



The Aurora Station Boulevard
**TRANSPORTATION
UPDATE REPORT**



MOVING YOU



City of Aurora

Station Boulevard Transit-Oriented Development – Transportation Plan Update

April 10, 2018

Prepared in Partnership by:
The Regional Transportation Authority
The City of Aurora, IL



[Type text]



Project Background and Overview

The Station Boulevard Transportation Plan Update, completed by the Regional Transportation Authority (RTA) through its Community Planning Program, and in partnership with the City of Aurora (City), examines multi-modal connections to the Route 59 Metra station for residential neighborhoods along Station Boulevard. Local knowledge, input and guidance was provided through the development of this plan by a steering committee comprised of representatives from the neighborhood, including residents and developers, as well as Metra staff. Additionally, Pace Suburban Bus and BNSF Railway staff offered technical assistance as needed through the duration of the project.

The Station Boulevard Corridor is a Transit-Oriented Development located just south of the Route 59 Metra Station in Aurora. Transit-Oriented Development (TOD) is defined by the RTA as moderate to high-density, mixed-use communities located within close proximity of a rail or bus station designed to maximize walkability and transit access. TOD provides residents with increased mobility options, a variety of commercial outlets and jobs within a short distance of their homes while the compact style of development preserves open space.

The Route 59 station is served by Metra Commuter Rail, connecting the residents along Station Boulevard with Downtown Chicago and points in between. This plan recommends multi-modal improvements that will enhance resident access to and from the station and is an update to the “Station Boulevard Shuttle” plan developed in 2009 for the City. When implemented, these improvements can help increase the resident commuting experience, alleviate parking demand at the Route 59 station, improve the environment through the use of transportation modes that are alternatives to single-occupant automobiles, and provide health benefits for the Station Boulevard residents. Implementing the transportation improvements will also fulfill the City’s desire and vision for this area to be more multi-modal and transit-oriented as opposed to a more auto-oriented neighborhood.

Project History and Description

The Station Boulevard corridor was approved as a TOD area in 2005 by the City Council as part of an amendment to the Comprehensive Plan. Prior to 2005 the area was designated for office, research and light industrial land uses. Based on, among other things, the proximity of the area to the very popular Route 59 Metra Station the land use designation was changed to include residential, but only under the criteria established for residential as a TOD. This included criteria that the development should provide a pleasant and functional vehicular, pedestrian and public transportation connection from the Route 59 Metra station along the newly constructed Station Boulevard from New York Street to the Route 59 station. The Station Boulevard Corridor TOD was well received by the development community and the Aurora City Council due to its strategic location and planning elements, but only by insuring connectivity to the train station with a Transit Plan. Due to the linear

nature (1.4 miles north to south) of the Station Boulevard corridor, this transit service was an integral part of the overall TOD plan for the corridor.

The Station Boulevard Corridor includes six neighborhoods totaling 513 townhomes and 877 apartments at various stages of completion for a total of just under 1,400 residential units:

STATION BOULEVARD NEIGHBORHOODS

NEIGHBORHOOD NAME	SIZE AND TYPE	YEAR APPROVED	DEVELOPMENT STATUS
Lehigh Station	264 Townhomes	2005	Completed
Plaza on New York	154 Townhomes	2006	Completed
Metro59	460 Apartments	2012	Initial Lease-Up
500 Station Boulevard	417 Apartments	2013 and 2014	Initial Lease-Up
Lehigh Station Unit 3	40 Townhomes	2014	Completed
Union Square	55 Townhomes	2014	Under Construction

A provision was added to each development to ensure multi-modal connectivity to the Route 59 train station. The provision allows for a monthly assessment for each residential unit for transit service, and the payment of assessments allows all individuals residing in the developments full access to the transit service. While the documents refer to the transit service as a “Trolley System” the final form of this service and the assessed amount per unit is determined by this transportation plan.

In 2009 the City contracted with a consultant firm to prepare a Phase 1 report for a Station Boulevard Shuttle. The consultant at that time looked at the existing and latent demand for service, the options for implementation, and the costs of the service. As a result of the study City staff determined that both the full construction of Station Boulevard and a critical mass of dwelling units would need to be in place before the service could be economically feasible. Since 2009 the progression of the developments and infrastructure along the Station Boulevard corridor has changed dramatically leading to the need for the City to update the report.

Previous Transit Plan

The initial Station Boulevard Shuttle Report was completed for the City in 2009 by the consulting firm S.B. Friedman & Company. The consultant used information collected from a Station Boulevard resident survey to determine scenarios for when a shuttle should operate along Station Boulevard and what attributes of the service were most important to the residents. Ridership projections for the first eight years of service were made as well as preliminary cost estimates based on possible service characteristics. Two service options were then designed for the City for implementation consideration, each with a plan for future expansion over time to meet demand.

- Option 1A: Service would operate on weekdays only, excluding holidays, during AM and PM peak commute times. The service area would include Station Boulevard from the Route 59 station on the north, to the Plaza on New York neighborhood near New York Street on the south. One cutaway van would operate during the AM peak times and two vans would operate during the PM peak times for a total of 6.5 operating hours per day. The service was projected to grow 4% annually through the year 2017 to meet demand. The estimated required monthly assessment per residential unit started at \$24 in 2009 and grew to \$25 by 2017.
- Option 1B: Service on weekdays would be identical to that of Option 1A, however, in this option Saturday service is added using one van and would connect the Route 59 station to the Westfield Fox Valley Mall via Station Boulevard between the hours of 9:00AM and 6:00PM. The monthly assessment to initiate this level of service started at \$33 in 2009 in order to break-even, then was reduced to an assessment of \$31 per month for the remaining years through 2017.

Additional scenarios were created by the consultant to address possible future circumstances including:

- The estimated monthly assessment assuming no future residents move into the area and the cost of increasing shuttle service would continue to be spread out among the existing number of households.
- The estimated future deficit in funding if no future residents were to move into the area and the cost per household does not increase to meet expanded levels of service.
- The estimated cost of expanding the service area to include a park and ride lot at the Westfield Fox Valley Mall, thereby making the service not exclusive to Station Boulevard residents.

A final report was prepared for the City and the existing homeowners' associations of "Lehigh Station" and "Plaza on New York". The report included draft Consortium By-Laws for "The Station Boulevard Trolley Consortium", a "Station Boulevard Trolley Operations Plan", and next steps needed to implement the trolley service, which at the time were:

1. Finalize service planning and organizational structure for the oversight of shuttle service operations, including guidelines for governance by at least two homeowners associations.
2. Identification and delineation of implementation issues for the service governing body to address.
3. Develop an operating plan which addresses implementation issues and establishes the fundamental policies and procedures for the operation of transit service.
4. Draft request for proposals to identify a contractor for operation of shuttle service.

Data Collection Summary

As part of the 2016 plan update and to gain an understanding of the existing transit conditions since the previous work was completed in 2009, more recent data was collected and analyzed from various sources including transit service providers and the City. This data collection effort was to analyze

more recent data on transit utilization in the Station Boulevard Corridor. The following is a summary of the analysis completed from this data collection effort.

Metra Service - Commuter passenger rail service is provided at the Route 59 station by Metra via the BNSF Railway, connecting 26 stations from downtown Chicago’s Union Station to the Aurora Transportation Center in Downtown Aurora. The service is designed primarily to serve residents commuting to jobs in downtown Chicago. There are 28 inbound departure trips to Chicago from the Route 59 station on weekdays and 30 outbound arrivals from Chicago. Weekend service is also available with 14 daily departures in each direction on Saturdays and nine daily departures on Sundays.

A primary way of measuring the utilization of the Route 59 Metra station is by the number of typical weekday passenger boardings. The Route 59 station is one of the busiest commuter rail stations in the Chicago region, with 5,874 daily boardings according to 2014 Metra data. Outside of Metra’s downtown Chicago terminals, the Route 59 station has the highest number of boardings of all 236 outlying stations in the Metra system by a high margin. The outlying station with the second highest number of boardings is Naperville with 4,002, or 32% fewer than the Route 59 station.

The 5,874 typical weekday boardings are spread over 58 daily weekday departures from the Route 59 station. The trains with the highest number of boardings are the morning express trains to downtown Chicago, followed by the morning non-express trains to downtown Chicago. The following table shows the five trains with the highest number of boardings from the Route 59 station.

TOP FIVE ROUTE 59 STATION BOARDING TIMES

INBOUND DEPARTURE	NUMBER OF BOARDINGS
7:22 AM	878
7:07 AM	785
7:42 AM	759
6:47 AM	725
8:06 AM	632
TOTAL	3,779

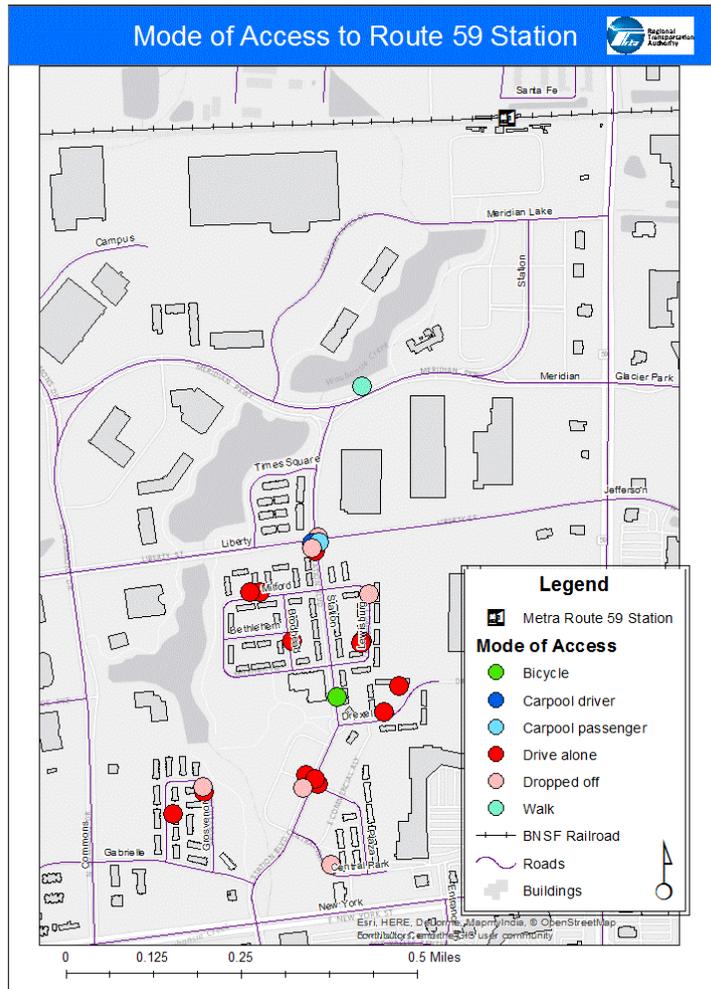
Source: Metra, Station Boarding and Alighting Count, Spring 2014

Station Mode Of Access - In spring of 2014 Metra conducted system-wide passenger counts and surveyed passengers about how they accessed their Metra station. At the Route 59 station, 23 passengers boarding from Station Boulevard neighborhoods provided information on their modes of access to the station, as well as their approximate points of origin. Due to the sampling rate of the passengers surveyed it is assumed that each survey respondent represents 2.78 riders; therefore the survey represents 64 actual riders who originated from the Station Boulevard neighborhoods.

Of those 23 respondents, 91% indicated they arrived at the Route 59 station via automobile, either as a driver, a passenger being dropped off, or by carpooling. 8% of respondents walked to the station or rode

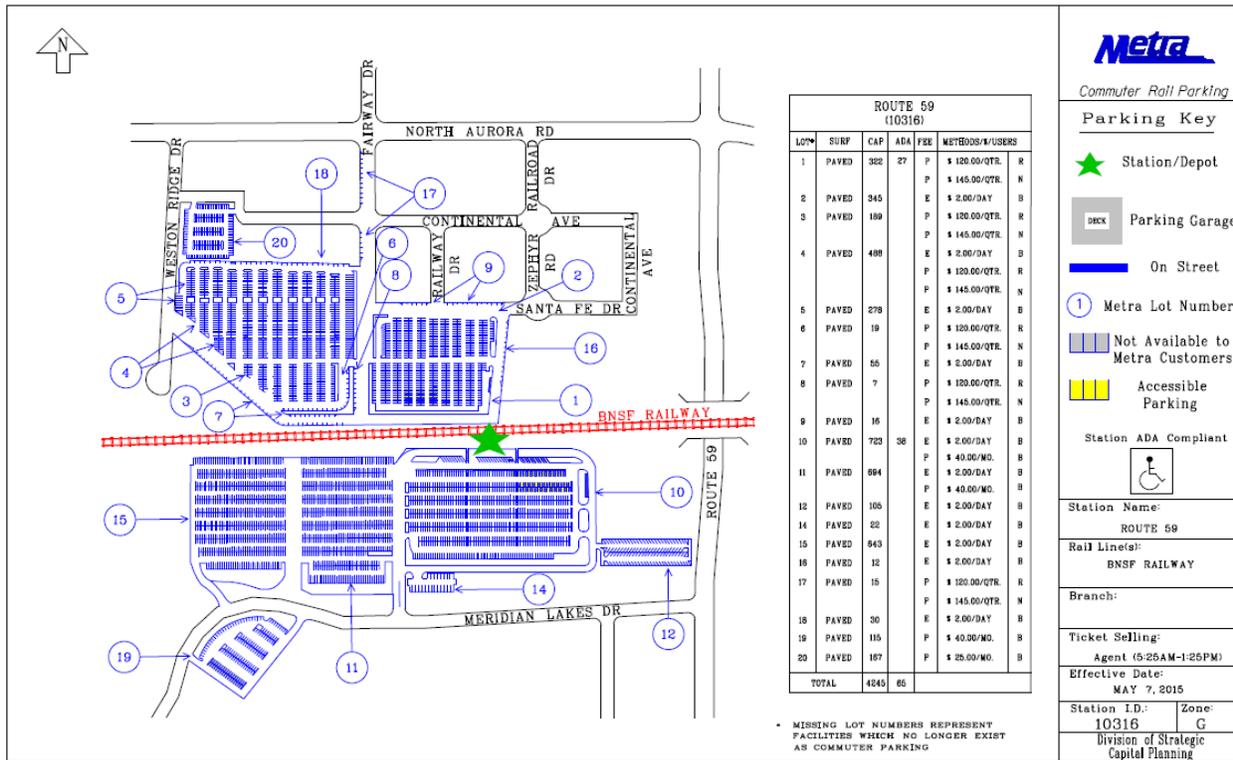
a bicycle. This is slightly higher than the 7% of all Route 59 station users who indicated they walk or bike to the Metra station. The map in Figure 1 shows the origins and modes of access for respondents in Station Boulevard neighborhoods who boarded at the Route 59 station.

FIGURE 1: MODE OF ACCESS TO THE ROUTE 59 STATION



Station Parking - Commuter parking lots at the Route 59 station are located on both the north side of the BNSF railroad tracks, in the City of Naperville, and on the south side of the tracks, in the City of Aurora. Six of the total 19 parking lots are south of the tracks in the City of Aurora and at the beginning of 2016 they comprised 2,302 parking spaces, accounting for 54% of the total station-area parking. Payment at the six Aurora lots varies between \$2.00 electronic daily parking, and \$40.00 monthly permitted parking. There are parking spaces in these six lots available for both residents and for non-residents. The map in Figure 2 shows the location of the commuter parking lots at the Route 59 station.

FIGURE 2: ROUTE 59 STATION COMMUTER PARKING LOTS



Source: Metra, May 2015

Parking on the south side of the Route 59 Station (City of Aurora side) is at capacity. Parking counts of the six Aurora parking lots completed in 2015 observed 94% of parking spaces being used. However, Metra prefers to consider “effective use” which assumes full occupancy for permitted parking spaces in addition to observed use of daily parking spaces. Effective use of the six parking lots is 99%. A main issue regarding parking at the station concerns the ingress, egress, and circulation within the main parking area. On typical weekdays, it can take motorists 20-30 minutes to exit the parking lot. During inclement weather, that time can increase to 45 – 60 minutes.

The City of Aurora is currently making significant enhancements to the Route 59 station commuter parking lot to improve access and circulation, thus reducing the egress time delay, with construction completion targeted for late 2016. Improvements include a new Pace Bus Staging Area with 10 bus bays (located where the current Lot #12 is located), the addition of 448 parking stalls, and a new parking lot entrance at Station Boulevard and Meridian Lake Drive, as an extension of Station Boulevard into the station, complete with traffic signal. Additional enhancements include new parking lot lights and landscaping, improved pedestrian access, new Pay-by-License Plate daily parking machines and security cameras. The graphic in Figure 3 shows the layout and configuration of the commuter parking lot once the enhancements are complete.

FIGURE 3: ROUTE 59 STATION COMMUTER PARKING MODIFICATIONS



Source: City of Aurora Public Works and Engineering, Spring 2015

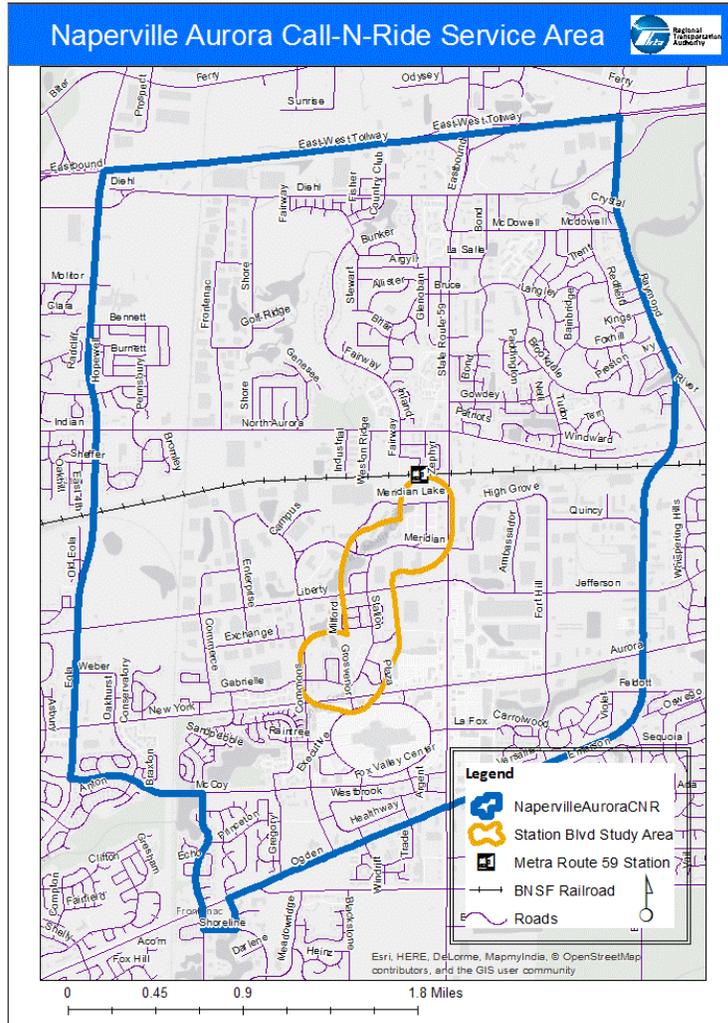
Pace Service - While no Pace Suburban Bus services are provided directly to the Station Boulevard neighborhoods, there are four week-day peak-hour-only commuter bus routes that use nearby Meridian Lake Drive to connect commuters to AM and PM rush hour trains at the Route 59 station. These four rush hour routes provide connections to the Wheatland Salem Church Park-n-Ride, the 95th Street Park-n-Ride, the Naperville Park-n-Ride (Community Christian Church) lot, and to the Fox Valley Villages subdivisions.

Pace has two noteworthy future services they plan introduce in Phase II of the Pace Fox Valley Service Restructure initiative which started in 2015. The first new service in Phase II (expected to occur in 2016) will include a new bus route which will connect destinations along IL Route 59, adjacent to the Station Boulevard neighborhoods. This service will travel IL Route 59 from Ferry Road on the north to 95th Street on the south, making connections to Pace Route 530 at the Westfield Fox Valley Mall.

The second new service in Phase II of interest to Station Boulevard residents will be the startup of the new Naperville Aurora Call-n-Ride. Pace Call-n-Rides offer reservation-based, curb-to-curb, shared-ride service for anyone who calls to reserve a trip at least one hour in advance within a designated service

area. Station Boulevard will be in the center of the new Naperville Aurora Call-n-Ride service area, which will be from I-88 on the north to Ogden Avenue on the south, and from Eola Road on the west to Raymond Drive / West Ogden Avenue on the east. Figure 4 is a map of the Naperville Aurora Call-n-Ride service area.

FIGURE 4: NAPERVILLE AURORA CALL-N-RIDE SERVICE AREA



Resident Trip Generation Survey

As part of the data collection and planning process the residents along Station Boulevard were asked to complete an online survey. The goal of conducting the survey was to gain a better understanding of the demographics, characteristics and travel patterns of the residents that make up the Station Boulevard neighborhoods.

Methodology and Outreach - City and RTA staff drafted a survey instrument with a total of 20 questions to be answered by a representative of each household. It was built using the SurveyMonkey® platform for online administration and was designed to take approximately five minutes to complete. The 20 questions asked about household travel habits and the use of transit services by members of each household responding.

The survey instrument was vetted by the Steering Committee who provided valuable input and feedback. Informational postcards and email blasts were developed as a way to advertise and promote participation in the survey by the residents, although participation in the survey was voluntary. All survey questions were optional except for one, which asked the respondent to input their address. This question was required as a control measure to allow only one survey to be completed per household.

The informational postcards arrived in all 426 resident mailboxes on January 21, 2016, the same day the survey opened online. Email blasts were sent out to those who had a subscription to receive general emails from the home owners association about the community in which they live. The survey remained open for 13 days, closing on February 2.

A total of 275 responses were submitted, which is a 65% participation rate. The data was analyzed to check for any multiple responses that may have been received from the same household, and in cases where a duplicate response was found, the first response was retained and any subsequent responses were removed from the results. The results of the survey can be summarized with the following salient points:

Respondent Demographics

- 51% of responding households have lived in the area for five years or more.
- 83% own their home.
- 68% of households have children at home, with most having one or two children.
- 32% of households consist of just one or two people, however, 28% are one vehicle households.

Household Commuting

- Commute times are long with 62% traveling over 30 minutes, and 23% over an hour. (Average commute time for Aurora residents is 29 minutes¹.)
- 35% of households are using transit for commuting or for other trip purposes.

Use of Transit of the 35% Transit Households

- 62% of the transit households use transit frequently, two to five times per week.
- 87% of the transit households use Metra
- 61% access the Metra station by driving alone and parking at the station
- 39% access the Metra station via other modes, including shared rides, walking and biking

Although comments were not solicited, 27% of respondents used an open-ended field dedicated to a specific question to submit a comment about their lack of support for transit and/or for public

¹ 2012 Census / American Community Survey

transportation service that is funded through resident assessments. The survey instrument is included in this report as Appendix A.

Transportation Alternatives

As a result of the data collection, survey analysis and feedback from the Steering Committee, it was mutually decided by RTA and City staff to approach the development of transportation alternatives in a manner other than anticipated at the beginning of the project. Rather than a focus on updating the 2009 shuttle operations plan, the new approach was to identify multiple modes for consideration, in addition to a fixed route shuttle as originally envisioned. The desire was to identify various transportation alternatives which could appeal to the residents of Station Boulevard, at a variety of costs, all lower than the \$24-\$33 per month estimated in the original report. The revised concept envisioned the neighborhood as a true multi-modal district with various transportation options, offered as benefits to the residents, to gain access to the Route 59 station. After an initial brainstorming activity including research of multiple transportation modes, seven mode options were selected to move forward in the analysis based on their feasibility for the City to implement, and their potential benefits to the residents. The following is a description of the seven transportation options that were analyzed.

1. **Walking Clubs** - Neighbors and co-workers who desire to walk together would walk together in coordinated groups of two or more. The benefits of walking together include:
 - An improved sense of personal safety as opposed to walking alone.
 - Increased neighborhood safety by having additional “eyes on the street”.
 - Improved social connections with neighbors and other residents.
 - Numerous health benefits through the additional physical activity from walking.
2. **Bike Share** - A bike share program would make bikes available for the public to use for very short-term periods, especially for making connections to other travel modes when commuting. Examples of bike sharing companies are Zagster and Divvy. The benefits of a bike share include:
 - Free or affordable access to bicycles for short-distance trips.
 - Reduced traffic congestion, noise, and air pollution.
 - Bicycle access without having to buy one.
 - For those who already have their own personal bike, using the bike share would remove concerns with using their personal bike such as theft or vandalism, parking and storage, maintenance requirements and exposure to inclement weather.
3. **Car Pool / Permit Share** - Carpooling is when two or more people share a ride, or ride to and from a destination together, in which the driver of the automobile is the owner. Saving money is a significant reason people participate in a carpool, including:

- Saving on gasoline costs, permit fees, maintenance and insurance.
- Carpooling on a regular basis allows car owners to reduce the depreciation of their own vehicle or eliminates the need to own a car or as many cars.
- Better use of commute time – When leaving the driving to someone else, riders can have extra time to do other things, such as text or read email.
- Connect socially with others during carpooling.
- Reduce traffic congestion and fuel consumption.
- Improve air quality by reducing emissions.

4. **Ride Share / Transportation Network Companies (TNC)**- TNC's are technology companies that use their technology to match-up, in real-time, drivers, who are using their own vehicles, with passengers who need a ride, hence "ride sharing". Examples of TNC's are Uber, Lyft and Via. The benefits of real-time ridesharing include:

- A way to better utilize the empty seats in most passenger cars
- Lower fuel usage as well as transportation costs by reducing the number of vehicles needed per household
- Ease and speed of use via the technology platform
- Acts as a transit feeder service, serving areas not covered by a public transit system.
- Flexible and capable of serving one-time trips, recurrent commute trips and scheduled trips².

5. **Fixed Route Transit** - Fixed route transit is designed to carry groups of people, "riders", from one location to another at the same time of day, every day of the week. Multi-passenger vehicles (such as trolleys, buses, shuttles and vans) are used to gather riders from one or more designated stop locations and deliver them to a mutual destination. The route also operates in the reverse order, dispersing riders from their mutual destination back to one or more stop locations. Most transit programs have established timetables and routes to follow, operating at the same times and in the same sequence every day.

Fixed-route transit is the original recommendation for implementation in 2009 as detailed in the Station Boulevard Shuttle Report. The travel and operating characteristics included the establishment of fixed stop locations and schedules, and the recommended vehicle type to be used for this benefit would be a vintage designed rubber-tired trolley

The benefits of fixed route transit include:

- Reliability and confidence that riders' trips will be the same each and every day.
- Vehicles used are climate controlled, providing protection from daily fluctuations in temperature and precipitation.

² Levofsky, Amber and Allen Greenberg. "Organized Dynamic Ride Sharing: The Potential Environmental Benefits And The Opportunity For Advancing The Concept." Transportation Research Board, 2001.

- Reduced use of private automobiles, or from the need to own as many private automobiles per household
- Cost savings by lower automobile expenses (an individual living in the region deciding to use transit and is thus able to eliminate one vehicle from their household saves, on average, saves over \$11,000 when factoring in all the costs to own and operate a vehicle³).

6. **Pace Vanpool** – Pace Vanpool participants consist of individuals who live near each other, have similar travel patterns and work hours, and who decide to travel together to a mutual destination at the start of their day and then return home from that destination at the end of the day. One member volunteers as the primary driver and at least one other person volunteers as back-up driver. The benefits of participating in a Pace Vanpool include:

- Driver bonus - Pace Vanpool drivers get 300 personal usage miles.
- Connect socially with other vanpool participants - Find other neighbors to share the fun with on your commute.
- More time - Riders can use their time productively or to just sit back and relax.
- Less stress - Avoid the stress of traffic and congestion.

Pace supplies the vehicle and also covers the following costs:

- Fuel
- Tolls
- Insurance
- Roadside assistance
- Van washes
- Guaranteed Ride Home

7. **Guaranteed Ride Home** - A Guaranteed Ride Home program provides commuters who do not drive their own car, but instead, commute via walking, biking, carpooling, ridesharing, or taking a shuttle, with a reliable means of getting home quickly when unexpected situations arise. The program provides occasional free rides home during times of emergency, when a personal vehicle is not readily available. Examples of emergencies include:

- Family illness or emergency
- Personal illness or emergency
- Unexpected early departure of carpool/rideshare driver
- Unexpected mandatory overtime

A Guaranteed Ride Home program acts as an emergency “safety net”, especially for those who choose to stop driving a car one or more days a week. It provides an added level of comfort to

³ American Public Transportation Association, March 2016 Transit Savings Report

commuters for when emergencies arise. Knowing a guarantee is in place for times of emergencies encourages one to use other commute options, such as a shuttle or a carpool, with added confidence.

Implementation Options

To show when various combinations of the seven transportation modes described above could be incrementally implemented using a five-phase strategy that was developed based on estimated population increases and the estimated mode split of commuting residents. The intervals in time, or phases, in which to roll-out or increase the availability of the transportation benefits available to residents was based on three trigger points:

1. When there is an increase in the number of residential units along Station Boulevard as new development is completed.
 2. When the subsequent projected increases in population occur once the new units become occupied.
 3. When there are increases in the percentage of households using the various transportation options.
- The following table illustrates potential estimated thresholds, or stages, for incrementally growing the transportation benefits being offered to Station Boulevard residents.

TRIGGER POINTS FOR WHEN TO IMPLEMENT ADDITIONAL TRANSPORTATION BENEFITS

	PHASE 1 2016	PHASE 2 2017	PHASE 3 2019	PHASE 4 2020	PHASE 5 2021
Number of Households	468	1,162	1,162	1,162	1,390
Projected Population	1,076	2,432	2,432	2,432	2,865
Projected % of Transit Households	TWN = 26%	TWN = 26 % APT = 27%	TWN = 28 % APT = 29%	TWN = 29 % APT = 30%	TWN = 30 % APT = 31%

Source: City of Aurora (TWN = Townhomes, APT = Apartments)

In the implementation strategy illustrated above, the first phase of introducing a new transportation option to the benefit of the Station Boulevard residents would be at the end of 2016 or beginning of 2017 at which time there would be an estimated 468 units occupied throughout all the Station Boulevard neighborhoods with a population projected to be 1,076 residents⁴. The second phase in which to introduce either an expansion of already existing transportation benefits, or to introduce a new benefit is when the number of households reaches 1,162 with a projected population of 2,432. This trigger point is currently estimated to occur sometime in 2017. The third and fourth phases in which to

⁴ In an effort to be conservative in the estimated number of households using transit, professional judgment was used to determine initially residents of 26% of the Station Boulevard households will be using transit for commuting needs. While 26% of households could be a much higher estimate compared to the 5% of Aurora residents who use transit as a primary means of commuting, it is lower than the 35% of survey responding households who use transit.

introduce an expansion in the Station Boulevard transportation benefits occurs as the percent of households using transit increases over the next three years , approaching 30% anticipated by the year 2020. The fifth phase for expanding the benefits would be when the Station Boulevard neighborhood is at full build-out and reaches it's long-term population of approximately 2,865 residents and 30 to 31% of households using transit to commute. This is estimated to occur in 2021.

The various transportation modes described above could be implemented to the benefit of Station Boulevard residents in the following manner:

- Walking Clubs – Two or more residents with similar commute times walk to and from the Route 59 station together or in groups. The number of participants would grow over time and monthly costs to the residents would cover any minimal administrative tasks related to the formation and promotion of the Walking Clubs.
- Bike Share – Residents of Station Boulevard would be provided access to a fixed number of shared bikes, which would be located at docking stations throughout the Station Boulevard TOD area. One docking station would be located at the Route 59 station, with others being placed at key locations central to residents living along Station Boulevard. The number of bikes and docking stations would grow over time and the City of Aurora would expand their contract with Bike Share provider Zagster. Monthly costs to the residents would cover the operating costs of \$150 per month per bike as well as any administrative costs.
- Car Pool / Permit Share – Residents who drive to the Route 59 station as part of their commute and who have a monthly permit will be eligible to have the cost of their monthly parking permit covered if they participate in carpooling by taking one or more passengers from other households with them as they drive to and from the station. The number of participants would grow over time and the monthly costs to the residents would cover the cost of the parking permits, currently \$40 per month, for the participating carpool drivers as well as any administrative costs.
- Fixed Route Transit – A shuttle (or trolley) / Pace Vanpool vehicle would operate during morning and afternoon rush hours, on weekdays only. Service would not be provided on major holidays. The service would provide at minimum two round trips per hour, providing access to a minimum of two departing or arriving BNSF trains per hour. Designated shuttle stops for residents to access the shuttle or trolley would be located in or adjacent to each of the six Station Boulevard neighborhoods and, ideally, will include stop amenities for passenger comfort and protection for the weather. The number of AM and PM service hours would grow over time. Monthly costs to the residents would cover the expenses of operating the shuttle or trolley, estimated at \$60 per hour of service, as well as any additional costs needed to cover fuel, maintenance and any administrative costs. To ease the up-front vehicle capital costs the City could participate with the Pace Vanpool Program to implement fixed route transit service.
- Ride Share / TNC – The City would enter into an agreement with a Transportation Network Company (TNC) that would provide free or reduced rate rides for residents whose trips have an origin or destination within the Station Boulevard TOD area. This area would be established with

defined geographic boundaries and would include the Route 59 station as well as all six Station Boulevard neighborhoods.

- **Guaranteed Ride Home** – The City would establish a Guaranteed Ride Home program for the Station Boulevard TOD area to the benefit of residents who use the modes described above as well as in an effort to increase the number of households using transit for commuting purposes. Under this program, residents in need of an emergency ride home would be reimbursed up to a pre-determined amount for their trip home, and up to a limited number of times per year. To be eligible to use the program participants must have participated in one of the transportation benefit programs that day and commuted via a transportation mode other than driving alone. Research conducted in 2007 of many such programs across the country found that the average annual cost per program registrant or per eligible user is low, at \$1.69 per year per registrant, which equates to \$1.97 in 2016 dollars adjusted for inflation. (Menczer, 2007) Monthly costs to the residents would cover the expenses of an estimated average number of monthly emergency trips taken as well as any administrative costs.

A scenario building exercise was completed to test four combinations of these transportation solutions for the residents. Each scenario combines two or more of the transportation alternatives and illustrates a possible path for the City to consider implementing transportation alternatives in the Station Boulevard TOD area. Each of the four transportation scenarios includes a description of which benefits could be implemented, the timing of growing the availability of the benefits based on changes in population and demand, potential utilization based on research and professional judgment, and estimated operating costs per residential unit.

Administration and promotion of the transportation benefits would take place via an individual who is a designated “Mobility Manager”. It’s envisioned this Mobility Manager would initially be a City staff person, however eventually; the role could transition to an outside paid position that coordinates the operation of all transportation benefits as they expand over time.

The following is a description of the four scenarios that were built. More detail about the scenarios is included at the end of this report in Appendix B.

1. **“Health-Conscience”** – This scenario provides a focus on the more “active” forms of transportation, which are walking and biking, and includes the implementation of Carpool / Permit Share, Walking Clubs, Bike Share, and a Guaranteed Ride Home Program. This combination of transportation benefits was chosen to provide a focus on transportation modes that have more potential to provide the health benefits detailed earlier in the report, as well offer a selection of modes that are lower in cost to the resident on a per unit per month basis compared to others. The estimated monthly cost per residential unit in this scenario ranges from \$4.09 to \$4.94.

2. **“Fixed Route Transit”** - This scenario provides a focus on the implementation of a fixed route service, as recommended in the 2009 report. The Fixed Route Transport would be supplemented with Carpooling / Permit Share, and a Guaranteed Ride Home Program. The estimated monthly cost per residential unit in this scenario ranges from \$10.59 to \$14.61.
3. **“Limited Services”** - This scenario provides a very low cost option for implementation and would include the implementation of Carpool / Permit Share and Walking Clubs. This combination of transportation benefits was chosen to provide Station Boulevard residents with a limited number of transportation benefits in order to keep the monthly cost per residential unit low. The estimated monthly cost per residential unit in this scenario ranges from \$0.58 to \$0.72.
4. **“Trip-Sharing”** – This scenario provides a focus on the sharing transportation options becoming more popular across the region and includes the implementation of Carpooling / Permit Share, Walking Clubs, Ride Share / Transportation Network Companies (TNC), and a Guaranteed Ride Home Program. This combination of transportation benefits was chosen to provide a focus on shared-use of the automobile as a means to access the Route 59 station. The estimated monthly cost per residential unit in this scenario ranges from \$8.54 to \$9.83.

Recommendation

The recommendation is to implement a refined combination of the scenarios detailed in the previous section, to take the ideas generated from these and create an ideal hybrid scenario. The recommended scenario includes four different transportation modes and a Guaranteed Ride Home Program, all phasing-in at different times over the next several years based on the increasing trigger points of population and the percent of households using transit for commuting purposes. The recommended scenario incorporates, where possible, discussions and feedback from the Steering Committee members and the resident survey data, and is also based on research, current transportation trends and best practices. The City and the RTA recommend pursuit of the following “Recommended Strategy” detailed in this section.

“Recommended Strategy” – This scenario combines the benefits of the Health-Conscience and Trip-Sharing options, preserves the option of a future more traditional fixed-route option but includes a phasing strategy which begins with the Limited Service option. The Recommended Strategy includes the implementation of Carpool / Permit Share, Walking Clubs, Bike Share, Fixed Route Transport and a Guaranteed Ride Home Program phased in over a period of time based on demand. The estimated monthly cost per residential unit in this scenario ranges from less than \$1 in Phase 1 to \$21 in Phase 5 and back down to \$17 in Phase 6.

Phase 1 - The first phase of implementation is recommended to begin immediately and be completed within one year. This phase will start with the City establishing an Implementation Team to guide the City in all phases of implementing the recommendations of this Plan. A temporary Mobility Manager will then be identified

from City staff to fill this key role until a paid outside party has been identified to take the lead. This first phase will then issue up to 7 permits to carpool participants with an average of 2.5 commuters participating per carpool, and attract up to 6 individuals to start in the first of the Walking Club groups. This would allow 24 residents to take advantage of the transportation benefits and would make them eligible for the Guaranteed Ride Home program. The Mobility Manager would monitor the rollout and utilization rates of the Guaranteed Ride Home program and could limit the number of monthly trips that could be taken should available funding warrant doing so. One month after these two benefits are implemented the Mobility Manager would begin collecting the monthly fee per residential unit as detailed in the table below.

Phase 2 – The second phase of implementation is recommended to take place as resident demand for additional transportation benefits increases and would build upon the first phase from 2016. In addition to increasing the participation in carpooling to 40 and Walking Club participants to 15, the Mobility Manager would implement a bike share system in the Station Boulevard TOD area via Zagster, a bike share company that already has an existing contract with the City, and is a provider of bike shares for cities, universities, and businesses. The initial rollout of the bike share system could include six bikes and two docking stations. With the estimated increase to 1,162 occupied households along Station Boulevard, the addition of the bike share system should assist in meeting the increase in demand for access to the Route 59 station, and it would also lower the per unit monthly cost of the carpool / permit share benefits.

Phase 3 - The third phase of implementation is recommended to include an increase in the bike share system to a total 12 bikes and four docking stations, as well as the addition of limited fixed route transit service, with three hours of service in the mornings and three hours of service in the afternoons. The hours of service implemented would correspond with the highest demand for Metra express trips taken by the residents. The residents should be surveyed once again to determine which trips are in highest demand.

To save on up-front vehicle capital costs in the provision of fixed route transit service, the Mobility Manager would initiate a partnership with Pace to participate in one of two programs in which Pace assists with the provision of a passenger van or a paratransit van. These two Pace programs are:

1. Municipal Vehicle Program – For an initial deposit of \$1,000 and a monthly fee of \$100 per vehicle, Pace will provide a passenger van to use for the commuting needs of the residents. Pace provides the routine maintenance needed in this program while fueling the vehicle is the responsibility of the users or the Mobility Manager.

2. Locally Based Program – For an initial deposit of \$1,000 and a monthly fee of \$100 per vehicle, Pace will provide a paratransit style van to use for the commuting needs of the residents. In this program Pace is not responsible for required routine maintenance and fueling.

The process to join either of these two Pace programs can be lengthy so it's recommended that the Mobility Manager begin discussions with Pace well in advance, perhaps as many as 12 months in advance of phase three, in order to ensure a vehicle is secured in a timely manner for fixed route transit service.

Phase 4 – Phase four would include the expansion of the fixed route service from three morning and afternoon hours per day, to four hours. At the same time the Mobility Manager would consider adding up to six more bikes to the bike share system. The timing of implementing phase four should allow for some time after the completion of phase three to let the transportation benefits offered in the first three phases to mature. It will also allow the Mobility Manager to use data to better understand trip demand in the area, as well as the number of residents living along Station Boulevard, and the demand in commute mode split.

Phase 5 – Assuming demand increases for multi-modal options to access the Route 59 station, it is recommended that phase five include increases in fixed route transit, providing up to six morning and afternoon hours of service through the use of two vans. It is anticipated that this scenario would provide the level of service to meet the express trains desired for use by the residents. In addition to expanded transit service, this phase would expand the carpool program by up to 20 parking permits, and expand the bike share system by up to 40 bikes.

Phase 6 – A sixth phase is included in the recommendation for implementation when the Station Boulevard neighborhood is expected to be at full build-out with 1,390 occupied residential units, of which, 426 households are estimated to be using transit for their commuting needs. This sixth phase would continue the level of service being offered in Phase Five, with the exception of the carpool / permit share program, which is recommended to be phased-out.

The table below provides details of the recommended strategy. The phasing strategy is across the top of the table and the elements of the recommendation are down the left side. It should be noted that the costs per residential unit go down in the last phase, partially due to the elimination of the carpool program, but also due to an increase in the number of occupied residential units, thereby spreading the cost of services across additional households.

RECOMMENDED SCENARIO	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6
Total No. Residential Units	468	1162	1162	1162	1162	1390
Estimated Transit Households	122	309	332	343	343	426
Est. Number Driving To Station	98	248	198	182	114	247
Carpool / Permit Households	10-20	30-40	40-50	40-50	50	-
Est Monthly Cost Per Unit	\$.60-.70	\$.50-.60	\$.60-.70	\$.60-.70	\$.70-.80	-
Walking Households	5-10	10-20	10-20	10-20	10-20	10-20
Est. Monthly Cost Per Unit	\$.03-.04	\$.01-.02	\$.01-.02	\$.01-.02	\$.01-.02	\$.01-.02
Biking Households	-	5-10	10-20	10-20	40-50	40-50
Est. Monthly Cost Per Unit	-	\$.50-1.00	\$1-2	\$2-3	\$5-6	\$4-5
Fixed Route Households	-	-	50-75	75-100	100-125	100-125
Est. Monthly Cost Per Unit	-	-	\$6-7	\$8-9	\$13-14	\$11-12
Guaranteed Ride Home	15-30	45-70	110-165	135-190	210-245	150-195
Est. Monthly Cost Per Unit	\$.01-.02	\$.01-.02	\$.02-.03	\$.02-.03	\$.03-.04	\$.02-.03
TOTAL Monthly Estimated Cost Per Unit	<\$1	\$1-2	\$7-10	\$10-13	\$18-21	\$16-17

The eventual goal would be to have all residents along Station Boulevard who use transit for commuting purposes, to access the Route 59 station using one of the transportation benefits being offered rather than driving alone to the Route 59 station. This goal should be the work of the Mobility Manager who would further promote the transportation benefits and increase capacity as needed in future phases. Having residents along Station Boulevard walk, bike, use transit, or a ride share service fulfills the 2005 vision of the Station Boulevard TOD area as one providing a pleasant and functional vehicular, pedestrian and public transportation connection along Station Boulevard from the Route 59 Metra station to New York Street.

Immediate Next Steps

While the phases recommended above would occur over the course of several years, two immediate steps should occur within the next 3 months, establishing an Implementation Team and a Mobility Manager. The Mobility Manager should then take the remaining immediate next steps below to implement the first two phases within 12 months:

- City to establish an Implementation Team
- City to designate a staff person to implement and transition to role of Mobility Manager.
- Establish a Guaranteed Ride Home Program with either a voucher or reimbursement system.
- Secure seven Route 59 station monthly parking permits.
- Begin negotiating new or revised bike share contract with Zagster.
- Begin discussions with Pace to secure a vehicle from one of their two programs.
- Launch Phase 1.
- Begin marketing and advertising the transportation options.
- Monitor demand and utilization.
- Work with developers and HOAs to develop a fee schedule.
- Work with the residents and developers to transition the Mobility Manager position from being a City staff person to an outside paid position.



City of Aurora
Planning and Zoning Division
44 E. Downer Place
Aurora, IL 60505

(630) 256-3080
COAPlanning@aurora-il.org
aurora-il.org



**Regional
Transportation
Authority**

Regional Transportation Authority
175 W. Jackson Blvd. Suite 1650
Chicago, IL 60640

RTAChicago.org