
Maximum v/c Ratio: 1.23			
Intersection Signal Delay: 64.1		Intersection LOS: E	
Intersection Capacity Utilization 116.7%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 15: Stony Island Avenue & South Chicago Avenue & 79th Street

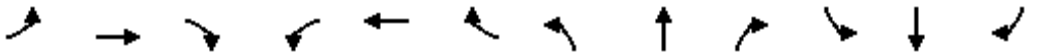


Lane Group	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	SET	SER	SER2	NWT	NWR
Queue Length 95th (ft)	23			231	548	96		#436			160	
Internal Link Dist (ft)					595			658			806	
Turn Bay Length (ft)	130											
Base Capacity (vph)	505			290	1967	662		530			544	
Starvation Cap Reductn	0			0	0	0		0			0	
Spillback Cap Reductn	0			0	0	0		0			0	
Storage Cap Reductn	0			0	0	0		0			0	
Reduced v/c Ratio	0.18			0.64	0.88	0.28		1.14			0.51	

Intersection Summary

Lane Group	NWR2
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



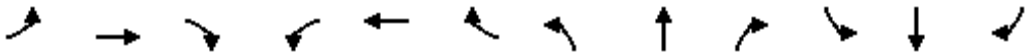
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	205	0	0	318	25	25	100	25	0	0	0
Future Volume (vph)	25	205	0	0	318	25	25	100	25	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	1417	0	0	1572	0	0	1541	0	0	0	0
Flt Permitted		0.936						0.992				
Satd. Flow (perm)	0	1333	0	0	1572	0	0	1541	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6			24				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			328			89			655	
Travel Time (s)		21.5			7.5			2.0			14.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Bus Blockages (#/hr)	0	1	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	250	0	0	373	0	0	163	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.40	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Minimum Split (s)	19.0	19.0			19.0		23.0	23.0				
Total Split (s)	25.0	25.0			25.0		40.0	40.0				
Total Split (%)	38.5%	38.5%			38.5%		61.5%	61.5%				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)		1.0			1.0			1.0				
Total Lost Time (s)		5.0			5.0			5.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		20.0			20.0			35.0				
Actuated g/C Ratio		0.31			0.31			0.54				
v/c Ratio		0.61			0.77			0.19				
Control Delay		30.6			32.9			7.3				
Queue Delay		0.0			0.0			0.0				
Total Delay		30.6			32.9			7.3				
LOS		C			C			A				
Approach Delay		30.6			32.9			7.3				
Approach LOS		C			C			A				
Queue Length 50th (ft)		117			130			26				
Queue Length 95th (ft)		m149			#258			53				
Internal Link Dist (ft)		866			248			9			575	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)		410			487			840				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.61			0.77			0.19				

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 26.8		Intersection LOS: C	
Intersection Capacity Utilization 61.4%		ICU Level of Service B	
Analysis Period (min) 15			

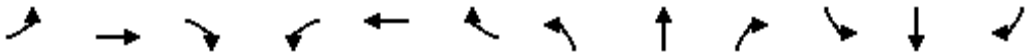
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: 79th Street & Cregier Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	540	0	0	419	0	8	0	28	29	0	5
Future Volume (vph)	0	540	0	0	419	0	8	0	28	29	0	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	1306	0	0	1274	0	0	1393	0	0	1434	0
Flt Permitted								0.989			0.962	
Satd. Flow (perm)	0	1306	0	0	1274	0	0	1393	0	0	1434	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		648			666			663			663	
Travel Time (s)		14.7			15.1			15.1			15.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.67	0.92	0.70	0.66	0.92	0.42
Heavy Vehicles (%)	2%	11%	2%	2%	10%	2%	0%	2%	4%	7%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	6	0	0	0	0	0	0
Parking (#/hr)		1			7							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	587	0	0	455	0	0	52	0	0	56	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.40	1.22	1.22	1.46	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	CBD		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.5%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	518	0	0	523	16	2	8	8	0	0	0
Future Volume (vph)	25	518	0	0	523	16	2	8	8	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	1311	0	0	1323	0	0	1515	0	0	0	0
Flt Permitted		0.996						0.993				
Satd. Flow (perm)	0	1311	0	0	1323	0	0	1515	0	0	0	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		667			332			660			661	
Travel Time (s)		15.2			7.5			15.0			15.0	
Peak Hour Factor	0.52	0.95	0.92	0.92	0.96	0.50	0.50	0.67	0.67	0.92	0.92	0.92
Heavy Vehicles (%)	8%	11%	2%	2%	10%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	593	0	0	577	0	0	28	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.22	1.22	1.39	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	CBD		
Control Type: Unsignalized			
Intersection Capacity Utilization 67.5%		ICU Level of Service C	
Analysis Period (min) 15			

Synchro Reports -

Existing Volumes

Existing Geometry

Optimized

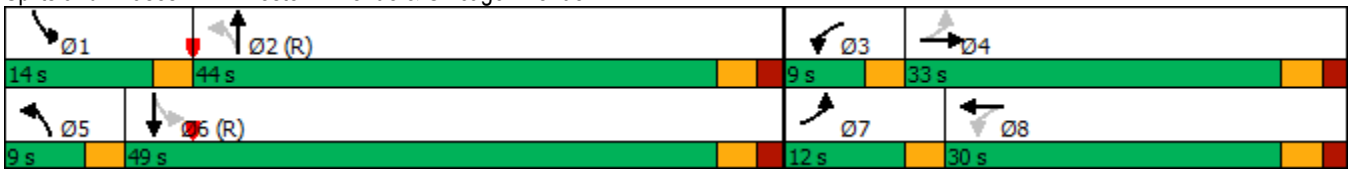
AM Reports

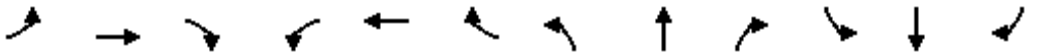
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	478	62	77	286	76	32	758	65	163	902	59
Future Volume (vph)	113	478	62	77	286	76	32	758	65	163	902	59
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	12	10	11	9	10	11	9
Storage Length (ft)	50		0	50		0	100		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1509	2488	0	1494	2571	0	1368	2739	0	1408	2792	0
Flt Permitted	0.399			0.337			0.187			0.179		
Satd. Flow (perm)	622	2488	0	507	2571	0	267	2739	0	265	2792	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			31			10			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		633			670			340			330	
Travel Time (s)		14.4			15.2			7.7			7.5	
Confl. Peds. (#/hr)	30		85	85		30	40		42	42		40
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	5%	6%	3%	8%	4%	5%	7%	3%	2%	5%	7%
Bus Blockages (#/hr)	0	6	6	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	568	0	81	381	0	34	866	0	172	1011	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.44	1.22	1.22	1.33	1.22	1.33	1.28	1.39	1.33	1.28	1.39
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	9.0	29.0		9.0	29.0		9.0	26.0		9.0	26.0	
Total Split (s)	12.0	33.0		9.0	30.0		9.0	44.0		14.0	49.0	
Total Split (%)	12.0%	33.0%		9.0%	30.0%		9.0%	44.0%		14.0%	49.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Act Effct Green (s)	37.0	27.0		31.0	24.0		45.0	38.0		54.0	43.0	
Actuated g/C Ratio	0.37	0.27		0.31	0.24		0.45	0.38		0.54	0.43	
v/c Ratio	0.40	0.83		0.39	0.60		0.19	0.83		0.67	0.84	
Control Delay	25.3	45.8		19.8	23.6		14.0	35.9		26.3	33.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	25.3	45.8		19.8	23.6		14.0	35.9		26.3	33.0	
LOS	C	D		B	C		B	D		C	C	
Approach Delay		42.3			23.0			35.0			32.0	
Approach LOS		D			C			D			C	
Queue Length 50th (ft)	50	175		24	57		10	256		55	293	
Queue Length 95th (ft)	92	#265		44	80		25	339		#104	385	
Internal Link Dist (ft)		553			590			260			250	
Turn Bay Length (ft)	50			50			100			100		
Base Capacity (vph)	301	681		206	640		175	1047		257	1205	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.40	0.83		0.39	0.60		0.19	0.83		0.67	0.84	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 92 (92%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 33.7		Intersection LOS: C	
Intersection Capacity Utilization 81.9%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Western Avenue & Chicago Avenue



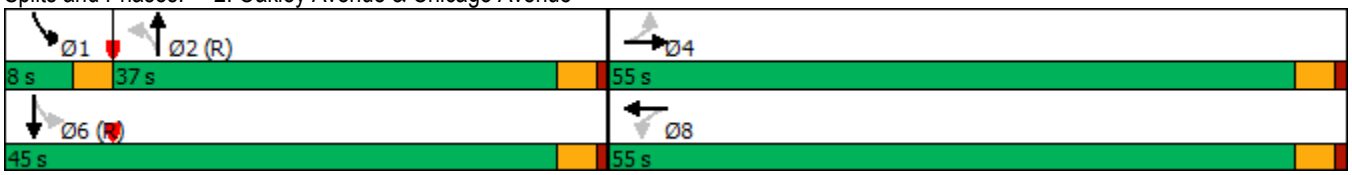


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	606	50	50	339	50	50	100	50	50	100	50
Future Volume (vph)	50	606	50	50	339	50	50	100	50	50	100	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	0		0	0		0	30		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2774	0	0	2752	0	0	1415	0	0	1415	0
Flt Permitted		0.882			0.802			0.876			0.890	
Satd. Flow (perm)	0	2457	0	0	2220	0	0	1254	0	0	1274	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			20			18			20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		670			631			329			347	
Travel Time (s)		15.2			14.3			7.5			7.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	744	0	0	463	0	0	211	0	0	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	15.0	15.0		15.0	15.0		22.0	22.0		8.0	22.0	
Total Split (s)	55.0	55.0		55.0	55.0		37.0	37.0		8.0	45.0	
Total Split (%)	55.0%	55.0%		55.0%	55.0%		37.0%	37.0%		8.0%	45.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		0.0	1.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?												
Act Effct Green (s)		50.0			50.0			32.0			40.0	
Actuated g/C Ratio		0.50			0.50			0.32			0.40	
v/c Ratio		0.60			0.41			0.51			0.40	
Control Delay		10.7			16.4			30.4			22.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		10.7			16.4			30.4			22.0	
LOS		B			B			C			C	
Approach Delay		10.7			16.4			30.4			22.0	
Approach LOS		B			B			C			C	
Queue Length 50th (ft)		83			89			99			83	
Queue Length 95th (ft)		m102			130			173			144	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		590			551			249			267	
Turn Bay Length (ft)												
Base Capacity (vph)		1234			1120			413			525	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.60			0.41			0.51			0.40	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 16.3		Intersection LOS: B	
Intersection Capacity Utilization 67.6%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: Oakley Avenue & Chicago Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	27	500	99	0	467	103	236	560	10	45	270	6
Future Volume (vph)	27	500	99	0	467	103	236	560	10	45	270	6
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	130		50	0		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2614	0	0	2606	0	1408	1482	1260	1408	1477	0
Flt Permitted	0.313						0.582			0.300		
Satd. Flow (perm)	454	2614	0	0	2606	0	845	1482	1169	435	1477	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			32				61		2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		426			207			537			178	
Travel Time (s)		9.7			4.7			12.2			4.0	
Confl. Peds. (#/hr)	38		59			38	36		71	71		36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	18	18	0	18	18	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	630	0	0	600	0	248	589	11	47	290	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.39	1.33	1.33	1.39	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4						6		6	2		
Minimum Split (s)	8.0	8.0			35.0		39.0	39.0	39.0	39.0	39.0	
Total Split (s)	28.0	28.0			38.0		52.0	52.0	52.0	52.0	52.0	
Total Split (%)	31.1%	31.1%			42.2%		57.8%	57.8%	57.8%	57.8%	57.8%	
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	0.0			2.0		5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0			1.0		1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	4.0	4.0			6.0		9.0	9.0	9.0	9.0	9.0	
Lead/Lag	Lead	Lead										
Lead-Lag Optimize?	Yes	Yes										
Act Effct Green (s)	24.0	24.0			32.0		43.0	43.0	43.0	43.0	43.0	
Actuated g/C Ratio	0.27	0.27			0.36		0.48	0.48	0.48	0.48	0.48	
v/c Ratio	0.23	0.88			0.63		0.62	0.83	0.02	0.23	0.41	
Control Delay	31.8	46.1			11.2		25.5	32.8	0.1	10.0	10.0	
Queue Delay	0.0	0.0			0.2		0.0	1.4	0.0	0.8	1.3	
Total Delay	31.8	46.1			11.4		25.5	34.3	0.1	10.8	11.4	
LOS	C	D			B		C	C	A	B	B	
Approach Delay		45.4			11.4			31.3			11.3	
Approach LOS		D			B			C			B	

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Bus Blockages (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Minimum Split (s)	10.0
Total Split (s)	10.0
Total Split (%)	11%
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

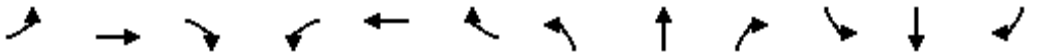
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Queue Length 50th (ft)	12	174			139		100	279	0	11	70	
Queue Length 95th (ft)	37	#274			198		188	#482	0	m23	101	
Internal Link Dist (ft)		346			127			457			98	
Turn Bay Length (ft)	50						130		50			
Base Capacity (vph)	121	715			947		403	708	590	207	706	
Starvation Cap Reductn	0	0			45		0	0	0	54	239	
Spillback Cap Reductn	0	0			0		0	33	0	0	0	
Storage Cap Reductn	0	0			0		0	0	0	0	0	
Reduced v/c Ratio	0.23	0.88			0.67		0.62	0.87	0.02	0.31	0.62	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 87 (97%), Referenced to phase 2:NWTL and 6:SETL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 27.4		Intersection LOS: C	
Intersection Capacity Utilization 105.4%		ICU Level of Service G	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: Milwaukee Avenue & Chicago Avenue

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	658	0	204	550	3	0	92	368	29	110	26
Future Volume (vph)	31	658	0	204	550	3	0	92	368	29	110	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	50		0	0		0	50		50
Storage Lanes	1		0	1		0	0		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2816	0	1408	2812	0	0	1482	1260	1408	1482	1260
Flt Permitted	0.359			0.388						0.694		
Satd. Flow (perm)	506	2816	0	562	2812	0	0	1482	1218	1009	1482	1198
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1				220			97
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		207			1872			137			461	
Travel Time (s)		4.7			42.5			3.1			10.5	
Confl. Peds. (#/hr)	90			73		90			18	18		31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	693	0	215	582	0	0	97	387	31	116	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8					2	6		6
Minimum Split (s)	40.0	40.0		13.0	13.0			27.0	27.0	27.0	27.0	27.0
Total Split (s)	60.0	60.0		52.0	52.0			30.0	30.0	30.0	30.0	30.0
Total Split (%)	66.7%	66.7%		57.8%	57.8%			33.3%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	6.0	6.0	6.0
Lead/Lag				Lag	Lag							
Lead-Lag Optimize?												
Act Effct Green (s)	51.0	51.0		43.0	43.0			24.0	24.0	24.0	24.0	24.0
Actuated g/C Ratio	0.57	0.57		0.48	0.48			0.27	0.27	0.27	0.27	0.27
v/c Ratio	0.12	0.43		0.80	0.43			0.25	0.80	0.12	0.29	0.07
Control Delay	4.7	5.7		45.1	16.7			24.7	36.7	26.4	28.8	0.3
Queue Delay	0.0	1.3		16.9	0.3			82.5	64.0	0.0	0.2	0.0
Total Delay	4.7	7.0		62.0	17.0			107.1	100.8	26.4	28.9	0.3
LOS	A	A		E	B			F	F	C	C	A
Approach Delay		6.9			29.2			102.0			24.0	
Approach LOS		A			C			F			C	
Queue Length 50th (ft)	5	63		99	110			59	196	13	53	0

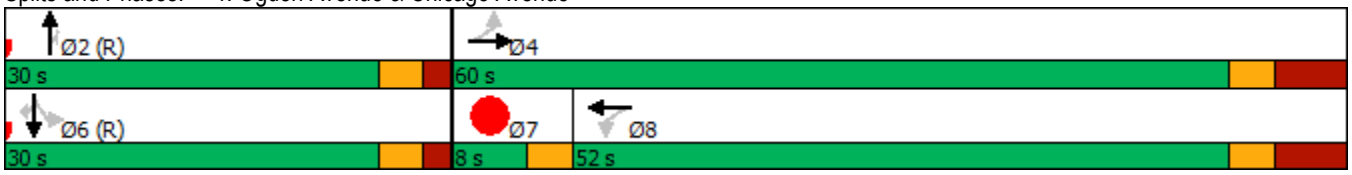
Lane Group	Ø7
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	7
Permitted Phases	
Minimum Split (s)	8.0
Total Split (s)	8.0
Total Split (%)	9%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	m5	m61		#235	153			m86	#319	36	99	0
Internal Link Dist (ft)		127			1792			57			381	
Turn Bay Length (ft)				50						50		50
Base Capacity (vph)	286	1595		268	1344			395	486	269	395	390
Starvation Cap Reductn	0	652		0	0			310	317	0	0	0
Spillback Cap Reductn	0	0		44	279			0	0	0	38	9
Storage Cap Reductn	0	0		0	0			0	0	0	0	0
Reduced v/c Ratio	0.12	0.73		0.96	0.55			1.14	2.29	0.12	0.32	0.07

Intersection Summary			
Area Type:	CBD		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 89 (99%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 37.5		Intersection LOS: D	
Intersection Capacity Utilization 91.0%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Ogden Avenue & Chicago Avenue



Lane Group	Ø7
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	118	443	63	14	307	0	0	520	121	80	195	10
Future Volume (vph)	118	443	63	14	307	0	0	520	121	80	195	10
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	110		0	0		0	0		0	90		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2700	0	1408	2816	0	0	1482	1260	1408	1464	0
Flt Permitted	0.556			0.323						0.280		
Satd. Flow (perm)	683	2700	0	451	2816	0	0	1482	1177	407	1464	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17							127		4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		514			137			178			729	
Travel Time (s)		11.7			3.1			4.0			16.6	
Confl. Peds. (#/hr)	169		63	63					53	53		100
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	532	0	15	323	0	0	547	127	84	216	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6					4	8		
Minimum Split (s)	25.0	25.0		25.0	25.0			31.0	31.0	8.0	8.0	
Total Split (s)	34.0	34.0		40.0	40.0			50.0	50.0	40.0	40.0	
Total Split (%)	37.8%	37.8%		44.4%	44.4%			55.6%	55.6%	44.4%	44.4%	
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	0.0	0.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	4.0	4.0	
Lead/Lag	Lag	Lag								Lead	Lead	
Lead-Lag Optimize?	Yes	Yes								Yes	Yes	
Act Effct Green (s)	25.0	25.0		31.0	31.0			44.0	44.0	36.0	36.0	
Actuated g/C Ratio	0.28	0.28		0.34	0.34			0.49	0.49	0.40	0.40	
v/c Ratio	0.66	0.70		0.10	0.33			0.76	0.20	0.52	0.37	
Control Delay	47.6	33.9		19.6	20.1			9.5	0.4	34.3	20.9	
Queue Delay	0.9	18.8		0.9	37.1			5.5	1.8	0.0	0.0	
Total Delay	48.5	52.7		20.6	57.2			15.1	2.1	34.3	20.9	
LOS	D	D		C	E			B	A	C	C	
Approach Delay		51.9			55.6			12.6			24.7	
Approach LOS		D			E			B			C	
Queue Length 50th (ft)	62	137		4	58			50	0	35	83	

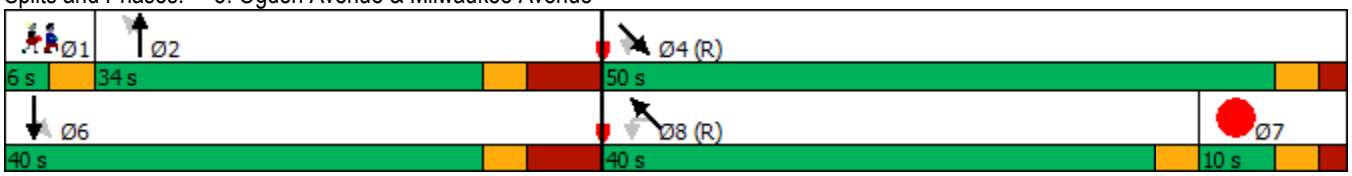
Lane Group	Ø1	Ø7
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	7
Permitted Phases		
Minimum Split (s)	6.0	10.0
Total Split (s)	6.0	10.0
Total Split (%)	7%	11%
Yellow Time (s)	3.0	3.0
All-Red Time (s)	0.0	2.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Queue Length 95th (ft)	#145	196		m9	m78			m60	m0	89	141	
Internal Link Dist (ft)		434			57			98			649	
Turn Bay Length (ft)	110									90		
Base Capacity (vph)	189	762		155	969			724	640	162	588	
Starvation Cap Reductn	0	0		69	657			124	381	0	0	
Spillback Cap Reductn	8	228		0	0			0	0	0	6	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.69	1.00		0.17	1.04			0.91	0.49	0.52	0.37	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 4:SET and 8:NWTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 34.9		Intersection LOS: C	
Intersection Capacity Utilization 92.1%		ICU Level of Service F	
Analysis Period (min) 15			

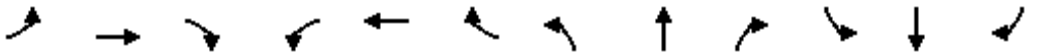
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Ogden Avenue & Milwaukee Avenue



Lane Group	Ø1	Ø7
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	237	770	13	58	567	108	40	399	105	138	445	222
Future Volume (vph)	237	770	13	58	567	108	40	399	105	138	445	222
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	80		0	80		0	95		0	80		260
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1342	2684	0	1368	2648	0	1064	2494	0	1131	2542	1168
Flt Permitted	0.347			0.291			0.453			0.403		
Satd. Flow (perm)	477	2684	0	408	2648	0	495	2494	0	476	2542	1023
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			45			51				134
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1872			743			718			744	
Travel Time (s)		42.5			16.9			16.3			16.9	
Confl. Peds. (#/hr)	102		123	123		102	57		18	18		57
Confl. Bikes (#/hr)			137			11			2			103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	6%	31%	5%	4%	6%	35%	12%	7%	27%	13%	10%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	249	825	0	61	711	0	42	531	0	145	468	234
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Minimum Split (s)	33.0	33.0		33.0	33.0		29.0	29.0		29.0	29.0	29.0
Total Split (s)	41.0	41.0		41.0	41.0		29.0	29.0		29.0	29.0	29.0
Total Split (%)	58.6%	58.6%		58.6%	58.6%		41.4%	41.4%		41.4%	41.4%	41.4%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	35.0	35.0		35.0	35.0		23.0	23.0		23.0	23.0	23.0
Actuated g/C Ratio	0.50	0.50		0.50	0.50		0.33	0.33		0.33	0.33	0.33
v/c Ratio	1.05	0.61		0.30	0.53		0.26	0.62		0.93	0.56	0.55
Control Delay	94.5	15.1		15.3	12.8		22.4	21.6		84.7	22.5	14.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	94.5	15.1		15.3	12.8		22.4	21.6		84.7	22.5	14.2
LOS	F	B		B	B		C	C		F	C	B
Approach Delay		33.5			13.0			21.7			30.8	

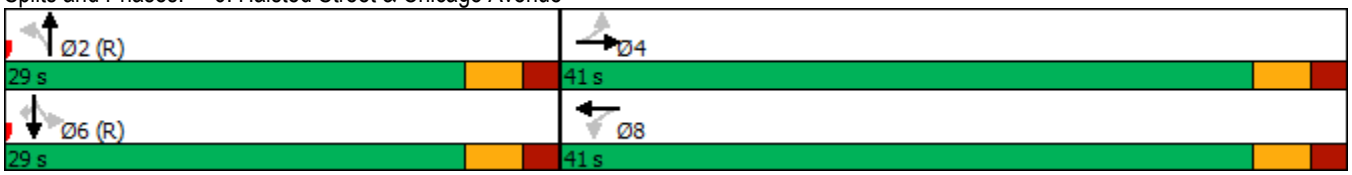
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			B			C			C	
Queue Length 50th (ft)	~119	125		14	95		13	90		59	86	32
Queue Length 95th (ft)	#250	181		42	141		38	140		#165	131	98
Internal Link Dist (ft)		1792			663			638			664	
Turn Bay Length (ft)	80			80			95			80		260
Base Capacity (vph)	238	1343		204	1346		162	853		156	835	426
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.05	0.61		0.30	0.53		0.26	0.62		0.93	0.56	0.55

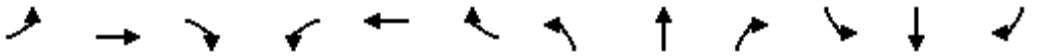
Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 25.9		Intersection LOS: C	
Intersection Capacity Utilization 108.9%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Halsted Street & Chicago Avenue



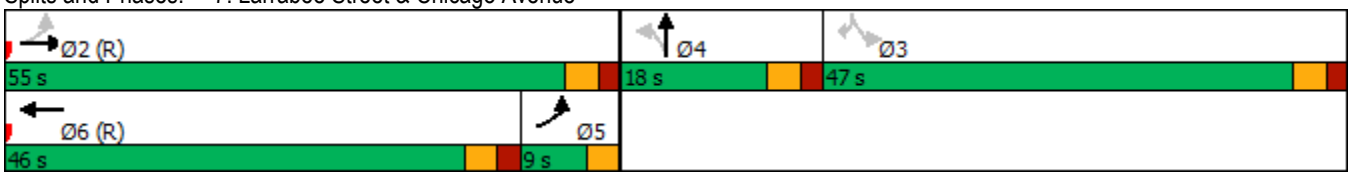


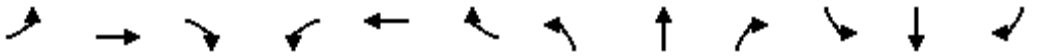
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	780	0	0	570	195	45	65	20	360	0	190
Future Volume (vph)	205	780	0	0	570	195	45	65	20	360	0	190
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2816	0	0	2224	0	0	1353	0	1408	0	1260
Flt Permitted	0.207							0.983		0.670		
Satd. Flow (perm)	278	2816	0	0	2224	0	0	1101	0	905	0	828
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					42			6				200
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		200			361			360			481	
Travel Time (s)		4.5			8.2			8.2			10.9	
Confl. Peds. (#/hr)	294		323	323		294	514		122	122		514
Confl. Bikes (#/hr)			67			9			12			24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	0	0	11	11	0	0	0	0	0	0
Parking (#/hr)					0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	216	821	0	0	805	0	0	136	0	379	0	200
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.46	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA		Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2						4			3		3
Minimum Split (s)	8.0	26.0			26.0		12.0	12.0		14.0		14.0
Total Split (s)	9.0	55.0			46.0		18.0	18.0		47.0		47.0
Total Split (%)	7.5%	45.8%			38.3%		15.0%	15.0%		39.2%		39.2%
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
All-Red Time (s)	0.0	2.0			2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)	1.0	1.0			1.0			1.0		1.0		1.0
Total Lost Time (s)	4.0	6.0			6.0			6.0		6.0		6.0
Lead/Lag	Lag				Lead		Lead	Lead		Lag		Lag
Lead-Lag Optimize?	Yes				Yes		Yes	Yes		Yes		Yes
Act Effct Green (s)	51.0	49.0			40.0			12.0		41.0		41.0
Actuated g/C Ratio	0.42	0.41			0.33			0.10		0.34		0.34
v/c Ratio	1.31	0.71			1.05			1.18		1.23		0.48
Control Delay	210.5	33.9			71.0			185.9		162.7		8.2
Queue Delay	0.0	0.0			5.0			0.0		0.0		0.0
Total Delay	210.5	33.9			76.0			185.9		162.7		8.2
LOS	F	C			E			F		F		A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		70.7			76.0			185.9			109.3	
Approach LOS		E			E			F			F	
Queue Length 50th (ft)	~157	275			~303			~122		~362		0
Queue Length 95th (ft)	#287	352			#470			#255		#555		61
Internal Link Dist (ft)		120			281			280			401	
Turn Bay Length (ft)	50											
Base Capacity (vph)	165	1149			769			115		309		414
Starvation Cap Reductn	0	0			10			0		0		0
Spillback Cap Reductn	0	0			0			0		0		0
Storage Cap Reductn	0	0			0			0		0		0
Reduced v/c Ratio	1.31	0.71			1.06			1.18		1.23		0.48

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 116 (97%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.31			
Intersection Signal Delay: 87.2		Intersection LOS: F	
Intersection Capacity Utilization 83.9%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Larrabee Street & Chicago Avenue



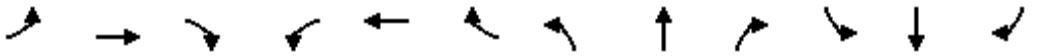


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	790	335	65	650	5	115	5	75	30	10	10
Future Volume (vph)	5	790	335	65	650	5	115	5	75	30	10	10
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	65		0	65		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2264	0	1408	2802	0	0	1352	0	1408	1315	0
Flt Permitted	0.390			0.164				0.806		0.616		
Satd. Flow (perm)	454	2264	0	243	2802	0	0	1092	0	907	1315	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		100			1			25			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		361			1193			355			175	
Travel Time (s)		8.2			27.1			8.1			4.0	
Confl. Peds. (#/hr)	211		139	139		211	30		7	7		30
Confl. Bikes (#/hr)			56			9			1			29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1185	0	68	689	0	0	205	0	32	22	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	20.0	20.0		8.0	20.0		27.0	27.0		27.0	27.0	
Total Split (s)	78.0	78.0		8.0	86.0		34.0	34.0		34.0	34.0	
Total Split (%)	65.0%	65.0%		6.7%	71.7%		28.3%	28.3%		28.3%	28.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		0.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0		1.0	1.0	
Total Lost Time (s)	5.0	5.0		4.0	5.0			5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Act Effct Green (s)	73.0	73.0		82.0	81.0			29.0		29.0	29.0	
Actuated g/C Ratio	0.61	0.61		0.68	0.68			0.24		0.24	0.24	
v/c Ratio	0.02	0.84		0.33	0.36			0.73		0.15	0.07	
Control Delay	3.0	8.9		9.1	9.3			52.8		38.0	23.5	
Queue Delay	0.0	0.1		0.0	0.0			0.1		0.0	0.0	
Total Delay	3.0	9.0		9.1	9.4			52.9		38.0	23.5	
LOS	A	A		A	A			D		D	C	
Approach Delay		9.0			9.4			52.9			32.1	
Approach LOS		A			A			D			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	0	114		19	179			130		20	7	
Queue Length 95th (ft)	m0	m123		m33	233			#242		48	29	
Internal Link Dist (ft)		281			1113			275			95	
Turn Bay Length (ft)	65			65								
Base Capacity (vph)	276	1416		204	1891			282		219	326	
Starvation Cap Reductn	0	10		0	0			0		0	0	
Spillback Cap Reductn	0	0		0	173			1		0	0	
Storage Cap Reductn	0	0		0	0			0		0	0	
Reduced v/c Ratio	0.02	0.84		0.33	0.40			0.73		0.15	0.07	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 100 (83%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 76.2%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 8: Kingsbury Street & Chicago Avenue

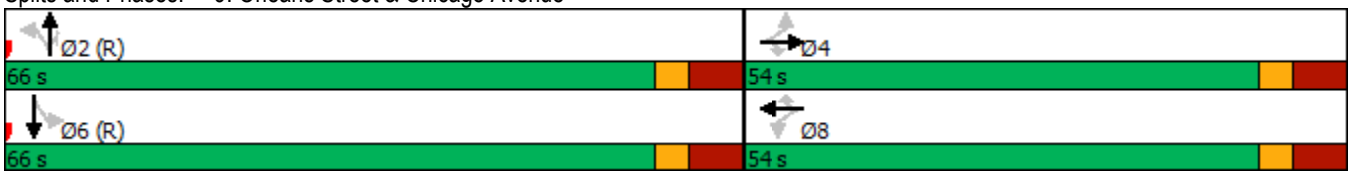


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	765	40	70	575	30	85	465	175	140	485	90
Future Volume (vph)	50	765	40	70	575	30	85	465	175	140	485	90
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	95		30	95		30	50		0	50		110
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2676	1144	1408	2676	1260	1408	1482	1260	1408	2668	0
Flt Permitted	0.356			0.239			0.389			0.362		
Satd. Flow (perm)	430	2676	731	331	2676	557	538	1482	1025	505	2668	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			45			45			45		24	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1193			406			352			306	
Travel Time (s)		27.1			9.2			8.0			7.0	
Confl. Peds. (#/hr)	206		258	258		206	106		107	107		106
Confl. Bikes (#/hr)			29			7			8			15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	23	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	805	42	74	605	32	89	489	184	147	606	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.50	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	30.0	30.0	30.0	30.0	30.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	66.0	66.0	66.0	66.0	66.0	
Total Split (%)	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	55.0%	55.0%	55.0%	55.0%	55.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	45.0	45.0	45.0	45.0	45.0	45.0	57.0	57.0	57.0	57.0	57.0	
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38	0.38	0.48	0.48	0.48	0.48	0.48	
v/c Ratio	0.33	0.80	0.14	0.60	0.60	0.14	0.35	0.70	0.36	0.62	0.47	
Control Delay	23.3	30.5	5.6	40.4	23.0	5.0	24.8	31.2	17.1	36.8	21.9	
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	23.3	30.5	5.6	40.4	23.3	5.0	24.8	31.2	17.1	36.8	21.9	
LOS	C	C	A	D	C	A	C	C	B	D	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		28.9			24.3			27.0			24.8	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	28	321	3	19	80	0	42	289	65	82	156	
Queue Length 95th (ft)	m34	396	m7	#117	140	m7	88	421	122	167	207	
Internal Link Dist (ft)		1113			326			272			226	
Turn Bay Length (ft)	95		30	95		30	50			50		
Base Capacity (vph)	161	1003	302	124	1003	237	255	703	510	239	1279	
Starvation Cap Reductn	0	0	0	0	87	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.33	0.80	0.14	0.60	0.66	0.14	0.35	0.70	0.36	0.62	0.47	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 102 (85%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 26.4		Intersection LOS: C	
Intersection Capacity Utilization 116.0%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Orleans Street & Chicago Avenue

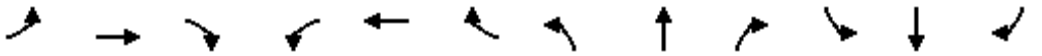


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	950	52	34	670	13	32	44	38	10	53	21
Future Volume (vph)	9	950	52	34	670	13	32	44	38	10	53	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	2536	0	0	2578	0	0	1252	0	0	1288	0
Flt Permitted		0.948			0.846			0.900			0.965	
Satd. Flow (perm)	0	2401	0	0	2185	0	0	1043	0	0	1215	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			3			19			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		406			399			394			261	
Travel Time (s)		9.2			9.1			9.0			5.9	
Confl. Peds. (#/hr)	120		461	461		120	260		182	182		260
Confl. Bikes (#/hr)			13			2			1			3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	0	0	11	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1064	0	0	755	0	0	120	0	0	89	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.46	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	17.0	17.0		17.0	17.0		26.0	26.0		18.0	18.0	
Total Split (s)	83.0	83.0		83.0	83.0		37.0	37.0		37.0	37.0	
Total Split (%)	69.2%	69.2%		69.2%	69.2%		30.8%	30.8%		30.8%	30.8%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		77.0			77.0			31.0			31.0	
Actuated g/C Ratio		0.64			0.64			0.26			0.26	
v/c Ratio		0.69			0.54			0.42			0.28	
Control Delay		7.3			2.5			36.4			32.9	
Queue Delay		1.4			1.0			0.0			0.0	
Total Delay		8.7			3.5			36.4			32.9	
LOS		A			A			D			C	
Approach Delay		8.7			3.5			36.4			32.9	
Approach LOS		A			A			D			C	
Queue Length 50th (ft)		76			11			65			47	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		113			14			126			95	
Internal Link Dist (ft)		326			319			314			181	
Turn Bay Length (ft)												
Base Capacity (vph)		1543			1403			283			323	
Starvation Cap Reductn		274			383			0			0	
Spillback Cap Reductn		86			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.84			0.74			0.42			0.28	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 6 (5%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 9.5		Intersection LOS: A	
Intersection Capacity Utilization 79.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 10: Franklin Street & Chicago Avenue



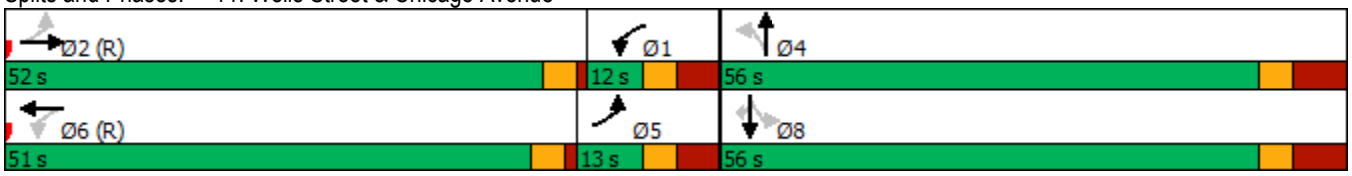
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	782	93	42	647	71	4	38	20	86	371	66
Future Volume (vph)	65	782	93	42	647	71	4	38	20	86	371	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	100		0	80		0	0		0	0		75
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2462	0	1408	2522	0	0	1341	0	0	1469	1260
Flt Permitted	0.241			0.162				0.972			0.918	
Satd. Flow (perm)	329	2462	0	240	2522	0	0	1304	0	0	1326	1036
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			11			21				73
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		399			407			355			273	
Travel Time (s)		9.1			9.3			8.1			6.2	
Confl. Peds. (#/hr)	119		282	282		119	79		90	90		79
Confl. Bikes (#/hr)			11			5			3			87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	921	0	44	756	0	0	65	0	0	482	69
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4			8		8
Minimum Split (s)	12.0	21.0		12.0	21.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	13.0	52.0		12.0	51.0		56.0	56.0		56.0	56.0	56.0
Total Split (%)	10.8%	43.3%		10.0%	42.5%		46.7%	46.7%		46.7%	46.7%	46.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	4.0	1.0		4.0	1.0		5.0	5.0		5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0			1.0	1.0
Total Lost Time (s)	8.0	5.0		8.0	5.0			9.0			9.0	9.0
Lead/Lag	Lag	Lead		Lag	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Act Effct Green (s)	49.0	47.0		47.0	46.0			47.0			47.0	47.0
Actuated g/C Ratio	0.41	0.39		0.39	0.38			0.39			0.39	0.39
v/c Ratio	0.38	0.95		0.33	0.78			0.12			0.93	0.15
Control Delay	19.2	43.2		20.2	25.8			17.4			61.2	5.7
Queue Delay	0.0	8.3		0.0	0.2			0.0			0.0	0.0
Total Delay	19.2	51.4		20.2	25.9			17.4			61.2	5.7
LOS	B	D		C	C			B			E	A
Approach Delay		49.2			25.6			17.4			54.2	

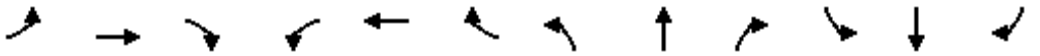
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		D			C			B			D	
Queue Length 50th (ft)	14	228		12	147			21			352	0
Queue Length 95th (ft)	m26	#486		m21	204			52			#568	28
Internal Link Dist (ft)		319			327			275			193	
Turn Bay Length (ft)	100			80								75
Base Capacity (vph)	179	971		132	973			523			519	450
Starvation Cap Reductn	0	46		0	14			0			0	0
Spillback Cap Reductn	0	49		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.38	1.00		0.33	0.79			0.12			0.93	0.15

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 43 (36%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 41.7		Intersection LOS: D	
Intersection Capacity Utilization 87.4%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 11: Wells Street & Chicago Avenue



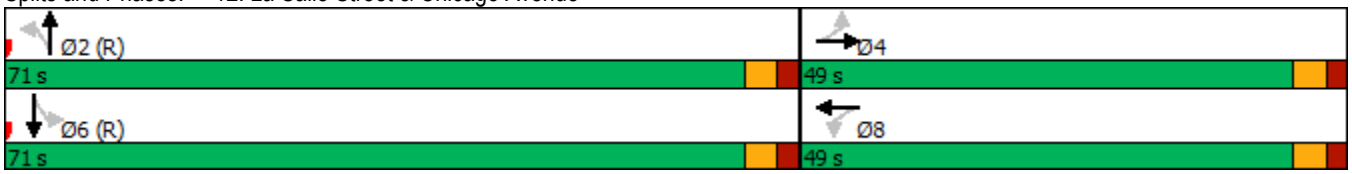


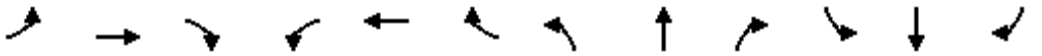
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	738	75	36	493	47	99	632	92	99	1110	133
Future Volume (vph)	97	738	75	36	493	47	99	632	92	99	1110	133
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	10	11	12	11	11	12	11	11	12
Storage Length (ft)	100		0	70		0	120		0	80		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1436	2590	0	1408	2668	0	1488	3926	0	1488	4078	0
Flt Permitted	0.343			0.179			0.156			0.329		
Satd. Flow (perm)	465	2590	0	252	2668	0	241	3926	0	477	4078	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			9			13			27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		407			413			368			440	
Travel Time (s)		9.3			9.4			8.4			10.0	
Confl. Peds. (#/hr)	190		191	191		190	72		151	151		72
Confl. Bikes (#/hr)			10			6			1			4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	2%	2%	1%	0%	3%	7%	0%	2%	0%
Bus Blockages (#/hr)	0	18	18	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	856	0	38	568	0	104	762	0	104	1308	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.22	1.33	1.36	1.22	1.28	1.28	1.22	1.28	1.28	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	29.0	29.0		29.0	29.0		28.0	28.0		28.0	28.0	
Total Split (s)	49.0	49.0		49.0	49.0		71.0	71.0		71.0	71.0	
Total Split (%)	40.8%	40.8%		40.8%	40.8%		59.2%	59.2%		59.2%	59.2%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	43.0	43.0		43.0	43.0		65.0	65.0		65.0	65.0	
Actuated g/C Ratio	0.36	0.36		0.36	0.36		0.54	0.54		0.54	0.54	
v/c Ratio	0.61	0.92		0.42	0.59		0.80	0.36		0.40	0.59	
Control Delay	15.8	18.0		32.2	23.5		66.0	15.9		22.1	19.4	
Queue Delay	0.0	2.9		0.0	0.4		0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	15.8	20.9		32.2	23.9		66.0	15.9		22.1	19.4	
LOS	B	C		C	C		E	B		C	B	
Approach Delay		20.4			24.4			21.9			19.6	
Approach LOS		C			C			C			B	
Queue Length 50th (ft)	16	145		12	91		62	115		45	234	
Queue Length 95th (ft)	m19	m164		m20	124		#179	145		95	281	
Internal Link Dist (ft)		327			333			288			360	
Turn Bay Length (ft)	100			70			120			80		
Base Capacity (vph)	166	934		90	961		130	2132		258	2221	
Starvation Cap Reductn	0	34		0	93		0	0		0	0	
Spillback Cap Reductn	0	15		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.61	0.95		0.42	0.65		0.80	0.36		0.40	0.59	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 105 (88%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 21.1		Intersection LOS: C	
Intersection Capacity Utilization 115.8%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 12: La Salle Street & Chicago Avenue





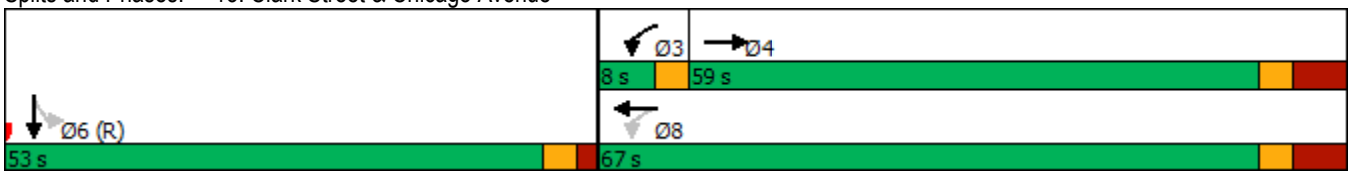
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	778	131	48	475	0	0	0	0	44	1018	122
Future Volume (vph)	0	778	131	48	475	0	0	0	0	44	1018	122
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	10	11	12	12	12	12	12	10	12
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2719	0	1408	1397	0	0	0	0	0	3958	0
Flt Permitted				0.176							0.998	
Satd. Flow (perm)	0	2719	0	261	1397	0	0	0	0	0	3948	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19									19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		413			144			365			405	
Travel Time (s)		9.4			3.3			8.3			9.2	
Confl. Peds. (#/hr)			128	128						42		45
Confl. Bikes (#/hr)			12									58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	2%	4%	2%	2%	2%	2%	6%	1%	2%
Bus Blockages (#/hr)	0	18	18	0	18	18	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	957	0	51	500	0	0	0	0	0	1246	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.28	1.22	1.33	1.40	1.22	1.22	1.22	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	
Protected Phases		4		3	8						6	
Permitted Phases				8						6		
Minimum Split (s)		24.0		8.0	24.0					26.0	26.0	
Total Split (s)		59.0		8.0	67.0					53.0	53.0	
Total Split (%)		49.2%		6.7%	55.8%					44.2%	44.2%	
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)		5.0		0.0	5.0					2.0	2.0	
Lost Time Adjust (s)		1.0		1.0	1.0						1.0	
Total Lost Time (s)		9.0		4.0	9.0						6.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Act Effct Green (s)		50.0		63.0	58.0						47.0	
Actuated g/C Ratio		0.42		0.52	0.48						0.39	
v/c Ratio		0.84		0.29	0.74						0.80	
Control Delay		17.8		10.6	19.9						36.6	
Queue Delay		1.4		0.0	1.8						0.0	
Total Delay		19.2		10.6	21.8						36.6	

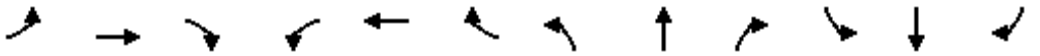
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		B		B	C						D	
Approach Delay		19.2			20.7						36.6	
Approach LOS		B			C						D	
Queue Length 50th (ft)		101		12	215						305	
Queue Length 95th (ft)		m121		m17	326						367	
Internal Link Dist (ft)		333			64			285			325	
Turn Bay Length (ft)				100								
Base Capacity (vph)		1144		175	675						1557	
Starvation Cap Reductn		56		0	71						0	
Spillback Cap Reductn		67		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.89		0.29	0.83						0.80	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 114 (95%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 27.4		Intersection LOS: C	
Intersection Capacity Utilization 108.8%		ICU Level of Service G	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: Clark Street & Chicago Avenue



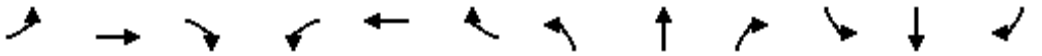


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	660	0	0	417	27	155	502	65	0	0	0
Future Volume (vph)	127	660	0	0	417	27	155	502	65	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	12	11	12	16	11	10	12	12	12
Storage Length (ft)	100		0	0		30	0		75	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1436	1425	0	0	1308	1316	1727	2946	1285	0	0	0
Flt Permitted	0.409						0.950					
Satd. Flow (perm)	545	1425	0	0	1308	858	839	2946	555	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						64			64			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			428			364			418	
Travel Time (s)		5.4			9.7			8.3			9.5	
Confl. Peds. (#/hr)	257					257	162		216			
Confl. Bikes (#/hr)						2			12			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	2%	2%	3%	0%	1%	1%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	18	0	0	11	11	0	0	0	0	0	0
Parking (#/hr)					0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	134	695	0	0	439	28	163	528	68	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.40	1.22	1.22	1.53	1.29	1.05	1.28	1.33	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2		2			
Minimum Split (s)	8.0	23.0			23.0	23.0	22.0	22.0	22.0			
Total Split (s)	11.0	78.0			67.0	67.0	42.0	42.0	42.0			
Total Split (%)	9.2%	65.0%			55.8%	55.8%	35.0%	35.0%	35.0%			
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	1.0	1.0			1.0	1.0	1.0	1.0	1.0			
Total Lost Time (s)	4.0	6.0			6.0	6.0	6.0	6.0	6.0			
Lead/Lag	Lag				Lead	Lead						
Lead-Lag Optimize?	Yes				Yes	Yes						
Act Effct Green (s)	74.0	72.0			61.0	61.0	36.0	36.0	36.0			
Actuated g/C Ratio	0.62	0.60			0.51	0.51	0.30	0.30	0.30			
v/c Ratio	0.35	0.81			0.66	0.06	0.65	0.60	0.32			
Control Delay	2.7	15.0			26.7	0.6	50.4	39.2	13.0			
Queue Delay	0.0	1.4			0.6	0.0	0.0	0.0	0.0			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	2.7	16.4			27.3	0.6	50.4	39.2	13.1			
LOS	A	B			C	A	D	D	B			
Approach Delay		14.2			25.7			39.3				
Approach LOS		B			C			D				
Queue Length 50th (ft)	6	49			232	0	110	183	2			
Queue Length 95th (ft)	m7	m165			290	m1	193	243	42			
Internal Link Dist (ft)		158			348			284			338	
Turn Bay Length (ft)	100					30			75			
Base Capacity (vph)	388	855			664	467	251	883	211			
Starvation Cap Reductn	0	39			52	0	0	0	0			
Spillback Cap Reductn	0	53			32	0	0	0	2			
Storage Cap Reductn	0	0			0	0	0	0	0			
Reduced v/c Ratio	0.35	0.87			0.72	0.06	0.65	0.60	0.33			

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 3 (3%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 26.1		Intersection LOS: C	
Intersection Capacity Utilization 108.8%		ICU Level of Service G	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 14: Dearborn Street & Chicago Avenue



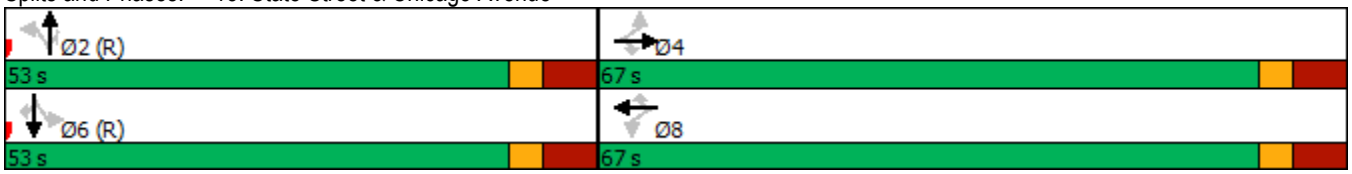
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	545	46	45	273	25	115	291	92	43	253	85
Future Volume (vph)	90	545	46	45	273	25	115	291	92	43	253	85
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	100		50	100		50	90		30	90		30
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1422	1334	1272	1422	1321	1216	1422	1482	1272	1422	1482	1272
Flt Permitted	0.556			0.294			0.539			0.488		
Satd. Flow (perm)	515	1334	560	440	1321	449	524	1482	616	534	1482	528
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			45			45			45			45
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		428			375			323			297	
Travel Time (s)		9.7			8.5			7.3			6.8	
Confl. Peds. (#/hr)	295		191	191		295	260		154	154		260
Confl. Bikes (#/hr)			21			6			7			8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	2%	1%	1%	3%	1%	1%	2%	1%	1%	2%	1%
Bus Blockages (#/hr)	0	0	0	0	0	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	574	48	47	287	26	121	306	97	45	266	89
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.52	1.33	1.33	1.52	1.41	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	26.0	26.0	26.0	26.0	26.0	26.0
Total Split (s)	67.0	67.0	67.0	67.0	67.0	67.0	53.0	53.0	53.0	53.0	53.0	53.0
Total Split (%)	55.8%	55.8%	55.8%	55.8%	55.8%	55.8%	44.2%	44.2%	44.2%	44.2%	44.2%	44.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	58.0	58.0	58.0	58.0	58.0	58.0	44.0	44.0	44.0	44.0	44.0	44.0
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.48	0.48	0.37	0.37	0.37	0.37	0.37	0.37
v/c Ratio	0.38	0.89	0.16	0.22	0.45	0.11	0.63	0.56	0.38	0.23	0.49	0.40
Control Delay	8.6	20.5	1.4	12.0	12.3	1.0	48.3	35.3	20.6	30.3	33.1	21.1
Queue Delay	0.0	34.8	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0

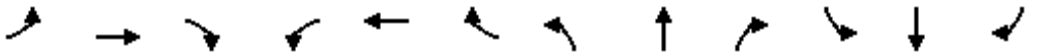
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	8.6	55.3	1.4	12.0	13.1	1.0	48.3	35.3	20.7	30.3	33.1	21.1
LOS	A	E	A	B	B	A	D	D	C	C	C	C
Approach Delay		45.5			12.1			35.6			30.1	
Approach LOS		D			B			D			C	
Queue Length 50th (ft)	13	83	0	9	55	0	77	188	28	24	158	24
Queue Length 95th (ft)	m27	m#610	m2	m20	m133	m0	#164	283	79	56	241	75
Internal Link Dist (ft)		348			295			243			217	
Turn Bay Length (ft)	100		50	100		50	90		30	90		30
Base Capacity (vph)	248	644	293	212	638	240	192	543	254	195	543	222
Starvation Cap Reductn	0	43	0	0	141	0	0	0	0	0	0	0
Spillback Cap Reductn	0	105	0	0	0	0	0	0	3	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	1.06	0.16	0.22	0.58	0.11	0.63	0.56	0.39	0.23	0.49	0.40

Intersection Summary

Area Type: CBD
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 13 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 33.8 Intersection LOS: C
Intersection Capacity Utilization 109.9% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 15: State Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	500	95	50	264	46	0	0	0	29	132	57
Future Volume (vph)	38	500	95	50	264	46	0	0	0	29	132	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	12	10	10	12	12	12	12	12	12	12
Storage Length (ft)	80		30	80		30	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	958	831	858	958	867	872	0	0	0	0	896	0
Flt Permitted	0.578			0.380							0.993	
Satd. Flow (perm)	274	831	283	318	867	155	0	0	0	0	834	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			45			45					15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		375			368			298			279	
Travel Time (s)		8.5			8.4			6.8			6.3	
Confl. Peds. (#/hr)	487		301	301		487				185		159
Confl. Bikes (#/hr)			24			5						9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	50%	52%	49%	50%	50%	51%	51%	51%	49%	49%	50%	50%
Bus Blockages (#/hr)	0	18	18	0	11	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	526	100	53	278	48	0	0	0	0	230	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.66	1.34	*0.50	1.60	1.29	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm				Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4		4	8		8				6		
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0				27.0	27.0	
Total Split (s)	77.0	77.0	77.0	77.0	77.0	77.0				43.0	43.0	
Total Split (%)	64.2%	64.2%	64.2%	64.2%	64.2%	64.2%				35.8%	35.8%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	4.0	4.0	4.0	4.0	4.0	4.0				5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0					1.0	
Total Lost Time (s)	8.0	8.0	8.0	8.0	8.0	8.0					9.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	69.0	69.0	69.0	69.0	69.0	69.0					34.0	
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.58	0.58					0.28	
v/c Ratio	0.25	1.10	0.55	0.29	0.56	0.44					0.93	
Control Delay	11.4	79.3	11.7	7.7	9.0	15.0					82.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0					0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	11.4	79.4	11.7	7.7	9.0	15.0					82.3	
LOS	B	E	B	A	A	B					F	
Approach Delay		65.1			9.6						82.3	
Approach LOS		E			A						F	
Queue Length 50th (ft)	8	~458	6	6	31	1					164	
Queue Length 95th (ft)	m11	m#582	m13	m12	43	m34					#326	
Internal Link Dist (ft)		295			288			218			199	
Turn Bay Length (ft)	80		30	80		30						
Base Capacity (vph)	157	477	181	182	498	108					247	
Starvation Cap Reductn	0	0	0	0	0	0					0	
Spillback Cap Reductn	0	2	0	0	0	0					0	
Storage Cap Reductn	0	0	0	0	0	0					0	
Reduced v/c Ratio	0.25	1.11	0.55	0.29	0.56	0.44					0.93	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 14 (12%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 51.7		Intersection LOS: D	
Intersection Capacity Utilization 78.9%		ICU Level of Service D	
Analysis Period (min) 15			

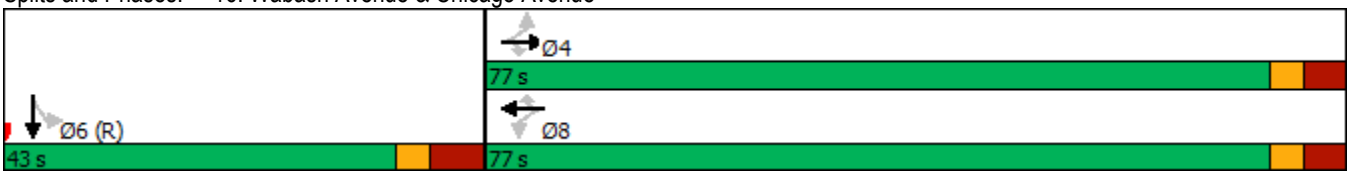
* User Entered Value

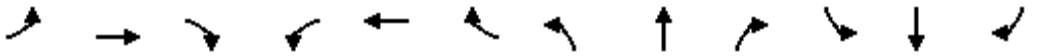
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: Wabash Avenue & Chicago Avenue





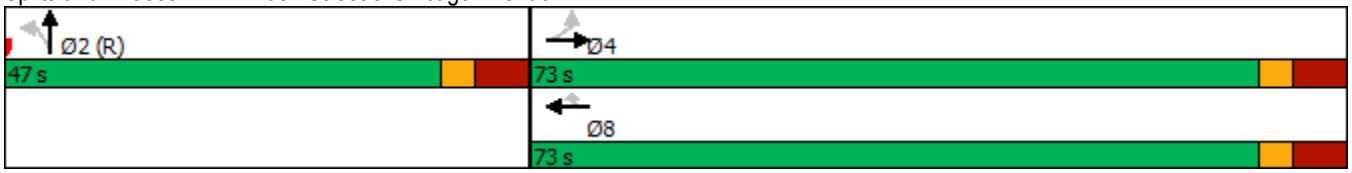
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	439	0	0	313	55	47	137	25	0	0	0
Future Volume (vph)	50	439	0	0	313	55	47	137	25	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	12	11	12	12	12	12	12	12	12
Storage Length (ft)	80		0	0		30	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1422	1270	0	0	1520	1363	0	1464	0	0	0	0
Flt Permitted	0.531							0.989				
Satd. Flow (perm)	471	1270	0	0	1520	342	0	1339	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						45		6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		368			334			328			284	
Travel Time (s)		8.4			7.6			7.5			6.5	
Confl. Peds. (#/hr)	372					372	121		173			
Confl. Bikes (#/hr)						5			3			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	3%	2%	2%	3%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	18	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	462	0	0	329	58	0	219	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.59	1.22	1.22	1.28	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Minimum Split (s)	21.0	21.0			21.0	21.0	27.0	27.0				
Total Split (s)	73.0	73.0			73.0	73.0	47.0	47.0				
Total Split (%)	60.8%	60.8%			60.8%	60.8%	39.2%	39.2%				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Lost Time Adjust (s)	1.0	1.0			1.0	1.0		1.0				
Total Lost Time (s)	9.0	9.0			9.0	9.0		9.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	64.0	64.0			64.0	64.0		38.0				
Actuated g/C Ratio	0.53	0.53			0.53	0.53		0.32				
v/c Ratio	0.21	0.68			0.41	0.29		0.51				
Control Delay	12.1	13.5			8.0	3.0		37.6				
Queue Delay	0.0	5.6			1.0	0.0		0.0				

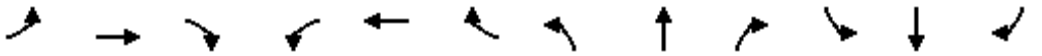
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	12.1	19.2			9.0	3.0		37.6				
LOS	B	B			A	A		D				
Approach Delay		18.4			8.1			37.6				
Approach LOS		B			A			D				
Queue Length 50th (ft)	12	102			67	0		134				
Queue Length 95th (ft)	m10	m94			m77	m1		215				
Internal Link Dist (ft)		288			254			248			204	
Turn Bay Length (ft)	80					30						
Base Capacity (vph)	251	677			810	203		428				
Starvation Cap Reductn	0	158			259	0		0				
Spillback Cap Reductn	0	69			0	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.21	0.89			0.60	0.29		0.51				

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 8 (7%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 18.6		Intersection LOS: B	
Intersection Capacity Utilization 68.5%		ICU Level of Service C	
Analysis Period (min) 15			
* User Entered Value			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: Rush Street & Chicago Avenue



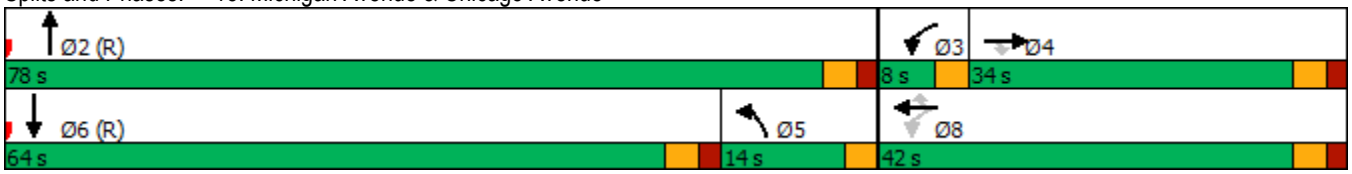


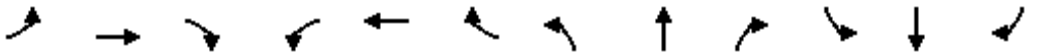
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	289	145	106	159	27	117	956	98	0	1386	125
Future Volume (vph)	0	289	145	106	159	27	117	956	98	0	1386	125
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	10	10	10	10	10	12	12	10	12
Storage Length (ft)	0		50	100		50	115		0	0		0
Storage Lanes	0		1	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1454	1193	1282	1440	1179	1408	2895	0	0	3253	0
Flt Permitted				0.275			0.950					
Satd. Flow (perm)	0	1454	779	312	1440	963	1312	2895	0	0	3253	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			91			64		21			14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		334			679			321			298	
Travel Time (s)		7.6			15.4			7.3			6.8	
Confl. Peds. (#/hr)			411	411		141	352		437			352
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	12%	5%	9%	2%	4%	20%	2%	2%	0%
Bus Blockages (#/hr)	0	0	18	0	0	0	0	49	49	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	304	153	112	167	28	123	1109	0	0	1591	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.33	1.46	1.33	1.33	1.33	1.33	1.45	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	pm+pt	NA	Perm	Prot	NA			NA	
Protected Phases		4		3	8		5	2			6	
Permitted Phases			4	8		8						
Minimum Split (s)		34.0	34.0	8.0	34.0	34.0	8.0	24.0			24.0	
Total Split (s)		34.0	34.0	8.0	42.0	42.0	14.0	78.0			64.0	
Total Split (%)		28.3%	28.3%	6.7%	35.0%	35.0%	11.7%	65.0%			53.3%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
All-Red Time (s)		2.0	2.0	0.0	2.0	2.0	0.0	2.0			2.0	
Lost Time Adjust (s)		1.0	1.0	1.0	1.0	1.0	1.0	1.0			1.0	
Total Lost Time (s)		6.0	6.0	4.0	6.0	6.0	4.0	6.0			6.0	
Lead/Lag		Lag	Lag	Lead			Lag				Lead	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes				Yes	
Act Effct Green (s)		28.0	28.0	38.0	36.0	36.0	10.0	72.0			58.0	
Actuated g/C Ratio		0.23	0.23	0.32	0.30	0.30	0.08	0.60			0.48	
v/c Ratio		0.90	0.61	0.85	0.39	0.08	1.05	0.64			1.01	
Control Delay		48.9	19.3	84.5	36.5	0.7	150.6	17.3			55.5	
Queue Delay		5.3	0.0	0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay		54.3	19.3	84.5	36.5	0.7	150.6	17.3			55.5	
LOS		D	B	F	D	A	F	B			E	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		42.6			50.8			30.6			55.5	
Approach LOS		D			D			C			E	
Queue Length 50th (ft)		210	48	65	102	0	~104	219			~520	
Queue Length 95th (ft)		#391	m123	#165	168	2	#229	276			#664	
Internal Link Dist (ft)		254			599			241			218	
Turn Bay Length (ft)			50	100		50	115					
Base Capacity (vph)		339	251	131	432	333	117	1745			1579	
Starvation Cap Reductn		16	0	0	0	0	0	0			0	
Spillback Cap Reductn		0	0	0	0	0	0	0			0	
Storage Cap Reductn		0	0	0	0	0	0	0			0	
Reduced v/c Ratio		0.94	0.61	0.85	0.39	0.08	1.05	0.64			1.01	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 10 (8%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 44.9		Intersection LOS: D	
Intersection Capacity Utilization 90.7%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 18: Michigan Avenue & Chicago Avenue



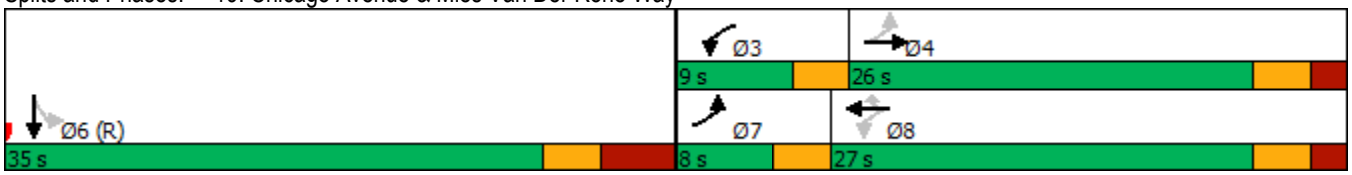


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	293	0	1	188	84	0	0	0	80	0	94
Future Volume (vph)	61	293	0	1	188	84	0	0	0	80	0	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	16	10	12
Storage Length (ft)	100		100	0		50	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1197	2270	0	718	1326	989	0	0	0	0	1213	0
Flt Permitted	0.633			0.538							0.978	
Satd. Flow (perm)	655	2270	0	407	1326	736	0	0	0	0	1088	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						109					99	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		679			400			272			306	
Travel Time (s)		15.4			9.1			6.2			7.0	
Confl. Peds. (#/hr)	101					101				226		70
Confl. Bikes (#/hr)			10			5						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	20%	22%	0%	100%	14%	19%	2%	2%	2%	8%	0%	2%
Bus Blockages (#/hr)	0	18	18	0	0	21	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	308	0	1	198	88	0	0	0	0	183	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			75			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.75	1.39	1.33	1.33	1.33	1.48	1.33	1.33	1.33	1.05	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	Perm				Perm	NA	
Protected Phases	7	4		3	8						6	
Permitted Phases	4			8		8				6		
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0				28.0	28.0	
Total Split (s)	8.0	26.0		9.0	27.0	27.0				35.0	35.0	
Total Split (%)	11.4%	37.1%		12.9%	38.6%	38.6%				50.0%	50.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0				4.0	4.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	1.0					1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0					8.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Act Effct Green (s)	26.0	20.0		28.0	21.0	21.0					27.0	
Actuated g/C Ratio	0.37	0.29		0.40	0.30	0.30					0.39	
v/c Ratio	0.23	0.48		0.01	0.50	0.30					0.38	
Control Delay	14.4	23.6		9.0	16.4	3.6					10.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0					0.0	
Total Delay	14.4	23.6		9.0	16.4	3.6					10.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	C		A	B	A					B	
Approach Delay		22.0			12.5						10.2	
Approach LOS		C			B						B	
Queue Length 50th (ft)	16	57		0	33	0					23	
Queue Length 95th (ft)	37	93		m1	55	1					70	
Internal Link Dist (ft)		599			320			192			226	
Turn Bay Length (ft)	100					50						
Base Capacity (vph)	274	648		185	397	297					480	
Starvation Cap Reductn	0	0		0	0	0					0	
Spillback Cap Reductn	0	0		0	0	0					0	
Storage Cap Reductn	0	0		0	0	0					0	
Reduced v/c Ratio	0.23	0.48		0.01	0.50	0.30					0.38	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 63 (90%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 16.2		Intersection LOS: B	
Intersection Capacity Utilization 49.2%		ICU Level of Service A	
Analysis Period (min) 15			
* User Entered Value			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 19: Chicago Avenue & Mies Van Der Rohe Way

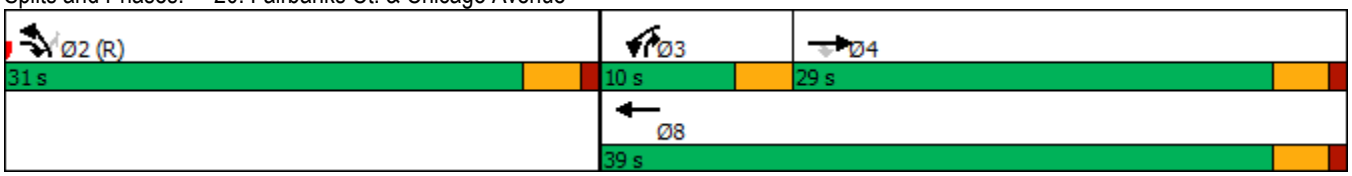


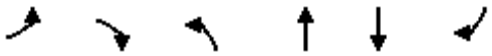
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	150	195	30	65	200	75
Future Volume (vph)	150	195	30	65	200	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	12	10	11	11	12
Storage Length (ft)		0	100		140	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	1550	1151	1422	1550	1340	1249
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1550	646	935	1550	1340	910
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		205				60
Link Speed (mph)	30			30	30	
Link Distance (ft)	400			888	320	
Travel Time (s)	9.1			20.2	7.3	
Confl. Peds. (#/hr)		305	305			315
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	11%	1%	1%	11%	1%
Bus Blockages (#/hr)	0	18	0	0	0	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	158	205	32	68	211	79
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			10	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.28	1.34	1.33	1.28	1.28	1.36
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Minimum Split (s)	29.0	29.0	8.0	29.0	29.0	8.0
Total Split (s)	29.0	31.0	10.0	39.0	31.0	10.0
Total Split (%)	41.4%	44.3%	14.3%	55.7%	44.3%	14.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	0.0	1.0	1.0	0.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?						
Act Effct Green (s)	24.0	50.0	6.0	34.0	26.0	33.0
Actuated g/C Ratio	0.34	0.71	0.09	0.49	0.37	0.47
v/c Ratio	0.30	0.29	0.26	0.09	0.42	0.16
Control Delay	21.4	2.7	22.2	0.7	19.7	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.4	2.7	22.2	0.7	19.7	4.5
LOS	C	A	C	A	B	A

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	10.9			7.6	15.6	
Approach LOS	B			A	B	
Queue Length 50th (ft)	67	1	5	0	66	4
Queue Length 95th (ft)	118	38	13	1	122	22
Internal Link Dist (ft)	320			808	240	
Turn Bay Length (ft)			100		140	
Base Capacity (vph)	531	707	121	752	497	489
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.29	0.26	0.09	0.42	0.16

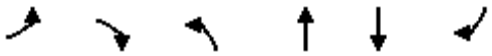
Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 30 (43%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 57.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 20: Fairbanks Ct. & Chicago Avenue





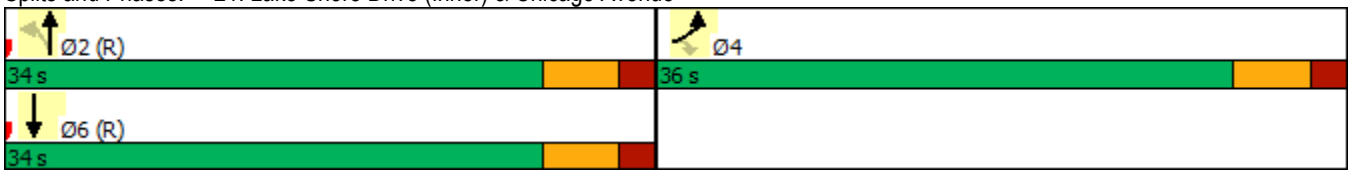
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	125	75	100	100	20
Future Volume (vph)	100	125	75	100	100	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	1408	1260	0	2757	2746	0
Flt Permitted	0.950			0.785		
Satd. Flow (perm)	1408	1260	0	2211	2746	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		132			21	
Link Speed (mph)	30			40	30	
Link Distance (ft)	888			307	377	
Travel Time (s)	20.2			5.2	8.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	132	0	184	126	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	20			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Minimum Split (s)	11.0	11.0	11.0	11.0	29.0	
Total Split (s)	36.0	36.0	34.0	34.0	34.0	
Total Split (%)	51.4%	51.4%	48.6%	48.6%	48.6%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	29.0	29.0		27.0	27.0	
Actuated g/C Ratio	0.41	0.41		0.39	0.39	
v/c Ratio	0.18	0.22		0.22	0.12	
Control Delay	6.2	1.4		15.3	11.9	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	6.2	1.4		15.3	11.9	
LOS	A	A		B	B	
Approach Delay	3.5			15.3	11.9	
Approach LOS	A			B	B	
Queue Length 50th (ft)	11	0		27	14	
Queue Length 95th (ft)	25	0		48	31	
Internal Link Dist (ft)	808			227	297	
Turn Bay Length (ft)						
Base Capacity (vph)	583	599		852	1072	



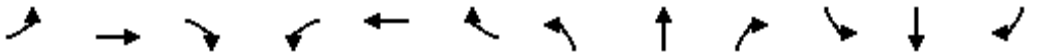
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.18	0.22		0.22	0.12	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 40 (57%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 40			
Control Type: Pretimed			
Maximum v/c Ratio: 0.22			
Intersection Signal Delay: 9.4		Intersection LOS: A	
Intersection Capacity Utilization 39.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: Lake Shore Drive (Inner) & Chicago Avenue



PM Reports

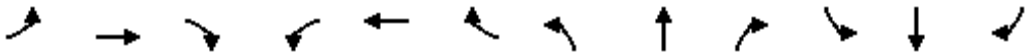


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	391	70	53	477	103	133	1222	74	118	768	111
Future Volume (vph)	93	391	70	53	477	103	133	1222	74	118	768	111
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	12	10	11	9	10	11	9
Storage Length (ft)	50		0	50		0	100		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1509	2469	0	1494	2552	0	1368	2731	0	1408	2686	0
Flt Permitted	0.226			0.324			0.196			0.102		
Satd. Flow (perm)	349	2469	0	478	2552	0	282	2731	0	151	2686	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			16			6			14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		633			670			340			330	
Travel Time (s)		14.4			15.2			7.7			7.5	
Confl. Peds. (#/hr)	56		87	87		56	102		79	79		102
Confl. Bikes (#/hr)			1									4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	5%	6%	3%	8%	4%	5%	7%	3%	2%	5%	7%
Bus Blockages (#/hr)	0	0	6	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	486	0	56	610	0	140	1364	0	124	925	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.42	1.22	1.22	1.33	1.22	1.33	1.28	1.39	1.33	1.28	1.39
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	9.0	29.0		9.0	29.0		9.0	26.0		9.0	26.0	
Total Split (s)	9.0	45.0		9.0	45.0		19.0	84.0		12.0	77.0	
Total Split (%)	6.0%	30.0%		6.0%	30.0%		12.7%	56.0%		8.0%	51.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Act Effct Green (s)	46.0	39.0		46.0	39.0		92.0	78.0		81.0	71.0	
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.61	0.52		0.54	0.47	
v/c Ratio	0.68	0.75		0.31	0.90		0.50	0.96		0.84	0.72	
Control Delay	63.2	57.7		33.7	58.5		18.9	50.3		61.9	35.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	63.2	57.7		33.7	58.5		18.9	50.3		61.9	35.2	
LOS	E	E		C	E		B	D		E	D	
Approach Delay		58.6			56.4			47.4			38.3	
Approach LOS		E			E			D			D	
Queue Length 50th (ft)	68	225		35	219		56	654		49	370	
Queue Length 95th (ft)	#133	295		m67	#314		91	#836		#165	455	
Internal Link Dist (ft)		553			590			260			250	
Turn Bay Length (ft)	50			50			100			100		
Base Capacity (vph)	145	651		180	675		281	1423		148	1278	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.68	0.75		0.31	0.90		0.50	0.96		0.84	0.72	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 10 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 48.2		Intersection LOS: D	
Intersection Capacity Utilization 93.1%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 1: Western Avenue & Chicago Avenue

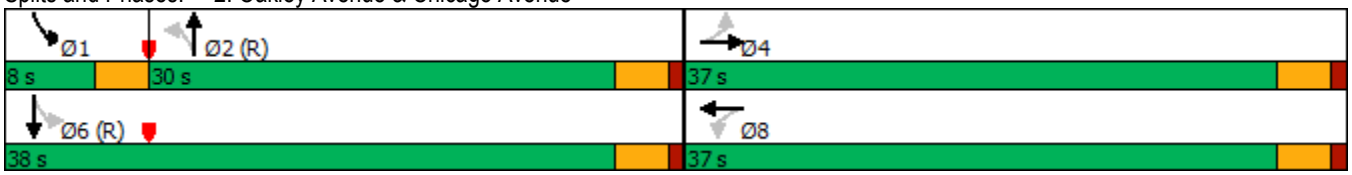


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	533	25	25	533	25	50	100	50	50	100	50
Future Volume (vph)	25	533	25	25	533	25	50	100	50	50	100	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	0		0	0		0	30		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2794	0	0	2794	0	0	1415	0	0	1415	0
Flt Permitted		0.915			0.915			0.880			0.897	
Satd. Flow (perm)	0	2562	0	0	2562	0	0	1260	0	0	1284	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			7			24			29	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		670			631			329			347	
Travel Time (s)		15.2			14.3			7.5			7.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	613	0	0	613	0	0	211	0	0	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	15.0	15.0		15.0	15.0		22.0	22.0		8.0	22.0	
Total Split (s)	37.0	37.0		37.0	37.0		30.0	30.0		8.0	38.0	
Total Split (%)	49.3%	49.3%		49.3%	49.3%		40.0%	40.0%		10.7%	50.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		0.0	1.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?												
Act Effct Green (s)		32.0			32.0			25.0			33.0	
Actuated g/C Ratio		0.43			0.43			0.33			0.44	
v/c Ratio		0.56			0.56			0.48			0.36	
Control Delay		11.8			18.4			22.0			14.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		11.8			18.4			22.0			14.0	
LOS		B			B			C			B	
Approach Delay		11.8			18.4			22.0			14.0	
Approach LOS		B			B			C			B	
Queue Length 50th (ft)		64			107			68			52	
Queue Length 95th (ft)		m142			157			130			100	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		590			551			249			267	
Turn Bay Length (ft)												
Base Capacity (vph)		1097			1097			436			586	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.56			0.56			0.48			0.36	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 15.9		Intersection LOS: B	
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: Oakley Avenue & Chicago Avenue



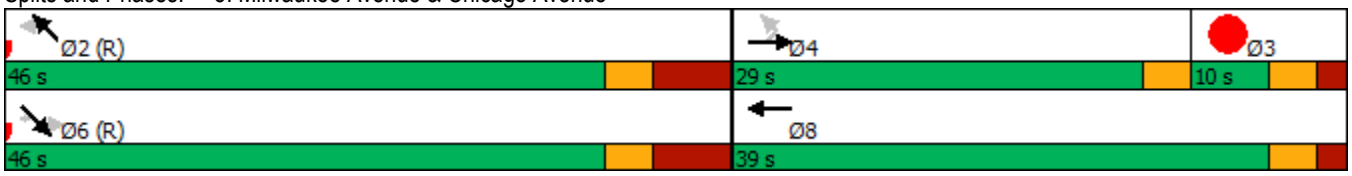
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	36	345	93	0	806	173	113	575	47	88	531	5
Future Volume (vph)	36	345	93	0	806	173	113	575	47	88	531	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	130		50	0		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2599	0	0	2683	0	1408	1482	1260	1408	1480	0
Flt Permitted	0.160						0.295			0.256		
Satd. Flow (perm)	233	2599	0	0	2683	0	429	1482	1155	372	1480	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		41			35				64		1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		426			207			537			178	
Travel Time (s)		9.7			4.7			12.2			4.0	
Confl. Peds. (#/hr)	71		41			71	60		88	71		36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	18	18	0	0	18	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	461	0	0	1030	0	119	605	49	93	564	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.39	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4						6		6	2		
Minimum Split (s)	8.0	8.0			35.0		39.0	39.0	39.0	39.0	39.0	
Total Split (s)	29.0	29.0			39.0		46.0	46.0	46.0	46.0	46.0	
Total Split (%)	34.1%	34.1%			45.9%		54.1%	54.1%	54.1%	54.1%	54.1%	
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	0.0			2.0		5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0			1.0		1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	4.0	4.0			6.0		9.0	9.0	9.0	9.0	9.0	
Lead/Lag	Lead	Lead										
Lead-Lag Optimize?	Yes	Yes										
Act Effct Green (s)	25.0	25.0			33.0		37.0	37.0	37.0	37.0	37.0	
Actuated g/C Ratio	0.29	0.29			0.39		0.44	0.44	0.44	0.44	0.44	
v/c Ratio	0.56	0.58			0.97		0.64	0.94	0.09	0.58	0.88	
Control Delay	60.3	26.6			21.0		37.9	48.1	3.2	15.0	18.0	
Queue Delay	0.0	0.0			0.4		0.0	1.0	0.0	1.5	12.5	
Total Delay	60.3	26.6			21.4		37.9	49.1	3.2	16.4	30.6	
LOS	E	C			C		D	D	A	B	C	
Approach Delay		29.2			21.4			44.5			28.6	
Approach LOS		C			C			D			C	

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Bus Blockages (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Minimum Split (s)	10.0
Total Split (s)	10.0
Total Split (%)	12%
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Queue Length 50th (ft)	17	99			18		48	299	0	14	83	
Queue Length 95th (ft)	#67	149			m#334		#134	#516	15	m16	m#163	
Internal Link Dist (ft)		346			127			457			98	
Turn Bay Length (ft)	50						130		50			
Base Capacity (vph)	68	793			1063		186	645	538	161	644	
Starvation Cap Reductn	0	0			3		0	0	0	13	73	
Spillback Cap Reductn	0	0			0		0	6	0	0	0	
Storage Cap Reductn	0	0			0		0	0	0	0	0	
Reduced v/c Ratio	0.56	0.58			0.97		0.64	0.95	0.09	0.63	0.99	

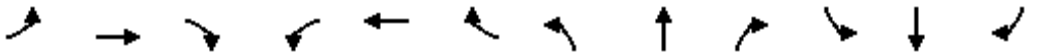
Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 30.3		Intersection LOS: C	
Intersection Capacity Utilization 114.8%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: Milwaukee Avenue & Chicago Avenue



Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	501	0	219	960	9	0	130	342	33	127	67
Future Volume (vph)	18	501	0	219	960	9	0	130	342	33	127	67
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	50		0	0		0	50		50
Storage Lanes	1		0	1		0	0		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2816	0	1408	2810	0	0	1482	1260	1408	1482	1260
Flt Permitted	0.143			0.456						0.669		
Satd. Flow (perm)	207	2816	0	648	2810	0	0	1482	1202	963	1482	1176
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1				272			103
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		207			1872			137			461	
Travel Time (s)		4.7			42.5			3.1			10.5	
Confl. Peds. (#/hr)	102			108		102			30	30		48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	527	0	231	1020	0	0	137	360	35	134	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8					2	6		6
Minimum Split (s)	40.0	40.0		13.0	13.0			27.0	27.0	27.0	27.0	27.0
Total Split (s)	51.0	51.0		43.0	43.0			34.0	34.0	34.0	34.0	34.0
Total Split (%)	60.0%	60.0%		50.6%	50.6%			40.0%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	6.0	6.0	6.0
Lead/Lag				Lag	Lag							
Lead-Lag Optimize?												
Act Effct Green (s)	42.0	42.0		34.0	34.0			28.0	28.0	28.0	28.0	28.0
Actuated g/C Ratio	0.49	0.49		0.40	0.40			0.33	0.33	0.33	0.33	0.33
v/c Ratio	0.19	0.38		0.89	0.91			0.28	0.62	0.11	0.27	0.16
Control Delay	9.3	7.1		61.3	37.3			26.4	27.0	21.1	23.0	2.9
Queue Delay	0.0	0.3		8.2	2.3			81.9	67.2	0.0	0.2	0.0
Total Delay	9.3	7.5		69.5	39.5			108.3	94.2	21.1	23.2	2.9
LOS	A	A		E	D			F	F	C	C	A
Approach Delay		7.5			45.1			98.1			16.8	
Approach LOS		A			D			F			B	
Queue Length 50th (ft)	3	46		112	263			80	167	13	52	0

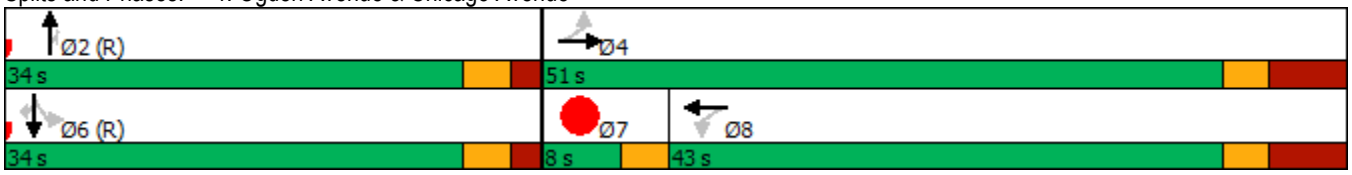
Lane Group	Ø7
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	7
Permitted Phases	
Minimum Split (s)	8.0
Total Split (s)	8.0
Total Split (%)	9%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	m5	56		#254	#394			m99	m216	34	97	15
Internal Link Dist (ft)		127			1792			57			381	
Turn Bay Length (ft)				50						50		50
Base Capacity (vph)	102	1391		259	1124			488	578	317	488	456
Starvation Cap Reductn	0	364		0	0			401	414	0	0	0
Spillback Cap Reductn	0	0		16	42			0	0	0	75	1
Storage Cap Reductn	0	0		0	0			0	0	0	0	0
Reduced v/c Ratio	0.19	0.51		0.95	0.94			1.57	2.20	0.11	0.32	0.16

Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 44.7		Intersection LOS: D	
Intersection Capacity Utilization 110.3%		ICU Level of Service H	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Ogden Avenue & Chicago Avenue



Lane Group	Ø7
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	153	513	59	25	340	0	0	524	163	131	467	0
Future Volume (vph)	153	513	59	25	340	0	0	524	163	131	467	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	110		0	0		0	0		0	90		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2708	0	1408	2816	0	0	1482	1260	1408	1482	0
Flt Permitted	0.538			0.274						0.271		
Satd. Flow (perm)	717	2708	0	379	2816	0	0	1482	1181	386	1482	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14							172			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		514			137			178			729	
Travel Time (s)		11.7			3.1			4.0			16.6	
Confl. Peds. (#/hr)	110		87	87					53	118		138
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	602	0	26	358	0	0	552	172	138	492	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6					4	8		
Minimum Split (s)	25.0	25.0		25.0	25.0			31.0	31.0	8.0	8.0	
Total Split (s)	32.0	32.0		38.0	38.0			47.0	47.0	37.0	37.0	
Total Split (%)	37.6%	37.6%		44.7%	44.7%			55.3%	55.3%	43.5%	43.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	0.0	0.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	4.0	4.0	
Lead/Lag	Lag	Lag								Lead	Lead	
Lead-Lag Optimize?	Yes	Yes								Yes	Yes	
Act Effct Green (s)	23.0	23.0		29.0	29.0			41.0	41.0	33.0	33.0	
Actuated g/C Ratio	0.27	0.27		0.34	0.34			0.48	0.48	0.39	0.39	
v/c Ratio	0.83	0.81		0.20	0.37			0.77	0.26	0.93	0.86	
Control Delay	64.5	38.6		21.7	19.1			9.0	0.5	86.5	40.6	
Queue Delay	17.2	51.2		1.2	41.5			7.9	1.7	0.0	2.4	
Total Delay	81.8	89.7		22.9	60.5			17.0	2.2	86.5	43.0	
LOS	F	F		C	E			B	A	F	D	
Approach Delay		88.0			58.0			13.5			52.5	
Approach LOS		F			E			B			D	
Queue Length 50th (ft)	81	154		6	46			47	0	69	235	

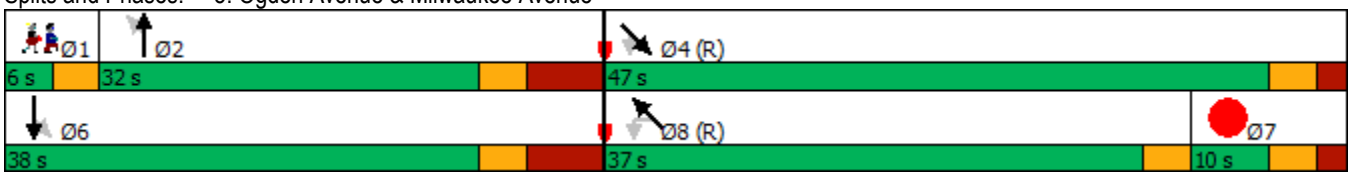
Lane Group	Ø1	Ø7
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	7
Permitted Phases		
Minimum Split (s)	6.0	10.0
Total Split (s)	6.0	10.0
Total Split (%)	7%	12%
Yellow Time (s)	3.0	3.0
All-Red Time (s)	0.0	2.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Queue Length 95th (ft)	#191	#238		m13	m65			m53	m0	#184	#415	
Internal Link Dist (ft)		434			57			98			649	
Turn Bay Length (ft)	110									90		
Base Capacity (vph)	194	742		129	960			714	658	149	575	
Starvation Cap Reductn	0	0		37	620			127	343	0	0	
Spillback Cap Reductn	26	205		0	0			0	0	0	28	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.96	1.12		0.28	1.05			0.94	0.55	0.93	0.90	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 4:SET and 8:NWTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 52.9		Intersection LOS: D	
Intersection Capacity Utilization 97.8%		ICU Level of Service F	
Analysis Period (min) 15			

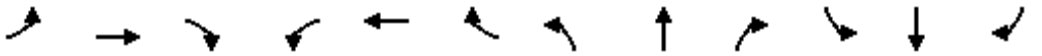
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Ogden Avenue & Milwaukee Avenue



Lane Group	Ø1	Ø7
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	670	25	135	894	99	43	552	135	88	494	348
Future Volume (vph)	142	670	25	135	894	99	43	552	135	88	494	348
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	80		0	80		0	95		0	80		260
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1342	2652	0	1368	2678	0	1064	2397	0	1131	2542	1168
Flt Permitted	0.194			0.323			0.390			0.260		
Satd. Flow (perm)	269	2652	0	435	2678	0	421	2397	0	300	2542	1043
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			17			33				60
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1872			743			718			744	
Travel Time (s)		42.5			16.9			16.3			16.9	
Confl. Peds. (#/hr)	96		194	194		96	68		86	86		68
Confl. Bikes (#/hr)			61			73			229			23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	6%	31%	5%	4%	6%	35%	12%	7%	27%	13%	10%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	149	731	0	142	1045	0	45	723	0	93	520	366
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Minimum Split (s)	33.0	33.0		33.0	33.0		29.0	29.0		29.0	29.0	29.0
Total Split (s)	58.0	58.0		58.0	58.0		42.0	42.0		42.0	42.0	42.0
Total Split (%)	58.0%	58.0%		58.0%	58.0%		42.0%	42.0%		42.0%	42.0%	42.0%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	52.0	52.0		52.0	52.0		36.0	36.0		36.0	36.0	36.0
Actuated g/C Ratio	0.52	0.52		0.52	0.52		0.36	0.36		0.36	0.36	0.36
v/c Ratio	1.07	0.53		0.63	0.75		0.30	0.82		0.86	0.57	0.89
Control Delay	125.2	17.5		32.4	22.7		29.7	36.7		89.7	28.7	50.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	125.2	17.5		32.4	22.7		29.7	36.7		89.7	28.7	50.1
LOS	F	B		C	C		C	D		F	C	D
Approach Delay		35.8			23.8			36.3			42.5	

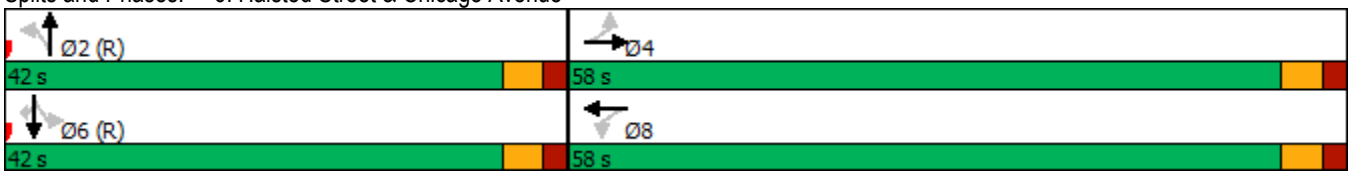
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		D			C			D			D	
Queue Length 50th (ft)	~105	153		62	258		20	208		54	138	186
Queue Length 95th (ft)	#230	207		#161	342		53	#290		#153	193	#367
Internal Link Dist (ft)		1792			663			638			664	
Turn Bay Length (ft)	80			80			95			80		260
Base Capacity (vph)	139	1381		226	1400		151	884		108	915	413
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.07	0.53		0.63	0.75		0.30	0.82		0.86	0.57	0.89

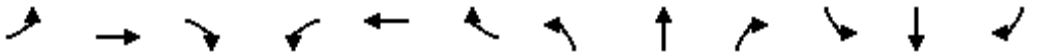
Intersection Summary			
Area Type:	CBD		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 33.9		Intersection LOS: C	
Intersection Capacity Utilization 120.6%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Halsted Street & Chicago Avenue



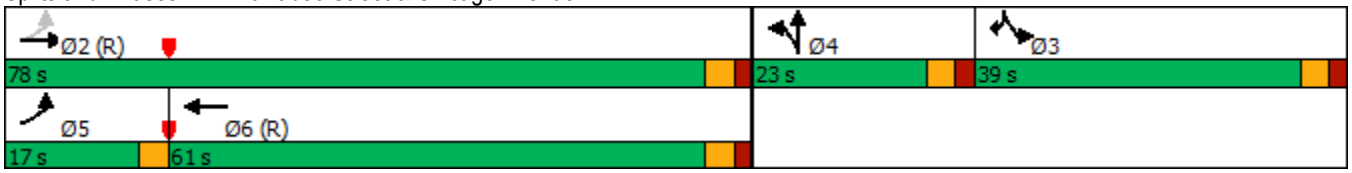


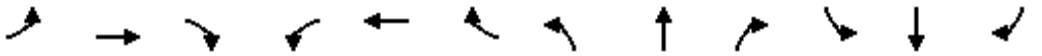
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	720	0	0	805	145	65	85	20	340	0	280
Future Volume (vph)	220	720	0	0	805	145	65	85	20	340	0	280
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2816	0	0	2323	0	0	1373	0	1408	0	1260
Flt Permitted	0.126							0.981		0.950		
Satd. Flow (perm)	171	2816	0	0	2323	0	0	1142	0	1230	0	1260
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					17			4				283
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		200			361			360			481	
Travel Time (s)		4.5			8.2			8.2			10.9	
Confl. Peds. (#/hr)	447		337	337		447	406		122	127		406
Confl. Bikes (#/hr)			19			80			38			28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	0	0	14	14	0	0	0	0	0	0
Parking (#/hr)					0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	232	758	0	0	1000	0	0	178	0	358	0	295
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.47	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Split	NA		Prot		Prot
Protected Phases	5	2			6		4	4		3		3
Permitted Phases	2											
Minimum Split (s)	8.0	26.0			26.0		12.0	12.0		14.0		14.0
Total Split (s)	17.0	78.0			61.0		23.0	23.0		39.0		39.0
Total Split (%)	12.1%	55.7%			43.6%		16.4%	16.4%		27.9%		27.9%
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
All-Red Time (s)	0.0	2.0			2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)	1.0	1.0			1.0			1.0		1.0		1.0
Total Lost Time (s)	4.0	6.0			6.0			6.0		6.0		6.0
Lead/Lag	Lead				Lag		Lead	Lead		Lag		Lag
Lead-Lag Optimize?	Yes				Yes		Yes	Yes		Yes		Yes
Act Effct Green (s)	74.0	72.0			55.0			17.0		33.0		33.0
Actuated g/C Ratio	0.53	0.51			0.39			0.12		0.24		0.24
v/c Ratio	1.13	0.52			1.08			1.05		1.08		0.58
Control Delay	130.1	24.2			94.9			138.6		122.5		10.6
Queue Delay	0.0	0.0			7.5			0.0		0.0		0.0
Total Delay	130.1	24.2			102.4			138.6		122.5		10.6
LOS	F	C			F			F		F		B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		49.1			102.4			138.6			72.0	
Approach LOS		D			F			F			E	
Queue Length 50th (ft)	~173	235			~531			~172		~363		9
Queue Length 95th (ft)	#347	294			#670			#330		#563		96
Internal Link Dist (ft)		120			281			280			401	
Turn Bay Length (ft)	50											
Base Capacity (vph)	205	1448			922			170		331		513
Starvation Cap Reductn	0	0			187			0		0		0
Spillback Cap Reductn	0	0			0			0		0		0
Storage Cap Reductn	0	0			0			0		0		0
Reduced v/c Ratio	1.13	0.52			1.36			1.05		1.08		0.58

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay: 78.9		Intersection LOS: E	
Intersection Capacity Utilization 89.3%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Larrabee Street & Chicago Avenue





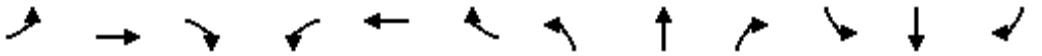
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	840	240	40	800	5	95	5	150	15	5	5
Future Volume (vph)	5	840	240	40	800	5	95	5	150	15	5	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	65		0	65		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2236	0	1408	2664	0	0	1289	0	1408	1344	0
Flt Permitted	0.329			0.157				0.874		0.526		
Satd. Flow (perm)	405	2236	0	233	2664	0	0	1142	0	767	1344	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53			1			69			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		361			1193			355			175	
Travel Time (s)		8.2			27.1			8.1			4.0	
Confl. Peds. (#/hr)	243		280	280		243	10		22	22		10
Confl. Bikes (#/hr)			35			56			23			19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1137	0	42	847	0	0	263	0	16	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	20.0	20.0		8.0	20.0		27.0	27.0		27.0	27.0	
Total Split (s)	65.0	65.0		8.0	73.0		37.0	37.0		37.0	37.0	
Total Split (%)	59.1%	59.1%		7.3%	66.4%		33.6%	33.6%		33.6%	33.6%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		0.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0		1.0	1.0	
Total Lost Time (s)	5.0	5.0		4.0	5.0			5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Act Effct Green (s)	60.0	60.0		69.0	68.0			32.0		32.0	32.0	
Actuated g/C Ratio	0.55	0.55		0.63	0.62			0.29		0.29	0.29	
v/c Ratio	0.02	0.91		0.22	0.51			0.69		0.07	0.03	
Control Delay	12.0	34.3		3.6	2.7			35.9		29.5	21.1	
Queue Delay	0.0	46.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	12.0	80.4		3.6	2.7			35.9		29.5	21.1	
LOS	B	F		A	A			D		C	C	
Approach Delay		80.1			2.8			35.9			26.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		F			A			D			C	
Queue Length 50th (ft)	2	352		2	23			122		8	3	
Queue Length 95th (ft)	7	#523		m3	27			223		26	16	
Internal Link Dist (ft)		281			1113			275			95	
Turn Bay Length (ft)	65			65								
Base Capacity (vph)	220	1243		188	1647			381		223	394	
Starvation Cap Reductn	0	227		0	0			0		0	0	
Spillback Cap Reductn	0	0		0	0			0		0	0	
Storage Cap Reductn	0	0		0	0			0		0	0	
Reduced v/c Ratio	0.02	1.12		0.22	0.51			0.69		0.07	0.03	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 54 (49%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 44.8		Intersection LOS: D	
Intersection Capacity Utilization 72.5%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Kingsbury Street & Chicago Avenue

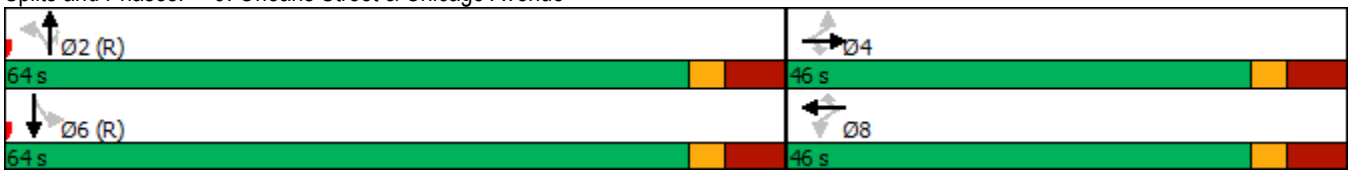


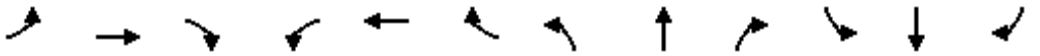
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	830	25	85	670	65	70	635	90	165	440	55
Future Volume (vph)	120	830	25	85	670	65	70	635	90	165	440	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	95		30	95		30	50		0	50		110
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2676	1169	1408	2676	1260	1408	1482	1260	1408	2704	0
Flt Permitted	0.280			0.184			0.452			0.236		
Satd. Flow (perm)	353	2676	768	258	2676	520	606	1482	1011	350	2704	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50			50			50		8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1193			406			352			306	
Travel Time (s)		27.1			9.2			8.0			7.0	
Confl. Peds. (#/hr)	247		244	244		247	133		114	114		133
Confl. Bikes (#/hr)			11			39			56			8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	18	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	874	26	89	705	68	74	668	95	174	521	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.46	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	30.0	30.0	30.0	30.0	30.0	
Total Split (s)	46.0	46.0	46.0	46.0	46.0	46.0	64.0	64.0	64.0	64.0	64.0	
Total Split (%)	41.8%	41.8%	41.8%	41.8%	41.8%	41.8%	58.2%	58.2%	58.2%	58.2%	58.2%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	37.0	37.0	37.0	37.0	37.0	37.0	55.0	55.0	55.0	55.0	55.0	
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.50	0.50	0.50	0.50	0.50	
v/c Ratio	1.07	0.97	0.09	1.03	0.78	0.33	0.24	0.90	0.18	0.99	0.38	
Control Delay	113.4	51.5	5.4	129.2	37.3	17.0	18.4	42.6	8.7	97.4	17.8	
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	113.4	51.5	5.4	129.2	37.6	17.0	18.4	42.6	8.7	97.4	17.8	
LOS	F	D	A	F	D	B	B	D	A	F	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		57.9			45.4			36.6			37.7	
Approach LOS		E			D			D			D	
Queue Length 50th (ft)	~101	341	0	~47	160	14	29	414	16	118	113	
Queue Length 95th (ft)	m#129	m#411	m0	m#118	248	m20	62	#662	46	#266	155	
Internal Link Dist (ft)		1113			326			272			226	
Turn Bay Length (ft)	95		30	95		30	50			50		
Base Capacity (vph)	118	900	291	86	900	208	303	741	530	175	1356	
Starvation Cap Reductn	0	0	0	0	20	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	1.07	0.97	0.09	1.03	0.80	0.33	0.24	0.90	0.18	0.99	0.38	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 67 (61%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 45.4		Intersection LOS: D	
Intersection Capacity Utilization 128.6%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Orleans Street & Chicago Avenue





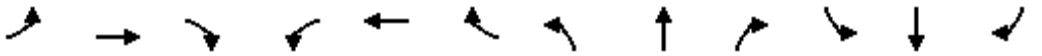
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	975	30	46	762	26	38	87	54	35	104	13
Future Volume (vph)	20	975	30	46	762	26	38	87	54	35	104	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	2518	0	0	2531	0	0	1256	0	0	1405	0
Flt Permitted		0.925			0.812			0.907			0.896	
Satd. Flow (perm)	0	2327	0	0	2061	0	0	1099	0	0	1206	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			5			1			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		406			399			394			261	
Travel Time (s)		9.2			9.1			9.0			5.9	
Confl. Peds. (#/hr)	222		910	910		222	183		336	366		183
Confl. Bikes (#/hr)			5			19			17			4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	14	14	0	14	14	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1079	0	0	877	0	0	189	0	0	160	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.47	1.33	1.33	1.47	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	17.0	17.0		17.0	17.0		26.0	26.0		18.0	18.0	
Total Split (s)	70.0	70.0		70.0	70.0		40.0	40.0		40.0	40.0	
Total Split (%)	63.6%	63.6%		63.6%	63.6%		36.4%	36.4%		36.4%	36.4%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		64.0			64.0			34.0			34.0	
Actuated g/C Ratio		0.58			0.58			0.31			0.31	
v/c Ratio		0.80			0.73			0.56			0.43	
Control Delay		11.2			7.7			39.0			33.5	
Queue Delay		1.4			0.1			0.0			0.0	
Total Delay		12.6			7.8			39.0			33.5	
LOS		B			A			D			C	
Approach Delay		12.6			7.8			39.0			33.5	
Approach LOS		B			A			D			C	
Queue Length 50th (ft)		80			16			110			87	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		m87			m53			187			151	
Internal Link Dist (ft)		326			319			314			181	
Turn Bay Length (ft)												
Base Capacity (vph)		1355			1201			340			376	
Starvation Cap Reductn		122			17			0			0	
Spillback Cap Reductn		4			8			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.88			0.74			0.56			0.43	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 79 (72%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 14.4		Intersection LOS: B	
Intersection Capacity Utilization 94.2%		ICU Level of Service F	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Franklin Street & Chicago Avenue



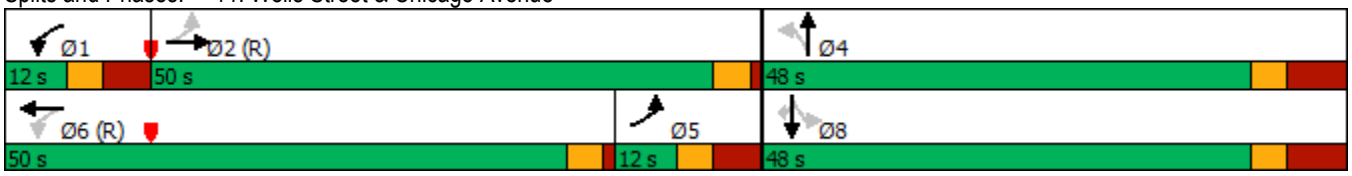
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	818	103	59	775	79	11	77	12	96	303	48
Future Volume (vph)	94	818	103	59	775	79	11	77	12	96	303	48
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	100		0	80		0	0		0	0		75
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2454	0	1408	2501	0	0	1415	0	0	1465	1260
Flt Permitted	0.269			0.098				0.934			0.885	
Satd. Flow (perm)	348	2454	0	145	2501	0	0	1316	0	0	1268	960
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			12			7				149
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		399			407			355			273	
Travel Time (s)		9.1			9.3			8.1			6.2	
Confl. Peds. (#/hr)	225		294	294		225	151		108	108		151
Confl. Bikes (#/hr)			6			25			34			10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	99	969	0	62	899	0	0	106	0	0	420	51
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4			8		8
Minimum Split (s)	12.0	21.0		12.0	21.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	12.0	50.0		12.0	50.0		48.0	48.0		48.0	48.0	48.0
Total Split (%)	10.9%	45.5%		10.9%	45.5%		43.6%	43.6%		43.6%	43.6%	43.6%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	4.0	1.0		4.0	1.0		5.0	5.0		5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0			1.0	1.0
Total Lost Time (s)	8.0	5.0		8.0	5.0			9.0			9.0	9.0
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Act Effct Green (s)	42.0	45.0		42.0	45.0			39.0			39.0	39.0
Actuated g/C Ratio	0.38	0.41		0.38	0.41			0.35			0.35	0.35
v/c Ratio	0.58	0.96		0.61	0.87			0.23			0.94	0.12
Control Delay	28.5	29.5		51.8	34.4			24.8			64.6	0.5
Queue Delay	0.0	8.8		0.0	0.7			0.0			0.0	0.0
Total Delay	28.5	38.3		51.8	35.0			24.8			64.6	0.5
LOS	C	D		D	D			C			E	A
Approach Delay		37.4			36.1			24.8			57.7	

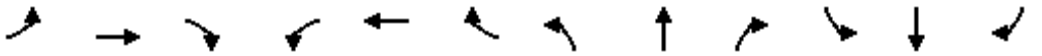
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		D			D			C			E	
Queue Length 50th (ft)	28	136		26	189			48			283	0
Queue Length 95th (ft)	m37	#212		m47	#307			92			#482	0
Internal Link Dist (ft)		319			327			275			193	
Turn Bay Length (ft)	100			80								75
Base Capacity (vph)	171	1012		101	1030			471			449	436
Starvation Cap Reductn	0	48		0	22			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.58	1.01		0.61	0.89			0.23			0.94	0.12

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 30 (27%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 40.1		Intersection LOS: D	
Intersection Capacity Utilization 85.4%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 11: Wells Street & Chicago Avenue



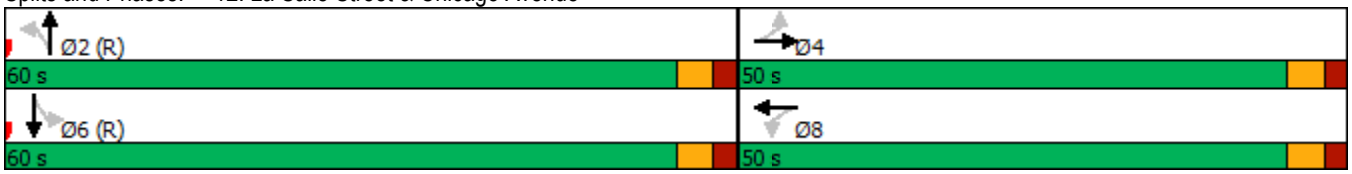


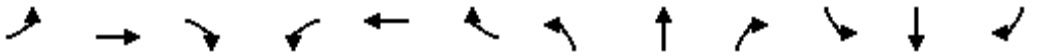
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	133	660	79	76	617	124	145	1121	85	108	660	111
Future Volume (vph)	133	660	79	76	617	124	145	1121	85	108	660	111
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	10	11	12	11	11	12	11	11	12
Storage Length (ft)	100		0	70		0	120		0	80		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1436	2591	0	1408	2738	0	1488	4041	0	1488	4042	0
Flt Permitted	0.247			0.248			0.302			0.155		
Satd. Flow (perm)	354	2591	0	348	2738	0	459	4041	0	238	4042	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			21			15			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		407			413			368			440	
Travel Time (s)		9.3			9.4			8.4			10.0	
Confl. Peds. (#/hr)	159		161	161		159	72		121	121		72
Confl. Bikes (#/hr)			14			14			1			9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	2%	2%	1%	0%	3%	7%	0%	2%	0%
Bus Blockages (#/hr)	0	18	18	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	778	0	80	780	0	153	1269	0	114	812	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.22	1.33	1.28	1.22	1.28	1.28	1.22	1.28	1.28	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	29.0	29.0		29.0	29.0		28.0	28.0		28.0	28.0	
Total Split (s)	50.0	50.0		50.0	50.0		60.0	60.0		60.0	60.0	
Total Split (%)	45.5%	45.5%		45.5%	45.5%		54.5%	54.5%		54.5%	54.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	44.0	44.0		44.0	44.0		54.0	54.0		54.0	54.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.49	0.49		0.49	0.49	
v/c Ratio	0.99	0.75		0.58	0.70		0.68	0.64		0.98	0.40	
Control Delay	64.7	14.8		28.6	25.0		39.6	22.3		111.2	17.5	
Queue Delay	0.0	0.5		0.0	1.1		0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	64.7	15.3		28.6	26.1		39.6	22.3		111.2	17.5	
LOS	E	B		C	C		D	C		F	B	
Approach Delay		22.9			26.4			24.2			29.0	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	26	72		31	158		80	232		76	121	
Queue Length 95th (ft)	m#75	m84		m30	m153		#191	282		#198	154	
Internal Link Dist (ft)		327			333			288			360	
Turn Bay Length (ft)	100			70			120			80		
Base Capacity (vph)	141	1044		139	1107		225	1991		116	2005	
Starvation Cap Reductn	0	61		0	141		0	0		0	0	
Spillback Cap Reductn	0	0		0	48		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.99	0.79		0.58	0.81		0.68	0.64		0.98	0.40	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 83 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 25.4		Intersection LOS: C	
Intersection Capacity Utilization 113.1%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 12: La Salle Street & Chicago Avenue





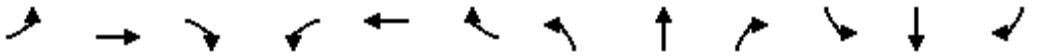
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	734	84	41	755	0	0	0	0	46	966	130
Future Volume (vph)	0	734	84	41	755	0	0	0	0	46	966	130
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	10	11	12	12	12	12	12	10	12
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2770	0	1408	1397	0	0	0	0	0	3940	0
Flt Permitted				0.274							0.998	
Satd. Flow (perm)	0	2770	0	380	1397	0	0	0	0	0	3906	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8									21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		413			144			365			405	
Travel Time (s)		9.4			3.3			8.3			9.2	
Confl. Peds. (#/hr)			161	161						139		50
Confl. Bikes (#/hr)			11									58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	2%	4%	2%	2%	2%	2%	6%	1%	2%
Bus Blockages (#/hr)	0	18	18	0	18	18	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	861	0	43	795	0	0	0	0	0	1202	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.28	1.22	1.33	1.40	1.22	1.22	1.22	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	
Protected Phases		4		3	8						6	
Permitted Phases				8						6		
Minimum Split (s)		24.0		8.0	24.0					26.0	26.0	
Total Split (s)		62.0		8.0	70.0					40.0	40.0	
Total Split (%)		56.4%		7.3%	63.6%					36.4%	36.4%	
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)		5.0		0.0	5.0					2.0	2.0	
Lost Time Adjust (s)		1.0		1.0	1.0						1.0	
Total Lost Time (s)		9.0		4.0	9.0						6.0	
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Act Effct Green (s)		53.0		66.0	61.0						34.0	
Actuated g/C Ratio		0.48		0.60	0.55						0.31	
v/c Ratio		0.64		0.16	1.03						0.98	
Control Delay		10.0		8.0	45.4						59.9	
Queue Delay		0.3		0.0	11.9						0.0	
Total Delay		10.2		8.0	57.3						59.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		B		A	E						E	
Approach Delay		10.2			54.8						59.9	
Approach LOS		B			D						E	
Queue Length 50th (ft)		83		9	~232						303	
Queue Length 95th (ft)		m100		m10	m#692						#409	
Internal Link Dist (ft)		333			64			285			325	
Turn Bay Length (ft)				100								
Base Capacity (vph)		1338		265	774						1221	
Starvation Cap Reductn		97		0	25						0	
Spillback Cap Reductn		57		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.69		0.16	1.06						0.98	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 102 (93%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 43.7		Intersection LOS: D	
Intersection Capacity Utilization 125.8%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: Clark Street & Chicago Avenue



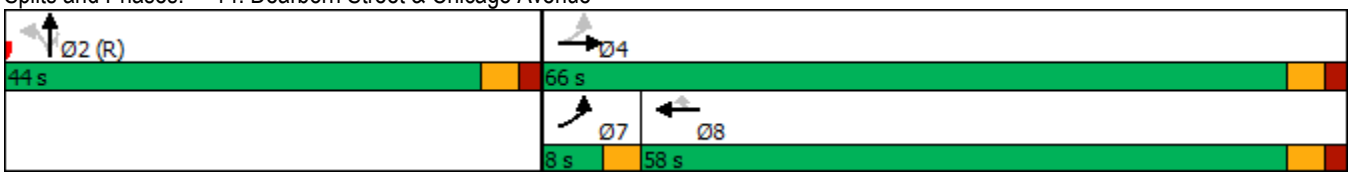
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	600	0	0	600	34	233	810	102	0	0	0
Future Volume (vph)	143	600	0	0	600	34	233	810	102	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	12	11	12	16	11	10	12	12	12
Storage Length (ft)	100		0	0		30	0		75	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1436	1425	0	0	1453	1316	1727	2946	1285	0	0	0
Flt Permitted	0.202						0.950					
Satd. Flow (perm)	305	1425	0	0	1453	822	765	2946	444	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						50			50			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			428			364			418	
Travel Time (s)		5.4			9.7			8.3			9.5	
Confl. Peds. (#/hr)	345					345	243		288			
Confl. Bikes (#/hr)						23			135			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	2%	2%	3%	0%	1%	1%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	18	0	0	11	11	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	151	632	0	0	632	36	245	853	107	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.40	1.22	1.22	1.35	1.29	1.05	1.28	1.33	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2		2			
Minimum Split (s)	8.0	23.0			23.0	23.0	22.0	22.0	22.0			
Total Split (s)	8.0	66.0			58.0	58.0	44.0	44.0	44.0			
Total Split (%)	7.3%	60.0%			52.7%	52.7%	40.0%	40.0%	40.0%			
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	1.0	1.0			1.0	1.0	1.0	1.0	1.0			
Total Lost Time (s)	4.0	6.0			6.0	6.0	6.0	6.0	6.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Act Effct Green (s)	62.0	60.0			52.0	52.0	38.0	38.0	38.0			
Actuated g/C Ratio	0.56	0.55			0.47	0.47	0.35	0.35	0.35			
v/c Ratio	0.71	0.81			0.92	0.09	0.93	0.84	0.58			
Control Delay	26.8	11.5			35.4	2.8	76.2	42.0	30.3			
Queue Delay	0.0	4.2			30.8	0.0	1.6	0.0	0.1			
Total Delay	26.8	15.8			66.2	2.8	77.8	42.0	30.4			

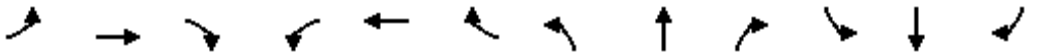
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	B			E	A	E	D	C			
Approach Delay		17.9			62.8			48.3				
Approach LOS		B			E			D				
Queue Length 50th (ft)	6	32			237	0	165	290	32			
Queue Length 95th (ft)	m#74	m73			m#592	m2	#325	373	101			
Internal Link Dist (ft)		158			348			284			338	
Turn Bay Length (ft)	100					30			75			
Base Capacity (vph)	213	777			686	414	264	1017	186			
Starvation Cap Reductn	0	0			12	0	0	0	0			
Spillback Cap Reductn	0	87			90	0	3	0	2			
Storage Cap Reductn	0	0			0	0	0	0	0			
Reduced v/c Ratio	0.71	0.92			1.06	0.09	0.94	0.84	0.58			

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 99 (90%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 43.0		Intersection LOS: D	
Intersection Capacity Utilization 125.8%		ICU Level of Service H	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Dearborn Street & Chicago Avenue





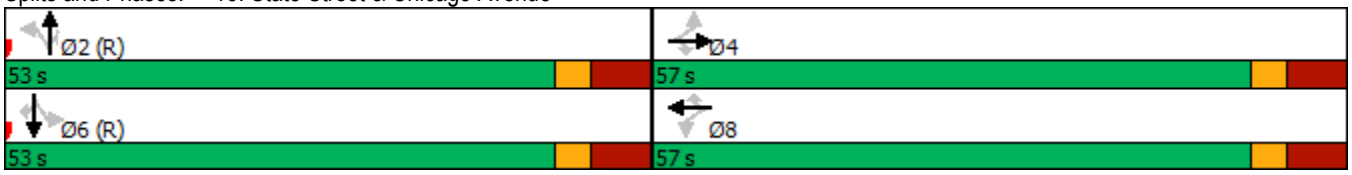
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	501	60	49	430	86	117	366	71	103	369	100
Future Volume (vph)	98	501	60	49	430	86	117	366	71	103	369	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	100		50	100		50	90		30	90		30
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1422	1334	1272	1422	1468	1216	1422	1482	1272	1422	1482	1272
Flt Permitted	0.378			0.306			0.422			0.425		
Satd. Flow (perm)	417	1334	530	458	1468	255	395	1482	572	486	1482	171
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50			50			50			50
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		428			375			323			297	
Travel Time (s)		9.7			8.5			7.3			6.8	
Confl. Peds. (#/hr)	560		252	252		560	755		221	221		755
Confl. Bikes (#/hr)			5			7			14			12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	2%	1%	1%	3%	1%	1%	2%	1%	1%	2%	1%
Bus Blockages (#/hr)	0	0	0	0	0	11	0	0	0	0	0	0
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	527	63	52	453	91	123	385	75	108	388	105
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.52	1.33	1.33	1.33	1.41	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	26.0	26.0	26.0	26.0	26.0	26.0
Total Split (s)	57.0	57.0	57.0	57.0	57.0	57.0	53.0	53.0	53.0	53.0	53.0	53.0
Total Split (%)	51.8%	51.8%	51.8%	51.8%	51.8%	51.8%	48.2%	48.2%	48.2%	48.2%	48.2%	48.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	44.0	44.0	44.0	44.0	44.0	44.0
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.44	0.44	0.40	0.40	0.40	0.40	0.40	0.40
v/c Ratio	0.57	0.91	0.24	0.26	0.71	0.65	0.78	0.65	0.29	0.56	0.66	1.07
Control Delay	17.3	27.0	1.9	13.4	17.1	15.0	62.9	33.0	12.9	38.7	33.2	134.5
Queue Delay	0.0	16.9	0.0	0.0	5.9	0.0	0.7	0.0	0.0	0.0	0.0	10.1

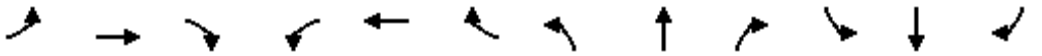
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	17.3	44.0	1.9	13.4	23.0	15.0	63.6	33.0	12.9	38.7	33.2	144.6
LOS	B	D	A	B	C	B	E	C	B	D	C	F
Approach Delay		36.2			21.0			36.9			53.7	
Approach LOS		D			C			D			D	
Queue Length 50th (ft)	21	262	0	11	157	3	74	217	11	58	219	~59
Queue Length 95th (ft)	m44	m#522	m3	m11	m161	m3	#184	327	47	125	330	#126
Internal Link Dist (ft)		348			295			243			217	
Turn Bay Length (ft)	100		50	100		50	90		30	90		30
Base Capacity (vph)	181	582	259	199	640	139	158	592	258	194	592	98
Starvation Cap Reductn	0	32	0	0	135	0	0	0	0	0	0	0
Spillback Cap Reductn	0	61	0	0	61	0	2	0	2	0	0	3
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	1.01	0.24	0.26	0.90	0.65	0.79	0.65	0.29	0.56	0.66	1.11

Intersection Summary

Area Type: CBD
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 1.07
Intersection Signal Delay: 36.9 Intersection LOS: D
Intersection Capacity Utilization 112.0% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 15: State Street & Chicago Avenue



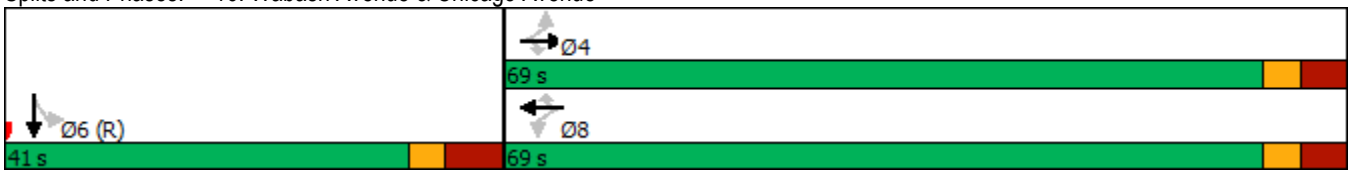


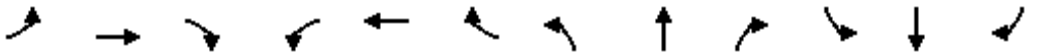
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	554	64	70	486	30	0	0	0	46	154	57
Future Volume (vph)	39	554	64	70	486	30	0	0	0	46	154	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	12	10	10	12	12	12	12	12	12	12
Storage Length (ft)	80		30	80		30	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	958	923	858	958	964	872	0	0	0	0	929	0
Flt Permitted	0.386			0.332							0.991	
Satd. Flow (perm)	301	923	275	335	964	187	0	0	0	0	845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50			50					13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		375			368			298			279	
Travel Time (s)		8.5			8.4			6.8			6.3	
Confl. Peds. (#/hr)	483		345	345		483				185		159
Confl. Bikes (#/hr)			7			13						9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	50%	52%	49%	50%	50%	51%	51%	51%	49%	49%	50%	50%
Bus Blockages (#/hr)	0	18	18	0	11	11	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	583	67	74	512	32	0	0	0	0	270	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.46	1.34	*0.50	1.41	1.29	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm				Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4		4	8		8				6		
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0				27.0	27.0	
Total Split (s)	69.0	69.0	69.0	69.0	69.0	69.0				41.0	41.0	
Total Split (%)	62.7%	62.7%	62.7%	62.7%	62.7%	62.7%				37.3%	37.3%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	4.0	4.0	4.0	4.0	4.0	4.0				5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0					1.0	
Total Lost Time (s)	8.0	8.0	8.0	8.0	8.0	8.0					9.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	61.0	61.0	61.0	61.0	61.0	61.0					32.0	
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55					0.29	
v/c Ratio	0.25	1.14	0.39	0.40	0.96	0.26					1.06	
Control Delay	12.3	96.0	7.3	12.3	37.9	4.2					110.0	
Queue Delay	0.0	0.2	0.0	0.0	7.7	0.0					0.0	
Total Delay	12.3	96.3	7.3	12.3	45.6	4.2					110.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	F	A	B	D	A					F	
Approach Delay		82.6			39.5						110.0	
Approach LOS		F			D						F	
Queue Length 50th (ft)	8	~472	1	10	93	0					~203	
Queue Length 95th (ft)	m14	m#596	m4	m23	#563	m1					#373	
Internal Link Dist (ft)		295			288			218			199	
Turn Bay Length (ft)	80		30	80		30						
Base Capacity (vph)	166	511	174	185	534	125					255	
Starvation Cap Reductn	0	0	0	0	0	0					0	
Spillback Cap Reductn	0	14	0	0	21	0					0	
Storage Cap Reductn	0	0	0	0	0	0					0	
Reduced v/c Ratio	0.25	1.17	0.39	0.40	1.00	0.26					1.06	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 109 (99%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 140			
Control Type: Pretimed			
Maximum v/c Ratio: 1.14			
Intersection Signal Delay: 70.4		Intersection LOS: E	
Intersection Capacity Utilization 84.9%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 16: Wabash Avenue & Chicago Avenue



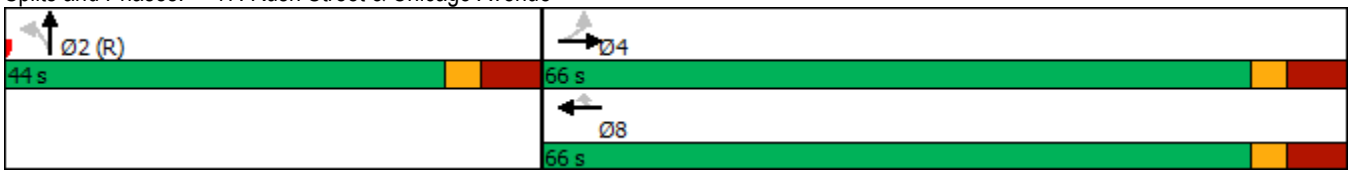


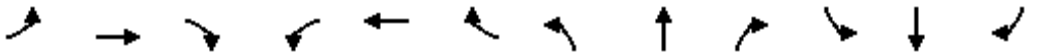
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	540	0	0	515	71	69	173	34	0	0	0
Future Volume (vph)	44	540	0	0	515	71	69	173	34	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	12	11	12	12	12	12	12	12	12
Storage Length (ft)	80		0	0		30	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1422	1411	0	0	1520	1363	0	1451	0	0	0	0
Flt Permitted	0.350							0.988				
Satd. Flow (perm)	524	1411	0	0	1520	158	0	1250	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						50		7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		368			334			328			284	
Travel Time (s)		8.4			7.6			7.5			6.5	
Confl. Peds. (#/hr)	568					568	260		245			
Confl. Bikes (#/hr)						15			10			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	3%	2%	2%	3%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	18	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	568	0	0	542	75	0	291	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.40	1.22	1.22	1.28	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Minimum Split (s)	21.0	21.0			21.0	21.0	27.0	27.0				
Total Split (s)	66.0	66.0			66.0	66.0	44.0	44.0				
Total Split (%)	60.0%	60.0%			60.0%	60.0%	40.0%	40.0%				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Lost Time Adjust (s)	1.0	1.0			1.0	1.0		1.0				
Total Lost Time (s)	9.0	9.0			9.0	9.0		9.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	57.0	57.0			57.0	57.0		35.0				
Actuated g/C Ratio	0.52	0.52			0.52	0.52		0.32				
v/c Ratio	0.17	0.78			0.69	0.71		0.72				
Control Delay	5.6	7.9			12.1	32.6		44.3				
Queue Delay	0.0	25.1			1.0	0.0		0.0				
Total Delay	5.6	33.0			13.1	32.6		44.3				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	C			B	C		D				
Approach Delay		31.0			15.5			44.3				
Approach LOS		C			B			D				
Queue Length 50th (ft)	5	61			128	3		177				
Queue Length 95th (ft)	m4	m54			m148	m7		#289				
Internal Link Dist (ft)		288			254			248			204	
Turn Bay Length (ft)	80					30						
Base Capacity (vph)	271	731			787	105		402				
Starvation Cap Reductn	0	151			82	0		0				
Spillback Cap Reductn	0	177			49	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.17	1.03			0.77	0.71		0.72				

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 4 (4%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 27.2		Intersection LOS: C	
Intersection Capacity Utilization 76.5%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 17: Rush Street & Chicago Avenue



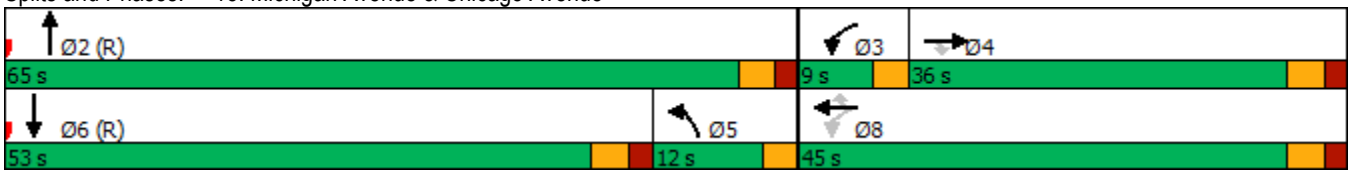


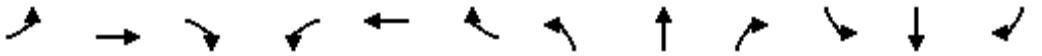
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	400	127	122	305	105	97	1384	81	0	1200	142
Future Volume (vph)	0	400	127	122	305	105	97	1384	81	0	1200	142
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	10	10	10	10	10	12	12	10	12
Storage Length (ft)	0		50	100		50	115		0	0		0
Storage Lanes	0		1	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1454	1193	1282	1440	1179	1408	2972	0	0	3095	0
Flt Permitted				0.176			0.950					
Satd. Flow (perm)	0	1454	646	201	1440	810	1230	2972	0	0	3095	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99			69		10			19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		334			679			321			298	
Travel Time (s)		7.6			15.4			7.3			6.8	
Confl. Peds. (#/hr)			947	947		295	1480		1878			1480
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	12%	5%	9%	2%	4%	20%	2%	2%	0%
Bus Blockages (#/hr)	0	0	18	0	0	0	0	49	49	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	421	134	128	321	111	102	1542	0	0	1412	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.33	1.46	1.33	1.33	1.33	1.33	1.45	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	pm+pt	NA	Perm	Prot	NA			NA	
Protected Phases		4		3	8		5	2			6	
Permitted Phases			4	8		8						
Minimum Split (s)		34.0	34.0	8.0	34.0	34.0	8.0	24.0			24.0	
Total Split (s)		36.0	36.0	9.0	45.0	45.0	12.0	65.0			53.0	
Total Split (%)		32.7%	32.7%	8.2%	40.9%	40.9%	10.9%	59.1%			48.2%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
All-Red Time (s)		2.0	2.0	0.0	2.0	2.0	0.0	2.0			2.0	
Lost Time Adjust (s)		1.0	1.0	1.0	1.0	1.0	1.0	1.0			1.0	
Total Lost Time (s)		6.0	6.0	4.0	6.0	6.0	4.0	6.0			6.0	
Lead/Lag		Lag	Lag	Lead			Lag				Lead	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes				Yes	
Act Effct Green (s)		30.0	30.0	41.0	39.0	39.0	8.0	59.0			47.0	
Actuated g/C Ratio		0.27	0.27	0.37	0.35	0.35	0.07	0.54			0.43	
v/c Ratio		1.06	0.54	1.03	0.63	0.34	1.00	0.96			1.06	
Control Delay		80.0	10.0	121.7	36.1	14.2	141.6	40.7			73.1	
Queue Delay		14.0	0.0	0.0	0.0	0.0	15.4	0.0			0.0	
Total Delay		93.9	10.0	121.7	36.1	14.2	157.0	40.7			73.1	
LOS		F	B	F	D	B	F	D			E	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		73.7			51.3			47.9			73.1	
Approach LOS		E			D			D			E	
Queue Length 50th (ft)		~323	27	~65	187	20	73	425			~466	
Queue Length 95th (ft)		m#501	m28	#183	287	67	#185	#579			#579	
Internal Link Dist (ft)		254			599			241			218	
Turn Bay Length (ft)			50	100		50	115					
Base Capacity (vph)		396	248	124	510	331	102	1598			1333	
Starvation Cap Reductn		21	0	0	0	0	0	0			0	
Spillback Cap Reductn		0	0	0	0	0	5	0			0	
Storage Cap Reductn		0	0	0	0	0	0	0			0	
Reduced v/c Ratio		1.12	0.54	1.03	0.63	0.34	1.05	0.96			1.06	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 60.3		Intersection LOS: E	
Intersection Capacity Utilization 88.0%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 18: Michigan Avenue & Chicago Avenue



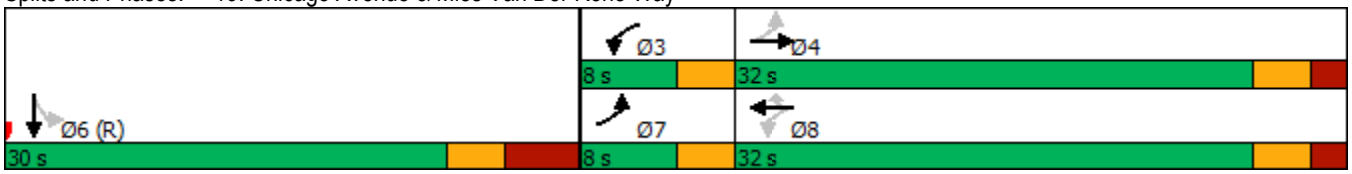


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	388	2	0	442	102	0	0	0	216	0	61
Future Volume (vph)	49	388	2	0	442	102	0	0	0	216	0	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	16	10	12
Storage Length (ft)	100		100	0		50	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1197	2269	0	756	1326	989	0	0	0	0	1225	0
Flt Permitted	0.318										0.962	
Satd. Flow (perm)	321	2269	0	756	1326	429	0	0	0	0	921	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				109					78	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		679			400			272			306	
Travel Time (s)		15.4			9.1			6.2			7.0	
Confl. Peds. (#/hr)	319					319				391		194
Confl. Bikes (#/hr)			18			19						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	20%	22%	0%	100%	14%	19%	2%	2%	2%	8%	0%	2%
Bus Blockages (#/hr)	0	18	18	0	0	21	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	410	0	0	465	107	0	0	0	0	291	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			75			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.75	1.39	1.33	1.33	1.33	1.48	1.33	1.33	1.33	1.05	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	Perm				Perm	NA	
Protected Phases	7	4		3	8						6	
Permitted Phases	4			8		8				6		
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0				28.0	28.0	
Total Split (s)	8.0	32.0		8.0	32.0	32.0				30.0	30.0	
Total Split (%)	11.4%	45.7%		11.4%	45.7%	45.7%				42.9%	42.9%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0				4.0	4.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	1.0					1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0					8.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Act Effct Green (s)	32.0	26.0			26.0	26.0					22.0	
Actuated g/C Ratio	0.46	0.37			0.37	0.37					0.31	
v/c Ratio	0.27	0.49			0.95	0.47					0.85	
Control Delay	12.3	19.3			42.3	6.9					42.0	
Queue Delay	0.0	0.0			0.0	0.0					0.0	
Total Delay	12.3	19.3			42.3	6.9					42.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B			D	A					D	
Approach Delay		18.5			35.7						42.0	
Approach LOS		B			D						D	
Queue Length 50th (ft)	11	69			89	0					86	
Queue Length 95th (ft)	27	109			m#316	m0					#226	
Internal Link Dist (ft)		599			320			192			226	
Turn Bay Length (ft)	100					50						
Base Capacity (vph)	196	843			492	227					342	
Starvation Cap Reductn	0	0			0	0					0	
Spillback Cap Reductn	0	0			0	0					0	
Storage Cap Reductn	0	0			0	0					0	
Reduced v/c Ratio	0.27	0.49			0.95	0.47					0.85	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 16 (23%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 31.1		Intersection LOS: C	
Intersection Capacity Utilization 66.5%		ICU Level of Service C	
Analysis Period (min) 15			
* User Entered Value			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 19: Chicago Avenue & Mies Van Der Rohe Way

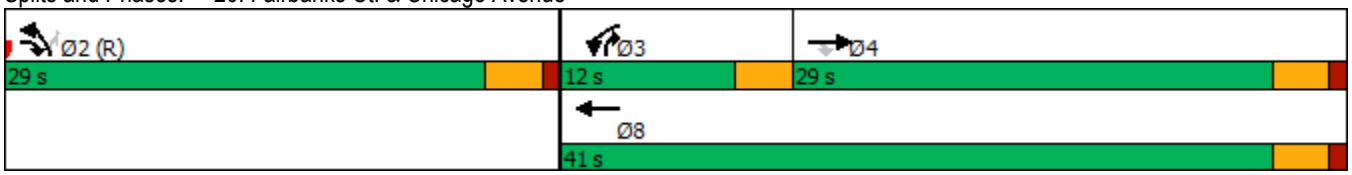


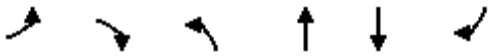
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	410	140	50	165	350	250
Future Volume (vph)	410	140	50	165	350	250
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	12	10	11	11	12
Storage Length (ft)		0	100		140	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	1550	1151	1422	1550	1340	1249
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1550	550	1022	1550	1340	866
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		147				9
Link Speed (mph)	30			30	30	
Link Distance (ft)	400			888	320	
Travel Time (s)	9.1			20.2	7.3	
Confl. Peds. (#/hr)		402	402			360
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	11%	1%	1%	11%	1%
Bus Blockages (#/hr)	0	18	0	0	0	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	432	147	53	174	368	263
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			10	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.28	1.34	1.33	1.28	1.28	1.36
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Minimum Split (s)	29.0	29.0	8.0	29.0	29.0	8.0
Total Split (s)	29.0	29.0	12.0	41.0	29.0	12.0
Total Split (%)	41.4%	41.4%	17.1%	58.6%	41.4%	17.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	0.0	1.0	1.0	0.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?						
Act Effct Green (s)	24.0	48.0	8.0	36.0	24.0	33.0
Actuated g/C Ratio	0.34	0.69	0.11	0.51	0.34	0.47
v/c Ratio	0.81	0.23	0.33	0.22	0.80	0.58
Control Delay	32.7	2.8	45.6	6.1	36.7	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.7	2.8	45.6	6.1	36.7	17.2
LOS	C	A	D	A	D	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	25.1			15.3	28.6	
Approach LOS	C			B	C	
Queue Length 50th (ft)	161	0	23	22	141	60
Queue Length 95th (ft)	m#285	m24	57	36	#280	111
Internal Link Dist (ft)	320			808	240	
Turn Bay Length (ft)			100		140	
Base Capacity (vph)	531	629	162	797	459	456
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.23	0.33	0.22	0.80	0.58

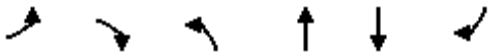
Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 47 (67%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 25.1		Intersection LOS: C	
Intersection Capacity Utilization 63.9%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 20: Fairbanks Ct. & Chicago Avenue





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	300	50	100	100	65
Future Volume (vph)	100	300	50	100	100	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	1408	1260	0	2771	2650	0
Flt Permitted	0.950			0.811		
Satd. Flow (perm)	1408	1260	0	2284	2650	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		316			68	
Link Speed (mph)	30			40	30	
Link Distance (ft)	888			307	377	
Travel Time (s)	20.2			5.2	8.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	316	0	158	173	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	20			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Minimum Split (s)	11.0	11.0	11.0	11.0	29.0	
Total Split (s)	39.0	39.0	31.0	31.0	31.0	
Total Split (%)	55.7%	55.7%	44.3%	44.3%	44.3%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	32.0	32.0		24.0	24.0	
Actuated g/C Ratio	0.46	0.46		0.34	0.34	
v/c Ratio	0.16	0.42		0.20	0.18	
Control Delay	7.7	1.8		17.1	10.5	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	7.7	1.8		17.1	10.5	
LOS	A	A		B	B	
Approach Delay	3.3			17.1	10.5	
Approach LOS	A			B	B	
Queue Length 50th (ft)	16	5		24	15	
Queue Length 95th (ft)	m21	m3		45	36	
Internal Link Dist (ft)	808			227	297	
Turn Bay Length (ft)						
Base Capacity (vph)	643	747		783	953	

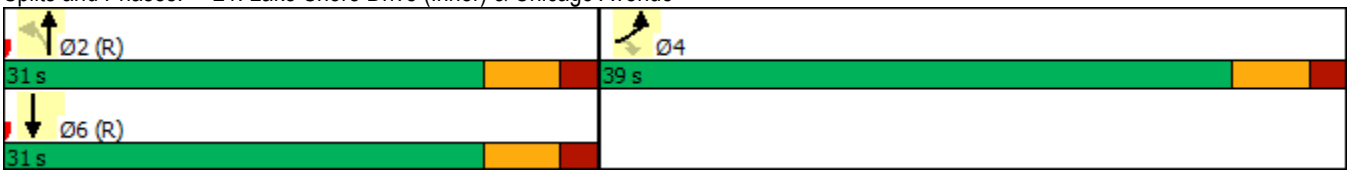


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.16	0.42		0.20	0.18	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 69 (99%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 7.8		Intersection LOS: A	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 21: Lake Shore Drive (Inner) & Chicago Avenue



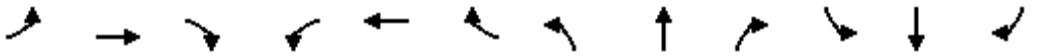
Synchro Reports -

Existing Volumes

Proposed Geometry

Optimized

AM Reports



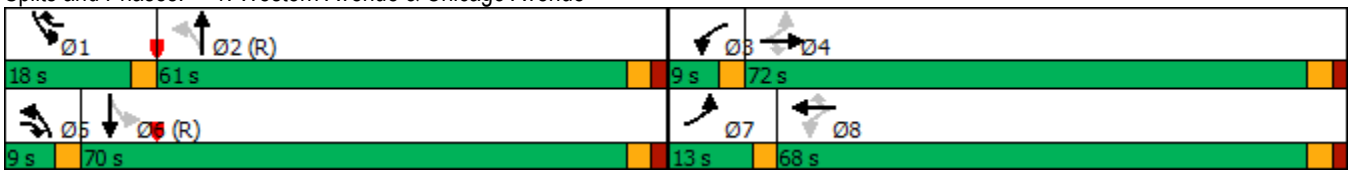
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	478	62	77	286	76	32	758	65	163	902	59
Future Volume (vph)	113	478	62	77	286	76	32	758	65	163	902	59
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	10	12	10	11	12	10	11	9	10	11	9
Storage Length (ft)	160		260	100		0	100		0	100		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98		0.82			0.93		0.98			0.99	
Frt			0.850			0.850		0.988			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1459	1296	1283	1395	1450	1313	1368	2714	0	1408	2773	0
Flt Permitted	0.408			0.265			0.147			0.134		
Satd. Flow (perm)	612	1296	1054	389	1450	1220	212	2714	0	199	2773	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			61			80		6			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		633			179			340			330	
Travel Time (s)		14.4			4.1			7.7			7.5	
Confl. Peds. (#/hr)	30		85	85		30	40		42	42		40
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	5%	6%	3%	8%	4%	5%	7%	3%	2%	5%	7%
Bus Blockages (#/hr)	0	0	3	0	0	2	0	0	0	0	0	0
Parking (#/hr)		0										
Adj. Flow (vph)	119	503	65	81	301	80	34	798	68	172	949	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	503	65	81	301	80	34	866	0	172	1011	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.28	1.52	1.24	1.33	1.28	1.24	1.33	1.28	1.39	1.33	1.28	1.39
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	9.0	29.0	9.0	9.0	29.0	9.0	9.0	26.0		9.0	26.0	
Total Split (s)	13.0	72.0	9.0	9.0	68.0	18.0	9.0	61.0		18.0	70.0	
Total Split (%)	8.1%	45.0%	5.6%	5.6%	42.5%	11.3%	5.6%	38.1%		11.3%	43.8%	
Maximum Green (s)	10.0	67.0	6.0	6.0	63.0	15.0	6.0	56.0		15.0	65.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	1.0	-1.0	1.0	1.0	-1.0	1.0	1.0	-1.0		1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		19.0			19.0			14.0			14.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	77.0	68.0	73.0	69.0	64.0	78.0	62.0	57.0		75.0	66.0	
Actuated g/C Ratio	0.48	0.42	0.46	0.43	0.40	0.49	0.39	0.36		0.47	0.41	
v/c Ratio	0.35	0.91	0.12	0.41	0.52	0.12	0.29	0.89		0.86	0.88	
Control Delay	26.7	65.8	6.1	26.2	34.1	7.2	30.2	60.8		64.2	53.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	26.7	65.8	6.1	26.2	34.1	7.2	30.2	60.8		64.2	53.5	
LOS	C	E	A	C	C	A	C	E		E	D	
Approach Delay		53.4			28.1			59.6			55.0	
Approach LOS		D			C			E			E	
Stops (vph)	63	419	9	50	185	14	19	741		91	853	
Fuel Used(gal)	2	11	0	1	5	1	0	16		3	18	
CO Emissions (g/hr)	106	775	30	76	315	41	27	1151		213	1233	
NOx Emissions (g/hr)	21	151	6	15	61	8	5	224		42	240	
VOC Emissions (g/hr)	25	180	7	18	73	10	6	267		49	286	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	69	491	2	46	212	9	19	447		108	508	
Queue Length 95th (ft)	113	#725	30	80	279	36	41	#568		#237	613	
Internal Link Dist (ft)		553			99			260			250	
Turn Bay Length (ft)	160		260	100			100			100		
Base Capacity (vph)	342	550	521	199	580	643	118	970		199	1146	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.35	0.91	0.12	0.41	0.52	0.12	0.29	0.89		0.86	0.88	

Intersection Summary

Area Type: CBD
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 15 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Pretimed
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 52.1 Intersection LOS: D
Intersection Capacity Utilization 85.7% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Western Avenue & Chicago Avenue



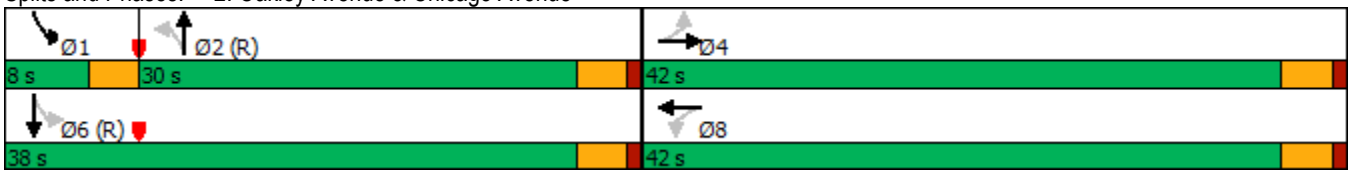
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	606	50	50	339	50	50	100	50	50	100	50
Future Volume (vph)	50	606	50	50	339	50	50	100	50	50	100	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	0		0	0		0	30		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.983			0.966			0.966	
Flt Protected		0.996			0.994			0.988			0.988	
Satd. Flow (prot)	0	2636	0	0	2752	0	0	1415	0	0	1415	0
Flt Permitted		0.889			0.816			0.883			0.901	
Satd. Flow (perm)	0	2352	0	0	2259	0	0	1264	0	0	1290	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		491			631			329			347	
Travel Time (s)		11.2			14.3			7.5			7.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0										
Adj. Flow (vph)	53	638	53	53	357	53	53	105	53	53	105	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	744	0	0	463	0	0	211	0	0	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	15.0	15.0		15.0	15.0		22.0	22.0		8.0	22.0	
Total Split (s)	42.0	42.0		42.0	42.0		30.0	30.0		8.0	38.0	
Total Split (%)	52.5%	52.5%		52.5%	52.5%		37.5%	37.5%		10.0%	47.5%	
Maximum Green (s)	38.0	38.0		38.0	38.0		26.0	26.0		5.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		0.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Flash Dont Walk (s)	6.0	6.0		6.0	6.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	
Act Effct Green (s)		38.0			38.0			26.0			34.0	
Actuated g/C Ratio		0.48			0.48			0.32			0.42	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.67			0.43			0.51			0.38	
Control Delay		14.9			15.5			27.3			18.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		14.9			15.5			27.3			18.2	
LOS		B			B			C			B	
Approach Delay		14.9			15.5			27.3			18.2	
Approach LOS		B			B			C			B	
Stops (vph)		468			277			159			131	
Fuel Used(gal)		8			5			3			2	
CO Emissions (g/hr)		589			355			175			140	
NOx Emissions (g/hr)		115			69			34			27	
VOC Emissions (g/hr)		137			82			41			32	
Dilemma Vehicles (#)		0			0			0			0	
Queue Length 50th (ft)		148			76			85			69	
Queue Length 95th (ft)		m194			115			151			122	
Internal Link Dist (ft)		411			551			249			267	
Turn Bay Length (ft)												
Base Capacity (vph)		1117			1073			410			554	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.67			0.43			0.51			0.38	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 17.1		Intersection LOS: B	
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Oakley Avenue & Chicago Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	27	500	99	0	467	103	236	560	10	45	270	6
Future Volume (vph)	27	500	99	0	467	103	236	560	10	45	270	6
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	130		50	0		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	*0.80	0.95	1.00	*0.80	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	0.99			0.99		0.98		0.92	0.98	1.00	
Frt		0.975			0.973				0.850		0.997	
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1408	2206	0	0	2192	0	1408	1482	1260	1408	1476	0
Flt Permitted	0.277						0.556			0.250		
Satd. Flow (perm)	401	2206	0	0	2192	0	806	1482	1160	363	1476	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		426			207			537			178	
Travel Time (s)		9.7			4.7			12.2			4.0	
Confl. Peds. (#/hr)	38		59			38	36		71	71		36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	18	18	0	18	18	0	0	0	0	0	0
Adj. Flow (vph)	28	526	104	0	492	108	248	589	11	47	284	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	630	0	0	600	0	248	589	11	47	290	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.39	1.33	1.33	1.39	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4						6		6	2		
Minimum Split (s)	8.0	8.0			35.0		39.0	39.0	39.0	39.0	39.0	
Total Split (s)	38.0	38.0			48.0		52.0	52.0	52.0	52.0	52.0	
Total Split (%)	38.0%	38.0%			48.0%		52.0%	52.0%	52.0%	52.0%	52.0%	
Maximum Green (s)	35.0	35.0			43.0		44.0	44.0	44.0	44.0	44.0	
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	0.0			2.0		5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0			1.0		1.0	1.0	-3.0	1.0	1.0	
Total Lost Time (s)	4.0	4.0			6.0		9.0	9.0	5.0	9.0	9.0	
Lead/Lag	Lead	Lead										
Lead-Lag Optimize?	Yes	Yes										
Walk Time (s)					5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)					25.0		26.0	26.0	26.0	26.0	26.0	
Pedestrian Calls (#/hr)					0		0	0	0	0	0	

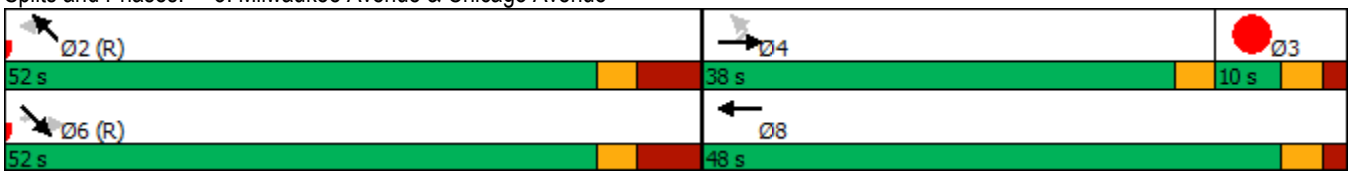
Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Bus Blockages (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Minimum Split (s)	10.0
Total Split (s)	10.0
Total Split (%)	10%
Maximum Green (s)	5.0
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Act Effct Green (s)	34.0	34.0			42.0		43.0	43.0	47.0	43.0	43.0	
Actuated g/C Ratio	0.34	0.34			0.42		0.43	0.43	0.47	0.43	0.43	
v/c Ratio	0.21	0.84			0.65		0.72	0.92	0.02	0.30	0.46	
Control Delay	28.4	42.3			8.9		37.4	49.8	14.4	17.0	14.3	
Queue Delay	0.0	6.0			0.0		0.0	47.0	0.0	1.0	31.9	
Total Delay	28.4	48.3			8.9		37.4	96.8	14.4	18.0	46.2	
LOS	C	D			A		D	F	B	B	D	
Approach Delay		47.4			8.9			78.4			42.3	
Approach LOS		D			A			E			D	
Stops (vph)	21	523			449		191	474	6	19	128	
Fuel Used(gal)	0	10			4		4	11	0	0	2	
CO Emissions (g/hr)	25	701			310		268	744	7	23	132	
NOx Emissions (g/hr)	5	136			60		52	145	1	4	26	
VOC Emissions (g/hr)	6	162			72		62	172	2	5	31	
Dilemma Vehicles (#)	0	0			0		0	0	0	0	0	
Queue Length 50th (ft)	13	229			11		127	346	4	8	63	
Queue Length 95th (ft)	37	#346			15		#253	#570	14	m27	133	
Internal Link Dist (ft)		346			127			457			98	
Turn Bay Length (ft)	50						130		50			
Base Capacity (vph)	136	750			920		346	637	545	156	634	
Starvation Cap Reductn	0	0			7		0	0	0	29	348	
Spillback Cap Reductn	0	81			0		0	172	0	0	0	
Storage Cap Reductn	0	0			0		0	0	0	0	0	
Reduced v/c Ratio	0.21	0.94			0.66		0.72	1.27	0.02	0.37	1.01	

Intersection Summary

Area Type: CBD
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 2 (2%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 48.0 Intersection LOS: D
Intersection Capacity Utilization 105.4% ICU Level of Service G
Analysis Period (min) 15
* User Entered Value
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Milwaukee Avenue & Chicago Avenue



Lane Group	Ø3
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	658	0	204	550	3	0	92	368	29	110	26
Future Volume (vph)	31	658	0	204	550	3	0	92	368	29	110	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	9	10	10	10	10	10	10	10	10
Storage Length (ft)	0		0	160		0	0		0	50		50
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.94			0.98	1.00				0.96	0.98	0.99	
Frt					0.999				0.850		0.972	
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1408	2372	0	1358	2368	0	0	1482	1260	1408	1284	0
Flt Permitted	0.389			0.173						0.694		
Satd. Flow (perm)	541	2372	0	243	2368	0	0	1482	1215	1007	1284	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		207			1872			137			461	
Travel Time (s)		4.7			42.5			3.1			10.5	
Confl. Peds. (#/hr)	90			73		90			18	18		31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)											0	0
Adj. Flow (vph)	33	693	0	215	579	3	0	97	387	31	116	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	693	0	215	582	0	0	97	387	31	143	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.39	1.33	1.33	1.33	1.33	1.33	1.33	1.52	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA			NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8					2	6		
Minimum Split (s)	8.0	40.0		8.0	13.0			27.0	27.0	27.0	27.0	
Total Split (s)	8.0	45.0		17.0	54.0			38.0	38.0	38.0	38.0	
Total Split (%)	8.0%	45.0%		17.0%	54.0%			38.0%	38.0%	38.0%	38.0%	
Maximum Green (s)	5.0	37.0		13.0	46.0			33.0	33.0	33.0	33.0	
Yellow Time (s)	3.0	3.0		3.5	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	5.0		0.5	5.0			2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	6.0	1.0		5.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?		Yes		Yes								
Walk Time (s)		5.0						5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		27.0						17.0	17.0	17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)		0						0	0	0	0	
Act Effct Green (s)	36.0	36.0		53.0	45.0			32.0	32.0	32.0	32.0	
Actuated g/C Ratio	0.36	0.36		0.53	0.45			0.32	0.32	0.32	0.32	
v/c Ratio	0.17	0.81		0.99	0.55			0.20	1.00	0.10	0.35	
Control Delay	12.6	20.1		79.0	22.5			2.9	52.5	25.0	29.1	
Queue Delay	0.0	13.8		38.7	0.3			3.9	36.3	0.0	0.0	
Total Delay	12.6	33.9		117.7	22.8			6.8	88.8	25.0	29.1	
LOS	B	C		F	C			A	F	C	C	
Approach Delay		32.9			48.4			72.4			28.3	
Approach LOS		C			D			E			C	
Stops (vph)	11	410		97	391			1	6	22	102	
Fuel Used(gal)	0	6		7	13			0	4	0	2	
CO Emissions (g/hr)	13	421		475	892			11	305	26	130	
NOx Emissions (g/hr)	3	82		92	174			2	59	5	25	
VOC Emissions (g/hr)	3	98		110	207			3	71	6	30	
Dilemma Vehicles (#)	0	0		0	0			0	0	0	0	
Queue Length 50th (ft)	8	104		73	164			0	0	14	69	
Queue Length 95th (ft)	m11	m198		#205	228			m0	#459	36	124	
Internal Link Dist (ft)		127			1792			57			381	
Turn Bay Length (ft)				160						50		
Base Capacity (vph)	194	853		217	1065			474	388	322	410	
Starvation Cap Reductn	0	153		0	0			305	108	0	0	
Spillback Cap Reductn	0	0		64	129			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.17	0.99		1.41	0.62			0.57	1.38	0.10	0.35	

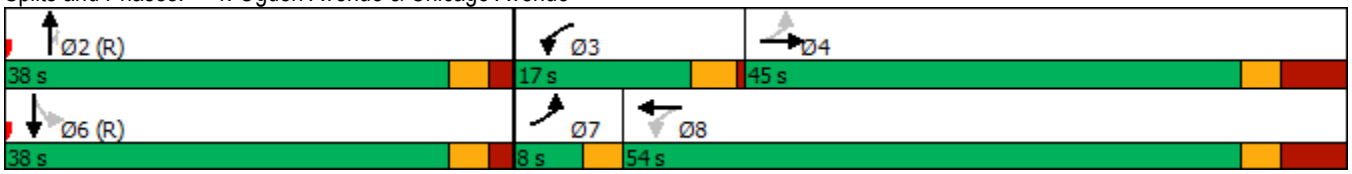
Intersection Summary			
Area Type:	CBD		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 47.0		Intersection LOS: D	
Intersection Capacity Utilization 91.0%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Ogden Avenue & Chicago Avenue



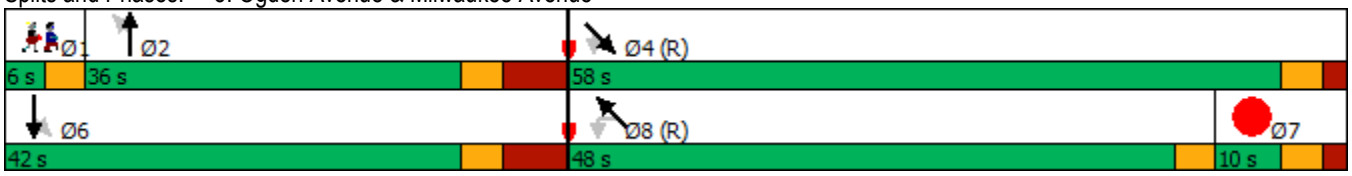
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	118	443	63	14	307	0	0	520	121	80	195	10
Future Volume (vph)	118	443	63	14	307	0	0	520	121	80	195	10
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	110		0	0		0	0		0	90		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.81	0.97		0.94					0.93	0.98	1.00	
Frt		0.981							0.850		0.992	
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1408	2694	0	1408	2816	0	0	1482	1260	1408	1465	0
Flt Permitted	0.556			0.310						0.304		
Satd. Flow (perm)	667	2694	0	431	2816	0	0	1482	1169	441	1465	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		514			137			178			729	
Travel Time (s)		11.7			3.1			4.0			16.6	
Confl. Peds. (#/hr)	169		63	63					53	53		100
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	124	466	66	15	323	0	0	547	127	84	205	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	532	0	15	323	0	0	547	127	84	216	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6					4	8		
Minimum Split (s)	25.0	25.0		25.0	25.0			31.0	31.0	8.0	8.0	
Total Split (s)	36.0	36.0		42.0	42.0			58.0	58.0	48.0	48.0	
Total Split (%)	36.0%	36.0%		42.0%	42.0%			58.0%	58.0%	48.0%	48.0%	
Maximum Green (s)	28.0	28.0		34.0	34.0			53.0	53.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	0.0	0.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	4.0	4.0	
Lead/Lag	Lag	Lag								Lead	Lead	
Lead-Lag Optimize?	Yes	Yes								Yes	Yes	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0	5.0			
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			21.0	21.0			
Pedestrian Calls (#/hr)	0	0		0	0			0	0			
Act Effct Green (s)	27.0	27.0		33.0	33.0			52.0	52.0	44.0	44.0	

Lane Group	Ø1	Ø7
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	7
Permitted Phases		
Minimum Split (s)	6.0	10.0
Total Split (s)	6.0	10.0
Total Split (%)	6%	10%
Maximum Green (s)	3.0	5.0
Yellow Time (s)	3.0	3.0
All-Red Time (s)	0.0	2.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Walk Time (s)		
Flash Dont Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Actuated g/C Ratio	0.27	0.27		0.33	0.33			0.52	0.52	0.44	0.44	
v/c Ratio	0.69	0.73		0.11	0.35			0.71	0.21	0.43	0.34	
Control Delay	54.6	40.1		25.4	25.9			21.9	10.1	28.1	20.3	
Queue Delay	5.2	0.0		1.1	61.2			57.3	12.9	0.0	0.0	
Total Delay	59.8	40.1		26.5	87.1			79.2	23.0	28.1	20.3	
LOS	E	D		C	F			E	C	C	C	
Approach Delay		43.8			84.5			68.6			22.5	
Approach LOS		D			F			E			C	
Stops (vph)	101	449		11	213			476	82	58	131	
Fuel Used(gal)	2	9		0	3			6	1	1	3	
CO Emissions (g/hr)	164	603		10	219			397	61	86	191	
NOx Emissions (g/hr)	32	117		2	43			77	12	17	37	
VOC Emissions (g/hr)	38	140		2	51			92	14	20	44	
Dilemma Vehicles (#)	0	0		0	0			0	0	0	0	
Queue Length 50th (ft)	71	162		7	79			334	45	36	88	
Queue Length 95th (ft)	#161	224		m12	m91			m378	m49	85	145	
Internal Link Dist (ft)		434			57			98			649	
Turn Bay Length (ft)	110									90		
Base Capacity (vph)	180	727		142	929			770	607	194	644	
Starvation Cap Reductn	0	0		63	666			447	451	0	0	
Spillback Cap Reductn	23	0		0	0			0	0	0	13	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.79	0.73		0.19	1.23			1.69	0.81	0.43	0.34	

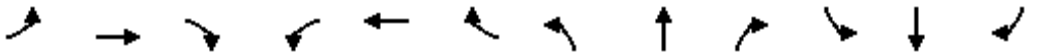
Intersection Summary			
Area Type:	CBD		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 29 (29%), Referenced to phase 4:SET and 8:NWTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 56.1		Intersection LOS: E	
Intersection Capacity Utilization 92.1%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Ogden Avenue & Milwaukee Avenue



Lane Group	Ø1	Ø7
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

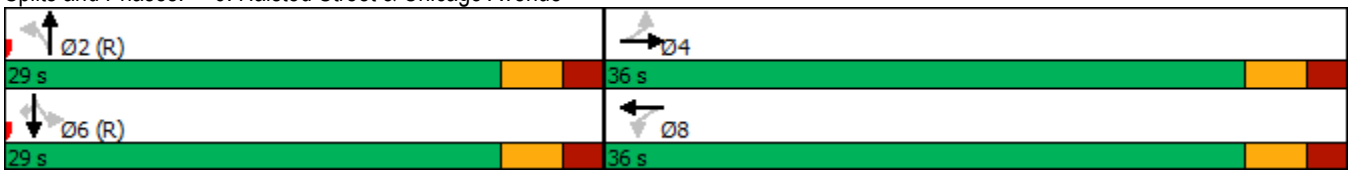


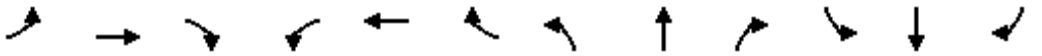
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	237	770	13	58	567	108	40	399	105	138	445	222
Future Volume (vph)	237	770	13	58	567	108	40	399	105	138	445	222
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	80		0	80		0	95		0	80		260
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor	0.98	1.00		0.98	0.99		0.98	0.99		0.99		0.88
Frt		0.997			0.976			0.969				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1342	2684	0	1368	2651	0	1064	2494	0	1131	2542	1168
Flt Permitted	0.341			0.283			0.470			0.421		
Satd. Flow (perm)	470	2684	0	397	2651	0	514	2494	0	498	2542	1032
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1872			743			718			744	
Travel Time (s)		42.5			16.9			16.3			16.9	
Confl. Peds. (#/hr)	102		123	123		102	57		18	18		57
Confl. Bikes (#/hr)			137			11			2			103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	6%	31%	5%	4%	6%	35%	12%	7%	27%	13%	10%
Adj. Flow (vph)	249	811	14	61	597	114	42	420	111	145	468	234
Shared Lane Traffic (%)												
Lane Group Flow (vph)	249	825	0	61	711	0	42	531	0	145	468	234
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Minimum Split (s)	33.0	33.0		33.0	33.0		29.0	29.0		29.0	29.0	29.0
Total Split (s)	36.0	36.0		36.0	36.0		29.0	29.0		29.0	29.0	29.0
Total Split (%)	55.4%	55.4%		55.4%	55.4%		44.6%	44.6%		44.6%	44.6%	44.6%
Maximum Green (s)	31.0	31.0		31.0	31.0		24.0	24.0		24.0	24.0	24.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	19.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	30.0	30.0		30.0	30.0		23.0	23.0		23.0	23.0	23.0
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.35	0.35		0.35	0.35	0.35
v/c Ratio	1.15	0.67		0.33	0.58		0.23	0.60		0.82	0.52	0.64
Control Delay	132.3	16.9		7.8	10.3		18.9	20.7		58.8	19.2	27.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	132.3	16.9		7.8	10.3		18.9	20.7		58.8	19.2	27.5
LOS	F	B		A	B		B	C		E	B	C
Approach Delay		43.7			10.1			20.6			28.3	
Approach LOS		D			B			C			C	
Stops (vph)	173	580		23	587		30	396		108	337	181
Fuel Used(gal)	11	17		1	12		1	7		3	6	4
CO Emissions (g/hr)	755	1212		57	805		38	499		213	432	247
NOx Emissions (g/hr)	147	236		11	157		7	97		41	84	48
VOC Emissions (g/hr)	175	281		13	187		9	116		49	100	57
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	0
Queue Length 50th (ft)	~119	126		4	84		11	88		51	75	76
Queue Length 95th (ft)	#246	185		m8	71		35	136		#148	117	#167
Internal Link Dist (ft)		1792			663			638			664	
Turn Bay Length (ft)	80			80			95			80		260
Base Capacity (vph)	216	1238		183	1223		181	882		176	899	365
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.15	0.67		0.33	0.58		0.23	0.60		0.82	0.52	0.64

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 27.7		Intersection LOS: C	
Intersection Capacity Utilization 108.9%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Halsted Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	436	240	25	625	195	0	0	0	360	20	190
Future Volume (vph)	205	436	240	25	625	195	0	0	0	360	20	190
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	9	10	11	10	10	10	10	10	10
Storage Length (ft)	75		0	110		150	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.77	0.75		0.75		0.41					0.72	0.50
Frt		0.947				0.850						0.850
Flt Protected	0.950			0.950							0.955	
Satd. Flow (prot)	1408	2002	0	1358	2816	1248	0	0	0	0	1416	1260
Flt Permitted	0.950			0.381							0.955	
Satd. Flow (perm)	1080	2002	0	407	2816	506	0	0	0	0	1017	635
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		67				184						200
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		200			361			360			481	
Travel Time (s)		4.5			8.2			8.2			10.9	
Confl. Peds. (#/hr)	294		323	323		294	514		122	122		514
Confl. Bikes (#/hr)			67			9			12			24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	0	0	0	11	0	0	0	0	0	0
Adj. Flow (vph)	216	459	253	26	658	205	0	0	0	379	21	200
Shared Lane Traffic (%)												
Lane Group Flow (vph)	216	712	0	26	658	205	0	0	0	0	400	200
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.39	1.33	1.35	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		pm+pt	NA	custom				Split	NA	Perm
Protected Phases	5	2 12		1	6	16				4	4	
Permitted Phases				6		6						4
Minimum Split (s)	8.0			8.0	26.5	7.0				21.0	21.0	21.0
Total Split (s)	27.0			8.0	44.0	11.0				48.0	48.0	48.0
Total Split (%)	20.8%			6.2%	33.8%	8.5%				36.9%	36.9%	36.9%
Maximum Green (s)	23.5			5.0	39.0	9.0				43.0	43.0	43.0
Yellow Time (s)	3.0			3.0	3.0	2.0				3.0	3.0	3.0
All-Red Time (s)	0.5			0.0	2.0	0.0				2.0	2.0	2.0
Lost Time Adjust (s)	0.0			1.0	1.0	1.0					1.0	1.0
Total Lost Time (s)	3.5			4.0	6.0	3.0					6.0	6.0
Lead/Lag				Lag	Lag	Lead						
Lead-Lag Optimize?												
Walk Time (s)					4.0					5.0	5.0	5.0

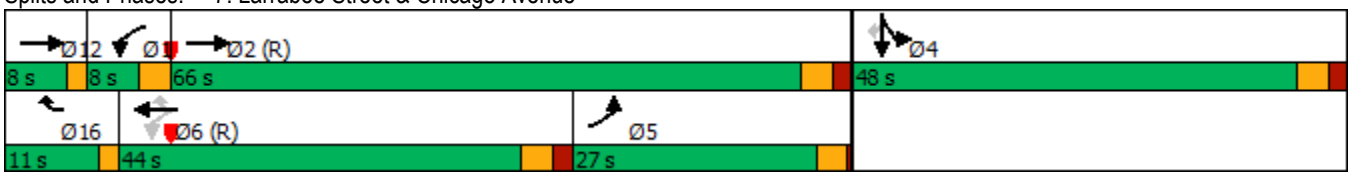
Lane Group	Ø2	Ø12
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Width (ft)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor		
Bus Blockages (#/hr)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	2	12
Permitted Phases		
Minimum Split (s)	26.0	8.0
Total Split (s)	66.0	8.0
Total Split (%)	51%	6%
Maximum Green (s)	61.0	6.0
Yellow Time (s)	3.0	2.0
All-Red Time (s)	2.0	0.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		Lead
Lead-Lag Optimize?		
Walk Time (s)	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)					17.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)					0					0	0	0
Act Effct Green (s)	23.5	62.0		43.0	38.0	49.0					42.0	42.0
Actuated g/C Ratio	0.18	0.48		0.33	0.29	0.38					0.32	0.32
v/c Ratio	0.85	0.72		0.16	0.80	0.58					0.88	0.59
Control Delay	81.1	37.4		24.1	40.4	11.7					62.6	12.2
Queue Delay	0.0	0.2		0.0	2.4	0.0					0.0	0.0
Total Delay	81.1	37.5		24.1	42.9	11.7					62.6	12.2
LOS	F	D		C	D	B					E	B
Approach Delay		47.7			35.1						45.8	
Approach LOS		D			D						D	
Stops (vph)	184	792		11	579	47					337	29
Fuel Used(gal)	6	16		0	10	1					8	1
CO Emissions (g/hr)	453	1145		18	706	89					568	94
NOx Emissions (g/hr)	88	223		3	137	17					111	18
VOC Emissions (g/hr)	105	265		4	164	21					132	22
Dilemma Vehicles (#)	0	0		0	0	0					0	0
Queue Length 50th (ft)	180	254		10	281	16					318	0
Queue Length 95th (ft)	m#302	333		m23	354	43					#503	79
Internal Link Dist (ft)		120			281			280			401	
Turn Bay Length (ft)	75			110		150						
Base Capacity (vph)	254	989		163	823	351					457	340
Starvation Cap Reductn	0	0		0	77	0					0	0
Spillback Cap Reductn	0	26		0	0	0					0	0
Storage Cap Reductn	0	0		0	0	0					0	0
Reduced v/c Ratio	0.85	0.74		0.16	0.88	0.58					0.88	0.59

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 42.6		Intersection LOS: D	
Intersection Capacity Utilization 78.2%		ICU Level of Service D	
Analysis Period (min) 15			

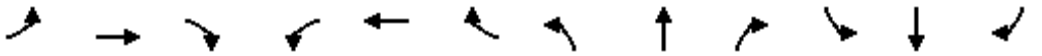
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Larrabee Street & Chicago Avenue



Lane Group	Ø2	Ø12
Flash Dont Walk (s)	10.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

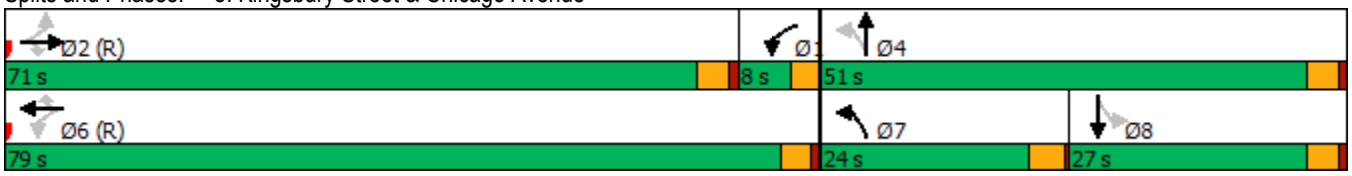


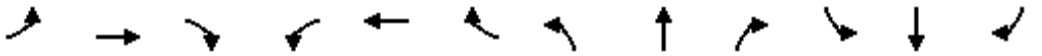
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	790	1	65	650	5	160	65	85	30	10	10
Future Volume (vph)	5	790	1	65	650	5	160	65	85	30	10	10
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	65		350	80		75	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.84		0.46	0.92		0.42	0.96	0.99		0.99	0.95	
Frt			0.850			0.850		0.915			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1358	2816	1305	1358	2816	1305	1408	1338	0	1408	1305	0
Flt Permitted	0.338			0.264			0.605			0.657		
Satd. Flow (perm)	406	2816	597	346	2816	545	857	1338	0	965	1305	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)						42						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		361			809			355			175	
Travel Time (s)		8.2			18.4			8.1			4.0	
Confl. Peds. (#/hr)	211		139	139		211	30		7	7		30
Confl. Bikes (#/hr)			56			9			1			29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	832	1	68	684	5	168	68	89	32	11	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	832	1	68	684	5	168	157	0	32	22	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.33	1.28	1.39	1.33	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6		6	4			8		
Minimum Split (s)	20.0	20.0	20.0	8.0	20.0	20.0	8.0	27.0		27.0	27.0	
Total Split (s)	71.0	71.0	71.0	8.0	79.0	79.0	24.0	51.0		27.0	27.0	
Total Split (%)	54.6%	54.6%	54.6%	6.2%	60.8%	60.8%	18.5%	39.2%		20.8%	20.8%	
Maximum Green (s)	67.0	67.0	67.0	5.0	75.0	75.0	20.0	47.0		23.0	23.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	0.5	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Total Lost Time (s)	5.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lead	Lead	Lag			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Walk Time (s)	5.0	5.0	5.0		5.0	5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		18.0		18.0	18.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0		0	0		0		0	0	
Act Effct Green (s)	66.0	66.0	66.0	75.0	74.0	74.0	46.0	46.0		22.0	22.0	
Actuated g/C Ratio	0.51	0.51	0.51	0.58	0.57	0.57	0.35	0.35		0.17	0.17	
v/c Ratio	0.02	0.58	0.00	0.30	0.43	0.02	0.44	0.33		0.20	0.10	
Control Delay	15.4	20.3	15.0	19.2	17.0	0.0	35.0	33.2		50.1	47.1	
Queue Delay	0.0	2.4	0.0	0.0	0.1	0.0	0.0	0.0		0.0	0.0	
Total Delay	15.4	22.8	15.0	19.2	17.0	0.0	35.0	33.2		50.1	47.1	
LOS	B	C	B	B	B	A	D	C		D	D	
Approach Delay		22.7			17.1			34.2			48.9	
Approach LOS		C			B			C			D	
Stops (vph)	3	442	1	29	355	0	116	107		26	19	
Fuel Used(gal)	0	8	0	1	10	0	2	2		0	0	
CO Emissions (g/hr)	3	555	1	71	717	3	155	141		34	23	
NOx Emissions (g/hr)	1	108	0	14	139	1	30	27		7	5	
VOC Emissions (g/hr)	1	129	0	17	166	1	36	33		8	5	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	2	208	0	24	165	0	103	96		24	16	
Queue Length 95th (ft)	m3	m268	m1	47	211	0	166	158		56	42	
Internal Link Dist (ft)		281			729			275			95	
Turn Bay Length (ft)	65		350	80		75						
Base Capacity (vph)	206	1429	303	230	1602	328	383	473		163	220	
Starvation Cap Reductn	0	449	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	131	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.02	0.85	0.00	0.30	0.46	0.02	0.44	0.33		0.20	0.10	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 116 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 23.2		Intersection LOS: C	
Intersection Capacity Utilization 76.1%		ICU Level of Service D	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 8: Kingsbury Street & Chicago Avenue





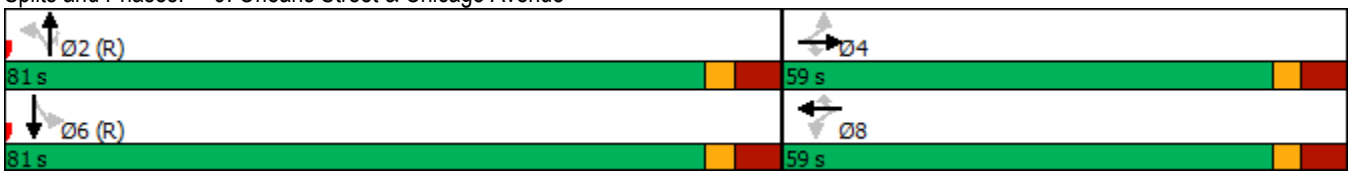
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	765	40	70	575	30	85	465	175	140	485	90
Future Volume (vph)	50	765	40	70	575	30	85	465	175	140	485	90
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	130		75	95		125	50		0	50		110
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.83		0.62			0.42	0.92		0.79	0.93	0.97	
Frt			0.850			0.850			0.850		0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1358	2816	1305	1358	2676	1305	1408	1482	1260	1408	2656	0
Flt Permitted	0.336			0.218			0.390			0.375		
Satd. Flow (perm)	398	2816	810	312	2676	546	534	1482	990	520	2656	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		384			406			352			306	
Travel Time (s)		8.7			9.2			8.0			7.0	
Confl. Peds. (#/hr)	206		258	258		206	106		107	107		106
Confl. Bikes (#/hr)			29			7			8			15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)					0							
Adj. Flow (vph)	53	805	42	74	605	32	89	489	184	147	511	95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	805	42	74	605	32	89	489	184	147	606	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.33	1.28	1.39	1.42	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	30.0	30.0	30.0	30.0	30.0	
Total Split (s)	59.0	59.0	59.0	59.0	59.0	59.0	81.0	81.0	81.0	81.0	81.0	
Total Split (%)	42.1%	42.1%	42.1%	42.1%	42.1%	42.1%	57.9%	57.9%	57.9%	57.9%	57.9%	
Maximum Green (s)	51.0	51.0	51.0	51.0	51.0	51.0	73.0	73.0	73.0	73.0	73.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	

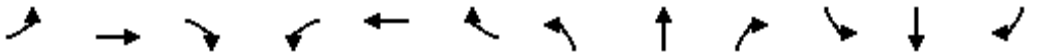
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	12.0	12.0	12.0	12.0	12.0	12.0	17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)	50.0	50.0	50.0	50.0	50.0	50.0	72.0	72.0	72.0	72.0	72.0	
Actuated g/C Ratio	0.36	0.36	0.36	0.36	0.36	0.36	0.51	0.51	0.51	0.51	0.51	
v/c Ratio	0.37	0.80	0.15	0.67	0.63	0.16	0.32	0.64	0.36	0.55	0.44	
Control Delay	42.9	47.8	32.4	68.8	41.0	33.7	24.0	29.5	22.9	32.7	22.7	
Queue Delay	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	42.9	47.8	32.4	68.8	43.2	33.7	24.0	29.5	22.9	32.7	22.7	
LOS	D	D	C	E	D	C	C	C	C	C	C	
Approach Delay		46.8			45.5			27.3			24.7	
Approach LOS		D			D			C			C	
Stops (vph)	40	677	28	59	468	21	50	334	103	97	352	
Fuel Used(gal)	1	18	1	2	9	0	1	6	2	2	6	
CO Emissions (g/hr)	79	1279	55	107	644	29	65	413	130	126	418	
NOx Emissions (g/hr)	15	249	11	21	125	6	13	80	25	25	81	
VOC Emissions (g/hr)	18	296	13	25	149	7	15	96	30	29	97	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	36	346	26	57	240	20	46	314	97	88	177	
Queue Length 95th (ft)	81	431	56	#142	307	48	91	442	158	168	227	
Internal Link Dist (ft)		304			326			272			226	
Turn Bay Length (ft)	130		75	95		125	50			50		
Base Capacity (vph)	142	1005	289	111	955	195	274	762	509	267	1365	
Starvation Cap Reductn	0	0	0	0	216	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.37	0.80	0.15	0.67	0.82	0.16	0.32	0.64	0.36	0.55	0.44	

Intersection Summary

Area Type: CBD
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 36 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 36.4 Intersection LOS: D
Intersection Capacity Utilization 116.0% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Orleans Street & Chicago Avenue



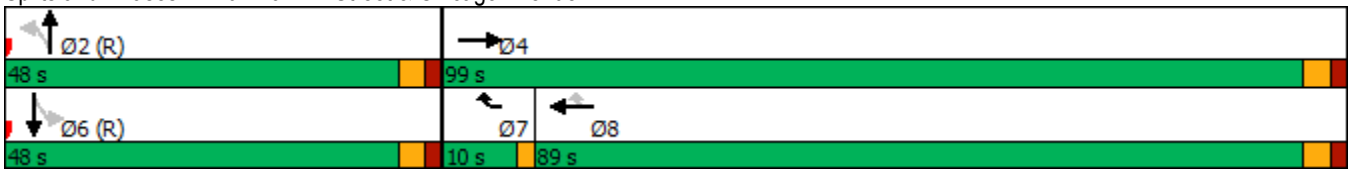


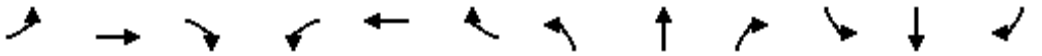
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	950	52	0	670	13	32	44	38	10	53	21
Future Volume (vph)	0	950	52	0	670	13	32	44	38	10	53	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	10	11	11	12	10	10	10	10	10	10
Storage Length (ft)	0		0	0		90	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.95				0.44		0.81			0.87	
Frt		0.992				0.850		0.955			0.967	
Flt Protected								0.986			0.994	
Satd. Flow (prot)	0	2818	0	0	2710	1291	0	1246	0	0	1277	0
Flt Permitted								0.900			0.965	
Satd. Flow (perm)	0	2818	0	0	2710	572	0	1033	0	0	1204	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		406			399			394			261	
Travel Time (s)		9.2			9.1			9.0			5.9	
Confl. Peds. (#/hr)	120		461	461		120	260		182	182		260
Confl. Bikes (#/hr)			13			2			1			3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	6	6	0	11	11	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	0	1000	55	0	705	14	34	46	40	11	56	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1055	0	0	705	14	0	120	0	0	89	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.24	1.33	1.28	1.40	1.29	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA			NA	custom	Perm	NA		Perm	NA	
Protected Phases		4			8	7		2			6	
Permitted Phases						8	2			6		
Minimum Split (s)		17.0			17.0	5.0	26.0	26.0		18.0	18.0	
Total Split (s)		99.0			89.0	10.0	48.0	48.0		48.0	48.0	
Total Split (%)		67.3%			60.5%	6.8%	32.7%	32.7%		32.7%	32.7%	
Maximum Green (s)		94.0			84.0	8.0	43.0	43.0		43.0	43.0	
Yellow Time (s)		3.0			3.0	2.0	3.0	3.0		3.0	3.0	
All-Red Time (s)		2.0			2.0	0.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		4.0			1.0	3.0		1.0			1.0	
Total Lost Time (s)		9.0			6.0	5.0		6.0			6.0	
Lead/Lag					Lag	Lead						
Lead-Lag Optimize?												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		7.0			7.0		16.0	16.0		8.0	8.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)		90.0			83.0	89.0		42.0			42.0	
Actuated g/C Ratio		0.61			0.56	0.61		0.29			0.29	
v/c Ratio		0.61			0.46	0.04		0.41			0.26	
Control Delay		19.6			20.1	10.1		47.5			43.0	
Queue Delay		11.5			2.6	0.0		0.0			0.0	
Total Delay		31.1			22.7	10.1		47.5			43.0	
LOS		C			C	B		D			D	
Approach Delay		31.1			22.4			47.5			43.0	
Approach LOS		C			C			D			D	
Stops (vph)		600			381	6		91			64	
Fuel Used(gal)		10			7	0		2			1	
CO Emissions (g/hr)		733			484	7		137			89	
NOx Emissions (g/hr)		143			94	1		27			17	
VOC Emissions (g/hr)		170			112	2		32			21	
Dilemma Vehicles (#)		0			0	0		0			0	
Queue Length 50th (ft)		314			202	5		93			66	
Queue Length 95th (ft)		382			253	14		158			117	
Internal Link Dist (ft)		326			319			314			181	
Turn Bay Length (ft)						90						
Base Capacity (vph)		1725			1530	370		295			344	
Starvation Cap Reductn		654			677	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.99			0.83	0.04		0.41			0.26	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 147			
Actuated Cycle Length: 147			
Offset: 55 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 29.5		Intersection LOS: C	
Intersection Capacity Utilization 63.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: Franklin Street & Chicago Avenue





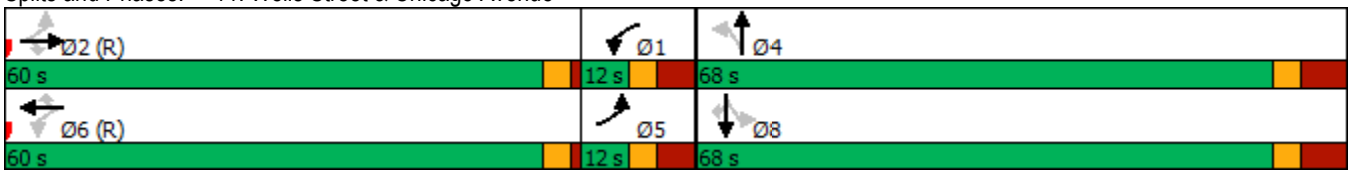
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	782	93	42	647	71	4	38	20	86	371	66
Future Volume (vph)	65	782	93	42	647	71	4	38	20	86	371	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	100		50	90		90	0		0	0		75
Storage Lanes	1		1	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.90		0.36			0.50		0.94			0.97	0.81
Frt			0.850			0.850		0.956				0.850
Flt Protected	0.950			0.950				0.997			0.991	
Satd. Flow (prot)	1358	2676	1305	1358	2816	1305	0	1330	0	0	1469	1260
Flt Permitted	0.278			0.205				0.973			0.918	
Satd. Flow (perm)	358	2676	465	293	2816	649	0	1295	0	0	1320	1018
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		399			407			355			273	
Travel Time (s)		9.1			9.3			8.1			6.2	
Confl. Peds. (#/hr)	119		282	282		119	79		90	90		79
Confl. Bikes (#/hr)			11			5			3			87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0										
Adj. Flow (vph)	68	823	98	44	681	75	4	40	21	91	391	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	823	98	44	681	75	0	65	0	0	482	69
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.42	1.28	1.39	1.33	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4			8		8
Minimum Split (s)	12.0	21.0	21.0	12.0	21.0	21.0	30.0	30.0		30.0	30.0	30.0
Total Split (s)	12.0	60.0	60.0	12.0	60.0	60.0	68.0	68.0		68.0	68.0	68.0
Total Split (%)	8.6%	42.9%	42.9%	8.6%	42.9%	42.9%	48.6%	48.6%		48.6%	48.6%	48.6%
Maximum Green (s)	5.0	56.0	56.0	5.0	56.0	56.0	60.0	60.0		60.0	60.0	60.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	4.0	1.0	1.0	4.0	1.0	1.0	5.0	5.0		5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0			1.0	-3.0
Total Lost Time (s)	8.0	5.0	5.0	8.0	5.0	5.0		9.0			9.0	5.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Walk Time (s)		5.0	5.0		5.0	5.0	4.0	4.0		4.0	4.0	4.0

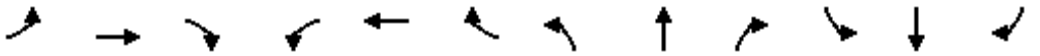
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	18.0	18.0		18.0	18.0	18.0
Pedestrian Calls (#/hr)		0	0		0	0	0	0		0	0	0
Act Effct Green (s)	56.0	55.0	55.0	56.0	55.0	55.0		59.0			59.0	63.0
Actuated g/C Ratio	0.40	0.39	0.39	0.40	0.39	0.39		0.42			0.42	0.45
v/c Ratio	0.40	0.78	0.54	0.30	0.62	0.30		0.12			0.87	0.15
Control Delay	34.7	43.7	45.9	18.5	19.1	18.2		25.5			54.3	23.9
Queue Delay	0.0	42.6	0.0	0.0	0.3	0.0		0.0			0.0	0.0
Total Delay	34.7	86.3	45.9	18.5	19.3	18.2		25.5			54.3	23.9
LOS	C	F	D	B	B	B		C			D	C
Approach Delay		78.7			19.2			25.5			50.5	
Approach LOS		E			B			C			D	
Stops (vph)	39	675	74	14	228	25		36			397	39
Fuel Used(gal)	1	13	2	0	6	1		1			8	1
CO Emissions (g/hr)	61	917	110	26	407	44		48			576	47
NOx Emissions (g/hr)	12	178	21	5	79	9		9			112	9
VOC Emissions (g/hr)	14	212	25	6	94	10		11			133	11
Dilemma Vehicles (#)	0	0	0	0	0	0		0			0	0
Queue Length 50th (ft)	35	343	68	13	121	24		36			396	37
Queue Length 95th (ft)	66	429	138	m20	145	m39		68			#606	70
Internal Link Dist (ft)		319			327			275			193	
Turn Bay Length (ft)	100		50	90		90						75
Base Capacity (vph)	171	1051	182	147	1106	254		545			556	458
Starvation Cap Reductn	0	290	0	0	82	0		0			0	0
Spillback Cap Reductn	0	60	0	0	0	0		0			0	0
Storage Cap Reductn	0	0	0	0	0	0		0			0	0
Reduced v/c Ratio	0.40	1.08	0.54	0.30	0.67	0.30		0.12			0.87	0.15

Intersection Summary

Area Type: CBD
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 121 (86%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 51.0 Intersection LOS: D
Intersection Capacity Utilization 83.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 11: Wells Street & Chicago Avenue





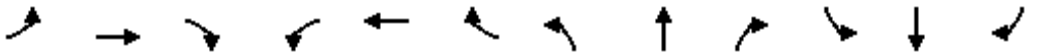
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	738	75	36	493	47	99	632	92	99	1110	133
Future Volume (vph)	97	738	75	36	493	47	99	632	92	99	1110	133
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	11	11	12	11	11	12
Storage Length (ft)	150		60	100		80	120		0	80		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor	0.88		0.68	0.94		0.69	0.98	0.96		0.91	0.98	
Frt			0.850			0.850		0.981			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1385	2742	1235	1358	2676	1318	1488	3906	0	1488	4070	0
Flt Permitted	0.375			0.201			0.164			0.340		
Satd. Flow (perm)	479	2742	845	269	2676	904	253	3906	0	484	4070	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		407			413			368			440	
Travel Time (s)		9.3			9.4			8.4			10.0	
Confl. Peds. (#/hr)	190		191	191		190	72		151	151		72
Confl. Bikes (#/hr)			10			6			1			4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	2%	2%	1%	0%	3%	7%	0%	2%	0%
Bus Blockages (#/hr)	0	18	18	0	0	0	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	102	777	79	38	519	49	104	665	97	104	1168	140
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	777	79	38	519	49	104	762	0	104	1308	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.39	1.40	1.39	1.42	1.28	1.28	1.28	1.22	1.28	1.28	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	29.0	29.0	29.0	29.0	29.0	29.0	28.0	28.0		28.0	28.0	
Total Split (s)	53.0	53.0	53.0	53.0	53.0	53.0	87.0	87.0		87.0	87.0	
Total Split (%)	37.9%	37.9%	37.9%	37.9%	37.9%	37.9%	62.1%	62.1%		62.1%	62.1%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	82.0	82.0		82.0	82.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	4.0	4.0	0.0	4.0	4.0	0.0	4.0	4.0		4.0	4.0	
Total Lost Time (s)	9.0	9.0	5.0	9.0	9.0	5.0	9.0	9.0		9.0	9.0	
Lead/Lag												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	19.0	19.0	19.0	19.0	19.0	19.0	18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	44.0	44.0	48.0	44.0	44.0	48.0	78.0	78.0		78.0	78.0	
Actuated g/C Ratio	0.31	0.31	0.34	0.31	0.31	0.34	0.56	0.56		0.56	0.56	
v/c Ratio	0.68	0.90	0.27	0.45	0.62	0.16	0.74	0.35		0.39	0.58	
Control Delay	34.0	29.4	13.5	46.3	40.0	29.5	57.2	17.6		22.8	21.5	
Queue Delay	0.0	4.8	0.0	0.0	1.3	0.0	0.0	0.1		55.6	0.0	
Total Delay	34.0	34.1	13.5	46.3	41.3	29.5	57.2	17.7		78.5	21.5	
LOS	C	C	B	D	D	C	E	B		E	C	
Approach Delay		32.4			40.6			22.5			25.7	
Approach LOS		C			D			C			C	
Stops (vph)	48	480	16	34	450	39	75	384		56	782	
Fuel Used(gal)	1	9	1	1	8	1	2	7		1	14	
CO Emissions (g/hr)	87	657	37	45	565	45	129	475		78	981	
NOx Emissions (g/hr)	17	128	7	9	110	9	25	92		15	191	
VOC Emissions (g/hr)	20	152	9	10	131	11	30	110		18	227	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	21	126	14	33	236	39	69	135		52	274	
Queue Length 95th (ft)	m62	m#458	m23	m38	m275	m41	#188	165		102	320	
Internal Link Dist (ft)		327			333			288			360	
Turn Bay Length (ft)	150		60	100		80	120			80		
Base Capacity (vph)	150	861	289	84	841	309	140	2176		269	2267	
Starvation Cap Reductn	0	38	0	0	150	0	0	0		0	0	
Spillback Cap Reductn	0	50	0	0	0	0	0	454		168	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.68	0.96	0.27	0.45	0.75	0.16	0.74	0.44		1.03	0.58	

Intersection Summary

Area Type: CBD
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 42 (30%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 29.0 Intersection LOS: C
Intersection Capacity Utilization 122.3% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: La Salle Street & Chicago Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	778	131	48	475	0	0	0	0	44	1018	122
Future Volume (vph)	0	778	131	48	475	0	0	0	0	44	1018	122
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	11	9	10	11	12	12	12	12	10	12
Storage Length (ft)	0		250	100		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor			0.68								0.98	
Frt			0.850								0.985	
Flt Protected				0.950							0.998	
Satd. Flow (prot)	0	2715	1199	1358	1214	0	0	0	0	0	3953	0
Flt Permitted				0.249							0.998	
Satd. Flow (perm)	0	2715	820	356	1214	0	0	0	0	0	3941	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		413			144			365			405	
Travel Time (s)		9.4			3.3			8.3			9.2	
Confl. Peds. (#/hr)			128	128						42		45
Confl. Bikes (#/hr)			12									58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	2%	4%	2%	2%	2%	2%	6%	1%	2%
Bus Blockages (#/hr)	0	18	18	0	18	18	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	0	819	138	51	500	0	0	0	0	46	1072	128
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	819	138	51	500	0	0	0	0	0	1246	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.40	1.39	1.66	1.28	1.22	1.22	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	custom	custom	NA					Perm	NA	
Protected Phases		4	14	3	8 18						6	
Permitted Phases			4	8						6		
Minimum Split (s)		24.0	5.0	8.0						26.0	26.0	
Total Split (s)		65.0	7.0	8.0						60.0	60.0	
Total Split (%)		46.4%	5.0%	5.7%						42.9%	42.9%	
Maximum Green (s)		57.0	5.0	5.0						55.0	55.0	
Yellow Time (s)		3.0	2.0	3.0						3.0	3.0	
All-Red Time (s)		5.0	0.0	0.0						2.0	2.0	
Lost Time Adjust (s)		1.0	3.0	1.0							1.0	
Total Lost Time (s)		9.0	5.0	4.0							6.0	
Lead/Lag		Lag	Lead									

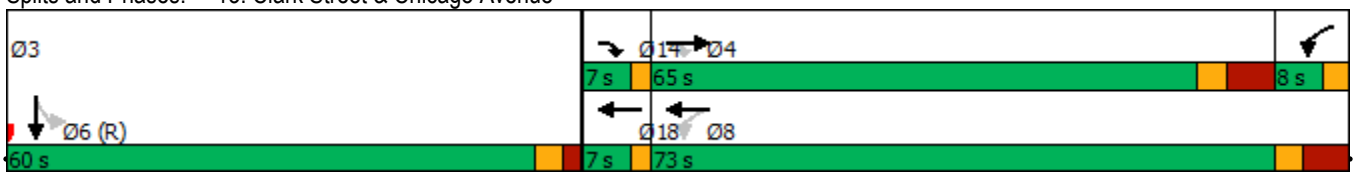
Lane Group	Ø8	Ø18
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Width (ft)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Bus Blockages (#/hr)		
Parking (#/hr)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	8	18
Permitted Phases		
Minimum Split (s)	24.0	5.0
Total Split (s)	73.0	7.0
Total Split (%)	52%	5%
Maximum Green (s)	65.0	5.0
Yellow Time (s)	3.0	2.0
All-Red Time (s)	5.0	0.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)		5.0								5.0	5.0	
Flash Dont Walk (s)		11.0								16.0	16.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		56.0	62.0	69.0	64.0						54.0	
Actuated g/C Ratio		0.40	0.44	0.49	0.46						0.39	
v/c Ratio		0.75	0.38	0.25	0.90						0.82	
Control Delay		62.6	49.5	38.8	74.5						44.1	
Queue Delay		55.8	0.0	0.0	50.0						0.0	
Total Delay		118.4	49.5	38.8	124.5						44.1	
LOS		F	D	D	F						D	
Approach Delay		108.5			116.6						44.1	
Approach LOS		F			F						D	
Stops (vph)		762	223	31	451						1041	
Fuel Used(gal)		17	3	1	11						20	
CO Emissions (g/hr)		1163	208	48	777						1407	
NOx Emissions (g/hr)		226	40	9	151						274	
VOC Emissions (g/hr)		270	48	11	180						326	
Dilemma Vehicles (#)		0	0	0	0						0	
Queue Length 50th (ft)		406	123	31	478						371	
Queue Length 95th (ft)		m458	m145	m51	#654						435	
Internal Link Dist (ft)		333			64			285			325	
Turn Bay Length (ft)			250	100								
Base Capacity (vph)		1086	368	204	554						1520	
Starvation Cap Reductn		328	0	0	190						0	
Spillback Cap Reductn		706	0	0	0						0	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		2.16	0.38	0.25	1.37						0.82	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 81.0		Intersection LOS: F	
Intersection Capacity Utilization 102.9%		ICU Level of Service G	
Analysis Period (min) 15			

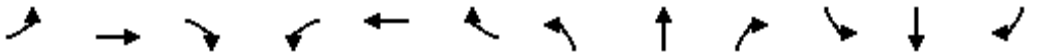
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: Clark Street & Chicago Avenue



Lane Group	Ø8	Ø18
Lead-Lag Optimize?		
Walk Time (s)	5.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary



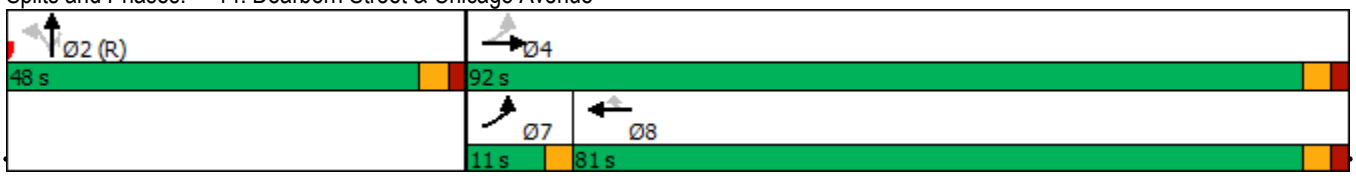
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	660	0	0	417	27	155	502	65	0	0	0
Future Volume (vph)	127	660	0	0	417	27	155	502	65	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	12	10	11	16	11	10	12	12	12
Storage Length (ft)	100		0	0		70	0		75	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.63	0.47		0.41			
Frt						0.850			0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1385	1334	0	0	1321	1273	1727	2946	1285	0	0	0
Flt Permitted	0.386						0.950					
Satd. Flow (perm)	563	1334	0	0	1321	808	806	2946	524	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			428			364			418	
Travel Time (s)		5.4			9.7			8.3			9.5	
Confl. Peds. (#/hr)	257					257	162		216			
Confl. Bikes (#/hr)						2			12			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	2%	2%	3%	0%	1%	1%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	18	0	0	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Adj. Flow (vph)	134	695	0	0	439	28	163	528	68	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	134	695	0	0	439	28	163	528	68	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.52	1.28	1.22	1.52	1.35	1.05	1.28	1.33	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2		2			
Minimum Split (s)	8.0	23.0			23.0	23.0	22.0	22.0	22.0			
Total Split (s)	11.0	92.0			81.0	81.0	48.0	48.0	48.0			
Total Split (%)	7.9%	65.7%			57.9%	57.9%	34.3%	34.3%	34.3%			
Maximum Green (s)	8.0	87.0			76.0	76.0	43.0	43.0	43.0			
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	1.0	1.0			1.0	0.0	1.0	1.0	1.0			
Total Lost Time (s)	4.0	6.0			6.0	5.0	6.0	6.0	6.0			
Lead/Lag	Lead				Lag	Lag						

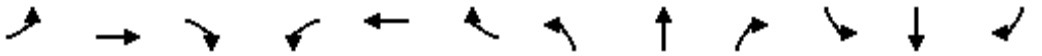
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes				Yes	Yes						
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		13.0			13.0	13.0	12.0	12.0	12.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	88.0	86.0			75.0	76.0	42.0	42.0	42.0			
Actuated g/C Ratio	0.63	0.61			0.54	0.54	0.30	0.30	0.30			
v/c Ratio	0.34	0.85			0.62	0.06	0.68	0.60	0.43			
Control Delay	23.0	53.2			18.7	9.9	58.8	45.2	49.9			
Queue Delay	0.0	54.7			49.4	0.0	89.5	0.0	0.0			
Total Delay	23.0	107.8			68.0	9.9	148.3	45.2	49.9			
LOS	C	F			E	A	F	D	D			
Approach Delay		94.1			64.5			67.7				
Approach LOS		F			E			E				
Stops (vph)	117	646			245	11	137	419	54			
Fuel Used(gal)	2	13			4	0	3	8	1			
CO Emissions (g/hr)	113	886			303	14	213	584	80			
NOx Emissions (g/hr)	22	172			59	3	42	114	16			
VOC Emissions (g/hr)	26	205			70	3	49	135	19			
Dilemma Vehicles (#)	0	0			0	0	0	0	0			
Queue Length 50th (ft)	119	664			194	11	131	216	50			
Queue Length 95th (ft)	m133	#803			241	m19	#221	279	103			
Internal Link Dist (ft)		158			348			284			338	
Turn Bay Length (ft)	100					70			75			
Base Capacity (vph)	394	819			707	438	241	883	157			
Starvation Cap Reductn	0	470			99	0	0	0	0			
Spillback Cap Reductn	0	101			302	0	183	0	0			
Storage Cap Reductn	0	0			0	0	0	0	0			
Reduced v/c Ratio	0.34	1.99			1.08	0.06	2.81	0.60	0.43			

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 62 (44%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 77.7		Intersection LOS: E	
Intersection Capacity Utilization 102.9%		ICU Level of Service G	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Dearborn Street & Chicago Avenue



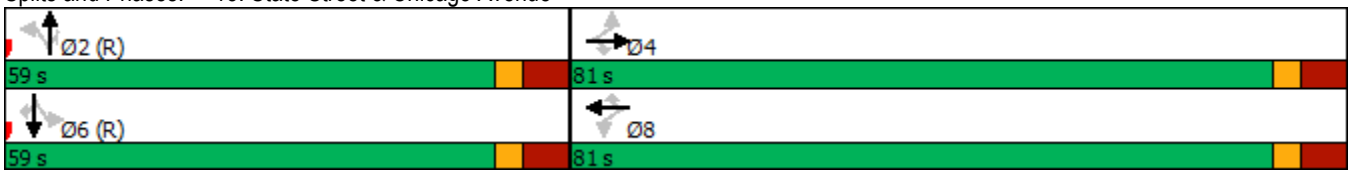


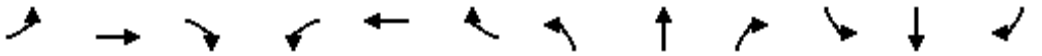
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	545	46	45	273	25	115	291	92	43	253	85
Future Volume (vph)	90	545	46	45	273	25	115	291	92	43	253	85
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	150		50	100		70	90		30	90		30
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.61		0.42			0.33	0.66		0.47	0.75		0.39
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1371	1334	1318	1371	1321	1318	1422	1482	1272	1422	1482	1272
Flt Permitted	0.552			0.306			0.517			0.466		
Satd. Flow (perm)	488	1334	550	442	1321	440	511	1482	594	523	1482	492
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		428			375			323			297	
Travel Time (s)		9.7			8.5			7.3			6.8	
Confl. Peds. (#/hr)	295		191	191		295	260		154	154		260
Confl. Bikes (#/hr)			21			6			7			8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	2%	1%	1%	3%	1%	1%	2%	1%	1%	2%	1%
Parking (#/hr)		0			0							
Adj. Flow (vph)	95	574	48	47	287	26	121	306	97	45	266	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	574	48	47	287	26	121	306	97	45	266	89
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.52	1.28	1.39	1.52	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	26.0	26.0	26.0	26.0	26.0	26.0
Total Split (s)	81.0	81.0	81.0	81.0	81.0	81.0	59.0	59.0	59.0	59.0	59.0	59.0
Total Split (%)	57.9%	57.9%	57.9%	57.9%	57.9%	57.9%	42.1%	42.1%	42.1%	42.1%	42.1%	42.1%
Maximum Green (s)	73.0	73.0	73.0	73.0	73.0	73.0	51.0	51.0	51.0	51.0	51.0	51.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Lead/Lag												
Lead-Lag Optimize?												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	13.0	13.0	13.0	13.0	13.0	13.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	72.0	72.0	72.0	72.0	72.0	72.0	50.0	50.0	50.0	50.0	50.0	50.0
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51	0.36	0.36	0.36	0.36	0.36	0.36
v/c Ratio	0.38	0.84	0.17	0.21	0.42	0.12	0.66	0.58	0.46	0.24	0.50	0.51
Control Delay	9.7	21.3	6.9	14.3	16.7	12.5	57.8	41.8	43.2	36.2	39.3	47.6
Queue Delay	0.0	8.2	0.0	0.0	1.9	0.0	0.0	0.0	3.5	1.0	0.0	0.0
Total Delay	9.7	29.5	6.9	14.3	18.6	12.5	57.8	41.8	46.7	37.2	39.3	47.6
LOS	A	C	A	B	B	B	E	D	D	D	D	D
Approach Delay		25.4			17.6			46.4			40.9	
Approach LOS		C			B			D			D	
Stops (vph)	34	493	12	20	181	11	98	233	70	31	196	69
Fuel Used(gal)	1	7	0	0	3	0	2	4	1	1	4	1
CO Emissions (g/hr)	47	483	20	26	191	14	153	314	100	41	258	98
NOx Emissions (g/hr)	9	94	4	5	37	3	30	61	19	8	50	19
VOC Emissions (g/hr)	11	112	5	6	44	3	35	73	23	10	60	23
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	0
Queue Length 50th (ft)	26	410	10	17	163	8	93	225	68	29	189	63
Queue Length 95th (ft)	m30	m469	m12	m31	m207	m15	#190	327	129	64	279	127
Internal Link Dist (ft)		348			295			243			217	
Turn Bay Length (ft)	150		50	100		70	90		30	90		30
Base Capacity (vph)	250	686	282	227	679	226	182	529	212	186	529	175
Starvation Cap Reductn	0	85	0	0	250	0	0	0	0	0	0	0
Spillback Cap Reductn	0	49	0	0	13	0	0	0	57	50	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.96	0.17	0.21	0.67	0.12	0.66	0.58	0.63	0.33	0.50	0.51

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 74 (53%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 32.6		Intersection LOS: C	
Intersection Capacity Utilization 109.9%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 15: State Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	500	95	50	264	46	0	0	0	29	132	57
Future Volume (vph)	38	500	95	50	264	46	0	0	0	29	132	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	12	12	12	12	12	12
Storage Length (ft)	150		50	100		70	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.46		0.29			0.11					0.80	
Frt			0.850			0.850					0.965	
Flt Protected	0.950			0.950							0.993	
Satd. Flow (prot)	923	831	829	923	867	843	0	0	0	0	892	0
Flt Permitted	0.565			0.367							0.993	
Satd. Flow (perm)	255	831	239	357	867	93	0	0	0	0	828	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		375			368			298			279	
Travel Time (s)		8.5			8.4			6.8			6.3	
Confl. Peds. (#/hr)	487		301	301		487				185		159
Confl. Bikes (#/hr)			24			5						9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	50%	52%	49%	50%	50%	51%	51%	51%	49%	49%	50%	50%
Bus Blockages (#/hr)	0	18	18	0	11	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Adj. Flow (vph)	40	526	100	53	278	48	0	0	0	31	139	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	526	100	53	278	48	0	0	0	0	230	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.66	1.40	*0.50	1.60	1.35	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm				Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4		4	8		8				6		
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0				27.0	27.0	
Total Split (s)	87.0	87.0	87.0	87.0	87.0	87.0				53.0	53.0	
Total Split (%)	62.1%	62.1%	62.1%	62.1%	62.1%	62.1%				37.9%	37.9%	
Maximum Green (s)	80.0	80.0	80.0	80.0	80.0	80.0				45.0	45.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	4.0	4.0	4.0	4.0	4.0	4.0				5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	-2.0	1.0	1.0	-2.0					1.0	
Total Lost Time (s)	8.0	8.0	5.0	8.0	8.0	5.0					9.0	
Lead/Lag												

Lanes, Volumes, Timings
16: Wabash Avenue & Chicago Avenue 02/23/2018

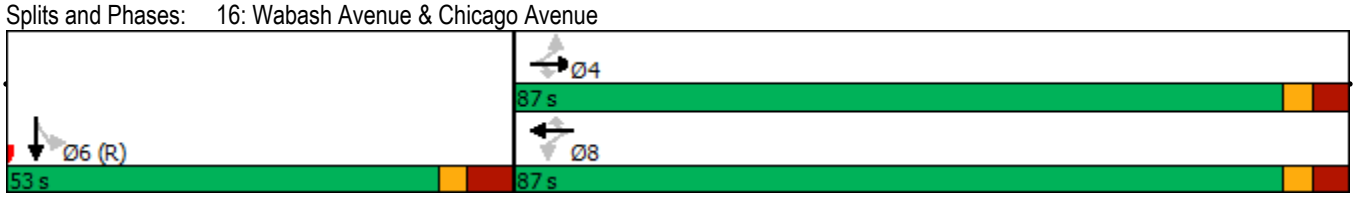
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0				5.0	5.0	
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0				14.0	14.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0				0	0	
Act Effct Green (s)	79.0	79.0	82.0	79.0	79.0	82.0					44.0	
Actuated g/C Ratio	0.56	0.56	0.59	0.56	0.56	0.59					0.31	
v/c Ratio	0.28	1.12	0.72	0.26	0.57	0.89					0.88	
Control Delay	24.0	101.4	41.0	7.6	10.7	113.8					79.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0					0.0	
Total Delay	24.0	101.4	41.0	7.6	10.8	113.8					79.0	
LOS	C	F	D	A	B	F					E	
Approach Delay		87.7			23.4						79.0	
Approach LOS		F			C						E	
Stops (vph)	20	284	50	8	81	26					188	
Fuel Used(gal)	0	13	1	0	2	1					5	
CO Emissions (g/hr)	28	933	94	19	125	94					351	
NOx Emissions (g/hr)	6	182	18	4	24	18					68	
VOC Emissions (g/hr)	7	216	22	4	29	22					81	
Dilemma Vehicles (#)	0	0	0	0	0	0					0	
Queue Length 50th (ft)	17	~543	41	8	41	32					199	
Queue Length 95th (ft)	m27	m#747	m66	m15	57	m#128					#361	
Internal Link Dist (ft)		295			288			218			199	
Turn Bay Length (ft)	150		50	100		70						
Base Capacity (vph)	143	468	139	201	489	54					260	
Starvation Cap Reductn	0	0	0	0	0	0					0	
Spillback Cap Reductn	0	0	0	0	4	0					0	
Storage Cap Reductn	0	0	0	0	0	0					0	
Reduced v/c Ratio	0.28	1.12	0.72	0.26	0.57	0.89					0.88	

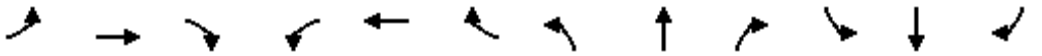
Intersection Summary

Area Type: CBD
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 49 (35%), Referenced to phase 6:SBTL, Start of Green
Natural Cycle: 130
Control Type: Pretimed
Maximum v/c Ratio: 1.12
Intersection Signal Delay: 67.0 Intersection LOS: E
Intersection Capacity Utilization 78.9% ICU Level of Service D
Analysis Period (min) 15

* User Entered Value
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: Wabash Avenue & Chicago Avenue





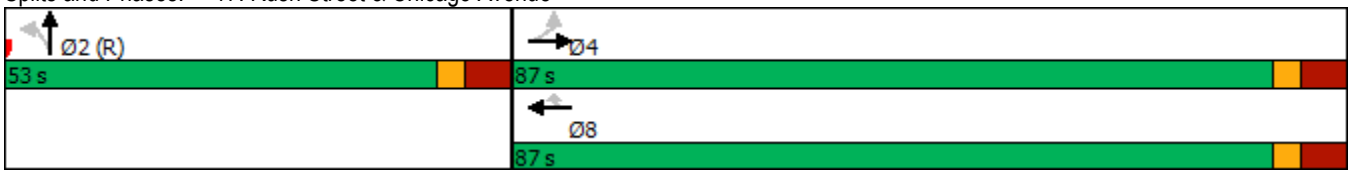
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	439	0	0	313	55	47	137	25	0	0	0
Future Volume (vph)	50	439	0	0	313	55	47	137	25	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	12	10	11	12	12	12	12	12	12
Storage Length (ft)	125		0	0		70	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.59					0.19		0.84				
Frt						0.850		0.984				
Flt Protected	0.950							0.989				
Satd. Flow (prot)	1371	1321	0	0	1468	1318	0	1461	0	0	0	0
Flt Permitted	0.527							0.989				
Satd. Flow (perm)	447	1321	0	0	1468	257	0	1315	0	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		368			334			328			284	
Travel Time (s)		8.4			7.6			7.5			6.5	
Confl. Peds. (#/hr)	372					372	121		173			
Confl. Bikes (#/hr)						5			3			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	3%	2%	2%	3%	1%	1%	1%	1%	2%	2%	2%
Parking (#/hr)		0										
Adj. Flow (vph)	53	462	0	0	329	58	49	144	26	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	462	0	0	329	58	0	219	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.52	1.28	1.22	1.33	1.28	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Minimum Split (s)	21.0	21.0			21.0	21.0	27.0	27.0				
Total Split (s)	87.0	87.0			87.0	87.0	53.0	53.0				
Total Split (%)	62.1%	62.1%			62.1%	62.1%	37.9%	37.9%				
Maximum Green (s)	79.0	79.0			79.0	79.0	45.0	45.0				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Lost Time Adjust (s)	1.0	1.0			1.0	-3.0		1.0				
Total Lost Time (s)	9.0	9.0			9.0	5.0		9.0				
Lead/Lag												
Lead-Lag Optimize?												

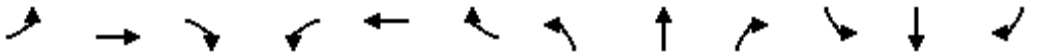
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Flash Dont Walk (s)	8.0	8.0			8.0	8.0	14.0	14.0				
Pedestrian Calls (#/hr)	0	0			0	0	0	0				
Act Effct Green (s)	78.0	78.0			78.0	82.0		44.0				
Actuated g/C Ratio	0.56	0.56			0.56	0.59		0.31				
v/c Ratio	0.21	0.63			0.40	0.39		0.53				
Control Delay	2.4	3.0			11.5	16.1		45.1				
Queue Delay	0.0	5.9			1.4	0.0		0.0				
Total Delay	2.4	8.8			13.0	16.1		45.1				
LOS	A	A			B	B		D				
Approach Delay		8.2			13.4			45.1				
Approach LOS		A			B			D				
Stops (vph)	4	73			117	31		170				
Fuel Used(gal)	0	2			2	0		3				
CO Emissions (g/hr)	13	135			154	35		236				
NOx Emissions (g/hr)	3	26			30	7		46				
VOC Emissions (g/hr)	3	31			36	8		55				
Dilemma Vehicles (#)	0	0			0	0		0				
Queue Length 50th (ft)	3	27			95	16		164				
Queue Length 95th (ft)	m3	m25			m107	m22		251				
Internal Link Dist (ft)		288			254			248			204	
Turn Bay Length (ft)	125					70						
Base Capacity (vph)	249	735			817	150		413				
Starvation Cap Reductn	0	214			304	0		0				
Spillback Cap Reductn	0	133			0	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.21	0.89			0.64	0.39		0.53				

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 58 (41%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 17.2		Intersection LOS: B	
Intersection Capacity Utilization 68.5%		ICU Level of Service C	
Analysis Period (min) 15			
* User Entered Value			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: Rush Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	289	145	106	159	27	117	956	98	0	1386	125
Future Volume (vph)	0	289	145	106	159	27	117	956	98	0	1386	125
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	11	9	10	11	10	10	12	12	10	12
Storage Length (ft)	0		50	215		70	115		0	0		0
Storage Lanes	0		1	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.78	*0.78	1.00	*0.78	*0.78
Ped Bike Factor			0.64	0.84		0.79	0.93	0.93			0.94	
Frt			0.850			0.850		0.986			0.988	
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	1349	1235	1237	1440	1221	1408	2882	0	0	3243	0
Flt Permitted				0.268			0.950					
Satd. Flow (perm)	0	1349	786	295	1440	962	1306	2882	0	0	3243	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		334			679			321			298	
Travel Time (s)		7.6			15.4			7.3			6.8	
Confl. Peds. (#/hr)			411	411		141	352		437			352
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	12%	5%	9%	2%	4%	20%	2%	2%	0%
Bus Blockages (#/hr)	0	18	18	0	0	0	0	49	49	0	0	0
Adj. Flow (vph)	0	304	153	112	167	28	123	1006	103	0	1459	132
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	304	153	112	167	28	123	1109	0	0	1591	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.46	1.40	1.39	1.33	1.28	1.33	1.45	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	pm+pt	NA	Perm	Prot	NA			NA	
Protected Phases		4		3	8		5	2			6	
Permitted Phases			4	8		8						
Minimum Split (s)		34.0	34.0	8.0	34.0	34.0	8.0	24.0			24.0	
Total Split (s)		39.0	39.0	10.0	49.0	49.0	16.0	91.0			75.0	
Total Split (%)		27.9%	27.9%	7.1%	35.0%	35.0%	11.4%	65.0%			53.6%	
Maximum Green (s)		34.0	34.0	7.0	44.0	44.0	13.0	86.0			70.0	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
All-Red Time (s)		2.0	2.0	0.0	2.0	2.0	0.0	2.0			2.0	
Lost Time Adjust (s)		1.0	1.0	1.0	1.0	1.0	1.0	0.0			0.0	
Total Lost Time (s)		6.0	6.0	4.0	6.0	6.0	4.0	5.0			5.0	
Lead/Lag		Lag	Lag	Lead			Lag				Lead	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes				Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		24.0	24.0		24.0	24.0		14.0			14.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)		33.0	33.0	45.0	43.0	43.0	12.0	86.0			70.0	
Actuated g/C Ratio		0.24	0.24	0.32	0.31	0.31	0.09	0.61			0.50	
v/c Ratio		0.96	0.83	0.83	0.38	0.09	1.02	0.63			0.98	
Control Delay		79.4	69.6	82.8	41.1	35.9	150.2	18.9			52.8	
Queue Delay		17.4	0.0	0.0	0.0	0.0	5.3	0.0			0.0	
Total Delay		96.8	69.6	82.8	41.1	35.9	155.5	18.9			52.8	
LOS		F	E	F	D	D	F	B			D	
Approach Delay		87.7			55.8			32.6			52.8	
Approach LOS		F			E			C			D	
Stops (vph)		241	120	72	123	20	96	638			1339	
Fuel Used(gal)		7	3	3	3	0	4	10			27	
CO Emissions (g/hr)		472	216	192	199	32	308	715			1898	
NOx Emissions (g/hr)		92	42	37	39	6	60	139			369	
VOC Emissions (g/hr)		109	50	44	46	7	71	166			440	
Dilemma Vehicles (#)		0	0	0	0	0	0	0			0	
Queue Length 50th (ft)		258	121	76	119	18	~118	256			593	
Queue Length 95th (ft)		#459	#257	#178	189	44	#253	314			#744	
Internal Link Dist (ft)		254			599			241			218	
Turn Bay Length (ft)			50	215		70	115					
Base Capacity (vph)		317	185	135	442	295	120	1770			1621	
Starvation Cap Reductn		22	0	0	0	0	0	0			0	
Spillback Cap Reductn		0	0	0	0	0	2	0			0	
Storage Cap Reductn		0	0	0	0	0	0	0			0	
Reduced v/c Ratio		1.03	0.83	0.83	0.38	0.09	1.04	0.63			0.98	

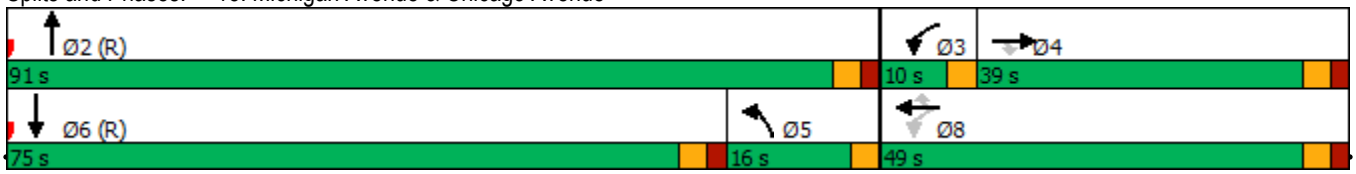
Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 39 (28%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 50.5		Intersection LOS: D	
Intersection Capacity Utilization 89.9%		ICU Level of Service E	
Analysis Period (min) 15			

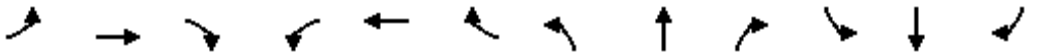
* User Entered Value

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 18: Michigan Avenue & Chicago Avenue





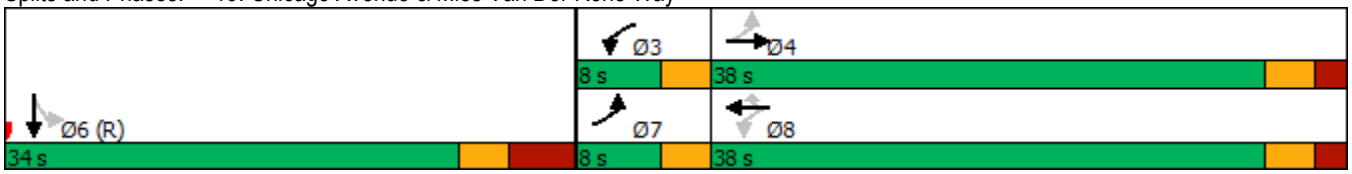
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	293	0	1	188	84	0	0	0	80	0	94
Future Volume (vph)	61	293	0	1	188	84	0	0	0	80	0	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	12	10	10	11	10	10	10	16	10	12
Storage Length (ft)	120		60	120		50	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.80					0.71					0.74	
Frt						0.850					0.927	
Flt Protected	0.950			0.950							0.978	
Satd. Flow (prot)	1154	2270	0	718	1326	1025	0	0	0	0	1202	0
Flt Permitted	0.633			0.564							0.978	
Satd. Flow (perm)	612	2270	0	426	1326	730	0	0	0	0	964	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		679			400			272			306	
Travel Time (s)		15.4			9.1			6.2			7.0	
Confl. Peds. (#/hr)	101					101				226		70
Confl. Bikes (#/hr)			10			5						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	20%	22%	0%	100%	14%	19%	2%	2%	2%	8%	0%	2%
Bus Blockages (#/hr)	0	18	18	0	0	21	0	0	0	0	0	0
Adj. Flow (vph)	64	308	0	1	198	88	0	0	0	84	0	99
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	308	0	1	198	88	0	0	0	0	183	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			75			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.75	1.39	1.22	1.33	1.33	1.42	1.33	1.33	1.33	1.05	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	Perm				Perm	NA	
Protected Phases	7	4		3	8						6	
Permitted Phases	4			8		8				6		
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0				28.0	28.0	
Total Split (s)	8.0	38.0		8.0	38.0	38.0				34.0	34.0	
Total Split (%)	10.0%	47.5%		10.0%	47.5%	47.5%				42.5%	42.5%	
Maximum Green (s)	5.0	33.0		5.0	33.0	33.0				27.0	27.0	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0				4.0	4.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	1.0					1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0					8.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		5.0			5.0	5.0				5.0	5.0	
Flash Dont Walk (s)		10.0			10.0	10.0				16.0	16.0	
Pedestrian Calls (#/hr)		0			0	0				0	0	
Act Effct Green (s)	38.0	32.0		38.0	32.0	32.0					26.0	
Actuated g/C Ratio	0.48	0.40		0.48	0.40	0.40					0.32	
v/c Ratio	0.20	0.34		0.00	0.37	0.30					0.58	
Control Delay	11.6	18.0		4.0	9.3	9.9					31.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0					0.0	
Total Delay	11.6	18.0		4.0	9.3	9.9					31.5	
LOS	B	B		A	A	A					C	
Approach Delay		16.9			9.5						31.5	
Approach LOS		B			A						C	
Stops (vph)	31	195		0	56	25					145	
Fuel Used(gal)	1	4		0	1	1					2	
CO Emissions (g/hr)	45	259		0	87	40					163	
NOx Emissions (g/hr)	9	50		0	17	8					32	
VOC Emissions (g/hr)	10	60		0	20	9					38	
Dilemma Vehicles (#)	0	0		0	0	0					0	
Queue Length 50th (ft)	15	54		0	33	14					75	
Queue Length 95th (ft)	35	86		m1	54	30					145	
Internal Link Dist (ft)		599			320			192			226	
Turn Bay Length (ft)	120			120		50						
Base Capacity (vph)	317	908		216	530	292					313	
Starvation Cap Reductn	0	0		0	0	0					0	
Spillback Cap Reductn	0	0		0	0	0					0	
Storage Cap Reductn	0	0		0	0	0					0	
Reduced v/c Ratio	0.20	0.34		0.00	0.37	0.30					0.58	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 77 (96%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 17.5		Intersection LOS: B	
Intersection Capacity Utilization 49.2%		ICU Level of Service A	
Analysis Period (min) 15			
* User Entered Value			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 19: Chicago Avenue & Mies Van Der Rohe Way

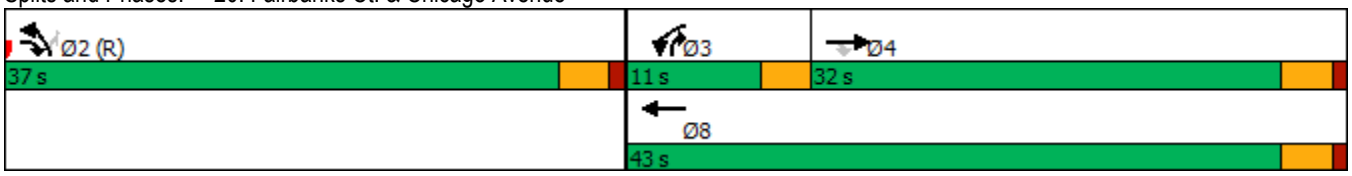


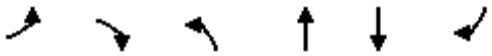
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	150	195	30	65	200	75
Future Volume (vph)	150	195	30	65	200	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	10	11	11	12
Storage Length (ft)		75	100		140	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.50	0.61			0.69
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1497	1113	1422	1550	1340	1249
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1497	558	865	1550	1340	866
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	400			888	320	
Travel Time (s)	9.1			20.2	7.3	
Confl. Peds. (#/hr)		305	305			315
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	11%	1%	1%	11%	1%
Bus Blockages (#/hr)	0	18	0	0	0	21
Adj. Flow (vph)	158	205	32	68	211	79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	158	205	32	68	211	79
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			10	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.40	1.33	1.28	1.28	1.36
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Minimum Split (s)	29.0	29.0	8.0	29.0	29.0	8.0
Total Split (s)	32.0	37.0	11.0	43.0	37.0	11.0
Total Split (%)	40.0%	46.3%	13.8%	53.8%	46.3%	13.8%
Maximum Green (s)	28.0	33.0	8.0	39.0	33.0	8.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	0.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0	0.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?						
Walk Time (s)	5.0	5.0		5.0	5.0	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Flash Dont Walk (s)	20.0	20.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	28.0	61.0	7.0	38.0	32.0	40.0
Actuated g/C Ratio	0.35	0.76	0.09	0.48	0.40	0.50
v/c Ratio	0.30	0.31	0.26	0.09	0.39	0.17
Control Delay	25.9	2.7	62.0	3.8	19.9	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.9	2.7	62.0	3.8	19.9	10.2
LOS	C	A	E	A	B	B
Approach Delay	12.8			22.4	17.2	
Approach LOS	B			C	B	
Stops (vph)	127	29	32	7	138	34
Fuel Used(gal)	2	1	1	1	2	1
CO Emissions (g/hr)	137	61	53	38	145	37
NOx Emissions (g/hr)	27	12	10	7	28	7
VOC Emissions (g/hr)	32	14	12	9	34	9
Dilemma Vehicles (#)	0	0	0	0	0	0
Queue Length 50th (ft)	69	12	18	3	73	18
Queue Length 95th (ft)	121	20	47	7	130	38
Internal Link Dist (ft)	320			808	240	
Turn Bay Length (ft)		75	100		140	
Base Capacity (vph)	523	654	124	736	536	466
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.31	0.26	0.09	0.39	0.17

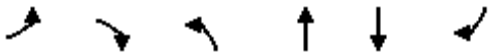
Intersection Summary			
Area Type:	CBD		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 36 (45%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 15.8		Intersection LOS: B	
Intersection Capacity Utilization 56.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 20: Fairbanks Ct. & Chicago Avenue





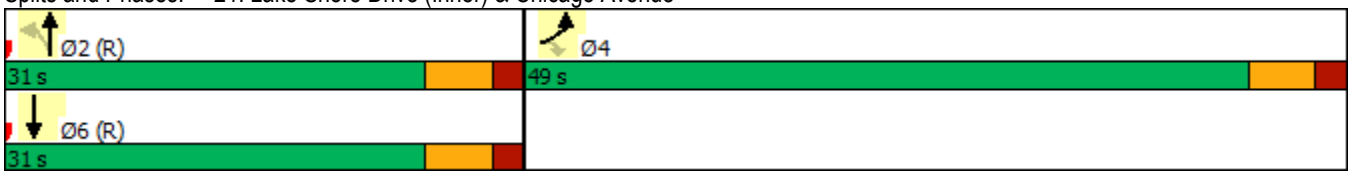
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	125	75	100	100	20
Future Volume (vph)	100	125	75	100	100	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt		0.850			0.975	
Flt Protected	0.950			0.979		
Satd. Flow (prot)	1408	1134	0	2757	2746	0
Flt Permitted	0.950			0.794		
Satd. Flow (perm)	1408	1134	0	2236	2746	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			40	30	
Link Distance (ft)	888			307	377	
Travel Time (s)	20.2			5.2	8.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0				
Adj. Flow (vph)	105	132	79	105	105	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	132	0	184	126	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	20			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.52	1.33	1.33	1.33	1.33
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Minimum Split (s)	11.0	11.0	11.0	11.0	29.0	
Total Split (s)	49.0	49.0	31.0	31.0	31.0	
Total Split (%)	61.3%	61.3%	38.8%	38.8%	38.8%	
Maximum Green (s)	43.0	43.0	25.0	25.0	25.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)					5.0	
Flash Dont Walk (s)					18.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	45.0	45.0		27.0	27.0	
Actuated g/C Ratio	0.56	0.56		0.34	0.34	
v/c Ratio	0.13	0.21		0.24	0.14	
Control Delay	3.0	3.4		20.2	18.9	
Queue Delay	0.0	0.0		0.0	0.0	



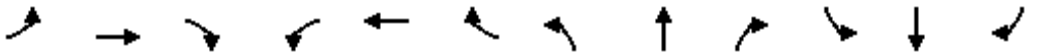
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	3.0	3.4		20.2	18.9	
LOS	A	A		C	B	
Approach Delay	3.2			20.2	18.9	
Approach LOS	A			C	B	
Stops (vph)	14	17		122	80	
Fuel Used(gal)	1	1		2	1	
CO Emissions (g/hr)	58	73		160	88	
NOx Emissions (g/hr)	11	14		31	17	
VOC Emissions (g/hr)	13	17		37	20	
Dilemma Vehicles (#)	0	0		11	0	
Queue Length 50th (ft)	7	9		34	22	
Queue Length 95th (ft)	14	17		60	42	
Internal Link Dist (ft)	808			227	297	
Turn Bay Length (ft)						
Base Capacity (vph)	792	637		754	926	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.13	0.21		0.24	0.14	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 71 (89%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 40			
Control Type: Pretimed			
Maximum v/c Ratio: 0.24			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 34.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: Lake Shore Drive (Inner) & Chicago Avenue



PM Reports



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	391	70	53	477	103	133	1222	74	118	768	111
Future Volume (vph)	93	391	70	53	477	103	133	1222	74	118	768	111
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	10	12	10	11	12	10	11	9	10	11	9
Storage Length (ft)	160		260	100		0	100		0	100		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor			0.82			0.93		0.99			0.98	
Frt			0.850			0.850		0.991			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1459	1296	1283	1395	1450	1313	1368	2731	0	1408	2708	0
Flt Permitted	0.148			0.254			0.166			0.070		
Satd. Flow (perm)	227	1296	1054	373	1450	1220	239	2731	0	104	2708	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			74			55		5			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		633			179			340			330	
Travel Time (s)		14.4			4.1			7.7			7.5	
Confl. Peds. (#/hr)	30		85	85		30	40		42	42		40
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	5%	6%	3%	8%	4%	5%	7%	3%	2%	5%	7%
Bus Blockages (#/hr)	0	0	3	0	0	2	0	0	0	0	0	0
Parking (#/hr)		0										
Adj. Flow (vph)	98	412	74	56	502	108	140	1286	78	124	808	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	412	74	56	502	108	140	1364	0	124	925	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.28	1.52	1.24	1.33	1.28	1.24	1.33	1.28	1.39	1.33	1.28	1.39
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	9.0	29.0	9.0	9.0	29.0	9.0	9.0	26.0		9.0	26.0	
Total Split (s)	9.0	59.0	18.0	9.0	59.0	11.0	18.0	81.0		11.0	74.0	
Total Split (%)	5.6%	36.9%	11.3%	5.6%	36.9%	6.9%	11.3%	50.6%		6.9%	46.3%	
Maximum Green (s)	6.0	54.0	15.0	6.0	54.0	8.0	15.0	76.0		8.0	69.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	1.0	-1.0	1.0	1.0	-1.0	1.0	1.0	-1.0		1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	

Lanes, Volumes, Timings
1: Western Avenue & Chicago Avenue 02/23/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		19.0			19.0			14.0			14.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	60.0	55.0	69.0	60.0	55.0	62.0	88.0	77.0		77.0	70.0	
Actuated g/C Ratio	0.38	0.34	0.43	0.38	0.34	0.39	0.55	0.48		0.48	0.44	
v/c Ratio	0.80	0.93	0.14	0.33	1.01	0.21	0.61	1.04		1.16	0.78	
Control Delay	77.7	78.1	5.5	28.4	79.5	13.0	29.8	74.9		166.0	43.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	77.7	78.1	5.5	28.4	79.5	13.0	29.8	74.9		166.0	43.3	
LOS	E	E	A	C	E	B	C	E		F	D	
Approach Delay		68.9			64.4			70.7			57.8	
Approach LOS		E			E			E			E	
Stops (vph)	64	346	8	32	374	57	65	1145		55	727	
Fuel Used(gal)	2	10	0	1	12	1	2	30		5	14	
CO Emissions (g/hr)	160	703	33	53	858	79	106	2063		321	980	
NOx Emissions (g/hr)	31	137	6	10	167	15	21	401		62	191	
VOC Emissions (g/hr)	37	163	8	12	199	18	25	478		74	227	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	66	415	0	35	~541	37	72	~804		~103	424	
Queue Length 95th (ft)	#151	#629	31	m65	#758	67	113	#946		#247	516	
Internal Link Dist (ft)		553			99			260			250	
Turn Bay Length (ft)	160		260	100			100			100		
Base Capacity (vph)	123	445	516	171	498	510	230	1316		107	1192	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.80	0.93	0.14	0.33	1.01	0.21	0.61	1.04		1.16	0.78	

Intersection Summary

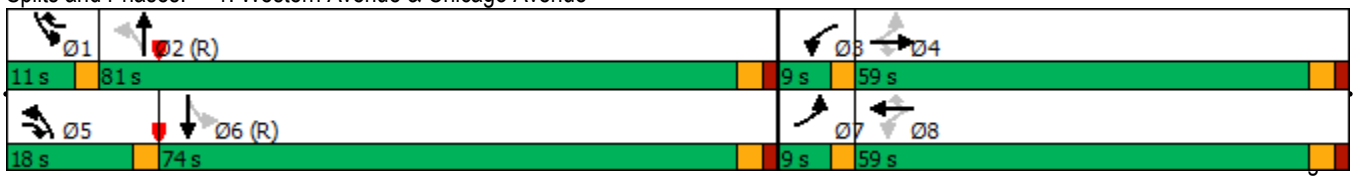
Area Type: CBD
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 12 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Pretimed
Maximum v/c Ratio: 1.16
Intersection Signal Delay: 65.7 Intersection LOS: E
Intersection Capacity Utilization 99.1% ICU Level of Service F
Analysis Period (min) 15

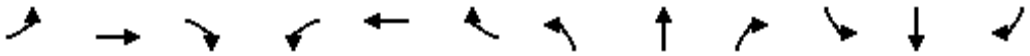
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Western Avenue & Chicago Avenue





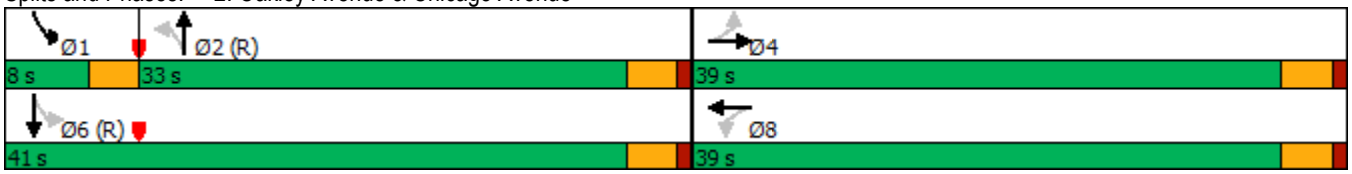
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	533	25	25	533	25	50	100	50	50	100	50
Future Volume (vph)	25	533	25	25	533	25	50	100	50	50	100	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	0		0	0		0	30		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.994			0.966			0.966	
Flt Protected		0.998			0.998			0.988			0.988	
Satd. Flow (prot)	0	2654	0	0	2794	0	0	1415	0	0	1415	0
Flt Permitted		0.916			0.916			0.885			0.896	
Satd. Flow (perm)	0	2436	0	0	2564	0	0	1267	0	0	1283	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		491			631			329			347	
Travel Time (s)		11.2			14.3			7.5			7.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0										
Adj. Flow (vph)	26	561	26	26	561	26	53	105	53	53	105	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	613	0	0	613	0	0	211	0	0	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	15.0	15.0		15.0	15.0		22.0	22.0		8.0	22.0	
Total Split (s)	39.0	39.0		39.0	39.0		33.0	33.0		8.0	41.0	
Total Split (%)	48.8%	48.8%		48.8%	48.8%		41.3%	41.3%		10.0%	51.3%	
Maximum Green (s)	35.0	35.0		35.0	35.0		29.0	29.0		5.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		0.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Flash Dont Walk (s)	6.0	6.0		6.0	6.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	
Act Effct Green (s)		35.0			35.0			29.0			37.0	
Actuated g/C Ratio		0.44			0.44			0.36			0.46	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.58			0.55			0.46			0.35	
Control Delay		14.8			18.9			23.6			15.8	
Queue Delay		0.0			0.1			0.0			0.0	
Total Delay		14.8			19.0			23.6			15.8	
LOS		B			B			C			B	
Approach Delay		14.8			19.0			23.6			15.8	
Approach LOS		B			B			C			B	
Stops (vph)		342			413			150			121	
Fuel Used(gal)		7			7			2			2	
CO Emissions (g/hr)		467			516			161			129	
NOx Emissions (g/hr)		91			100			31			25	
VOC Emissions (g/hr)		108			120			37			30	
Dilemma Vehicles (#)		0			0			0			0	
Queue Length 50th (ft)		121			114			79			64	
Queue Length 95th (ft)		m141			164			142			112	
Internal Link Dist (ft)		411			551			249			267	
Turn Bay Length (ft)												
Base Capacity (vph)		1065			1121			459			599	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			37			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.58			0.57			0.46			0.35	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 17.6		Intersection LOS: B	
Intersection Capacity Utilization 63.9%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Oakley Avenue & Chicago Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	36	345	93	0	806	173	113	575	47	88	531	5
Future Volume (vph)	36	345	93	0	806	173	113	575	47	88	531	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	130		50	0		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	*0.80	0.95	1.00	*0.80	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.98		0.99		0.90	0.98	1.00	
Frt		0.968			0.973				0.850		0.999	
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1408	2208	0	0	2267	0	1408	1482	1260	1408	1480	0
Flt Permitted	0.099						0.260			0.222		
Satd. Flow (perm)	147	2208	0	0	2267	0	381	1482	1135	322	1480	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		426			207			537			178	
Travel Time (s)		9.7			4.7			12.2			4.0	
Confl. Peds. (#/hr)	38		59			38	36		71	71		36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	14	14	0	0	0	0	0	0	0	0	0
Adj. Flow (vph)	38	363	98	0	848	182	119	605	49	93	559	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	461	0	0	1030	0	119	605	49	93	564	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.38	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4						6		6	2		
Minimum Split (s)	8.0	8.0			35.0		39.0	39.0	39.0	39.0	39.0	
Total Split (s)	64.0	64.0			64.0		66.0	66.0	66.0	66.0	66.0	
Total Split (%)	49.2%	49.2%			49.2%		50.8%	50.8%	50.8%	50.8%	50.8%	
Maximum Green (s)	61.0	61.0			59.0		58.0	58.0	58.0	58.0	58.0	
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	0.0			2.0		5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0			1.0		1.0	1.0	-3.0	1.0	1.0	
Total Lost Time (s)	4.0	4.0			6.0		9.0	9.0	5.0	9.0	9.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)					25.0		26.0	26.0	26.0	26.0	26.0	
Pedestrian Calls (#/hr)					0		0	0	0	0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Act Effct Green (s)	60.0	60.0			58.0		57.0	57.0	61.0	57.0	57.0	
Actuated g/C Ratio	0.46	0.46			0.45		0.44	0.44	0.47	0.44	0.44	
v/c Ratio	0.57	0.45			1.02		0.71	0.93	0.09	0.66	0.87	
Control Delay	62.3	25.6			49.8		55.7	57.5	19.9	38.9	33.6	
Queue Delay	0.0	0.0			31.4		0.6	39.7	0.0	4.3	50.4	
Total Delay	62.3	25.6			81.2		56.3	97.2	19.9	43.2	84.0	
LOS	E	C			F		E	F	B	D	F	
Approach Delay		28.4			81.2			86.0			78.2	
Approach LOS		C			F			F			E	
Stops (vph)	28	290			906		91	497	25	47	298	
Fuel Used(gal)	1	5			17		2	12	1	1	6	
CO Emissions (g/hr)	51	373			1153		158	831	37	75	424	
NOx Emissions (g/hr)	10	73			224		31	162	7	15	82	
VOC Emissions (g/hr)	12	87			267		37	193	9	17	98	
Dilemma Vehicles (#)	0	0			0		0	0	0	0	0	
Queue Length 50th (ft)	23	161			~585		81	476	22	36	218	
Queue Length 95th (ft)	#84	219			#753		#190	#720	47	m#87	#634	
Internal Link Dist (ft)		346			127			457			98	
Turn Bay Length (ft)	50						130		50			
Base Capacity (vph)	67	1019			1011		167	649	532	141	648	
Starvation Cap Reductn	0	0			255		0	0	0	16	189	
Spillback Cap Reductn	0	0			0		3	92	0	0	0	
Storage Cap Reductn	0	0			0		0	0	0	0	0	
Reduced v/c Ratio	0.57	0.45			1.36		0.73	1.09	0.09	0.74	1.23	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 122 (94%), Referenced to phase 2:NWTL and 6:SETL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 72.9		Intersection LOS: E	
Intersection Capacity Utilization 114.7%		ICU Level of Service H	
Analysis Period (min) 15			

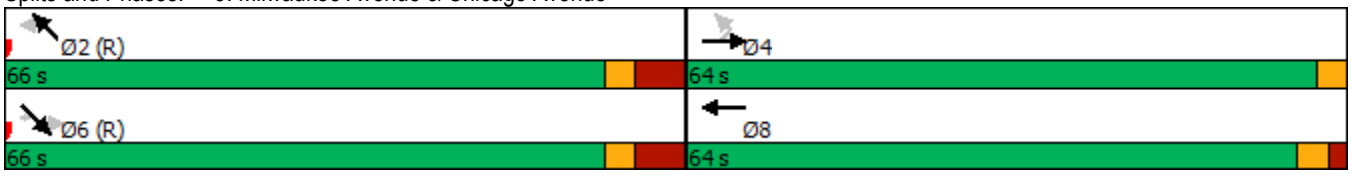
* User Entered Value

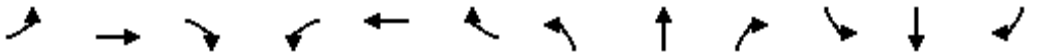
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Milwaukee Avenue & Chicago Avenue



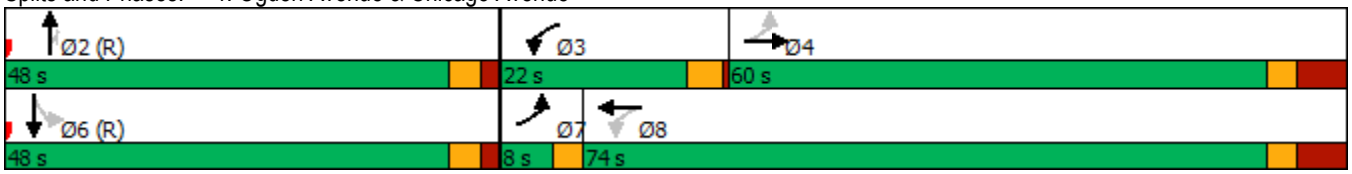


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	501	0	219	960	9	0	130	342	33	127	67
Future Volume (vph)	18	501	0	219	960	9	0	130	342	33	127	67
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	9	10	10	10	10	10	10	10	10
Storage Length (ft)	0		0	160		0	0		0	50		50
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.96			0.97	1.00				0.96	0.97	0.98	
Frt					0.999				0.850		0.948	
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1408	2372	0	1358	2367	0	0	1482	1260	1408	1236	0
Flt Permitted	0.168			0.284						0.650		
Satd. Flow (perm)	240	2372	0	393	2367	0	0	1482	1205	939	1236	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		207			1872			137			461	
Travel Time (s)		4.7			42.5			3.1			10.5	
Confl. Peds. (#/hr)	90			73		90			18	18		31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)											0	0
Adj. Flow (vph)	19	527	0	231	1011	9	0	137	360	35	134	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	527	0	231	1020	0	0	137	360	35	205	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.39	1.33	1.33	1.33	1.33	1.33	1.33	1.52	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA			NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8					2	6		
Minimum Split (s)	8.0	40.0		8.0	13.0			27.0	27.0	27.0	27.0	
Total Split (s)	8.0	60.0		22.0	74.0			48.0	48.0	48.0	48.0	
Total Split (%)	6.2%	46.2%		16.9%	56.9%			36.9%	36.9%	36.9%	36.9%	
Maximum Green (s)	5.0	52.0		18.0	66.0			43.0	43.0	43.0	43.0	
Yellow Time (s)	3.0	3.0		3.5	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	5.0		0.5	5.0			2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	6.0	1.0		5.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Walk Time (s)		5.0						5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		27.0						17.0	17.0	17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)		0						0	0	0	0	
Act Effct Green (s)	51.0	51.0		73.0	65.0			42.0	42.0	42.0	42.0	
Actuated g/C Ratio	0.39	0.39		0.56	0.50			0.32	0.32	0.32	0.32	
v/c Ratio	0.20	0.57		0.73	0.86			0.29	0.93	0.12	0.51	
Control Delay	23.3	22.4		22.6	28.3			8.4	45.8	32.4	41.3	
Queue Delay	0.0	1.9		62.2	49.4			11.5	49.6	0.0	0.0	
Total Delay	23.3	24.3		84.7	77.7			19.9	95.4	32.4	41.3	
LOS	C	C		F	E			B	F	C	D	
Approach Delay		24.3			79.0			74.6			40.0	
Approach LOS		C			E			E			D	
Stops (vph)	9	219		119	721			97	320	25	156	
Fuel Used(gal)	0	4		5	24			1	5	0	3	
CO Emissions (g/hr)	11	301		340	1657			63	372	33	224	
NOx Emissions (g/hr)	2	59		66	322			12	72	6	44	
VOC Emissions (g/hr)	3	70		79	384			15	86	8	52	
Dilemma Vehicles (#)	0	0		0	0			0	0	0	0	
Queue Length 50th (ft)	7	128		98	381			73	325	21	140	
Queue Length 95th (ft)	m15	160		m116	m455			m96	#501	48	222	
Internal Link Dist (ft)		127			1792			57			381	
Turn Bay Length (ft)				160						50		
Base Capacity (vph)	94	930		317	1183			478	389	303	399	
Starvation Cap Reductn	0	248		0	0			309	138	0	0	
Spillback Cap Reductn	0	0		131	462			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.20	0.77		1.24	1.41			0.81	1.43	0.12	0.51	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 105 (81%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 62.6		Intersection LOS: E	
Intersection Capacity Utilization 93.1%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 4: Ogden Avenue & Chicago Avenue



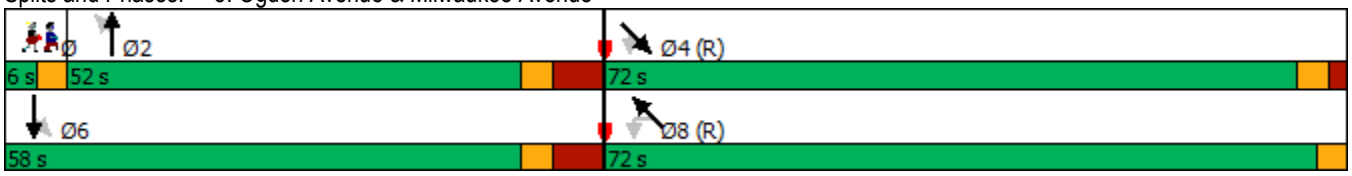
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	153	513	59	25	340	0	0	524	163	131	467	0
Future Volume (vph)	153	513	59	25	340	0	0	524	163	131	467	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	110		0	0		0	0		0	90		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.81	0.97		0.94					0.91	0.98		
Frt		0.985							0.850			
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1408	2701	0	1408	2816	0	0	1482	1260	1408	1482	0
Flt Permitted	0.538			0.289						0.308		
Satd. Flow (perm)	643	2701	0	404	2816	0	0	1482	1147	447	1482	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		514			137			178			729	
Travel Time (s)		11.7			3.1			4.0			16.6	
Confl. Peds. (#/hr)	169		63	63					53	53		100
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	161	540	62	26	358	0	0	552	172	138	492	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	602	0	26	358	0	0	552	172	138	492	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6					4	8		
Minimum Split (s)	25.0	25.0		25.0	25.0			31.0	31.0	8.0	8.0	
Total Split (s)	52.0	52.0		58.0	58.0			72.0	72.0	72.0	72.0	
Total Split (%)	40.0%	40.0%		44.6%	44.6%			55.4%	55.4%	55.4%	55.4%	
Maximum Green (s)	44.0	44.0		50.0	50.0			67.0	67.0	69.0	69.0	
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	0.0	0.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	4.0	4.0	
Lead/Lag	Lag	Lag										
Lead-Lag Optimize?	Yes	Yes										
Walk Time (s)	5.0	5.0		5.0	5.0			5.0	5.0			
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			21.0	21.0			
Pedestrian Calls (#/hr)	0	0		0	0			0	0			
Act Effct Green (s)	43.0	43.0		49.0	49.0			66.0	66.0	68.0	68.0	

Lane Group	Ø1
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	1
Permitted Phases	
Minimum Split (s)	6.0
Total Split (s)	6.0
Total Split (%)	5%
Maximum Green (s)	3.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Actuated g/C Ratio	0.33	0.33		0.38	0.38			0.51	0.51	0.52	0.52	
v/c Ratio	0.76	0.67		0.17	0.34			0.73	0.30	0.59	0.63	
Control Delay	63.0	42.0		30.2	28.6			17.4	7.3	34.2	26.8	
Queue Delay	68.2	2.7		4.3	60.7			53.7	14.6	0.0	0.5	
Total Delay	131.2	44.7		34.5	89.4			71.1	21.8	34.2	27.3	
LOS	F	D		C	F			E	C	C	C	
Approach Delay		62.9			85.7			59.4			28.8	
Approach LOS		E			F			E			C	
Stops (vph)	130	483		17	218			467	60	96	328	
Fuel Used(gal)	3	10		0	4			5	1	2	7	
CO Emissions (g/hr)	230	689		19	248			361	56	153	490	
NOx Emissions (g/hr)	45	134		4	48			70	11	30	95	
VOC Emissions (g/hr)	53	160		4	58			84	13	35	114	
Dilemma Vehicles (#)	0	0		0	0			0	0	0	0	
Queue Length 50th (ft)	121	229		12	96			406	41	78	287	
Queue Length 95th (ft)	#241	297		m25	155			m510	m51	163	410	
Internal Link Dist (ft)		434			57			98			649	
Turn Bay Length (ft)	110									90		
Base Capacity (vph)	212	893		152	1061			752	582	233	775	
Starvation Cap Reductn	0	0		85	787			303	385	0	0	
Spillback Cap Reductn	97	181		0	0			0	0	0	63	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	1.40	0.85		0.39	1.31			1.23	0.87	0.59	0.69	

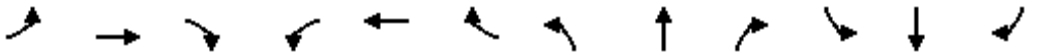
Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 8 (6%), Referenced to phase 4:SET and 8:NWTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 56.8		Intersection LOS: E	
Intersection Capacity Utilization 97.7%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Ogden Avenue & Milwaukee Avenue



Lane Group	Ø1
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

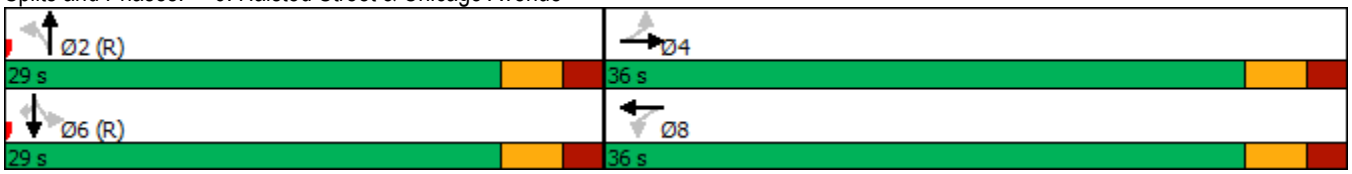


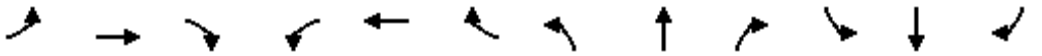
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	670	25	135	894	99	43	552	135	88	494	348
Future Volume (vph)	142	670	25	135	894	99	43	552	135	88	494	348
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	80		0	80		0	95		0	80		260
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor	0.99	0.99		0.97	0.99		0.98	0.99		1.00		0.88
Frt		0.995			0.985			0.971				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1342	2660	0	1368	2692	0	1064	2499	0	1131	2542	1168
Flt Permitted	0.188			0.330			0.429			0.291		
Satd. Flow (perm)	262	2660	0	461	2692	0	470	2499	0	345	2542	1032
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1872			743			718			744	
Travel Time (s)		42.5			16.9			16.3			16.9	
Confl. Peds. (#/hr)	102		123	123		102	57		18	18		57
Confl. Bikes (#/hr)			137			11			2			103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	6%	31%	5%	4%	6%	35%	12%	7%	27%	13%	10%
Adj. Flow (vph)	149	705	26	142	941	104	45	581	142	93	520	366
Shared Lane Traffic (%)												
Lane Group Flow (vph)	149	731	0	142	1045	0	45	723	0	93	520	366
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Minimum Split (s)	33.0	33.0		33.0	33.0		29.0	29.0		29.0	29.0	29.0
Total Split (s)	36.0	36.0		36.0	36.0		29.0	29.0		29.0	29.0	29.0
Total Split (%)	55.4%	55.4%		55.4%	55.4%		44.6%	44.6%		44.6%	44.6%	44.6%
Maximum Green (s)	31.0	31.0		31.0	31.0		24.0	24.0		24.0	24.0	24.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	19.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	30.0	30.0		30.0	30.0		23.0	23.0		23.0	23.0	23.0
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.35	0.35		0.35	0.35	0.35
v/c Ratio	1.24	0.60		0.67	0.84		0.27	0.82		0.76	0.58	1.00
Control Delay	167.5	7.3		33.5	23.6		20.4	28.7		61.5	20.2	73.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	167.5	7.3		33.5	23.6		20.4	28.7		61.5	20.2	73.5
LOS	F	A		C	C		C	C		E	C	E
Approach Delay		34.5			24.8			28.2			44.0	
Approach LOS		C			C			C			D	
Stops (vph)	93	390		103	803		33	578		67	384	278
Fuel Used(gal)	7	13		3	19		1	11		2	7	9
CO Emissions (g/hr)	519	931		200	1349		42	773		139	491	612
NOx Emissions (g/hr)	101	181		39	262		8	150		27	95	119
VOC Emissions (g/hr)	120	216		46	313		10	179		32	114	142
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	0
Queue Length 50th (ft)	~104	74		41	181		12	133		32	86	~143
Queue Length 95th (ft)	m#233	m123		#129	#301		38	#225		#109	131	#303
Internal Link Dist (ft)		1792			663			638			664	
Turn Bay Length (ft)	80			80			95			80		260
Base Capacity (vph)	120	1227		212	1242		166	884		122	899	365
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.24	0.60		0.67	0.84		0.27	0.82		0.76	0.58	1.00

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 1.24			
Intersection Signal Delay: 32.6		Intersection LOS: C	
Intersection Capacity Utilization 119.9%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Halsted Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	526	240	25	810	145	0	0	0	320	20	280
Future Volume (vph)	220	526	240	25	810	145	0	0	0	320	20	280
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	9	10	11	10	10	10	10	10	10
Storage Length (ft)	75		0	0		150	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.82	0.77		0.79		0.39					0.71	0.49
Frt		0.953				0.850						0.850
Flt Protected	0.950			0.950							0.955	
Satd. Flow (prot)	1408	2077	0	1358	2816	1232	0	0	0	0	1416	1260
Flt Permitted	0.950			0.328							0.955	
Satd. Flow (perm)	1152	2077	0	370	2816	483	0	0	0	0	1010	612
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		80				103						295
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		200			361			360			481	
Travel Time (s)		4.5			8.2			8.2			10.9	
Confl. Peds. (#/hr)	294		323	323		294	514		122	122		514
Confl. Bikes (#/hr)			67			9			12			24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	0	0	0	14	0	0	0	0	0	0
Adj. Flow (vph)	232	554	253	26	853	153	0	0	0	337	21	295
Shared Lane Traffic (%)												
Lane Group Flow (vph)	232	807	0	26	853	153	0	0	0	0	358	295
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.39	1.33	1.37	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		pm+pt	NA	custom				Split	NA	Perm
Protected Phases	5	2 12		1	6	16				4	4	
Permitted Phases				6		6						4
Minimum Split (s)	8.0			8.0	26.0	7.0				21.0	21.0	21.0
Total Split (s)	31.0			8.0	56.0	7.0				46.0	46.0	46.0
Total Split (%)	22.1%			5.7%	40.0%	5.0%				32.9%	32.9%	32.9%
Maximum Green (s)	27.0			5.0	51.0	5.0				41.0	41.0	41.0
Yellow Time (s)	3.5			3.0	3.0	2.0				3.0	3.0	3.0
All-Red Time (s)	0.5			0.0	2.0	0.0				2.0	2.0	2.0
Lost Time Adjust (s)	1.0			1.0	1.0	1.0					1.0	1.0
Total Lost Time (s)	5.0			4.0	6.0	3.0					6.0	6.0
Lead/Lag				Lag	Lag	Lead						
Lead-Lag Optimize?												
Walk Time (s)					4.0					5.0	5.0	5.0

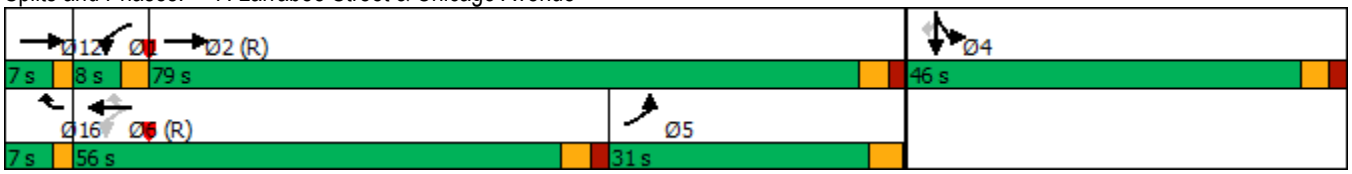
Lane Group	Ø2	Ø12
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Width (ft)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor		
Bus Blockages (#/hr)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	2	12
Permitted Phases		
Minimum Split (s)	26.0	7.0
Total Split (s)	79.0	7.0
Total Split (%)	56%	5%
Maximum Green (s)	74.0	5.0
Yellow Time (s)	3.0	2.0
All-Red Time (s)	2.0	0.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		Lead
Lead-Lag Optimize?		
Walk Time (s)	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)					17.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)					0					0	0	0
Act Effct Green (s)	26.0	74.0		52.0	50.0	57.0					40.0	40.0
Actuated g/C Ratio	0.19	0.53		0.37	0.36	0.41					0.29	0.29
v/c Ratio	0.89	0.71		0.16	0.85	0.55					0.89	0.77
Control Delay	88.9	26.2		22.2	42.8	11.1					72.0	18.8
Queue Delay	0.0	0.0		0.0	3.1	0.0					9.6	0.0
Total Delay	88.9	26.2		22.2	45.9	11.1					81.6	18.8
LOS	F	C		C	D	B					F	B
Approach Delay		40.2			40.1						53.2	
Approach LOS		D			D						D	
Stops (vph)	195	406		13	742	40					304	41
Fuel Used(gal)	7	14		0	13	1					8	2
CO Emissions (g/hr)	510	987		18	939	67					555	164
NOx Emissions (g/hr)	99	192		3	183	13					108	32
VOC Emissions (g/hr)	118	229		4	218	16					129	38
Dilemma Vehicles (#)	0	0		0	0	0					0	0
Queue Length 50th (ft)	208	197		12	388	5					313	0
Queue Length 95th (ft)	#363	261		m25	475	25					#495	#176
Internal Link Dist (ft)		120			281			280			401	
Turn Bay Length (ft)	75					150						
Base Capacity (vph)	261	1135		165	1005	279					404	385
Starvation Cap Reductn	0	0		0	81	0					0	0
Spillback Cap Reductn	0	8		0	0	0					33	0
Storage Cap Reductn	0	0		0	0	0					0	0
Reduced v/c Ratio	0.89	0.72		0.16	0.92	0.55					0.96	0.77

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 43.3		Intersection LOS: D	
Intersection Capacity Utilization 83.4%		ICU Level of Service E	
Analysis Period (min) 15			

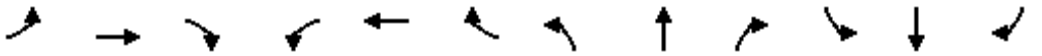
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Larrabee Street & Chicago Avenue



Lane Group	Ø2	Ø12
Flash Dont Walk (s)	10.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

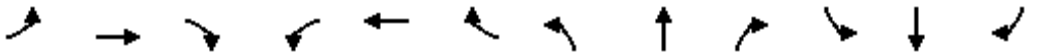


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	840	1	40	800	5	150	85	75	15	5	5
Future Volume (vph)	5	840	1	40	800	5	150	85	75	15	5	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	65		350	80		75	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.89		0.45			0.40		0.99		0.99	0.95	
Frt			0.850			0.850		0.929			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1358	2816	1305	1358	2816	1305	1408	1361	0	1408	1301	0
Flt Permitted	0.281			0.257			0.612			0.651		
Satd. Flow (perm)	358	2816	589	367	2816	528	907	1361	0	955	1301	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)						39						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		361			809			355			175	
Travel Time (s)		8.2			18.4			8.1			4.0	
Confl. Peds. (#/hr)	211		139	139		211			7	7		30
Confl. Bikes (#/hr)			56			9			1			29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	884	1	42	842	5	158	89	79	16	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	884	1	42	842	5	158	168	0	16	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.33	1.28	1.39	1.33	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6		6	4			8		
Minimum Split (s)	20.0	20.0	20.0	8.0	20.0	20.0	8.0	27.0		27.0	27.0	
Total Split (s)	83.0	83.0	83.0	8.0	91.0	91.0	22.0	49.0		27.0	27.0	
Total Split (%)	59.3%	59.3%	59.3%	5.7%	65.0%	65.0%	15.7%	35.0%		19.3%	19.3%	
Maximum Green (s)	79.0	79.0	79.0	5.0	87.0	87.0	18.0	45.0		23.0	23.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	0.5	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Total Lost Time (s)	5.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lead	Lead	Lag			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Walk Time (s)	5.0	5.0	5.0		5.0	5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		18.0		18.0	18.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0		0	0		0		0	0	
Act Effct Green (s)	78.0	78.0	78.0	87.0	86.0	86.0	44.0	44.0		22.0	22.0	
Actuated g/C Ratio	0.56	0.56	0.56	0.62	0.61	0.61	0.31	0.31		0.16	0.16	
v/c Ratio	0.03	0.56	0.00	0.16	0.49	0.01	0.46	0.39		0.11	0.05	
Control Delay	13.2	18.3	14.0	13.5	16.0	0.0	42.1	41.0		52.8	51.0	
Queue Delay	0.0	5.2	0.0	0.0	0.3	0.0	0.0	0.0		0.0	0.0	
Total Delay	13.2	23.5	14.0	13.5	16.3	0.0	42.1	41.0		52.8	51.0	
LOS	B	C	B	B	B	A	D	D		D	D	
Approach Delay		23.5			16.1			41.5			52.1	
Approach LOS		C			B			D			D	
Stops (vph)	3	487	1	14	424	0	114	124		15	10	
Fuel Used(gal)	0	8	0	1	12	0	2	2		0	0	
CO Emissions (g/hr)	3	573	1	39	867	3	163	172		18	12	
NOx Emissions (g/hr)	1	111	0	8	169	1	32	33		4	2	
VOC Emissions (g/hr)	1	133	0	9	201	1	38	40		4	3	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	2	249	0	14	211	0	111	120		13	8	
Queue Length 95th (ft)	m2	m328	m0	30	262	0	178	190		36	26	
Internal Link Dist (ft)		281			729			275			95	
Turn Bay Length (ft)	65		350	80		75						
Base Capacity (vph)	199	1568	328	256	1729	339	345	427		150	204	
Starvation Cap Reductn	0	608	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	338	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.03	0.92	0.00	0.16	0.61	0.01	0.46	0.39		0.11	0.05	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 109 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 23.5		Intersection LOS: C	
Intersection Capacity Utilization 66.5%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 8: Kingsbury Street & Chicago Avenue



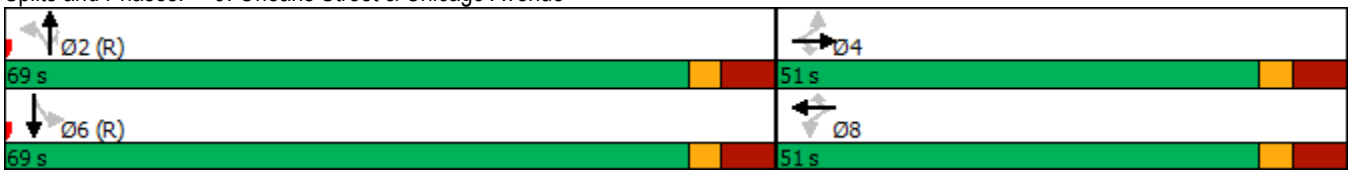
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	830	25	85	670	65	70	635	90	165	440	55
Future Volume (vph)	120	830	25	85	670	65	70	635	90	165	440	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	130		75	95		125	50		0	50		110
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.86		0.64			0.44	0.92		0.81		0.98	
Frt			0.850			0.850			0.850		0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1358	2816	1305	1358	2676	1305	1408	1482	1260	1408	2711	0
Flt Permitted	0.281			0.187			0.446			0.230		
Satd. Flow (perm)	347	2816	833	267	2676	577	608	1482	1026	341	2711	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		384			406			352			306	
Travel Time (s)		8.7			9.2			8.0			7.0	
Confl. Peds. (#/hr)	206		258	258		206	106		107	107		106
Confl. Bikes (#/hr)			29			7			8			15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)					0							
Adj. Flow (vph)	126	874	26	89	705	68	74	668	95	174	463	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	874	26	89	705	68	74	668	95	174	521	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.33	1.28	1.39	1.42	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	30.0	30.0	30.0	30.0	30.0	
Total Split (s)	51.0	51.0	51.0	51.0	51.0	51.0	69.0	69.0	69.0	69.0	69.0	
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	42.5%	57.5%	57.5%	57.5%	57.5%	57.5%	
Maximum Green (s)	43.0	43.0	43.0	43.0	43.0	43.0	61.0	61.0	61.0	61.0	61.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	

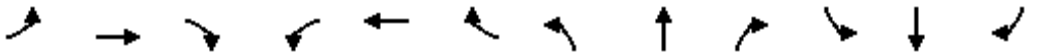
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	12.0	12.0	12.0	12.0	12.0	12.0	17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)	42.0	42.0	42.0	42.0	42.0	42.0	60.0	60.0	60.0	60.0	60.0	
Actuated g/C Ratio	0.35	0.35	0.35	0.35	0.35	0.35	0.50	0.50	0.50	0.50	0.50	
v/c Ratio	1.04	0.89	0.09	0.96	0.75	0.34	0.24	0.90	0.19	1.02	0.38	
Control Delay	133.4	49.0	27.4	123.5	40.5	34.7	19.8	44.7	17.8	107.7	19.6	
Queue Delay	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	133.4	49.0	27.4	123.5	42.4	34.7	19.8	44.7	17.8	107.7	19.6	
LOS	F	D	C	F	D	C	B	D	B	F	B	
Approach Delay		58.8			50.2			39.4			41.7	
Approach LOS		E			D			D			D	
Stops (vph)	91	742	16	66	580	49	39	537	48	126	295	
Fuel Used(gal)	5	20	0	3	11	1	1	10	1	5	5	
CO Emissions (g/hr)	341	1405	32	194	759	65	48	733	59	329	335	
NOx Emissions (g/hr)	66	273	6	38	148	13	9	143	11	64	65	
VOC Emissions (g/hr)	79	326	7	45	176	15	11	170	14	76	78	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	~105	333	13	67	252	39	32	456	39	~143	127	
Queue Length 95th (ft)	#231	#452	35	#178	327	82	66	#710	74	#288	170	
Internal Link Dist (ft)		304			326			272			226	
Turn Bay Length (ft)	130		75	95		125	50			50		
Base Capacity (vph)	121	985	291	93	936	201	304	741	513	170	1355	
Starvation Cap Reductn	0	0	0	0	111	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	1.04	0.89	0.09	0.96	0.85	0.34	0.24	0.90	0.19	1.02	0.38	

Intersection Summary

Area Type: CBD
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 89 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 48.4 Intersection LOS: D
Intersection Capacity Utilization 128.6% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Orleans Street & Chicago Avenue



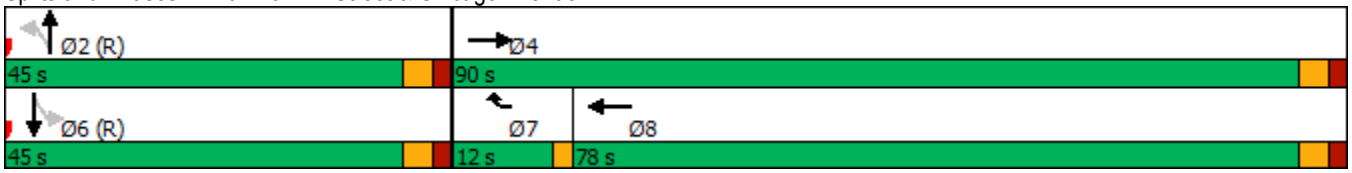


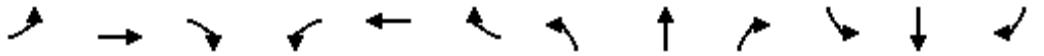
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	975	30	0	762	26	38	87	54	35	104	13
Future Volume (vph)	0	975	30	0	762	26	38	87	54	35	104	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	10	11	11	12	10	10	10	10	10	10
Storage Length (ft)	0		0	0		90	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97						0.86			0.92	
Frt		0.995				0.850		0.959			0.988	
Flt Protected								0.990			0.989	
Satd. Flow (prot)	0	2886	0	0	2771	1274	0	1273	0	0	1397	0
Flt Permitted								0.907			0.899	
Satd. Flow (perm)	0	2886	0	0	2771	1274	0	1110	0	0	1215	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		406			399			394			261	
Travel Time (s)		9.2			9.1			9.0			5.9	
Confl. Peds. (#/hr)	120		461	461		120	260		182	182		260
Confl. Bikes (#/hr)			13			2			1			3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	6	6	0	0	14	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	0	1026	32	0	802	27	40	92	57	37	109	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1058	0	0	802	27	0	189	0	0	160	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.24	1.33	1.28	1.36	1.32	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA			NA	custom	Perm	NA		Perm	NA	
Protected Phases		4			8	7		2			6	
Permitted Phases							2			6		
Minimum Split (s)		17.0			17.0	5.0	26.0	26.0		18.0	18.0	
Total Split (s)		90.0			78.0	12.0	45.0	45.0		45.0	45.0	
Total Split (%)		66.7%			57.8%	8.9%	33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)		85.0			73.0	10.0	40.0	40.0		40.0	40.0	
Yellow Time (s)		3.0			3.0	2.0	3.0	3.0		3.0	3.0	
All-Red Time (s)		2.0			2.0	0.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		4.0			1.0	3.0		1.0			1.0	
Total Lost Time (s)		9.0			6.0	5.0		6.0			6.0	
Lead/Lag					Lag	Lead						
Lead-Lag Optimize?												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		7.0			7.0		16.0	16.0		8.0	8.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)		81.0			72.0	7.0		39.0			39.0	
Actuated g/C Ratio		0.60			0.53	0.05		0.29			0.29	
v/c Ratio		0.61			0.54	0.41		0.59			0.46	
Control Delay		19.0			22.4	80.6		50.0			44.4	
Queue Delay		7.9			4.0	0.0		0.0			0.0	
Total Delay		26.9			26.4	80.6		50.0			44.4	
LOS		C			C	F		D			D	
Approach Delay		26.9			28.2			50.0			44.4	
Approach LOS		C			C			D			D	
Stops (vph)		612			484	26		153			123	
Fuel Used(gal)		10			9	1		3			2	
CO Emissions (g/hr)		730			596	46		226			165	
NOx Emissions (g/hr)		142			116	9		44			32	
VOC Emissions (g/hr)		169			138	11		52			38	
Dilemma Vehicles (#)		0			0	0		0			0	
Queue Length 50th (ft)		293			235	23		142			115	
Queue Length 95th (ft)		361			295	57		229			187	
Internal Link Dist (ft)		326			319			314			181	
Turn Bay Length (ft)						90						
Base Capacity (vph)		1731			1477	66		320			351	
Starvation Cap Reductn		632			576	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.96			0.89	0.41		0.59			0.46	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 96 (71%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 30.6		Intersection LOS: C	
Intersection Capacity Utilization 63.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: Franklin Street & Chicago Avenue





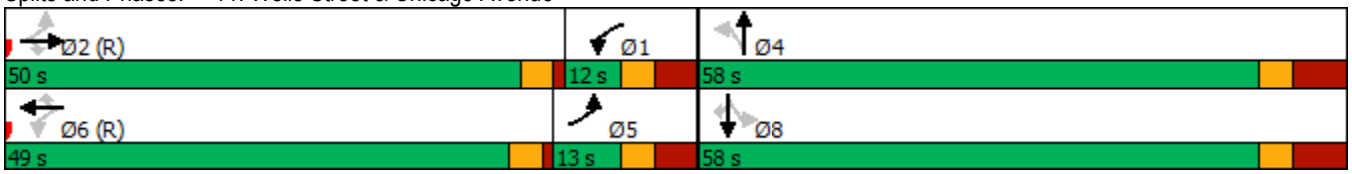
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	818	103	59	775	79	11	77	12	96	303	48
Future Volume (vph)	94	818	103	59	775	79	11	77	12	96	303	48
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	100		50	90		90	0		0	0		75
Storage Lanes	1		1	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.39			0.57		0.97			0.97	0.83
Frt			0.850			0.850		0.983				0.850
Flt Protected	0.950			0.950				0.994			0.988	
Satd. Flow (prot)	1358	2676	1305	1358	2816	1305	0	1420	0	0	1465	1260
Flt Permitted	0.200			0.178				0.937			0.885	
Satd. Flow (perm)	286	2676	507	254	2816	738	0	1331	0	0	1272	1042
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		399			407			355			273	
Travel Time (s)		9.1			9.3			8.1			6.2	
Confl. Peds. (#/hr)	119		282	282		119	79		90	90		79
Confl. Bikes (#/hr)			11			5			3			87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0										
Adj. Flow (vph)	99	861	108	62	816	83	12	81	13	101	319	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	99	861	108	62	816	83	0	106	0	0	420	51
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.42	1.28	1.39	1.33	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4			8		8
Minimum Split (s)	12.0	21.0	21.0	12.0	21.0	21.0	30.0	30.0		30.0	30.0	30.0
Total Split (s)	13.0	50.0	50.0	12.0	49.0	49.0	58.0	58.0		58.0	58.0	58.0
Total Split (%)	10.8%	41.7%	41.7%	10.0%	40.8%	40.8%	48.3%	48.3%		48.3%	48.3%	48.3%
Maximum Green (s)	6.0	46.0	46.0	5.0	45.0	45.0	50.0	50.0		50.0	50.0	50.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	4.0	1.0	1.0	4.0	1.0	1.0	5.0	5.0		5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0			1.0	-3.0
Total Lost Time (s)	8.0	5.0	5.0	8.0	5.0	5.0		9.0			9.0	5.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Walk Time (s)		5.0	5.0		5.0	5.0	4.0	4.0		4.0	4.0	4.0

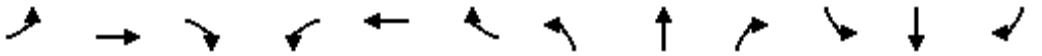
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	18.0	18.0		18.0	18.0	18.0
Pedestrian Calls (#/hr)		0	0		0	0	0	0		0	0	0
Act Effct Green (s)	47.0	45.0	45.0	45.0	44.0	44.0		49.0			49.0	53.0
Actuated g/C Ratio	0.39	0.38	0.38	0.38	0.37	0.37		0.41			0.41	0.44
v/c Ratio	0.63	0.86	0.57	0.47	0.79	0.31		0.20			0.81	0.11
Control Delay	50.4	44.6	43.8	25.3	30.2	25.9		24.1			45.4	20.6
Queue Delay	0.0	30.0	0.0	0.0	0.6	0.0		0.0			0.0	0.0
Total Delay	50.4	74.6	43.8	25.3	30.8	25.9		24.1			45.4	20.6
LOS	D	E	D	C	C	C		C			D	C
Approach Delay		69.3			30.1			24.1			42.7	
Approach LOS		E			C			C			D	
Stops (vph)	64	721	85	27	409	38		63			339	27
Fuel Used(gal)	2	14	2	1	9	1		1			6	0
CO Emissions (g/hr)	113	976	119	45	663	61		78			448	32
NOx Emissions (g/hr)	22	190	23	9	129	12		15			87	6
VOC Emissions (g/hr)	26	226	28	10	154	14		18			104	7
Dilemma Vehicles (#)	0	0	0	0	0	0		0			0	0
Queue Length 50th (ft)	44	320	66	17	167	30		52			283	23
Queue Length 95th (ft)	#92	#417	136	m25	229	m54		93			#460	49
Internal Link Dist (ft)		319			327			275			193	
Turn Bay Length (ft)	100		50	90		90						75
Base Capacity (vph)	156	1003	190	132	1032	270		543			519	460
Starvation Cap Reductn	0	185	0	0	47	0		0			0	0
Spillback Cap Reductn	0	0	0	0	0	0		0			0	0
Storage Cap Reductn	0	0	0	0	0	0		0			0	0
Reduced v/c Ratio	0.63	1.05	0.57	0.47	0.83	0.31		0.20			0.81	0.11

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 48.2		Intersection LOS: D	
Intersection Capacity Utilization 81.2%		ICU Level of Service D	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 11: Wells Street & Chicago Avenue





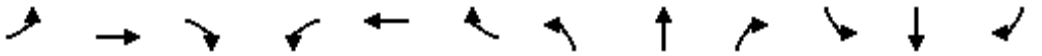
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	133	660	79	76	617	124	145	1121	85	108	660	111
Future Volume (vph)	133	660	79	76	617	124	145	1121	85	108	660	111
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	11	11	12	11	11	12
Storage Length (ft)	150		60	100		80	120		0	80		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor	0.91		0.70	0.92		0.71	0.97	0.98		0.97	0.98	
Frt			0.850			0.850		0.989			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1385	2844	1257	1358	2676	1318	1488	4024	0	1488	4037	0
Flt Permitted	0.311			0.282			0.319			0.168		
Satd. Flow (perm)	411	2844	885	369	2676	932	482	4024	0	255	4037	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		407			413			368			440	
Travel Time (s)		9.3			9.4			8.4			10.0	
Confl. Peds. (#/hr)	190		191	191		190	72		151	151		72
Confl. Bikes (#/hr)			10			6			1			4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	2%	2%	1%	0%	3%	7%	0%	2%	0%
Bus Blockages (#/hr)	0	0	14	0	0	0	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	140	695	83	80	649	131	153	1180	89	114	695	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	695	83	80	649	131	153	1269	0	114	812	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.33	1.37	1.39	1.42	1.28	1.28	1.28	1.22	1.28	1.28	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	29.0	29.0	29.0	29.0	29.0	29.0	28.0	28.0		28.0	28.0	
Total Split (s)	50.0	50.0	50.0	50.0	50.0	50.0	70.0	70.0		70.0	70.0	
Total Split (%)	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	58.3%	58.3%		58.3%	58.3%	
Maximum Green (s)	45.0	45.0	45.0	45.0	45.0	45.0	65.0	65.0		65.0	65.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	4.0	4.0	0.0	4.0	4.0	0.0	4.0	4.0		4.0	4.0	
Total Lost Time (s)	9.0	9.0	5.0	9.0	9.0	5.0	9.0	9.0		9.0	9.0	
Lead/Lag												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	19.0	19.0	19.0	19.0	19.0	19.0	18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	41.0	41.0	45.0	41.0	41.0	45.0	61.0	61.0		61.0	61.0	
Actuated g/C Ratio	0.34	0.34	0.38	0.34	0.34	0.38	0.51	0.51		0.51	0.51	
v/c Ratio	1.00	0.72	0.25	0.63	0.71	0.38	0.62	0.62		0.88	0.40	
Control Delay	73.0	11.0	5.5	22.3	18.0	11.5	35.0	22.9		83.6	18.9	
Queue Delay	0.0	0.5	0.0	0.0	0.9	0.0	0.0	0.0		0.0	0.0	
Total Delay	73.0	11.5	5.5	22.3	18.9	11.5	35.0	22.9		83.6	18.9	
LOS	E	B	A	C	B	B	D	C		F	B	
Approach Delay		20.3			18.1			24.2			26.8	
Approach LOS		C			B			C			C	
Stops (vph)	88	306	15	55	437	62	111	834		81	454	
Fuel Used(gal)	3	5	0	1	7	1	2	14		3	8	
CO Emissions (g/hr)	202	368	30	62	465	72	144	956		186	567	
NOx Emissions (g/hr)	39	72	6	12	91	14	28	186		36	110	
VOC Emissions (g/hr)	47	85	7	14	108	17	33	222		43	132	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	40	43	8	36	164	42	83	250		76	136	
Queue Length 95th (ft)	m#148	m86	m10	m29	m129	m35	173	299		#200	170	
Internal Link Dist (ft)		327			333			288			360	
Turn Bay Length (ft)	150		60	100		80	120			80		
Base Capacity (vph)	140	971	331	126	914	349	245	2045		129	2052	
Starvation Cap Reductn	0	62	0	0	87	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	13	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.00	0.76	0.25	0.63	0.78	0.38	0.62	0.62		0.88	0.40	

Intersection Summary

Area Type: CBD
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 97 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 22.6 Intersection LOS: C
Intersection Capacity Utilization 118.7% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: La Salle Street & Chicago Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	734	84	41	755	0	0	0	0	46	966	130
Future Volume (vph)	0	734	84	41	755	0	0	0	0	46	966	130
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	11	9	10	11	12	12	12	12	10	12
Storage Length (ft)	0		250	100		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor			0.70	0.93							0.98	
Frt			0.850								0.983	
Flt Protected				0.950							0.998	
Satd. Flow (prot)	0	2816	1220	1358	1308	0	0	0	0	0	3940	0
Flt Permitted				0.297							0.998	
Satd. Flow (perm)	0	2816	857	397	1308	0	0	0	0	0	3929	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		413			144			365			405	
Travel Time (s)		9.4			3.3			8.3			9.2	
Confl. Peds. (#/hr)			128	128						42		45
Confl. Bikes (#/hr)			12									58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	2%	4%	2%	2%	2%	2%	6%	1%	2%
Bus Blockages (#/hr)	0	0	14	0	0	14	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	0	773	88	43	795	0	0	0	0	48	1017	137
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	773	88	43	795	0	0	0	0	0	1202	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.33	1.37	1.39	1.52	1.28	1.22	1.22	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	custom	custom	NA					Perm	NA	
Protected Phases		4	14	3	8 18						6	
Permitted Phases			4	8						6		
Minimum Split (s)		24.0	5.0	8.0						26.0	26.0	
Total Split (s)		62.0	7.0	8.0						43.0	43.0	
Total Split (%)		51.7%	5.8%	6.7%						35.8%	35.8%	
Maximum Green (s)		54.0	5.0	5.0						38.0	38.0	
Yellow Time (s)		3.0	2.0	3.0						3.0	3.0	
All-Red Time (s)		5.0	0.0	0.0						2.0	2.0	
Lost Time Adjust (s)		1.0	3.0	1.0							1.0	
Total Lost Time (s)		9.0	5.0	4.0							6.0	
Lead/Lag		Lag	Lead									

Lane Group	Ø8	Ø18
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Width (ft)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Bus Blockages (#/hr)		
Parking (#/hr)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	8	18
Permitted Phases		
Minimum Split (s)	24.0	5.0
Total Split (s)	70.0	7.0
Total Split (%)	58%	6%
Maximum Green (s)	62.0	5.0
Yellow Time (s)	3.0	2.0
All-Red Time (s)	5.0	0.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		

Lanes, Volumes, Timings
13: Clark Street & Chicago Avenue 02/23/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)		5.0								5.0	5.0	
Flash Dont Walk (s)		11.0								16.0	16.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		53.0	59.0	66.0	61.0						37.0	
Actuated g/C Ratio		0.44	0.49	0.55	0.51						0.31	
v/c Ratio		0.62	0.21	0.17	1.20						0.99	
Control Delay		29.1	18.6	10.1	117.9						65.7	
Queue Delay		0.3	0.0	0.0	0.3						0.0	
Total Delay		29.4	18.6	10.1	118.2						65.7	
LOS		C	B	B	F						E	
Approach Delay		28.3			112.7						65.7	
Approach LOS		C			F						E	
Stops (vph)		402	52	11	610						1029	
Fuel Used(gal)		9	1	0	24						25	
CO Emissions (g/hr)		624	61	19	1660						1718	
NOx Emissions (g/hr)		121	12	4	323						334	
VOC Emissions (g/hr)		145	14	4	385						398	
Dilemma Vehicles (#)		0	0	0	0						0	
Queue Length 50th (ft)		182	29	10	~756						339	
Queue Length 95th (ft)		m244	m45	m11	m#855						#447	
Internal Link Dist (ft)		333			64			285			325	
Turn Bay Length (ft)			250	100								
Base Capacity (vph)		1243	427	250	664						1211	
Starvation Cap Reductn		106	0	0	28						0	
Spillback Cap Reductn		54	0	0	0						0	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		0.68	0.21	0.17	1.25						0.99	

Intersection Summary

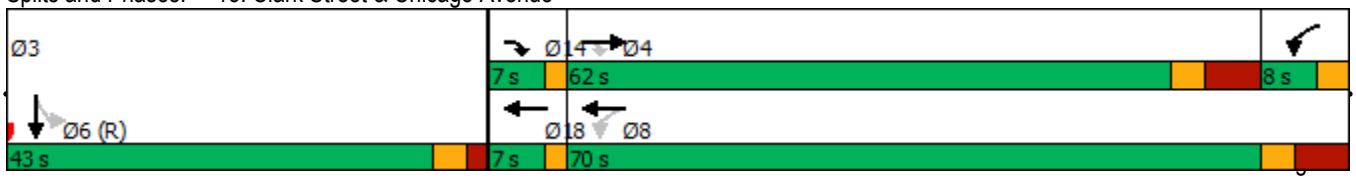
Area Type: CBD
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 91 (76%), Referenced to phase 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.20
Intersection Signal Delay: 68.2 Intersection LOS: E
Intersection Capacity Utilization 121.9% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

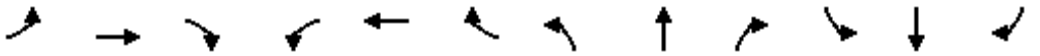
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: Clark Street & Chicago Avenue



Lane Group	Ø8	Ø18
Lead-Lag Optimize?		
Walk Time (s)	5.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary



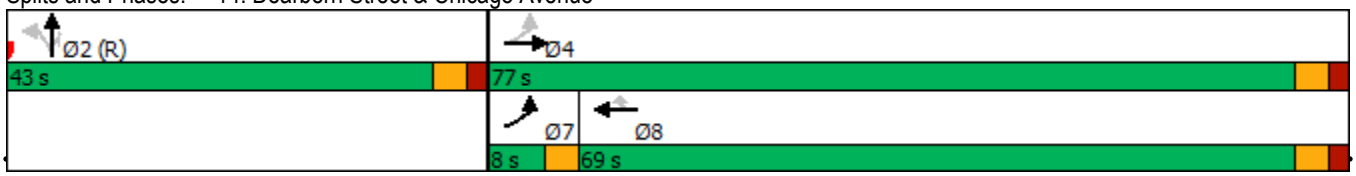
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	600	0	0	600	34	233	810	102	0	0	0
Future Volume (vph)	143	600	0	0	600	34	233	810	102	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	12	10	11	16	11	10	12	12	12
Storage Length (ft)	100		0	0		70	0		75	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.65	0.49		0.43			
Frt						0.850			0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1385	1334	0	0	1321	1257	1727	2946	1285	0	0	0
Flt Permitted	0.242						0.950					
Satd. Flow (perm)	353	1334	0	0	1321	819	839	2946	555	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			428			364			418	
Travel Time (s)		5.4			9.7			8.3			9.5	
Confl. Peds. (#/hr)	257					257	162		216			
Confl. Bikes (#/hr)						2			12			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	2%	2%	3%	0%	1%	1%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	14	0	0	0	0	0	0
Parking (#/hr)		0			0							
Adj. Flow (vph)	151	632	0	0	632	36	245	853	107	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	151	632	0	0	632	36	245	853	107	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.52	1.28	1.22	1.52	1.37	1.05	1.28	1.33	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2		2			
Minimum Split (s)	8.0	23.0			23.0	23.0	22.0	22.0	22.0			
Total Split (s)	8.0	77.0			69.0	69.0	43.0	43.0	43.0			
Total Split (%)	6.7%	64.2%			57.5%	57.5%	35.8%	35.8%	35.8%			
Maximum Green (s)	5.0	72.0			64.0	64.0	38.0	38.0	38.0			
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	1.0	1.0			1.0	0.0	1.0	1.0	1.0			
Total Lost Time (s)	4.0	6.0			6.0	5.0	6.0	6.0	6.0			
Lead/Lag	Lead				Lag	Lag						

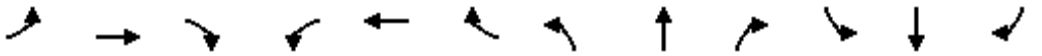
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes				Yes	Yes						
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		13.0			13.0	13.0	12.0	12.0	12.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	73.0	71.0			63.0	64.0	37.0	37.0	37.0			
Actuated g/C Ratio	0.61	0.59			0.52	0.53	0.31	0.31	0.31			
v/c Ratio	0.61	0.80			0.91	0.08	0.95	0.94	0.63			
Control Delay	21.7	22.4			37.8	13.8	86.2	59.2	53.9			
Queue Delay	0.0	2.9			48.7	0.0	0.0	0.0	0.0			
Total Delay	21.7	25.3			86.5	13.8	86.2	59.2	53.9			
LOS	C	C			F	B	F	E	D			
Approach Delay		24.6			82.5			64.2				
Approach LOS		C			F			E				
Stops (vph)	61	403			475	16	196	727	89			
Fuel Used(gal)	1	7			9	0	6	16	2			
CO Emissions (g/hr)	97	472			646	21	408	1124	133			
NOx Emissions (g/hr)	19	92			126	4	79	219	26			
VOC Emissions (g/hr)	23	109			150	5	95	261	31			
Dilemma Vehicles (#)	0	0			0	0	0	0	0			
Queue Length 50th (ft)	17	116			268	13	185	337	71			
Queue Length 95th (ft)	m64	m359			#682	m18	#351	#466	#152			
Internal Link Dist (ft)		158			348			284			338	
Turn Bay Length (ft)	100					70			75			
Base Capacity (vph)	249	789			693	436	258	908	171			
Starvation Cap Reductn	0	0			25	0	0	0	0			
Spillback Cap Reductn	0	79			236	0	0	0	0			
Storage Cap Reductn	0	0			0	0	0	0	0			
Reduced v/c Ratio	0.61	0.89			1.38	0.08	0.95	0.94	0.63			

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 85 (71%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 57.2		Intersection LOS: E	
Intersection Capacity Utilization 121.9%		ICU Level of Service H	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Dearborn Street & Chicago Avenue





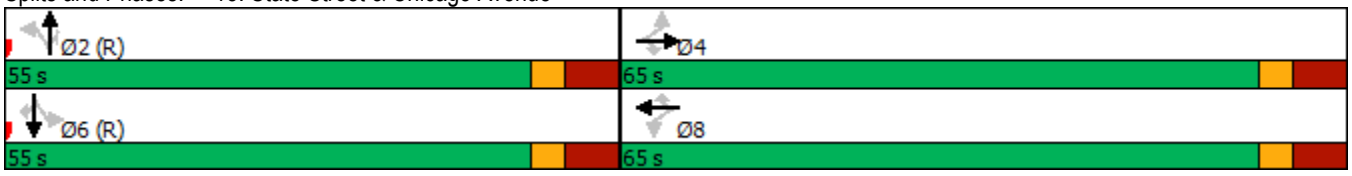
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	501	60	49	430	86	117	366	71	103	369	100
Future Volume (vph)	98	501	60	49	430	86	117	366	71	103	369	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	150		50	100		70	90		30	90		30
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.80		0.44			0.37	0.77		0.48	0.80		0.41
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1371	1334	1318	1371	1321	1318	1422	1482	1272	1422	1482	1272
Flt Permitted	0.389			0.322			0.401			0.405		
Satd. Flow (perm)	448	1334	580	465	1321	487	463	1482	616	483	1482	528
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		428			375			323			297	
Travel Time (s)		9.7			8.5			7.3			6.8	
Confl. Peds. (#/hr)	295		191	191		295	260		154	154		260
Confl. Bikes (#/hr)			21			6			7			8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	2%	1%	1%	3%	1%	1%	2%	1%	1%	2%	1%
Parking (#/hr)		0			0							
Adj. Flow (vph)	103	527	63	52	453	91	123	385	75	108	388	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	527	63	52	453	91	123	385	75	108	388	105
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.52	1.28	1.39	1.52	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	26.0	26.0	26.0	26.0	26.0	26.0
Total Split (s)	65.0	65.0	65.0	65.0	65.0	65.0	55.0	55.0	55.0	55.0	55.0	55.0
Total Split (%)	54.2%	54.2%	54.2%	54.2%	54.2%	54.2%	45.8%	45.8%	45.8%	45.8%	45.8%	45.8%
Maximum Green (s)	57.0	57.0	57.0	57.0	57.0	57.0	47.0	47.0	47.0	47.0	47.0	47.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Lead/Lag												
Lead-Lag Optimize?												

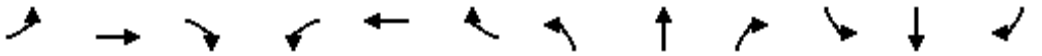
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	13.0	13.0	13.0	13.0	13.0	13.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	56.0	56.0	56.0	56.0	56.0	56.0	46.0	46.0	46.0	46.0	46.0	46.0
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47	0.47	0.38	0.38	0.38	0.38	0.38	0.38
v/c Ratio	0.49	0.85	0.23	0.24	0.74	0.40	0.69	0.68	0.32	0.58	0.68	0.52
Control Delay	16.3	24.1	10.6	22.2	25.9	23.4	54.1	38.1	30.8	44.6	38.3	39.7
Queue Delay	0.0	9.5	0.0	0.0	9.2	0.0	2.8	0.0	0.1	0.5	0.0	0.8
Total Delay	16.3	33.6	10.6	22.2	35.1	23.4	56.8	38.1	30.8	45.0	38.3	40.5
LOS	B	C	B	C	D	C	E	D	C	D	D	D
Approach Delay		29.0			32.2			41.1			39.9	
Approach LOS		C			C			D			D	
Stops (vph)	49	375	22	24	248	40	97	302	50	85	305	80
Fuel Used(gal)	1	6	0	0	5	1	2	5	1	2	5	1
CO Emissions (g/hr)	65	434	32	35	342	62	148	379	63	115	379	104
NOx Emissions (g/hr)	13	84	6	7	67	12	29	74	12	22	74	20
VOC Emissions (g/hr)	15	101	7	8	79	14	34	88	15	27	88	24
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	0
Queue Length 50th (ft)	30	224	18	19	178	35	79	246	40	66	248	62
Queue Length 95th (ft)	m50	m#552	m22	m19	m171	m34	#181	363	84	138	366	126
Internal Link Dist (ft)		348			295			243			217	
Turn Bay Length (ft)	150		50	100		70	90		30	90		30
Base Capacity (vph)	209	622	270	217	616	227	177	568	236	185	568	202
Starvation Cap Reductn	0	66	0	0	132	0	0	0	0	0	0	0
Spillback Cap Reductn	0	75	0	0	57	0	14	0	7	6	0	16
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.96	0.23	0.24	0.94	0.40	0.75	0.68	0.33	0.60	0.68	0.56

Intersection Summary

Area Type: CBD
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 97 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 35.3 Intersection LOS: D
Intersection Capacity Utilization 112.0% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 15: State Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	554	64	70	486	30	0	0	0	46	154	57
Future Volume (vph)	39	554	64	70	486	30	0	0	0	46	154	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	12	12	12	12	12	12
Storage Length (ft)	150		50	100		70	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.33			0.18					0.80	
Frt			0.850			0.850					0.970	
Flt Protected	0.950			0.950							0.991	
Satd. Flow (prot)	923	895	893	923	907	882	0	0	0	0	920	0
Flt Permitted	0.369			0.314							0.991	
Satd. Flow (perm)	359	895	295	305	907	157	0	0	0	0	836	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		375			368			298			279	
Travel Time (s)		8.5			8.4			6.8			6.3	
Confl. Peds. (#/hr)	487		301	301		487				185		159
Confl. Bikes (#/hr)			24			5						9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	50%	52%	49%	50%	50%	51%	51%	51%	49%	49%	50%	50%
Parking (#/hr)		0			0							
Adj. Flow (vph)	41	583	67	74	512	32	0	0	0	48	162	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	583	67	74	512	32	0	0	0	0	270	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.52	1.28	*0.50	1.52	1.28	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm				Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4		4	8		8				6		
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0				27.0	27.0	
Total Split (s)	72.0	72.0	72.0	72.0	72.0	72.0				48.0	48.0	
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%				40.0%	40.0%	
Maximum Green (s)	65.0	65.0	65.0	65.0	65.0	65.0				40.0	40.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	4.0	4.0	4.0	4.0	4.0	4.0				5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	-2.0	1.0	1.0	-2.0					1.0	
Total Lost Time (s)	8.0	8.0	5.0	8.0	8.0	5.0					9.0	
Lead/Lag												
Lead-Lag Optimize?												

Lanes, Volumes, Timings
16: Wabash Avenue & Chicago Avenue 02/23/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0				5.0	5.0	
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0				14.0	14.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0				0	0	
Act Effct Green (s)	64.0	64.0	67.0	64.0	64.0	67.0					39.0	
Actuated g/C Ratio	0.53	0.53	0.56	0.53	0.53	0.56					0.32	
v/c Ratio	0.21	1.22	0.41	0.46	1.06	0.37					1.00	
Control Delay	12.8	137.3	16.1	15.0	67.9	15.1					95.2	
Queue Delay	0.0	1.3	0.0	0.0	14.6	0.0					0.0	
Total Delay	12.8	138.6	16.1	15.0	82.5	15.1					95.2	
LOS	B	F	B	B	F	B					F	
Approach Delay		119.3			70.9						95.2	
Approach LOS		F			E						F	
Stops (vph)	14	385	32	17	225	7					214	
Fuel Used(gal)	0	19	1	1	9	0					7	
CO Emissions (g/hr)	20	1345	40	36	654	15					468	
NOx Emissions (g/hr)	4	262	8	7	127	3					91	
VOC Emissions (g/hr)	5	312	9	8	152	4					109	
Dilemma Vehicles (#)	0	0	0	0	0	0					0	
Queue Length 50th (ft)	9	~343	14	11	~432	4					208	
Queue Length 95th (ft)	m12	m#421	m24	m25	#640	m8					#387	
Internal Link Dist (ft)		295			288			218			199	
Turn Bay Length (ft)	150		50	100		70						
Base Capacity (vph)	191	477	164	162	483	87					271	
Starvation Cap Reductn	0	63	0	0	0	0					0	
Spillback Cap Reductn	0	10	0	0	17	0					0	
Storage Cap Reductn	0	0	0	0	0	0					0	
Reduced v/c Ratio	0.21	1.41	0.41	0.46	1.10	0.37					1.00	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.22			
Intersection Signal Delay: 96.2		Intersection LOS: F	
Intersection Capacity Utilization 84.9%		ICU Level of Service E	
Analysis Period (min) 15			

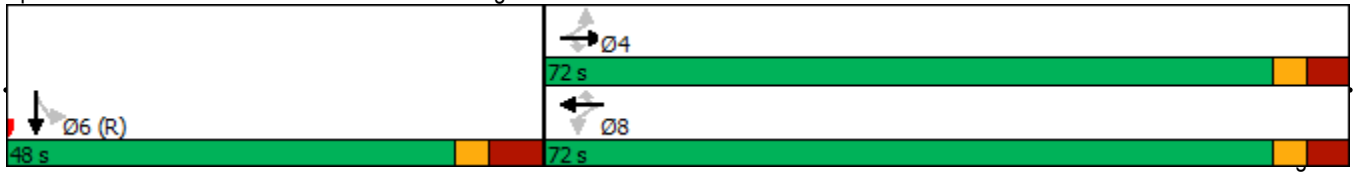
* User Entered Value

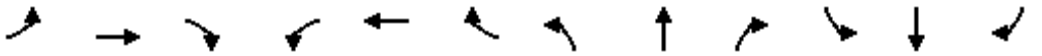
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: Wabash Avenue & Chicago Avenue





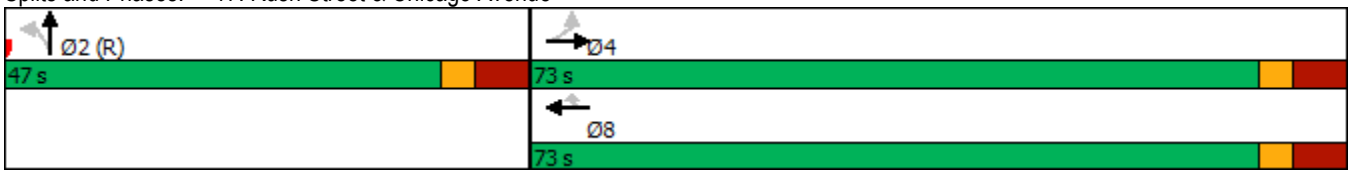
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	540	0	0	515	71	69	173	34	0	0	0
Future Volume (vph)	44	540	0	0	515	71	69	173	34	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	12	10	11	12	12	12	12	12	12
Storage Length (ft)	125		0	0		70	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.25		0.85				
Frt						0.850		0.983				
Flt Protected	0.950							0.988				
Satd. Flow (prot)	1371	1321	0	0	1468	1318	0	1457	0	0	0	0
Flt Permitted	0.353							0.988				
Satd. Flow (perm)	510	1321	0	0	1468	330	0	1318	0	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		368			334			328			284	
Travel Time (s)		8.4			7.6			7.5			6.5	
Confl. Peds. (#/hr)	372					372	121		173			
Confl. Bikes (#/hr)						5			3			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	3%	2%	2%	3%	1%	1%	1%	1%	2%	2%	2%
Parking (#/hr)		0										
Adj. Flow (vph)	46	568	0	0	542	75	73	182	36	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	568	0	0	542	75	0	291	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.52	1.28	1.22	1.33	1.28	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Minimum Split (s)	21.0	21.0			21.0	21.0	27.0	27.0				
Total Split (s)	73.0	73.0			73.0	73.0	47.0	47.0				
Total Split (%)	60.8%	60.8%			60.8%	60.8%	39.2%	39.2%				
Maximum Green (s)	65.0	65.0			65.0	65.0	39.0	39.0				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Lost Time Adjust (s)	1.0	1.0			1.0	-3.0		1.0				
Total Lost Time (s)	9.0	9.0			9.0	5.0		9.0				
Lead/Lag												
Lead-Lag Optimize?												

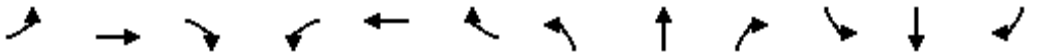
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Flash Dont Walk (s)	8.0	8.0			8.0	8.0	14.0	14.0				
Pedestrian Calls (#/hr)	0	0			0	0	0	0				
Act Effct Green (s)	64.0	64.0			64.0	68.0		38.0				
Actuated g/C Ratio	0.53	0.53			0.53	0.57		0.32				
v/c Ratio	0.17	0.81			0.69	0.40		0.70				
Control Delay	2.6	5.1			13.1	11.6		46.3				
Queue Delay	0.0	24.0			0.7	0.0		0.0				
Total Delay	2.6	29.1			13.8	11.6		46.3				
LOS	A	C			B	B		D				
Approach Delay		27.2			13.6			46.3				
Approach LOS		C			B			D				
Stops (vph)	4	210			214	23		241				
Fuel Used(gal)	0	3			4	0		5				
CO Emissions (g/hr)	12	229			273	34		324				
NOx Emissions (g/hr)	2	45			53	7		63				
VOC Emissions (g/hr)	3	53			63	8		75				
Dilemma Vehicles (#)	0	0			0	0		0				
Queue Length 50th (ft)	3	38			140	16		197				
Queue Length 95th (ft)	m3	m32			m157	m24		304				
Internal Link Dist (ft)		288			254			248			204	
Turn Bay Length (ft)	125					70						
Base Capacity (vph)	272	704			782	187		417				
Starvation Cap Reductn	0	146			63	0		0				
Spillback Cap Reductn	0	149			54	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.17	1.02			0.75	0.40		0.70				

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 2 (2%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 25.3		Intersection LOS: C	
Intersection Capacity Utilization 76.4%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: Rush Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	400	127	122	305	105	97	1384	81	0	1200	142
Future Volume (vph)	0	400	127	122	305	105	97	1384	81	0	1200	142
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	11	9	10	11	10	10	12	12	10	12
Storage Length (ft)	0		50	215		70	115		0	0		0
Storage Lanes	0		1	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.78	*0.78	1.00	*0.78	*0.78
Ped Bike Factor			0.65	0.89		0.82	0.91	0.96			0.93	
Frt			0.850			0.850		0.992			0.984	
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	1454	1283	1237	1440	1221	1408	3010	0	0	3193	0
Flt Permitted				0.211			0.950					
Satd. Flow (perm)	0	1454	838	244	1440	997	1285	3010	0	0	3193	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		334			679			321			298	
Travel Time (s)		7.6			15.4			7.3			6.8	
Confl. Peds. (#/hr)			411	411		141	352		437			352
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	12%	5%	9%	2%	4%	20%	2%	2%	0%
Bus Blockages (#/hr)	0	0	9	0	0	0	0	49	49	0	0	0
Adj. Flow (vph)	0	421	134	128	321	111	102	1457	85	0	1263	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	421	134	128	321	111	102	1542	0	0	1412	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.33	1.34	1.39	1.33	1.28	1.33	1.45	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	pm+pt	NA	Perm	Prot	NA			NA	
Protected Phases		4		3	8		5	2			6	
Permitted Phases			4	8		8						
Minimum Split (s)		34.0	34.0	8.0	34.0	34.0	8.0	24.0			24.0	
Total Split (s)		42.0	42.0	10.0	52.0	52.0	12.0	68.0			56.0	
Total Split (%)		35.0%	35.0%	8.3%	43.3%	43.3%	10.0%	56.7%			46.7%	
Maximum Green (s)		37.0	37.0	7.0	47.0	47.0	9.0	63.0			51.0	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
All-Red Time (s)		2.0	2.0	0.0	2.0	2.0	0.0	2.0			2.0	
Lost Time Adjust (s)		1.0	1.0	1.0	1.0	1.0	1.0	0.0			0.0	
Total Lost Time (s)		6.0	6.0	4.0	6.0	6.0	4.0	5.0			5.0	
Lead/Lag		Lag	Lag	Lead			Lag				Lead	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes				Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	

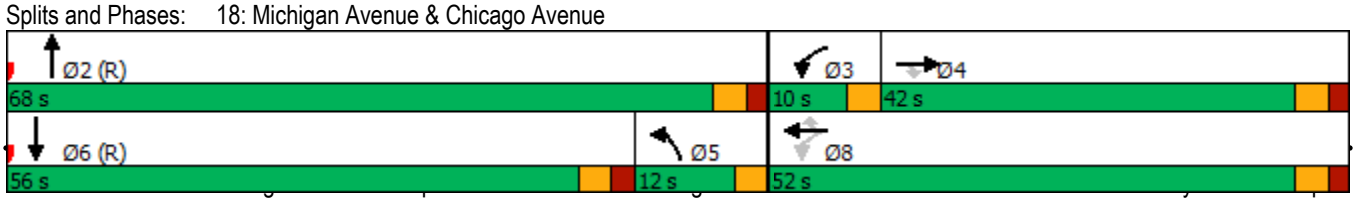
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		24.0	24.0		24.0	24.0		14.0			14.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)		36.0	36.0	48.0	46.0	46.0	8.0	63.0			51.0	
Actuated g/C Ratio		0.30	0.30	0.40	0.38	0.38	0.07	0.52			0.42	
v/c Ratio		0.97	0.53	0.87	0.58	0.29	1.10	0.98			1.04	
Control Delay		50.7	24.0	76.6	34.6	28.3	173.6	45.9			69.9	
Queue Delay		34.8	0.0	0.0	0.0	0.0	4.0	0.0			0.0	
Total Delay		85.4	24.0	76.6	34.6	28.3	177.6	45.9			69.9	
LOS		F	C	E	C	C	F	D			E	
Approach Delay		70.6			42.9			54.0			69.9	
Approach LOS		E			D			D			E	
Stops (vph)		315	86	71	240	72	75	1270			1177	
Fuel Used(gal)		7	1	3	5	2	4	24			29	
CO Emissions (g/hr)		483	100	206	356	109	286	1703			2007	
NOx Emissions (g/hr)		94	19	40	69	21	56	331			391	
VOC Emissions (g/hr)		112	23	48	82	25	66	395			465	
Dilemma Vehicles (#)		0	0	0	0	0	0	0			0	
Queue Length 50th (ft)		287	65	65	195	59	~89	479			~505	
Queue Length 95th (ft)		m#485	m83	#169	293	107	#205	#630			#618	
Internal Link Dist (ft)		254			599			241			218	
Turn Bay Length (ft)			50	215		70	115					
Base Capacity (vph)		436	251	147	552	382	93	1580			1357	
Starvation Cap Reductn		48	0	0	0	0	0	0			0	
Spillback Cap Reductn		0	0	0	0	0	10	0			0	
Storage Cap Reductn		0	0	0	0	0	0	0			0	
Reduced v/c Ratio		1.09	0.53	0.87	0.58	0.29	1.23	0.98			1.04	

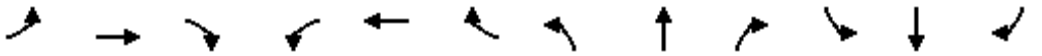
Intersection Summary

Area Type: CBD
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 118 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 1.10
Intersection Signal Delay: 60.1 Intersection LOS: E
Intersection Capacity Utilization 86.6% ICU Level of Service E
Analysis Period (min) 15

* User Entered Value
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: Michigan Avenue & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	388	2	0	442	102	0	0	0	216	0	61
Future Volume (vph)	49	388	2	0	442	102	0	0	0	216	0	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	12	10	10	11	10	10	10	16	10	12
Storage Length (ft)	120		60	120		50	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.91	1.00				0.75					0.69	
Frt		0.999				0.850					0.970	
Flt Protected	0.950										0.962	
Satd. Flow (prot)	1154	2354	0	756	1326	1025	0	0	0	0	1283	0
Flt Permitted	0.318										0.962	
Satd. Flow (perm)	353	2354	0	756	1326	764	0	0	0	0	906	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		679			400			272			306	
Travel Time (s)		15.4			9.1			6.2			7.0	
Confl. Peds. (#/hr)	101					101				226		70
Confl. Bikes (#/hr)			10			5						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	20%	22%	0%	100%	14%	19%	2%	2%	2%	8%	0%	2%
Bus Blockages (#/hr)	0	0	18	0	0	21	0	0	0	0	0	0
Adj. Flow (vph)	52	408	2	0	465	107	0	0	0	227	0	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	410	0	0	465	107	0	0	0	0	291	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			9			0			0	
Link Offset(ft)		0			0			75			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.75	1.33	1.22	1.33	1.33	1.42	1.33	1.33	1.33	1.05	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	Perm				Perm	NA	
Protected Phases	7	4		3	8						6	
Permitted Phases	4			8		8				6		
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0				28.0	28.0	
Total Split (s)	8.0	32.0		8.0	32.0	32.0				30.0	30.0	
Total Split (%)	11.4%	45.7%		11.4%	45.7%	45.7%				42.9%	42.9%	
Maximum Green (s)	5.0	27.0		5.0	27.0	27.0				23.0	23.0	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0				4.0	4.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	1.0					1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0					8.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												

Lanes, Volumes, Timings
19: Chicago Avenue & Mies Van Der Rohe Way 02/23/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		5.0			5.0	5.0				5.0	5.0	
Flash Dont Walk (s)		10.0			10.0	10.0				16.0	16.0	
Pedestrian Calls (#/hr)		0			0	0				0	0	
Act Effct Green (s)	32.0	26.0			26.0	26.0					22.0	
Actuated g/C Ratio	0.46	0.37			0.37	0.37					0.31	
v/c Ratio	0.25	0.47			0.95	0.38					1.02	
Control Delay	12.0	19.0			45.3	15.5					88.4	
Queue Delay	0.0	0.0			0.0	0.0					0.0	
Total Delay	12.0	19.0			45.3	15.5					88.4	
LOS	B	B			D	B					F	
Approach Delay		18.2			39.8						88.4	
Approach LOS		B			D						F	
Stops (vph)	25	284			327	47					219	
Fuel Used(gal)	1	5			7	1					7	
CO Emissions (g/hr)	36	359			508	63					478	
NOx Emissions (g/hr)	7	70			99	12					93	
VOC Emissions (g/hr)	8	83			118	15					111	
Dilemma Vehicles (#)	0	0			0	0					0	
Queue Length 50th (ft)	11	68			108	20					~129	
Queue Length 95th (ft)	27	107			#360	m38					#276	
Internal Link Dist (ft)		599			320			192			226	
Turn Bay Length (ft)	120					50						
Base Capacity (vph)	207	874			492	283					284	
Starvation Cap Reductn	0	0			0	0					0	
Spillback Cap Reductn	0	0			0	0					0	
Storage Cap Reductn	0	0			0	0					0	
Reduced v/c Ratio	0.25	0.47			0.95	0.38					1.02	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 66 (94%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 42.9		Intersection LOS: D	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

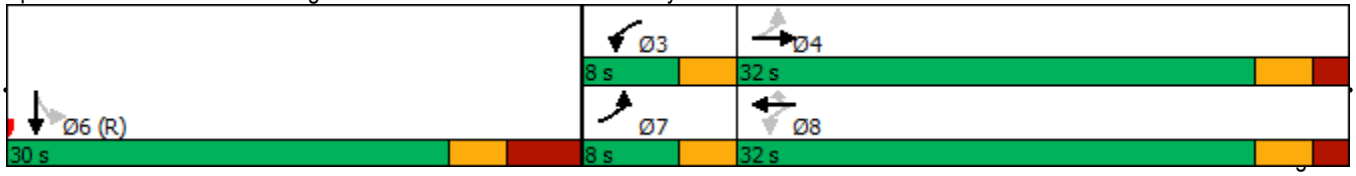
* User Entered Value

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 19: Chicago Avenue & Mies Van Der Rohe Way



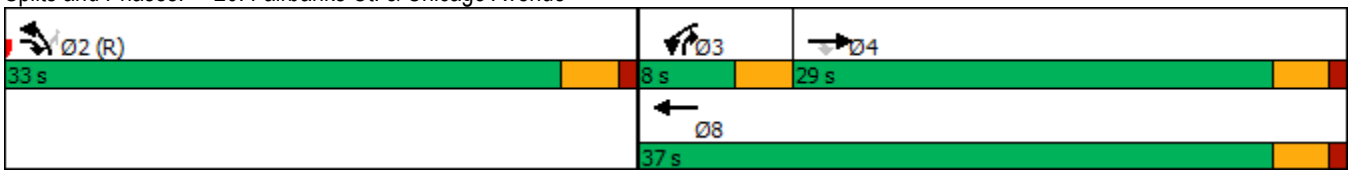
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	410	140	50	165	350	250
Future Volume (vph)	410	140	50	165	350	250
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	10	11	11	12
Storage Length (ft)		75	100		140	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.56	0.77			0.73
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1497	1113	1422	1550	1340	1249
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1497	625	1089	1550	1340	910
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	400			888	320	
Travel Time (s)	9.1			20.2	7.3	
Confl. Peds. (#/hr)		305	305			315
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	11%	1%	1%	11%	1%
Bus Blockages (#/hr)	0	18	0	0	0	21
Adj. Flow (vph)	432	147	53	174	368	263
Shared Lane Traffic (%)						
Lane Group Flow (vph)	432	147	53	174	368	263
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	9			10	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.40	1.33	1.28	1.28	1.36
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Minimum Split (s)	29.0	29.0	8.0	29.0	29.0	8.0
Total Split (s)	29.0	33.0	8.0	37.0	33.0	8.0
Total Split (%)	41.4%	47.1%	11.4%	52.9%	47.1%	11.4%
Maximum Green (s)	25.0	29.0	5.0	33.0	29.0	5.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	0.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0	0.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?						
Walk Time (s)	5.0	5.0		5.0	5.0	

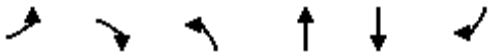
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Flash Dont Walk (s)	20.0	20.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	25.0	54.0	4.0	32.0	28.0	33.0
Actuated g/C Ratio	0.36	0.77	0.06	0.46	0.40	0.47
v/c Ratio	0.81	0.21	0.65	0.25	0.69	0.59
Control Delay	30.3	1.6	82.2	7.0	25.5	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.3	1.6	82.2	7.0	25.5	17.6
LOS	C	A	F	A	C	B
Approach Delay	23.0			24.5	22.2	
Approach LOS	C			C	C	
Stops (vph)	341	18	45	46	284	152
Fuel Used(gal)	6	1	1	2	4	2
CO Emissions (g/hr)	398	41	100	114	298	165
NOx Emissions (g/hr)	77	8	19	22	58	32
VOC Emissions (g/hr)	92	9	23	26	69	38
Dilemma Vehicles (#)	0	0	0	0	0	0
Queue Length 50th (ft)	156	4	25	21	127	63
Queue Length 95th (ft)	m#230	m10	#80	38	223	114
Internal Link Dist (ft)	320			808	240	
Turn Bay Length (ft)		75	100		140	
Base Capacity (vph)	534	684	81	708	536	448
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.21	0.65	0.25	0.69	0.59

Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 28 (40%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 22.9		Intersection LOS: C	
Intersection Capacity Utilization 63.1%		ICU Level of Service B	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Fairbanks Ct. & Chicago Avenue



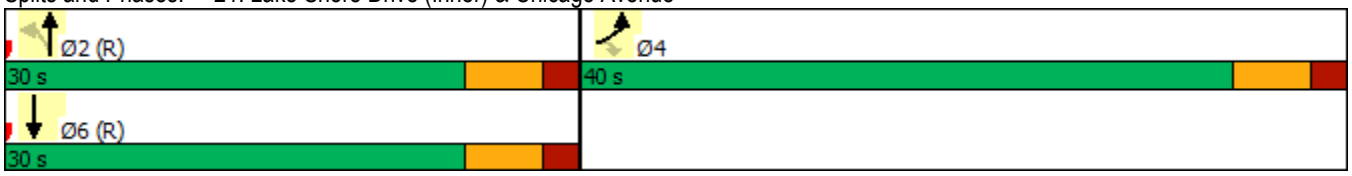


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	300	50	100	100	65
Future Volume (vph)	100	300	50	100	100	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt		0.850			0.941	
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1408	1134	0	2771	2650	0
Flt Permitted	0.950			0.828		
Satd. Flow (perm)	1408	1134	0	2332	2650	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			40	30	
Link Distance (ft)	888			307	377	
Travel Time (s)	20.2			5.2	8.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0				
Adj. Flow (vph)	105	316	53	105	105	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	316	0	158	173	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	20			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.52	1.33	1.33	1.33	1.33
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Minimum Split (s)	11.0	11.0	11.0	11.0	29.0	
Total Split (s)	40.0	40.0	30.0	30.0	30.0	
Total Split (%)	57.1%	57.1%	42.9%	42.9%	42.9%	
Maximum Green (s)	34.0	34.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)					5.0	
Flash Dont Walk (s)					18.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	36.0	36.0		26.0	26.0	
Actuated g/C Ratio	0.51	0.51		0.37	0.37	
v/c Ratio	0.15	0.54		0.18	0.18	
Control Delay	7.4	10.8		15.6	15.4	
Queue Delay	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	7.4	10.8		15.6	15.4	
LOS	A	B		B	B	
Approach Delay	10.0			15.6	15.4	
Approach LOS	A			B	B	
Stops (vph)	34	122		96	105	
Fuel Used(gal)	1	3		2	2	
CO Emissions (g/hr)	72	239		121	110	
NOx Emissions (g/hr)	14	46		24	21	
VOC Emissions (g/hr)	17	55		28	26	
Dilemma Vehicles (#)	0	0		11	0	
Queue Length 50th (ft)	17	52		23	25	
Queue Length 95th (ft)	m24	m76		43	46	
Internal Link Dist (ft)	808			227	297	
Turn Bay Length (ft)						
Base Capacity (vph)	724	583		866	984	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.15	0.54		0.18	0.18	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 50 (71%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 12.4		Intersection LOS: B	
Intersection Capacity Utilization 47.6%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 21: Lake Shore Drive (Inner) & Chicago Avenue



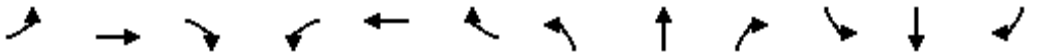
Synchro Reports -

2040 Volumes

Existing Geometry

Optimized

AM Reports

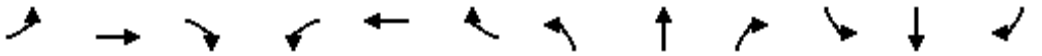


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	497	65	80	298	79	34	796	68	168	930	61
Future Volume (vph)	118	497	65	80	298	79	34	796	68	168	930	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	12	10	11	9	10	11	9
Storage Length (ft)	50		0	50		0	100		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1509	2485	0	1494	2569	0	1368	2737	0	1408	2791	0
Flt Permitted	0.374			0.298			0.194			0.170		
Satd. Flow (perm)	582	2485	0	449	2569	0	276	2737	0	252	2791	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			28			10			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		633			670			340			330	
Travel Time (s)		14.4			15.2			7.7			7.5	
Confl. Peds. (#/hr)	30		85	85		30	40		42	42		40
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	5%	6%	3%	8%	4%	5%	7%	3%	2%	5%	7%
Bus Blockages (#/hr)	0	6	6	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	591	0	84	397	0	36	910	0	177	1043	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.44	1.22	1.22	1.33	1.22	1.33	1.28	1.39	1.33	1.28	1.39
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	9.0	29.0		9.0	29.0		9.0	26.0		9.0	26.0	
Total Split (s)	12.0	35.0		9.0	32.0		9.0	50.0		16.0	57.0	
Total Split (%)	10.9%	31.8%		8.2%	29.1%		8.2%	45.5%		14.5%	51.8%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Act Effct Green (s)	39.0	29.0		33.0	26.0		51.0	44.0		62.0	51.0	
Actuated g/C Ratio	0.35	0.26		0.30	0.24		0.46	0.40		0.56	0.46	
v/c Ratio	0.45	0.89		0.46	0.63		0.20	0.83		0.66	0.80	
Control Delay	30.4	55.5		24.4	27.0		14.2	37.0		25.4	30.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	30.4	55.5		24.4	27.0		14.2	37.0		25.4	30.9	
LOS	C	E		C	C		B	D		C	C	
Approach Delay		51.2			26.5			36.2			30.1	
Approach LOS		D			C			D			C	
Queue Length 50th (ft)	60	207		26	63		11	295		59	320	
Queue Length 95th (ft)	106	#312		48	86		26	384		#111	412	
Internal Link Dist (ft)		553			590			260			250	
Turn Bay Length (ft)	50			50			100			100		
Base Capacity (vph)	273	663		182	628		177	1100		268	1298	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.45	0.89		0.46	0.63		0.20	0.83		0.66	0.80	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 103 (94%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 35.8		Intersection LOS: D	
Intersection Capacity Utilization 83.9%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Western Avenue & Chicago Avenue

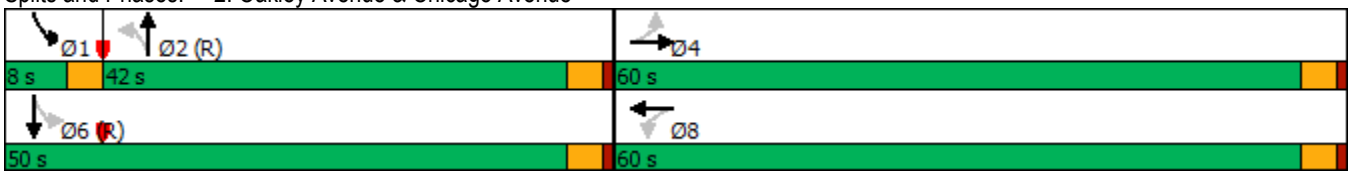


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	633	50	50	357	50	50	100	50	50	100	50
Future Volume (vph)	50	633	50	50	357	50	50	100	50	50	100	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	0		0	0		0	30		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2780	0	0	2758	0	0	1415	0	0	1415	0
Flt Permitted		0.879			0.795			0.876			0.887	
Satd. Flow (perm)	0	2451	0	0	2203	0	0	1254	0	0	1270	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			17			17			19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		670			631			329			347	
Travel Time (s)		15.2			14.3			7.5			7.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	772	0	0	482	0	0	211	0	0	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	15.0	15.0		15.0	15.0		22.0	22.0		8.0	22.0	
Total Split (s)	60.0	60.0		60.0	60.0		42.0	42.0		8.0	50.0	
Total Split (%)	54.5%	54.5%		54.5%	54.5%		38.2%	38.2%		7.3%	45.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		0.0	1.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?												
Act Effct Green (s)		55.0			55.0			37.0			45.0	
Actuated g/C Ratio		0.50			0.50			0.34			0.41	
v/c Ratio		0.63			0.43			0.49			0.40	
Control Delay		11.7			18.4			31.1			23.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		11.7			18.4			31.1			23.3	
LOS		B			B			C			C	
Approach Delay		11.7			18.4			31.1			23.3	
Approach LOS		B			B			C			C	
Queue Length 50th (ft)		94			106			108			92	
Queue Length 95th (ft)		m107			150			183			154	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		590			551			249			267	
Turn Bay Length (ft)												
Base Capacity (vph)		1230			1110			433			534	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.63			0.43			0.49			0.40	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 17.5		Intersection LOS: B	
Intersection Capacity Utilization 69.1%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: Oakley Avenue & Chicago Avenue



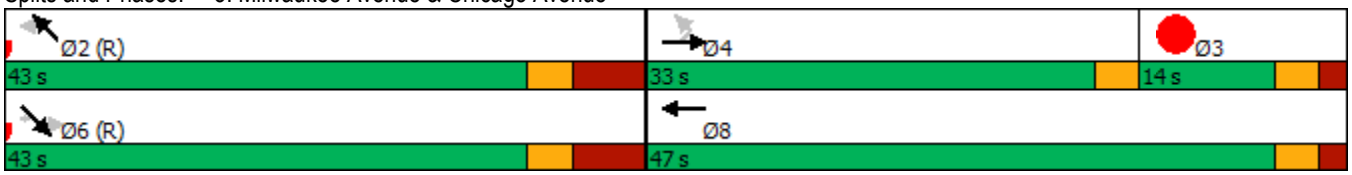
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	32	595	118	0	560	123	270	640	11	51	309	7
Future Volume (vph)	32	595	118	0	560	123	270	640	11	51	309	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	130		50	0		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2618	0	0	2703	0	1408	1482	1260	1408	1477	0
Flt Permitted	0.287						0.500			0.118		
Satd. Flow (perm)	418	2618	0	0	2703	0	727	1482	1169	172	1477	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			38				61		1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		426			207			537			178	
Travel Time (s)		9.7			4.7			12.2			4.0	
Confl. Peds. (#/hr)	38		59			38	36		71	71		36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	18	18	0	0	18	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	750	0	0	718	0	284	674	12	54	332	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.39	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4						6		6	2		
Minimum Split (s)	8.0	8.0			35.0		39.0	39.0	39.0	39.0	39.0	
Total Split (s)	33.0	33.0			47.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	36.7%	36.7%			52.2%		47.8%	47.8%	47.8%	47.8%	47.8%	
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	0.0			2.0		5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0			1.0		1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	4.0	4.0			6.0		9.0	9.0	9.0	9.0	9.0	
Lead/Lag	Lead	Lead										
Lead-Lag Optimize?	Yes	Yes										
Act Effct Green (s)	29.0	29.0			41.0		34.0	34.0	34.0	34.0	34.0	
Actuated g/C Ratio	0.32	0.32			0.46		0.38	0.38	0.38	0.38	0.38	
v/c Ratio	0.25	0.87			0.57		1.04	1.21	0.03	0.84	0.59	
Control Delay	28.6	40.4			6.8		95.0	136.8	0.1	84.5	12.0	
Queue Delay	0.0	0.3			32.9		23.5	0.9	0.0	0.0	1.9	
Total Delay	28.6	40.7			39.7		118.4	137.7	0.1	84.5	13.9	
LOS	C	D			D		F	F	A	F	B	
Approach Delay		40.2			39.7			130.4			23.7	
Approach LOS		D			D			F			C	

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Bus Blockages (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Minimum Split (s)	10.0
Total Split (s)	14.0
Total Split (%)	16%
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Queue Length 50th (ft)	14	203			212		~175	~471	0	14	83	
Queue Length 95th (ft)	41	#310			m278		#330	#681	0	m#74	m110	
Internal Link Dist (ft)		346			127			457			98	
Turn Bay Length (ft)	50						130		50			
Base Capacity (vph)	134	861			1252		274	559	479	64	558	
Starvation Cap Reductn	0	0			568		0	0	0	0	109	
Spillback Cap Reductn	0	9			0		40	57	0	0	0	
Storage Cap Reductn	0	0			0		0	0	0	0	0	
Reduced v/c Ratio	0.25	0.88			1.05		1.21	1.34	0.03	0.84	0.74	

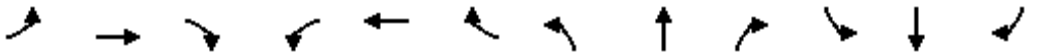
Intersection Summary	
Area Type:	CBD
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 1.21	
Intersection Signal Delay: 68.5	Intersection LOS: E
Intersection Capacity Utilization 114.9%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 3: Milwaukee Avenue & Chicago Avenue



Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	835	0	243	655	4	0	101	403	32	120	28
Future Volume (vph)	37	835	0	243	655	4	0	101	403	32	120	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	50		0	0		0	50		50
Storage Lanes	1		0	1		0	0		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2816	0	1408	2811	0	0	1482	1260	1408	1482	1260
Flt Permitted	0.146			0.323						0.689		
Satd. Flow (perm)	216	2816	0	470	2811	0	0	1482	1218	1002	1482	1198
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1				153			97
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		207			1872			137			461	
Travel Time (s)		4.7			42.5			3.1			10.5	
Confl. Peds. (#/hr)	90			73		90			18	18		31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	879	0	256	693	0	0	106	424	34	126	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8					2	6		6
Minimum Split (s)	40.0	40.0		13.0	13.0			27.0	27.0	27.0	27.0	27.0
Total Split (s)	62.0	62.0		36.0	36.0			28.0	28.0	28.0	28.0	28.0
Total Split (%)	68.9%	68.9%		40.0%	40.0%			31.1%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	6.0	6.0	6.0
Lead/Lag				Lag	Lag							
Lead-Lag Optimize?												
Act Effct Green (s)	53.0	53.0		27.0	27.0			22.0	22.0	22.0	22.0	22.0
Actuated g/C Ratio	0.59	0.59		0.30	0.30			0.24	0.24	0.24	0.24	0.24
v/c Ratio	0.31	0.53		1.82	0.82			0.29	1.03	0.14	0.35	0.08
Control Delay	16.6	13.4		418.0	38.8			1.4	48.9	28.5	31.4	0.4
Queue Delay	0.0	32.6		7.6	34.5			3.9	28.8	0.0	0.0	0.0
Total Delay	16.6	46.0		425.7	73.4			5.3	77.7	28.5	31.4	0.4
LOS	B	D		F	E			A	E	C	C	A
Approach Delay		44.8			168.4			63.2			26.1	
Approach LOS		D			F			E			C	
Queue Length 50th (ft)	9	123		~222	191			1	~104	15	59	0

Lane Group	Ø7
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	7
Permitted Phases	
Minimum Split (s)	8.0
Total Split (s)	26.0
Total Split (%)	29%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	m12	m159		#370	#282			m1	m#124	40	111	0
Internal Link Dist (ft)		127			1792			57			381	
Turn Bay Length (ft)				50						50		50
Base Capacity (vph)	127	1658		141	844			362	413	244	362	366
Starvation Cap Reductn	0	823		0	0			186	119	0	0	0
Spillback Cap Reductn	0	0		42	190			0	0	0	0	6
Storage Cap Reductn	0	0		0	0			0	0	0	0	0
Reduced v/c Ratio	0.31	1.05		2.59	1.06			0.60	1.44	0.14	0.35	0.08

Intersection Summary	
Area Type:	CBD
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 69 (77%), Referenced to phase 2:NBT and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 1.82	
Intersection Signal Delay: 92.6	Intersection LOS: F
Intersection Capacity Utilization 93.9%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Ogden Avenue & Chicago Avenue

Lane Group	Ø7
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	129	504	69	15	348	0	0	620	138	91	238	0
Future Volume (vph)	129	504	69	15	348	0	0	620	138	91	238	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	110		0	0		0	0		0	90		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2704	0	1408	2816	0	0	1482	1260	1408	1482	0
Flt Permitted	0.534			0.238						0.176		
Satd. Flow (perm)	664	2704	0	336	2816	0	0	1482	1177	257	1482	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16							145			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		514			137			178			729	
Travel Time (s)		11.7			3.1			4.0			16.6	
Confl. Peds. (#/hr)	169		63	63					53	53		100
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	604	0	16	366	0	0	653	145	96	251	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6					4	8		
Minimum Split (s)	25.0	25.0		25.0	25.0			31.0	31.0	8.0	8.0	
Total Split (s)	30.0	30.0		36.0	36.0			54.0	54.0	35.0	35.0	
Total Split (%)	33.3%	33.3%		40.0%	40.0%			60.0%	60.0%	38.9%	38.9%	
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	0.0	0.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	4.0	4.0	
Lead/Lag	Lag	Lag								Lead	Lead	
Lead-Lag Optimize?	Yes	Yes								Yes	Yes	
Act Effct Green (s)	21.0	21.0		27.0	27.0			48.0	48.0	31.0	31.0	
Actuated g/C Ratio	0.23	0.23		0.30	0.30			0.53	0.53	0.34	0.34	
v/c Ratio	0.88	0.94		0.16	0.43			0.83	0.21	1.09	0.49	
Control Delay	83.8	57.7		11.3	11.9			11.7	0.1	156.9	27.3	
Queue Delay	27.0	39.8		0.5	58.9			51.9	4.0	0.0	0.0	
Total Delay	110.8	97.5		11.8	70.8			63.7	4.1	156.9	27.3	
LOS	F	F		B	E			E	A	F	C	
Approach Delay		99.9			68.3			52.8			63.2	
Approach LOS		F			E			D			E	
Queue Length 50th (ft)	75	174		5	80			391	0	~62	111	

Lane Group	Ø1	Ø7
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	7
Permitted Phases		
Minimum Split (s)	6.0	10.0
Total Split (s)	6.0	19.0
Total Split (%)	7%	21%
Yellow Time (s)	3.0	3.0
All-Red Time (s)	0.0	2.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Queue Length 95th (ft)	#184	#282		m7	m62			m50	m0	#160	184	
Internal Link Dist (ft)		434			57			98			649	
Turn Bay Length (ft)	110									90		
Base Capacity (vph)	154	643		100	844			790	695	88	510	
Starvation Cap Reductn	0	0		17	531			308	469	0	0	
Spillback Cap Reductn	20	88		0	0			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	1.01	1.09		0.19	1.17			1.35	0.64	1.09	0.49	

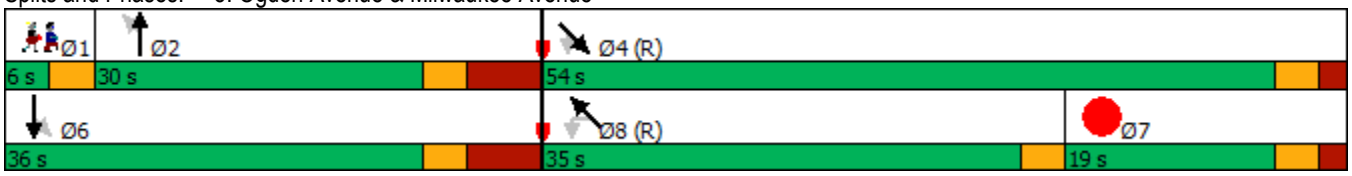
Intersection Summary			
Area Type:	CBD		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 6 (7%), Referenced to phase 4:SET and 8:NWTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 72.4		Intersection LOS: E	
Intersection Capacity Utilization 101.2%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

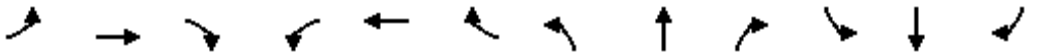
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Ogden Avenue & Milwaukee Avenue



Lane Group	Ø1	Ø7
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	237	875	13	58	738	108	40	399	105	138	445	222
Future Volume (vph)	237	875	13	58	738	108	40	399	105	138	445	222
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	80		0	80		0	95		0	80		260
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1342	2688	0	1368	2661	0	1064	2490	0	1131	2542	1168
Flt Permitted	0.252			0.235			0.428			0.382		
Satd. Flow (perm)	347	2688	0	329	2661	0	463	2490	0	450	2542	1007
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			24			37				90
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1872			743			718			744	
Travel Time (s)		42.5			16.9			16.3			16.9	
Confl. Peds. (#/hr)	102		123	123		102	57		18	18		57
Confl. Bikes (#/hr)			137			11			2			103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	6%	31%	5%	4%	6%	35%	12%	7%	27%	13%	10%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	249	935	0	61	891	0	42	531	0	145	468	234
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Minimum Split (s)	33.0	33.0		33.0	33.0		29.0	29.0		29.0	29.0	29.0
Total Split (s)	58.0	58.0		58.0	58.0		42.0	42.0		42.0	42.0	42.0
Total Split (%)	58.0%	58.0%		58.0%	58.0%		42.0%	42.0%		42.0%	42.0%	42.0%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	52.0	52.0		52.0	52.0		36.0	36.0		36.0	36.0	36.0
Actuated g/C Ratio	0.52	0.52		0.52	0.52		0.36	0.36		0.36	0.36	0.36
v/c Ratio	1.38	0.67		0.36	0.64		0.25	0.58		0.90	0.51	0.56
Control Delay	228.3	20.6		21.7	19.3		27.6	26.9		81.3	27.5	21.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	228.3	20.6		21.7	19.3		27.6	26.9		81.3	27.5	21.3
LOS	F	C		C	B		C	C		F	C	C
Approach Delay		64.3			19.5			27.0			35.0	

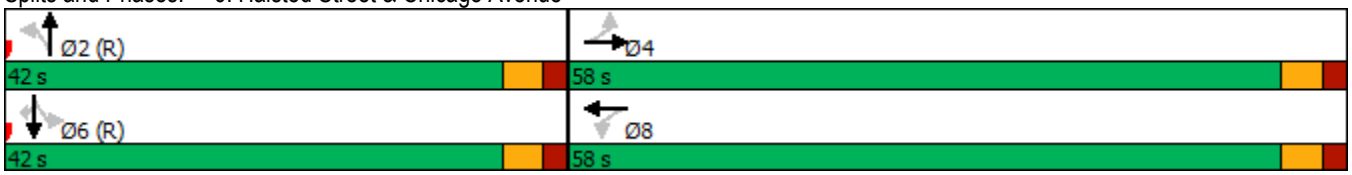
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		E			B			C			D	
Queue Length 50th (ft)	~212	219		22	199		19	132		86	121	71
Queue Length 95th (ft)	#256	291		58	266		48	187		#209	171	152
Internal Link Dist (ft)		1792			663			638			664	
Turn Bay Length (ft)	80			80			95			80		260
Base Capacity (vph)	180	1398		171	1395		166	920		162	915	420
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.38	0.67		0.36	0.64		0.25	0.58		0.90	0.51	0.56

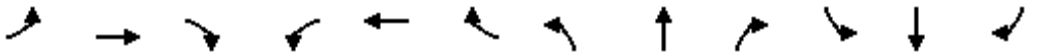
Intersection Summary			
Area Type:	CBD		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 1.38			
Intersection Signal Delay: 39.3		Intersection LOS: D	
Intersection Capacity Utilization 112.3%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Halsted Street & Chicago Avenue



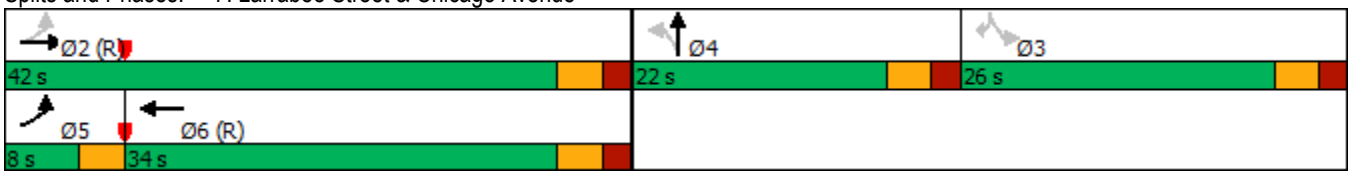


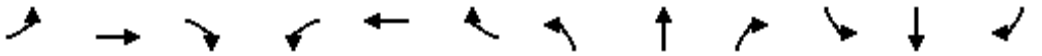
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	885	0	0	647	221	49	71	22	394	0	208
Future Volume (vph)	233	885	0	0	647	221	49	71	22	394	0	208
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2816	0	0	2204	0	0	1378	0	1408	0	1260
Flt Permitted	0.125							0.983		0.662		
Satd. Flow (perm)	172	2816	0	0	2204	0	0	1180	0	850	0	766
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					55			9				219
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		200			361			360			481	
Travel Time (s)		4.5			8.2			8.2			10.9	
Confl. Peds. (#/hr)	294		323	323		294	514		122	122		514
Confl. Bikes (#/hr)			67			9			12			24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	0	0	11	11	0	0	0	0	0	0
Parking (#/hr)					0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	245	932	0	0	914	0	0	150	0	415	0	219
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.46	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA		Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2						4			3		3
Detector Phase	5	2			6		4	4		3		3
Switch Phase												
Minimum Initial (s)	5.0	21.0			21.0		7.0	7.0		9.0		9.0
Minimum Split (s)	8.0	26.0			26.0		12.0	12.0		14.0		14.0
Total Split (s)	8.0	42.0			34.0		22.0	22.0		26.0		26.0
Total Split (%)	8.9%	46.7%			37.8%		24.4%	24.4%		28.9%		28.9%
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
All-Red Time (s)	0.0	2.0			2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)	1.0	1.0			1.0			1.0		1.0		1.0
Total Lost Time (s)	4.0	6.0			6.0			6.0		6.0		6.0
Lead/Lag	Lead				Lag		Lead	Lead		Lag		Lag
Lead-Lag Optimize?	Yes				Yes		Yes	Yes		Yes		Yes
Recall Mode	None	C-Max			C-Max		Min	Min		Min		Min
Act Effct Green (s)	38.0	36.0			28.0			13.7		22.3		22.3
Actuated g/C Ratio	0.42	0.40			0.31			0.15		0.25		0.25
v/c Ratio	1.93	0.83			1.26			0.81		1.98		0.62

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	465.8	32.0			157.8			65.0		478.8		13.0
Queue Delay	0.0	0.0			0.0			0.0		0.0		0.0
Total Delay	465.8	32.0			157.8			65.0		478.8		13.0
LOS	F	C			F			E		F		B
Approach Delay		122.3			157.8			65.0			317.9	
Approach LOS		F			F			E			F	
Queue Length 50th (ft)	~173	244			~337			76		~381		0
Queue Length 95th (ft)	#341	328			#461			#164		#561		77
Internal Link Dist (ft)		120			281			280			401	
Turn Bay Length (ft)	50											
Base Capacity (vph)	127	1126			723			217		210		354
Starvation Cap Reductn	0	0			0			0		0		0
Spillback Cap Reductn	0	0			0			0		0		0
Storage Cap Reductn	0	0			0			0		0		0
Reduced v/c Ratio	1.93	0.83			1.26			0.69		1.98		0.62

Intersection Summary			
Area Type:	CBD		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 47 (52%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.98			
Intersection Signal Delay: 173.7		Intersection LOS: F	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Larrabee Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	890	335	65	740	5	115	5	75	30	10	10
Future Volume (vph)	5	890	335	65	740	5	115	5	75	30	10	10
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	65		0	65		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2307	0	1408	2664	0	0	1354	0	1408	1329	0
Flt Permitted	0.355			0.100				0.806		0.634		
Satd. Flow (perm)	439	2307	0	148	2664	0	0	1105	0	936	1329	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		97			1			43			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		361			1193			355			175	
Travel Time (s)		8.2			27.1			8.1			4.0	
Confl. Peds. (#/hr)	211		139	139		211	30		7	7		30
Confl. Bikes (#/hr)			56			9			1			29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1290	0	68	784	0	0	205	0	32	22	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		1	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	16.0	16.0		5.0	16.0		23.0	23.0		23.0	23.0	
Minimum Split (s)	20.0	20.0		8.0	20.0		27.0	27.0		27.0	27.0	
Total Split (s)	40.0	40.0		8.0	48.0		27.0	27.0		27.0	27.0	
Total Split (%)	53.3%	53.3%		10.7%	64.0%		36.0%	36.0%		36.0%	36.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		0.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0		1.0	1.0	
Total Lost Time (s)	5.0	5.0		4.0	5.0			5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Recall Mode	C-Max	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	36.6	36.6		44.0	43.0			22.0		22.0	22.0	
Actuated g/C Ratio	0.49	0.49		0.59	0.57			0.29		0.29	0.29	
v/c Ratio	0.02	1.10		0.44	0.51			0.58		0.12	0.06	
Control Delay	11.4	78.4		19.2	17.9			25.3		20.9	14.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.9		0.0	0.0			0.0		0.0	0.0	
Total Delay	11.4	79.3		19.2	17.9			25.3		20.9	14.0	
LOS	B	E		B	B			C		C	B	
Approach Delay		79.1			18.0			25.3			18.0	
Approach LOS		E			B			C			B	
Queue Length 50th (ft)	1	~365		25	165			63		11	4	
Queue Length 95th (ft)	7	#492		m36	215			132		31	19	
Internal Link Dist (ft)		281			1113			275			95	
Turn Bay Length (ft)	65			65								
Base Capacity (vph)	213	1175		154	1527			354		274	397	
Starvation Cap Reductn	0	9		0	0			0		0	0	
Spillback Cap Reductn	0	0		0	0			0		0	0	
Storage Cap Reductn	0	0		0	0			0		0	0	
Reduced v/c Ratio	0.02	1.11		0.44	0.51			0.58		0.12	0.06	

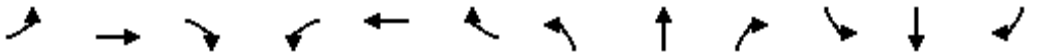
Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 45 (60%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 51.5		Intersection LOS: D	
Intersection Capacity Utilization 79.3%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Kingsbury Street & Chicago Avenue

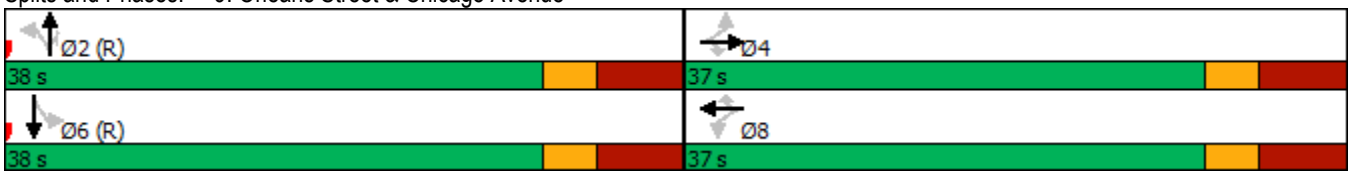


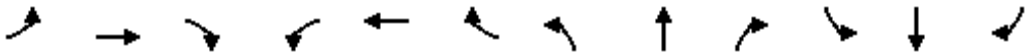
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	850	40	70	600	30	85	465	175	140	485	90
Future Volume (vph)	50	850	40	70	600	30	85	465	175	140	485	90
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	95		30	95		30	50		0	50		110
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2676	1144	1408	2676	1260	1408	1482	1260	1408	2695	0
Flt Permitted	0.388			0.231			0.409			0.349		
Satd. Flow (perm)	472	2676	775	319	2676	669	579	1482	1105	494	2695	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73			73			73		26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1193			406			352			306	
Travel Time (s)		27.1			9.2			8.0			7.0	
Confl. Peds. (#/hr)	206		258	258		206	106		107	107		106
Confl. Bikes (#/hr)			29			7			8			15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	23	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	895	42	74	632	32	89	489	184	147	606	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.50	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	30.0	30.0	30.0	30.0	30.0	
Total Split (s)	37.0	37.0	37.0	37.0	37.0	37.0	38.0	38.0	38.0	38.0	38.0	
Total Split (%)	49.3%	49.3%	49.3%	49.3%	49.3%	49.3%	50.7%	50.7%	50.7%	50.7%	50.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	28.0	28.0	28.0	28.0	28.0	28.0	29.0	29.0	29.0	29.0	29.0	
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37	0.37	0.39	0.39	0.39	0.39	0.39	
v/c Ratio	0.30	0.90	0.13	0.62	0.63	0.11	0.40	0.85	0.39	0.77	0.57	
Control Delay	20.8	24.3	4.3	33.5	14.1	1.0	23.4	37.9	12.8	49.8	19.9	
Queue Delay	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	20.8	26.9	4.3	33.5	14.1	1.0	23.4	37.9	12.8	49.8	19.9	
LOS	C	C	A	C	B	A	C	D	B	D	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		25.6			15.5			30.2			25.7	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)	15	136	0	11	49	0	29	203	34	58	108	
Queue Length 95th (ft)	m16	m129	m0	m20	65	m0	71	#376	85	#159	159	
Internal Link Dist (ft)		1113			326			272			226	
Turn Bay Length (ft)	95		30	95		30	50			50		
Base Capacity (vph)	176	999	335	119	999	295	223	573	472	191	1058	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	45	0	0	0	0	0	0	1	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.30	0.94	0.13	0.62	0.63	0.11	0.40	0.85	0.39	0.77	0.57	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 24 (32%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 24.4		Intersection LOS: C	
Intersection Capacity Utilization 118.8%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Orleans Street & Chicago Avenue





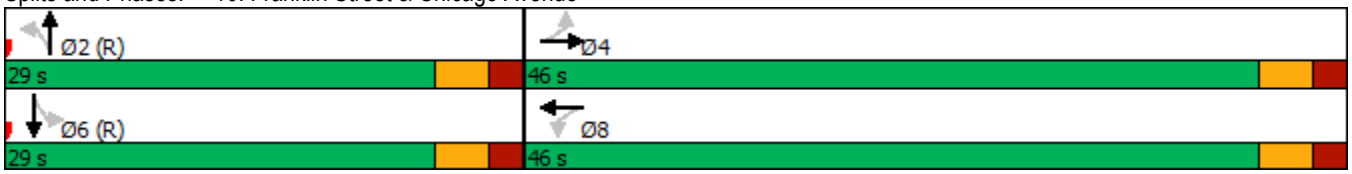
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	1000	60	34	700	13	32	44	38	10	53	21
Future Volume (vph)	15	1000	60	34	700	13	32	44	38	10	53	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	2549	0	0	2586	0	0	1301	0	0	1306	0
Flt Permitted		0.940			0.858			0.906			0.966	
Satd. Flow (perm)	0	2395	0	0	2215	0	0	1097	0	0	1244	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			4			7			22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		406			399			394			261	
Travel Time (s)		9.2			9.1			9.0			5.9	
Confl. Peds. (#/hr)	120		461	461		120	260		182	182		260
Confl. Bikes (#/hr)			13			2			1			3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	0	0	11	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1132	0	0	787	0	0	120	0	0	89	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.46	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	17.0	17.0		17.0	17.0		26.0	26.0		18.0	18.0	
Total Split (s)	46.0	46.0		46.0	46.0		29.0	29.0		29.0	29.0	
Total Split (%)	61.3%	61.3%		61.3%	61.3%		38.7%	38.7%		38.7%	38.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		40.0			40.0			23.0			23.0	
Actuated g/C Ratio		0.53			0.53			0.31			0.31	
v/c Ratio		0.88			0.67			0.35			0.22	
Control Delay		16.2			26.3			22.6			17.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.2			26.3			22.6			17.0	
LOS		B			C			C			B	
Approach Delay		16.2			26.3			22.6			17.0	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)		104			160			40			23	

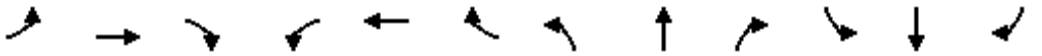
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		m#155			m208			85			57	
Internal Link Dist (ft)		326			319			314			181	
Turn Bay Length (ft)												
Base Capacity (vph)		1282			1183			341			396	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.88			0.67			0.35			0.22	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 25 (33%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 20.4		Intersection LOS: C	
Intersection Capacity Utilization 80.3%		ICU Level of Service D	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Franklin Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	840	99	45	686	75	5	43	23	98	422	75
Future Volume (vph)	69	840	99	45	686	75	5	43	23	98	422	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	100		0	80		0	0		0	0		75
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2483	0	1408	2562	0	0	1365	0	0	1469	1260
Flt Permitted	0.220			0.159				0.848			0.916	
Satd. Flow (perm)	306	2483	0	217	2562	0	0	1159	0	0	1337	1070
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			18			24				116
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		399			407			355			273	
Travel Time (s)		9.1			9.3			8.1			6.2	
Confl. Peds. (#/hr)	119		282	282		119	79		90	90		79
Confl. Bikes (#/hr)			11			5			3			87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	73	988	0	47	801	0	0	74	0	0	547	79
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	17.0		5.0	17.0		22.0	22.0		22.0	22.0	22.0
Minimum Split (s)	12.0	21.0		12.0	21.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	12.0	33.0		12.0	33.0		30.0	30.0		30.0	30.0	30.0
Total Split (%)	16.0%	44.0%		16.0%	44.0%		40.0%	40.0%		40.0%	40.0%	40.0%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	4.0	1.0		4.0	1.0		5.0	5.0		5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0			1.0	1.0
Total Lost Time (s)	8.0	5.0		8.0	5.0			9.0			9.0	9.0
Lead/Lag	Lag	Lead		Lag	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max
Act Effct Green (s)	30.6	30.4		29.0	28.0			23.4			23.4	23.4
Actuated g/C Ratio	0.41	0.41		0.39	0.37			0.31			0.31	0.31
v/c Ratio	0.40	0.97		0.32	0.83			0.20			1.31	0.19
Control Delay	13.5	29.3		13.4	26.4			16.9			184.6	3.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	13.5	29.3		13.4	26.4			16.9			184.6	3.2
LOS	B	C		B	C			B			F	A
Approach Delay		28.3			25.6			16.9			161.7	
Approach LOS		C			C			B			F	
Queue Length 50th (ft)	12	~281		6	126			17			~355	0
Queue Length 95th (ft)	m13	m#355		m12	m#196			49			#539	16
Internal Link Dist (ft)		319			327			275			193	
Turn Bay Length (ft)	100			80								75
Base Capacity (vph)	183	1017		147	967			377			417	413
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.40	0.97		0.32	0.83			0.20			1.31	0.19

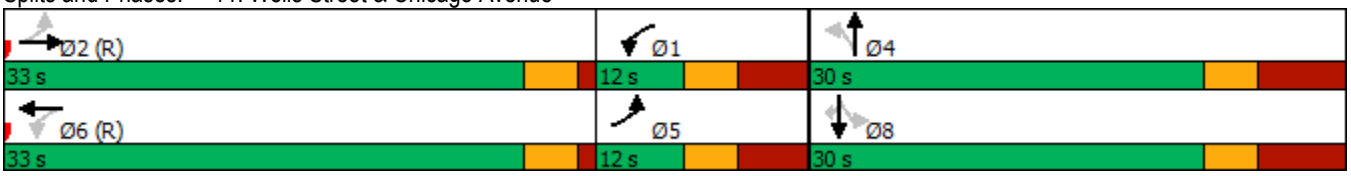
Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 4 (5%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.31			
Intersection Signal Delay: 59.1		Intersection LOS: E	
Intersection Capacity Utilization 93.4%		ICU Level of Service F	
Analysis Period (min) 15			

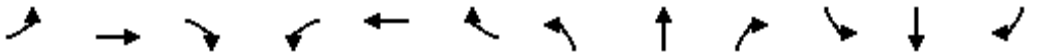
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 11: Wells Street & Chicago Avenue



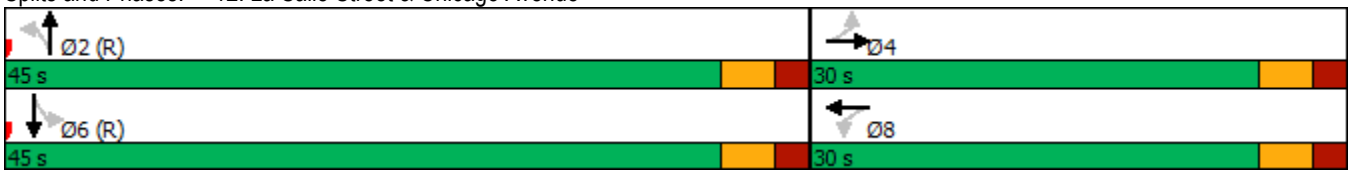


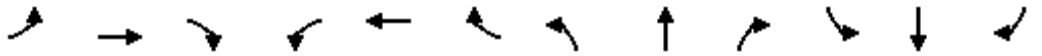
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	782	79	38	548	50	107	681	99	107	1195	143
Future Volume (vph)	103	782	79	38	548	50	107	681	99	107	1195	143
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	10	11	12	11	11	12	11	11	12
Storage Length (ft)	100		0	70		0	120		0	80		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1436	2616	0	1408	2694	0	1488	3971	0	1488	4096	0
Flt Permitted	0.318			0.167			0.140			0.320		
Satd. Flow (perm)	449	2616	0	238	2694	0	217	3971	0	478	4096	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			13			6			20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		407			413			368			440	
Travel Time (s)		9.3			9.4			8.4			10.0	
Confl. Peds. (#/hr)	190		191	191		190	72		151	151		72
Confl. Bikes (#/hr)			10			6			1			4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	2%	2%	1%	0%	3%	7%	0%	2%	0%
Bus Blockages (#/hr)	0	18	18	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	906	0	40	630	0	113	821	0	113	1409	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.22	1.33	1.36	1.22	1.28	1.28	1.22	1.28	1.28	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	29.0	29.0		29.0	29.0		28.0	28.0		28.0	28.0	
Total Split (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	24.0	24.0		24.0	24.0		39.0	39.0		39.0	39.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32		0.52	0.52		0.52	0.52	
v/c Ratio	0.76	1.07		0.53	0.72		1.01	0.40		0.46	0.66	
Control Delay	25.6	53.2		31.4	16.9		114.3	11.5		18.8	14.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	25.6	53.2		31.4	16.9		114.3	11.5		18.8	14.8	
LOS	C	D		C	B		F	B		B	B	
Approach Delay		50.2			17.8			24.0			15.1	
Approach LOS		D			B			C			B	
Queue Length 50th (ft)	15	~232		12	72		~49	78		31	161	
Queue Length 95th (ft)	m15	m#235		m15	m150		#153	105		79	208	
Internal Link Dist (ft)		327			333			288			360	
Turn Bay Length (ft)	100			70			120			80		
Base Capacity (vph)	143	847		76	870		112	2067		248	2139	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.76	1.07		0.53	0.72		1.01	0.40		0.46	0.66	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 43 (57%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 26.1		Intersection LOS: C	
Intersection Capacity Utilization 119.5%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 12: La Salle Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	850	139	51	503	0	0	0	0	48	1107	133
Future Volume (vph)	0	850	139	51	503	0	0	0	0	48	1107	133
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	10	11	12	12	12	12	12	10	12
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2767	0	1408	1397	0	0	0	0	0	3966	0
Flt Permitted				0.133							0.998	
Satd. Flow (perm)	0	2767	0	197	1397	0	0	0	0	0	3959	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27									28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		413			144			365			405	
Travel Time (s)		9.4			3.3			8.3			9.2	
Confl. Peds. (#/hr)			128	128						42		45
Confl. Bikes (#/hr)			12									58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	2%	4%	2%	2%	2%	2%	6%	1%	2%
Bus Blockages (#/hr)	0	18	18	0	18	18	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1041	0	54	529	0	0	0	0	0	1356	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.28	1.22	1.33	1.40	1.22	1.22	1.22	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	
Protected Phases		4		3	8						6	
Permitted Phases				8						6		
Minimum Split (s)		24.0		8.0	24.0					26.0	26.0	
Total Split (s)		35.0		10.0	45.0					30.0	30.0	
Total Split (%)		46.7%		13.3%	60.0%					40.0%	40.0%	
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)		5.0		0.0	5.0					2.0	2.0	
Lost Time Adjust (s)		1.0		1.0	1.0						1.0	
Total Lost Time (s)		9.0		4.0	9.0						6.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Act Effct Green (s)		26.0		41.0	36.0						24.0	
Actuated g/C Ratio		0.35		0.55	0.48						0.32	
v/c Ratio		1.07		0.26	0.79						1.06	
Control Delay		76.3		9.7	14.1						67.5	
Queue Delay		14.0		0.0	1.3						18.5	
Total Delay		90.3		9.7	15.4						86.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		F		A	B						F	
Approach Delay		90.3			14.9						86.0	
Approach LOS		F			B						F	
Queue Length 50th (ft)		~274		7	75						~254	
Queue Length 95th (ft)		m#271		m10	m80						#344	
Internal Link Dist (ft)		333			64			285			325	
Turn Bay Length (ft)				100								
Base Capacity (vph)		976		204	670						1285	
Starvation Cap Reductn		0		0	39						0	
Spillback Cap Reductn		128		0	0						142	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		1.23		0.26	0.84						1.19	

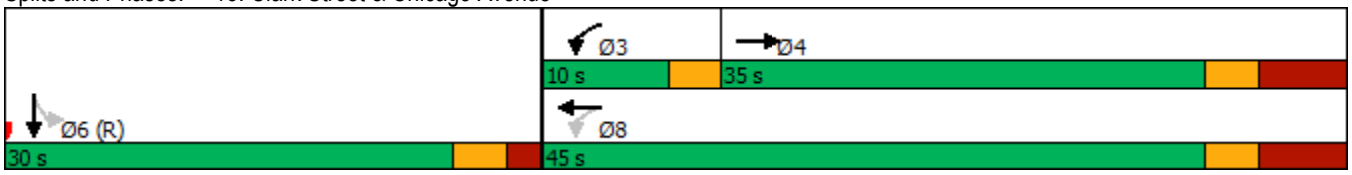
Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 34 (45%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 73.6		Intersection LOS: E	
Intersection Capacity Utilization 116.2%		ICU Level of Service H	
Analysis Period (min) 15			

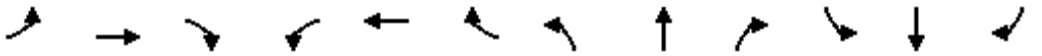
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: Clark Street & Chicago Avenue



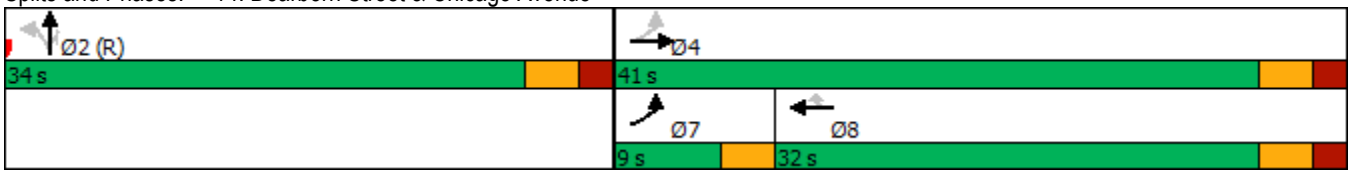


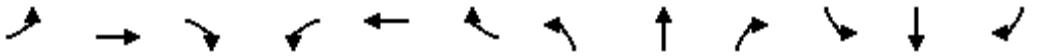
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	730	0	0	442	29	163	528	68	0	0	0
Future Volume (vph)	160	730	0	0	442	29	163	528	68	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	12	11	12	16	11	10	12	12	12
Storage Length (ft)	100		0	0		30	0		75	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1436	1425	0	0	1308	1316	1727	2946	1285	0	0	0
Flt Permitted	0.247						0.950					
Satd. Flow (perm)	339	1425	0	0	1308	907	1110	2946	651	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						73			73			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			428			364			418	
Travel Time (s)		5.4			9.7			8.3			9.5	
Confl. Peds. (#/hr)	257					257	162		216			
Confl. Bikes (#/hr)						2			12			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	2%	2%	3%	0%	1%	1%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	18	0	0	11	11	0	0	0	0	0	0
Parking (#/hr)					0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	168	768	0	0	465	31	172	556	72	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.40	1.22	1.22	1.53	1.29	1.05	1.28	1.33	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2		2			
Minimum Split (s)	8.0	23.0			23.0	23.0	22.0	22.0	22.0			
Total Split (s)	9.0	41.0			32.0	32.0	34.0	34.0	34.0			
Total Split (%)	12.0%	54.7%			42.7%	42.7%	45.3%	45.3%	45.3%			
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	1.0	1.0			1.0	1.0	1.0	1.0	1.0			
Total Lost Time (s)	4.0	6.0			6.0	6.0	6.0	6.0	6.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Act Effct Green (s)	37.0	35.0			26.0	26.0	28.0	28.0	28.0			
Actuated g/C Ratio	0.49	0.47			0.35	0.35	0.37	0.37	0.37			
v/c Ratio	0.70	1.15			1.03	0.09	0.42	0.51	0.25			
Control Delay	30.1	104.2			68.5	1.1	21.3	20.1	6.8			
Queue Delay	0.0	0.0			18.0	0.0	0.0	0.0	0.0			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	30.1	104.2			86.5	1.1	21.3	20.1	6.8			
LOS	C	F			F	A	C	C	A			
Approach Delay		90.9			81.2			19.2				
Approach LOS		F			F			B				
Queue Length 50th (ft)	63	~398			~206	0	58	102	0			
Queue Length 95th (ft)	m57	m#352			#413	m0	111	148	26			
Internal Link Dist (ft)		158			348			284			338	
Turn Bay Length (ft)	100					30			75			
Base Capacity (vph)	240	665			453	362	414	1099	288			
Starvation Cap Reductn	0	0			0	0	0	0	0			
Spillback Cap Reductn	0	0			22	0	0	0	0			
Storage Cap Reductn	0	0			0	0	0	0	0			
Reduced v/c Ratio	0.70	1.15			1.08	0.09	0.42	0.51	0.25			

Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 21 (28%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 63.0		Intersection LOS: E	
Intersection Capacity Utilization 116.2%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 14: Dearborn Street & Chicago Avenue



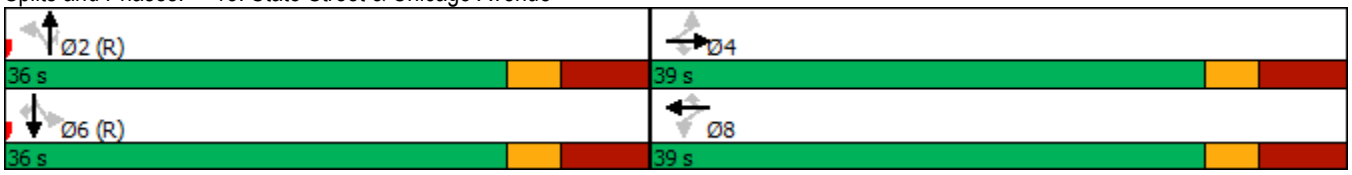


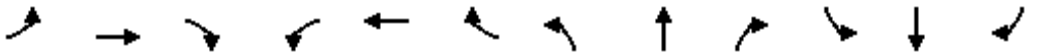
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	585	55	48	289	26	124	314	99	46	273	92
Future Volume (vph)	100	585	55	48	289	26	124	314	99	46	273	92
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	100		50	100		50	90		30	90		30
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1422	1334	1272	1422	1321	1216	1422	1482	1272	1422	1482	1272
Flt Permitted	0.572			0.224			0.582			0.523		
Satd. Flow (perm)	555	1334	675	300	1321	547	575	1482	841	632	1482	608
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73			73			73			73
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		428			375			323			297	
Travel Time (s)		9.7			8.5			7.3			6.8	
Confl. Peds. (#/hr)	295		191	191		295	260		154	154		260
Confl. Bikes (#/hr)			21			6			7			8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	2%	1%	1%	3%	1%	1%	2%	1%	1%	2%	1%
Bus Blockages (#/hr)	0	0	0	0	0	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	616	58	51	304	27	131	331	104	48	287	97
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.52	1.33	1.33	1.52	1.41	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	26.0	26.0	26.0	26.0	26.0	26.0
Total Split (s)	39.0	39.0	39.0	39.0	39.0	39.0	36.0	36.0	36.0	36.0	36.0	36.0
Total Split (%)	52.0%	52.0%	52.0%	52.0%	52.0%	52.0%	48.0%	48.0%	48.0%	48.0%	48.0%	48.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	27.0	27.0	27.0	27.0
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40	0.40	0.36	0.36	0.36	0.36	0.36	0.36
v/c Ratio	0.47	1.16	0.19	0.42	0.58	0.10	0.63	0.62	0.30	0.21	0.54	0.37
Control Delay	20.2	96.1	6.3	19.5	14.5	1.0	36.8	26.0	9.6	19.7	23.6	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	20.2	96.1	6.3	19.5	14.5	1.0	36.8	26.0	9.6	19.7	23.6	11.2
LOS	C	F	A	B	B	A	D	C	A	B	C	B
Approach Delay		79.2			14.2			25.5			20.4	
Approach LOS		E			B			C			C	
Queue Length 50th (ft)	27	~330	4	8	49	0	49	124	9	15	104	7
Queue Length 95th (ft)	m26	m#160	m3	m14	m86	m0	#130	210	44	41	178	44
Internal Link Dist (ft)		348			295			243			217	
Turn Bay Length (ft)	100		50	100		50	90		30	90		30
Base Capacity (vph)	222	533	313	120	528	262	207	533	349	227	533	265
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	1.16	0.19	0.42	0.58	0.10	0.63	0.62	0.30	0.21	0.54	0.37

Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 17 (23%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay: 41.9		Intersection LOS: D	
Intersection Capacity Utilization 113.8%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 15: State Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	530	105	53	280	49	0	0	0	38	172	74
Future Volume (vph)	50	530	105	53	280	49	0	0	0	38	172	74
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	12	10	10	12	12	12	12	12	12	12
Storage Length (ft)	80		30	80		30	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	958	831	858	958	867	872	0	0	0	0	946	0
Flt Permitted	0.572			0.294							0.993	
Satd. Flow (perm)	327	831	361	251	867	288	0	0	0	0	899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73			73					21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		375			368			298			279	
Travel Time (s)		8.5			8.4			6.8			6.3	
Confl. Peds. (#/hr)	487		301	301		487				185		159
Confl. Bikes (#/hr)			24			5						9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	50%	52%	49%	50%	50%	51%	51%	51%	49%	49%	50%	50%
Bus Blockages (#/hr)	0	18	18	0	11	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	558	111	56	295	52	0	0	0	0	299	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.66	1.34	*0.50	1.60	1.29	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm				Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4		4	8		8				6		
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0				27.0	27.0	
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0				35.0	35.0	
Total Split (%)	53.3%	53.3%	53.3%	53.3%	53.3%	53.3%				46.7%	46.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	4.0	4.0	4.0	4.0	4.0	4.0				5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0					1.0	
Total Lost Time (s)	8.0	8.0	8.0	8.0	8.0	8.0					9.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	32.0	32.0	32.0	32.0	32.0	32.0					26.0	
Actuated g/C Ratio	0.43	0.43	0.43	0.43	0.43	0.43					0.35	
v/c Ratio	0.38	1.58	0.57	0.52	0.80	0.32					0.92	
Control Delay	14.8	282.5	10.4	37.8	37.9	7.7					58.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0					0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	14.8	282.5	10.4	37.8	37.9	7.7					58.7	
LOS	B	F	B	D	D	A					E	
Approach Delay		221.0			34.0						58.7	
Approach LOS		F			C						E	
Queue Length 50th (ft)	10	~366	3	19	115	0					123	
Queue Length 95th (ft)	m12	m#344	m4	#72	#254	16					#276	
Internal Link Dist (ft)		295			288			218			199	
Turn Bay Length (ft)	80		30	80		30						
Base Capacity (vph)	139	354	195	107	369	164					325	
Starvation Cap Reductn	0	0	0	0	0	0					0	
Spillback Cap Reductn	0	0	0	0	0	0					0	
Storage Cap Reductn	0	0	0	0	0	0					0	
Reduced v/c Ratio	0.38	1.58	0.57	0.52	0.80	0.32					0.92	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 17 (23%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.58			
Intersection Signal Delay: 134.0		Intersection LOS: F	
Intersection Capacity Utilization 85.5%		ICU Level of Service E	
Analysis Period (min) 15			

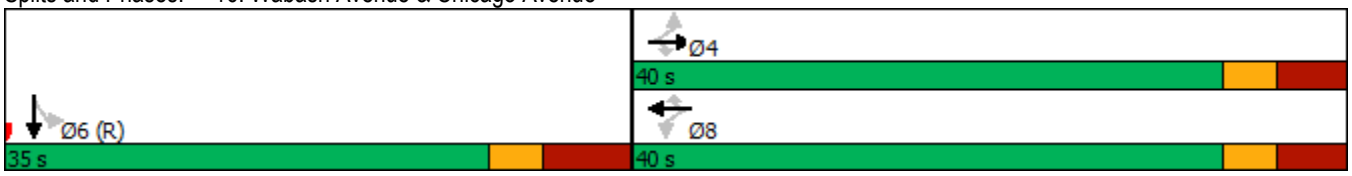
* User Entered Value

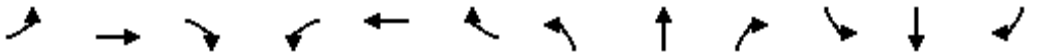
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: Wabash Avenue & Chicago Avenue





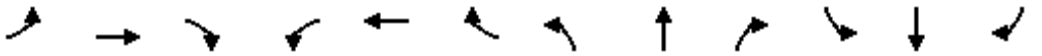
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	470	0	0	335	55	47	137	25	0	0	0
Future Volume (vph)	50	470	0	0	335	55	47	137	25	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	12	11	12	12	12	12	12	12	12
Storage Length (ft)	80		0	0		30	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1422	1270	0	0	1520	1363	0	1470	0	0	0	0
Flt Permitted	0.536							0.989				
Satd. Flow (perm)	478	1270	0	0	1520	399	0	1360	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						52		6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		368			334			328			284	
Travel Time (s)		8.4			7.6			7.5			6.5	
Confl. Peds. (#/hr)	372					372	121		173			
Confl. Bikes (#/hr)						5			3			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	3%	2%	2%	3%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	18	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	495	0	0	353	58	0	219	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.59	1.22	1.22	1.28	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Minimum Split (s)	21.0	21.0			21.0	21.0	27.0	27.0				
Total Split (s)	71.0	71.0			71.0	71.0	34.0	34.0				
Total Split (%)	67.6%	67.6%			67.6%	67.6%	32.4%	32.4%				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Lost Time Adjust (s)	1.0	1.0			1.0	1.0		1.0				
Total Lost Time (s)	9.0	9.0			9.0	9.0		9.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	62.0	62.0			62.0	62.0		25.0				
Actuated g/C Ratio	0.59	0.59			0.59	0.59		0.24				
v/c Ratio	0.19	0.66			0.39	0.23		0.67				
Control Delay	12.1	19.8			10.4	4.3		46.5				
Queue Delay	0.0	7.7			0.9	0.0		0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	12.1	27.5			11.3	4.3		46.5				
LOS	B	C			B	A		D				
Approach Delay		26.0			10.3			46.5				
Approach LOS		C			B			D				
Queue Length 50th (ft)	15	209			86	0		130				
Queue Length 95th (ft)	37	330			m117	m7		216				
Internal Link Dist (ft)		288			254			248			204	
Turn Bay Length (ft)	80					30						
Base Capacity (vph)	282	749			897	256		328				
Starvation Cap Reductn	0	210			303	0		0				
Spillback Cap Reductn	0	45			0	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.19	0.92			0.59	0.23		0.67				

Intersection Summary			
Area Type:	CBD		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 17 (16%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 24.3		Intersection LOS: C	
Intersection Capacity Utilization 69.8%		ICU Level of Service C	
Analysis Period (min) 15			
* User Entered Value			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: Rush Street & Chicago Avenue

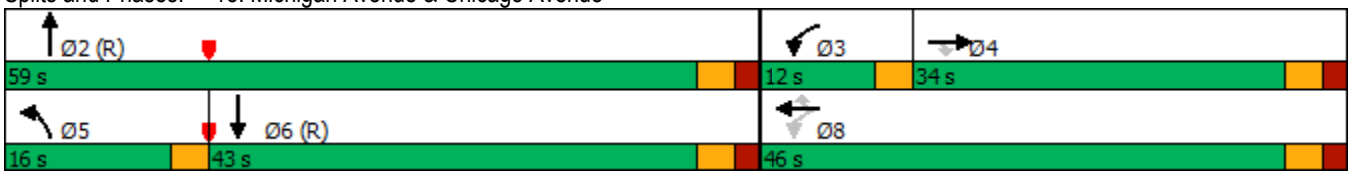


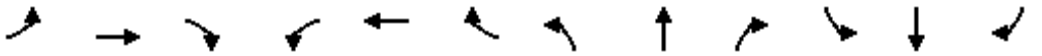
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	306	154	109	163	28	118	961	98	0	1393	126
Future Volume (vph)	0	306	154	109	163	28	118	961	98	0	1393	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	10	10	10	10	10	12	12	10	12
Storage Length (ft)	0		50	100		50	115		0	0		0
Storage Lanes	0		1	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1454	1193	1282	1440	1179	1408	2906	0	0	3261	0
Flt Permitted				0.309			0.950					
Satd. Flow (perm)	0	1454	793	352	1440	988	1317	2906	0	0	3261	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83			52		19			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		334			679			321			298	
Travel Time (s)		7.6			15.4			7.3			6.8	
Confl. Peds. (#/hr)			411	411		141	352		437			352
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	12%	5%	9%	2%	4%	20%	2%	2%	0%
Bus Blockages (#/hr)	0	0	18	0	0	0	0	49	49	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	322	162	115	172	29	124	1115	0	0	1599	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.33	1.46	1.33	1.33	1.33	1.33	1.45	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	pm+pt	NA	Perm	Prot	NA			NA	
Protected Phases		4		3	8		5	2			6	
Permitted Phases			4	8		8						
Detector Phase		4	4	3	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)		29.0	29.0	5.0	29.0	29.0	5.0	19.0			19.0	
Minimum Split (s)		34.0	34.0	8.0	34.0	34.0	8.0	24.0			24.0	
Total Split (s)		34.0	34.0	12.0	46.0	46.0	16.0	59.0			43.0	
Total Split (%)		32.4%	32.4%	11.4%	43.8%	43.8%	15.2%	56.2%			41.0%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
All-Red Time (s)		2.0	2.0	0.0	2.0	2.0	0.0	2.0			2.0	
Lost Time Adjust (s)		1.0	1.0	1.0	1.0	1.0	1.0	1.0			1.0	
Total Lost Time (s)		6.0	6.0	4.0	6.0	6.0	4.0	6.0			6.0	
Lead/Lag		Lag	Lag	Lead			Lead				Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes				Yes	
Recall Mode		Max	Max	None	Max	Max	None	C-Max			C-Max	
Act Effct Green (s)		28.4	28.4	42.0	40.0	40.0	11.3	53.0			37.7	
Actuated g/C Ratio		0.27	0.27	0.40	0.38	0.38	0.11	0.50			0.36	
v/c Ratio		0.82	0.59	0.55	0.31	0.07	0.82	0.76			1.36	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		40.7	16.7	32.1	24.9	2.6	84.6	24.5			195.8	
Queue Delay		2.3	0.0	0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay		43.1	16.7	32.1	24.9	2.6	84.6	24.5			195.8	
LOS		D	B	C	C	A	F	C			F	
Approach Delay		34.2			25.4			30.5			195.8	
Approach LOS		C			C			C			F	
Queue Length 50th (ft)		144	13	50	80	0	82	242			~614	
Queue Length 95th (ft)		#346	m66	92	135	9	#179	313			#728	
Internal Link Dist (ft)		254			599			241			218	
Turn Bay Length (ft)			50	100		50	115					
Base Capacity (vph)		392	274	211	548	408	160	1476			1179	
Starvation Cap Reductn		20	0	0	0	0	0	0			0	
Spillback Cap Reductn		0	0	0	6	0	0	0			0	
Storage Cap Reductn		0	0	0	0	0	0	0			0	
Reduced v/c Ratio		0.87	0.59	0.55	0.32	0.07	0.78	0.76			1.36	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 8 (8%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.36			
Intersection Signal Delay: 103.2		Intersection LOS: F	
Intersection Capacity Utilization 91.2%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 18: Michigan Avenue & Chicago Avenue



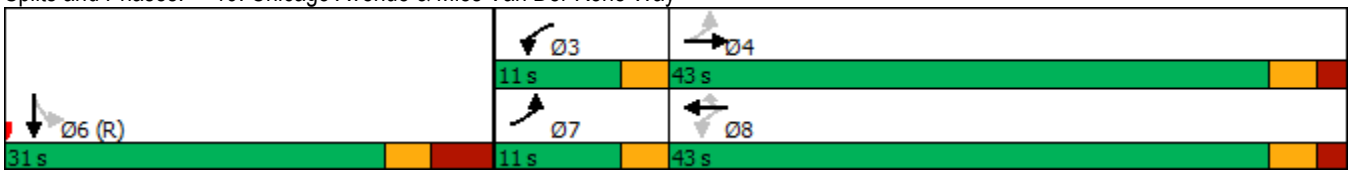


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	293	0	1	188	84	0	0	0	80	0	94
Future Volume (vph)	61	293	0	1	188	84	0	0	0	80	0	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	16	10	12
Storage Length (ft)	100		100	0		50	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1197	2270	0	718	1326	989	0	0	0	0	1196	0
Flt Permitted	0.578			0.564							0.978	
Satd. Flow (perm)	570	2270	0	426	1326	689	0	0	0	0	1045	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						90					68	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		679			400			272			306	
Travel Time (s)		15.4			9.1			6.2			7.0	
Confl. Peds. (#/hr)	101					101				226		70
Confl. Bikes (#/hr)			10			5						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	20%	22%	0%	100%	14%	19%	2%	2%	2%	8%	0%	2%
Bus Blockages (#/hr)	0	18	18	0	0	21	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	308	0	1	198	88	0	0	0	0	183	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			75			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.75	1.39	1.33	1.33	1.33	1.48	1.33	1.33	1.33	1.05	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	Perm				Perm	NA	
Protected Phases	7	4		3	8						6	
Permitted Phases	4			8		8				6		
Detector Phase	7	4		3	8	8				6	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0				21.0	21.0	
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0				28.0	28.0	
Total Split (s)	11.0	43.0		11.0	43.0	43.0				31.0	31.0	
Total Split (%)	12.9%	50.6%		12.9%	50.6%	50.6%				36.5%	36.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0				4.0	4.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	1.0					1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0					8.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Recall Mode	None	Max		None	Max	Max				C-Max	C-Max	
Act Effct Green (s)	49.6	46.2		45.3	39.6	39.6					23.0	
Actuated g/C Ratio	0.58	0.54		0.53	0.47	0.47					0.27	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.17	0.25		0.00	0.32	0.24					0.55	
Control Delay	8.8	11.6		10.0	25.4	15.9					23.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0					0.0	
Total Delay	8.8	11.6		10.0	25.4	15.9					23.7	
LOS	A	B		A	C	B					C	
Approach Delay		11.1			22.4						23.7	
Approach LOS		B			C						C	
Queue Length 50th (ft)	14	40		0	108	23					51	
Queue Length 95th (ft)	31	81		m1	175	m55					119	
Internal Link Dist (ft)		599			320			192			226	
Turn Bay Length (ft)	100					50						
Base Capacity (vph)	384	1234		260	617	368					332	
Starvation Cap Reductn	0	0		0	0	0					0	
Spillback Cap Reductn	0	0		0	0	0					0	
Storage Cap Reductn	0	0		0	0	0					0	
Reduced v/c Ratio	0.17	0.25		0.00	0.32	0.24					0.55	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 23 (27%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 17.7		Intersection LOS: B	
Intersection Capacity Utilization 49.2%		ICU Level of Service A	
Analysis Period (min) 15			
* User Entered Value			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 19: Chicago Avenue & Mies Van Der Rohe Way

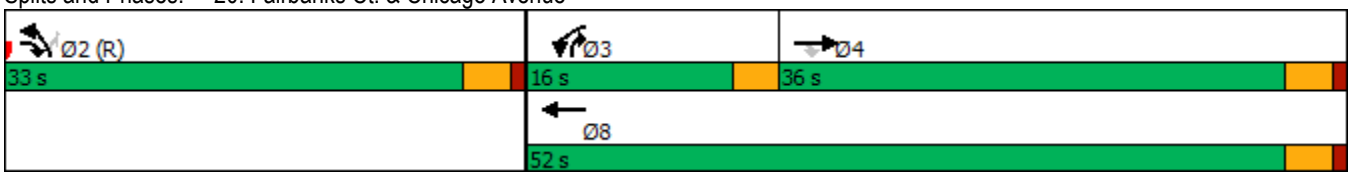


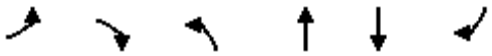
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	154	200	31	67	249	93
Future Volume (vph)	154	200	31	67	249	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	12	10	11	11	12
Storage Length (ft)		0	100		140	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	1550	1151	1422	1550	1340	1249
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1550	560	850	1550	1340	861
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		211				69
Link Speed (mph)	30			30	30	
Link Distance (ft)	400			888	320	
Travel Time (s)	9.1			20.2	7.3	
Confl. Peds. (#/hr)		305	305			315
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	11%	1%	1%	11%	1%
Bus Blockages (#/hr)	0	18	0	0	0	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	162	211	33	71	262	98
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			10	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.28	1.34	1.33	1.28	1.28	1.36
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Minimum Split (s)	29.0	29.0	8.0	29.0	29.0	8.0
Total Split (s)	36.0	33.0	16.0	52.0	33.0	16.0
Total Split (%)	42.4%	38.8%	18.8%	61.2%	38.8%	18.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	0.0	1.0	1.0	0.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?						
Act Effct Green (s)	31.0	59.0	12.0	47.0	28.0	41.0
Actuated g/C Ratio	0.36	0.69	0.14	0.55	0.33	0.48
v/c Ratio	0.29	0.33	0.17	0.08	0.59	0.19
Control Delay	14.4	6.5	34.5	9.3	30.4	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.4	6.5	34.5	9.3	30.4	5.3
LOS	B	A	C	A	C	A

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	9.9			17.3	23.6	
Approach LOS	A			B	C	
Queue Length 50th (ft)	66	0	16	17	115	7
Queue Length 95th (ft)	43	64	42	36	196	30
Internal Link Dist (ft)	320			808	240	
Turn Bay Length (ft)			100		140	
Base Capacity (vph)	565	647	200	857	441	505
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.33	0.17	0.08	0.59	0.19

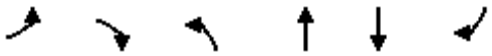
Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 23 (27%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 16.7		Intersection LOS: B	
Intersection Capacity Utilization 57.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 20: Fairbanks Ct. & Chicago Avenue





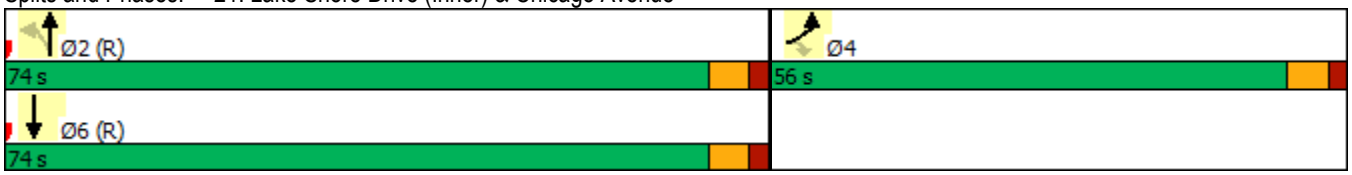
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	115	132	75	100	100	20
Future Volume (vph)	115	132	75	100	100	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	1408	1260	0	2757	2746	0
Flt Permitted	0.950			0.783		
Satd. Flow (perm)	1408	1260	0	2205	2746	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		139			21	
Link Speed (mph)	30			40	30	
Link Distance (ft)	888			307	377	
Travel Time (s)	20.2			5.2	8.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	121	139	0	184	126	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	20			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	23.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	29.0	
Total Split (s)	56.0	56.0	74.0	74.0	74.0	
Total Split (%)	43.1%	43.1%	56.9%	56.9%	56.9%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	
Act Effct Green (s)	15.7	15.7		100.3	100.3	
Actuated g/C Ratio	0.12	0.12		0.77	0.77	
v/c Ratio	0.72	0.51		0.11	0.06	
Control Delay	76.5	14.4		4.4	3.6	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	76.5	14.4		4.4	3.6	
LOS	E	B		A	A	
Approach Delay	43.3			4.4	3.6	
Approach LOS	D			A	A	
Queue Length 50th (ft)	100	0		17	9	



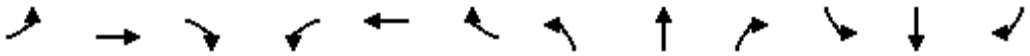
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Length 95th (ft)	158	59		34	21	
Internal Link Dist (ft)	808			227	297	
Turn Bay Length (ft)						
Base Capacity (vph)	530	561		1701	2123	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.23	0.25		0.11	0.06	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 118 (91%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 22.0		Intersection LOS: C	
Intersection Capacity Utilization 40.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: Lake Shore Drive (Inner) & Chicago Avenue



PM Reports

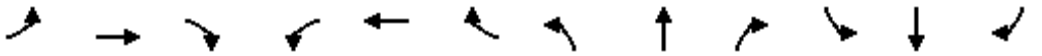


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	407	73	55	496	107	140	1284	78	122	792	114
Future Volume (vph)	97	407	73	55	496	107	140	1284	78	122	792	114
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	12	10	11	9	10	11	9
Storage Length (ft)	50		0	50		0	100		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1509	2453	0	1494	2579	0	1368	2747	0	1408	2743	0
Flt Permitted	0.179			0.292			0.186			0.081		
Satd. Flow (perm)	281	2453	0	436	2579	0	268	2747	0	120	2743	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			20			7			18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		633			670			340			330	
Travel Time (s)		14.4			15.2			7.7			7.5	
Confl. Peds. (#/hr)	30		85	85		30	40		42	42		40
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	5%	6%	3%	8%	4%	5%	7%	3%	2%	5%	7%
Bus Blockages (#/hr)	0	6	6	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	505	0	58	635	0	147	1434	0	128	954	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.44	1.22	1.22	1.33	1.22	1.33	1.28	1.39	1.33	1.28	1.39
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	9.0	29.0		9.0	29.0		9.0	26.0		9.0	26.0	
Total Split (s)	9.0	33.0		9.0	33.0		16.0	67.0		11.0	62.0	
Total Split (%)	7.5%	27.5%		7.5%	27.5%		13.3%	55.8%		9.2%	51.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Act Effct Green (s)	34.0	27.0		34.0	27.0		74.0	61.0		65.0	56.0	
Actuated g/C Ratio	0.28	0.22		0.28	0.22		0.62	0.51		0.54	0.47	
v/c Ratio	0.78	0.90		0.35	1.07		0.53	1.03		0.91	0.74	
Control Delay	72.0	63.5		29.7	89.3		17.3	60.3		81.2	29.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	72.0	63.5		29.7	89.3		17.3	60.3		81.2	29.9	
LOS	E	E		C	F		B	E		F	C	
Approach Delay		64.9			84.3			56.3			35.9	
Approach LOS		E			F			E			D	
Queue Length 50th (ft)	58	195		29	~261		46	~621		52	303	
Queue Length 95th (ft)	#142	#295		m54	#384		77	#763		#174	387	
Internal Link Dist (ft)		553			590			260			250	
Turn Bay Length (ft)	50			50			100			100		
Base Capacity (vph)	130	564		167	595		275	1399		140	1289	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.78	0.90		0.35	1.07		0.53	1.03		0.91	0.74	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 13 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 57.0		Intersection LOS: E	
Intersection Capacity Utilization 96.2%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 1: Western Avenue & Chicago Avenue

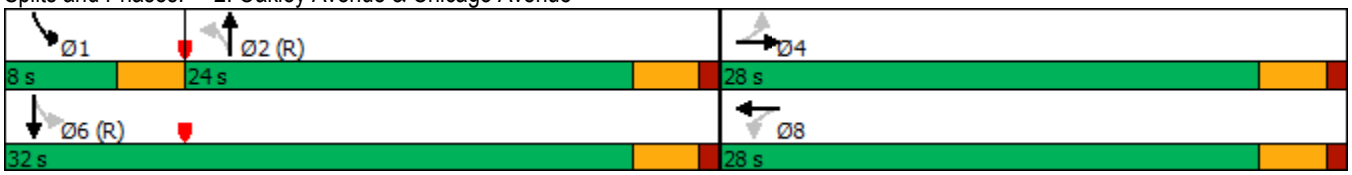


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	533	25	25	533	25	50	100	50	50	100	50
Future Volume (vph)	25	533	25	25	533	25	50	100	50	50	100	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	0		0	0		0	30		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2794	0	0	2794	0	0	1415	0	0	1415	0
Flt Permitted		0.916			0.916			0.880			0.898	
Satd. Flow (perm)	0	2564	0	0	2564	0	0	1260	0	0	1286	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			9			29			37	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		670			631			329			347	
Travel Time (s)		15.2			14.3			7.5			7.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	613	0	0	613	0	0	211	0	0	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	15.0	15.0		15.0	15.0		22.0	22.0		8.0	22.0	
Total Split (s)	28.0	28.0		28.0	28.0		24.0	24.0		8.0	32.0	
Total Split (%)	46.7%	46.7%		46.7%	46.7%		40.0%	40.0%		13.3%	53.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		0.0	1.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?												
Act Effct Green (s)		23.0			23.0			19.0			27.0	
Actuated g/C Ratio		0.38			0.38			0.32			0.45	
v/c Ratio		0.62			0.62			0.50			0.35	
Control Delay		22.8			18.1			19.3			10.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		22.8			18.1			19.3			10.7	
LOS		C			B			B			B	
Approach Delay		22.8			18.1			19.3			10.7	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		157			89			52			37	
Queue Length 95th (ft)		m185			138			109			78	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		590			551			249			267	
Turn Bay Length (ft)												
Base Capacity (vph)		988			988			418			605	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.62			0.62			0.50			0.35	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 19.1		Intersection LOS: B	
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: Oakley Avenue & Chicago Avenue



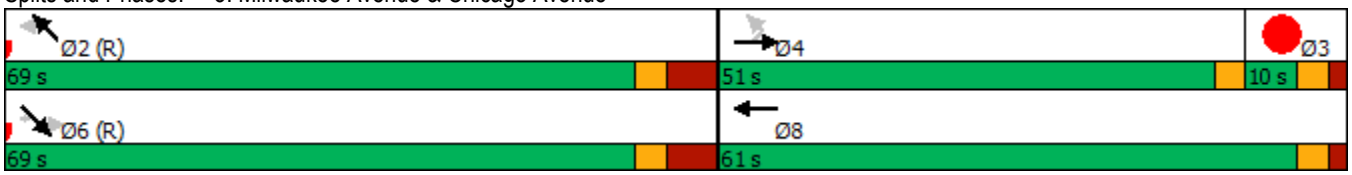
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	43	411	111	0	960	206	129	657	54	101	607	6
Future Volume (vph)	43	411	111	0	960	206	129	657	54	101	607	6
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	130		50	0		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2595	0	0	2692	0	1408	1482	1260	1408	1480	0
Flt Permitted	0.085						0.209			0.169		
Satd. Flow (perm)	126	2595	0	0	2692	0	307	1482	1135	251	1480	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			24				42			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		426			207			537			178	
Travel Time (s)		9.7			4.7			12.2			4.0	
Confl. Peds. (#/hr)	38		59			38	36		71	71		36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	18	18	0	0	18	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	550	0	0	1228	0	136	692	57	106	645	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.39	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4						6		6	2		
Minimum Split (s)	8.0	8.0			35.0		39.0	39.0	39.0	39.0	39.0	
Total Split (s)	51.0	51.0			61.0		69.0	69.0	69.0	69.0	69.0	
Total Split (%)	39.2%	39.2%			46.9%		53.1%	53.1%	53.1%	53.1%	53.1%	
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	0.0			2.0		5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0			1.0		1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	4.0	4.0			6.0		9.0	9.0	9.0	9.0	9.0	
Lead/Lag	Lead	Lead										
Lead-Lag Optimize?	Yes	Yes										
Act Effct Green (s)	47.0	47.0			55.0		60.0	60.0	60.0	60.0	60.0	
Actuated g/C Ratio	0.36	0.36			0.42		0.46	0.46	0.46	0.46	0.46	
v/c Ratio	1.00	0.57			1.07		0.96	1.01	0.10	0.92	0.94	
Control Delay	179.8	34.4			64.3		103.3	72.5	8.5	67.3	34.7	
Queue Delay	0.0	0.7			0.0		0.0	0.0	0.0	4.9	32.7	
Total Delay	179.8	35.0			64.3		103.3	72.5	8.5	72.2	67.4	
LOS	F	D			E		F	E	A	E	E	
Approach Delay		46.0			64.3			73.1			68.1	
Approach LOS		D			E			E			E	

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Bus Blockages (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Minimum Split (s)	10.0
Total Split (s)	10.0
Total Split (%)	8%
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Queue Length 50th (ft)	37	184			~596		109	~590	7	87	536	
Queue Length 95th (ft)	#123	245			#736		#249	#851	32	m#125	m#719	
Internal Link Dist (ft)		346			127			457			98	
Turn Bay Length (ft)	50						130		50			
Base Capacity (vph)	45	957			1152		141	684	546	115	683	
Starvation Cap Reductn	0	0			0		0	0	0	3	81	
Spillback Cap Reductn	0	153			0		0	0	0	0	0	
Storage Cap Reductn	0	0			0		0	0	0	0	0	
Reduced v/c Ratio	1.00	0.68			1.07		0.96	1.01	0.10	0.95	1.07	

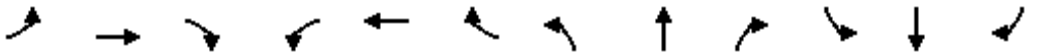
Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 64.2		Intersection LOS: E	
Intersection Capacity Utilization 126.6%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: Milwaukee Avenue & Chicago Avenue



Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	596	0	261	1143	11	0	142	375	36	139	73
Future Volume (vph)	21	596	0	261	1143	11	0	142	375	36	139	73
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	50		0	0		0	50		50
Storage Lanes	1		0	1		0	0		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2816	0	1408	2811	0	0	1482	1260	1408	1482	1260
Flt Permitted	0.159			0.414						0.586		
Satd. Flow (perm)	231	2816	0	591	2811	0	0	1482	1205	848	1482	1177
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1				324			67
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		207			1872			137			461	
Travel Time (s)		4.7			42.5			3.1			10.5	
Confl. Peds. (#/hr)	90			73		90			18	18		31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	627	0	275	1215	0	0	149	395	38	146	77
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8					2	6		6
Minimum Split (s)	40.0	40.0		13.0	13.0			27.0	27.0	27.0	27.0	27.0
Total Split (s)	96.0	96.0		88.0	88.0			34.0	34.0	34.0	34.0	34.0
Total Split (%)	73.8%	73.8%		67.7%	67.7%			26.2%	26.2%	26.2%	26.2%	26.2%
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	6.0	6.0	6.0
Lead/Lag				Lag	Lag							
Lead-Lag Optimize?												
Act Effct Green (s)	87.0	87.0		79.0	79.0			28.0	28.0	28.0	28.0	28.0
Actuated g/C Ratio	0.67	0.67		0.61	0.61			0.22	0.22	0.22	0.22	0.22
v/c Ratio	0.14	0.33		0.77	0.71			0.47	0.77	0.21	0.46	0.25
Control Delay	6.7	6.0		35.5	20.6			59.1	50.1	45.6	49.8	14.3
Queue Delay	0.0	0.6		5.5	2.2			93.7	66.2	0.0	54.2	0.0
Total Delay	6.7	6.6		41.0	22.7			152.8	116.3	45.6	104.1	14.3
LOS	A	A		D	C			F	F	D	F	B
Approach Delay		6.6			26.1			126.3			69.1	
Approach LOS		A			C			F			E	
Queue Length 50th (ft)	4	62		161	351			134	266	27	108	7

Lane Group	Ø7
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	7
Permitted Phases	
Minimum Split (s)	8.0
Total Split (s)	8.0
Total Split (%)	6%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	m7	m72		#346	436			m166	m352	61	178	50
Internal Link Dist (ft)		127			1792			57			381	
Turn Bay Length (ft)				50						50		50
Base Capacity (vph)	154	1884		359	1708			319	513	182	319	306
Starvation Cap Reductn	0	835		0	0			263	357	0	0	0
Spillback Cap Reductn	0	0		45	340			0	0	0	180	7
Storage Cap Reductn	0	0		0	0			0	0	0	0	0
Reduced v/c Ratio	0.14	0.60		0.88	0.89			2.66	2.53	0.21	1.05	0.26

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 17 (13%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 44.1		Intersection LOS: D	
Intersection Capacity Utilization 119.3%		ICU Level of Service H	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Ogden Avenue & Chicago Avenue

Lane Group	Ø7
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	168	562	65	27	372	0	0	599	186	150	534	0
Future Volume (vph)	168	562	65	27	372	0	0	599	186	150	534	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	110		0	0		0	0		0	90		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2701	0	1408	2816	0	0	1482	1260	1408	1482	0
Flt Permitted	0.520			0.234						0.244		
Satd. Flow (perm)	629	2701	0	347	2816	0	0	1482	1147	362	1482	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10							196			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		514			137			178			729	
Travel Time (s)		11.7			3.1			4.0			16.6	
Confl. Peds. (#/hr)	169		63	63					53	53		100
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	177	660	0	28	392	0	0	631	196	158	562	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6					4	8		
Minimum Split (s)	25.0	25.0		25.0	25.0			31.0	31.0	8.0	8.0	
Total Split (s)	48.0	48.0		54.0	54.0			76.0	76.0	66.0	66.0	
Total Split (%)	36.9%	36.9%		41.5%	41.5%			58.5%	58.5%	50.8%	50.8%	
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	0.0	0.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	4.0	4.0	
Lead/Lag	Lag	Lag								Lead	Lead	
Lead-Lag Optimize?	Yes	Yes								Yes	Yes	
Act Effct Green (s)	39.0	39.0		45.0	45.0			70.0	70.0	62.0	62.0	
Actuated g/C Ratio	0.30	0.30		0.35	0.35			0.54	0.54	0.48	0.48	
v/c Ratio	0.94	0.81		0.23	0.40			0.79	0.28	0.92	0.80	
Control Delay	97.2	50.3		34.9	32.0			9.6	0.4	84.3	38.8	
Queue Delay	48.7	51.7		4.8	60.5			23.3	2.8	0.0	1.3	
Total Delay	145.9	102.0		39.7	92.5			32.9	3.2	84.3	40.0	
LOS	F	F		D	F			C	A	F	D	
Approach Delay		111.3			89.0			25.8			49.7	
Approach LOS		F			F			C			D	
Queue Length 50th (ft)	145	266		15	118			84	0	121	390	

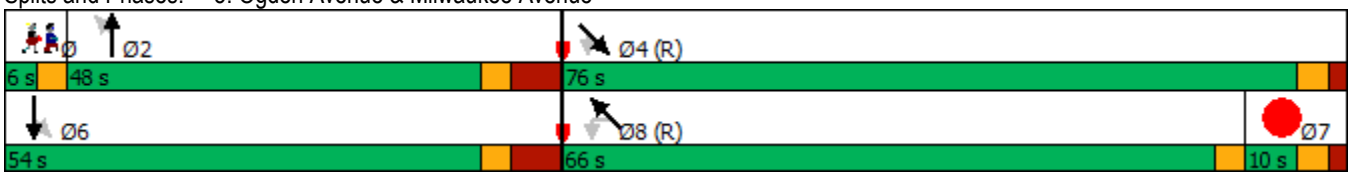
Lane Group	Ø1	Ø7
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	7
Permitted Phases		
Minimum Split (s)	6.0	10.0
Total Split (s)	6.0	10.0
Total Split (%)	5%	8%
Yellow Time (s)	3.0	3.0
All-Red Time (s)	0.0	2.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Queue Length 95th (ft)	#295	344		m28	173			m87	m0	#269	556	
Internal Link Dist (ft)		434			57			98			649	
Turn Bay Length (ft)	110									90		
Base Capacity (vph)	188	817		120	974			798	708	172	706	
Starvation Cap Reductn	0	0		55	698			181	402	0	0	
Spillback Cap Reductn	56	293		0	0			0	0	0	41	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	1.34	1.26		0.43	1.42			1.02	0.64	0.92	0.85	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 126 (97%), Referenced to phase 4:SET and 8:NWTL, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 66.9		Intersection LOS: E	
Intersection Capacity Utilization 105.3%		ICU Level of Service G	
Analysis Period (min) 15			

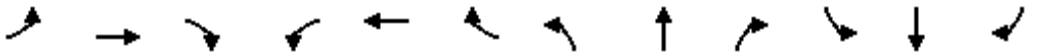
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Ogden Avenue & Milwaukee Avenue



Lane Group	Ø1	Ø7
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	670	25	135	894	99	43	552	135	88	494	348
Future Volume (vph)	142	670	25	135	894	99	43	552	135	88	494	348
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	80		0	80		0	95		0	80		260
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1342	2656	0	1368	2682	0	1064	2495	0	1131	2542	1168
Flt Permitted	0.194			0.323			0.390			0.260		
Satd. Flow (perm)	269	2656	0	446	2682	0	423	2495	0	308	2542	1007
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			17			33				58
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1872			743			718			744	
Travel Time (s)		42.5			16.9			16.3			16.9	
Confl. Peds. (#/hr)	102		123	123		102	57		18	18		57
Confl. Bikes (#/hr)			137			11			2			103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	6%	31%	5%	4%	6%	35%	12%	7%	27%	13%	10%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	149	731	0	142	1045	0	45	723	0	93	520	366
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Minimum Split (s)	33.0	33.0		33.0	33.0		29.0	29.0		29.0	29.0	29.0
Total Split (s)	58.0	58.0		58.0	58.0		42.0	42.0		42.0	42.0	42.0
Total Split (%)	58.0%	58.0%		58.0%	58.0%		42.0%	42.0%		42.0%	42.0%	42.0%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	52.0	52.0		52.0	52.0		36.0	36.0		36.0	36.0	36.0
Actuated g/C Ratio	0.52	0.52		0.52	0.52		0.36	0.36		0.36	0.36	0.36
v/c Ratio	1.07	0.53		0.61	0.75		0.30	0.79		0.85	0.57	0.92
Control Delay	125.2	17.5		31.1	22.6		29.6	34.6		85.8	28.7	55.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	125.2	17.5		31.1	22.6		29.6	34.6		85.8	28.7	55.9
LOS	F	B		C	C		C	C		F	C	E
Approach Delay		35.7			23.6			34.3			44.3	

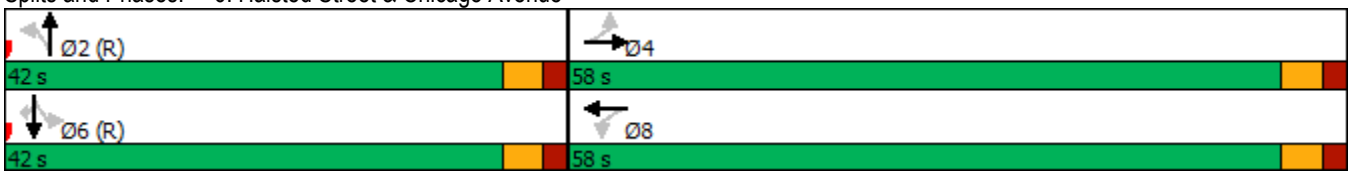
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		D			C			C			D	
Queue Length 50th (ft)	~105	153		61	257		20	205		54	138	191
Queue Length 95th (ft)	#230	206		#147	342		53	281		#152	193	#377
Internal Link Dist (ft)		1792			663			638			664	
Turn Bay Length (ft)	80			80			95			80		260
Base Capacity (vph)	139	1383		231	1402		152	919		110	915	399
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.07	0.53		0.61	0.75		0.30	0.79		0.85	0.57	0.92

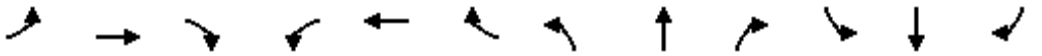
Intersection Summary			
Area Type:	CBD		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 33.9		Intersection LOS: C	
Intersection Capacity Utilization 119.9%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Halsted Street & Chicago Avenue



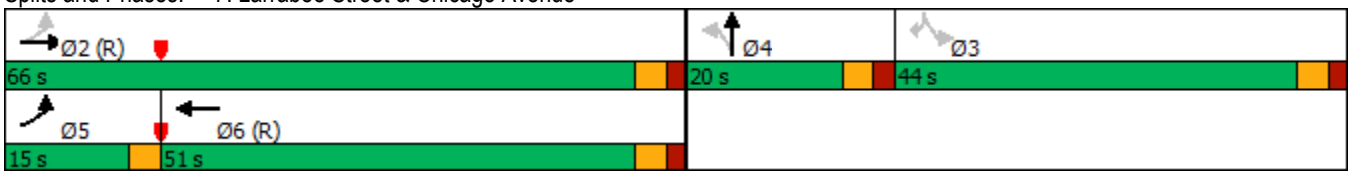


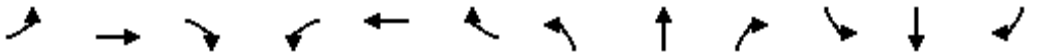
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	250	817	0	0	914	165	71	93	22	372	0	306
Future Volume (vph)	250	817	0	0	914	165	71	93	22	372	0	306
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2816	0	0	2384	0	0	1376	0	1408	0	1260
Flt Permitted	0.082							0.981		0.634		
Satd. Flow (perm)	116	2816	0	0	2384	0	0	1099	0	850	0	808
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					17			4				272
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		200			361			360			481	
Travel Time (s)		4.5			8.2			8.2			10.9	
Confl. Peds. (#/hr)	294		323	323		294	514		122	122		514
Confl. Bikes (#/hr)			67			9			12			24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	0	0	11	11	0	0	0	0	0	0
Parking (#/hr)					0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	263	860	0	0	1136	0	0	196	0	392	0	322
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.46	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA		Perm	NA		Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2						4			3		3
Detector Phase	5	2			6		4	4		3		3
Switch Phase												
Minimum Initial (s)	5.0	21.0			21.0		7.0	7.0		9.0		9.0
Minimum Split (s)	8.0	26.0			26.0		12.0	12.0		14.0		14.0
Total Split (s)	15.0	66.0			51.0		20.0	20.0		44.0		44.0
Total Split (%)	11.5%	50.8%			39.2%		15.4%	15.4%		33.8%		33.8%
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
All-Red Time (s)	0.0	2.0			2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)	1.0	1.0			1.0			1.0		1.0		1.0
Total Lost Time (s)	4.0	6.0			6.0			6.0		6.0		6.0
Lead/Lag	Lead				Lag		Lead	Lead		Lag		Lag
Lead-Lag Optimize?	Yes				Yes		Yes	Yes		Yes		Yes
Recall Mode	None	C-Max			C-Max		Min	Min		Min		Min
Act Effct Green (s)	62.0	60.0			45.0			14.0		38.0		38.0
Actuated g/C Ratio	0.48	0.46			0.35			0.11		0.29		0.29
v/c Ratio	1.60	0.66			1.36			1.62		1.58		0.75

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	324.7	30.2			199.1			349.0		312.1		20.2
Queue Delay	0.0	0.7			0.0			0.0		0.0		0.0
Total Delay	324.7	30.9			199.1			349.0		312.1		20.2
LOS	F	C			F			F		F		C
Approach Delay		99.7			199.1			349.0			180.4	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	~278	289			~662			~235		~469		32
Queue Length 95th (ft)	#456	364			#800			#394		#670		#177
Internal Link Dist (ft)		120			281			280			401	
Turn Bay Length (ft)	50											
Base Capacity (vph)	164	1299			836			121		248		428
Starvation Cap Reductn	0	0			0			0		0		0
Spillback Cap Reductn	0	163			0			0		0		0
Storage Cap Reductn	0	0			0			0		0		0
Reduced v/c Ratio	1.60	0.76			1.36			1.62		1.58		0.75

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 22 (17%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.62			
Intersection Signal Delay: 168.9		Intersection LOS: F	
Intersection Capacity Utilization 97.0%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Larrabee Street & Chicago Avenue





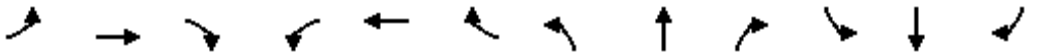
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	840	240	40	800	5	95	5	150	15	5	5
Future Volume (vph)	5	840	240	40	800	5	95	5	150	15	5	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	65		0	65		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2276	0	1408	2664	0	0	1317	0	1408	1314	0
Flt Permitted	0.324			0.169				0.872		0.515		
Satd. Flow (perm)	401	2276	0	251	2664	0	0	1148	0	759	1314	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		49			1			58			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		361			1193			355			175	
Travel Time (s)		8.2			27.1			8.1			4.0	
Confl. Peds. (#/hr)	211		139	139		211	30		7	7		30
Confl. Bikes (#/hr)			56			9			1			29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1137	0	42	847	0	0	263	0	16	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	20.0	20.0		8.0	20.0		27.0	27.0		27.0	27.0	
Total Split (s)	81.0	81.0		8.0	89.0		41.0	41.0		41.0	41.0	
Total Split (%)	62.3%	62.3%		6.2%	68.5%		31.5%	31.5%		31.5%	31.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		0.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0		1.0	1.0	
Total Lost Time (s)	5.0	5.0		4.0	5.0			5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Act Effct Green (s)	76.0	76.0		85.0	84.0			36.0		36.0	36.0	
Actuated g/C Ratio	0.58	0.58		0.65	0.65			0.28		0.28	0.28	
v/c Ratio	0.02	0.84		0.21	0.49			0.73		0.08	0.03	
Control Delay	4.6	12.8		10.6	13.1			46.2		36.1	25.6	
Queue Delay	0.0	0.2		0.0	9.8			1.0		0.0	0.0	
Total Delay	4.6	13.0		10.6	22.9			47.3		36.1	25.6	
LOS	A	B		B	C			D		D	C	
Approach Delay		13.0			22.3			47.3			32.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			C			D			C	
Queue Length 50th (ft)	1	460		12	181			159		10	3	
Queue Length 95th (ft)	m1	m162		26	230			#273		30	18	
Internal Link Dist (ft)		281			1113			275			95	
Turn Bay Length (ft)	65			65								
Base Capacity (vph)	234	1350		199	1721			359		210	367	
Starvation Cap Reductn	0	18		0	0			0		0	0	
Spillback Cap Reductn	0	0		0	842			17		0	0	
Storage Cap Reductn	0	0		0	0			0		0	0	
Reduced v/c Ratio	0.02	0.85		0.21	0.96			0.77		0.08	0.03	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 20.7		Intersection LOS: C	
Intersection Capacity Utilization 71.7%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Kingsbury Street & Chicago Avenue

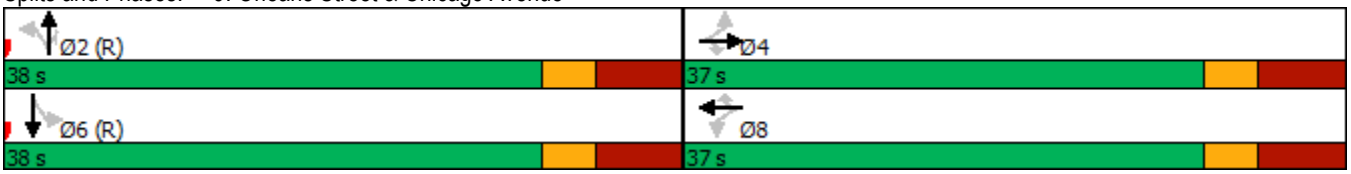


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	830	25	85	670	65	70	635	90	165	440	55
Future Volume (vph)	120	830	25	85	670	65	70	635	90	165	440	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	95		30	95		30	50		0	50		110
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2676	1144	1408	2676	1260	1408	1482	1260	1408	2730	0
Flt Permitted	0.340			0.242			0.459			0.154		
Satd. Flow (perm)	426	2676	775	333	2676	669	645	1482	1105	222	2730	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73			73			73		20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1193			406			352			306	
Travel Time (s)		27.1			9.2			8.0			7.0	
Confl. Peds. (#/hr)	206		258	258		206	106		107	107		106
Confl. Bikes (#/hr)			29			7			8			15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	23	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	874	26	89	705	68	74	668	95	174	521	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.50	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	30.0	30.0	30.0	30.0	30.0	
Total Split (s)	37.0	37.0	37.0	37.0	37.0	37.0	38.0	38.0	38.0	38.0	38.0	
Total Split (%)	49.3%	49.3%	49.3%	49.3%	49.3%	49.3%	50.7%	50.7%	50.7%	50.7%	50.7%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	28.0	28.0	28.0	28.0	28.0	28.0	29.0	29.0	29.0	29.0	29.0	
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37	0.37	0.39	0.39	0.39	0.39	0.39	
v/c Ratio	0.79	0.87	0.08	0.72	0.71	0.23	0.30	1.17	0.20	2.05	0.49	
Control Delay	58.5	33.7	0.4	39.0	15.4	4.0	20.1	117.6	7.0	530.4	18.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	58.5	33.7	0.4	39.0	15.4	4.0	20.1	117.6	7.0	530.4	18.6	
LOS	E	C	A	D	B	A	C	F	A	F	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		35.9			16.9			96.4			146.7	
Approach LOS		D			B			F			F	
Queue Length 50th (ft)	51	194	0	12	48	0	23	~376	6	~129	90	
Queue Length 95th (ft)	#148	#306	1	m36	126	m1	57	#573	35	#213	134	
Internal Link Dist (ft)		1113			326			272			226	
Turn Bay Length (ft)	95		30	95		30	50			50		
Base Capacity (vph)	159	999	335	124	999	295	249	573	472	85	1067	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.79	0.87	0.08	0.72	0.71	0.23	0.30	1.17	0.20	2.05	0.49	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 24 (32%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 2.05			
Intersection Signal Delay: 68.5		Intersection LOS: E	
Intersection Capacity Utilization 128.6%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Orleans Street & Chicago Avenue



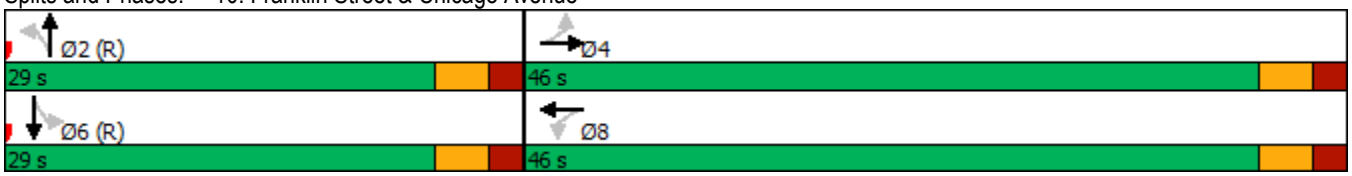
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	975	30	46	762	26	38	87	54	35	104	13
Future Volume (vph)	20	975	30	46	762	26	38	87	54	35	104	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	0	2607	0	0	2565	0	0	1321	0	0	1406	0
Flt Permitted		0.929			0.834			0.909			0.897	
Satd. Flow (perm)	0	2421	0	0	2135	0	0	1151	0	0	1235	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			6			7			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		406			399			394			261	
Travel Time (s)		9.2			9.1			9.0			5.9	
Confl. Peds. (#/hr)	120		461	461		120	260		182	182		260
Confl. Bikes (#/hr)			13			2			1			3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	0	0	11	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1079	0	0	877	0	0	189	0	0	160	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.46	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	17.0	17.0		17.0	17.0		26.0	26.0		18.0	18.0	
Total Split (s)	46.0	46.0		46.0	46.0		29.0	29.0		29.0	29.0	
Total Split (%)	61.3%	61.3%		61.3%	61.3%		38.7%	38.7%		38.7%	38.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		40.0			40.0			23.0			23.0	
Actuated g/C Ratio		0.53			0.53			0.31			0.31	
v/c Ratio		0.83			0.77			0.53			0.42	
Control Delay		11.0			30.2			27.1			23.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		11.0			30.2			27.1			23.8	
LOS		B			C			C			C	
Approach Delay		11.0			30.2			27.1			23.8	
Approach LOS		B			C			C			C	
Queue Length 50th (ft)		82			189			69			56	

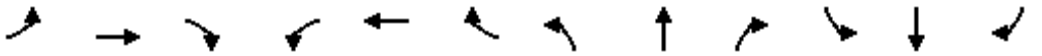
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		m108			m198			133			109	
Internal Link Dist (ft)		326			319			314			181	
Turn Bay Length (ft)												
Base Capacity (vph)		1294			1141			357			383	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.83			0.77			0.53			0.42	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 25 (33%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 20.5		Intersection LOS: C	
Intersection Capacity Utilization 93.7%		ICU Level of Service F	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Franklin Street & Chicago Avenue





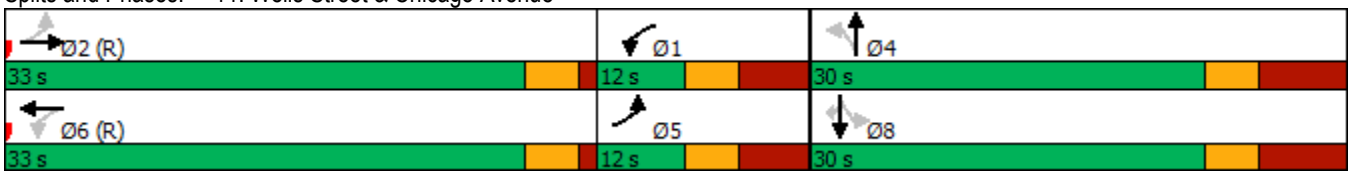
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	867	109	63	821	84	13	88	14	109	344	55
Future Volume (vph)	100	867	109	63	821	84	13	88	14	109	344	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	100		0	80		0	0		0	0		75
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1408	2472	0	1408	2570	0	0	1430	0	0	1465	1260
Flt Permitted	0.150			0.150				0.833			0.880	
Satd. Flow (perm)	213	2472	0	207	2570	0	0	1194	0	0	1280	1070
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			16			9				116
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		399			407			355			273	
Travel Time (s)		9.1			9.3			8.1			6.2	
Confl. Peds. (#/hr)	119		282	282		119	79		90	90		79
Confl. Bikes (#/hr)			11			5			3			87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	1028	0	66	952	0	0	122	0	0	477	58
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	17.0		5.0	17.0		22.0	22.0		22.0	22.0	22.0
Minimum Split (s)	12.0	21.0		12.0	21.0		30.0	30.0		30.0	30.0	30.0
Total Split (s)	12.0	33.0		12.0	33.0		30.0	30.0		30.0	30.0	30.0
Total Split (%)	16.0%	44.0%		16.0%	44.0%		40.0%	40.0%		40.0%	40.0%	40.0%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	4.0	1.0		4.0	1.0		5.0	5.0		5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0			1.0	1.0
Total Lost Time (s)	8.0	5.0		8.0	5.0			9.0			9.0	9.0
Lead/Lag	Lag	Lead		Lag	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max
Act Effct Green (s)	29.0	28.0		29.0	28.0			23.4			23.4	23.4
Actuated g/C Ratio	0.39	0.37		0.39	0.37			0.31			0.31	0.31
v/c Ratio	0.72	1.10		0.46	0.98			0.32			1.20	0.14
Control Delay	36.8	70.8		20.1	45.2			22.8			139.2	1.4

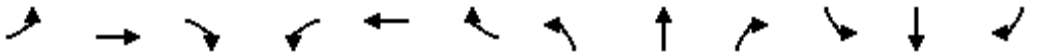
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	36.8	70.8		20.1	45.2			22.8			139.2	1.4
LOS	D	E		C	D			C			F	A
Approach Delay		67.7			43.6			22.8			124.2	
Approach LOS		E			D			C			F	
Queue Length 50th (ft)	17	~303		13	183			42			~294	0
Queue Length 95th (ft)	m30	m#416		m16	m#271			87			#468	5
Internal Link Dist (ft)		319			327			275			193	
Turn Bay Length (ft)	100			80								75
Base Capacity (vph)	146	936		144	969			378			399	413
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.72	1.10		0.46	0.98			0.32			1.20	0.14

Intersection Summary

Area Type: CBD
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 4 (5%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.20
Intersection Signal Delay: 67.8 Intersection LOS: E
Intersection Capacity Utilization 90.6% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 11: Wells Street & Chicago Avenue



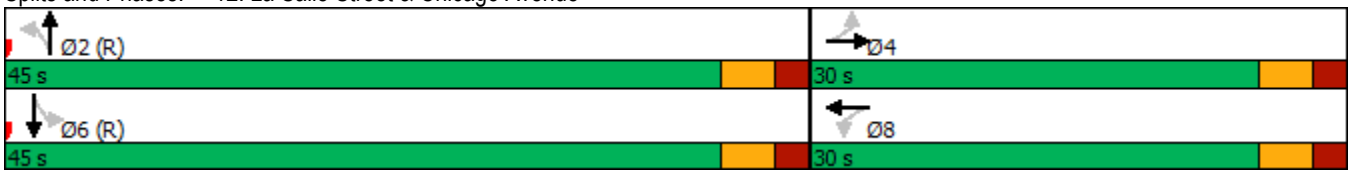


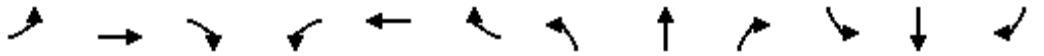
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	700	84	81	654	131	156	1207	92	116	711	120
Future Volume (vph)	141	700	84	81	654	131	156	1207	92	116	711	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	10	11	12	11	11	12	11	11	12
Storage Length (ft)	100		0	70		0	120		0	80		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1436	2603	0	1408	2621	0	1488	4048	0	1488	4062	0
Flt Permitted	0.195			0.196			0.298			0.149		
Satd. Flow (perm)	282	2603	0	278	2621	0	457	4048	0	229	4062	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			18			9			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		407			413			368			440	
Travel Time (s)		9.3			9.4			8.4			10.0	
Confl. Peds. (#/hr)	190		191	191		190	72		151	151		72
Confl. Bikes (#/hr)			10			6			1			4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	2%	2%	1%	0%	3%	7%	0%	2%	0%
Bus Blockages (#/hr)	0	18	18	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	148	825	0	85	826	0	164	1368	0	122	874	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.22	1.33	1.36	1.22	1.28	1.28	1.22	1.28	1.28	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	29.0	29.0		29.0	29.0		28.0	28.0		28.0	28.0	
Total Split (s)	30.0	30.0		30.0	30.0		45.0	45.0		45.0	45.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	24.0	24.0		24.0	24.0		39.0	39.0		39.0	39.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32		0.52	0.52		0.52	0.52	
v/c Ratio	1.64	0.98		0.97	0.97		0.69	0.65		1.03	0.41	
Control Delay	315.0	19.3		47.0	21.1		32.6	14.8		115.9	11.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	315.0	19.3		47.0	21.1		32.6	14.8		115.9	11.6	
LOS	F	B		D	C		C	B		F	B	
Approach Delay		64.2			23.5			16.7			24.4	
Approach LOS		E			C			B			C	
Queue Length 50th (ft)	~98	57		34	175		53	156		~57	83	
Queue Length 95th (ft)	m#86	m51		m23	m116		#158	202		#161	112	
Internal Link Dist (ft)		327			333			288			360	
Turn Bay Length (ft)	100			70			120			80		
Base Capacity (vph)	90	845		88	850		237	2109		119	2118	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	1.64	0.98		0.97	0.97		0.69	0.65		1.03	0.41	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 43 (57%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 1.64			
Intersection Signal Delay: 30.3		Intersection LOS: C	
Intersection Capacity Utilization 116.8%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 12: La Salle Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	778	89	43	800	0	0	0	0	50	1050	141
Future Volume (vph)	0	778	89	43	800	0	0	0	0	50	1050	141
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	10	11	12	12	12	12	12	10	12
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2805	0	1408	1397	0	0	0	0	0	3953	0
Flt Permitted				0.179							0.998	
Satd. Flow (perm)	0	2805	0	257	1397	0	0	0	0	0	3946	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18									32	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		413			144			365			405	
Travel Time (s)		9.4			3.3			8.3			9.2	
Confl. Peds. (#/hr)			128	128						42		45
Confl. Bikes (#/hr)			12									58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	2%	4%	2%	2%	2%	2%	6%	1%	2%
Bus Blockages (#/hr)	0	18	18	0	18	18	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	913	0	45	842	0	0	0	0	0	1306	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.28	1.22	1.33	1.40	1.22	1.22	1.22	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		pm+pt	NA					Perm	NA	
Protected Phases		4		3	8						6	
Permitted Phases				8						6		
Minimum Split (s)		24.0		8.0	24.0					26.0	26.0	
Total Split (s)		35.0		10.0	45.0					30.0	30.0	
Total Split (%)		46.7%		13.3%	60.0%					40.0%	40.0%	
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)		5.0		0.0	5.0					2.0	2.0	
Lost Time Adjust (s)		1.0		1.0	1.0						1.0	
Total Lost Time (s)		9.0		4.0	9.0						6.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?		Yes		Yes								
Act Effct Green (s)		26.0		41.0	36.0						24.0	
Actuated g/C Ratio		0.35		0.55	0.48						0.32	
v/c Ratio		0.93		0.19	1.26						1.02	
Control Delay		43.9		6.5	133.0						56.1	
Queue Delay		5.0		0.0	0.4						31.4	
Total Delay		48.9		6.5	133.3						87.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D		A	F						F	
Approach Delay		48.9			126.9						87.5	
Approach LOS		D			F						F	
Queue Length 50th (ft)		224		6	~497						~223	
Queue Length 95th (ft)		m235		m6	m#359						#325	
Internal Link Dist (ft)		333			64			285			325	
Turn Bay Length (ft)				100								
Base Capacity (vph)		984		232	670						1284	
Starvation Cap Reductn		0		0	34						0	
Spillback Cap Reductn		46		0	0						141	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.97		0.19	1.32						1.14	

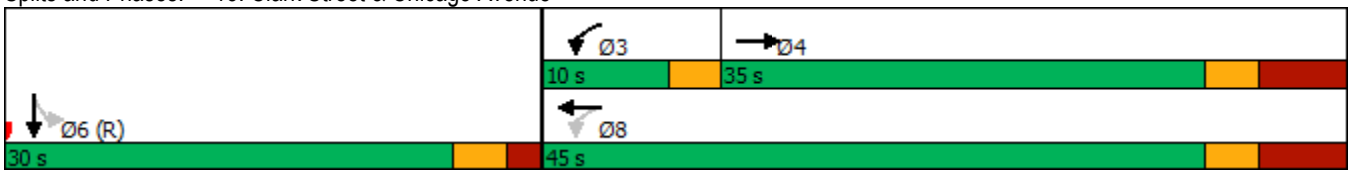
Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 34 (45%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.26			
Intersection Signal Delay: 87.4		Intersection LOS: F	
Intersection Capacity Utilization 133.2%		ICU Level of Service H	
Analysis Period (min) 15			

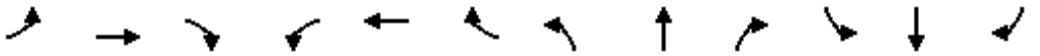
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: Clark Street & Chicago Avenue



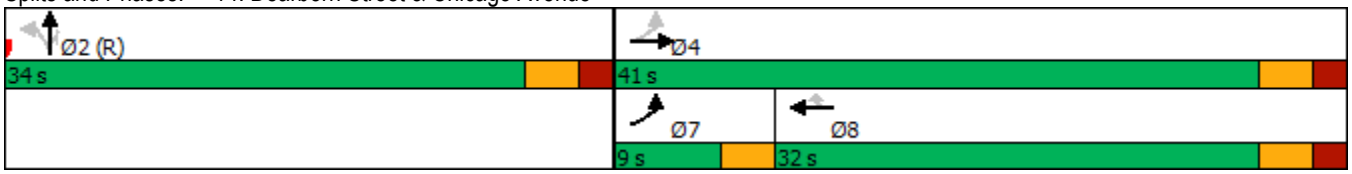


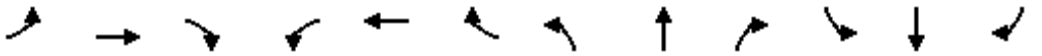
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	636	0	0	636	36	245	853	107	0	0	0
Future Volume (vph)	152	636	0	0	636	36	245	853	107	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	12	11	12	16	11	10	12	12	12
Storage Length (ft)	100		0	0		30	0		75	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1436	1425	0	0	1308	1316	1727	2946	1285	0	0	0
Flt Permitted	0.133						0.950					
Satd. Flow (perm)	201	1425	0	0	1308	907	1110	2946	651	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						73			73			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			428			364			418	
Travel Time (s)		5.4			9.7			8.3			9.5	
Confl. Peds. (#/hr)	257					257	162		216			
Confl. Bikes (#/hr)						2			12			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	2%	2%	3%	0%	1%	1%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	18	0	0	11	11	0	0	0	0	0	0
Parking (#/hr)					0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	160	669	0	0	669	38	258	898	113	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.40	1.22	1.22	1.53	1.29	1.05	1.28	1.33	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2		2			
Minimum Split (s)	8.0	23.0			23.0	23.0	22.0	22.0	22.0			
Total Split (s)	9.0	41.0			32.0	32.0	34.0	34.0	34.0			
Total Split (%)	12.0%	54.7%			42.7%	42.7%	45.3%	45.3%	45.3%			
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	1.0	1.0			1.0	1.0	1.0	1.0	1.0			
Total Lost Time (s)	4.0	6.0			6.0	6.0	6.0	6.0	6.0			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Act Effct Green (s)	37.0	35.0			26.0	26.0	28.0	28.0	28.0			
Actuated g/C Ratio	0.49	0.47			0.35	0.35	0.37	0.37	0.37			
v/c Ratio	0.88	1.01			1.48	0.10	0.62	0.82	0.39			
Control Delay	53.8	57.3			241.6	0.7	27.2	28.8	12.0			
Queue Delay	0.0	0.0			4.8	0.0	0.0	0.0	0.0			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	53.8	57.3			246.4	0.7	27.2	28.8	12.0			
LOS	D	E			F	A	C	C	B			
Approach Delay		56.6			233.2			27.0				
Approach LOS		E			F			C				
Queue Length 50th (ft)	68	~278			~436	0	96	193	12			
Queue Length 95th (ft)	m74	m#348			m#537	m0	176	#275	54			
Internal Link Dist (ft)		158			348			284			338	
Turn Bay Length (ft)	100					30			75			
Base Capacity (vph)	181	665			453	362	414	1099	288			
Starvation Cap Reductn	0	0			0	0	0	0	0			
Spillback Cap Reductn	0	0			165	0	0	0	0			
Storage Cap Reductn	0	0			0	0	0	0	0			
Reduced v/c Ratio	0.88	1.01			2.32	0.10	0.62	0.82	0.39			

Intersection Summary			
Area Type:	CBD		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 21 (28%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 1.48			
Intersection Signal Delay: 87.7		Intersection LOS: F	
Intersection Capacity Utilization 133.2%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 14: Dearborn Street & Chicago Avenue





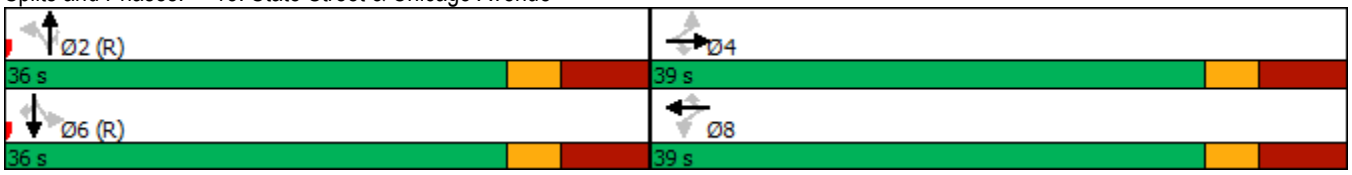
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	531	64	52	456	91	126	395	77	111	398	108
Future Volume (vph)	104	531	64	52	456	91	126	395	77	111	398	108
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	100		50	100		50	90		30	90		30
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1422	1334	1272	1422	1321	1216	1422	1482	1272	1422	1482	1272
Flt Permitted	0.369			0.284			0.411			0.415		
Satd. Flow (perm)	435	1334	675	368	1321	547	468	1482	841	526	1482	608
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73			73			73			73
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		428			375			323			297	
Travel Time (s)		9.7			8.5			7.3			6.8	
Confl. Peds. (#/hr)	295		191	191		295	260		154	154		260
Confl. Bikes (#/hr)			21			6			7			8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	2%	1%	1%	3%	1%	1%	2%	1%	1%	2%	1%
Bus Blockages (#/hr)	0	0	0	0	0	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	559	67	55	480	96	133	416	81	117	419	114
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.52	1.33	1.33	1.52	1.41	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	26.0	26.0	26.0	26.0	26.0	26.0
Total Split (s)	39.0	39.0	39.0	39.0	39.0	39.0	36.0	36.0	36.0	36.0	36.0	36.0
Total Split (%)	52.0%	52.0%	52.0%	52.0%	52.0%	52.0%	48.0%	48.0%	48.0%	48.0%	48.0%	48.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	27.0	27.0	27.0	27.0
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40	0.40	0.36	0.36	0.36	0.36	0.36	0.36
v/c Ratio	0.63	1.05	0.21	0.37	0.91	0.37	0.79	0.78	0.23	0.62	0.79	0.43
Control Delay	28.5	61.9	7.4	25.1	46.0	10.5	57.1	33.8	7.3	37.2	34.2	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

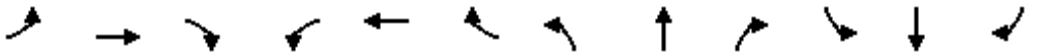
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	28.5	61.9	7.4	25.1	46.0	10.5	57.1	33.8	7.3	37.2	34.2	13.7
LOS	C	E	A	C	D	B	E	C	A	D	C	B
Approach Delay		52.0			38.8			35.3			31.2	
Approach LOS		D			D			D			C	
Queue Length 50th (ft)	29	~185	1	18	204	7	54	169	2	44	171	13
Queue Length 95th (ft)	m34	m#300	m6	52	#388	42	#152	#312	31	#120	#316	58
Internal Link Dist (ft)		348			295			243			217	
Turn Bay Length (ft)	100		50	100		50	90		30	90		30
Base Capacity (vph)	174	533	313	147	528	262	168	533	349	189	533	265
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	1.05	0.21	0.37	0.91	0.37	0.79	0.78	0.23	0.62	0.79	0.43

Intersection Summary

Area Type: CBD
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 17 (23%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 39.8 Intersection LOS: D
Intersection Capacity Utilization 115.7% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 15: State Street & Chicago Avenue



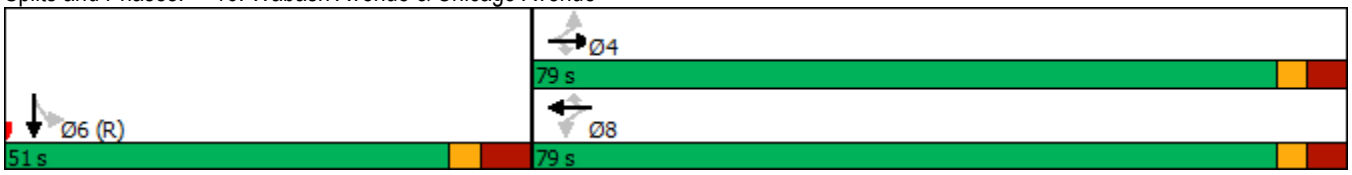


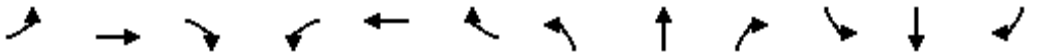
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	587	68	74	515	32	0	0	0	60	201	74
Future Volume (vph)	41	587	68	74	515	32	0	0	0	60	201	74
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	12	10	10	12	12	12	12	12	12	12
Storage Length (ft)	80		30	80		30	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	958	831	858	958	867	872	0	0	0	0	919	0
Flt Permitted	0.349			0.292							0.991	
Satd. Flow (perm)	352	831	265	294	867	126	0	0	0	0	833	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			42			42					12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		375			368			298			279	
Travel Time (s)		8.5			8.4			6.8			6.3	
Confl. Peds. (#/hr)	487		301	301		487				185		159
Confl. Bikes (#/hr)			24			5						9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	50%	52%	49%	50%	50%	51%	51%	51%	49%	49%	50%	50%
Bus Blockages (#/hr)	0	18	18	0	11	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	618	72	78	542	34	0	0	0	0	353	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.66	1.34	*0.50	1.60	1.29	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm				Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4		4	8		8				6		
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0				27.0	27.0	
Total Split (s)	79.0	79.0	79.0	79.0	79.0	79.0				51.0	51.0	
Total Split (%)	60.8%	60.8%	60.8%	60.8%	60.8%	60.8%				39.2%	39.2%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	4.0	4.0	4.0	4.0	4.0	4.0				5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0					1.0	
Total Lost Time (s)	8.0	8.0	8.0	8.0	8.0	8.0					9.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	71.0	71.0	71.0	71.0	71.0	71.0					42.0	
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55					0.32	
v/c Ratio	0.22	1.36	0.44	0.49	1.15	0.39					1.27	
Control Delay	19.1	205.2	17.9	31.1	117.3	17.1					184.6	
Queue Delay	0.0	0.6	0.0	0.0	1.0	0.0					0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	19.1	205.8	17.9	31.1	118.3	17.1					184.6	
LOS	B	F	B	C	F	B					F	
Approach Delay		176.4			102.6						184.6	
Approach LOS		F			F						F	
Queue Length 50th (ft)	18	~685	13	39	~534	0					~370	
Queue Length 95th (ft)	45	#916	61	97	#758	27					#567	
Internal Link Dist (ft)		295			288			218			199	
Turn Bay Length (ft)	80		30	80		30						
Base Capacity (vph)	192	453	163	160	473	87					277	
Starvation Cap Reductn	0	28	0	0	52	0					0	
Spillback Cap Reductn	0	0	0	0	0	0					0	
Storage Cap Reductn	0	0	0	0	0	0					0	
Reduced v/c Ratio	0.22	1.45	0.44	0.49	1.29	0.39					1.27	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.36			
Intersection Signal Delay: 150.3		Intersection LOS: F	
Intersection Capacity Utilization 91.9%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 16: Wabash Avenue & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	540	0	0	515	71	69	173	34	0	0	0
Future Volume (vph)	44	540	0	0	515	71	69	173	34	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	12	12	11	12	12	12	12	12	12	12
Storage Length (ft)	80		0	0		30	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1422	1270	0	0	1520	1363	0	1463	0	0	0	0
Flt Permitted	0.391							0.988				
Satd. Flow (perm)	463	1270	0	0	1520	399	0	1340	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						52		6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		368			334			328			284	
Travel Time (s)		8.4			7.6			7.5			6.5	
Confl. Peds. (#/hr)	372					372	121		173			
Confl. Bikes (#/hr)						5			3			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	3%	2%	2%	3%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	18	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0										
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	568	0	0	542	75	0	291	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.59	1.22	1.22	1.28	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Minimum Split (s)	21.0	21.0			21.0	21.0	27.0	27.0				
Total Split (s)	71.0	71.0			71.0	71.0	34.0	34.0				
Total Split (%)	67.6%	67.6%			67.6%	67.6%	32.4%	32.4%				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Lost Time Adjust (s)	1.0	1.0			1.0	1.0		1.0				
Total Lost Time (s)	9.0	9.0			9.0	9.0		9.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)	62.0	62.0			62.0	62.0		25.0				
Actuated g/C Ratio	0.59	0.59			0.59	0.59		0.24				
v/c Ratio	0.17	0.76			0.60	0.29		0.90				
Control Delay	11.8	24.1			10.6	3.9		69.6				
Queue Delay	0.0	21.7			1.2	0.0		0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	11.8	45.9			11.8	3.9		69.6				
LOS	B	D			B	A		E				
Approach Delay		43.3			10.9			69.6				
Approach LOS		D			B			E				
Queue Length 50th (ft)	13	264			108	1		187				
Queue Length 95th (ft)	33	425			m158	m8		#347				
Internal Link Dist (ft)		288			254			248			204	
Turn Bay Length (ft)	80					30						
Base Capacity (vph)	273	749			897	256		323				
Starvation Cap Reductn	0	188			168	0		0				
Spillback Cap Reductn	0	169			0	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.17	1.01			0.74	0.29		0.90				

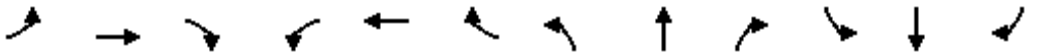
Intersection Summary			
Area Type:	CBD		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 17 (16%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 35.2		Intersection LOS: D	
Intersection Capacity Utilization 76.4%		ICU Level of Service D	
Analysis Period (min) 15			

* User Entered Value

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: Rush Street & Chicago Avenue

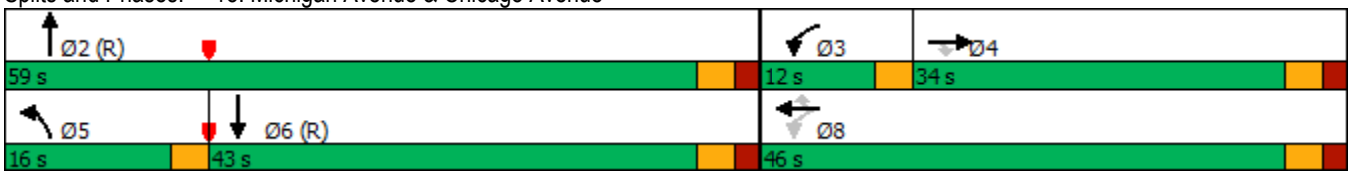


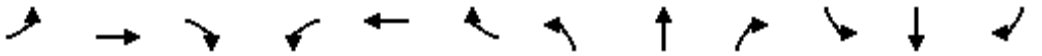
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	424	135	125	313	108	97	1391	81	0	1206	143
Future Volume (vph)	0	424	135	125	313	108	97	1391	81	0	1206	143
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	10	10	10	10	10	12	12	10	12
Storage Length (ft)	0		50	100		50	115		0	0		0
Storage Lanes	0		1	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1454	1193	1282	1440	1179	1408	3017	0	0	3201	0
Flt Permitted				0.136			0.950					
Satd. Flow (perm)	0	1454	793	164	1440	988	1292	3017	0	0	3201	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83			52		10			18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		334			679			321			298	
Travel Time (s)		7.6			15.4			7.3			6.8	
Confl. Peds. (#/hr)			411	411		141	352		437			352
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	12%	5%	9%	2%	4%	20%	2%	2%	0%
Bus Blockages (#/hr)	0	0	18	0	0	0	0	49	49	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	446	142	132	329	114	102	1549	0	0	1420	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.33	1.46	1.33	1.33	1.33	1.33	1.45	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	pm+pt	NA	Perm	Prot	NA			NA	
Protected Phases		4		3	8		5	2			6	
Permitted Phases			4	8		8						
Detector Phase		4	4	3	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)		29.0	29.0	5.0	29.0	29.0	5.0	19.0			19.0	
Minimum Split (s)		34.0	34.0	8.0	34.0	34.0	8.0	24.0			24.0	
Total Split (s)		34.0	34.0	12.0	46.0	46.0	16.0	59.0			43.0	
Total Split (%)		32.4%	32.4%	11.4%	43.8%	43.8%	15.2%	56.2%			41.0%	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
All-Red Time (s)		2.0	2.0	0.0	2.0	2.0	0.0	2.0			2.0	
Lost Time Adjust (s)		1.0	1.0	1.0	1.0	1.0	1.0	1.0			1.0	
Total Lost Time (s)		6.0	6.0	4.0	6.0	6.0	4.0	6.0			6.0	
Lead/Lag		Lag	Lag	Lead			Lead				Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes				Yes	
Recall Mode		Max	Max	None	Max	Max	None	C-Max			C-Max	
Act Effct Green (s)		28.0	28.0	42.0	40.0	40.0	10.5	53.0			38.5	
Actuated g/C Ratio		0.27	0.27	0.40	0.38	0.38	0.10	0.50			0.37	
v/c Ratio		1.15	0.52	0.88	0.60	0.28	0.73	1.01			1.20	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		116.3	15.9	73.2	31.7	14.7	74.1	53.3			129.3	
Queue Delay		0.4	0.0	0.0	0.4	0.0	0.0	0.0			0.0	
Total Delay		116.7	15.9	73.2	32.1	14.7	74.1	53.3			129.3	
LOS		F	B	E	C	B	E	D			F	
Approach Delay		92.3			38.1			54.5			129.3	
Approach LOS		F			D			D			F	
Queue Length 50th (ft)		~343	12	58	175	27	66	~445			~509	
Queue Length 95th (ft)		m#538	m43	#165	272	70	#138	#583			#622	
Internal Link Dist (ft)		254			599			241			218	
Turn Bay Length (ft)			50	100		50	115					
Base Capacity (vph)		387	272	150	548	408	160	1527			1184	
Starvation Cap Reductn		15	0	0	0	0	0	0			0	
Spillback Cap Reductn		0	0	0	33	0	0	0			0	
Storage Cap Reductn		0	0	0	0	0	0	0			0	
Reduced v/c Ratio		1.20	0.52	0.88	0.64	0.28	0.64	1.01			1.20	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 8 (8%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay: 82.6		Intersection LOS: F	
Intersection Capacity Utilization 89.3%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 18: Michigan Avenue & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	388	2	0	442	102	0	0	0	216	0	61
Future Volume (vph)	49	388	2	0	442	102	0	0	0	216	0	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	16	10	12
Storage Length (ft)	100		100	0		50	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1197	2269	0	756	1326	989	0	0	0	0	1276	0
Flt Permitted	0.353										0.962	
Satd. Flow (perm)	402	2269	0	756	1326	689	0	0	0	0	1003	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				90					64	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		679			400			272			306	
Travel Time (s)		15.4			9.1			6.2			7.0	
Confl. Peds. (#/hr)	101					101				226		70
Confl. Bikes (#/hr)			10			5						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	20%	22%	0%	100%	14%	19%	2%	2%	2%	8%	0%	2%
Bus Blockages (#/hr)	0	18	18	0	0	21	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	410	0	0	465	107	0	0	0	0	291	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			75			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.75	1.39	1.33	1.33	1.33	1.48	1.33	1.33	1.33	1.05	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	Perm				Perm	NA	
Protected Phases	7	4		3	8						6	
Permitted Phases	4			8		8				6		
Detector Phase	7	4		3	8	8				6	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0				21.0	21.0	
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0				28.0	28.0	
Total Split (s)	11.0	43.0		11.0	43.0	43.0				31.0	31.0	
Total Split (%)	12.9%	50.6%		12.9%	50.6%	50.6%				36.5%	36.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0				4.0	4.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	1.0					1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0					8.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Recall Mode	None	Max		None	Max	Max				C-Max	C-Max	
Act Effct Green (s)	50.0	48.0			41.6	41.6					23.0	
Actuated g/C Ratio	0.59	0.56			0.49	0.49					0.27	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.18	0.32			0.72	0.28					0.92	
Control Delay	9.1	10.7			30.1	12.5					59.0	
Queue Delay	0.0	0.0			1.0	0.0					0.7	
Total Delay	9.1	10.7			31.1	12.5					59.6	
LOS	A	B			C	B					E	
Approach Delay		10.5			27.6						59.6	
Approach LOS		B			C						E	
Queue Length 50th (ft)	11	56			261	28					121	
Queue Length 95th (ft)	26	84			m282	m37					#277	
Internal Link Dist (ft)		599			320			192			226	
Turn Bay Length (ft)	100					50						
Base Capacity (vph)	301	1281			649	383					318	
Starvation Cap Reductn	0	0			52	0					0	
Spillback Cap Reductn	0	81			0	0					2	
Storage Cap Reductn	0	0			0	0					0	
Reduced v/c Ratio	0.17	0.34			0.78	0.28					0.92	

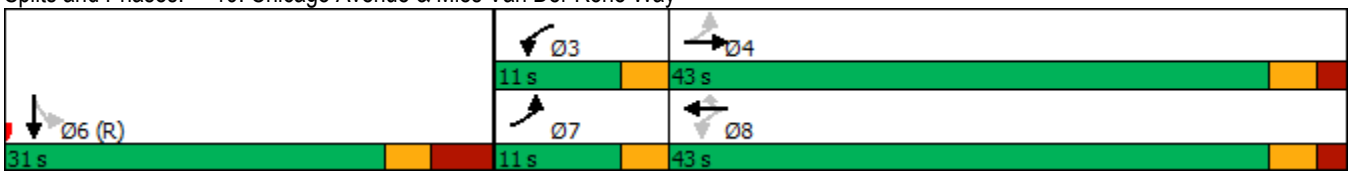
Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 23 (27%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 28.7		Intersection LOS: C	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 19: Chicago Avenue & Mies Van Der Rohe Way

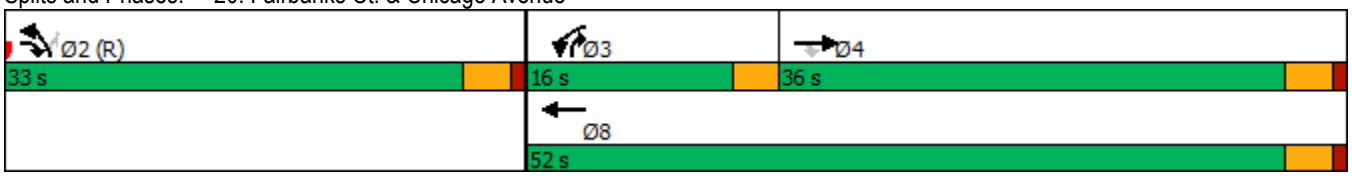


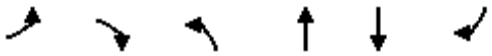
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	421	144	51	169	435	311
Future Volume (vph)	421	144	51	169	435	311
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	12	10	11	11	12
Storage Length (ft)		0	100		140	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	1550	1151	1422	1550	1340	1249
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1550	560	1035	1550	1340	861
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		152				23
Link Speed (mph)	30			30	30	
Link Distance (ft)	400			888	320	
Travel Time (s)	9.1			20.2	7.3	
Confl. Peds. (#/hr)		305	305			315
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	11%	1%	1%	11%	1%
Bus Blockages (#/hr)	0	18	0	0	0	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	443	152	54	178	458	327
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			10	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.28	1.34	1.33	1.28	1.28	1.36
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Minimum Split (s)	29.0	29.0	8.0	29.0	29.0	8.0
Total Split (s)	36.0	33.0	16.0	52.0	33.0	16.0
Total Split (%)	42.4%	38.8%	18.8%	61.2%	38.8%	18.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	0.0	1.0	1.0	0.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?						
Act Effct Green (s)	31.0	59.0	12.0	47.0	28.0	41.0
Actuated g/C Ratio	0.36	0.69	0.14	0.55	0.33	0.48
v/c Ratio	0.78	0.24	0.27	0.21	1.04	0.68
Control Delay	32.9	3.3	36.6	10.4	83.8	23.0
Queue Delay	0.7	0.0	0.0	0.0	0.0	0.0
Total Delay	33.6	3.3	36.6	10.4	83.8	23.0
LOS	C	A	D	B	F	C

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	25.8			16.5	58.5	
Approach LOS	C			B	E	
Queue Length 50th (ft)	226	9	26	45	~267	96
Queue Length 95th (ft)	m306	m27	61	79	#447	167
Internal Link Dist (ft)	320			808	240	
Turn Bay Length (ft)			100		140	
Base Capacity (vph)	565	629	200	857	441	481
Starvation Cap Reductn	18	0	0	0	0	0
Spillback Cap Reductn	0	0	0	93	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.24	0.27	0.23	1.04	0.68

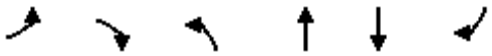
Intersection Summary			
Area Type:	CBD		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 23 (27%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 40.4		Intersection LOS: D	
Intersection Capacity Utilization 70.1%		ICU Level of Service C	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 20: Fairbanks Ct. & Chicago Avenue





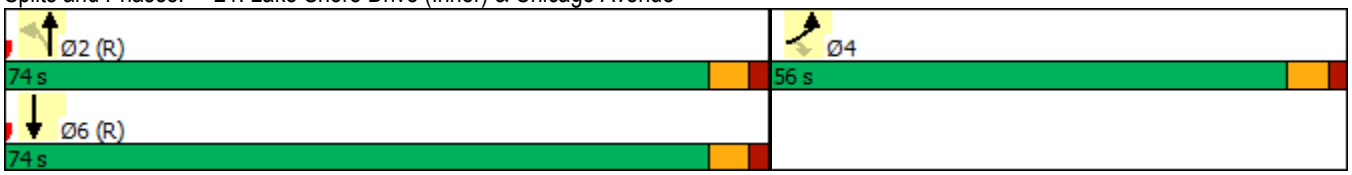
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	300	50	100	100	65
Future Volume (vph)	100	300	50	100	100	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Satd. Flow (prot)	1408	1260	0	2771	2650	0
Flt Permitted	0.950			0.811		
Satd. Flow (perm)	1408	1260	0	2284	2650	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		316			68	
Link Speed (mph)	30			40	30	
Link Distance (ft)	888			307	377	
Travel Time (s)	20.2			5.2	8.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	316	0	158	173	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	20			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	23.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	29.0	
Total Split (s)	56.0	56.0	74.0	74.0	74.0	
Total Split (%)	43.1%	43.1%	56.9%	56.9%	56.9%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	
Act Effct Green (s)	14.3	14.3		101.7	101.7	
Actuated g/C Ratio	0.11	0.11		0.78	0.78	
v/c Ratio	0.68	0.75		0.09	0.08	
Control Delay	76.3	17.5		3.9	2.5	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	76.3	17.5		3.9	2.5	
LOS	E	B		A	A	
Approach Delay	32.1			3.9	2.5	
Approach LOS	C			A	A	
Queue Length 50th (ft)	87	0		13	8	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Length 95th (ft)	143	95		28	22	
Internal Link Dist (ft)	808			227	297	
Turn Bay Length (ft)						
Base Capacity (vph)	530	671		1786	2088	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.20	0.47		0.09	0.08	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 118 (91%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 19.4		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: Lake Shore Drive (Inner) & Chicago Avenue



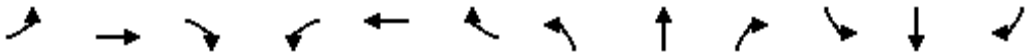
Synchro Reports -

2040 Volumes

Proposed Geometry

Optomized

AM Reports



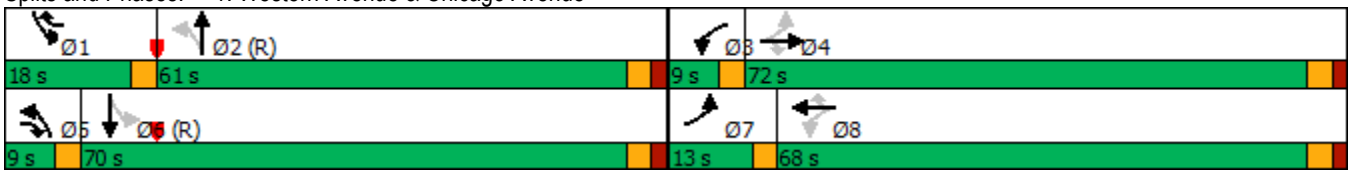
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	497	65	80	298	79	34	796	68	168	930	61
Future Volume (vph)	118	497	65	80	298	79	34	796	68	168	930	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	10	12	10	11	12	10	11	9	10	11	9
Storage Length (ft)	160		260	100		0	100		0	100		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	100			50			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98		0.82			0.93		0.98			0.99	
Frt			0.850			0.850		0.988			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1459	1296	1283	1395	1450	1313	1368	2713	0	1408	2773	0
Flt Permitted	0.408			0.254			0.139			0.122		
Satd. Flow (perm)	612	1296	1054	373	1450	1220	200	2713	0	181	2773	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			61			83		6			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		633			179			340			330	
Travel Time (s)		14.4			4.1			7.7			7.5	
Confl. Peds. (#/hr)	30		85	85		30	40		42	42		40
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	5%	6%	3%	8%	4%	5%	7%	3%	2%	5%	7%
Bus Blockages (#/hr)	0	0	3	0	0	2	0	0	0	0	0	0
Parking (#/hr)		0										
Adj. Flow (vph)	124	523	68	84	314	83	36	838	72	177	979	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	523	68	84	314	83	36	910	0	177	1043	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.28	1.52	1.24	1.33	1.28	1.24	1.33	1.28	1.39	1.33	1.28	1.39
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	9.0	29.0	9.0	9.0	29.0	9.0	9.0	26.0		9.0	26.0	
Total Split (s)	13.0	72.0	9.0	9.0	68.0	18.0	9.0	61.0		18.0	70.0	
Total Split (%)	8.1%	45.0%	5.6%	5.6%	42.5%	11.3%	5.6%	38.1%		11.3%	43.8%	
Maximum Green (s)	10.0	67.0	6.0	6.0	63.0	15.0	6.0	56.0		15.0	65.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Total Lost Time (s)	4.0	6.0	4.0	4.0	6.0	4.0	4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	

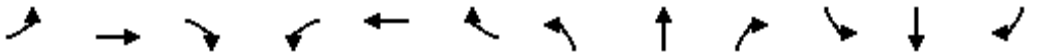
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		19.0			19.0			14.0			14.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	77.0	66.0	73.0	69.0	62.0	78.0	62.0	55.0		75.0	64.0	
Actuated g/C Ratio	0.48	0.41	0.46	0.43	0.39	0.49	0.39	0.34		0.47	0.40	
v/c Ratio	0.36	0.98	0.13	0.44	0.56	0.13	0.32	0.97		0.92	0.94	
Control Delay	27.0	80.0	6.6	26.7	35.6	7.4	31.3	74.3		77.4	61.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	27.0	80.0	6.6	26.7	35.6	7.4	31.3	74.3		77.4	61.6	
LOS	C	F	A	C	D	A	C	E		E	E	
Approach Delay		63.9			29.2			72.7			63.9	
Approach LOS		E			C			E			E	
Stops (vph)	66	434	10	52	195	15	20	779		93	894	
Fuel Used(gal)	2	13	0	1	5	1	0	20		4	20	
CO Emissions (g/hr)	112	905	32	80	335	43	29	1375		251	1392	
NOx Emissions (g/hr)	22	176	6	16	65	8	6	268		49	271	
VOC Emissions (g/hr)	26	210	8	18	78	10	7	319		58	323	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	73	536	4	48	224	11	20	492		111	547	
Queue Length 95th (ft)	117	#788	33	81	294	38	44	#641		#265	#694	
Internal Link Dist (ft)		553			99			260			250	
Turn Bay Length (ft)	160		260	100			100			100		
Base Capacity (vph)	342	534	521	192	561	645	114	936		192	1112	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.36	0.98	0.13	0.44	0.56	0.13	0.32	0.97		0.92	0.94	

Intersection Summary

Area Type: CBD
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 15 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 130
Control Type: Pretimed
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 61.4 Intersection LOS: E
Intersection Capacity Utilization 92.1% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Western Avenue & Chicago Avenue





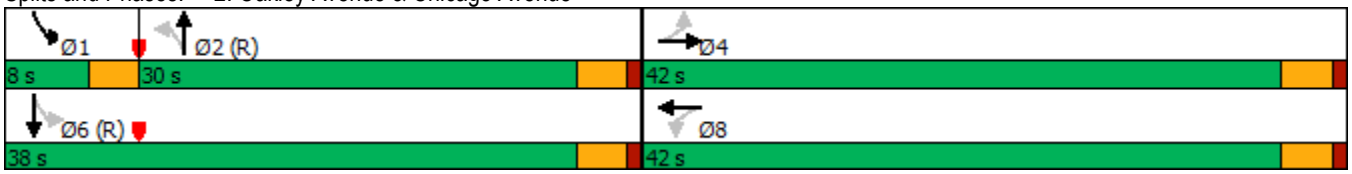
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	633	50	50	357	50	50	100	50	50	100	50
Future Volume (vph)	50	633	50	50	357	50	50	100	50	50	100	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	0		0	0		0	30		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.984			0.966			0.966	
Flt Protected		0.997			0.995			0.988			0.988	
Satd. Flow (prot)	0	2641	0	0	2758	0	0	1415	0	0	1415	0
Flt Permitted		0.886			0.811			0.878			0.901	
Satd. Flow (perm)	0	2347	0	0	2248	0	0	1257	0	0	1290	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		491			631			329			347	
Travel Time (s)		11.2			14.3			7.5			7.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0										
Adj. Flow (vph)	53	666	53	53	376	53	53	105	53	53	105	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	772	0	0	482	0	0	211	0	0	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	15.0	15.0		15.0	15.0		22.0	22.0		8.0	22.0	
Total Split (s)	42.0	42.0		42.0	42.0		30.0	30.0		8.0	38.0	
Total Split (%)	52.5%	52.5%		52.5%	52.5%		37.5%	37.5%		10.0%	47.5%	
Maximum Green (s)	38.0	38.0		38.0	38.0		26.0	26.0		5.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		0.0	1.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Flash Dont Walk (s)	6.0	6.0		6.0	6.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	
Act Effct Green (s)		37.0			37.0			25.0			33.0	
Actuated g/C Ratio		0.46			0.46			0.31			0.41	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.71			0.46			0.54			0.39	
Control Delay		16.1			16.6			28.8			19.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.1			16.6			28.8			19.1	
LOS		B			B			C			B	
Approach Delay		16.1			16.6			28.8			19.1	
Approach LOS		B			B			C			B	
Stops (vph)		527			299			164			134	
Fuel Used(gal)		9			5			3			2	
CO Emissions (g/hr)		639			381			181			144	
NOx Emissions (g/hr)		124			74			35			28	
VOC Emissions (g/hr)		148			88			42			33	
Dilemma Vehicles (#)		0			0			0			0	
Queue Length 50th (ft)		171			83			86			71	
Queue Length 95th (ft)		m186			124			155			125	
Internal Link Dist (ft)		411			551			249			267	
Turn Bay Length (ft)												
Base Capacity (vph)		1085			1039			392			536	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.71			0.46			0.54			0.39	

Intersection Summary	
Area Type:	CBD
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 18.2	Intersection LOS: B
Intersection Capacity Utilization 69.1%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Oakley Avenue & Chicago Avenue



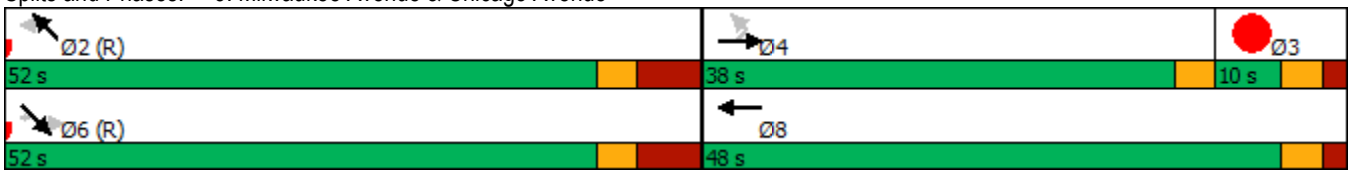
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	32	595	118	0	560	123	270	640	11	51	309	7
Future Volume (vph)	32	595	118	0	560	123	270	640	11	51	309	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	130		50	0		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	*0.80	0.95	1.00	*0.80	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	0.99			0.99		0.98		0.92	0.98	1.00	
Frt		0.975			0.973				0.850		0.997	
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1408	2206	0	0	2192	0	1408	1482	1260	1408	1476	0
Flt Permitted	0.202						0.510			0.170		
Satd. Flow (perm)	294	2206	0	0	2192	0	740	1482	1160	248	1476	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		426			207			537			178	
Travel Time (s)		9.7			4.7			12.2			4.0	
Confl. Peds. (#/hr)	38		59			38	36		71	71		36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	18	18	0	18	18	0	0	0	0	0	0
Adj. Flow (vph)	34	626	124	0	589	129	284	674	12	54	325	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	750	0	0	718	0	284	674	12	54	332	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.39	1.33	1.33	1.39	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4						6		6	2		
Minimum Split (s)	8.0	8.0			35.0		39.0	39.0	39.0	39.0	39.0	
Total Split (s)	38.0	38.0			48.0		52.0	52.0	52.0	52.0	52.0	
Total Split (%)	38.0%	38.0%			48.0%		52.0%	52.0%	52.0%	52.0%	52.0%	
Maximum Green (s)	35.0	35.0			43.0		44.0	44.0	44.0	44.0	44.0	
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	0.0			2.0		5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0			1.0		1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	4.0	4.0			6.0		9.0	9.0	9.0	9.0	9.0	
Lead/Lag	Lead	Lead										
Lead-Lag Optimize?	Yes	Yes										
Walk Time (s)					5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)					25.0		26.0	26.0	26.0	26.0	26.0	
Pedestrian Calls (#/hr)					0		0	0	0	0	0	

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Bus Blockages (#/hr)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Minimum Split (s)	10.0
Total Split (s)	10.0
Total Split (%)	10%
Maximum Green (s)	5.0
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Act Effct Green (s)	34.0	34.0			42.0		43.0	43.0	43.0	43.0	43.0	
Actuated g/C Ratio	0.34	0.34			0.42		0.43	0.43	0.43	0.43	0.43	
v/c Ratio	0.34	1.00			0.78		0.89	1.06	0.02	0.51	0.52	
Control Delay	36.5	67.1			11.4		58.3	81.5	16.7	32.6	16.7	
Queue Delay	0.0	35.2			0.1		1.4	18.6	0.0	0.0	58.6	
Total Delay	36.5	102.3			11.5		59.8	100.1	16.7	32.6	75.4	
LOS	D	F			B		E	F	B	C	E	
Approach Delay		99.4			11.5			87.3			69.4	
Approach LOS		F			B			F			E	
Stops (vph)	27	618			579		221	533	7	29	168	
Fuel Used(gal)	0	15			6		6	16	0	1	2	
CO Emissions (g/hr)	34	1083			411		388	1136	9	40	171	
NOx Emissions (g/hr)	7	211			80		76	221	2	8	33	
VOC Emissions (g/hr)	8	251			95		90	263	2	9	40	
Dilemma Vehicles (#)	0	0			0		0	0	0	0	0	
Queue Length 50th (ft)	16	295			246		163	~474	4	11	71	
Queue Length 95th (ft)	48	#452			15		#328	#692	15	m48	m170	
Internal Link Dist (ft)		346			127			457			98	
Turn Bay Length (ft)	50						130		50			
Base Capacity (vph)	99	750			920		318	637	498	106	634	
Starvation Cap Reductn	0	0			7		0	0	0	0	332	
Spillback Cap Reductn	0	139			0		5	185	0	0	0	
Storage Cap Reductn	0	0			0		0	0	0	0	0	
Reduced v/c Ratio	0.34	1.23			0.79		0.91	1.49	0.02	0.51	1.10	

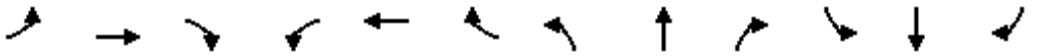
Intersection Summary			
Area Type:	CBD		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 2 (2%), Referenced to phase 2:NWTL and 6:SETL, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 69.2		Intersection LOS: E	
Intersection Capacity Utilization 114.9%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: Milwaukee Avenue & Chicago Avenue



Lane Group	Ø3
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	835	0	243	655	4	0	101	403	32	120	28
Future Volume (vph)	37	835	0	243	655	4	0	101	403	32	120	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	9	10	10	10	10	10	10	10	10
Storage Length (ft)	0		0	160		0	0		0	50		50
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	25			75			25			25		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.95			0.99	1.00				0.96	0.98	0.99	
Frt					0.999				0.850		0.972	
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1408	2372	0	1358	2368	0	0	1482	1260	1408	1284	0
Flt Permitted	0.342			0.113						0.689		
Satd. Flow (perm)	480	2372	0	159	2368	0	0	1482	1215	1000	1284	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		207			1872			137			461	
Travel Time (s)		4.7			42.5			3.1			10.5	
Confl. Peds. (#/hr)	90			73		90			18	18		31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)											0	0
Adj. Flow (vph)	39	879	0	256	689	4	0	106	424	34	126	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	879	0	256	693	0	0	106	424	34	155	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.39	1.33	1.33	1.33	1.33	1.33	1.33	1.52	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA			NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8					2	6		
Minimum Split (s)	8.0	40.0		8.0	13.0			27.0	27.0	27.0	27.0	
Total Split (s)	8.0	45.0		17.0	54.0			38.0	38.0	38.0	38.0	
Total Split (%)	8.0%	45.0%		17.0%	54.0%			38.0%	38.0%	38.0%	38.0%	
Maximum Green (s)	5.0	37.0		13.0	46.0			33.0	33.0	33.0	33.0	
Yellow Time (s)	3.0	3.0		3.5	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	5.0		0.5	5.0			2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	4.0	9.0		5.0	9.0			6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?		Yes		Yes								
Walk Time (s)		5.0						5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		27.0						17.0	17.0	17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)		0						0	0	0	0	
Act Effct Green (s)	45.0	36.0		57.0	45.0			32.0	32.0	32.0	32.0	
Actuated g/C Ratio	0.45	0.36		0.57	0.45			0.32	0.32	0.32	0.32	
v/c Ratio	0.15	1.03		1.09	0.65			0.22	1.09	0.11	0.38	
Control Delay	4.8	44.5		111.2	25.0			1.1	75.8	25.2	29.7	
Queue Delay	0.0	26.8		8.7	0.7			4.9	6.4	0.0	0.0	
Total Delay	4.8	71.2		119.9	25.7			6.0	82.2	25.2	29.7	
LOS	A	E		F	C			A	F	C	C	
Approach Delay		68.4			51.1			66.9			28.9	
Approach LOS		E			D			E			C	
Stops (vph)	10	583		132	497			11	324	24	113	
Fuel Used(gal)	0	12		10	16			0	8	0	2	
CO Emissions (g/hr)	11	848		684	1097			13	590	29	143	
NOx Emissions (g/hr)	2	165		133	213			3	115	6	28	
VOC Emissions (g/hr)	2	197		158	254			3	137	7	33	
Dilemma Vehicles (#)	0	0		0	0			0	0	0	0	
Queue Length 50th (ft)	6	~279		~136	208			0	~320	15	76	
Queue Length 95th (ft)	m5	m#391		#295	286			m0	m#440	39	134	
Internal Link Dist (ft)		127			1792			57			381	
Turn Bay Length (ft)				160						50		
Base Capacity (vph)	253	853		234	1065			474	388	320	410	
Starvation Cap Reductn	0	127		0	0			305	109	0	0	
Spillback Cap Reductn	0	0		78	136			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.15	1.21		1.64	0.75			0.63	1.52	0.11	0.38	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 58.9		Intersection LOS: E	
Intersection Capacity Utilization 93.9%		ICU Level of Service F	
Analysis Period (min) 15			

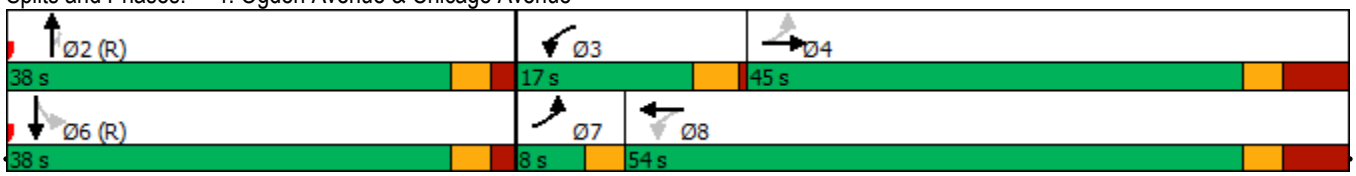
* User Entered Value

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Ogden Avenue & Chicago Avenue



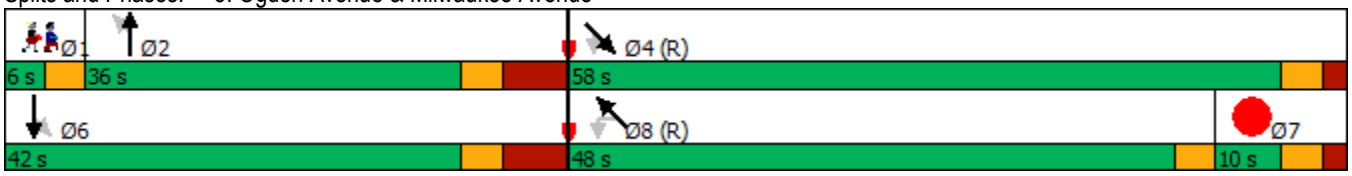
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	129	504	69	15	348	0	0	620	138	91	238	0
Future Volume (vph)	129	504	69	15	348	0	0	620	138	91	238	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	110		0	0		0	0		0	90		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.82	0.98		0.95					0.93	0.99		
Frt		0.982							0.850			
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1408	2698	0	1408	2816	0	0	1482	1260	1408	1482	0
Flt Permitted	0.534			0.261						0.215		
Satd. Flow (perm)	650	2698	0	367	2816	0	0	1482	1169	314	1482	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		514			137			178			729	
Travel Time (s)		11.7			3.1			4.0			16.6	
Confl. Peds. (#/hr)	169		63	63					53	53		100
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	531	73	16	366	0	0	653	145	96	251	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	604	0	16	366	0	0	653	145	96	251	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6					4	8		
Minimum Split (s)	25.0	25.0		25.0	25.0			31.0	31.0	8.0	8.0	
Total Split (s)	36.0	36.0		42.0	42.0			58.0	58.0	48.0	48.0	
Total Split (%)	36.0%	36.0%		42.0%	42.0%			58.0%	58.0%	48.0%	48.0%	
Maximum Green (s)	28.0	28.0		34.0	34.0			53.0	53.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	0.0	0.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	4.0	4.0	
Lead/Lag	Lag	Lag								Lead	Lead	
Lead-Lag Optimize?	Yes	Yes								Yes	Yes	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0	5.0			
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			21.0	21.0			
Pedestrian Calls (#/hr)	0	0		0	0			0	0			
Act Effct Green (s)	27.0	27.0		33.0	33.0			52.0	52.0	44.0	44.0	

Lane Group	Ø1	Ø7
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	1	7
Permitted Phases		
Minimum Split (s)	6.0	10.0
Total Split (s)	6.0	10.0
Total Split (%)	6%	10%
Maximum Green (s)	3.0	5.0
Yellow Time (s)	3.0	3.0
All-Red Time (s)	0.0	2.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Walk Time (s)		
Flash Dont Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Actuated g/C Ratio	0.27	0.27		0.33	0.33			0.52	0.52	0.44	0.44	
v/c Ratio	0.78	0.83		0.13	0.39			0.85	0.24	0.70	0.38	
Control Delay	64.4	45.7		27.9	27.9			24.0	10.3	52.2	21.1	
Queue Delay	12.0	5.7		1.1	60.6			55.0	26.2	0.0	0.1	
Total Delay	76.4	51.4		28.9	88.4			79.0	36.4	52.2	21.2	
LOS	E	D		C	F			E	D	D	C	
Approach Delay		56.0			86.0			71.3			29.8	
Approach LOS		E			F			E			C	
Stops (vph)	110	514		12	242			573	95	72	156	
Fuel Used(gal)	3	10		0	4			7	1	2	3	
CO Emissions (g/hr)	197	732		12	258			493	70	132	226	
NOx Emissions (g/hr)	38	142		2	50			96	14	26	44	
VOC Emissions (g/hr)	46	170		3	60			114	16	31	52	
Dilemma Vehicles (#)	0	0		0	0			0	0	0	0	
Queue Length 50th (ft)	80	190		7	91			417	51	48	105	
Queue Length 95th (ft)	#184	#279		m11	m97			m393	m49	#140	169	
Internal Link Dist (ft)		434			57			98			649	
Turn Bay Length (ft)	110									90		
Base Capacity (vph)	175	728		121	929			770	607	138	652	
Starvation Cap Reductn	0	0		43	654			439	452	0	0	
Spillback Cap Reductn	24	82		0	0			0	0	0	41	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.90	0.93		0.21	1.33			1.97	0.94	0.70	0.41	

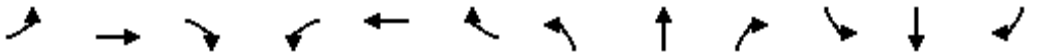
Intersection Summary			
Area Type:	CBD		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 29 (29%), Referenced to phase 4:SET and 8:NWTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 62.4		Intersection LOS: E	
Intersection Capacity Utilization 101.2%		ICU Level of Service G	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Ogden Avenue & Milwaukee Avenue



Lane Group	Ø1	Ø7
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

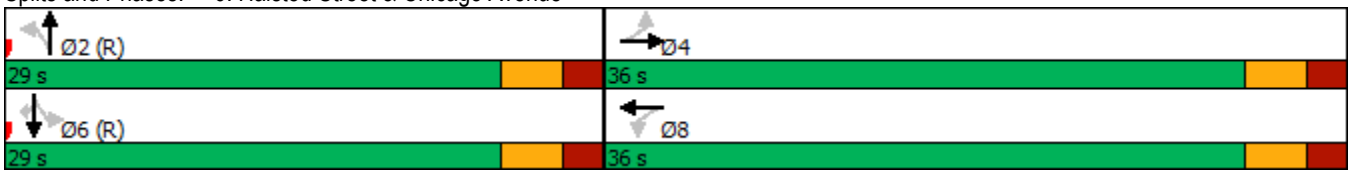


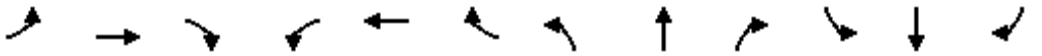
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	717	25	135	916	99	43	552	135	88	494	348
Future Volume (vph)	142	717	25	135	916	99	43	552	135	88	494	348
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	80		0	80		0	95		0	80		260
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor	0.99	0.99		0.97	0.99		0.98	0.99		1.00		0.88
Frt		0.995			0.985			0.971				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1342	2662	0	1368	2693	0	1064	2499	0	1131	2542	1168
Flt Permitted	0.180			0.304			0.429			0.291		
Satd. Flow (perm)	251	2662	0	426	2693	0	470	2499	0	345	2542	1032
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1872			743			718			744	
Travel Time (s)		42.5			16.9			16.3			16.9	
Confl. Peds. (#/hr)	102		123	123		102	57		18	18		57
Confl. Bikes (#/hr)			137			11			2			103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	6%	31%	5%	4%	6%	35%	12%	7%	27%	13%	10%
Adj. Flow (vph)	149	755	26	142	964	104	45	581	142	93	520	366
Shared Lane Traffic (%)												
Lane Group Flow (vph)	149	781	0	142	1068	0	45	723	0	93	520	366
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Minimum Split (s)	33.0	33.0		33.0	33.0		29.0	29.0		29.0	29.0	29.0
Total Split (s)	36.0	36.0		36.0	36.0		29.0	29.0		29.0	29.0	29.0
Total Split (%)	55.4%	55.4%		55.4%	55.4%		44.6%	44.6%		44.6%	44.6%	44.6%
Maximum Green (s)	31.0	31.0		31.0	31.0		24.0	24.0		24.0	24.0	24.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	19.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	30.0	30.0		30.0	30.0		23.0	23.0		23.0	23.0	23.0
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.35	0.35		0.35	0.35	0.35
v/c Ratio	1.30	0.64		0.72	0.86		0.27	0.82		0.76	0.58	1.00
Control Delay	207.7	16.3		35.7	27.2		20.4	28.7		61.5	20.2	73.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	207.7	16.3		35.7	27.2		20.4	28.7		61.5	20.2	73.5
LOS	F	B		D	C		C	C		E	C	E
Approach Delay		46.9			28.2			28.2			44.0	
Approach LOS		D			C			C			D	
Stops (vph)	98	537		88	1178		33	578		67	384	278
Fuel Used(gal)	9	16		3	22		1	11		2	7	9
CO Emissions (g/hr)	602	1136		198	1569		42	773		139	491	612
NOx Emissions (g/hr)	117	221		39	305		8	150		27	95	119
VOC Emissions (g/hr)	140	263		46	364		10	179		32	114	142
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	0
Queue Length 50th (ft)	~77	117		96	405		12	133		32	86	~143
Queue Length 95th (ft)	#137	173		m75	457		38	#225		#109	131	#303
Internal Link Dist (ft)		1792			663			638			664	
Turn Bay Length (ft)	80			80			95			80		260
Base Capacity (vph)	115	1228		196	1242		166	884		122	899	365
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.30	0.64		0.72	0.86		0.27	0.82		0.76	0.58	1.00

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 1.30			
Intersection Signal Delay: 36.7		Intersection LOS: D	
Intersection Capacity Utilization 120.6%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Halsted Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	645	240	25	647	221	0	0	0	378	20	208
Future Volume (vph)	233	645	240	25	647	221	0	0	0	378	20	208
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	9	10	11	10	10	10	10	10	10
Storage Length (ft)	75		0	0		150	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.77	0.81		0.86		0.41					0.72	0.50
Frt		0.959				0.850						0.850
Flt Protected	0.950			0.950							0.955	
Satd. Flow (prot)	1408	2186	0	1358	2816	1248	0	0	0	0	1416	1260
Flt Permitted	0.950			0.244							0.955	
Satd. Flow (perm)	1090	2186	0	300	2816	506	0	0	0	0	1016	635
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		56				198						219
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		200			361			360			481	
Travel Time (s)		4.5			8.2			8.2			10.9	
Confl. Peds. (#/hr)	294		323	323		294	514		122	122		514
Confl. Bikes (#/hr)			67			9			12			24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	0	0	0	11	0	0	0	0	0	0
Adj. Flow (vph)	245	679	253	26	681	233	0	0	0	398	21	219
Shared Lane Traffic (%)												
Lane Group Flow (vph)	245	932	0	26	681	233	0	0	0	0	419	219
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.39	1.33	1.35	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		pm+pt	NA	custom				Split	NA	Perm
Protected Phases	5	2 12		1	6	16				4	4	
Permitted Phases				6		6						4
Minimum Split (s)	8.0			8.0	26.0	7.0				21.0	21.0	21.0
Total Split (s)	29.0			8.0	43.0	10.0				48.0	48.0	48.0
Total Split (%)	22.3%			6.2%	33.1%	7.7%				36.9%	36.9%	36.9%
Maximum Green (s)	25.5			5.0	38.0	8.0				43.0	43.0	43.0
Yellow Time (s)	3.0			3.0	3.0	2.0				3.0	3.0	3.0
All-Red Time (s)	0.5			0.0	2.0	0.0				2.0	2.0	2.0
Lost Time Adjust (s)	1.0			1.0	1.0	1.0					1.0	1.0
Total Lost Time (s)	4.5			4.0	6.0	3.0					6.0	6.0
Lead/Lag				Lag	Lag	Lead						
Lead-Lag Optimize?												
Walk Time (s)					4.0					5.0	5.0	5.0

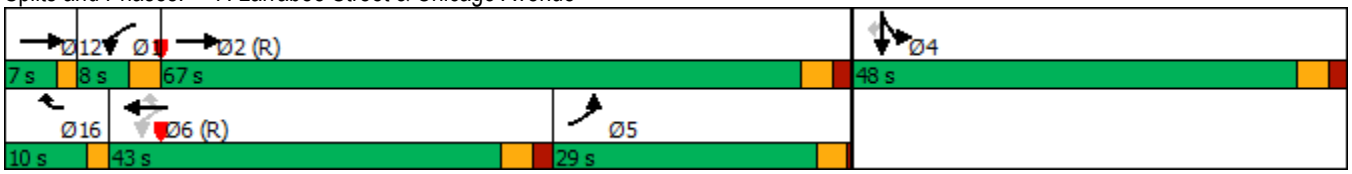
Lane Group	Ø2	Ø12
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Width (ft)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor		
Bus Blockages (#/hr)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	2	12
Permitted Phases		
Minimum Split (s)	26.0	7.0
Total Split (s)	67.0	7.0
Total Split (%)	52%	5%
Maximum Green (s)	62.0	5.0
Yellow Time (s)	3.0	2.0
All-Red Time (s)	2.0	0.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		Lead
Lead-Lag Optimize?		
Walk Time (s)	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)					17.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)					0					0	0	0
Act Effct Green (s)	24.5	62.0		42.0	37.0	47.0					42.0	42.0
Actuated g/C Ratio	0.19	0.48		0.32	0.28	0.36					0.32	0.32
v/c Ratio	0.92	0.87		0.20	0.85	0.67					0.92	0.62
Control Delay	91.9	45.0		25.6	42.5	15.2					68.7	12.8
Queue Delay	0.0	1.3		0.0	4.4	0.1					10.0	0.0
Total Delay	91.9	46.3		25.6	46.9	15.2					78.7	12.8
LOS	F	D		C	D	B					E	B
Approach Delay		55.8			38.5						56.1	
Approach LOS		E			D						E	
Stops (vph)	201	694		11	591	59					350	31
Fuel Used(gal)	8	21		0	11	2					9	1
CO Emissions (g/hr)	548	1463		18	747	114					628	104
NOx Emissions (g/hr)	107	285		4	145	22					122	20
VOC Emissions (g/hr)	127	339		4	173	26					146	24
Dilemma Vehicles (#)	0	0		0	0	0					0	0
Queue Length 50th (ft)	204	346		10	293	16					339	0
Queue Length 95th (ft)	m#347	#423		m18	#386	53					#538	86
Internal Link Dist (ft)		120			281			280			401	
Turn Bay Length (ft)	75					150						
Base Capacity (vph)	265	1071		129	801	349					457	353
Starvation Cap Reductn	0	0		0	70	2					0	0
Spillback Cap Reductn	0	42		0	0	0					31	0
Storage Cap Reductn	0	0		0	0	0					0	0
Reduced v/c Ratio	0.92	0.91		0.20	0.93	0.67					0.98	0.62

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 50.0		Intersection LOS: D	
Intersection Capacity Utilization 82.3%		ICU Level of Service E	
Analysis Period (min) 15			

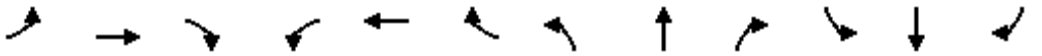
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Larrabee Street & Chicago Avenue



Lane Group	Ø2	Ø12
Flash Dont Walk (s)	10.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

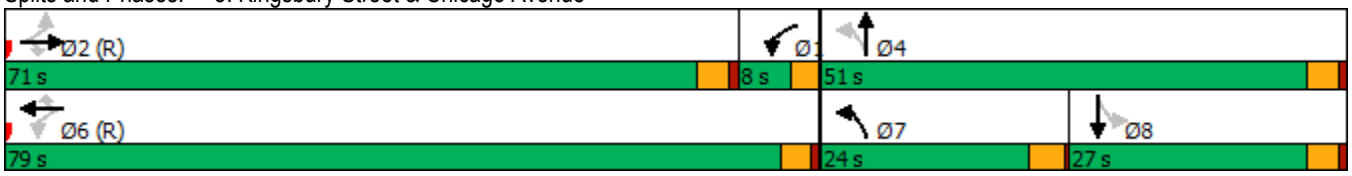


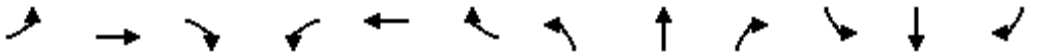
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1013	5	40	800	5	220	80	172	15	5	5
Future Volume (vph)	5	1013	5	40	800	5	220	80	172	15	5	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	65		350	80		75	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			75			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.90		0.46			0.42	0.96	0.98		0.99	0.95	
Frt			0.850			0.850		0.898			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1358	2816	1305	1358	2816	1305	1408	1309	0	1408	1305	0
Flt Permitted	0.268			0.178			0.612			0.596		
Satd. Flow (perm)	343	2816	597	254	2816	545	867	1309	0	876	1305	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)						42						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		361			809			355			175	
Travel Time (s)		8.2			18.4			8.1			4.0	
Confl. Peds. (#/hr)	211		139	139		211	30		7	7		30
Confl. Bikes (#/hr)			56			9			1			29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	1066	5	42	842	5	232	84	181	16	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1066	5	42	842	5	232	265	0	16	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.33	1.28	1.39	1.33	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6		6	4			8		
Minimum Split (s)	20.0	20.0	20.0	8.0	20.0	20.0	8.0	27.0		27.0	27.0	
Total Split (s)	71.0	71.0	71.0	8.0	79.0	79.0	24.0	51.0		27.0	27.0	
Total Split (%)	54.6%	54.6%	54.6%	6.2%	60.8%	60.8%	18.5%	39.2%		20.8%	20.8%	
Maximum Green (s)	67.0	67.0	67.0	5.0	75.0	75.0	20.0	47.0		23.0	23.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	0.5	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Total Lost Time (s)	5.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lead	Lead	Lag			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Walk Time (s)	5.0	5.0	5.0		5.0	5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		18.0		18.0	18.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0		0	0		0		0	0	
Act Effct Green (s)	66.0	66.0	66.0	75.0	74.0	74.0	46.0	46.0		22.0	22.0	
Actuated g/C Ratio	0.51	0.51	0.51	0.58	0.57	0.57	0.35	0.35		0.17	0.17	
v/c Ratio	0.03	0.75	0.02	0.23	0.53	0.02	0.60	0.57		0.11	0.05	
Control Delay	18.2	23.3	17.8	18.7	18.7	0.0	40.2	40.0		48.0	46.0	
Queue Delay	0.0	13.8	0.0	0.0	0.1	0.0	0.0	0.0		0.0	0.0	
Total Delay	18.2	37.1	17.8	18.7	18.8	0.0	40.2	40.0		48.0	46.0	
LOS	B	D	B	B	B	A	D	D		D	D	
Approach Delay		36.9			18.7			40.1			47.2	
Approach LOS		D			B			D			D	
Stops (vph)	3	595	3	16	472	0	169	203		15	10	
Fuel Used(gal)	0	11	0	1	13	0	3	4		0	0	
CO Emissions (g/hr)	3	765	3	43	915	3	234	270		17	11	
NOx Emissions (g/hr)	1	149	1	8	178	1	45	53		3	2	
VOC Emissions (g/hr)	1	177	1	10	212	1	54	63		4	3	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	2	253	2	15	219	0	150	180		12	7	
Queue Length 95th (ft)	m3	m360	m3	32	276	0	232	274		34	24	
Internal Link Dist (ft)		281			729			275			95	
Turn Bay Length (ft)	65		350	80		75						
Base Capacity (vph)	174	1429	303	180	1602	328	385	463		148	220	
Starvation Cap Reductn	0	362	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	117	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.03	1.00	0.02	0.23	0.57	0.02	0.60	0.57		0.11	0.05	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 116 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 31.1		Intersection LOS: C	
Intersection Capacity Utilization 68.3%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 8: Kingsbury Street & Chicago Avenue





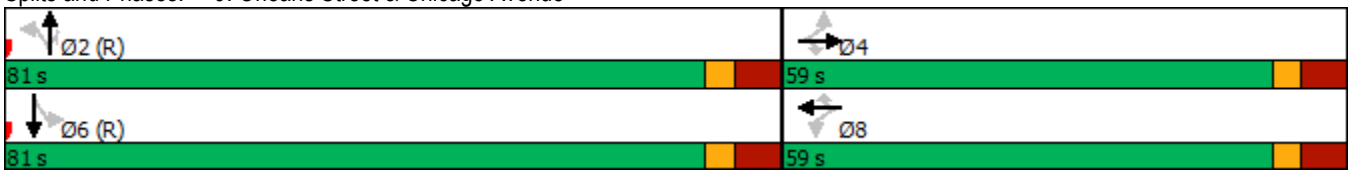
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	830	25	85	670	65	70	635	90	165	440	55
Future Volume (vph)	120	830	25	85	670	65	70	635	90	165	440	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	130		75	95		125	50		0	50		110
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.88		0.62			0.42	0.91		0.79		0.98	
Frt			0.850			0.850			0.850		0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1358	2816	1305	1358	2676	1305	1408	1482	1260	1408	2702	0
Flt Permitted	0.273			0.183			0.439			0.233		
Satd. Flow (perm)	342	2816	810	262	2676	546	592	1482	990	345	2702	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		384			406			352			306	
Travel Time (s)		8.7			9.2			8.0			7.0	
Confl. Peds. (#/hr)	206		258	258		206	106		107	107		106
Confl. Bikes (#/hr)			29			7			8			15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)					0							
Adj. Flow (vph)	126	874	26	89	705	68	74	668	95	174	463	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	874	26	89	705	68	74	668	95	174	521	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.33	1.28	1.39	1.42	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	30.0	30.0	30.0	30.0	30.0	
Total Split (s)	59.0	59.0	59.0	59.0	59.0	59.0	81.0	81.0	81.0	81.0	81.0	
Total Split (%)	42.1%	42.1%	42.1%	42.1%	42.1%	42.1%	57.9%	57.9%	57.9%	57.9%	57.9%	
Maximum Green (s)	51.0	51.0	51.0	51.0	51.0	51.0	73.0	73.0	73.0	73.0	73.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	

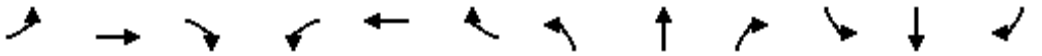
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	12.0	12.0	12.0	12.0	12.0	12.0	17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)	50.0	50.0	50.0	50.0	50.0	50.0	72.0	72.0	72.0	72.0	72.0	
Actuated g/C Ratio	0.36	0.36	0.36	0.36	0.36	0.36	0.51	0.51	0.51	0.51	0.51	
v/c Ratio	1.03	0.87	0.09	0.96	0.74	0.35	0.24	0.88	0.19	0.98	0.38	
Control Delay	135.1	52.6	31.2	127.7	44.9	39.5	21.6	44.5	19.5	98.4	21.4	
Queue Delay	0.0	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	135.1	52.6	31.2	127.7	51.8	39.5	21.6	44.5	19.5	98.4	21.4	
LOS	F	D	C	F	D	D	C	D	B	F	C	
Approach Delay		62.2			58.6			39.7			40.7	
Approach LOS		E			E			D			D	
Stops (vph)	96	745	17	67	575	49	39	533	47	131	289	
Fuel Used(gal)	5	21	0	3	11	1	1	10	1	4	5	
CO Emissions (g/hr)	346	1448	34	199	798	70	50	730	60	309	345	
NOx Emissions (g/hr)	67	282	7	39	155	14	10	142	12	60	67	
VOC Emissions (g/hr)	80	336	8	46	185	16	12	169	14	72	80	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	~123	389	16	79	293	45	37	524	45	151	146	
Queue Length 95th (ft)	#259	#485	39	#197	371	93	72	#784	81	#316	190	
Internal Link Dist (ft)		304			326			272			226	
Turn Bay Length (ft)	130		75	95		125	50			50		
Base Capacity (vph)	122	1005	289	93	955	195	304	762	509	177	1389	
Starvation Cap Reductn	0	0	0	0	204	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	1.03	0.87	0.09	0.96	0.94	0.35	0.24	0.88	0.19	0.98	0.38	

Intersection Summary

Area Type: CBD
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 36 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 51.4 Intersection LOS: D
Intersection Capacity Utilization 128.6% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Orleans Street & Chicago Avenue



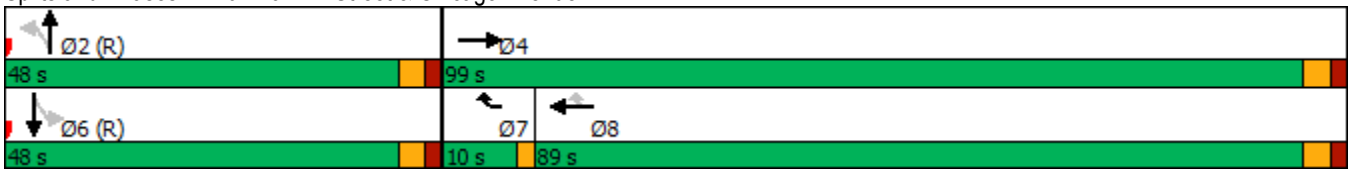


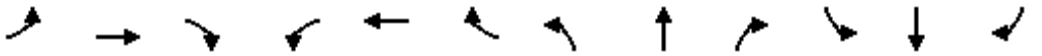
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	975	30	0	762	26	38	87	54	35	104	13
Future Volume (vph)	0	975	30	0	762	26	38	87	54	35	104	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	10	11	11	12	10	10	10	10	10	10
Storage Length (ft)	0		0	0		90	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97				0.44		0.86			0.92	
Frt		0.995				0.850		0.959			0.988	
Flt Protected								0.990			0.989	
Satd. Flow (prot)	0	2886	0	0	2710	1291	0	1270	0	0	1395	0
Flt Permitted								0.909			0.896	
Satd. Flow (perm)	0	2886	0	0	2710	572	0	1111	0	0	1210	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		406			399			394			261	
Travel Time (s)		9.2			9.1			9.0			5.9	
Confl. Peds. (#/hr)	120		461	461		120	260		182	182		260
Confl. Bikes (#/hr)			13			2			1			3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	6	6	0	11	11	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	0	1026	32	0	802	27	40	92	57	37	109	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1058	0	0	802	27	0	189	0	0	160	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.24	1.33	1.28	1.40	1.29	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA			NA	custom	Perm	NA		Perm	NA	
Protected Phases		4			8	7		2			6	
Permitted Phases						8	2			6		
Minimum Split (s)		17.0			17.0	5.0	26.0	26.0		18.0	18.0	
Total Split (s)		99.0			89.0	10.0	48.0	48.0		48.0	48.0	
Total Split (%)		67.3%			60.5%	6.8%	32.7%	32.7%		32.7%	32.7%	
Maximum Green (s)		94.0			84.0	8.0	43.0	43.0		43.0	43.0	
Yellow Time (s)		3.0			3.0	2.0	3.0	3.0		3.0	3.0	
All-Red Time (s)		2.0			2.0	0.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		1.0			1.0	1.0		1.0			1.0	
Total Lost Time (s)		6.0			6.0	3.0		6.0			6.0	
Lead/Lag					Lag	Lead						
Lead-Lag Optimize?												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		7.0			7.0		16.0	16.0		8.0	8.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)		93.0			83.0	93.0		42.0			42.0	
Actuated g/C Ratio		0.63			0.56	0.63		0.29			0.29	
v/c Ratio		0.58			0.52	0.07		0.60			0.46	
Control Delay		17.3			21.3	9.5		54.3			48.5	
Queue Delay		7.8			4.7	0.0		0.0			0.0	
Total Delay		25.1			26.1	9.5		54.3			48.5	
LOS		C			C	A		D			D	
Approach Delay		25.1			25.6			54.3			48.5	
Approach LOS		C			C			D			D	
Stops (vph)		560			457	10		155			125	
Fuel Used(gal)		10			8	0		3			3	
CO Emissions (g/hr)		686			574	13		238			175	
NOx Emissions (g/hr)		133			112	3		46			34	
VOC Emissions (g/hr)		159			133	3		55			41	
Dilemma Vehicles (#)		0			0	0		0			0	
Queue Length 50th (ft)		293			241	9		157			127	
Queue Length 95th (ft)		355			300	20		246			203	
Internal Link Dist (ft)		326			319			314			181	
Turn Bay Length (ft)						90						
Base Capacity (vph)		1825			1530	396		317			345	
Starvation Cap Reductn		724			643	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.96			0.90	0.07		0.60			0.46	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 147			
Actuated Cycle Length: 147			
Offset: 55 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 29.4		Intersection LOS: C	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: Franklin Street & Chicago Avenue





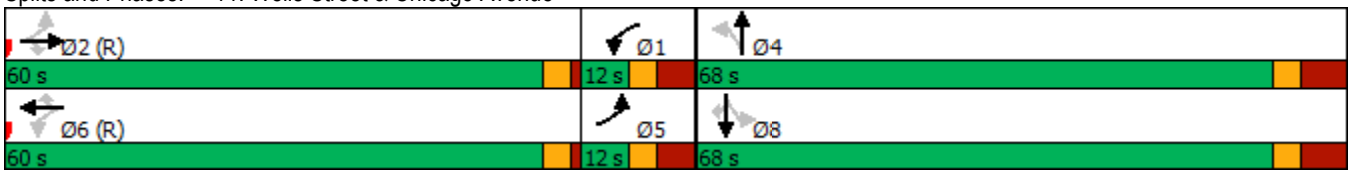
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	829	99	45	686	75	5	43	23	98	422	75
Future Volume (vph)	69	829	99	45	686	75	5	43	23	98	422	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	100		50	90		90	0		0	0		75
Storage Lanes	1		1	1		1	0		0	0		1
Taper Length (ft)	25			75			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.36			0.50		0.94			0.97	0.81
Frt			0.850			0.850		0.956				0.850
Flt Protected	0.950			0.950				0.997			0.991	
Satd. Flow (prot)	1358	2676	1305	1358	2816	1305	0	1330	0	0	1469	1260
Flt Permitted	0.256			0.182				0.965			0.916	
Satd. Flow (perm)	366	2676	465	260	2816	649	0	1287	0	0	1318	1015
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		399			407			355			273	
Travel Time (s)		9.1			9.3			8.1			6.2	
Confl. Peds. (#/hr)	119		282	282		119	79		90	90		79
Confl. Bikes (#/hr)			11			5			3			87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0										
Adj. Flow (vph)	73	873	104	47	722	79	5	45	24	103	444	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	73	873	104	47	722	79	0	74	0	0	547	79
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.42	1.28	1.39	1.33	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4			8		8
Minimum Split (s)	12.0	21.0	21.0	12.0	21.0	21.0	30.0	30.0		30.0	30.0	30.0
Total Split (s)	12.0	60.0	60.0	12.0	60.0	60.0	68.0	68.0		68.0	68.0	68.0
Total Split (%)	8.6%	42.9%	42.9%	8.6%	42.9%	42.9%	48.6%	48.6%		48.6%	48.6%	48.6%
Maximum Green (s)	5.0	56.0	56.0	5.0	56.0	56.0	60.0	60.0		60.0	60.0	60.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	4.0	1.0	1.0	4.0	1.0	1.0	5.0	5.0		5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0			1.0	1.0
Total Lost Time (s)	8.0	5.0	5.0	8.0	5.0	5.0		9.0			9.0	9.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Walk Time (s)		5.0	5.0		5.0	5.0	4.0	4.0		4.0	4.0	4.0

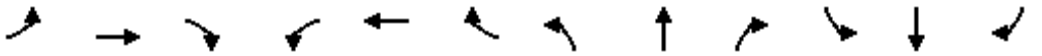
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	18.0	18.0		18.0	18.0	18.0
Pedestrian Calls (#/hr)		0	0		0	0	0	0		0	0	0
Act Effct Green (s)	56.0	55.0	55.0	56.0	55.0	55.0		59.0			59.0	59.0
Actuated g/C Ratio	0.40	0.39	0.39	0.40	0.39	0.39		0.42			0.42	0.42
v/c Ratio	0.42	0.83	0.57	0.35	0.65	0.31		0.14			0.99	0.19
Control Delay	35.6	46.5	48.0	18.5	18.3	17.3		25.8			75.0	26.9
Queue Delay	0.0	49.3	0.0	0.0	0.4	0.0		0.0			0.0	0.0
Total Delay	35.6	95.8	48.0	18.5	18.7	17.3		25.8			75.0	26.9
LOS	D	F	D	B	B	B		C			E	C
Approach Delay		86.9			18.5			25.8			68.9	
Approach LOS		F			B			C			E	
Stops (vph)	43	730	80	14	234	25		43			450	47
Fuel Used(gal)	1	14	2	0	6	1		1			12	1
CO Emissions (g/hr)	67	1011	120	27	421	45		56			806	58
NOx Emissions (g/hr)	13	197	23	5	82	9		11			157	11
VOC Emissions (g/hr)	15	234	28	6	98	10		13			187	13
Dilemma Vehicles (#)	0	0	0	0	0	0		0			0	0
Queue Length 50th (ft)	38	374	74	13	122	24		41			487	45
Queue Length 95th (ft)	70	466	147	m19	m143	m37		76			#737	83
Internal Link Dist (ft)		319			327			275			193	
Turn Bay Length (ft)	100		50	90		90						75
Base Capacity (vph)	174	1051	182	135	1106	254		542			555	427
Starvation Cap Reductn	0	281	0	0	85	0		0			0	0
Spillback Cap Reductn	0	54	0	0	0	0		0			0	0
Storage Cap Reductn	0	0	0	0	0	0		0			0	0
Reduced v/c Ratio	0.42	1.13	0.57	0.35	0.71	0.31		0.14			0.99	0.19

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 121 (86%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 58.5		Intersection LOS: E	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 11: Wells Street & Chicago Avenue





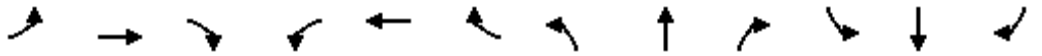
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	782	79	38	550	50	107	681	99	107	1195	143
Future Volume (vph)	103	782	79	38	550	50	107	681	99	107	1195	143
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	11	11	12	11	11	12
Storage Length (ft)	150		60	100		80	120		0	80		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	75			50			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor	0.90		0.68	0.95		0.69	0.99	0.96		0.92	0.98	
Frt			0.850			0.850		0.981			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1385	2742	1235	1358	2676	1318	1488	3907	0	1488	4070	0
Flt Permitted	0.314			0.171			0.140			0.306		
Satd. Flow (perm)	412	2742	845	232	2676	904	217	3907	0	442	4070	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		407			413			368			440	
Travel Time (s)		9.3			9.4			8.4			10.0	
Confl. Peds. (#/hr)	190		191	191		190	72		151	151		72
Confl. Bikes (#/hr)			10			6			1			4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	2%	2%	1%	0%	3%	7%	0%	2%	0%
Bus Blockages (#/hr)	0	18	18	0	0	0	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	108	823	83	40	579	53	113	717	104	113	1258	151
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	823	83	40	579	53	113	821	0	113	1409	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.39	1.40	1.39	1.42	1.28	1.28	1.28	1.22	1.28	1.28	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	29.0	29.0	29.0	29.0	29.0	29.0	28.0	28.0		28.0	28.0	
Total Split (s)	53.0	53.0	53.0	53.0	53.0	53.0	87.0	87.0		87.0	87.0	
Total Split (%)	37.9%	37.9%	37.9%	37.9%	37.9%	37.9%	62.1%	62.1%		62.1%	62.1%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	82.0	82.0		82.0	82.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	19.0	19.0	19.0	19.0	19.0	19.0	18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	47.0	47.0	47.0	47.0	47.0	47.0	81.0	81.0		81.0	81.0	
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.58	0.58		0.58	0.58	
v/c Ratio	0.78	0.89	0.29	0.52	0.64	0.17	0.90	0.36		0.44	0.60	
Control Delay	40.6	25.1	15.7	48.1	39.5	30.3	88.1	16.3		23.6	20.4	
Queue Delay	0.0	28.4	0.0	0.0	2.4	0.0	0.0	0.1		77.7	0.0	
Total Delay	40.6	53.5	15.7	48.1	42.0	30.3	88.1	16.4		101.3	20.4	
LOS	D	D	B	D	D	C	F	B		F	C	
Approach Delay		49.0			41.4			25.1			26.4	
Approach LOS		D			D			C			C	
Stops (vph)	53	480	20	35	504	43	80	399		62	832	
Fuel Used(gal)	1	9	1	1	9	1	3	7		1	15	
CO Emissions (g/hr)	103	638	43	48	628	49	187	492		86	1030	
NOx Emissions (g/hr)	20	124	8	9	122	10	36	96		17	200	
VOC Emissions (g/hr)	24	148	10	11	146	11	43	114		20	239	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	20	113	15	34	263	40	87	139		56	290	
Queue Length 95th (ft)	m68	m#383	m27	m37	m285	m42	#225	170		114	337	
Internal Link Dist (ft)		327			333			288			360	
Turn Bay Length (ft)	150		60	100		80	120			80		
Base Capacity (vph)	138	920	283	77	898	303	125	2260		255	2354	
Starvation Cap Reductn	0	50	0	0	198	0	0	0		0	0	
Spillback Cap Reductn	0	137	0	0	0	0	0	465		157	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.78	1.05	0.29	0.52	0.83	0.17	0.90	0.46		1.15	0.60	

Intersection Summary

Area Type: CBD
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 42 (30%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 34.1 Intersection LOS: C
Intersection Capacity Utilization 115.9% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: La Salle Street & Chicago Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	825	139	61	505	0	0	0	0	48	1107	133
Future Volume (vph)	0	825	139	61	505	0	0	0	0	48	1107	133
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	11	9	10	11	12	12	12	12	10	12
Storage Length (ft)	0		250	100		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor			0.68								0.98	
Frt			0.850								0.985	
Flt Protected				0.950							0.998	
Satd. Flow (prot)	0	2715	1199	1358	1214	0	0	0	0	0	3953	0
Flt Permitted				0.227							0.998	
Satd. Flow (perm)	0	2715	820	324	1214	0	0	0	0	0	3940	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		413			144			365			405	
Travel Time (s)		9.4			3.3			8.3			9.2	
Confl. Peds. (#/hr)			128	128						42		45
Confl. Bikes (#/hr)			12									58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	2%	4%	2%	2%	2%	2%	6%	1%	2%
Bus Blockages (#/hr)	0	18	18	0	18	18	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	0	868	146	64	532	0	0	0	0	51	1165	140
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	868	146	64	532	0	0	0	0	0	1356	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.39	1.40	1.39	1.66	1.28	1.22	1.22	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	custom	custom	NA					Perm	NA	
Protected Phases		4	14	3	8 18						6	
Permitted Phases			4	8						6		
Minimum Split (s)		24.0	5.0	8.0						26.0	26.0	
Total Split (s)		65.0	7.0	8.0						60.0	60.0	
Total Split (%)		46.4%	5.0%	5.7%						42.9%	42.9%	
Maximum Green (s)		57.0	5.0	5.0						55.0	55.0	
Yellow Time (s)		3.0	2.0	3.0						3.0	3.0	
All-Red Time (s)		5.0	0.0	0.0						2.0	2.0	
Lost Time Adjust (s)		1.0	1.0	1.0							1.0	
Total Lost Time (s)		9.0	3.0	4.0							6.0	
Lead/Lag		Lag	Lead									

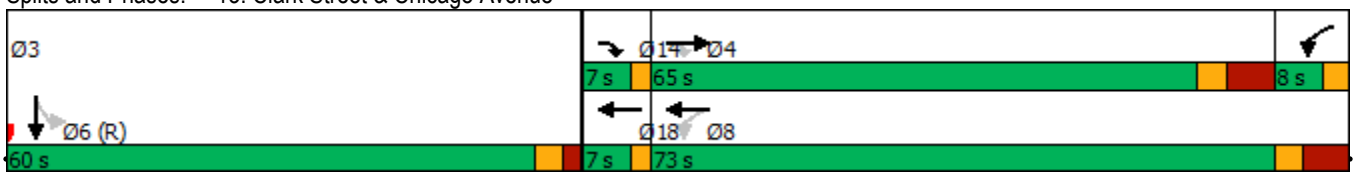
Lane Group	Ø8	Ø18
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Width (ft)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Bus Blockages (#/hr)		
Parking (#/hr)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	8	18
Permitted Phases		
Minimum Split (s)	24.0	5.0
Total Split (s)	73.0	7.0
Total Split (%)	52%	5%
Maximum Green (s)	65.0	5.0
Yellow Time (s)	3.0	2.0
All-Red Time (s)	5.0	0.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)		5.0								5.0	5.0	
Flash Dont Walk (s)		11.0								16.0	16.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		56.0	66.0	69.0	64.0						54.0	
Actuated g/C Ratio		0.40	0.47	0.49	0.46						0.39	
v/c Ratio		0.80	0.37	0.34	0.96						0.89	
Control Delay		63.7	45.9	42.0	80.9						49.0	
Queue Delay		55.4	0.0	0.0	44.3						0.8	
Total Delay		119.0	45.9	42.0	125.2						49.8	
LOS		F	D	D	F						D	
Approach Delay		108.5			116.3						49.8	
Approach LOS		F			F						D	
Stops (vph)		810	212	39	471						1158	
Fuel Used(gal)		18	3	1	12						23	
CO Emissions (g/hr)		1246	204	64	869						1630	
NOx Emissions (g/hr)		242	40	12	169						317	
VOC Emissions (g/hr)		289	47	15	201						378	
Dilemma Vehicles (#)		0	0	0	0						0	
Queue Length 50th (ft)		432	129	41	509						420	
Queue Length 95th (ft)		m491	m152	m60	#721						491	
Internal Link Dist (ft)		333			64			285			325	
Turn Bay Length (ft)			250	100								
Base Capacity (vph)		1086	397	189	554						1519	
Starvation Cap Reductn		324	0	0	192						0	
Spillback Cap Reductn		707	0	0	0						36	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		2.29	0.37	0.34	1.47						0.91	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 83.2		Intersection LOS: F	
Intersection Capacity Utilization 110.5%		ICU Level of Service H	
Analysis Period (min) 15			

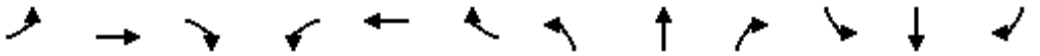
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: Clark Street & Chicago Avenue



Lane Group	Ø8	Ø18
Lead-Lag Optimize?		
Walk Time (s)	5.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary



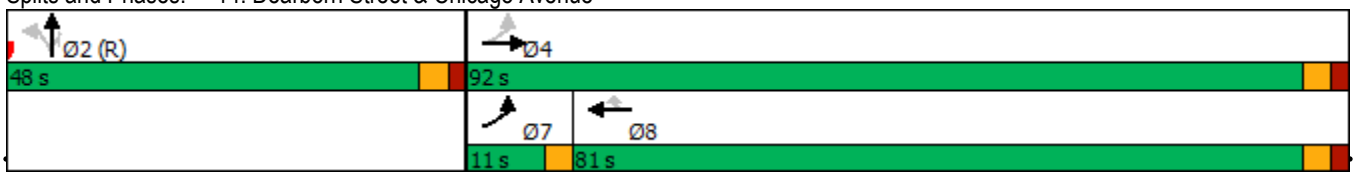
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	700	0	0	462	60	163	528	68	0	0	0
Future Volume (vph)	135	700	0	0	462	60	163	528	68	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	12	10	11	16	11	10	12	12	12
Storage Length (ft)	100		0	0		70	0		75	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.63	0.47		0.41			
Frt						0.850			0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1385	1334	0	0	1321	1273	1727	2946	1285	0	0	0
Flt Permitted	0.351						0.950					
Satd. Flow (perm)	512	1334	0	0	1321	808	806	2946	524	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			428			364			418	
Travel Time (s)		5.4			9.7			8.3			9.5	
Confl. Peds. (#/hr)	257					257	162		216			
Confl. Bikes (#/hr)						2			12			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	2%	2%	3%	0%	1%	1%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	18	0	0	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Adj. Flow (vph)	142	737	0	0	486	63	172	556	72	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	142	737	0	0	486	63	172	556	72	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.52	1.28	1.22	1.52	1.35	1.05	1.28	1.33	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2		2			
Minimum Split (s)	8.0	23.0			23.0	23.0	22.0	22.0	22.0			
Total Split (s)	11.0	92.0			81.0	81.0	48.0	48.0	48.0			
Total Split (%)	7.9%	65.7%			57.9%	57.9%	34.3%	34.3%	34.3%			
Maximum Green (s)	8.0	87.0			76.0	76.0	43.0	43.0	43.0			
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	1.0	1.0			1.0	1.0	1.0	1.0	1.0			
Total Lost Time (s)	4.0	6.0			6.0	6.0	6.0	6.0	6.0			
Lead/Lag	Lead				Lag	Lag						

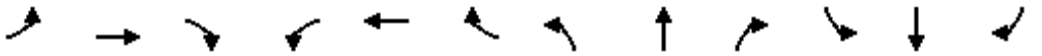
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes				Yes	Yes						
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		13.0			13.0	13.0	12.0	12.0	12.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	88.0	86.0			75.0	75.0	42.0	42.0	42.0			
Actuated g/C Ratio	0.63	0.61			0.54	0.54	0.30	0.30	0.30			
v/c Ratio	0.39	0.90			0.69	0.15	0.71	0.63	0.46			
Control Delay	23.4	55.9			18.3	10.5	61.6	46.1	51.1			
Queue Delay	0.0	52.8			54.4	0.0	88.7	0.0	0.0			
Total Delay	23.4	108.7			72.7	10.5	150.3	46.1	51.1			
LOS	C	F			E	B	F	D	D			
Approach Delay		94.9			65.6			68.9				
Approach LOS		F			E			E				
Stops (vph)	123	677			235	22	143	446	56			
Fuel Used(gal)	2	14			5	0	3	9	1			
CO Emissions (g/hr)	121	964			319	31	231	623	85			
NOx Emissions (g/hr)	23	188			62	6	45	121	16			
VOC Emissions (g/hr)	28	223			74	7	53	144	20			
Dilemma Vehicles (#)	0	0			0	0	0	0	0			
Queue Length 50th (ft)	119	705			199	23	140	230	53			
Queue Length 95th (ft)	m123	m#883			244	m35	#250	295	109			
Internal Link Dist (ft)		158			348			284			338	
Turn Bay Length (ft)	100					70			75			
Base Capacity (vph)	365	819			707	432	241	883	157			
Starvation Cap Reductn	0	469			77	0	0	0	0			
Spillback Cap Reductn	0	111			275	0	183	0	0			
Storage Cap Reductn	0	0			0	0	0	0	0			
Reduced v/c Ratio	0.39	2.11			1.13	0.15	2.97	0.63	0.46			

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 62 (44%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 78.4		Intersection LOS: E	
Intersection Capacity Utilization 110.5%		ICU Level of Service H	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Dearborn Street & Chicago Avenue



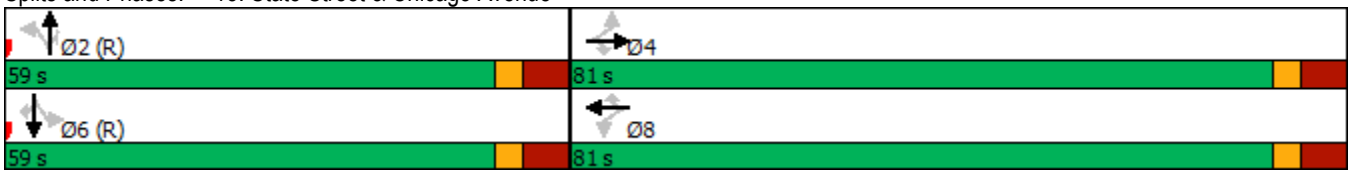


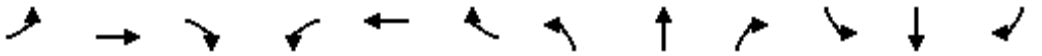
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	578	49	70	360	40	124	314	99	46	273	92
Future Volume (vph)	95	578	49	70	360	40	124	314	99	46	273	92
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	150		50	100		70	90		30	90		30
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	50			50			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.72		0.42			0.33	0.69		0.47	0.77		0.39
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1371	1334	1318	1371	1321	1318	1422	1482	1272	1422	1482	1272
Flt Permitted	0.469			0.280			0.490			0.434		
Satd. Flow (perm)	489	1334	550	404	1321	440	504	1482	594	503	1482	492
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		428			375			323			297	
Travel Time (s)		9.7			8.5			7.3			6.8	
Confl. Peds. (#/hr)	295		191	191		295	260		154	154		260
Confl. Bikes (#/hr)			21			6			7			8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	2%	1%	1%	3%	1%	1%	2%	1%	1%	2%	1%
Parking (#/hr)		0			0							
Adj. Flow (vph)	100	608	52	74	379	42	131	331	104	48	287	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	100	608	52	74	379	42	131	331	104	48	287	97
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.52	1.28	1.39	1.52	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	26.0	26.0	26.0	26.0	26.0	26.0
Total Split (s)	81.0	81.0	81.0	81.0	81.0	81.0	59.0	59.0	59.0	59.0	59.0	59.0
Total Split (%)	57.9%	57.9%	57.9%	57.9%	57.9%	57.9%	42.1%	42.1%	42.1%	42.1%	42.1%	42.1%
Maximum Green (s)	73.0	73.0	73.0	73.0	73.0	73.0	51.0	51.0	51.0	51.0	51.0	51.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Lead/Lag												
Lead-Lag Optimize?												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	13.0	13.0	13.0	13.0	13.0	13.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	72.0	72.0	72.0	72.0	72.0	72.0	50.0	50.0	50.0	50.0	50.0	50.0
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51	0.36	0.36	0.36	0.36	0.36	0.36
v/c Ratio	0.40	0.89	0.18	0.36	0.56	0.19	0.73	0.63	0.49	0.27	0.54	0.55
Control Delay	9.5	23.3	6.9	16.2	17.4	12.6	63.9	43.6	44.7	37.2	40.6	50.4
Queue Delay	0.0	17.5	0.0	0.0	8.4	0.0	0.0	0.0	5.5	1.5	0.0	0.0
Total Delay	9.5	40.8	6.9	16.2	25.7	12.6	63.9	43.6	50.2	38.7	40.6	50.4
LOS	A	D	A	B	C	B	E	D	D	D	D	D
Approach Delay		34.3			23.2			49.5			42.6	
Approach LOS		C			C			D			D	
Stops (vph)	35	507	14	38	232	17	105	258	79	33	214	75
Fuel Used(gal)	1	7	0	1	4	0	3	5	2	1	4	2
CO Emissions (g/hr)	49	522	22	45	252	22	175	350	111	45	284	110
NOx Emissions (g/hr)	9	102	4	9	49	4	34	68	22	9	55	21
VOC Emissions (g/hr)	11	121	5	10	58	5	41	81	26	10	66	25
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	0
Queue Length 50th (ft)	26	423	11	30	205	13	103	249	74	31	208	71
Queue Length 95th (ft)	m30	m475	m13	m39	m267	m19	#214	359	139	68	303	140
Internal Link Dist (ft)		348			295			243			217	
Turn Bay Length (ft)	150		50	100		70	90		30	90		30
Base Capacity (vph)	251	686	282	207	679	226	180	529	212	179	529	175
Starvation Cap Reductn	0	85	0	0	257	0	0	0	0	0	0	0
Spillback Cap Reductn	0	78	0	0	11	0	0	0	63	53	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	1.01	0.18	0.36	0.90	0.19	0.73	0.63	0.70	0.38	0.54	0.55

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 74 (53%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 37.3		Intersection LOS: D	
Intersection Capacity Utilization 113.4%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 15: State Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	530	101	53	380	49	0	0	0	38	172	74
Future Volume (vph)	40	530	101	53	380	49	0	0	0	38	172	74
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	12	12	12	12	12	12
Storage Length (ft)	150		50	100		70	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	50			75			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.66		0.29			0.11					0.80	
Frt			0.850			0.850					0.965	
Flt Protected	0.950			0.950							0.993	
Satd. Flow (prot)	923	831	829	923	867	843	0	0	0	0	892	0
Flt Permitted	0.464			0.343							0.993	
Satd. Flow (perm)	299	831	239	333	867	93	0	0	0	0	828	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		375			368			298			279	
Travel Time (s)		8.5			8.4			6.8			6.3	
Confl. Peds. (#/hr)	487		301	301		487				185		159
Confl. Bikes (#/hr)			24			5						9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	50%	52%	49%	50%	50%	51%	51%	51%	49%	49%	50%	50%
Bus Blockages (#/hr)	0	18	18	0	11	11	0	0	0	0	0	0
Parking (#/hr)		0			0							
Adj. Flow (vph)	42	558	106	56	400	52	0	0	0	40	181	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	558	106	56	400	52	0	0	0	0	299	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.66	1.40	*0.50	1.60	1.35	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm				Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4		4	8		8				6		
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0				27.0	27.0	
Total Split (s)	87.0	87.0	87.0	87.0	87.0	87.0				53.0	53.0	
Total Split (%)	62.1%	62.1%	62.1%	62.1%	62.1%	62.1%				37.9%	37.9%	
Maximum Green (s)	80.0	80.0	80.0	80.0	80.0	80.0				45.0	45.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	4.0	4.0	4.0	4.0	4.0	4.0				5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0					1.0	
Total Lost Time (s)	8.0	8.0	8.0	8.0	8.0	8.0					9.0	
Lead/Lag												

Lanes, Volumes, Timings
16: Wabash Avenue & Chicago Avenue 02/23/2018

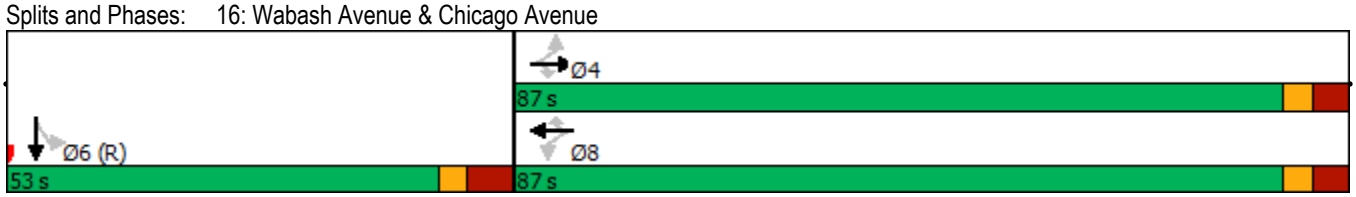
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0				5.0	5.0	
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0				14.0	14.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0				0	0	
Act Effct Green (s)	79.0	79.0	79.0	79.0	79.0	79.0					44.0	
Actuated g/C Ratio	0.56	0.56	0.56	0.56	0.56	0.56					0.31	
v/c Ratio	0.25	1.19	0.79	0.30	0.82	1.00					1.15	
Control Delay	22.8	126.8	51.4	10.8	21.2	135.3					145.4	
Queue Delay	0.0	0.2	0.0	0.0	2.0	0.0					0.0	
Total Delay	22.8	127.0	51.4	10.8	23.2	135.3					145.4	
LOS	C	F	D	B	C	F					F	
Approach Delay		109.4			33.3						145.4	
Approach LOS		F			C						F	
Stops (vph)	20	331	64	10	147	24					230	
Fuel Used(gal)	0	17	2	0	4	2					10	
CO Emissions (g/hr)	29	1193	119	23	248	113					720	
NOx Emissions (g/hr)	6	232	23	4	48	22					140	
VOC Emissions (g/hr)	7	276	28	5	57	26					167	
Dilemma Vehicles (#)	0	0	0	0	0	0					0	
Queue Length 50th (ft)	19	~606	52	9	67	11					~319	
Queue Length 95th (ft)	m27	m#764	m72	m21	#494	m#120					#508	
Internal Link Dist (ft)		295			288			218			199	
Turn Bay Length (ft)	150		50	100		70						
Base Capacity (vph)	168	468	134	187	489	52					260	
Starvation Cap Reductn	0	0	0	0	0	0					0	
Spillback Cap Reductn	0	8	0	0	26	0					0	
Storage Cap Reductn	0	0	0	0	0	0					0	
Reduced v/c Ratio	0.25	1.21	0.79	0.30	0.86	1.00					1.15	

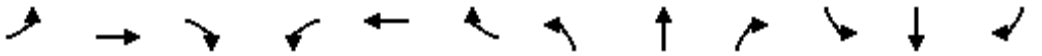
Intersection Summary

Area Type: CBD
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 49 (35%), Referenced to phase 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 1.19
Intersection Signal Delay: 91.0 Intersection LOS: F
Intersection Capacity Utilization 85.5% ICU Level of Service E
Analysis Period (min) 15

* User Entered Value
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: Wabash Avenue & Chicago Avenue





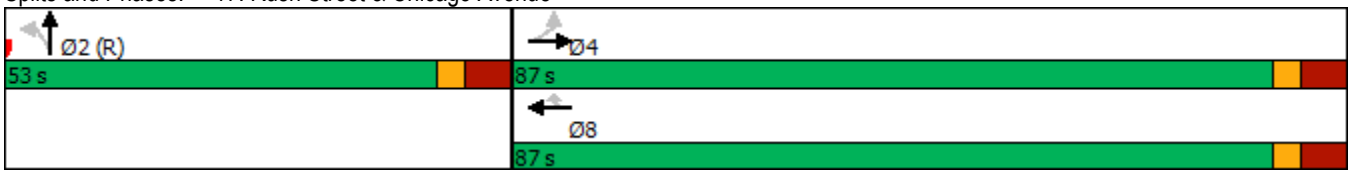
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	540	0	0	439	71	69	173	34	0	0	0
Future Volume (vph)	44	540	0	0	439	71	69	173	34	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	12	10	11	12	12	12	12	12	12
Storage Length (ft)	125		0	0		70	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.78					0.19		0.83				
Frt						0.850		0.983				
Flt Protected	0.950							0.988				
Satd. Flow (prot)	1371	1321	0	0	1468	1318	0	1454	0	0	0	0
Flt Permitted	0.418							0.988				
Satd. Flow (perm)	470	1321	0	0	1468	257	0	1291	0	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		368			334			328			284	
Travel Time (s)		8.4			7.6			7.5			6.5	
Confl. Peds. (#/hr)	372					372	121		173			
Confl. Bikes (#/hr)						5			3			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	3%	2%	2%	3%	1%	1%	1%	1%	2%	2%	2%
Parking (#/hr)		0										
Adj. Flow (vph)	46	568	0	0	462	75	73	182	36	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	568	0	0	462	75	0	291	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.52	1.28	1.22	1.33	1.28	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Minimum Split (s)	21.0	21.0			21.0	21.0	27.0	27.0				
Total Split (s)	87.0	87.0			87.0	87.0	53.0	53.0				
Total Split (%)	62.1%	62.1%			62.1%	62.1%	37.9%	37.9%				
Maximum Green (s)	79.0	79.0			79.0	79.0	45.0	45.0				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Lost Time Adjust (s)	1.0	1.0			1.0	1.0		1.0				
Total Lost Time (s)	9.0	9.0			9.0	9.0		9.0				
Lead/Lag												
Lead-Lag Optimize?												

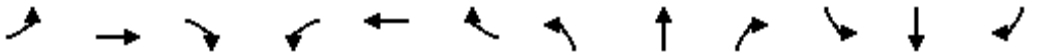
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Flash Dont Walk (s)	8.0	8.0			8.0	8.0	14.0	14.0				
Pedestrian Calls (#/hr)	0	0			0	0	0	0				
Act Effct Green (s)	78.0	78.0			78.0	78.0		44.0				
Actuated g/C Ratio	0.56	0.56			0.56	0.56		0.31				
v/c Ratio	0.18	0.77			0.57	0.52		0.72				
Control Delay	3.0	4.8			7.9	12.5		54.0				
Queue Delay	0.0	52.1			2.8	0.0		0.0				
Total Delay	3.0	56.9			10.7	12.5		54.0				
LOS	A	E			B	B		D				
Approach Delay		52.9			11.0			54.0				
Approach LOS		D			B			D				
Stops (vph)	4	153			102	28		244				
Fuel Used(gal)	0	3			2	1		5				
CO Emissions (g/hr)	12	205			169	36		356				
NOx Emissions (g/hr)	2	40			33	7		69				
VOC Emissions (g/hr)	3	47			39	8		82				
Dilemma Vehicles (#)	0	0			0	0		0				
Queue Length 50th (ft)	4	45			87	14		235				
Queue Length 95th (ft)	m3	m38			m96	m15		349				
Internal Link Dist (ft)		288			254			248			204	
Turn Bay Length (ft)	125					70						
Base Capacity (vph)	261	735			817	143		405				
Starvation Cap Reductn	0	183			241	0		0				
Spillback Cap Reductn	0	222			30	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.18	1.11			0.80	0.52		0.72				

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 58 (41%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 37.5		Intersection LOS: D	
Intersection Capacity Utilization 76.4%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: Rush Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	341	154	109	366	28	118	961	98	0	1393	126
Future Volume (vph)	0	341	154	109	366	28	118	961	98	0	1393	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	11	9	10	11	10	10	12	12	10	12
Storage Length (ft)	0		50	215		70	115		0	0		0
Storage Lanes	0		1	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.78	*0.78	1.00	*0.78	*0.78
Ped Bike Factor			0.64	0.87		0.79	0.93	0.93			0.94	
Frt			0.850			0.850		0.986			0.988	
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	1349	1235	1237	1440	1221	1408	2884	0	0	3242	0
Flt Permitted				0.182			0.950					
Satd. Flow (perm)	0	1349	786	207	1440	962	1307	2884	0	0	3242	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		334			679			321			298	
Travel Time (s)		7.6			15.4			7.3			6.8	
Confl. Peds. (#/hr)			411	411		141	352		437			352
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	12%	5%	9%	2%	4%	20%	2%	2%	0%
Bus Blockages (#/hr)	0	18	18	0	0	0	0	49	49	0	0	0
Adj. Flow (vph)	0	359	162	115	385	29	124	1012	103	0	1466	133
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	359	162	115	385	29	124	1115	0	0	1599	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.46	1.40	1.39	1.33	1.28	1.33	1.45	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	pm+pt	NA	Perm	Prot	NA			NA	
Protected Phases		4		3	8		5	2			6	
Permitted Phases			4	8		8						
Minimum Split (s)		34.0	34.0	8.0	34.0	34.0	8.0	24.0			24.0	
Total Split (s)		39.0	39.0	10.0	49.0	49.0	16.0	91.0			75.0	
Total Split (%)		27.9%	27.9%	7.1%	35.0%	35.0%	11.4%	65.0%			53.6%	
Maximum Green (s)		34.0	34.0	7.0	44.0	44.0	13.0	86.0			70.0	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
All-Red Time (s)		2.0	2.0	0.0	2.0	2.0	0.0	2.0			2.0	
Lost Time Adjust (s)		1.0	1.0	1.0	1.0	1.0	1.0	1.0			1.0	
Total Lost Time (s)		6.0	6.0	4.0	6.0	6.0	4.0	6.0			6.0	
Lead/Lag		Lag	Lag	Lead			Lag				Lead	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes				Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		24.0	24.0		24.0	24.0		14.0			14.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)		33.0	33.0	45.0	43.0	43.0	12.0	85.0			69.0	
Actuated g/C Ratio		0.24	0.24	0.32	0.31	0.31	0.09	0.61			0.49	
v/c Ratio		1.13	0.88	1.05	0.87	0.10	1.03	0.64			1.00	
Control Delay		121.4	70.5	139.2	66.8	36.0	152.1	19.7			58.2	
Queue Delay		0.9	0.0	0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay		122.3	70.5	139.2	66.8	36.0	152.1	19.7			58.2	
LOS		F	E	F	E	D	F	B			E	
Approach Delay		106.2			80.9			33.0			58.2	
Approach LOS		F			F			C			E	
Stops (vph)		273	128	66	327	20	97	654			1351	
Fuel Used(gal)		11	3	4	9	0	4	11			29	
CO Emissions (g/hr)		757	232	282	610	32	314	735			2026	
NOx Emissions (g/hr)		147	45	55	119	6	61	143			394	
VOC Emissions (g/hr)		175	54	65	141	8	73	170			470	
Dilemma Vehicles (#)		0	0	0	0	0	0	0			0	
Queue Length 50th (ft)		~374	132	~83	332	19	~120	264			~609	
Queue Length 95th (ft)		#574	m#218	#212	#516	46	#254	323			#759	
Internal Link Dist (ft)		254			599			241			218	
Turn Bay Length (ft)			50	215		70	115					
Base Capacity (vph)		317	185	110	442	295	120	1751			1597	
Starvation Cap Reductn		24	0	0	0	0	0	0			0	
Spillback Cap Reductn		0	0	0	0	0	0	0			0	
Storage Cap Reductn		0	0	0	0	0	0	0			0	
Reduced v/c Ratio		1.23	0.88	1.05	0.87	0.10	1.03	0.64			1.00	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 39 (28%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Pretimed			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay: 59.7		Intersection LOS: E	
Intersection Capacity Utilization 91.2%		ICU Level of Service F	
Analysis Period (min) 15			

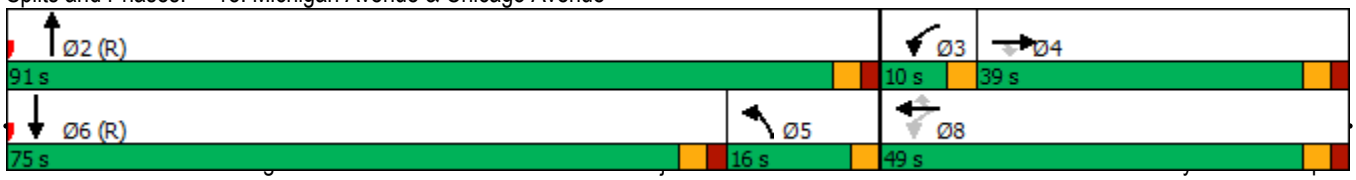
* User Entered Value

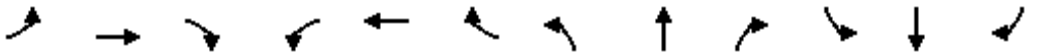
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: Michigan Avenue & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	388	2	0	442	102	0	0	0	216	0	61
Future Volume (vph)	49	388	2	0	442	102	0	0	0	216	0	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	12	10	10	11	10	10	10	16	10	12
Storage Length (ft)	120		60	120		50	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.91	1.00				0.71					0.64	
Frt		0.999				0.850					0.970	
Flt Protected	0.950										0.962	
Satd. Flow (prot)	1154	2269	0	756	1326	1025	0	0	0	0	1279	0
Flt Permitted	0.330										0.962	
Satd. Flow (perm)	365	2269	0	756	1326	730	0	0	0	0	849	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		679			400			272			306	
Travel Time (s)		15.4			9.1			6.2			7.0	
Confl. Peds. (#/hr)	101					101				226		70
Confl. Bikes (#/hr)			10			5						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	20%	22%	0%	100%	14%	19%	2%	2%	2%	8%	0%	2%
Bus Blockages (#/hr)	0	18	18	0	0	21	0	0	0	0	0	0
Adj. Flow (vph)	52	408	2	0	465	107	0	0	0	227	0	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	410	0	0	465	107	0	0	0	0	291	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			75			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.75	1.39	1.22	1.33	1.33	1.42	1.33	1.33	1.33	1.05	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	Perm				Perm	NA	
Protected Phases	7	4		3	8						6	
Permitted Phases	4			8		8				6		
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0				28.0	28.0	
Total Split (s)	8.0	38.0		8.0	38.0	38.0				34.0	34.0	
Total Split (%)	10.0%	47.5%		10.0%	47.5%	47.5%				42.5%	42.5%	
Maximum Green (s)	5.0	33.0		5.0	33.0	33.0				27.0	27.0	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0				4.0	4.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	1.0					1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0					8.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												

Lanes, Volumes, Timings
19: Chicago Avenue & Mies Van Der Rohe Way 02/23/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		5.0			5.0	5.0				5.0	5.0	
Flash Dont Walk (s)		10.0			10.0	10.0				16.0	16.0	
Pedestrian Calls (#/hr)		0			0	0				0	0	
Act Effct Green (s)	38.0	32.0			32.0	32.0					26.0	
Actuated g/C Ratio	0.48	0.40			0.40	0.40					0.32	
v/c Ratio	0.25	0.45			0.88	0.37					1.06	
Control Delay	12.6	19.6			36.6	16.8					100.6	
Queue Delay	0.0	0.0			0.0	0.0					0.0	
Total Delay	12.6	19.6			36.6	16.8					100.6	
LOS	B	B			D	B					F	
Approach Delay		18.8			32.9						100.6	
Approach LOS		B			C						F	
Stops (vph)	26	275			380	54					219	
Fuel Used(gal)	1	5			7	1					8	
CO Emissions (g/hr)	37	359			473	67					526	
NOx Emissions (g/hr)	7	70			92	13					102	
VOC Emissions (g/hr)	9	83			110	16					122	
Dilemma Vehicles (#)	0	0			0	0					0	
Queue Length 50th (ft)	12	76			198	29					~162	
Queue Length 95th (ft)	30	116			#382	m52					#310	
Internal Link Dist (ft)		599			320			192			226	
Turn Bay Length (ft)	120					50						
Base Capacity (vph)	212	907			530	292					275	
Starvation Cap Reductn	0	0			0	0					0	
Spillback Cap Reductn	0	0			0	0					0	
Storage Cap Reductn	0	0			0	0					0	
Reduced v/c Ratio	0.25	0.45			0.88	0.37					1.06	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 77 (96%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 42.8		Intersection LOS: D	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

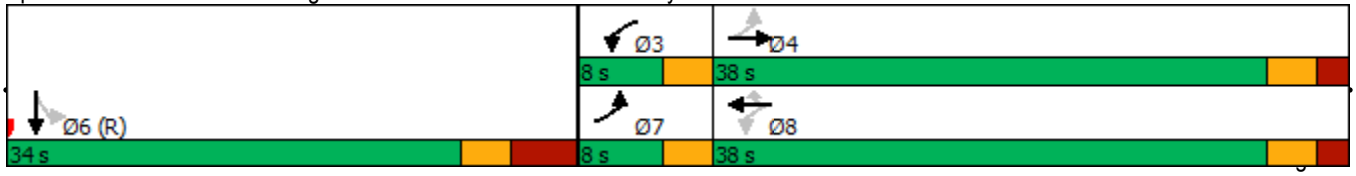
* User Entered Value

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 19: Chicago Avenue & Mies Van Der Rohe Way



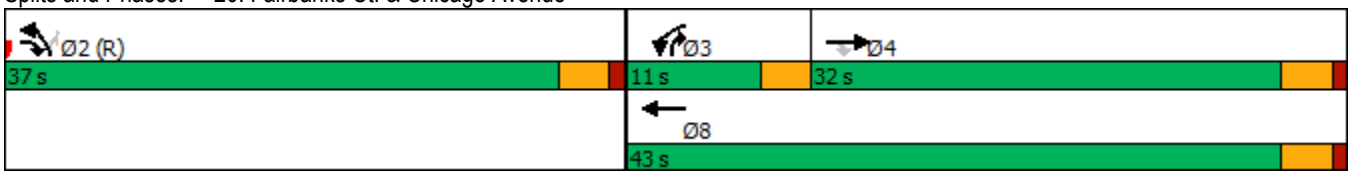
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	307	297	31	244	300	93
Future Volume (vph)	307	297	31	244	300	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	10	11	11	12
Storage Length (ft)		75	100		140	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.50	0.69			0.69
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1497	1113	1422	1550	1340	1249
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1497	558	979	1550	1340	866
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	400			888	320	
Travel Time (s)	9.1			20.2	7.3	
Confl. Peds. (#/hr)		305	305			315
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	11%	1%	1%	11%	1%
Bus Blockages (#/hr)	0	18	0	0	0	21
Adj. Flow (vph)	323	313	33	257	316	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	323	313	33	257	316	98
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			10	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.40	1.33	1.28	1.28	1.36
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Minimum Split (s)	29.0	29.0	8.0	29.0	29.0	8.0
Total Split (s)	32.0	37.0	11.0	43.0	37.0	11.0
Total Split (%)	40.0%	46.3%	13.8%	53.8%	46.3%	13.8%
Maximum Green (s)	28.0	33.0	8.0	39.0	33.0	8.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	0.0	1.0	1.0	0.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?						
Walk Time (s)	5.0	5.0		5.0	5.0	

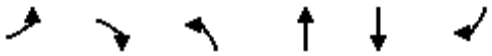
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Flash Dont Walk (s)	20.0	20.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	27.0	59.0	7.0	38.0	32.0	40.0
Actuated g/C Ratio	0.34	0.74	0.09	0.48	0.40	0.50
v/c Ratio	0.64	0.49	0.27	0.35	0.59	0.21
Control Delay	27.2	3.9	50.0	9.6	24.4	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.8	0.0
Total Delay	27.2	3.9	50.0	9.6	25.1	10.7
LOS	C	A	D	A	C	B
Approach Delay	15.7			14.2	21.7	
Approach LOS	B			B	C	
Stops (vph)	254	37	32	88	233	46
Fuel Used(gal)	4	1	1	3	4	1
CO Emissions (g/hr)	284	95	49	186	246	48
NOx Emissions (g/hr)	55	19	10	36	48	9
VOC Emissions (g/hr)	66	22	11	43	57	11
Dilemma Vehicles (#)	0	0	0	0	0	0
Queue Length 50th (ft)	129	17	17	45	121	22
Queue Length 95th (ft)	m179	m22	45	73	205	46
Internal Link Dist (ft)	320			808	240	
Turn Bay Length (ft)		75	100		140	
Base Capacity (vph)	505	633	124	736	536	466
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	59	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.49	0.27	0.35	0.66	0.21

Intersection Summary			
Area Type:	CBD		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 36 (45%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 17.3		Intersection LOS: B	
Intersection Capacity Utilization 57.5%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Fairbanks Ct. & Chicago Avenue



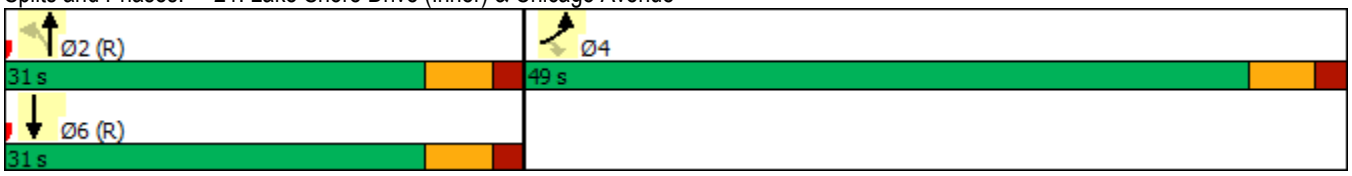


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	300	50	100	100	65
Future Volume (vph)	100	300	50	100	100	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt		0.850			0.941	
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1408	1134	0	2771	2650	0
Flt Permitted	0.950			0.804		
Satd. Flow (perm)	1408	1134	0	2264	2650	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			40	30	
Link Distance (ft)	888			307	377	
Travel Time (s)	20.2			5.2	8.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0				
Adj. Flow (vph)	105	316	53	105	105	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	316	0	158	173	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	20			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.52	1.33	1.33	1.33	1.33
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Minimum Split (s)	11.0	11.0	11.0	11.0	29.0	
Total Split (s)	49.0	49.0	31.0	31.0	31.0	
Total Split (%)	61.3%	61.3%	38.8%	38.8%	38.8%	
Maximum Green (s)	43.0	43.0	25.0	25.0	25.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)					5.0	
Flash Dont Walk (s)					18.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	42.0	42.0		24.0	24.0	
Actuated g/C Ratio	0.52	0.52		0.30	0.30	
v/c Ratio	0.14	0.53		0.23	0.22	
Control Delay	2.8	5.9		22.2	21.9	
Queue Delay	0.0	0.0		0.0	0.0	

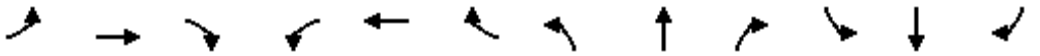
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	2.8	5.9		22.2	21.9	
LOS	A	A		C	C	
Approach Delay	5.1			22.2	21.9	
Approach LOS	A			C	C	
Stops (vph)	10	120		109	119	
Fuel Used(gal)	1	3		2	2	
CO Emissions (g/hr)	56	217		144	131	
NOx Emissions (g/hr)	11	42		28	25	
VOC Emissions (g/hr)	13	50		33	30	
Dilemma Vehicles (#)	0	0		9	0	
Queue Length 50th (ft)	6	18		31	33	
Queue Length 95th (ft)	m11	32		55	58	
Internal Link Dist (ft)	808			227	297	
Turn Bay Length (ft)						
Base Capacity (vph)	739	595		679	795	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.14	0.53		0.23	0.22	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 71 (89%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 21: Lake Shore Drive (Inner) & Chicago Avenue



PM Reports



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	407	73	55	496	107	140	1284	78	122	792	114
Future Volume (vph)	97	407	73	55	496	107	140	1284	78	122	792	114
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	10	12	10	11	12	10	11	9	10	11	9
Storage Length (ft)	160		260	100		0	100		0	100		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	100			50			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor			0.82			0.93		0.99			0.98	
Frt			0.850			0.850		0.991			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1459	1296	1283	1395	1450	1313	1368	2731	0	1408	2709	0
Flt Permitted	0.126			0.240			0.164			0.058		
Satd. Flow (perm)	193	1296	1054	352	1450	1220	236	2731	0	86	2709	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			77			55		5			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		633			179			340			330	
Travel Time (s)		14.4			4.1			7.7			7.5	
Confl. Peds. (#/hr)	30		85	85		30	40		42	42		40
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	5%	6%	3%	8%	4%	5%	7%	3%	2%	5%	7%
Bus Blockages (#/hr)	0	0	3	0	0	2	0	0	0	0	0	0
Parking (#/hr)		0										
Adj. Flow (vph)	102	428	77	58	522	113	147	1352	82	128	834	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	428	77	58	522	113	147	1434	0	128	954	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.28	1.52	1.24	1.33	1.28	1.24	1.33	1.28	1.39	1.33	1.28	1.39
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	9.0	29.0	9.0	9.0	29.0	9.0	9.0	26.0		9.0	26.0	
Total Split (s)	9.0	58.0	18.0	9.0	58.0	13.0	18.0	80.0		13.0	75.0	
Total Split (%)	5.6%	36.3%	11.3%	5.6%	36.3%	8.1%	11.3%	50.0%		8.1%	46.9%	
Maximum Green (s)	6.0	53.0	15.0	6.0	53.0	10.0	15.0	75.0		10.0	70.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Total Lost Time (s)	4.0	6.0	4.0	4.0	6.0	4.0	4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		19.0			19.0			14.0			14.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	59.0	52.0	68.0	59.0	52.0	63.0	89.0	74.0		80.0	69.0	
Actuated g/C Ratio	0.37	0.32	0.42	0.37	0.32	0.39	0.56	0.46		0.50	0.43	
v/c Ratio	0.93	1.02	0.15	0.36	1.11	0.22	0.64	1.13		1.09	0.81	
Control Delay	107.4	100.4	5.6	29.9	111.1	13.5	30.8	109.8		147.6	46.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	107.4	100.4	5.6	29.9	111.1	13.5	30.8	109.8		147.6	46.0	
LOS	F	F	A	C	F	B	C	F		F	D	
Approach Delay		89.5			88.4			102.5			58.0	
Approach LOS		F			F			F			E	
Stops (vph)	61	356	8	33	364	67	69	1165		64	774	
Fuel Used(gal)	3	12	0	1	16	1	2	41		4	15	
CO Emissions (g/hr)	205	859	34	56	1106	86	114	2831		303	1055	
NOx Emissions (g/hr)	40	167	7	11	215	17	22	551		59	205	
VOC Emissions (g/hr)	48	199	8	13	256	20	26	656		70	245	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	69	~471	0	36	~626	38	74	~914		~108	451	
Queue Length 95th (ft)	#177	#692	32	m65	#834	68	117	#1055		#253	547	
Internal Link Dist (ft)		553			99			260			250	
Turn Bay Length (ft)	160		260	100			100			100		
Base Capacity (vph)	110	421	512	162	471	518	230	1265		117	1175	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.93	1.02	0.15	0.36	1.11	0.22	0.64	1.13		1.09	0.81	

Intersection Summary

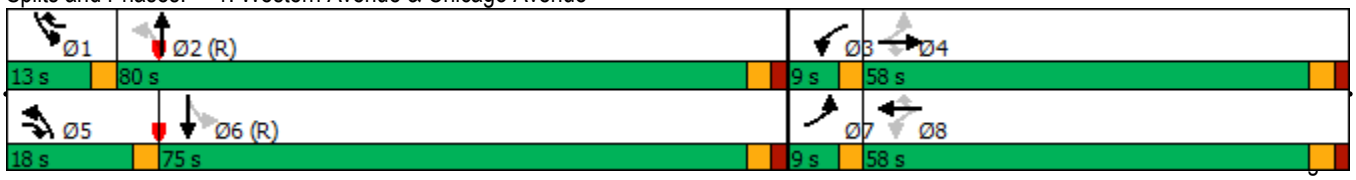
Area Type: CBD
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 12 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 85.9 Intersection LOS: F
Intersection Capacity Utilization 106.3% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Western Avenue & Chicago Avenue



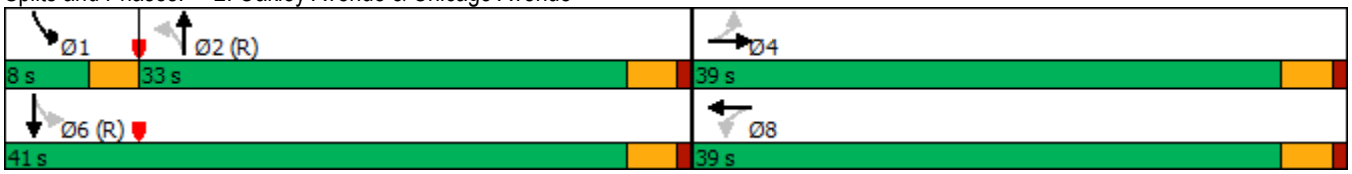
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	533	25	25	533	25	50	100	50	50	100	50
Future Volume (vph)	25	533	25	25	533	25	50	100	50	50	100	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	0		0	0		0	0		0	30		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	0			0			0			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.994			0.966			0.966	
Flt Protected		0.998			0.998			0.988			0.988	
Satd. Flow (prot)	0	2654	0	0	2794	0	0	1415	0	0	1415	0
Flt Permitted		0.915			0.915			0.881			0.891	
Satd. Flow (perm)	0	2434	0	0	2562	0	0	1262	0	0	1276	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		491			631			329			347	
Travel Time (s)		11.2			14.3			7.5			7.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0										
Adj. Flow (vph)	26	561	26	26	561	26	53	105	53	53	105	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	613	0	0	613	0	0	211	0	0	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.42	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	15.0	15.0		15.0	15.0		22.0	22.0		8.0	22.0	
Total Split (s)	39.0	39.0		39.0	39.0		33.0	33.0		8.0	41.0	
Total Split (%)	48.8%	48.8%		48.8%	48.8%		41.3%	41.3%		10.0%	51.3%	
Maximum Green (s)	35.0	35.0		35.0	35.0		29.0	29.0		5.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		0.0	1.0	
Lost Time Adjust (s)		1.0			1.0			1.0			1.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Flash Dont Walk (s)	6.0	6.0		6.0	6.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	
Act Effct Green (s)		34.0			34.0			28.0			36.0	
Actuated g/C Ratio		0.42			0.42			0.35			0.45	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.59			0.56			0.48			0.36	
Control Delay		15.6			19.9			24.8			16.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		15.6			19.9			24.8			16.6	
LOS		B			B			C			B	
Approach Delay		15.6			19.9			24.8			16.6	
Approach LOS		B			B			C			B	
Stops (vph)		342			422			153			124	
Fuel Used(gal)		7			8			2			2	
CO Emissions (g/hr)		474			528			165			133	
NOx Emissions (g/hr)		92			103			32			26	
VOC Emissions (g/hr)		110			122			38			31	
Dilemma Vehicles (#)		0			0			0			0	
Queue Length 50th (ft)		142			117			81			66	
Queue Length 95th (ft)		m135			168			145			115	
Internal Link Dist (ft)		411			551			249			267	
Turn Bay Length (ft)												
Base Capacity (vph)		1034			1088			441			579	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.59			0.56			0.48			0.36	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 18.5		Intersection LOS: B	
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Oakley Avenue & Chicago Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	43	411	111	0	960	206	129	657	54	101	607	6
Future Volume (vph)	43	411	111	0	960	206	129	657	54	101	607	6
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	50		0	0		0	130		50	0		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			0			25			0		
Lane Util. Factor	1.00	*0.80	0.95	1.00	*0.80	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.98				0.90		1.00	
Frt		0.968			0.973				0.850		0.999	
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1408	2208	0	0	2267	0	1408	1482	1260	1408	1480	0
Flt Permitted	0.067						0.186			0.144		
Satd. Flow (perm)	99	2208	0	0	2267	0	276	1482	1135	213	1480	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		426			207			537			178	
Travel Time (s)		9.7			4.7			12.2			4.0	
Confl. Peds. (#/hr)	38		59			38	36		71	71		36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	14	14	0	0	0	0	0	0	0	0	0
Adj. Flow (vph)	45	433	117	0	1011	217	136	692	57	106	639	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	550	0	0	1228	0	136	692	57	106	645	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.38	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4						6		6	2		
Minimum Split (s)	8.0	8.0			35.0		39.0	39.0	39.0	39.0	39.0	
Total Split (s)	64.0	64.0			64.0		66.0	66.0	66.0	66.0	66.0	
Total Split (%)	49.2%	49.2%			49.2%		50.8%	50.8%	50.8%	50.8%	50.8%	
Maximum Green (s)	61.0	61.0			59.0		58.0	58.0	58.0	58.0	58.0	
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	0.0			2.0		5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0			1.0		1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	4.0	4.0			6.0		9.0	9.0	9.0	9.0	9.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)					25.0		26.0	26.0	26.0	26.0	26.0	
Pedestrian Calls (#/hr)					0		0	0	0	0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Act Effct Green (s)	60.0	60.0			58.0		57.0	57.0	57.0	57.0	57.0	
Actuated g/C Ratio	0.46	0.46			0.45		0.44	0.44	0.44	0.44	0.44	
v/c Ratio	1.00	0.54			1.21		1.12	1.07	0.11	1.14	1.00	
Control Delay	174.9	27.6			122.5		155.0	90.0	22.5	147.1	54.1	
Queue Delay	0.0	0.0			1.5		1.5	14.2	0.0	0.0	37.1	
Total Delay	174.9	27.6			124.1		156.5	104.2	22.5	147.1	91.2	
LOS	F	C			F		F	F	C	F	F	
Approach Delay		38.7			124.1			106.9			99.1	
Approach LOS		D			F			F			F	
Stops (vph)	32	365			994		96	558	31	57	389	
Fuel Used(gal)	2	7			36		5	18	1	3	10	
CO Emissions (g/hr)	129	467			2551		359	1249	45	243	682	
NOx Emissions (g/hr)	25	91			496		70	243	9	47	133	
VOC Emissions (g/hr)	30	108			591		83	290	10	56	158	
Dilemma Vehicles (#)	0	0			0		0	0	0	0	0	
Queue Length 50th (ft)	37	203			~808		~132	~643	28	~102	253	
Queue Length 95th (ft)	#123	271			m#788		#267	#881	57	m#164	m#777	
Internal Link Dist (ft)		346			127			457			98	
Turn Bay Length (ft)	50						130		50			
Base Capacity (vph)	45	1019			1011		121	649	497	93	648	
Starvation Cap Reductn	0	0			252		0	0	0	0	186	
Spillback Cap Reductn	0	11			0		8	100	0	0	0	
Storage Cap Reductn	0	0			0		0	0	0	0	0	
Reduced v/c Ratio	1.00	0.55			1.62		1.20	1.26	0.11	1.14	1.40	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 122 (94%), Referenced to phase 2:NWTL and 6:SETL, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.21			
Intersection Signal Delay: 99.6		Intersection LOS: F	
Intersection Capacity Utilization 126.6%		ICU Level of Service H	
Analysis Period (min) 15			

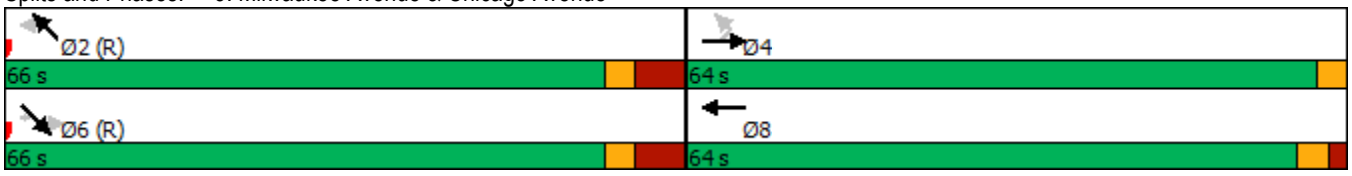
* User Entered Value

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Milwaukee Avenue & Chicago Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	596	0	261	1143	11	0	142	375	36	139	73
Future Volume (vph)	21	596	0	261	1143	11	0	142	375	36	139	73
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	9	10	10	10	10	10	10	10	10
Storage Length (ft)	0		0	160		0	0		0	50		50
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	0			75			0			25		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98			0.97	1.00				0.96	0.98	0.98	
Frt					0.999				0.850		0.948	
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1408	2372	0	1358	2367	0	0	1482	1260	1408	1236	0
Flt Permitted	0.096			0.250						0.632		
Satd. Flow (perm)	139	2372	0	348	2367	0	0	1482	1205	914	1236	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		207			1872			137			461	
Travel Time (s)		4.7			42.5			3.1			10.5	
Confl. Peds. (#/hr)	90			73		90			18	18		31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)											0	0
Adj. Flow (vph)	22	627	0	275	1203	12	0	149	395	38	146	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	627	0	275	1215	0	0	149	395	38	223	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.39	1.33	1.33	1.33	1.33	1.33	1.33	1.52	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA			NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8					2	6		
Minimum Split (s)	8.0	40.0		8.0	13.0			27.0	27.0	27.0	27.0	
Total Split (s)	8.0	60.0		22.0	74.0			48.0	48.0	48.0	48.0	
Total Split (%)	6.2%	46.2%		16.9%	56.9%			36.9%	36.9%	36.9%	36.9%	
Maximum Green (s)	5.0	52.0		18.0	66.0			43.0	43.0	43.0	43.0	
Yellow Time (s)	3.0	3.0		3.5	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	5.0		0.5	5.0			2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	4.0	9.0		5.0	9.0			6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Walk Time (s)		5.0						5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		27.0						17.0	17.0	17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)		0						0	0	0	0	
Act Effct Green (s)	60.0	51.0		77.0	65.0			42.0	42.0	42.0	42.0	
Actuated g/C Ratio	0.46	0.39		0.59	0.50			0.32	0.32	0.32	0.32	
v/c Ratio	0.21	0.67		0.81	1.03			0.31	1.02	0.13	0.56	
Control Delay	12.1	23.1		30.1	55.0			7.8	63.3	32.7	42.8	
Queue Delay	0.0	3.1		59.2	30.5			18.0	33.2	0.0	0.0	
Total Delay	12.1	26.2		89.3	85.5			25.8	96.6	32.7	42.8	
LOS	B	C		F	F			C	F	C	D	
Approach Delay		25.7			86.2			77.2			41.4	
Approach LOS		C			F			E			D	
Stops (vph)	8	261		153	891			97	341	26	174	
Fuel Used(gal)	0	5		6	35			1	7	1	4	
CO Emissions (g/hr)	9	364		437	2425			64	498	36	250	
NOx Emissions (g/hr)	2	71		85	472			12	97	7	49	
VOC Emissions (g/hr)	2	84		101	562			15	115	8	58	
Dilemma Vehicles (#)	0	0		0	0			0	0	0	0	
Queue Length 50th (ft)	5	152		131	~681			72	~362	23	155	
Queue Length 95th (ft)	m8	m175		m167	m#796			m81	#570	51	243	
Internal Link Dist (ft)		127			1792			57			381	
Turn Bay Length (ft)				160						50		
Base Capacity (vph)	103	930		338	1183			478	389	295	399	
Starvation Cap Reductn	0	202		0	0			310	138	0	0	
Spillback Cap Reductn	0	0		141	484			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.21	0.86		1.40	1.74			0.89	1.57	0.13	0.56	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 105 (81%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 67.2		Intersection LOS: E	
Intersection Capacity Utilization 95.4%		ICU Level of Service F	
Analysis Period (min) 15			

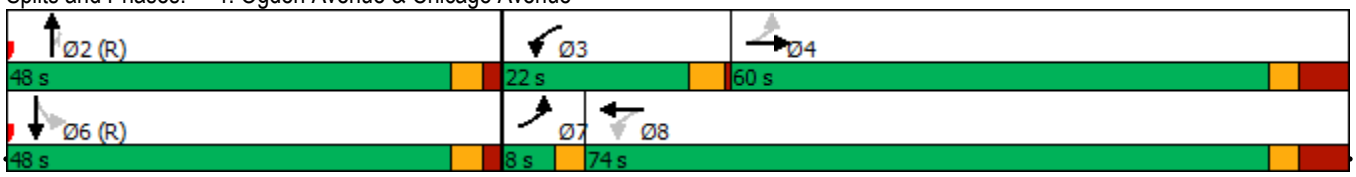
* User Entered Value

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Ogden Avenue & Chicago Avenue



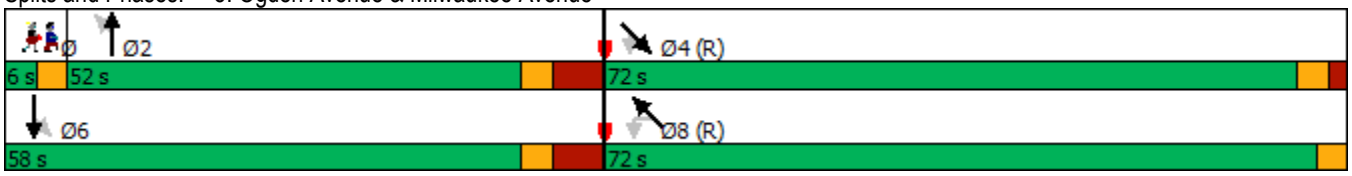
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	168	562	65	27	372	0	0	599	186	150	534	0
Future Volume (vph)	168	562	65	27	372	0	0	599	186	150	534	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	110		0	0		0	0		0	90		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	25			0			0			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.82	0.97							0.91			
Frt		0.985							0.850			
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1408	2701	0	1408	2816	0	0	1482	1260	1408	1482	0
Flt Permitted	0.520			0.255						0.247		
Satd. Flow (perm)	629	2701	0	378	2816	0	0	1482	1147	366	1482	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		514			137			178			729	
Travel Time (s)		11.7			3.1			4.0			16.6	
Confl. Peds. (#/hr)	169		63	63					53	53		100
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	177	592	68	28	392	0	0	631	196	158	562	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	177	660	0	28	392	0	0	631	196	158	562	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6					4	8		
Minimum Split (s)	25.0	25.0		25.0	25.0			31.0	31.0	8.0	8.0	
Total Split (s)	52.0	52.0		58.0	58.0			72.0	72.0	72.0	72.0	
Total Split (%)	40.0%	40.0%		44.6%	44.6%			55.4%	55.4%	55.4%	55.4%	
Maximum Green (s)	44.0	44.0		50.0	50.0			67.0	67.0	69.0	69.0	
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0		5.0	5.0			2.0	2.0	0.0	0.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0			1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0		9.0	9.0			6.0	6.0	4.0	4.0	
Lead/Lag	Lag	Lag										
Lead-Lag Optimize?	Yes	Yes										
Walk Time (s)	5.0	5.0		5.0	5.0			5.0	5.0			
Flash Dont Walk (s)	12.0	12.0		12.0	12.0			21.0	21.0			
Pedestrian Calls (#/hr)	0	0		0	0			0	0			
Act Effct Green (s)	43.0	43.0		49.0	49.0			66.0	66.0	68.0	68.0	

Lane Group	Ø1
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	1
Permitted Phases	
Minimum Split (s)	6.0
Total Split (s)	6.0
Total Split (%)	5%
Maximum Green (s)	3.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Actuated g/C Ratio	0.33	0.33		0.38	0.38			0.51	0.51	0.52	0.52	
v/c Ratio	0.85	0.74		0.20	0.37			0.84	0.34	0.83	0.73	
Control Delay	75.3	44.5		32.8	30.1			20.6	7.8	61.4	30.6	
Queue Delay	63.4	6.1		5.0	60.7			52.1	32.2	0.0	1.6	
Total Delay	138.7	50.6		37.7	90.8			72.7	40.0	61.4	32.1	
LOS	F	D		D	F			E	D	E	C	
Approach Delay		69.2			87.3			64.9			38.6	
Approach LOS		E			F			E			D	
Stops (vph)	142	545		18	244			549	73	118	407	
Fuel Used(gal)	4	11		0	4			6	1	3	9	
CO Emissions (g/hr)	282	783		22	281			446	67	236	602	
NOx Emissions (g/hr)	55	152		4	55			87	13	46	117	
VOC Emissions (g/hr)	65	182		5	65			103	16	55	139	
Dilemma Vehicles (#)	0	0		0	0			0	0	0	0	
Queue Length 50th (ft)	139	258		14	110			539	49	108	352	
Queue Length 95th (ft)	#278	333		m24	m168			m537	m54	#253	502	
Internal Link Dist (ft)		434			57			98			649	
Turn Bay Length (ft)	110									90		
Base Capacity (vph)	208	893		142	1061			752	582	191	775	
Starvation Cap Reductn	0	0		76	788			300	384	0	0	
Spillback Cap Reductn	94	181		0	0			0	0	0	88	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	1.55	0.93		0.42	1.44			1.40	0.99	0.83	0.82	

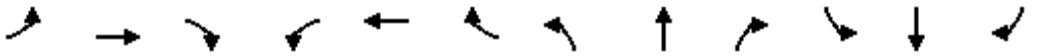
Intersection Summary			
Area Type:	CBD		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 8 (6%), Referenced to phase 4:SET and 8:NWTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 62.8		Intersection LOS: E	
Intersection Capacity Utilization 105.3%		ICU Level of Service G	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Ogden Avenue & Milwaukee Avenue



Lane Group	Ø1
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

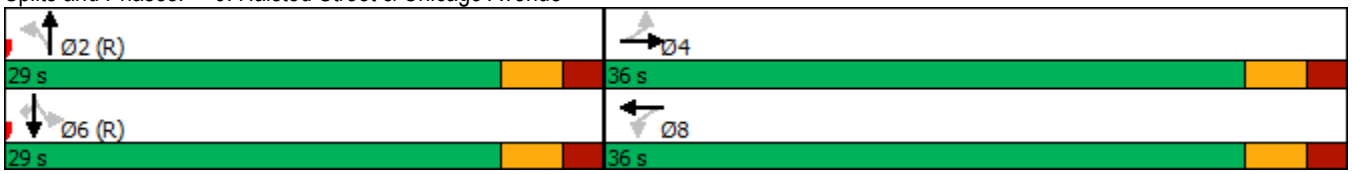


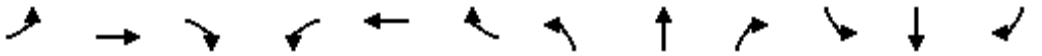
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	840	25	135	894	99	43	552	135	88	494	348
Future Volume (vph)	142	840	25	135	894	99	43	552	135	88	494	348
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	80		0	80		0	95		0	80		260
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor	0.99	1.00		0.98	0.99		0.98	0.99		1.00		0.88
Frt		0.996			0.985			0.971				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1342	2670	0	1368	2692	0	1064	2499	0	1131	2542	1168
Flt Permitted	0.188			0.244			0.429			0.291		
Satd. Flow (perm)	262	2670	0	344	2692	0	470	2499	0	345	2542	1032
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1872			743			718			744	
Travel Time (s)		42.5			16.9			16.3			16.9	
Confl. Peds. (#/hr)	102		123	123		102	57		18	18		57
Confl. Bikes (#/hr)			137			11			2			103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	6%	31%	5%	4%	6%	35%	12%	7%	27%	13%	10%
Adj. Flow (vph)	149	884	26	142	941	104	45	581	142	93	520	366
Shared Lane Traffic (%)												
Lane Group Flow (vph)	149	910	0	142	1045	0	45	723	0	93	520	366
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Minimum Split (s)	33.0	33.0		33.0	33.0		29.0	29.0		29.0	29.0	29.0
Total Split (s)	36.0	36.0		36.0	36.0		29.0	29.0		29.0	29.0	29.0
Total Split (%)	55.4%	55.4%		55.4%	55.4%		44.6%	44.6%		44.6%	44.6%	44.6%
Maximum Green (s)	31.0	31.0		31.0	31.0		24.0	24.0		24.0	24.0	24.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	19.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	30.0	30.0		30.0	30.0		23.0	23.0		23.0	23.0	23.0
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.35	0.35		0.35	0.35	0.35
v/c Ratio	1.24	0.74		0.90	0.84		0.27	0.82		0.76	0.58	1.00
Control Delay	162.8	9.9		72.8	23.6		20.4	28.7		61.5	20.2	73.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	162.8	9.9		72.8	23.6		20.4	28.7		61.5	20.2	73.5
LOS	F	A		E	C		C	C		E	C	E
Approach Delay		31.5			29.5			28.2			44.0	
Approach LOS		C			C			C			D	
Stops (vph)	93	557		98	803		33	578		67	384	278
Fuel Used(gal)	7	17		4	19		1	11		2	7	9
CO Emissions (g/hr)	510	1219		274	1349		42	773		139	491	612
NOx Emissions (g/hr)	99	237		53	262		8	150		27	95	119
VOC Emissions (g/hr)	118	283		63	313		10	179		32	114	142
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	0
Queue Length 50th (ft)	~100	122		49	181		12	133		32	86	~143
Queue Length 95th (ft)	m#204	m186		#152	#301		38	#225		#109	131	#303
Internal Link Dist (ft)		1792			663			638			664	
Turn Bay Length (ft)	80			80			95			80		260
Base Capacity (vph)	120	1232		158	1242		166	884		122	899	365
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	1.24	0.74		0.90	0.84		0.27	0.82		0.76	0.58	1.00

Intersection Summary			
Area Type:	CBD		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 1.24			
Intersection Signal Delay: 33.3		Intersection LOS: C	
Intersection Capacity Utilization 119.9%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Halsted Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	250	577	240	25	914	165	0	0	0	372	20	306
Future Volume (vph)	250	577	240	25	914	165	0	0	0	372	20	306
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	9	10	11	10	10	10	10	10	10
Storage Length (ft)	75		0	0		150	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	75			0			0			0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.84	0.79		0.82		0.39					0.71	0.49
Frt		0.956				0.850						0.850
Flt Protected	0.950			0.950							0.955	
Satd. Flow (prot)	1408	2122	0	1358	2816	1232	0	0	0	0	1416	1260
Flt Permitted	0.950			0.300							0.955	
Satd. Flow (perm)	1188	2122	0	350	2816	484	0	0	0	0	1007	612
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		69				106						309
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		200			361			360			481	
Travel Time (s)		4.5			8.2			8.2			10.9	
Confl. Peds. (#/hr)	294		323	323		294	514		122	122		514
Confl. Bikes (#/hr)			67			9			12			24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	0	0	0	0	14	0	0	0	0	0	0
Adj. Flow (vph)	263	607	253	26	962	174	0	0	0	392	21	322
Shared Lane Traffic (%)												
Lane Group Flow (vph)	263	860	0	26	962	174	0	0	0	0	413	322
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.33	1.33	1.39	1.33	1.37	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		pm+pt	NA	custom				Split	NA	Perm
Protected Phases	5	2 12		1	6	16				4	4	
Permitted Phases				6		6						4
Minimum Split (s)	8.0			8.0	26.0	7.0				21.0	21.0	21.0
Total Split (s)	30.0			8.0	57.0	7.0				46.0	46.0	46.0
Total Split (%)	21.4%			5.7%	40.7%	5.0%				32.9%	32.9%	32.9%
Maximum Green (s)	26.5			5.0	52.0	5.0				41.0	41.0	41.0
Yellow Time (s)	3.0			3.0	3.0	2.0				3.0	3.0	3.0
All-Red Time (s)	0.5			0.0	2.0	0.0				2.0	2.0	2.0
Lost Time Adjust (s)	1.0			1.0	1.0	1.0					1.0	1.0
Total Lost Time (s)	4.5			4.0	6.0	3.0					6.0	6.0
Lead/Lag				Lag	Lag	Lead						
Lead-Lag Optimize?												
Walk Time (s)					4.0					5.0	5.0	5.0

Lane Group	Ø2	Ø12
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Width (ft)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor		
Bus Blockages (#/hr)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	2	12
Permitted Phases		
Minimum Split (s)	26.0	7.0
Total Split (s)	79.0	7.0
Total Split (%)	56%	5%
Maximum Green (s)	74.0	5.0
Yellow Time (s)	3.0	2.0
All-Red Time (s)	2.0	0.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		Lead
Lead-Lag Optimize?		
Walk Time (s)	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)					17.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)					0					0	0	0
Act Effct Green (s)	25.5	74.0		53.0	51.0	58.0					40.0	40.0
Actuated g/C Ratio	0.18	0.53		0.38	0.36	0.41					0.29	0.29
v/c Ratio	1.03	0.75		0.16	0.94	0.61					1.02	0.82
Control Delay	118.7	28.1		20.6	49.4	12.9					99.4	23.0
Queue Delay	0.0	0.1		0.0	12.4	0.1					28.0	0.0
Total Delay	118.7	28.2		20.6	61.8	13.0					127.3	23.0
LOS	F	C		C	E	B					F	C
Approach Delay		49.4			53.6						81.6	
Approach LOS		D			D						F	
Stops (vph)	214	455		13	837	43					341	49
Fuel Used(gal)	10	15		0	16	1					11	3
CO Emissions (g/hr)	683	1082		17	1146	79					789	199
NOx Emissions (g/hr)	133	211		3	223	15					153	39
VOC Emissions (g/hr)	158	251		4	266	18					183	46
Dilemma Vehicles (#)	0	0		0	0	0					0	0
Queue Length 50th (ft)	~255	221		11	454	6					~398	9
Queue Length 95th (ft)	#434	290		m20	#585	28					#610	#216
Internal Link Dist (ft)		120			281			280			401	
Turn Bay Length (ft)	75					150						
Base Capacity (vph)	256	1154		161	1025	283					404	395
Starvation Cap Reductn	0	0		0	74	3					0	0
Spillback Cap Reductn	0	22		0	0	0					59	0
Storage Cap Reductn	0	0		0	0	0					0	0
Reduced v/c Ratio	1.03	0.76		0.16	1.01	0.62					1.20	0.82

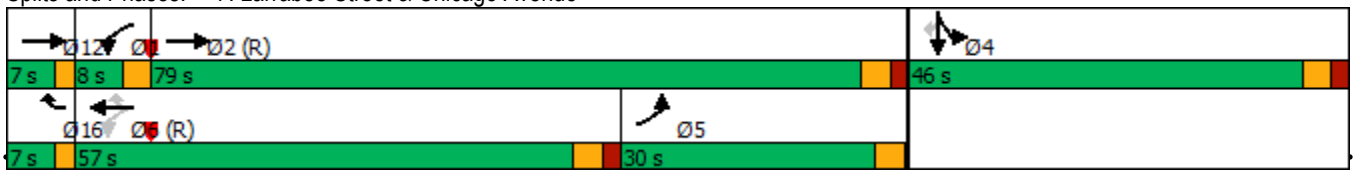
Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 58.9		Intersection LOS: E	
Intersection Capacity Utilization 91.7%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

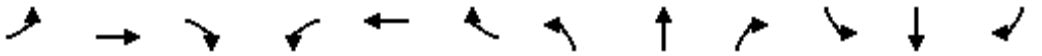
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Larrabee Street & Chicago Avenue



Lane Group	Ø2	Ø12
Flash Dont Walk (s)	10.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

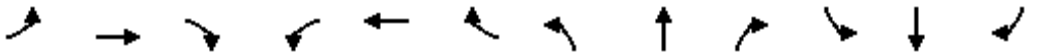


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	949	1	40	924	5	150	85	75	15	5	5
Future Volume (vph)	5	949	1	40	924	5	150	85	75	15	5	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	65		350	80		75	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			75			0			0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.45			0.40	0.95	0.99		0.99	0.95	
Frt			0.850			0.850		0.929			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1358	2816	1305	1358	2816	1305	1408	1361	0	1408	1301	0
Flt Permitted	0.232			0.216			0.612			0.651		
Satd. Flow (perm)	332	2816	589	309	2816	528	864	1361	0	955	1301	0
Right Turn on Red			No			Yes			No			No
Satd. Flow (RTOR)						39						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		361			809			355			175	
Travel Time (s)		8.2			18.4			8.1			4.0	
Confl. Peds. (#/hr)	211		139	139		211	30		7	7		30
Confl. Bikes (#/hr)			56			9			1			29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	999	1	42	973	5	158	89	79	16	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	999	1	42	973	5	158	168	0	16	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.33	1.28	1.39	1.33	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6		6	4			8		
Minimum Split (s)	20.0	20.0	20.0	8.0	20.0	20.0	8.0	27.0		27.0	27.0	
Total Split (s)	83.0	83.0	83.0	8.0	91.0	91.0	22.0	49.0		27.0	27.0	
Total Split (%)	59.3%	59.3%	59.3%	5.7%	65.0%	65.0%	15.7%	35.0%		19.3%	19.3%	
Maximum Green (s)	79.0	79.0	79.0	5.0	87.0	87.0	18.0	45.0		23.0	23.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	0.5	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Total Lost Time (s)	5.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag	Lead	Lead	Lead	Lag			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Walk Time (s)	5.0	5.0	5.0		5.0	5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		18.0		18.0	18.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0		0	0		0		0	0	
Act Effct Green (s)	78.0	78.0	78.0	87.0	86.0	86.0	44.0	44.0		22.0	22.0	
Actuated g/C Ratio	0.56	0.56	0.56	0.62	0.61	0.61	0.31	0.31		0.16	0.16	
v/c Ratio	0.03	0.64	0.00	0.19	0.56	0.01	0.47	0.39		0.11	0.05	
Control Delay	14.6	19.9	17.0	14.5	17.5	0.0	42.4	41.0		52.8	51.0	
Queue Delay	0.0	19.6	0.0	0.0	0.5	0.0	0.0	0.0		0.0	0.0	
Total Delay	14.6	39.6	17.0	14.5	18.0	0.0	42.4	41.0		52.8	51.0	
LOS	B	D	B	B	B	A	D	D		D	D	
Approach Delay		39.4			17.8			41.6			52.1	
Approach LOS		D			B			D			D	
Stops (vph)	3	569	1	14	523	0	114	124		15	10	
Fuel Used(gal)	0	10	0	1	15	0	2	2		0	0	
CO Emissions (g/hr)	3	676	1	40	1033	3	164	172		18	12	
NOx Emissions (g/hr)	1	131	0	8	201	1	32	33		4	2	
VOC Emissions (g/hr)	1	157	0	9	239	1	38	40		4	3	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	2	290	0	14	261	0	111	120		13	8	
Queue Length 95th (ft)	m2	m362	m0	30	321	0	178	190		36	26	
Internal Link Dist (ft)		281			729			275			95	
Turn Bay Length (ft)	65		350	80		75						
Base Capacity (vph)	184	1568	328	221	1729	339	337	427		150	204	
Starvation Cap Reductn	0	586	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	347	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.03	1.02	0.00	0.19	0.70	0.01	0.47	0.39		0.11	0.05	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 109 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 30.6		Intersection LOS: C	
Intersection Capacity Utilization 66.5%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 8: Kingsbury Street & Chicago Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	830	25	85	670	65	70	635	90	165	440	55
Future Volume (vph)	120	830	25	85	670	65	70	635	90	165	440	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	130		75	95		125	50		0	50		110
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.86		0.64			0.44	0.92		0.81		0.98	
Frt			0.850			0.850			0.850		0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1358	2816	1305	1358	2676	1305	1408	1482	1260	1408	2711	0
Flt Permitted	0.281			0.187			0.446			0.230		
Satd. Flow (perm)	347	2816	833	267	2676	577	608	1482	1026	341	2711	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		384			406			352			306	
Travel Time (s)		8.7			9.2			8.0			7.0	
Confl. Peds. (#/hr)	206		258	258		206	106		107	107		106
Confl. Bikes (#/hr)			29			7			8			15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)					0							
Adj. Flow (vph)	126	874	26	89	705	68	74	668	95	174	463	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	874	26	89	705	68	74	668	95	174	521	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.33	1.28	1.39	1.42	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	30.0	30.0	30.0	30.0	30.0	
Total Split (s)	51.0	51.0	51.0	51.0	51.0	51.0	69.0	69.0	69.0	69.0	69.0	
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	42.5%	57.5%	57.5%	57.5%	57.5%	57.5%	
Maximum Green (s)	43.0	43.0	43.0	43.0	43.0	43.0	61.0	61.0	61.0	61.0	61.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	12.0	12.0	12.0	12.0	12.0	12.0	17.0	17.0	17.0	17.0	17.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)	42.0	42.0	42.0	42.0	42.0	42.0	60.0	60.0	60.0	60.0	60.0	
Actuated g/C Ratio	0.35	0.35	0.35	0.35	0.35	0.35	0.50	0.50	0.50	0.50	0.50	
v/c Ratio	1.04	0.89	0.09	0.96	0.75	0.34	0.24	0.90	0.19	1.02	0.38	
Control Delay	133.4	49.0	27.4	123.5	40.5	34.7	19.8	44.7	17.8	107.7	19.6	
Queue Delay	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	133.4	49.0	27.4	123.5	42.4	34.7	19.8	44.7	17.8	107.7	19.6	
LOS	F	D	C	F	D	C	B	D	B	F	B	
Approach Delay		58.8			50.2			39.4			41.7	
Approach LOS		E			D			D			D	
Stops (vph)	91	742	16	66	580	49	39	537	48	126	295	
Fuel Used(gal)	5	20	0	3	11	1	1	10	1	5	5	
CO Emissions (g/hr)	341	1405	32	194	759	65	48	733	59	329	335	
NOx Emissions (g/hr)	66	273	6	38	148	13	9	143	11	64	65	
VOC Emissions (g/hr)	79	326	7	45	176	15	11	170	14	76	78	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	~105	333	13	67	252	39	32	456	39	~143	127	
Queue Length 95th (ft)	#231	#452	35	#178	327	82	66	#710	74	#288	170	
Internal Link Dist (ft)		304			326			272			226	
Turn Bay Length (ft)	130		75	95		125	50			50		
Base Capacity (vph)	121	985	291	93	936	201	304	741	513	170	1355	
Starvation Cap Reductn	0	0	0	0	111	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	1.04	0.89	0.09	0.96	0.85	0.34	0.24	0.90	0.19	1.02	0.38	

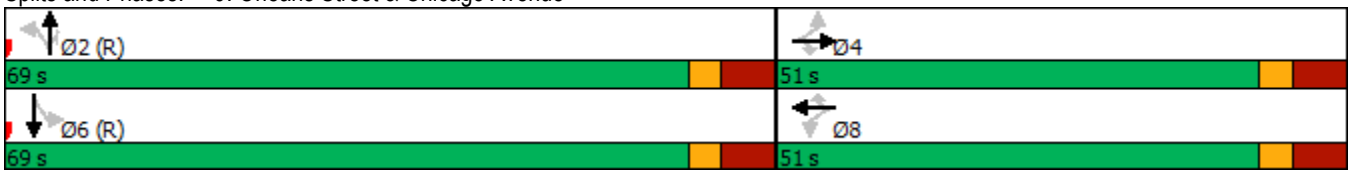
Intersection Summary

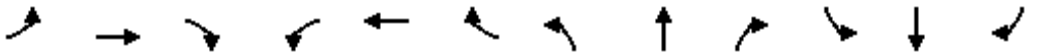
Area Type: CBD
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 89 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 48.4 Intersection LOS: D
Intersection Capacity Utilization 128.6% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Orleans Street & Chicago Avenue



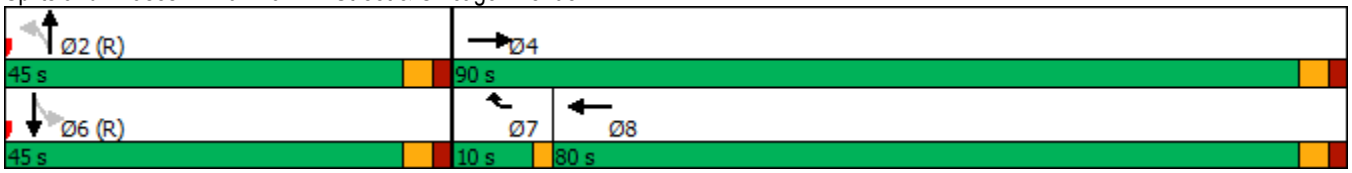


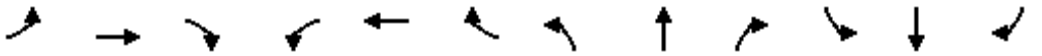
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	975	30	0	762	26	38	87	54	35	104	13
Future Volume (vph)	0	975	30	0	762	26	38	87	54	35	104	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	10	11	11	12	10	10	10	10	10	10
Storage Length (ft)	0		0	0		90	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	0			0			0			0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97						0.86			0.92	
Frt		0.995				0.850		0.959			0.988	
Flt Protected								0.990			0.989	
Satd. Flow (prot)	0	2886	0	0	2771	1274	0	1273	0	0	1397	0
Flt Permitted								0.907			0.899	
Satd. Flow (perm)	0	2886	0	0	2771	1274	0	1110	0	0	1215	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		406			399			394			261	
Travel Time (s)		9.2			9.1			9.0			5.9	
Confl. Peds. (#/hr)	120		461	461		120	260		182	182		260
Confl. Bikes (#/hr)			13			2			1			3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Bus Blockages (#/hr)	0	6	6	0	0	14	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	0	1026	32	0	802	27	40	92	57	37	109	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1058	0	0	802	27	0	189	0	0	160	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.33	1.24	1.33	1.28	1.36	1.32	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA			NA	custom	Perm	NA		Perm	NA	
Protected Phases		4			8	7		2			6	
Permitted Phases							2			6		
Minimum Split (s)		17.0			17.0	5.0	26.0	26.0		18.0	18.0	
Total Split (s)		90.0			80.0	10.0	45.0	45.0		45.0	45.0	
Total Split (%)		66.7%			59.3%	7.4%	33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)		85.0			75.0	8.0	40.0	40.0		40.0	40.0	
Yellow Time (s)		3.0			3.0	2.0	3.0	3.0		3.0	3.0	
All-Red Time (s)		2.0			2.0	0.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		1.0			1.0	1.0		1.0			1.0	
Total Lost Time (s)		6.0			6.0	3.0		6.0			6.0	
Lead/Lag					Lag	Lead						
Lead-Lag Optimize?												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		7.0			7.0		16.0	16.0		8.0	8.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)		84.0			74.0	7.0		39.0			39.0	
Actuated g/C Ratio		0.62			0.55	0.05		0.29			0.29	
v/c Ratio		0.59			0.53	0.41		0.59			0.46	
Control Delay		16.9			21.0	80.6		50.0			44.4	
Queue Delay		5.8			3.5	0.0		0.0			0.0	
Total Delay		22.7			24.5	80.6		50.0			44.4	
LOS		C			C	F		D			D	
Approach Delay		22.7			26.4			50.0			44.4	
Approach LOS		C			C			D			D	
Stops (vph)		576			468	26		153			123	
Fuel Used(gal)		10			8	1		3			2	
CO Emissions (g/hr)		687			574	46		226			165	
NOx Emissions (g/hr)		134			112	9		44			32	
VOC Emissions (g/hr)		159			133	11		52			38	
Dilemma Vehicles (#)		0			0	0		0			0	
Queue Length 50th (ft)		275			226	23		142			115	
Queue Length 95th (ft)		338			285	57		229			187	
Internal Link Dist (ft)		326			319			314			181	
Turn Bay Length (ft)						90						
Base Capacity (vph)		1795			1518	66		320			351	
Starvation Cap Reductn		671			604	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.94			0.88	0.41		0.59			0.46	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 27.9		Intersection LOS: C	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: Franklin Street & Chicago Avenue





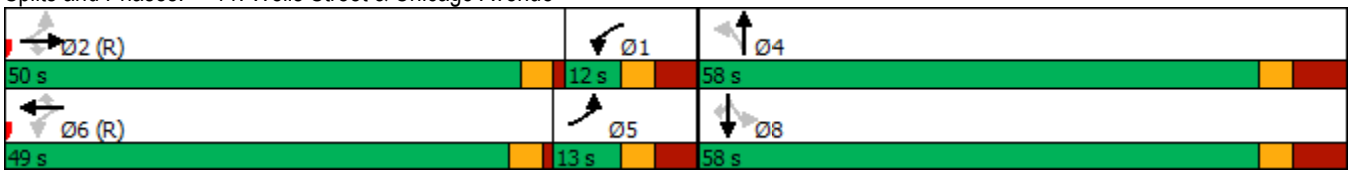
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	867	109	63	821	84	13	88	14	109	344	55
Future Volume (vph)	100	867	109	63	821	84	13	88	14	109	344	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	100		50	90		90	0		0	0		75
Storage Lanes	1		1	1		1	0		0	0		1
Taper Length (ft)	25			75			0			0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.39			0.57		0.98			0.97	0.82
Frt			0.850			0.850		0.983				0.850
Flt Protected	0.950			0.950				0.994			0.988	
Satd. Flow (prot)	1358	2676	1305	1358	2816	1305	0	1420	0	0	1465	1260
Flt Permitted	0.177			0.154				0.927			0.880	
Satd. Flow (perm)	253	2676	507	220	2816	738	0	1318	0	0	1265	1038
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		399			407			355			273	
Travel Time (s)		9.1			9.3			8.1			6.2	
Confl. Peds. (#/hr)	119		282	282		119	79		90	90		79
Confl. Bikes (#/hr)			11			5			3			87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0										
Adj. Flow (vph)	105	913	115	66	864	88	14	93	15	115	362	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	913	115	66	864	88	0	122	0	0	477	58
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.42	1.28	1.39	1.33	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4			8		8
Minimum Split (s)	12.0	21.0	21.0	12.0	21.0	21.0	30.0	30.0		30.0	30.0	30.0
Total Split (s)	13.0	50.0	50.0	12.0	49.0	49.0	58.0	58.0		58.0	58.0	58.0
Total Split (%)	10.8%	41.7%	41.7%	10.0%	40.8%	40.8%	48.3%	48.3%		48.3%	48.3%	48.3%
Maximum Green (s)	6.0	46.0	46.0	5.0	45.0	45.0	50.0	50.0		50.0	50.0	50.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	4.0	1.0	1.0	4.0	1.0	1.0	5.0	5.0		5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0			1.0	1.0
Total Lost Time (s)	8.0	5.0	5.0	8.0	5.0	5.0		9.0			9.0	9.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Walk Time (s)		5.0	5.0		5.0	5.0	4.0	4.0		4.0	4.0	4.0

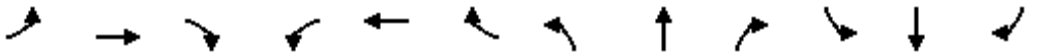
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	18.0	18.0		18.0	18.0	18.0
Pedestrian Calls (#/hr)		0	0		0	0	0	0		0	0	0
Act Effct Green (s)	47.0	45.0	45.0	45.0	44.0	44.0		49.0			49.0	49.0
Actuated g/C Ratio	0.39	0.38	0.38	0.38	0.37	0.37		0.41			0.41	0.41
v/c Ratio	0.72	0.91	0.61	0.55	0.84	0.33		0.23			0.92	0.14
Control Delay	62.1	49.8	46.2	33.1	33.7	27.3		24.6			59.5	23.5
Queue Delay	0.0	46.4	0.0	0.0	1.1	0.0		0.0			0.0	0.0
Total Delay	62.1	96.2	46.2	33.1	34.8	27.3		24.6			59.5	23.5
LOS	E	F	D	C	C	C		C			E	C
Approach Delay		88.0			34.1			24.6			55.6	
Approach LOS		F			C			C			E	
Stops (vph)	70	772	93	33	466	42		74			387	34
Fuel Used(gal)	2	16	2	1	11	1		1			9	1
CO Emissions (g/hr)	137	1101	131	56	756	67		92			601	40
NOx Emissions (g/hr)	27	214	26	11	147	13		18			117	8
VOC Emissions (g/hr)	32	255	30	13	175	16		21			139	9
Dilemma Vehicles (#)	0	0	0	0	0	0		0			0	0
Queue Length 50th (ft)	47	349	71	20	187	34		61			346	28
Queue Length 95th (ft)	#113	#479	#148	m28	252	m58		106			#562	58
Internal Link Dist (ft)		319			327			275			193	
Turn Bay Length (ft)	100		50	90		90						75
Base Capacity (vph)	145	1003	190	120	1032	270		538			516	423
Starvation Cap Reductn	0	179	0	0	47	0		0			0	0
Spillback Cap Reductn	0	0	0	0	0	0		0			0	0
Storage Cap Reductn	0	0	0	0	0	0		0			0	0
Reduced v/c Ratio	0.72	1.11	0.61	0.55	0.88	0.33		0.23			0.92	0.14

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 59.5		Intersection LOS: E	
Intersection Capacity Utilization 86.4%		ICU Level of Service E	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 11: Wells Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	700	84	81	654	131	156	1207	92	116	711	120
Future Volume (vph)	141	700	84	81	654	131	156	1207	92	116	711	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	11	11	12	11	11	12
Storage Length (ft)	150		60	100		80	120		0	80		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	75			50			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor	0.92		0.70	0.93		0.71	0.97	0.98		0.98	0.98	
Frt			0.850			0.850		0.989			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1385	2844	1257	1358	2676	1318	1488	4023	0	1488	4037	0
Flt Permitted	0.274			0.246			0.283			0.141		
Satd. Flow (perm)	368	2844	885	327	2676	931	430	4023	0	216	4037	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		407			413			368			440	
Travel Time (s)		9.3			9.4			8.4			10.0	
Confl. Peds. (#/hr)	190		191	191		190	72		151	151		72
Confl. Bikes (#/hr)			10			6			1			4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	2%	2%	1%	0%	3%	7%	0%	2%	0%
Bus Blockages (#/hr)	0	0	14	0	0	0	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	148	737	88	85	688	138	164	1271	97	122	748	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	148	737	88	85	688	138	164	1368	0	122	874	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.33	1.37	1.39	1.42	1.28	1.28	1.28	1.22	1.28	1.28	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	29.0	29.0	29.0	29.0	29.0	29.0	28.0	28.0		28.0	28.0	
Total Split (s)	50.0	50.0	50.0	50.0	50.0	50.0	70.0	70.0		70.0	70.0	
Total Split (%)	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	58.3%	58.3%		58.3%	58.3%	
Maximum Green (s)	45.0	45.0	45.0	45.0	45.0	45.0	65.0	65.0		65.0	65.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag												

Lanes, Volumes, Timings
12: La Salle Street & Chicago Avenue 02/23/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	19.0	19.0	19.0	19.0	19.0	19.0	18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)	44.0	44.0	44.0	44.0	44.0	44.0	64.0	64.0		64.0	64.0	
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37	0.37	0.53	0.53		0.53	0.53	
v/c Ratio	1.10	0.71	0.27	0.71	0.70	0.40	0.72	0.64		1.06	0.41	
Control Delay	98.4	7.7	6.0	22.0	14.5	12.2	41.6	21.5		132.5	17.4	
Queue Delay	0.0	0.6	0.0	0.0	1.3	0.0	0.0	0.0		0.0	0.0	
Total Delay	98.4	8.4	6.0	22.0	15.8	12.2	41.6	21.5		132.5	17.4	
LOS	F	A	A	C	B	B	D	C		F	B	
Approach Delay		21.9			15.8			23.7			31.5	
Approach LOS		C			B			C			C	
Stops (vph)	91	278	16	57	435	67	118	884		86	474	
Fuel Used(gal)	4	5	0	1	6	1	2	14		4	8	
CO Emissions (g/hr)	264	340	32	66	450	78	169	1000		280	588	
NOx Emissions (g/hr)	51	66	6	13	88	15	33	195		54	114	
VOC Emissions (g/hr)	61	79	7	15	104	18	39	232		65	136	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0		0	0	
Queue Length 50th (ft)	~33	41	9	38	160	46	92	264		~104	142	
Queue Length 95th (ft)	m#47	m46	m10	m27	m113	m35	#220	315		#230	175	
Internal Link Dist (ft)		327			333			288			360	
Turn Bay Length (ft)	150		60	100		80	120			80		
Base Capacity (vph)	134	1042	324	119	981	341	229	2145		115	2153	
Starvation Cap Reductn	0	87	0	0	131	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	34	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.10	0.77	0.27	0.71	0.81	0.40	0.72	0.64		1.06	0.41	

Intersection Summary

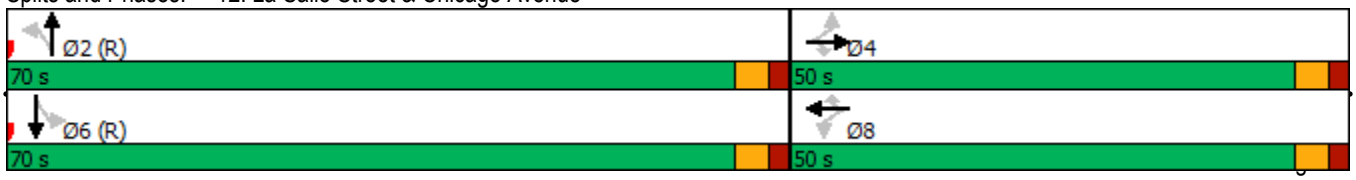
Area Type: CBD
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 97 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 1.10
Intersection Signal Delay: 23.4 Intersection LOS: C
Intersection Capacity Utilization 112.1% ICU Level of Service H
Analysis Period (min) 15

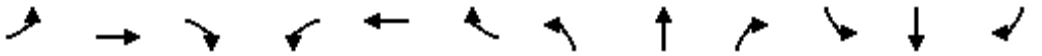
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: La Salle Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	778	89	43	800	0	0	0	0	50	1050	141
Future Volume (vph)	0	778	89	43	800	0	0	0	0	50	1050	141
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	11	9	10	11	12	12	12	12	10	12
Storage Length (ft)	0		250	100		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		0
Taper Length (ft)	0			25			0			0		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor			0.70	0.94							0.98	
Frt			0.850								0.983	
Flt Protected				0.950							0.998	
Satd. Flow (prot)	0	2816	1220	1358	1308	0	0	0	0	0	3941	0
Flt Permitted				0.275							0.998	
Satd. Flow (perm)	0	2816	857	371	1308	0	0	0	0	0	3929	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		413			144			365			405	
Travel Time (s)		9.4			3.3			8.3			9.2	
Confl. Peds. (#/hr)			128	128						42		45
Confl. Bikes (#/hr)			12									58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	2%	4%	2%	2%	2%	2%	6%	1%	2%
Bus Blockages (#/hr)	0	0	14	0	0	14	0	0	0	0	0	0
Parking (#/hr)					0							
Adj. Flow (vph)	0	819	94	45	842	0	0	0	0	53	1105	148
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	819	94	45	842	0	0	0	0	0	1306	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.33	1.37	1.39	1.52	1.28	1.22	1.22	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	custom	custom	NA					Perm	NA	
Protected Phases		4	14	3	8 18						6	
Permitted Phases			4	8						6		
Minimum Split (s)		24.0	5.0	8.0						26.0	26.0	
Total Split (s)		62.0	7.0	8.0						43.0	43.0	
Total Split (%)		51.7%	5.8%	6.7%						35.8%	35.8%	
Maximum Green (s)		54.0	5.0	5.0						38.0	38.0	
Yellow Time (s)		3.0	2.0	3.0						3.0	3.0	
All-Red Time (s)		5.0	0.0	0.0						2.0	2.0	
Lost Time Adjust (s)		1.0	1.0	1.0							1.0	
Total Lost Time (s)		9.0	3.0	4.0							6.0	
Lead/Lag		Lag	Lead									

Lane Group	Ø8	Ø18
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Width (ft)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Bus Blockages (#/hr)		
Parking (#/hr)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	8	18
Permitted Phases		
Minimum Split (s)	24.0	5.0
Total Split (s)	70.0	7.0
Total Split (%)	58%	6%
Maximum Green (s)	62.0	5.0
Yellow Time (s)	3.0	2.0
All-Red Time (s)	5.0	0.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		

Lanes, Volumes, Timings
13: Clark Street & Chicago Avenue 02/23/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?												
Walk Time (s)		5.0								5.0	5.0	
Flash Dont Walk (s)		11.0								16.0	16.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		53.0	63.0	66.0	61.0						37.0	
Actuated g/C Ratio		0.44	0.52	0.55	0.51						0.31	
v/c Ratio		0.66	0.20	0.19	1.27						1.08	
Control Delay		30.8	16.3	10.0	147.3						89.6	
Queue Delay		0.4	0.0	0.0	0.3						0.0	
Total Delay		31.2	16.3	10.0	147.5						89.6	
LOS		C	B	A	F						F	
Approach Delay		29.7			140.6						89.6	
Approach LOS		C			F						F	
Stops (vph)		448	42	12	628						1092	
Fuel Used(gal)		10	1	0	30						33	
CO Emissions (g/hr)		689	57	20	2086						2278	
NOx Emissions (g/hr)		134	11	4	406						443	
VOC Emissions (g/hr)		160	13	5	483						528	
Dilemma Vehicles (#)		0	0	0	0						0	
Queue Length 50th (ft)		200	30	11	~817						~413	
Queue Length 95th (ft)		m258	m45	m11	m#856						#509	
Internal Link Dist (ft)		333			64			285			325	
Turn Bay Length (ft)			250	100								
Base Capacity (vph)		1243	462	236	664						1211	
Starvation Cap Reductn		108	0	0	27						0	
Spillback Cap Reductn		61	0	0	0						0	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		0.72	0.20	0.19	1.32						1.08	

Intersection Summary

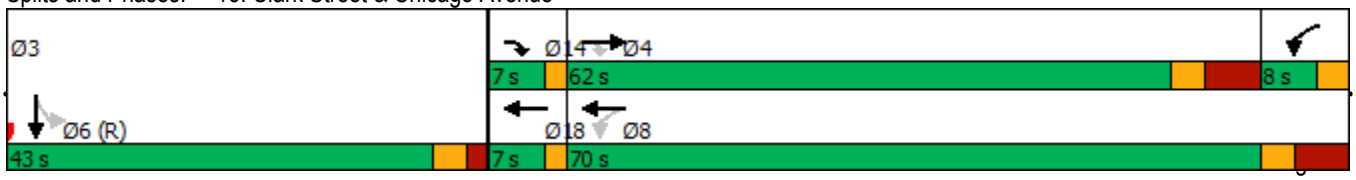
Area Type: CBD
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 91 (76%), Referenced to phase 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.27
Intersection Signal Delay: 86.5 Intersection LOS: F
Intersection Capacity Utilization 129.2% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

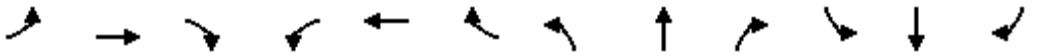
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: Clark Street & Chicago Avenue



Lane Group	Ø8	Ø18
Lead-Lag Optimize?		
Walk Time (s)	5.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary



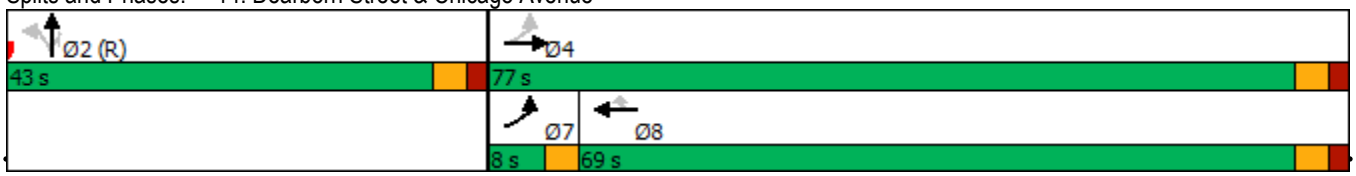
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	636	0	0	636	36	245	853	107	0	0	0
Future Volume (vph)	152	636	0	0	636	36	245	853	107	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	12	10	11	16	11	10	12	12	12
Storage Length (ft)	100		0	0		70	0		75	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	25			0			0			0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor						0.65	0.49		0.43			
Frt						0.850			0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1385	1334	0	0	1321	1257	1727	2946	1285	0	0	0
Flt Permitted	0.216						0.950					
Satd. Flow (perm)	315	1334	0	0	1321	819	839	2946	555	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		238			428			364			418	
Travel Time (s)		5.4			9.7			8.3			9.5	
Confl. Peds. (#/hr)	257					257	162		216			
Confl. Bikes (#/hr)						2			12			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	2%	2%	3%	0%	1%	1%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	14	0	0	0	0	0	0
Parking (#/hr)		0			0							
Adj. Flow (vph)	160	669	0	0	669	38	258	898	113	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	160	669	0	0	669	38	258	898	113	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.52	1.28	1.22	1.52	1.37	1.05	1.28	1.33	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2		2			
Minimum Split (s)	8.0	23.0			23.0	23.0	22.0	22.0	22.0			
Total Split (s)	8.0	77.0			69.0	69.0	43.0	43.0	43.0			
Total Split (%)	6.7%	64.2%			57.5%	57.5%	35.8%	35.8%	35.8%			
Maximum Green (s)	5.0	72.0			64.0	64.0	38.0	38.0	38.0			
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	1.0	1.0			1.0	1.0	1.0	1.0	1.0			
Total Lost Time (s)	4.0	6.0			6.0	6.0	6.0	6.0	6.0			
Lead/Lag	Lead				Lag	Lag						

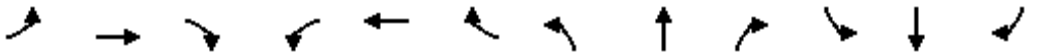
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes				Yes	Yes						
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		13.0			13.0	13.0	12.0	12.0	12.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	73.0	71.0			63.0	63.0	37.0	37.0	37.0			
Actuated g/C Ratio	0.61	0.59			0.52	0.52	0.31	0.31	0.31			
v/c Ratio	0.70	0.85			0.97	0.09	1.00	0.99	0.66			
Control Delay	31.2	24.9			44.8	14.1	98.5	68.9	56.7			
Queue Delay	0.0	7.9			43.7	0.0	0.0	0.0	0.0			
Total Delay	31.2	32.9			88.5	14.1	98.5	68.9	56.7			
LOS	C	C			F	B	F	E	E			
Approach Delay		32.6			84.5			73.9				
Approach LOS		C			F			E				
Stops (vph)	72	437			502	17	205	761	92			
Fuel Used(gal)	2	8			11	0	7	19	2			
CO Emissions (g/hr)	127	527			747	22	471	1300	143			
NOx Emissions (g/hr)	25	103			145	4	92	253	28			
VOC Emissions (g/hr)	29	122			173	5	109	301	33			
Dilemma Vehicles (#)	0	0			0	0	0	0	0			
Queue Length 50th (ft)	23	127			284	14	199	363	76			
Queue Length 95th (ft)	m#92	m#375			#748	m18	#377	#506	#165			
Internal Link Dist (ft)		158			348			284			338	
Turn Bay Length (ft)	100					70			75			
Base Capacity (vph)	227	789			693	429	258	908	171			
Starvation Cap Reductn	0	0			27	0	0	0	0			
Spillback Cap Reductn	0	93			256	0	0	0	0			
Storage Cap Reductn	0	0			0	0	0	0	0			
Reduced v/c Ratio	0.70	0.96			1.53	0.09	1.00	0.99	0.66			

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 85 (71%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 64.3		Intersection LOS: E	
Intersection Capacity Utilization 129.2%		ICU Level of Service H	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: Dearborn Street & Chicago Avenue



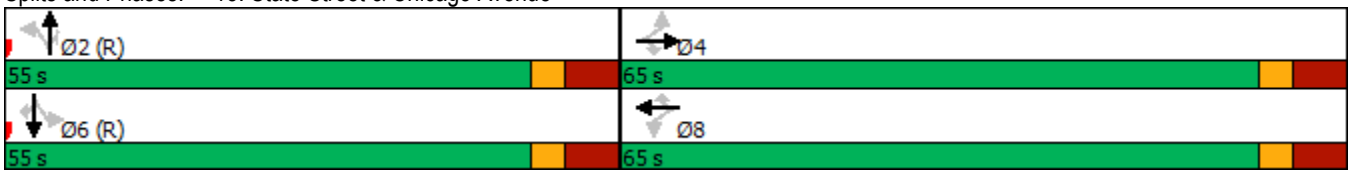


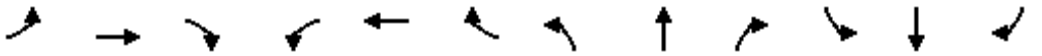
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	531	64	52	456	91	126	395	77	111	398	108
Future Volume (vph)	104	531	64	52	456	91	126	395	77	111	398	108
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	10	10	10	10	10	10
Storage Length (ft)	150		50	100		70	90		30	90		30
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	50			50			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.82		0.44			0.37	0.80		0.48	0.82		0.41
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1371	1334	1318	1371	1321	1318	1422	1482	1272	1422	1482	1272
Flt Permitted	0.364			0.294			0.366			0.369		
Satd. Flow (perm)	433	1334	580	424	1321	487	438	1482	616	454	1482	528
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		428			375			323			297	
Travel Time (s)		9.7			8.5			7.3			6.8	
Confl. Peds. (#/hr)	295		191	191		295	260		154	154		260
Confl. Bikes (#/hr)			21			6			7			8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	2%	1%	1%	3%	1%	1%	2%	1%	1%	2%	1%
Parking (#/hr)		0			0							
Adj. Flow (vph)	109	559	67	55	480	96	133	416	81	117	419	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	559	67	55	480	96	133	416	81	117	419	114
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.39	1.52	1.28	1.39	1.52	1.28	1.33	1.33	1.33	1.33	1.33	1.33
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	26.0	26.0	26.0	26.0	26.0	26.0
Total Split (s)	65.0	65.0	65.0	65.0	65.0	65.0	55.0	55.0	55.0	55.0	55.0	55.0
Total Split (%)	54.2%	54.2%	54.2%	54.2%	54.2%	54.2%	45.8%	45.8%	45.8%	45.8%	45.8%	45.8%
Maximum Green (s)	57.0	57.0	57.0	57.0	57.0	57.0	47.0	47.0	47.0	47.0	47.0	47.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Lead/Lag												
Lead-Lag Optimize?												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	13.0	13.0	13.0	13.0	13.0	13.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	56.0	56.0	56.0	56.0	56.0	56.0	46.0	46.0	46.0	46.0	46.0	46.0
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47	0.47	0.38	0.38	0.38	0.38	0.38	0.38
v/c Ratio	0.54	0.90	0.25	0.28	0.78	0.42	0.80	0.73	0.34	0.67	0.74	0.56
Control Delay	17.4	27.5	10.6	22.2	26.4	23.2	67.1	40.8	31.5	52.4	41.1	42.2
Queue Delay	0.0	15.0	0.0	0.0	18.5	0.0	9.7	0.0	0.1	0.7	0.0	1.6
Total Delay	17.4	42.5	10.6	22.2	44.9	23.2	76.8	40.8	31.6	53.1	41.1	43.8
LOS	B	D	B	C	D	C	E	D	C	D	D	D
Approach Delay		35.9			39.6			47.2			43.7	
Approach LOS		D			D			D			D	
Stops (vph)	54	399	25	24	276	43	105	336	54	92	340	88
Fuel Used(gal)	1	7	0	1	5	1	3	6	1	2	6	2
CO Emissions (g/hr)	71	486	34	36	371	65	183	429	69	136	429	116
NOx Emissions (g/hr)	14	94	7	7	72	13	36	83	13	27	83	23
VOC Emissions (g/hr)	16	113	8	8	86	15	42	99	16	32	99	27
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	0
Queue Length 50th (ft)	30	230	18	21	191	38	90	273	44	74	276	69
Queue Length 95th (ft)	m51	m#562	m22	m19	m169	m33	#208	402	90	#171	405	139
Internal Link Dist (ft)		348			295			243			217	
Turn Bay Length (ft)	150		50	100		70	90		30	90		30
Base Capacity (vph)	202	622	270	197	616	227	167	568	236	174	568	202
Starvation Cap Reductn	0	65	0	0	134	0	0	0	0	0	0	0
Spillback Cap Reductn	0	45	0	0	70	0	18	0	7	5	0	22
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	1.00	0.25	0.28	1.00	0.42	0.89	0.73	0.35	0.69	0.74	0.63

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 97 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 41.4		Intersection LOS: D	
Intersection Capacity Utilization 115.7%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 15: State Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	587	68	74	515	32	0	0	0	60	201	74
Future Volume (vph)	41	587	68	74	515	32	0	0	0	60	201	74
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	9	10	11	12	12	12	12	12	12
Storage Length (ft)	150		50	100		70	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	50			75			0			0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.33			0.18					0.80	
Frt			0.850			0.850					0.970	
Flt Protected	0.950			0.950							0.991	
Satd. Flow (prot)	923	895	893	923	907	882	0	0	0	0	921	0
Flt Permitted	0.346			0.287							0.991	
Satd. Flow (perm)	336	895	294	279	907	157	0	0	0	0	836	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		375			368			298			279	
Travel Time (s)		8.5			8.4			6.8			6.3	
Confl. Peds. (#/hr)	487		301	301		487				185		159
Confl. Bikes (#/hr)			24			5						9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	50%	52%	49%	50%	50%	51%	51%	51%	49%	49%	50%	50%
Parking (#/hr)		0			0							
Adj. Flow (vph)	43	618	72	78	542	34	0	0	0	63	212	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	618	72	78	542	34	0	0	0	0	353	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.52	1.28	*0.50	1.52	1.28	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm				Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4		4	8		8				6		
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0				27.0	27.0	
Total Split (s)	72.0	72.0	72.0	72.0	72.0	72.0				48.0	48.0	
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%				40.0%	40.0%	
Maximum Green (s)	65.0	65.0	65.0	65.0	65.0	65.0				40.0	40.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	4.0	4.0	4.0	4.0	4.0	4.0				5.0	5.0	
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0					1.0	
Total Lost Time (s)	8.0	8.0	8.0	8.0	8.0	8.0					9.0	
Lead/Lag												
Lead-Lag Optimize?												

Lanes, Volumes, Timings
16: Wabash Avenue & Chicago Avenue 02/23/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0				5.0	5.0	
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0				14.0	14.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0				0	0	
Act Effct Green (s)	64.0	64.0	64.0	64.0	64.0	64.0					39.0	
Actuated g/C Ratio	0.53	0.53	0.53	0.53	0.53	0.53					0.32	
v/c Ratio	0.24	1.30	0.46	0.53	1.12	0.41					1.30	
Control Delay	13.2	166.8	19.5	19.2	90.9	20.6					195.1	
Queue Delay	0.0	1.3	0.0	0.0	0.4	0.0					0.0	
Total Delay	13.2	168.1	19.5	19.2	91.3	20.6					195.1	
LOS	B	F	B	B	F	C					F	
Approach Delay		144.4			79.0						195.1	
Approach LOS		F			E						F	
Stops (vph)	17	395	42	20	234	8					255	
Fuel Used(gal)	0	24	1	1	12	0					15	
CO Emissions (g/hr)	23	1666	49	43	860	19					1079	
NOx Emissions (g/hr)	4	324	10	8	167	4					210	
VOC Emissions (g/hr)	5	386	11	10	199	4					250	
Dilemma Vehicles (#)	0	0	0	0	0	0					0	
Queue Length 50th (ft)	10	~385	20	13	~476	6					~350	
Queue Length 95th (ft)	m12	m#436	m28	m28	#698	m12					#539	
Internal Link Dist (ft)		295			288			218			199	
Turn Bay Length (ft)	150		50	100		70						
Base Capacity (vph)	179	477	156	148	483	83					271	
Starvation Cap Reductn	0	63	0	0	0	0					0	
Spillback Cap Reductn	0	12	0	0	23	0					0	
Storage Cap Reductn	0	0	0	0	0	0					0	
Reduced v/c Ratio	0.24	1.49	0.46	0.53	1.18	0.41					1.30	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.30			
Intersection Signal Delay: 130.1		Intersection LOS: F	
Intersection Capacity Utilization 91.9%		ICU Level of Service F	
Analysis Period (min) 15			

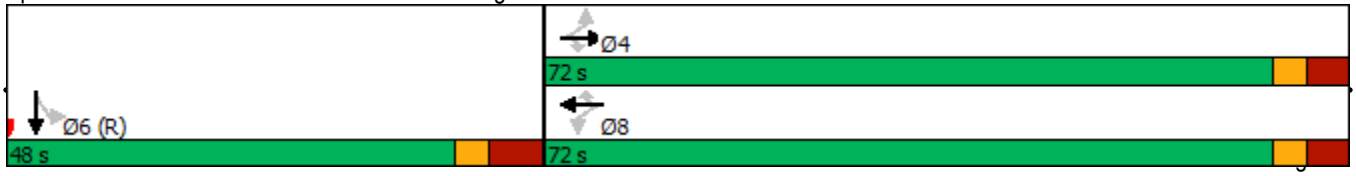
* User Entered Value

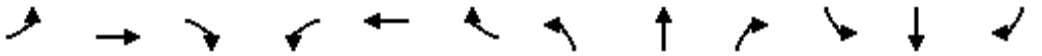
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: Wabash Avenue & Chicago Avenue





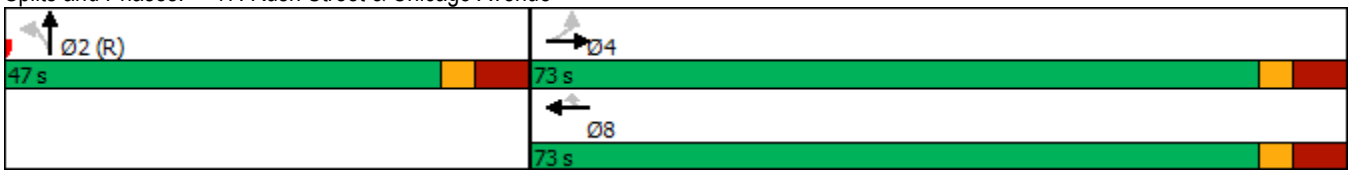
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	540	0	0	515	71	69	173	34	0	0	0
Future Volume (vph)	44	540	0	0	515	71	69	173	34	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	11	12	10	11	12	12	12	12	12	12
Storage Length (ft)	125		0	0		70	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	75			0			0			0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.25		0.85				
Frt						0.850		0.983				
Flt Protected	0.950							0.988				
Satd. Flow (prot)	1371	1321	0	0	1468	1318	0	1457	0	0	0	0
Flt Permitted	0.353							0.988				
Satd. Flow (perm)	510	1321	0	0	1468	330	0	1318	0	0	0	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		368			334			328			284	
Travel Time (s)		8.4			7.6			7.5			6.5	
Confl. Peds. (#/hr)	372					372	121		173			
Confl. Bikes (#/hr)						5			3			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	3%	2%	2%	3%	1%	1%	1%	1%	2%	2%	2%
Parking (#/hr)		0										
Adj. Flow (vph)	46	568	0	0	542	75	73	182	36	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	568	0	0	542	75	0	291	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.50	1.52	1.28	1.22	1.33	1.28	1.22	1.22	1.22	1.22	1.22	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Minimum Split (s)	21.0	21.0			21.0	21.0	27.0	27.0				
Total Split (s)	73.0	73.0			73.0	73.0	47.0	47.0				
Total Split (%)	60.8%	60.8%			60.8%	60.8%	39.2%	39.2%				
Maximum Green (s)	65.0	65.0			65.0	65.0	39.0	39.0				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Lost Time Adjust (s)	1.0	1.0			1.0	1.0		1.0				
Total Lost Time (s)	9.0	9.0			9.0	9.0		9.0				
Lead/Lag												
Lead-Lag Optimize?												

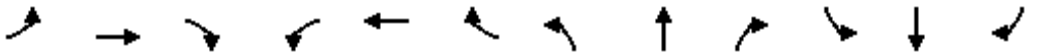
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0			5.0	5.0	5.0	5.0				
Flash Dont Walk (s)	8.0	8.0			8.0	8.0	14.0	14.0				
Pedestrian Calls (#/hr)	0	0			0	0	0	0				
Act Effct Green (s)	64.0	64.0			64.0	64.0		38.0				
Actuated g/C Ratio	0.53	0.53			0.53	0.53		0.32				
v/c Ratio	0.17	0.81			0.69	0.43		0.70				
Control Delay	3.1	5.8			12.8	13.4		46.3				
Queue Delay	0.0	45.1			0.8	0.0		0.0				
Total Delay	3.1	50.9			13.5	13.4		46.3				
LOS	A	D			B	B		D				
Approach Delay		47.3			13.5			46.3				
Approach LOS		D			B			D				
Stops (vph)	4	227			203	24		241				
Fuel Used(gal)	0	3			4	1		5				
CO Emissions (g/hr)	12	241			266	36		324				
NOx Emissions (g/hr)	2	47			52	7		63				
VOC Emissions (g/hr)	3	56			62	8		75				
Dilemma Vehicles (#)	0	0			0	0		0				
Queue Length 50th (ft)	4	46			137	17		197				
Queue Length 95th (ft)	m3	m35			m154	m26		304				
Internal Link Dist (ft)		288			254			248			204	
Turn Bay Length (ft)	125					70						
Base Capacity (vph)	272	704			782	176		417				
Starvation Cap Reductn	0	162			65	0		0				
Spillback Cap Reductn	0	180			66	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.17	1.08			0.76	0.43		0.70				

Intersection Summary			
Area Type:	CBD		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 2 (2%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 33.4		Intersection LOS: C	
Intersection Capacity Utilization 76.4%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: Rush Street & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	424	135	125	313	108	97	1391	81	0	1206	143
Future Volume (vph)	0	424	135	125	313	108	97	1391	81	0	1206	143
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	11	9	10	11	10	10	12	12	10	12
Storage Length (ft)	0		50	215		70	115		0	0		0
Storage Lanes	0		1	1		1	1		0	0		0
Taper Length (ft)	0			25			25			0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.78	*0.78	1.00	*0.78	*0.78
Ped Bike Factor			0.65	0.90		0.82	0.91	0.96			0.93	
Frt			0.850			0.850		0.992			0.984	
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	1454	1283	1237	1440	1221	1408	3011	0	0	3191	0
Flt Permitted				0.181			0.950					
Satd. Flow (perm)	0	1454	838	211	1440	997	1286	3011	0	0	3191	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		334			679			321			298	
Travel Time (s)		7.6			15.4			7.3			6.8	
Confl. Peds. (#/hr)			411	411		141	352		437			352
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	12%	5%	9%	2%	4%	20%	2%	2%	0%
Bus Blockages (#/hr)	0	0	9	0	0	0	0	49	49	0	0	0
Adj. Flow (vph)	0	446	142	132	329	114	102	1464	85	0	1269	151
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	446	142	132	329	114	102	1549	0	0	1420	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		9			9			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.33	1.34	1.39	1.33	1.28	1.33	1.45	1.22	1.22	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	pm+pt	NA	Perm	Prot	NA			NA	
Protected Phases		4		3	8		5	2			6	
Permitted Phases			4	8		8						
Minimum Split (s)		34.0	34.0	8.0	34.0	34.0	8.0	24.0			24.0	
Total Split (s)		42.0	42.0	10.0	52.0	52.0	12.0	68.0			56.0	
Total Split (%)		35.0%	35.0%	8.3%	43.3%	43.3%	10.0%	56.7%			46.7%	
Maximum Green (s)		37.0	37.0	7.0	47.0	47.0	9.0	63.0			51.0	
Yellow Time (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
All-Red Time (s)		2.0	2.0	0.0	2.0	2.0	0.0	2.0			2.0	
Lost Time Adjust (s)		1.0	1.0	1.0	1.0	1.0	1.0	1.0			1.0	
Total Lost Time (s)		6.0	6.0	4.0	6.0	6.0	4.0	6.0			6.0	
Lead/Lag		Lag	Lag	Lead			Lag				Lead	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes				Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	

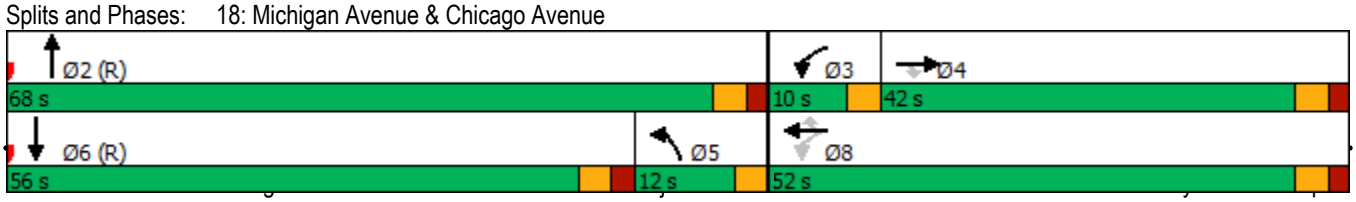
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		24.0	24.0		24.0	24.0		14.0			14.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)		36.0	36.0	48.0	46.0	46.0	8.0	62.0			50.0	
Actuated g/C Ratio		0.30	0.30	0.40	0.38	0.38	0.07	0.52			0.42	
v/c Ratio		1.02	0.57	0.98	0.60	0.30	1.10	1.00			1.07	
Control Delay		65.2	25.3	103.7	35.0	28.5	173.6	51.2			79.6	
Queue Delay		27.4	0.0	0.0	0.0	0.0	3.7	0.0			0.0	
Total Delay		92.6	25.3	103.7	35.0	28.5	177.3	51.2			79.6	
LOS		F	C	F	D	C	F	D			E	
Approach Delay		76.3			49.5			59.0			79.6	
Approach LOS		E			D			E			E	
Stops (vph)		337	97	70	248	75	75	1284			1178	
Fuel Used(gal)		9	2	4	5	2	4	26			31	
CO Emissions (g/hr)		601	111	258	368	113	286	1826			2202	
NOx Emissions (g/hr)		117	22	50	72	22	56	355			428	
VOC Emissions (g/hr)		139	26	60	85	26	66	423			510	
Dilemma Vehicles (#)		0	0	0	0	0	0	0			0	
Queue Length 50th (ft)		~339	71	68	202	61	~89	492			~520	
Queue Length 95th (ft)		m#535	m91	#188	302	110	#205	#644			#633	
Internal Link Dist (ft)		254			599			241			218	
Turn Bay Length (ft)			50	215		70	115					
Base Capacity (vph)		436	251	135	552	382	93	1555			1329	
Starvation Cap Reductn		43	0	0	0	0	0	0			0	
Spillback Cap Reductn		0	0	0	0	0	9	0			0	
Storage Cap Reductn		0	0	0	0	0	0	0			0	
Reduced v/c Ratio		1.13	0.57	0.98	0.60	0.30	1.21	1.00			1.07	

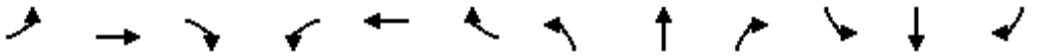
Intersection Summary

Area Type: CBD
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 118 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 140
Control Type: Pretimed
Maximum v/c Ratio: 1.10
Intersection Signal Delay: 67.0 Intersection LOS: E
Intersection Capacity Utilization 89.3% ICU Level of Service E
Analysis Period (min) 15

* User Entered Value
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: Michigan Avenue & Chicago Avenue





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	388	2	0	442	102	0	0	0	216	0	61
Future Volume (vph)	49	388	2	0	442	102	0	0	0	216	0	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	12	10	10	11	10	10	10	16	10	12
Storage Length (ft)	120		60	120		50	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	75			75			0			0		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.91	1.00				0.75					0.69	
Frt		0.999				0.850					0.970	
Flt Protected	0.950										0.962	
Satd. Flow (prot)	1154	2354	0	756	1326	1025	0	0	0	0	1283	0
Flt Permitted	0.318										0.962	
Satd. Flow (perm)	353	2354	0	756	1326	764	0	0	0	0	906	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		679			400			272			306	
Travel Time (s)		15.4			9.1			6.2			7.0	
Confl. Peds. (#/hr)	101					101				226		70
Confl. Bikes (#/hr)			10			5						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	20%	22%	0%	100%	14%	19%	2%	2%	2%	8%	0%	2%
Bus Blockages (#/hr)	0	0	18	0	0	21	0	0	0	0	0	0
Adj. Flow (vph)	52	408	2	0	465	107	0	0	0	227	0	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	410	0	0	465	107	0	0	0	0	291	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			9			0			0	
Link Offset(ft)		0			0			75			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	*0.75	1.33	1.22	1.33	1.33	1.42	1.33	1.33	1.33	1.05	1.33	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	Perm				Perm	NA	
Protected Phases	7	4		3	8						6	
Permitted Phases	4			8		8				6		
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0				28.0	28.0	
Total Split (s)	8.0	32.0		8.0	32.0	32.0				30.0	30.0	
Total Split (%)	11.4%	45.7%		11.4%	45.7%	45.7%				42.9%	42.9%	
Maximum Green (s)	5.0	27.0		5.0	27.0	27.0				23.0	23.0	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0				4.0	4.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	1.0					1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0					8.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												

Lanes, Volumes, Timings
19: Chicago Avenue & Mies Van Der Rohe Way 02/23/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		5.0			5.0	5.0				5.0	5.0	
Flash Dont Walk (s)		10.0			10.0	10.0				16.0	16.0	
Pedestrian Calls (#/hr)		0			0	0				0	0	
Act Effct Green (s)	32.0	26.0			26.0	26.0					22.0	
Actuated g/C Ratio	0.46	0.37			0.37	0.37					0.31	
v/c Ratio	0.25	0.47			0.95	0.38					1.02	
Control Delay	12.0	19.0			41.1	14.6					88.4	
Queue Delay	0.0	0.0			0.0	0.0					0.0	
Total Delay	12.0	19.0			41.1	14.6					88.4	
LOS	B	B			D	B					F	
Approach Delay		18.2			36.1						88.4	
Approach LOS		B			D						F	
Stops (vph)	25	284			311	47					219	
Fuel Used(gal)	1	5			7	1					7	
CO Emissions (g/hr)	36	359			475	62					478	
NOx Emissions (g/hr)	7	70			92	12					93	
VOC Emissions (g/hr)	8	83			110	14					111	
Dilemma Vehicles (#)	0	0			0	0					0	
Queue Length 50th (ft)	11	68			75	17					~129	
Queue Length 95th (ft)	27	107			m#290	m30					#276	
Internal Link Dist (ft)		599			320			192			226	
Turn Bay Length (ft)	120					50						
Base Capacity (vph)	207	874			492	283					284	
Starvation Cap Reductn	0	0			0	0					0	
Spillback Cap Reductn	0	0			0	0					0	
Storage Cap Reductn	0	0			0	0					0	
Reduced v/c Ratio	0.25	0.47			0.95	0.38					1.02	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 66 (94%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 41.3		Intersection LOS: D	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

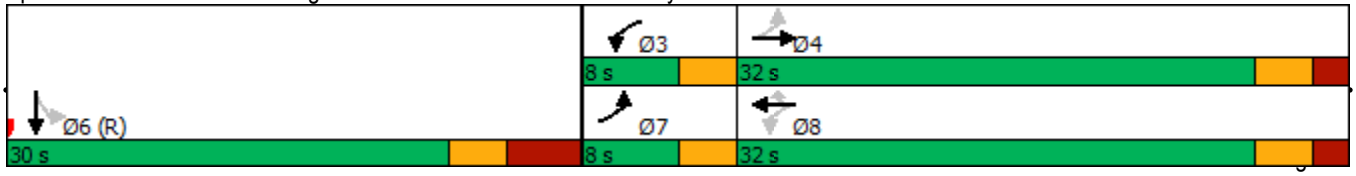
* User Entered Value

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 19: Chicago Avenue & Mies Van Der Rohe Way



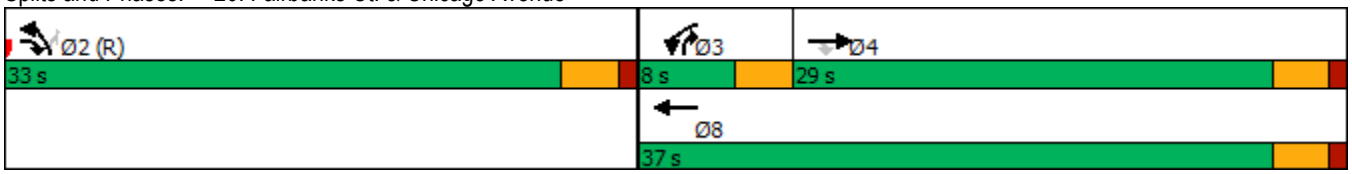
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	421	144	51	169	435	311
Future Volume (vph)	421	144	51	169	435	311
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	10	11	11	12
Storage Length (ft)		75	100		140	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.56	0.77			0.73
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1497	1113	1422	1550	1340	1249
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1497	625	1094	1550	1340	910
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	400			888	320	
Travel Time (s)	9.1			20.2	7.3	
Confl. Peds. (#/hr)		305	305			315
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	11%	1%	1%	11%	1%
Bus Blockages (#/hr)	0	18	0	0	0	21
Adj. Flow (vph)	443	152	54	178	458	327
Shared Lane Traffic (%)						
Lane Group Flow (vph)	443	152	54	178	458	327
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	9			10	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.40	1.33	1.28	1.28	1.36
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Minimum Split (s)	29.0	29.0	8.0	29.0	29.0	8.0
Total Split (s)	29.0	33.0	8.0	37.0	33.0	8.0
Total Split (%)	41.4%	47.1%	11.4%	52.9%	47.1%	11.4%
Maximum Green (s)	25.0	29.0	5.0	33.0	29.0	5.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	0.0	1.0	1.0	0.0
Lost Time Adjust (s)	1.0	1.0	1.0	1.0	1.0	1.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?						
Walk Time (s)	5.0	5.0		5.0	5.0	

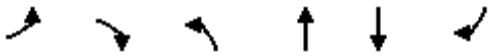
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Flash Dont Walk (s)	20.0	20.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	24.0	52.0	4.0	32.0	28.0	33.0
Actuated g/C Ratio	0.34	0.74	0.06	0.46	0.40	0.47
v/c Ratio	0.86	0.23	0.67	0.25	0.85	0.73
Control Delay	35.8	2.0	83.8	6.2	37.4	24.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.8	2.0	83.8	6.2	37.4	24.5
LOS	D	A	F	A	D	C
Approach Delay	27.2			24.3	32.0	
Approach LOS	C			C	C	
Stops (vph)	353	23	46	44	359	197
Fuel Used(gal)	6	1	1	2	6	3
CO Emissions (g/hr)	443	44	103	114	446	239
NOx Emissions (g/hr)	86	9	20	22	87	46
VOC Emissions (g/hr)	103	10	24	26	103	55
Dilemma Vehicles (#)	0	0	0	0	0	0
Queue Length 50th (ft)	167	5	25	20	174	83
Queue Length 95th (ft)	m#274	m15	#83	36	#340	#163
Internal Link Dist (ft)	320			808	240	
Turn Bay Length (ft)		75	100		140	
Base Capacity (vph)	513	659	81	708	536	448
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.23	0.67	0.25	0.85	0.73

Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 28 (40%), Referenced to phase 2:NBL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 29.1		Intersection LOS: C	
Intersection Capacity Utilization 70.1%		ICU Level of Service C	
Analysis Period (min) 15			

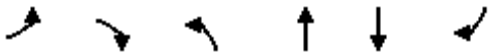
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 20: Fairbanks Ct. & Chicago Avenue





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	300	50	100	100	65
Future Volume (vph)	100	300	50	100	100	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt		0.850			0.941	
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1408	1134	0	2771	2650	0
Flt Permitted	0.950			0.810		
Satd. Flow (perm)	1408	1134	0	2281	2650	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			40	30	
Link Distance (ft)	888			307	377	
Travel Time (s)	20.2			5.2	8.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)		0				
Adj. Flow (vph)	105	316	53	105	105	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	316	0	158	173	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	20			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.33	1.52	1.33	1.33	1.33	1.33
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Minimum Split (s)	11.0	11.0	11.0	11.0	29.0	
Total Split (s)	40.0	40.0	30.0	30.0	30.0	
Total Split (%)	57.1%	57.1%	42.9%	42.9%	42.9%	
Maximum Green (s)	34.0	34.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	1.0	1.0		1.0	1.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)					5.0	
Flash Dont Walk (s)					18.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	33.0	33.0		23.0	23.0	
Actuated g/C Ratio	0.47	0.47		0.33	0.33	
v/c Ratio	0.16	0.59		0.21	0.20	
Control Delay	7.9	12.0		17.9	17.7	
Queue Delay	0.0	0.0		0.0	0.0	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	7.9	12.0		17.9	17.7	
LOS	A	B		B	B	
Approach Delay	11.0			17.9	17.7	
Approach LOS	B			B	B	
Stops (vph)	37	146		103	113	
Fuel Used(gal)	1	4		2	2	
CO Emissions (g/hr)	74	253		131	119	
NOx Emissions (g/hr)	14	49		25	23	
VOC Emissions (g/hr)	17	59		30	27	
Dilemma Vehicles (#)	0	0		11	0	
Queue Length 50th (ft)	19	60		25	27	
Queue Length 95th (ft)	m22	m79		46	50	
Internal Link Dist (ft)	808			227	297	
Turn Bay Length (ft)						
Base Capacity (vph)	663	534		749	870	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.16	0.59		0.21	0.20	

Intersection Summary			
Area Type:	CBD		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 50 (71%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 14.0		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 21: Lake Shore Drive (Inner) & Chicago Avenue