

Village of Justice, Illinois



TRANSIT IMPROVEMENT STUDY

August 2007

ACKNOWLEDGEMENTS

The Transit Improvement Study for the Village of Justice was prepared through the efforts of the Village of Justice, the Regional Transportation Authority, Pace, Metra, and the project planning consultants, HNTB Corporation and MKC Associates. Many citizens, staff and officials of the Village of Justice participated in the planning process. Their involvement and insights are sincerely appreciated.

The following Steering Committee members served during the planning process for the Transit Improvement Study:

Melvin D. Van Allen, Jr.	Former Village President 5/1993- 10/2006
Michael Maruszak	Former Village Trustee
Vicki Kelly	Former Village Trustee
Richard M. Sparr	Former Acting Village President 11/2006 - 5/14/2007
John Bruce	Planning & Zoning Commissioner
Krzysztof Wasowicz	Village President 5/14/2007- Present
Michael Murray	Village Trustee
Richard Berkowicz	Village Trustee
Edward Jurgel	Village Trustee

Village Program Coordinator:

James M. Lurquin

Director of Economic Development

The efforts of the following technical advisors are also appreciated:

Regional Transportation Authority
175 W. Jackson Boulevard Ste. 1550
Chicago, IL 60604
312.913.3200

Pace
550 West Algonquin Road
Arlington Heights, IL 60005

Metra
Office of Planning and Analysis
547 W. Jackson Boulevard
Chicago, IL 60661

Consultant Team Contact Information:

Diane Gormely-Barnes, Senior Planner
HNTB Corporation
111 North Canal Street
Chicago, IL 60606
312.930.9119, dcbarnes@hntb.com

Mary Kay Christopher, Principal
MKC Associates
3112 Maple Avenue
Berwyn, IL 60402
708.269.1380, marykay@mkcassociates.com

Transit Improvement Study

Village of Justice, Illinois
HNTB Corporation and MKC Associates

TABLE OF CONTENTS

	INTRODUCTION	1
I.	PLANNING FRAMEWORK	2
II.	BUS SERVICE ALTERNATIVES	4
	A. A Potential Transit Hub	4
	B. Bus Service Alternatives	6
	C. Conclusion	12
III.	POTENTIAL FUTURE METRA STATION	14
	A. Ridership Projection	14
	B. Alternative Station Concepts	17
	C. Station Development Cost Estimate	21
	D. Conclusion	24
IV.	IMPLEMENTATION RECOMMENDATIONS	25
	A. Near-Term Initiatives	25
	B. Long-Term Initiatives	25
	C. Ongoing Initiatives	26
	D. Policy Considerations	26
	E. Implementation of Pace-Related Initiatives	27
	APPENDIX	30
 LIST OF FIGURES		
1.	Planning Framework	3
2.	Potential Bus Service Improvements (Alternatives 2a and 2b)	8
3.	Potential Bus Service Improvements (Alternative 3)	11
4.	Ridership Shed	15
5.	Station Development Concept (Option 1)	19
6.	Station Development Concept (Option 2)	20
 LIST OF TABLES		
1.	Cost Implications of Potential Bus Service Improvements	12
2.	Ridership Calculations for Potential New Justice Metra Station	16
3.	Station Development Cost Estimate- Option One	22
4.	Station Development Cost Estimate- Option Two	23

This document summarizes the work conducted for the Transit Improvement Study for the Village of Justice, Illinois. The document was prepared under contract with the Regional Transportation Authority of Northeastern Illinois. Preparation of the document was financed in part through a grant from the U.S. Department of Transportation, Federal Transit Administration, and the Regional Transportation Authority. The contents of the document do not necessarily reflect the official views of the U.S. Department of Transportation, Federal Transit Administration or the Illinois Department of Transportation.

Transit Improvement Study

Village of Justice, Illinois

HNTB Corporation and MKC Associates

INTRODUCTION

Many communities throughout the Chicago region have capitalized on their public transportation assets as a resource to provide mobility options for residents and as a catalyst for commercial and residential development. Through its Regional Technical Assistance Program (RTAP), a tool used to facilitate local community and economic development and improved access and connections to and near transit stations, the Regional Transportation Authority (RTA) has worked with over fifty Chicago-area communities to formalize transit-oriented planning and local transit improvement projects.

With assistance from the Regional Transportation Authority, the Village of Justice has undertaken a Transit Improvement Study to assess existing public transit assets and develop recommendations for future enhancement. HNTB Corporation (HNTB), a planning and urban design consulting firm, and MKC Associates (MKC), a transit services consulting firm, have provided planning services to the Village over the course of the study.

The overall goal of the Transit Improvement Study is the development of a set of visionary- yet also realistic and achievable- implementation strategies to enhance mobility alternatives for Justice residents, to improve neighborhood connections and community cohesion, and to encourage appropriate new development and redevelopment that can both benefit from transit access and provide potential riders.

Building upon the information resources and community input summarized within the Background Report (dated January 2007 and available under separate cover), this Transit Alternatives Assessment Report represents the culmination of the planning process. The report documents the following study elements:

- An overall Planning Framework;
- Alternatives for improving bus service within the Village;
- Ridership projections for a potential future Justice Metra Station;
- Alternative concept plans for a potential future Justice Metra Station; and
- Preliminary cost estimates for the alternative concept plans.

Implementation recommendations for the Village are outlined in the final chapter of this report, providing guidance in moving forward to capitalize on both near-term and long-term public transit improvements within the Village.

I. PLANNING FRAMEWORK

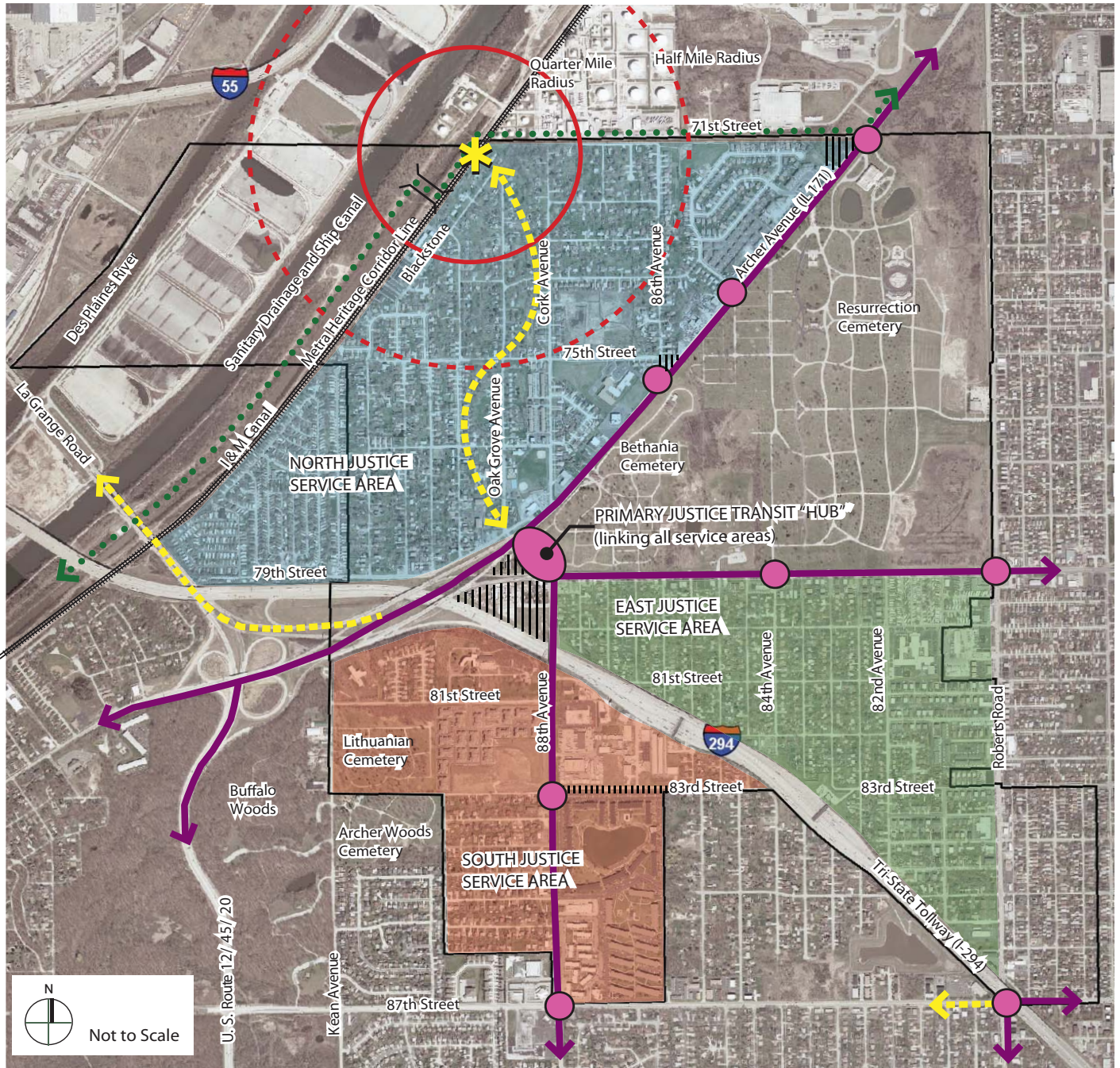
Building upon the key planning considerations described in detail in the Background Report, a preliminary “planning framework” was developed. [Figure 1: Planning Framework](#) depicts a general organizing strategy for the provision of enhanced public transit infrastructure in the Village of Justice, using transit services as a way to knit together a dispersed community, enhance resident mobility options, provide a more successful business environment, and improve the quality of life in the Village overall. These general ideas are developed in more detail in subsequent chapters of this report.

[Figure 1](#) depicts the following general concepts:

- Justice is effectively separated into three “service areas” by the physical barriers of I-294 and Resurrection and Bethania cemeteries.
- Each of the three service areas is adjacent to a major arterial that currently has Pace service. However, transferring between routes or moving from one service area to another as a pedestrian is exceedingly difficult.
- Future bus service provision should likely focus on creating several “hubs” in each service area with an increased level of passenger amenities, and should facilitate transferring in a centralized location if feasible.
- A centralized “gateway” hub and possibly other park & ride locations could also provide transit-supportive commercial or residential uses.
- If a Metra station is established at the north end of Justice, a linkage to the station will also be needed.
- Options for facilitating improved links to desired destinations outside of Justice are also explored, in particular the Hodgkins / La Grange area.









Throughout the planning process, it has been apparent that Justice residents are very interested in having improved opportunities to utilize public transportation within the Village and to other destinations. Anecdotal evidence suggests that when alternative transit options are available, Justice residents will often choose the mode that offers the most flexibility with regard to service headways and hours of service, opting to travel farther to access transit if that option provides increased convenience. Community input also suggested a strong interest in public transportation options that go beyond the “hub and spoke” system of access into and out of downtown Chicago. For these reasons, the alternatives explored in this study seek to provide increased opportunities to coordinate local transit services with the broader regional transit system, while also utilizing transit facilities as a potential catalyst for other community improvements.

FIGURE NO. 1: PLANNING FRAMEWORK



August 2007

Legend

-  Approximate Village Boundary
-  Potential Transit Service Hubs
-  Potential Park-n-ride, Kiss-n-ride, bus turn-around and/or TOD redevelopment sites
-  Existing Transit Service Corridors
-  Potential Future Transit Service Linkages
-  Potential Future Metra Station
-  Potential Bike Trail Connection
-  Existing Culvert Under Railroad Embankment

Transit Improvement Study

Village of Justice, Illinois
 HNTB Corporation and MKC Associates

II. BUS SERVICE ALTERNATIVES

This chapter provides a description of bus service improvement alternatives for the Village of Justice, building upon the existing conditions assessment and community feedback documented in the Background Report. Pace is currently conducting the South Cook County - Will County Initiative, a comprehensive review and restructuring of service in southern Cook, southwestern Cook and Will counties. The current status and results of the Initiative are presented in the Conclusion section of this chapter.

The Background Report outlined existing bus transit services in the Village of Justice, and summarized input from Village stakeholders. The Background Report documented that although the Village was relatively well-served with Pace bus service, there were gaps in the network that merited further review. These service gaps included:

- Lack of a connection after 10:40 p.m. from the CTA station at Midway,
- The need for a link to LaGrange Road,
- Difficulty circulating within the Village,
- A general desire for more frequent service, and
- A connection with a future Metra station, if constructed.

A. A Potential Transit Hub

General planning concepts for addressing some of these issues were included in the Background Report. One of these concepts addressed the issue of poor circulation in the Village with a "hub" flexible service. This flexible service would assign one van to each of three service areas in Justice identified as the North, East and South service areas (see [Figure 1](#) for the location of the three service areas and the potential transit hub). The three vans would meet at timed intervals at a transit hub located in the vicinity of the intersections of 79th Street, 88th Avenue and Archer Avenue so that community residents could transfer between vans or connect to Pace service.

In addition to providing a transfer location for the flexible service, the transit hub could also be developed with a Pace transit center, park-and-ride lot, kiss-and-ride lane and/or a transit-oriented development (TOD). The Pace transit center and associated parking and drop-off areas could be similar to the existing park-and-ride location in Burr Ridge off of County Line Road (see photos on the next page). A privately developed TOD could provide for transit-friendly commercial uses, along with residential and/or office uses that would both generate increased demand for commercial activity and support increased transit use. While in Burr Ridge the Pace facility is somewhat isolated from its surroundings, in Justice it would be ideal to integrate the Pace facility with commercial development to encourage Pace riders to patronize the businesses.

A transit center developed in conjunction with a park-and-ride lot could provide a transportation node where local bus routes could connect to new express bus or Bus Rapid Transit (BRT) services, providing area residents with transit access to major regional employment centers via nearby expressways. This service would be similar to the current Route 855 I-55 Flyer that provides service between the park-and-ride lots in Bolingbrook and Burr Ridge and downtown Chicago during weekday rush hours. Bus service to special events or destinations in the region (such as White Sox games or casinos) can also be accommodated from this type of facility.

Transit Improvement Study



The Pace park-and-ride facility in Burr Ridge, located east of the County Line Square shopping center off of County Line Road south of I-55, provides a dedicated off-street access lane for buses, separate driveway access to a parking lot for commuters, and a shelter for waiting passengers. Businesses are located nearby, but are not integrated with the Pace facility.



The potential transit hub site in Justice, estimated to be 2.5 acres in size, currently includes a vacant restaurant, a vacant building being advertised for sale, and a ten-unit apartment building. The triangular block across 79th Street to the south, estimated to be nearly 10 acres in total size, includes a gas station, a vacant former school site, a truck storage lot and four single family homes. While it would be preferable to locate a future Pace transit center north of 79th Street in conjunction with new mixed use or commercial development, redevelopment of some or all of the block south of 79th Street could potentially accommodate residential, commercial and/or office development in a central location accessible to bus service, as opportunities arise.

(Note: aerial image at left not to scale)

While additional study would be required to ascertain whether or not a Pace transit center could be effectively accommodated in this area, it is located less than two miles and less than three minutes from the inter-change of LaGrange Road and I-55. Ingress and egress patterns for larger Pace buses providing the potential new express service and established service routes, smaller transit vehicles circulating through the three Justice service areas, and potential transit riders and shoppers arriving by car would have to be safely accommodated, in addition to pedestrians and bicyclists arriving from nearby areas.

Transit Improvement Study

Village of Justice, Illinois
 HNTB Corporation and MKC Associates

This type of development would create the opportunity for a mutually beneficial partnership between Pace and the Village. A cooperative partnership with the goals of improving transit mobility for area residents while developing an under-utilized property would require joint commitments from the Village and from Pace. Examples of commitments for the Village might include project coordination, zoning approval and recruitment of a developer for the commercial and/or residential portion of the project. Pace commitments might include provision of appropriate bus service and oversight of the transit center design. Responsibilities for land acquisition, financing and construction would be dependent upon whether a developer was retained for TOD development.

B. Bus Service Alternatives

The flexible service “hub” concept and other opportunities are discussed further in the alternatives presented below.

Alternative 1 - Extend the last trip on Route 379 West 79th Street

In the current Pace schedule, the last weekday trip serving the Village of Justice on Route 379 leaves Midway at 10:10 p.m. and arrives at 79th Street and 88th Avenue at 10:38 p.m. Public comments during the study indicated a desire to have the 11 p.m. trip leaving Midway on Route 379 operate through Justice and provide the Village with a late night connection from the CTA station. Alternative 1 would reroute the 11 p.m. trip to serve Justice, providing service at 79th Street and 88th Avenue until 11:28 p.m.

The last scheduled westbound weekday trip on Route 379 leaves the Midway CTA station at 11 p.m. however; this trip does not serve the Village of Justice. This last trip operates in service to 79th and Harlem, where it turns south on Harlem and operates out of service to the garage located at 9889 S. Industrial Drive, Bridgeview. Alternative 1 would retain the trip in revenue service on its regular route until it reaches 88th Avenue and 95th Street. The vehicle would then go out of service and continue to the garage along 95th Street.

A check of the last three westbound 379 trips that serve the Village was taken on January 11, 2007. The check showed that the last three trips are fairly active. It is estimated that if the 379 trip which leaves Midway at 11 p.m. were rerouted to serve Justice, an additional three passengers per weekday, or 765 passengers per year, would utilize this realigned last trip.

Alternative 1 increases vehicle hours by six minutes per weekday or approximately 26 hours annually. Vehicle miles increase by 2.9 miles per weekday or approximately 740 miles per year. Given these statistics, the cost to realign the 11 p.m. trip on Route 379 would be negligible. At a variable cost per hour of \$40.03, this Alternative will cost approximately \$1,020 per year. This expenditure would be offset by estimated revenue of \$597 per year.

Alternative 2 - Bus route connecting Justice to north LaGrange Road

Public comment during the study indicated a need to connect the Village with transit service operating on LaGrange Road. The region's 2030 Plan includes plans for a high quality bus service on LaGrange Road between O'Hare Airport and Orland Park. It is possible that this proposed service could deviate off of LaGrange Road to serve high density development and traffic generators such as the Village of Justice and Moraine Valley College. This possibility becomes more likely if a transit center at the transit hub has been built or commitments for its construction have been made.

Operating funding for such a new service has not been identified, and it may be several years before this service can be implemented. In the meantime, implementation of a connection between the Village of Justice to north LaGrange Road may be a good first step to demonstrate the need for a link between LaGrange Road and Justice.

Transit Improvement Study

Alternative 2 has three variations which are described below. These variants are numbered 2a through 2c and are mutually exclusive. This means that only one of the three variations is intended for implementation. Implementation of all three variations, or even two of the variants, would result in excessive and duplicative service. Variations 2a through 2c assume operation by Pace and the cost estimates reflect Pace variable operating costs. However Alternatives 2a and 2b could be operated by the Village using the Municipal Vanpool Program described in Alternative 3. Potential routing for Alternatives 2a, 2b and 2c are depicted in [Figure 2: Potential Bus Service Improvements \(Alternatives 2a, 2b and 2c\)](#).

Alternative 2a: New route between the Quarry Shopping Center and 88th Avenue/87th Street.

This new route would operate along 88th Avenue and connect to northbound LaGrange Road using Archer Avenue. The service would make two or three stops within the shopping center and return along the same routing to 88th Avenue and 87th Street. A 40 foot transit vehicle could be accommodated in the shopping center on the southwest corner of 88th Avenue and 87th Street in Hickory Hills. Negotiations with the shopping center would be necessary which would hopefully result in a lease for the use of the lot. If this location is not available, the bus will need to turn around in another location, which can significantly increase the cost of the service. This route would make connections with Pace Routes 330 Mannheim-LaGrange Roads; 379 West 79th Street, and 831 Joliet-Midway, given existing route operations.

The hours of service for this new route are proposed as 7:30 a.m. to 10:30 p.m. on weekdays only. This would provide employment and shopping opportunities for residents by scheduling service 30 minutes before the Target store opens and 30 minutes after it closes. Due to the relatively quick round-trip vehicle travel time, service could be provided with one bus every 30 minutes. Annual ridership is estimated at approximately 16,575 passengers for an estimated \$12,930 in annual revenue.

Using the costs presented for Alternative 1, the variable annual operating cost of this service is estimated at \$153,115. Incorporating the estimated revenue produces a net annual operating cost of \$140,185.

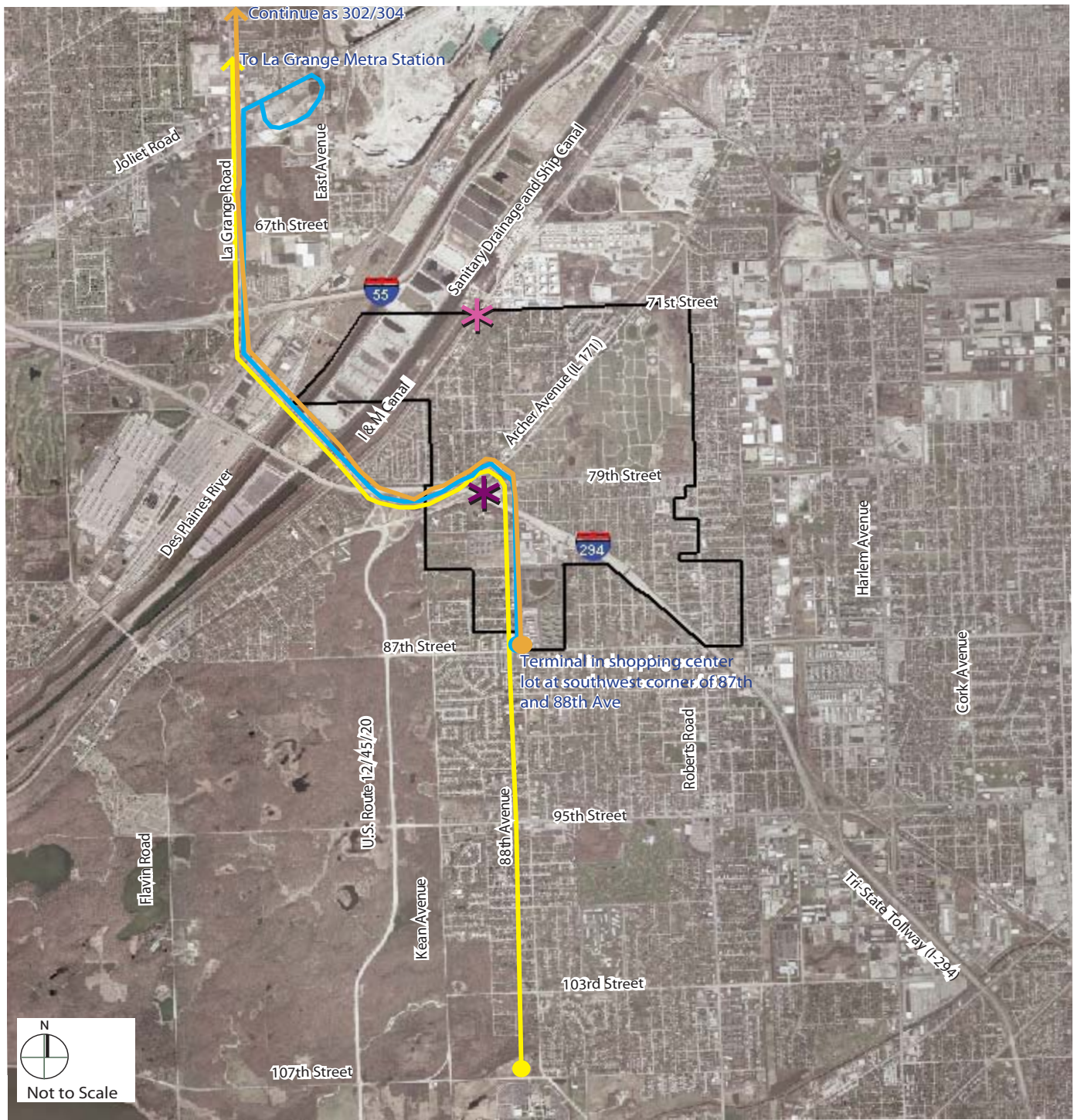
Alternative 2b: New route between LaGrange Metra station and Moraine Valley College

This new route would begin at the existing bus terminal at Moraine Valley College and travel along 88th Avenue to Archer Avenue and then north on LaGrange Road. This new route would provide a connection for Metra BNSF commuters as well as connections to shopping and entertainment opportunities in downtown LaGrange. The operational difficulty with this route is finding a suitable location to park a bus while it awaits arrival of the Metra train in the evening. Assuming that such a location can be found, the hours of service for this new route would be between 6 a.m. and 10 p.m. on weekdays only.

This route would make connections with Pace Routes 302 Ogden/Stanley, 304 Cicero-LaGrange, 330 Mannheim-LaGrange Roads, 379 West 79th Street, 381 95th Street, 385 87th/111th/127th, 386 South Harlem, 397 Blue Island/Moraine Valley College/UPS, and 831 Joliet-Midway, given existing route operations.







The variable annual operating cost for this new service is estimated at \$163,320 with hourly frequencies. This new route is expected to generate approximately 62,220 annual riders and revenue is estimated at \$48,530. Net annual operating costs would be approximately \$114,790.

FIGURE NO. 2: POTENTIAL BUS SERVICE IMPROVEMENTS (ALTERNATIVES 2A, 2B AND 2C)



August 2007

Legend

-  Approximate Village Boundary
-  Potential Future Metra Station
-  Potential Future Transit Hub
-  Alternative 2a: New Route Between Quarry Shopping Center and 87th/88th
-  Alternative 2b: New Route Between LaGrange Metra Station and Moraine Valley College
-  Alternative 2c: Extend an Existing Route

Transit Improvement Study

Village of Justice, Illinois
 HNTB Corporation and MKC Associates

Alternative 2c: Extend an existing route to serve the Village of Justice

As an alternative to instituting a new route, extensions of existing routes were reviewed to determine if there were advantages associated with service extensions as opposed to implementing new routes. Route extensions would terminate at a new bus turnaround facility at the proposed transit hub, or would utilize the shopping center lot on the south west corner of 88th Avenue and 87th Street.

Three routes serving downtown LaGrange were reviewed to determine if route extensions were feasible. The three routes included:

- Route 302 Ogden/Stanley (service between downtown LaGrange and Cermak/Cicero)
- Route 304 Cicero-LaGrange (service between downtown LaGrange and Archer/Harlem)
- Route 330 Mannheim/LaGrange Road (service between Archer/Harlem and O'Hare kiss-and-fly lot)

Automatic Passenger Counter (APC) and schedule data for Routes 302 and 304 were examined first to find out if the south terminal of either of those two routes could be moved to serve Justice. The schedule showed extensive inter-lining between Routes 302, 304 and 322 Cermak Road-22nd St. This means that the schedules are inter-connected and buses from all three routes operate interchangeably on each route. For example, a bus may make a trip on the 304 to downtown LaGrange, then leave LaGrange as Route 302 destined for Cermak and Cicero, and from there make a third trip along Cermak to Oak Brook as Route 322.

Due to this inter-lining, it was not possible to determine if an extension of Routes 302 or 304 to serve the Village of Justice could be accomplished efficiently. The operating costs associated with Alternative 2a provide an order of magnitude illustration of how much either of these two extensions might cost.

The APC and schedule data for Route 330 was then reviewed to determine if the south portion of the route could be split to serve two destinations. One branch would continue to operate to Archer and Harlem, while the other branch would operate to 88th Avenue and 87th Street. Operating costs would remain roughly the same as current because running times and mileage between the two branch destinations are similar. However, the intervals between buses would increase to one hour or more on each branch. (Between 9 a.m. and 2 p.m. service intervals would increase to two hours.) A branch operation at the southern end of Route 330 would effectively decrease service levels by producing unacceptably long headways. To compensate for decreased service levels, trips would need to be added to the existing schedule, which would significantly increase annual operating costs.

In light of these issues, it is suggested that a more detailed schedule analysis be undertaken to determine the cost impact of separating the schedule of Route 302 or Route 304 from the schedule of Route 322. Alternatively, a trial operation of Alternatives 2a or 2b could be implemented to verify ridership levels associated with this new connection.

Alternative 3 - Municipal Vanpool Program

Pace offers the Municipal Vanpool Program to all units of local government interested in providing their own local transportation system. Using vans, local governments implement services to supplement existing Pace service or to develop new service. There are currently 57 units of government participating in the program. Using vans supplied by Pace these agencies have implemented a variety of services such as community circulator routes, shuttles to train stations, and dial-a-ride services for senior and disabled residents.

One advantage of this program is the flexibility of vans, which unlike Pace buses, can easily maneuver on residential streets and through parking lots. Vans can be used to operate many types of "flexible" transit services including dial-a-ride and zone services. Dial-a-ride operations require reservation and dispatching services which can increase operating costs. Zone systems may or may not require phone reservations. Under some zone operations passengers are picked-up and dropped-off at fixed bus stops within the zone. Each bus stop has an individual schedule and the van comes to the stop at those times. Other zone systems incorporate a dial-a-ride component to accommodate residents that cannot walk to bus stops. Each flexible service can be designed to respond to area needs.

Based on the population of Justice, an established flexible service will attract approximately 100 riders per day or 25,500 annual riders. However, it will take at least three to five years for the service to become established. Ridership in the first few years of service will attract fewer riders - perhaps only 25 riders per day or 6,375 annually.

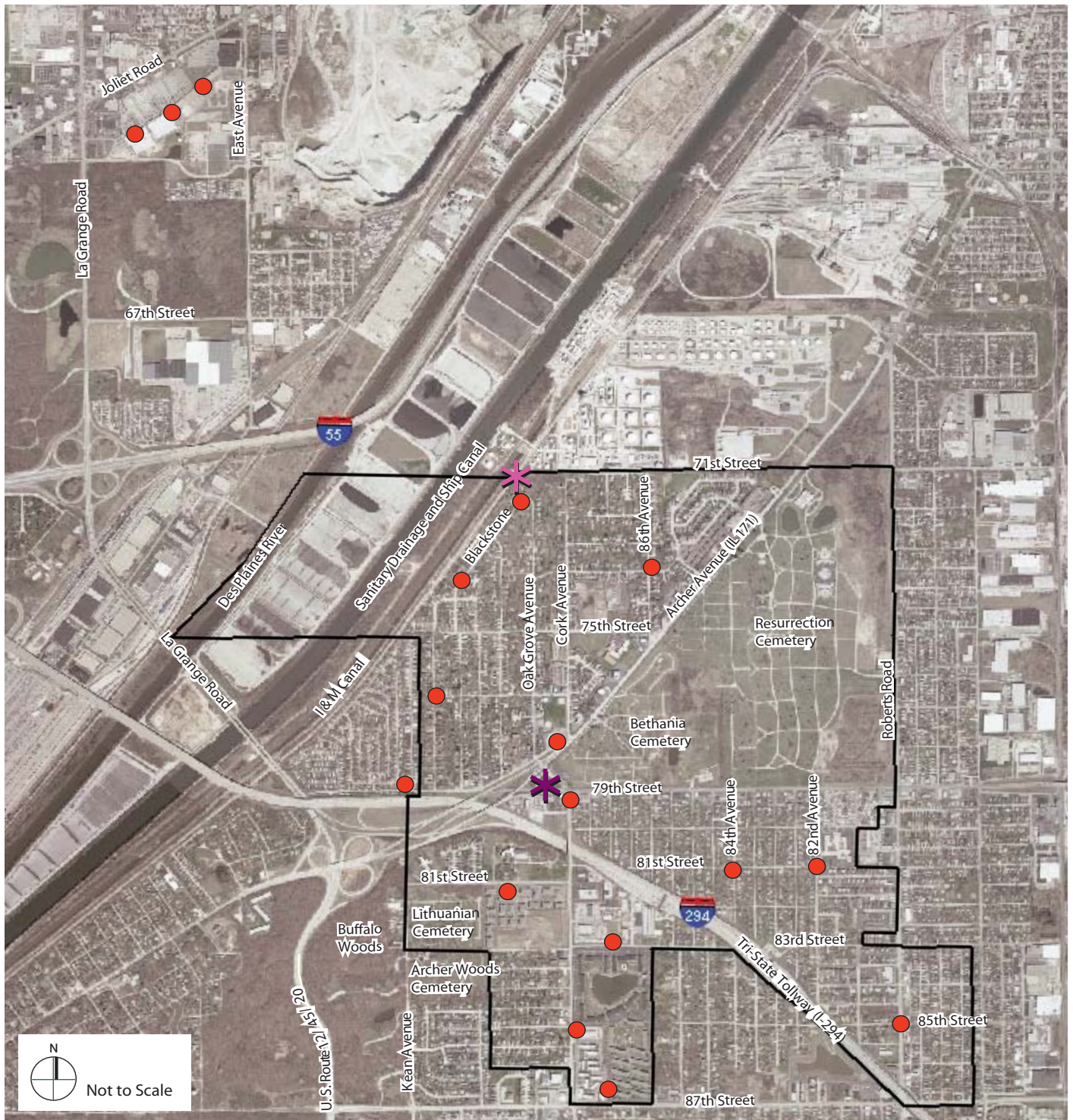
Under the Municipal Vanpool Program, Pace provides a local government agency with vans for a monthly fee, currently \$280 per month. The agency is responsible for providing a driver, maintenance, and insurance. Costs between municipalities vary based on what van drivers are paid and how the vans are maintained. The cost estimates in this report assume costs at \$31 per vehicle hour. A free service using one van and operating weekdays only for 10 hours per day will cost approximately \$79,000 annually. Operating costs can be offset by charging a fare for the service and/or by obtaining business sponsorship for the service.

The "Hub" flexible service previously described where one van serves each of the three service areas in Justice could be operated using vans from the Municipal Vanpool Program. This flexible service would assign one van to each of the service areas: North, East and South. The vans would circulate within their respective service areas and then make timed connections at the flexible transit service hub in the vicinity of the intersections between 79th Street, Archer Avenue and 88th Avenue. Passengers could then transfer between vans or connect to Pace bus routes. Potential service stops for this alternative are depicted in [Figure 3: Potential Bus Service Improvements \(Alternative 3\)](#). If the vans were operated for eight hours per day, weekdays only, the annual cost would total approximately \$189,700. These costs can be offset by charging a fare for the service and/or by obtaining business sponsorship for the service.

The Village might also consider operating variations of Alternatives 2a or 2b, utilizing Pace vans supplied through the Municipal Vanpool Program. Alternative 2a operated as a flexible service would consist of fixed bus stops located throughout Justice and at least one van supplied by the Municipal Vanpool Program. Flexible service bus stops could be set up at major intersections, Village Hall, the potential Justice Metra station, and at locations within major residential developments. Each flexible service bus stop would have a scheduled departure time. Vans would pick-up passengers at each bus stop at the scheduled time and take passengers to the Quarry Shopping Center where they can connect to Route 330. On the return trip, the van would pick up passengers at the shopping center and drop them off at the flexible service bus stops or at their homes (if on the way between flexible service bus stops.) The hours of operation for this flexible service are proposed between the hours of 7:30 a.m. and 10:30 p.m. This operation would cost approximately \$118,600 annually if operated by the Village with one van. If the hours were revised to operate just twelve hours per day, the cost would decline to \$94,860 annually.




Transit Improvement Study


FIGURE NO. 3: POTENTIAL BUS SERVICE IMPROVEMENTS (ALTERNATIVE 3)



August 2007

Legend

-  Approximate Village Boundary
-  Potential Future Metra Station
-  Potential Future Transit Hub

- Option 3: Municipal Vanpool Program
(and Alternative 2a as Flexible Service)
-  Potential Flexible Service Stops

Transit Improvement Study

Village of Justice, Illinois
HNTB Corporation and MKC Associates

Alternative 2b is another viable service for the Municipal Vanpool Program and could operate similar to the above description for Alternative 2a. The Village should consider this Alternative especially if a new Metra station is not constructed within Justice. In that event, the van could transport commuters during rush hours to either the Summit (Heritage) station or the LaGrange (Burlington Northern) station. During the day, the van could be used for circulation within the Village and/or to connect to pre-determined shopping, entertainment or personal business destinations outside of the Village.

If a transit hub is constructed at 79th Street / 88th Avenue / Archer Avenue, the transit hub could be used as a park-and-ride for the flexible service, as a flexible service bus stop and as a resting place for the van in between trips.

The Village might also consider adding a dial-a-ride component to their flexible service program. This would provide residents, particularly seniors and disabled residents, access to the service from their home as opposed to walking to a flexible service bus stop. A dial-a-ride component generally imposes higher operating costs due to expenditures related to reservation and dispatching requirements. These costs are estimated at over \$83,000 annually for one full-time dispatcher and two part-time call-takers for a ten-hour service day.

The Alternatives described above are summarized in the following table. The table summarizes each alternative with a brief description, an assumption of what entity would operate the service and estimates of annual cost, revenue and the resulting net annual cost. Residents of Justice would benefit from the implementation of any one of these Alternatives.

Table 1: Cost Implications of Potential Bus Service Improvements

Alternative	Description	Operator	Annual Cost	Annual Revenue	Net Annual Cost
1	Extend last 379 trip	Pace	\$ 1,020	\$ 5,97	\$ 424
2a	New route weekdays - 87 th St/88 th Ave to Quarry Ctr	Pace	\$ 153,115	\$ 12,930	\$ 140,185
2b	New route weekdays - LaGrange Metra to Moraine	Pace	\$ 163,320	\$ 48,530	\$ 114,790
3	Municipal Vanpool Program 1 van, 10 hours/weekday	Village	\$ 79,000	\$ 25,385	\$ 53,615
3	Municipal Vanpool Program 3 vans, 8 hours/weekday	Village	\$ 189,700	\$ 25,385	\$ 164,315
3 as 2a	Municipal Vanpool Program 1 van, 15 hours/weekday	Village	\$ 118,600	\$ 16,575	\$ 102,025

C. Conclusion

Pace is currently conducting the South Cook County - Will County Initiative, a comprehensive review and restructuring of service in southern Cook, southwestern Cook and Will counties. This initiative began in September 2005, and encompasses 81 communities, 48 bus routes and approximately 40 percent of Pace's overall ridership. As was done in the previous four initiatives, Pace intends to realign its services to meet current travel needs and demographics. In March and June 2007 Pace conducted public forums to obtain comments on proposed service concepts.

Transit Improvement Study

Justice is located on the north-central edge of the Initiative's planning border. Pace bus Routes 379, 385 and 831 are being reviewed as part of the initiative. Listed below are the proposed alternatives for these three bus routes. Note that these alternatives are subject to available funding and approval by the Pace Board of Directors.

- Route 379 would continue to operate through the Village of Justice on 79th Street and 88th Avenue as it currently does. However, the route would be extended south from Moraine Valley College to Orland Square Mall via 111th Street, LaGrange Road, 143rd Street and John Humphrey Drive. This extension would replace Route 384, 386 and 831 services to Orland Square. Evening hours of service would be extended on weekdays, Saturdays and Sundays. In addition, Route 379 would make fewer stops between Midway and Ford City Shopping Center because CTA Route 54B provides local service in this area.
- Route 385 would continue to serve the southeast corner of Justice at 87th Street and Roberts Road. However, south of Justice Route 385 would be rerouted to serve 95th Street between Roberts Road and 88th Avenue, and to serve 88th Avenue south of 95th Street. Route 385 service would operate later into the evening on weekdays, and Saturday and Sunday service would be added. Route 385 will also make fewer stops between Midway and Ford City Shopping Center because CTA Route 54B provides local service in this area. In addition, Route 385 service between Blue Island and Rivercrest Center in Crestwood would be replaced by a restructured Route 348.
- Route 831 would be restructured so that all trips travel between Joliet and Orland Square via Lockport and 159th Street. Route 831 would no longer provide service on Archer Avenue. Route 831 currently operates at a low productivity level due to low ridership. This restructuring is intended to improve operating efficiency.

Pace requires additional operating and capital funding to implement all of the changes included in the proposed service concepts. A final plan for the South Cook County - Will County Initiative will be presented to the Pace Board of Directors for approval in the fall or winter of 2007. Comments on the proposed plan are encouraged. The plan may be reviewed on the Pace website at http://www.pacebus.com/sub/initiatives/south_cook_will/ and comments may be submitted via email, or by calling Pace Passenger Services at (847) 364-7223.

The South Cook County - Will County Initiative, if implemented, will address one of the network gaps identified in the Existing Conditions and Community Input Background Report. That is the suggestion for extended hours on Route 379. The other items identified in the Background Report will be addressed in future Pace Initiatives, or could be addressed through the Village's participation in the Municipal Vanpool Program.

III. POTENTIAL FUTURE METRA STATION CONCEPTS

An assessment of the proposed Justice Metra station was prepared by HNTB, to determine if a station in the proposed location is logical to pursue through additional studies. This chapter presents the ridership projection, alternative station concepts and station development cost estimates prepared to gain an initial understanding of the feasibility of constructing a new Metra Station to directly serve the Village of Justice.

A. Ridership Projection

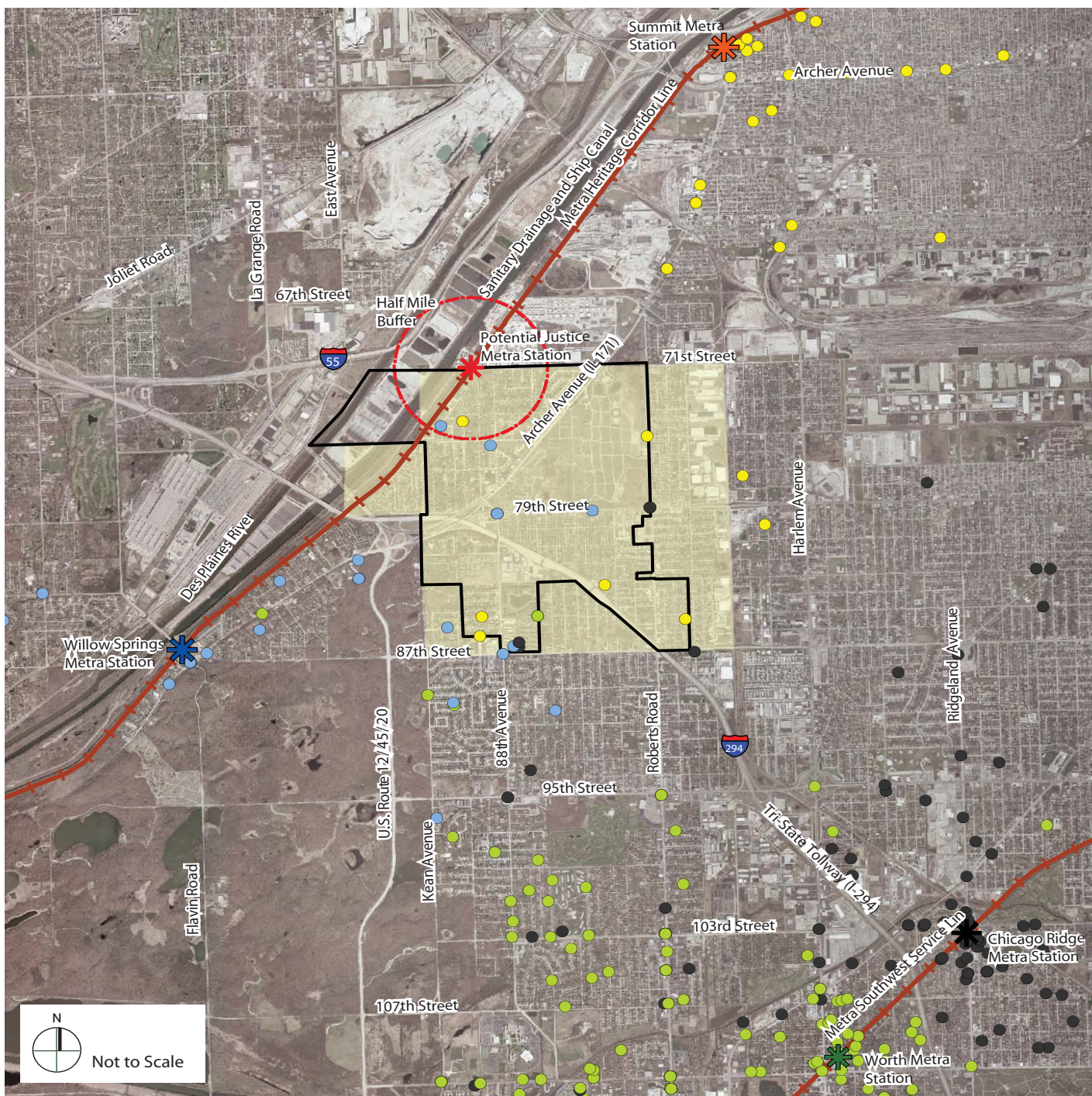
HNTB was asked to develop an “order-of-magnitude” projection of potential future ridership for the proposed Justice Metra Station. As a first step, the potential “ridership shed” for the proposed station was delineated, and is depicted in [Figure 4: Ridership Shed](#). Overlaid on the ridership shed are the origins of existing Metra riders within the area, with an indication of which Metra Station they use (based upon Metra’s Fall 2002 Origin-Destination Survey). The following should be noted when referring to [Figure 4](#):

- The ridership shed is delineated based upon U.S. Census quarter-section boundaries, to facilitate a projection of future population for the area.
- With the exception of residents of the Sterling Estates mobile home park, it is assumed that current and potential Metra riders living west of LaGrange Road / Kean Avenue will travel to the existing Willow Springs Metra Station.
- It is assumed that current and potential Metra riders living south of 87th Street will travel southeast to either the Chicago Ridge or Worth Metra Stations on the Metra SouthWest Service (SWS) Line.
- It is assumed that current and potential Metra riders living north of 71st Street and east of the Indiana Harbor Belt (IHB) Railroad (which runs north-south halfway between Roberts Road and Harlem Avenue) will travel north along Harlem or Archer Avenues to access the existing Summit Metra Station.

Based upon the ridership shed described above and in [Figure 4](#), population projections for 2030 prepared by the Chicago Metropolitan Agency for Planning (CMAP, formerly NIPC) were utilized to determine a projected future population within the area. A ridership projection was then developed that resulted in a potential range of **55 to 76 boardings per weekday in the year 2030**, based upon varying assumptions of the level of future transit use among Justice residents. The complete ridership projection is provided in [Table 2: Ridership Calculations for Potential New Justice Metra Station](#). The following should be noted when referring to [Table 2](#):

- In mature and built-out communities such as Justice, CMAP population projections are developed based upon input provided by each municipality as to the level of redevelopment and infill activity expected.
- The projection assumes that approximately 42 current Heritage Corridor Line riders that use either the Summit or Willow Springs stations would instead utilize the new Justice Metra Station. However, it is assumed that current riders of the Metra SWS Line who reside within the ridership shed will continue to utilize that line, due to the higher train frequency offered.
- Average weekday boardings across the entire Metra system are 645. In 2002, there were 142 weekday boardings at Willow Springs and 79 weekday boardings at Summit.

FIGURE NO. 4: RIDERSHIP SHED



August 2007

Legend

- Approximate Village Boundary
- Potential Ridership Shed

Origins of Existing Riders

- Chicago Ridge
- Summit
- Willow Springs
- Worth

Transit Improvement Study

Village of Justice, Illinois
 HNTB Corporation and MKC Associates

Table 2: Ridership Calculations for Potential New Justice Metra Station

Projected Population Increase for the Quarter Sections within the estimated "ridership shed" for the potential Justice Metra Station = 1,296 people (see Figure 4)

Alternative 1

- Assumptions:**
- 1) Once the new Metra station is in place, the percentage of total population in Justice taking transit to work will be equal to that of suburban Cook County
 - 2) Percentage of Justice residents using Metra out of the total workers using transit will equal the 2000 percentage in suburban Cook County

Alternative 2

- Assumptions:**
- 1) Once the new Metra station is in place, the percentage of total population in Justice taking transit to work will be equal to that of suburban Cook County
 - 2) Percentage of Justice residents using Metra out of the total workers using transit will remain the same as 2000

Alternative 3

- Assumptions:**
- 1) Once the new Metra station is in place, the percentage of total population in Justice taking transit to work will continue to be at the 2000 level
 - 2) Percentage of Justice residents using Metra out of the total workers using transit will remain the same as 2000

Table 2a: Potential new Metra riders based on the projected population increase

	Population Increase [1]	Increase in Workers [2]	Percentage of Transit Riders [3]	Increase in Transit Riders	Percentage of Metra Riders [4]	Increase In Metra Riders
Alternative 1	1,296	700	8.3%	58	58.4%	34
Alternative 2	1,296	700	8.3%	58	35.0%	20
Alternative 3	1,296	700	5.2%	36	35.0%	13

[1] 2030 Population Projections prepared by the Chicago Metropolitan Agency for Planning (CMAP, formerly NIPC); per ridership shed depicted in Figure 4

[2] Calculated by applying the number of workers as a percentage of total population in 2000 in Justice (U.S. Census data)

[3] U.S. Census 2000

[4] Workers by Mode of Transportation to Work and Municipality of Residence and by Area based on CTPP data provided by the RTA on RTAMS website

Table 2b: Existing Metra riders within Justice "ridership shed" using other Metra stations [1]

Station	No. of Data Points	Station Weight	No. of Existing Riders [2]
Summit	6	2.4	14.6
Willow Springs	7	3.9	27.6
Chicago Ridge [3]	4	0.0	0.0
Worth[3]	1	0.0	0.0
Total			42.2

[1] Based on Metra's Fall 2002 Origin-Destination Survey

[2] This represents the total number of boardings and not total passenger trips

[3] Existing riders using Chicago Ridge and Worth stations are not expected to switch to Justice due to higher train frequency on the SWS Line

Table 2c: Total potential riders for a potential Justice Metra Station

	New Riders	Existing Riders from other Metra Stations	Total Potential Riders [1]
Alternative 1	34	42	76
Alternative 2	20	42	63
Alternative 3	13	42	55

[1] This represents the total number of boardings and not total passenger trips

B. Alternative Station Concepts

The proposed site of a new Justice Metra Station was assessed for physical feasibility to accommodate commuter rail infrastructure. For purposes of this study, the current level of Heritage Corridor Line service was assumed. Two alternative station concepts were prepared, which differ only slightly with regard to access and circulation. The irregular shape and other constraints of the site resulted in one efficient layout for the station facility and platform access, with the differences in the two concepts reflected in ingress and egress at the commuter parking lot. In reviewing the two alternative concepts, it is important to note the following:

- As described and depicted in the Background Report, a significant floodplain currently impacts all of the Village-controlled property and public rights-of-way at the proposed station site. HNTB has been told that the floodplain is likely related to both the under-capacity of the creek that currently runs within the 71st Street right-of-way, which acts as a drainage channel for a significant area further to the east, and the presence of an existing square culvert to the south that allows floodwaters in the I&M Canal channel to back up into the neighborhood. The 71st Street creek pipe extending under the Metra HC Line may also be under-sized. The Village controls property on the west side of the Metra HC Line through a long-term lease, which may offer an opportunity to develop drainage improvements that can remove the proposed station area from the floodplain. If this cannot be accomplished, significant additional land acquisition would be required to provide for adequate compensatory storage beyond the boundaries of the floodplain.
- In order to provide as efficient and convenient a commuter parking facility as possible, with a strong visual and physical connection to the station facility, the parking lot has been indicated adjacent to the tracks, utilizing the Village-owned vacant lot and vacant home site immediately to the south. The Village-owned lot to the east can remain undeveloped, or in the very long term could be considered for transit-oriented residential development if the Metra Station is developed.
- While the presence of the existing square culvert approximately one block south of the proposed station site may offer the potential for future recreational or public safety access to the area west of the Metra HC Line, it is located too far away from the proposed station site to be useful as a pedestrian connection for commuter use. In any event, significant upgrades to the culvert and potential expansion would be required, along with flood control measures to address the high water table in the area. Railroad maintenance vehicles are able to use the nearby at-grade crossing at the Bedford Park industrial facility to the north; it is possible that Metra-related maintenance vehicles could also utilize this access route in the future if the Metra Station is developed.
- Because of current level of freight rail interference, future increases in commuter rail service on the Metra/HC Line are largely dependent upon the implementation of improvements elsewhere along the Line to alleviate freight rail interference. The CREATE (Chicago Region Environmental and Transportation Efficiency) Project identifies several improvements that are needed to allow increased levels of traffic on the CN tracks. The most significant project is a proposed rail-to-rail grade separation of the two CN tracks over three Indiana Harbor Belt (IHB) tracks in Bedford Park [CP Canal (Argo)], which could directly impact the proposed Justice station site. CREATE also proposed a rail-to-rail grade separation at the Brighton Park crossing in Chicago at Archer and Western Avenues, where the Heritage Corridor Line (two CN tracks) currently crosses over five tracks (three Norfolk Southern and two CSX tracks). Two other busy rail-to-rail crossings were studied as future grade separations, at LeMoyné (CN and Belt Railway Company) and Corwith (CN and BNSF), however both of these projects were not listed in the CREATE schedule of projects. In addition to these major projects, track upgrades and new connections further east, between Cicero and Ashland Avenues, are proposed. Funding availability and timing for these proposed improvements is unknown at this time. Until the flyovers are in place, it is not realistic

for Metra to consider upgrading the Heritage Corridor service or add more stations along the line due to the freight issues and resulting lower on-time performance record compared to most other Metra lines. A letter to the RTA from Metra that addresses these issues is included for reference in the Appendix of this report.

- The Canadian National (CN) Railway is the owner of the railroad that the Metra/HC Line operates on. The CN Railway will need to review and approve any station facility that is pursued in the future, as it will impact freight rail operations. This will include any proposed landscaping on the adjacent embankments, as required open sight lines for railway operations must be maintained. A preliminary response from the CN Railway regarding the alternative station area concepts is included for reference in the Appendix of this report.

The two concepts are depicted in [Figure 5: Station Development Concept \(Option 1\)](#) and [Figure 6: Station Development Concept \(Option 2\)](#). Key features of the concepts include the following:

- Inbound and outbound platforms of 465 feet in length and 10 feet in width are indicated, to accommodate a six-car train. A heated platform shelter is provided at the inbound platform only, similar to other station facilities along the Metra/HC Line.
- Because of the significant grade change between the platform and the adjacent commuter parking area (estimated at approximately 10 feet), a stairway and an ADA-compliant ramp provide access. The embankment at each side of the platforms would be well landscaped, with a decorative fence provided at the edge of the platform.
- Once at the platform level, commuters would utilize an ADA-compliant at-grade pedestrian crossing to reach the outbound platform. This crossing would be equipped with warning lights and gates. An underpass to access the outbound platform would be cost-prohibitive because of the high water table and floodplain, and an overpass is not feasible due to overhead utility lines and the need for 23 feet of clearance above the rail.
- A dedicated bus lane and kiss-and-ride lane are provided, separated from the traffic flow at the commuter parking lot. A unheated bus stop shelter is indicated at parking lot level, adjacent to the bus lane. The entire facility is designed to accommodate a 20-foot bus, to facilitate future transit connections to the station.
- In Option 1, a clock-wise “loop” route for transit vehicles is accommodated, with ingress at Blackstone Avenue and egress at a new extension of 71st Street. The transit vehicle could arrive from the transit hub along Oak Grove Avenue, and then return via 71st Street, 86th Avenue and Archer Avenue. In addition, exiting commuter traffic could potentially be dissipated by allowing exiting at both Blackstone Avenue and 71st Street. A lift station at 71st Street and 88th Avenue would have to be relocated to accommodate the new roadway and adjacent pedestrian/bicycle pathway.
- In Option 2, all ingress and egress for commuters and transit vehicles is provided from Blackstone Avenue, with the presumption that transit vehicles would travel north and south along Oak Grove Avenue to connect to the transit hub to the south. A pedestrian/bicycle pathway would be provided along the 71st Street right-of-way east to 86th Avenue.



This open but heated shelter at the Galewood Metra Station is a good example of the type of platform shelter that could be constructed at the Justice Metra Station.

FIGURE NO. 5: STATION DEVELOPMENT CONCEPT (OPTION 1)

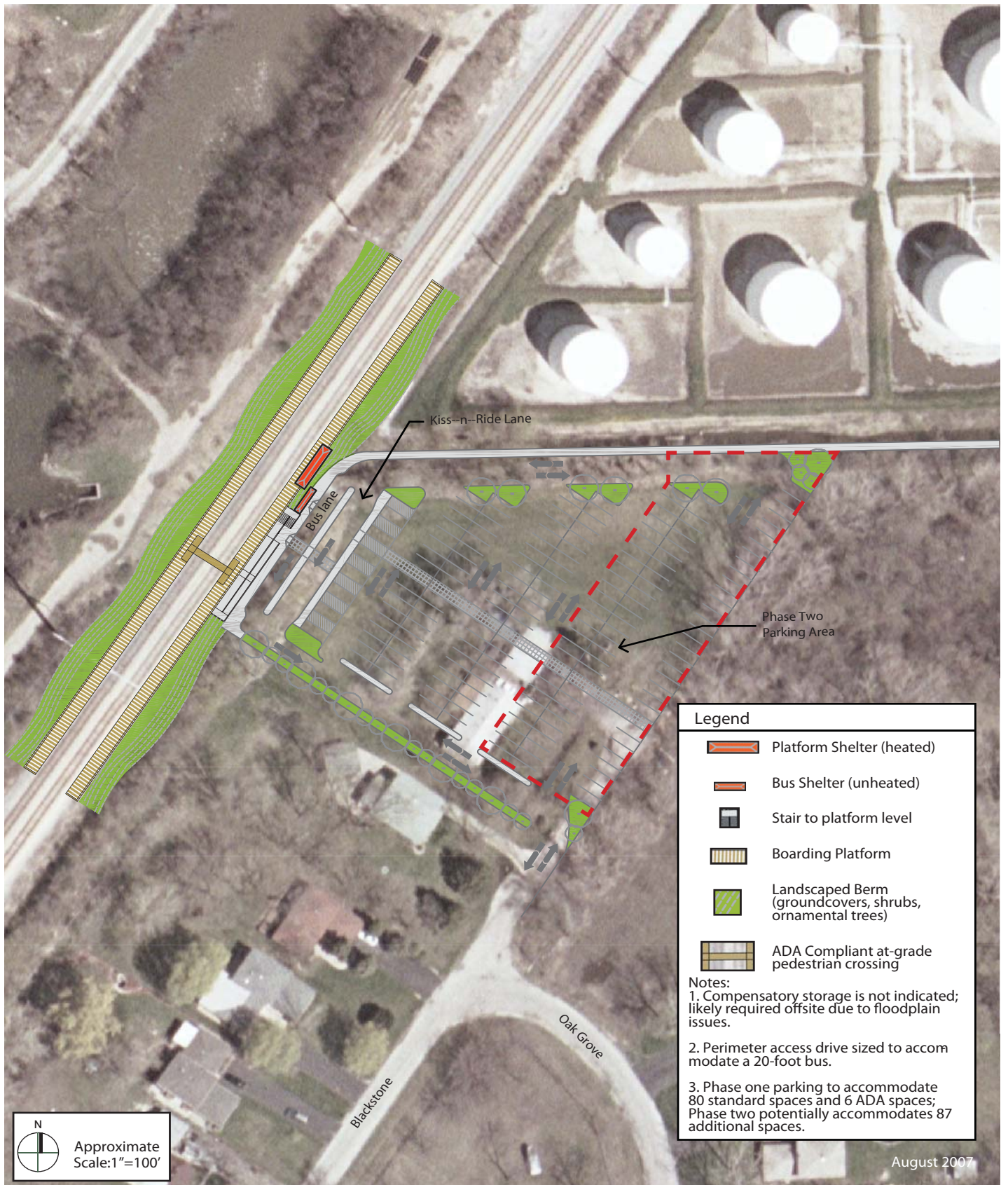


Transit Improvement Study

Village of Justice, Illinois

HNTB Corporation and MKC Associates

FIGURE NO. 6: STATION DEVELOPMENT CONCEPT (OPTION 2)



Transit Improvement Study

Village of Justice, Illinois

HNTB Corporation and MKC Associates

- Two phases of parking lot construction are anticipated. Initially, 80 standard spaces and 6 ADA spaces would be provided. While this slightly exceeds the anticipated 2030 ridership, the eastern-most drive aisle in Phase 1 will serve as the perimeter access road, so 80 spaces can be efficiently accommodated in the configuration. Phase 2 could consist of up to 86 additional spaces in Option 1 and 87 additional spaces in Option 2.

C. Station Development Cost Estimate

An order-of-magnitude cost estimate for each of the two alternative station area concepts is provided in this section, indicating both on-site and off-site improvement costs associated with a potential Justice Metra Station. As noted previously, the on-site configuration in both alternatives is the same, and as such the on-site cost estimate is also the same. Cost differences result from the differing access routes indicated in the two concepts.

The complete estimates are provided in Table 3: Station Development Cost Estimate- Option One and Table 4: Station Development Cost Estimate- Option Two on the following pages. Both concepts result in a potential on-site station development cost of approximately **\$5,056,446**. Option 1 would result in off-site costs of an additional approximately **\$962,000**. Option 2 would result in off-site costs of an additional approximately **\$478,270**.

When reviewing the complete estimates, it is important to note that the following are *excluded* costs, but could represent significant additional project costs if a future Justice Metra Station is pursued:

- Floodplain mitigation improvements
- Compensatory water storage costs if floodplain mitigation is not undertaken (note that parking lot fill to elevate the parking area is included in the estimates)
- Additional land acquisition to accommodate station improvements and/or access
- Additional land acquisition to accommodate compensatory water storage outside the floodplain
- Pole line burial of above-ground utilities that may be necessary in the station area, and any other necessary utility relocation
- Flagging costs associated with construction in the vicinity of active railroad tracks (currently \$350 per day)
- Parking lot expansion beyond Phase One
- Ongoing operational and maintenance costs for the station facility and commuter parking lot (which are likely to exceed the revenue from daily fees paid by commuters, resulting in an ongoing annual cost to the Village)
- Operational costs of new feeder transit service to the station

Table 3: Station Development Cost Estimate- Option One

Table 3a: On-Site Improvements

<i>Design Element</i>	<i>Size / Length</i>	<i>Unit</i>	<i>Unit Cost</i>	<i>Total Cost</i>	<i>Cost Source</i>
Platforms (2 @ 465' each)	930	LF	\$965	\$897,450	Metra
Platform fill (2 @ 10'Wx10'Dx465' L)	3444	cu yds	\$20	\$68,880	HNTB
Heated shelter at platform	1	each	\$250,000	\$250,000	Metra
Curbside bus stop with unheated shelter	1	each	\$50,000	\$50,000	Metra
2-track pedestrian crossing (gates, lights)	1	each	\$383,000	\$383,000	Metra
Stairway	1	each	\$60,000	\$60,000	Metra
Ramp	1	each	\$200,000	\$200,000	Metra
Sidewalks	3550	SF	\$6	\$21,300	HNTB
Parking lot *	86	spaces	\$8,000	\$688,000	Metra
Parking lot fill (18" deep) *	2550	cu yds	\$12	\$30,600	HNTB
Roadways (perimeter, bus lane, kiss & ride)	16000	SF	\$4	\$64,000	Metra
Platform fence (at outside edge)	800	LF	\$40	\$32,000	HNTB
Inter-track fencing (50' beyond platform ends)	565	LF	\$50	\$28,250	Metra
Trackwork	465	LF	\$100	\$46,500	Metra
Public address system / message signs (2)	1	each	\$50,000	\$50,000	HNTB
Miscellaneous amenities **	1	each	\$10,000	\$10,000	HNTB
Berms and landscaping ***	5600	SF	\$20	\$112,000	HNTB
<i>Sub-Total (const)</i>				<i>\$2,991,980</i>	
<i>Contingency @ 30%</i>				<i>\$897,594</i>	
<i>Sub-Total (const + contingency)</i>				<i>\$3,889,574</i>	
<i>Soft Costs (design, pm, cm, finance, insurance) @30%</i>				<i>\$1,166,872</i>	
TOTAL				\$5,056,446	

* Phase One only, per projected ridership estimate; includes striping, lighting, signage and interior landscaping

** Parking fee collection box, standard station/platform signage, newspaper boxes, trash receptables, benches

*** Trees, shrubs, groundcover, sod at platform berm (trees and shrubs on parking lot side of embankment only)

Table 3b: Off-Site Improvements

<i>Design Element</i>	<i>Size / Length</i>	<i>Unit</i>	<i>Unit Cost</i>	<i>Total Cost</i>	<i>Cost Source</i>
Upgrades to existing streets*	7450	LF	\$65	\$484,250	HNTB
New pedestrian path at 71st Street ROW**	0	LF	\$30	\$0	HNTB
New one-way street at 71st Street ROW***	900	LF	\$130	\$117,000	HNTB
<i>Sub-Total (const)</i>				<i>\$601,250</i>	
<i>Contingency @ 30%</i>				<i>\$180,375</i>	
<i>Sub-Total (const + contingency)</i>				<i>\$781,625</i>	
<i>Soft Costs (design, pm, cm, finance, insurance) @30%</i>				<i>\$234,488</i>	
TOTAL				\$962,000	

* To access station from transit hub with a Pace van-pool vehicle on curbed street with two sidewalks (upgrade from rural cross-section)- Oak Grove, 71st, 86th

** 8' wide asphalt path

*** 15' pavement width, curbed, 6' sidewalk on one side (north)- Metra lot east to existing 71st

NOTE: All figures are in 2007 dollars.

Table 4: Station Development Cost Estimate- Option Two

Table 4a: On-Site Improvements

<i>Design Element</i>	<i>Size / Length</i>	<i>Unit</i>	<i>Unit Cost</i>	<i>Total Cost</i>	<i>Cost Source</i>
Platforms (2 @ 465' each)	930	LF	\$965	\$897,450	Metra
Platform fill (2 @ 10'Wx10'Dx465' L)	3444	cu yds	\$20	\$68,880	HNTB
Heated shelter at platform	1	each	\$250,000	\$250,000	Metra
Curbside bus stop with unheated shelter	1	each	\$50,000	\$50,000	Metra
2-track pedestrian crossing (gates, lights)	1	each	\$383,000	\$383,000	Metra
Stairway	1	each	\$60,000	\$60,000	Metra
Ramp	1	each	\$200,000	\$200,000	Metra
Sidewalks	3550	SF	\$6	\$21,300	HNTB
Parking lot *	86	spaces	\$8,000	\$688,000	Metra
Parking lot fill (18" deep) *	2550	cu yds	\$12	\$30,600	HNTB
Roadways (perimeter, bus lane, kiss & ride)	16000	SF	\$4	\$64,000	Metra
Platform fence (at outside edge)	800	LF	\$40	\$32,000	HNTB
Inter-track fencing (50' beyond platform ends)	565	LF	\$50	\$28,250	Metra
Trackwork	465	LF	\$100	\$46,500	Metra
Public address system / message signs (2)	1	each	\$50,000	\$50,000	HNTB
Miscellaneous amenities **	1	each	\$10,000	\$10,000	HNTB
Berms and landscaping ***	5600	SF	\$20	\$112,000	HNTB
<i>Sub-Total (const)</i>				<i>\$2,991,980</i>	
<i>Contingency @ 30%</i>				<i>\$897,594</i>	
<i>Sub-Total (const + contingency)</i>				<i>\$3,889,574</i>	
<i>Soft Costs (design, pm, cm, finance, insurance) @30%</i>				<i>\$1,166,872</i>	
TOTAL				\$5,056,446	

* Phase One only, per projected ridership estimate; includes striping, lighting, signage and interior landscaping

** Parking fee collection box, standard station/platform signage, newspaper boxes, trash receptables, benches

*** Trees, shrubs, groundcover, sod at platform berm (trees and shrubs on parking lot side of embankment only)

Table 4b: Off-Site Improvements

<i>Design Element</i>	<i>Size / Length</i>	<i>Unit</i>	<i>Unit Cost</i>	<i>Total Cost</i>	<i>Cost Source</i>
Upgrades to existing streets*	3500	LF	\$65	\$227,500	HNTB
New pedestrian path at 71st Street ROW**	1850	LF	\$30	\$55,500	HNTB
New one-way street at 71st Street ROW***	0	LF	\$130	\$0	HNTB
<i>Sub-Total (const)</i>				<i>\$283,000</i>	
<i>Contingency @ 30%</i>				<i>\$84,900</i>	
<i>Sub-Total (const + contingency)</i>				<i>\$367,900</i>	
<i>Soft Costs (design, pm, cm, finance, insurance) @30%</i>				<i>\$110,370</i>	
TOTAL				\$478,270	

* To access station from transit hub with a Pace van-pool vehicle on curbed street with two sidewalks (upgrade from rural cross-section)- *Oak Grove*

** 8' wide asphalt path- *Metra lot east to 86th*

*** 15' pavement width, curbed, 6' sidewalk on one side (north)

NOTE: All figures are in 2007 dollars.

D. Conclusion

It is clear that there are several significant constraints to pursuing the development of a new Justice Metra Station at this time. Metra has indicated that it cannot commit at this time to providing service to a new station on the Metra/HC Line in advance of the completion of significant CREATE program improvements elsewhere along the railroad to facilitate increased commuter service. In the years that the CREATE program is being pursued regionally, the Village will need to study engineering options to mitigate the significant floodplain that impacts both the potential commuter parking lot and the adjacent neighborhood, to determine whether it is feasible to undertake such an improvement project. Addressing the floodplain issue will benefit the adjacent neighborhood regardless of whether a station is ultimately developed in this location.

Even if the physical constraints to station development can be overcome, preliminary ridership projections are lower than the existing ridership at adjacent Metra/HC Line stations, which still have excess commuter parking capacity to absorb additional riders. If the Village continues to encourage development and redevelopment to accommodate additional housing units, these projections might increase. In any event, the Village would need to fund the station and parking facilities.

As the previous chapter discussed in detail, there are other opportunities within the Village to provide both increased transit mobility and an enhanced community image through transit-oriented development in the shorter term that should be more actively pursued.

IV. IMPLEMENTATION RECOMMENDATIONS

This chapter organizes the planning recommendations described elsewhere in this report into near-term, long-term and ongoing initiatives, in addition to outlining several policy considerations that the Village should consider in order to both encourage transit-supportive development patterns within the community and realize potential positive “spin-off” impacts of transit-related initiatives. These are provided for ease of reference and to serve as a checklist against which progress in implementing the study recommendations can be measured. The chapter concludes with a discussion of the implementation process for Pace-related initiatives.

A. Near-Term Initiatives

- Explore the specific Pace service alternatives outlined in Chapter II of this report with Pace, to determine whether any of them can be implemented on a trial basis in order to assess interest in permanent service.
- Work with Pace to explore the potential of establishing a Pace transit center at the transit “hub” location near the confluence of Archer Avenue, 88th Avenue and 79th Street, as described in Chapter II of this report. In conjunction with this dialogue with Pace, ascertain property owner interest in the project, undertake a traffic study to determine if bus and park-and-ride traffic can be effectively accommodated on and around the site, and undertake a market study to determine potential interesting market-rate TOD development at and near this location. If the project is to be pursued, develop more detailed redevelopment plans and standards and issue an RFP for a private-sector development partner.
- Work to ensure that major intersections in the Village that coincide with Pace bus stop locations have adequate crosswalks and amenities to facilitate pedestrian movement. This is especially critical at the confluence of Archer Avenue, 88th Avenue and 79th Street near the proposed transit “hub” location.
- Improve the waiting environment for bus passengers by providing concrete pads and benches at all Village bus stops, and providing passenger shelters at the most active of these locations, coordinating these amenities with the overall streetscape.
- Further assess service issues related to township-based dial-a-ride service boundaries, to increase access to desired destinations south of 79th Street for residents who live north of 79th Street.

B. Long-Term Initiatives

- Pursue improvements at the intersection of 86th and Archer Avenues, reconfiguring the street system to create a T-intersection. In doing so, a parking lot expansion for the adjacent school district building could be created, along with either a park-and-ride lot or a new retail development site. In the evenings the retail uses could utilize the school district parking lot. If demand warranted, a traffic signal at this location might be pursued, in particular if a municipal vanpool service utilizes this intersection.

- Explore the feasibility of providing “park & ride” locations to enhance transit accessibility and spur commercial activity, including 1) along 83rd Street east of 88th Avenue and 2) at the intersection of Archer and 86th Avenues if an intersection reconfiguration is pursued.
- Conduct further studies to better understand floodplain and drainage issues in the proposed Justice Metra Station area, to ascertain whether development of that site will be feasible in the future.
- Explore the potential of a bike trail connection under LaGrange Road to the existing I&M Canal trail west of LaGrange Road, along with a potential trail extension to the northeast, utilizing the existing square culvert located south of the proposed Justice Metra Station site. A connection to the existing trail could provide bicycle access to the existing Willow Springs Metra station.
- Consider potential revenue enhancement from tourism-related activities tied to the I & M Canal, in particular if a Justice Metra Station is pursued (such as an Amtrak connection between Justice and the western terminus of the trail system).

C. Ongoing Initiatives

- Develop strategies to better publicize available bus services in ways that overcome local language barriers.
- Actively participate in public meetings sponsored by Pace as part of its South Cook County - Will County Initiative, along with the RTA's Moving Beyond Congestion planning initiative.
- Advocate for CREATE Project improvements that will allow for Metra/HC Line service level upgrades.
- Continue to improve pedestrian mobility by constructing sidewalks along arterials and within several blocks of arterials, building upon imminent Archer Avenue improvements and other significant projects already being pursued. If a Justice Metra Station is ultimately pursued, all streets within one-half mile of the station should be improved with sidewalks.
- Implement cohesive streetscape improvements- shade trees, decorative light poles, banners, flower beds or pots, etc.- along Village arterials to establish a consistent community character and improve the pedestrian experience, in particular near the proposed transit “hub” location.
- Encourage new housing development that continues to increase housing options in the Village, with higher density housing in readily transit-accessible locations.

D. Policy Considerations

- Explore a Tax Increment Financing (TIF) District along the frontage of Archer Avenue and 79th Street, and encompassing the potential transit “hub” location, to implement transit-supportive public improvements and new development that can improve community cohesion between all areas of Justice.

- Require new real estate developments to include sidewalks within the development with direct connections to destinations outside the development.
- Require and/or provide pedestrian access points at the perimeter of new developments, even when vehicular access is limited.
- As redevelopment and other site improvements occur, require reduced curb cut widths and shared parking to improve the walkability along arterials.
- Building upon the provisions of the C-1 District, consider a “TOD District” for use at and near transit hubs and the potential future Metra station, potentially including such provisions as lower parking ratios, shared parking requirements, mixed use buildings, and an increase in allowable building height if well buffered from nearby single family homes.
- Explore the creation of design standards that would establish the Village’s preferences for building quality, site improvements, parking lot landscaping and buffering, signage, etc. to aid in creating a consistent visual character along the Village’s arterials. If a TIF District is established encompassing key commercial properties near potential future transit hubs, compliance with design standards that also support pedestrian access and amenities should be a requirement for receiving financial incentives.

E. Implementation of Pace-Related initiatives

This report provides the Village of Justice with an assessment of transit alternatives. It outlines alternatives for new or revised Pace services. It also recommends improvements to bus stops and development of a new transit hub at 88th Avenue, 79th Street and Archer Avenue. This section provides technical information on the implementation process in the event the Village wishes to take steps toward implementing one of the Pace service options.

Contact Information

To pursue a recommendation contained in this report or to request information on other Pace matters, a written inquiry or request should be directed to:

Pace
Deputy Executive Director, Strategic Services
550 West Algonquin Road
Arlington Heights, IL 60005-4412

Information on Pace routes, schedules, planning initiatives, events and news can be obtained from the Pace website: www.pacebus.com. The general Pace telephone number is 847-364-7223. Information on CTA services can be obtained from the CTA website: www.transitchicago.com

This contact information is current as of August 2007.

Funding Resources

Federal surface transportation funding programs through 2009 are authorized by The Safe, Accountable, Flexible, Efficient Transportation Equity Act - a Legacy for Users (SAFETEA-LU). This legislation provides funds for three programs that may be used to support new transit services. The three programs are; Job Access Reverse Commute (JARC), New Freedom, and Congestion Mitigation and Air Quality (CMAQ).

Transit Improvement Study

The Chicago region receives a limited amount of federal funds for these three programs. Funding applications are competitive, meaning that all submitted projects are weighed against one another and the projects that provide the highest benefit are submitted by the region for federal funding. The JARC and New Freedom programs are coordinated by the Regional Transportation Authority while the CMAQ program is coordinated by the Chicago Area Transportation Study (CATS). Applicants for these programs are encouraged to work with existing service providers on project development. In the case of bus service projects in the Village of Justice, the Village should contact Pace to develop projects that will be eligible, as well as competitive, for federal funds. A brief summary of each program is provided below.

Job Access Reverse Commute (JARC)

The Job Access Reverse Commute (JARC) program provides funding for local initiatives that offer job access transportation to low income individuals, and/or that provides transportation options for residents who wish to access suburban employment opportunities. Eligible projects may include, but are not limited to:

- Late-night and weekend service
- Expanding fixed-route public transit service
- Shuttle service
- Demand-responsive van services
- Guaranteed ride home service
- Transit-related aspects of bicycling

JARC projects require a local match from the entity sponsoring the proposed project. Projects requesting operating assistance (i.e., the costs of providing services) require a 50 percent local match, with the federal government and the local entity each providing 50 percent of the operating cost of the project. Requests for capital assistance (for example, the cost of bicycle racks) require a 20 percent local match with 80 percent of the capital cost of the project provided by the federal government.

New Freedom

The New Freedom program supports initiatives intended to address the needs of persons with disabilities, or that go beyond requirements of the Americans with Disabilities Act of 1990 (ADA). New public transportation services or facility improvements may include, but are not limited to:

- Building an accessible path to a bus stop that is currently inaccessible, including curb cuts, accessible pedestrian signals or other accessible features
- Enhancing public transit services beyond the minimum requirements of the ADA, such as providing Paratransit service beyond the three-quarter mile required by ADA
- The provision of same day service

New Freedom projects require the same local match levels as the JARC program described above.

Congestion Mitigation and Air Quality (CMAQ)

The Congestion Mitigation and Air Quality (CMAQ) Improvement Program supports transportation improvements designed to improve air quality and mitigate congestion. Projects eligible for CMAQ funding include, but are not limited to:

- New transit start-ups
- Transit transfer facilities
- Transit facility improvements
- Traffic flow improvements

Transit Improvement Study

- Bicycle and pedestrian facility projects that reduce automobile travel

CMAQ funds require a local match. The typical split for CMAQ projects is 80 percent Federal and 20 percent local match.

Conclusion

The Village has several bus service and facility options to consider. These include improvements at Pace bus stops, development of a transit hub, implementation of a Municipal Vanpool Program and implementation of several new bus route alternatives. The Village should weigh the benefits and costs of each option considering the long term impacts of each. Each project will involve a partnership with Pace to ensure that the needs of residents and businesses in the Village are met. Some projects may require the financial support of the Village. For example, sidewalk construction is a Village responsibility, while the cost of some bus stop improvements may be shared between the Village and Pace. A typical bus stop shelter with concrete pad can cost between \$15,000 and \$20,000 per location. This cost could be shared, with the Village providing the concrete pad and Pace providing the shelter.

APPENDIX

- Letter from Philip Pagano, Metra to Steve Schlickman, RTA (dated August 25, 2006)
- Letter to Canadian National Railway soliciting comment on potential new Justice Metra Station (dated July 1, 2007)
- Email from Canadian National Railway in response to potential new Justice Metra Station (dated August 13, 2007)



August 25, 2006

Steve Schlickman
Executive Director
Regional Transportation Authority
175 W. Jackson Blvd., Suite 1550
Chicago, IL 60604-2705

Dear Mr. Schlickman:

Thank you for the opportunity to participate in the RTA-RTAP Justice Transit Improvement Study. As this study begins, we would like to note some important points regarding the feasibility of adding a new station in Justice.

In prior correspondence with President Van Allen, we have explained that Metra is constrained to operate only six trains per day on the Heritage Corridor (HC) Line. We would like to improve the HC service and attract more riders, but this will take time and will cost tens of millions of dollars.

Metra has been studying the problems of the HC for some time. In addition to running only six trains per day, the HC has a lower on-time performance record compared to most other Metra lines. As you may be aware, the HC operates on the tracks of the Canadian National Railway (CN), which operates many freight trains. The CN tracks cross a number of other freight railroads at grade, at several points between Justice and downtown Chicago. Fitting Metra trains in between all of these freight trains has not been easy. Because of the resurgence of freight railroading in the United States, freight railroad traffic has increased significantly over the years. According to the potential Chicago Regional Environmental and Transportation Efficiency Project (CREATE) project, two at-grade crossings are proposed to be reconstructed as rail-to-rail flyovers; however, this project is not yet fully funded. Until the flyovers are in place, it is not realistic for Metra to consider upgrading the Heritage Corridor service or adding more stations along the line.

As proposed in the scope of work for the RTA-RTAP Justice Transit Improvement Study, a significant amount of analysis will be needed to determine the feasibility of a proposed station in Justice, which will include the estimated station-level ridership, physical feasibility of the proposed station, order-of-magnitude costs and impacts to the Metra system and Heritage Service Corridor. We are concerned with the access to the proposed station and do not believe the proposed station site will meet our operational needs.

It is important for the RTA and the Village of Justice to understand and recognize our operating constraints as you undertake this study. Please also be advised that if the Village is interested in pursuing a station in the future after the improvements to the line are in place, Metra would require the Village to fund the station and parking.

As with all RTAP station area planning efforts, Metra staff will attend the meetings and review documents as part of the study. Should you have any questions, please do not hesitate to contact me. We look forward to working with you on this study.

Sincerely,

A handwritten signature in black ink, appearing to read 'Philip A. Pagano', with a long horizontal flourish extending to the right.

Philip A. Pagano
Executive Director

cc: Jim Lurquin, Village of Justice

O:/Catherine/Justice/lettertorta.doc

John Henriksen
Manager of Public Works
Canadian National Railway
17641 South Ashland Ave.
Homewood, IL 60430



July 1, 2007

Dear John:

HNTB has been working with the Village of Justice, Illinois on the preparation of a “Transit Improvement Study” that seeks to identify potential improvements to transit facilities and infrastructure to better serve the community in the future. The Village received funding through the RTA’s Regional Technical Assistance Program (RTAP) to undertake the study. Representatives of the RTA, Metra and Pace are serving on a Steering Committee that is working closely with the Village and consulting team, providing available data and reviewing HNTB’s recommendations.

A key aspect of the study has been the development of two preliminary station area concepts and construction cost estimates for a potential future Metra Station on the Heritage Corridor (HC) Line, reflecting the Village’s interest in understanding the feasibility of pursuing the construction of a station facility in the future. It was presumed that if a new station is added on the HC Line, it would be substantially similar to the existing adjacent stations in Summit and Willow Springs from an operational standpoint. The two station concepts, Option 1 and Option 2, are depicted in the figures attached to this letter, and are briefly described as follows (excerpted from the draft Transit Alternatives Assessment Report prepared by HNTB):

- Inbound and outbound platforms of 465 feet in length and 10 feet in width are indicated, to accommodate a six-car train. A heated platform shelter is provided at the inbound platform only, similar to other station facilities along the Metra/HC Line.
- Because of the significant grade change between the platform and the adjacent commuter parking area (estimated at approximately 10 feet), a stairway and an ADA-compliant ramp provide access. The embankment at each side of the platforms would be well landscaped, with a decorative fence provided at the edge of the platform.
- Once at the platform level, commuters would utilize an ADA-compliant at-grade pedestrian crossing to reach the outbound platform. This crossing would be equipped with warning lights and gates.
- A dedicated bus lane and kiss-and-ride lane are provided, separated from the traffic flow at the commuter parking lot. A unheated bus stop shelter is indicated at parking lot level, adjacent to the bus lane. The entire facility is designed to accommodate a 20-foot bus, to facilitate future transit connections to the station.
- In Option 1, a clock-wise “loop” route for transit vehicles is accommodated, with ingress at Blackstone Avenue and egress at a new extension of 71st Street. The transit vehicle could arrive from the transit hub along Oak Grove Avenue, and then return via 71st Street, 86th Avenue and Archer

Avenue. In addition, exiting commuter traffic could potentially be dissipated by allowing exiting at both Blackstone Avenue and 71st Street.

- In Option 2, all ingress and egress for commuters and transit vehicles is provided from Blackstone Avenue, with the presumption that transit vehicles would travel north and south along Oak Grove Avenue to connect to the transit hub to the south. A pedestrian/bicycle pathway would be provided along the 71st Street right-of-way east to 86th Avenue.
- Two phases of parking lot construction are anticipated. Initially, 80 standard spaces and 6 ADA spaces would be provided. While this slightly exceeds the anticipated 2030 ridership, the eastern-most drive aisle in Phase 1 will serve as the perimeter access road, so 80 spaces can be efficiently accommodated in the configuration. Phase 2 could consist of up to 86 additional spaces in Option 1 and 87 additional spaces in Option 2.

A potential future Metra Station is likely to be included in the final Transit Improvement Study report as a “long-term initiative” with a focus instead on more cost-effective and readily implemented public transit improvements provided by or in cooperation with Pace. This recommendation reflects the high cost of constructing the station facility and related off-site improvements (estimated to be between \$5 million and \$6 million), but also to the significant constraints of existing limitations on commuter rail capacity on the HC Line and existing floodplain issues at the station site.

While the Village acknowledges the long-term nature of a potential future Metra Station, in order to thoroughly investigate the alternatives we are seeking review and comment from the Canadian National Railway on the attached preliminary station concepts at this time. The Railway’s written response will be added to the project record as an appendix to the Transit Alternatives Assessment Report when it is finalized in the near future. If desired, we can provide a full copy of the draft report for your review.

If you have any questions regarding this request for review and comment, please do not hesitate to contact me or Diane Gormely-Barnes, the project manager for the project at HNTB. We can both be reached at 312-930-9119. Thank you very much for your prompt attention to this request.

Best Regards,

HNTB Corporation
W. Robert Moore, P.E.
Sr. Project Manger

cc: Diane Gormely-Barnes, HNTB
Jim Lurquin, Village of Justice
Heather Tabbert, RTA
Catherine Kannenberg, Metra

Diane Gormely-Barnes

From: Bob Moore
Sent: Monday, August 13, 2007 2:17 PM
To: Diane Gormely-Barnes
Subject: FW: Justice Passenger Station Study

W. Robert Moore, P.E.
HNTB Corporation
111 N. Canal St. Suite 1250
Chicago, IL 60606
(W) 312-798-0290 (C) 312-622-1446

-----Original Message-----

From: John.Henriksen@cn.ca [mailto:John.Henriksen@cn.ca]
Sent: Monday, August 13, 2007 1:10 PM
To: Bob Moore
Cc: Dave.Crader@cn.ca; Paul.Ladue@cn.ca; JERRY.PECK@cn.ca
Subject: Justice Passenger Station Study

CN will not approve any additional station stops or services at this time and will only consider additional requests after the capacity issues on the north central line are addressed.

John M. Henriksen
CN - Manager Public Works
708.332.3557
708.332.3514 Fax