

Dupage Transit Connectivity Study

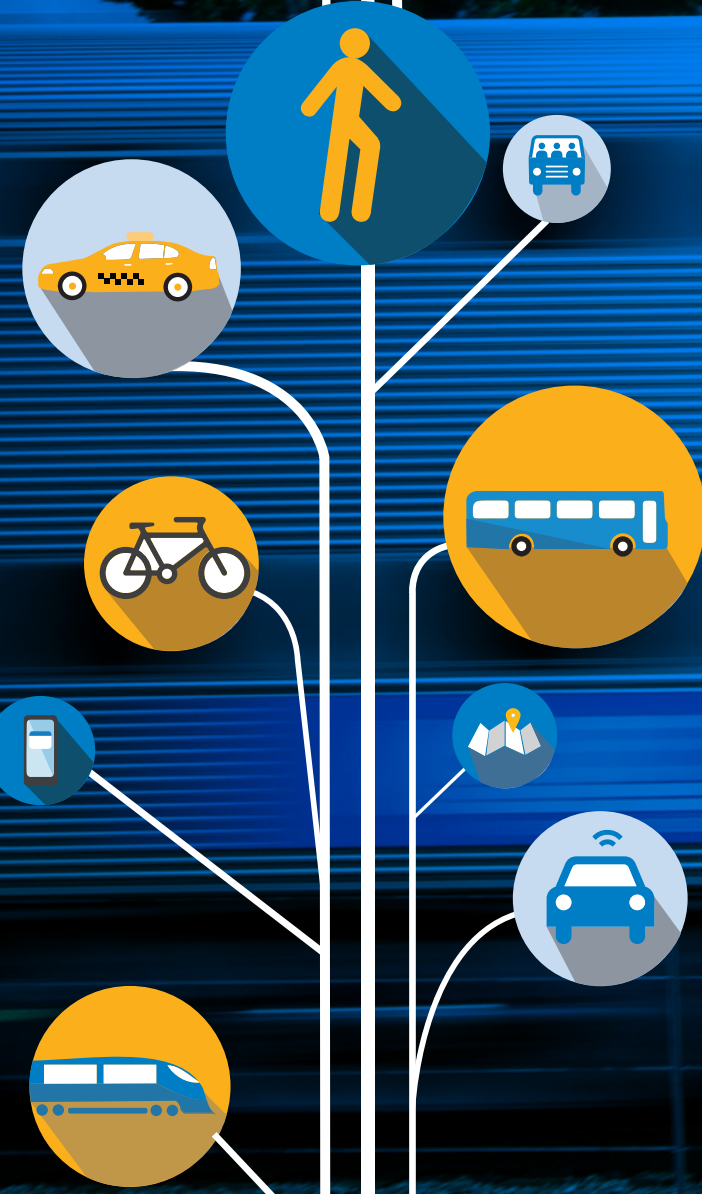


TABLE OF CONTENTS

Background.....3

Market Conditions.....3

DuPage County 2016 John Noel Public Transit Conference.....5

Last-Mile Activities.....6

Summary and Next Steps.....8

Appendix A: Market Conditions Executive Summary

Appendix B: John Noel Conference (agenda and workshop summary)

Appendix C: Mobility Provider Matrix

Background

The *DuPage Transit Connectivity Study* was initiated through the 2016 Regional Transportation Authority (RTA) Community Planning Program. DuPage County recognizes there is growing demand for reverse commuting and that there are more people with limited transit options who come from Chicago or from other suburban areas to DuPage County. The County seeks to reduce commute times and improve access to jobs for these inter-county and longer range commuters. The goal of the County is to make DuPage County jobs more accessible by improving commuting options, to improve employee attraction and retention for DuPage County employers, and to sustain that accessibility.

The *DuPage Transit Connectivity Study* focused on the manufacturing/industrial parks within Addison-Itasca-Wood Dale and office parks/corporate campuses along Warrenville Road from I-88 in Lisle to Ferry Road in Naperville. These locations were identified based on the clusters of employers in the locations and the quantity of workers commuting to them from locations that have viable transit connections within a reasonable commute time.

A Market Conditions analysis was completed and stakeholders were engaged through the 2016 John Noel Public Transit Conference. The results of these two efforts will be utilized by DuPage County to inform planning and pursue potential solutions in the two study areas, as well as throughout DuPage County.

Market Conditions

A Market Conditions Report was produced by RTA staff, analyzing the market conditions in the Addison-Itasca-Wood Dale and Warrenville Road study areas. Existing data sources were used to assess the total trips attracted to each study area and the transit potential for those trips based on their origin and demographics. Additionally, transit availability, pedestrian environment, transit travel times, and potential for last-mile improvements were assessed within the study areas. Due to the large geographies covered by the Addison-Itasca-Wood Dale study area, it was broken down to two corridors for analysis: Addison and Wood Dale.

Wood Dale Corridor

The Wood Dale corridor primarily attracts trips originating from surrounding areas in northern DuPage County, northwest Cook County and western portions of Cook County near the City of Chicago. Many of the workers in the corridor reside both east and west along Metra's Milwaukee District West (MD-W) line, which serves the corridor with three stations. Wood Dale will be served by the IL 390 (Elgin-O'Hare Expressway) project. With this extension of the Tollway east to Route 83 (Busse Road) Wood Dale will be more accessible via automobile, making it more difficult for transit to compete.

Currently, corridor Metra stations have a significant share of passengers alighting during the morning and midday, representing nearly one quarter of daily activity. This suggests that some commuters are already accessing local jobs via transit. Daily Pace bus service that connects to the CTA Blue Line at Rosemont serves a portion of the corridor and is well utilized. Pedestrian access is below average with incomplete sidewalk networks and large block size. A significant amount of light manufacturing and

industry exists in Wood Dale; this type of employment is traditionally difficult to serve by transit due to shift-work schedules and large block sizes.

Current transit commute times to the Wood Dale corridor are roughly three times as long as average drive time for the same trip. The addition of a last-mile service connecting with Metra service could significantly improve transit times by as much as 19 percent. Of those employed in the Wood Dale Corridor, approximately 7.6 percent live at a location conducive to using Metra for their commute.

Addison Corridor

The Addison corridor attracts trips primarily from adjacent areas in central DuPage County, northwest Cook County, and western portions of Cook County near the city of Chicago. Addison also attracts a high number of trips from within the corridor due to the corridor's mix of business and residential areas. These relatively short commute distances and a development layout not conducive to Pace services are challenges to attracting trips to transit.

Of the three corridors, Addison has the highest share of trips originating from areas served by Metra, nearly double that of the Wood Dale corridor. Addison trips also originate from areas with zero-vehicle household rates approximately 50-60 percent higher than Wood Dale and three times higher than Warrenville Road.

The Addison corridor is served by Metra Union Pacific-West and MD-W lines, though all stations nearest the corridor are beyond walking distance. Daily Pace bus service is available on the edges of the corridor only. Pedestrian access is average, though sidewalk completeness and network connectivity are better in the more residential areas than in the areas of greater employment. Approximately 1,000 passengers get off trains at the corridor's six Metra stations in the morning or midday, representing 17 percent of daily boardings and alightings.

A significant amount of light manufacturing and industry exists in Addison; this type of employment is traditionally difficult to serve by transit due to shift-work schedules and large block sizes.

Current transit times to the Addison corridor are roughly three times as long as average drive time for the same trip. The addition of a last-mile service would have an impact of seven percent reduction in average transit travel time. Of those employed in the Addison Corridor, approximately 11.1 percent live at a location conducive to using Metra for their commute.

Naperville-Warrenville Corridor

Naperville-Warrenville Road is the largest trip attractor among the corridors, with 25 percent more trips overall than Addison, and coming primarily from areas within northwest DuPage, eastern Kane, and northern Will Counties. The corridor attracts a small number of trips from Cook County and areas served by the Metra BNSF line for the reverse commute. Naperville-Warrenville Road trips originate from areas with average income higher than either the Addison or Wood Dale corridors. The corridor does attract trips from the Aurora and Southwest DuPage/Kane communities, from the west along the BNSF. Although these areas have average or higher than average car ownership and incomes, technology-based efforts to enhance or market transportation alternatives could prove effective.

The Naperville-Warrenville Road corridor is served by three stations along Metra's BNSF line, though none is within walking distance of the core employment areas. Pace Route 829 – Lisle-Naperville Office Corridor serves the Metra Lisle station and is designed for reverse commuters from Chicago to major office locations in the corridor, including Navistar and Nokia. Parallel mainline service on Route 722 – Ogden Avenue was added in 2016 with all-day service for the Warrenville Road corridor. Pace also operates many traditional commute routes in the area.

Approximately 1,500 passengers get off trains in the morning or midday at the corridor's three Metra stations representing 13 percent of daily activity. In the high employment areas, pedestrian access is below average characterized by higher speed roads, limited sidewalk connectivity, and difficult or lengthy access to buildings from bus stops.

Current transit times to the Naperville-Warrenville Road corridor are a little less than three times as long as average drive time for the same trip, but can be significant at as high as two hours in length. A last-mile solution results in a decrease in average travel times on transit by about 6 percent overall. Of those employed in the Naperville-Warrenville Corridor, only approximately 0.4 percent live at a location conducive to using Metra for their commute.

The Market Conditions Executive Summary is provided in [Appendix A](#). The full Market Conditions report can be found on the RTAMS website at

<http://www.rtams.org/rtams/planningStudy.jsp?id=3160>

DuPage County 2016 John Noel Public Transit Conference – Shared Mobility Workshop

The agenda of the 2016 John Noel Public Transit Conference, held on September 21, 2016 was constructed to build off the findings of the Market Conditions report and educate and engage stakeholders in new and emerging solutions to last-mile mobility in a suburban environment. The Shared Use Mobility Center facilitated participation by mobility providers and experts in emerging technologies and strategies.

In the morning, a summary of shared-use mobility activities in the Chicago region and nationally was presented, along with DuPage-specific findings from the Market Conditions report. This was followed by a panel discussion with public and private perspectives on commuting needs of suburban employees and employers.

In the afternoon, two concurrent workshops were held to synthesize the discussion of the morning sessions with the experience and issues of concern to the conference participants, who included representatives of municipalities, transit and other government agencies, shared-mobility providers, corporations, property owners and not-for-profit/NGO's.

The first workshop focused on how to improve the last-mile connection with the existing transit network, discussing challenges of land-use and lack of pedestrian infrastructure that are impediments to transit use. Possible solutions included new technology that enables new carpooling, ridesharing and

information for multi-modal trip making. Developing local “champions” and engaging employers by sharing knowledge and strategies were seen as possible next steps.

The second workshop discussed ways to improve mobility in DuPage and make it easier for everyone to get around without a personal vehicle. Effective education and marketing of transit and automobile alternatives were discussed as challenges, with establishing new public and private partnerships and, as in the first workshop, identifying local champions as a means to find solutions. The conference agenda and summary of the workshop discussions can be found in [Appendix B](#).

Last-Mile Activities

Mobility and better transit connections have been ongoing topics of interest in DuPage County for decades; County and RTA staff continue to monitor developments, understanding that the *DuPage Transit Connectivity Study* is but a part of many efforts that will continue to occur. The Market Conditions Report and information exchange of the DuPage County 2016 John Noel Public Transit Conference were intended to help further these on-going activities and foster new partnerships addressing last-mile connections. Specific activities that were underway before or during the time of the study are summarized in this section.

Choose DuPage Workplace Survey

Just prior to the initiation of the *DuPage Transit Connectivity Study*, Jones Lang LaSalle undertook a survey on behalf of ChooseDuPage to assess current business conditions in DuPage. The focus of the study was on suburban DuPage employees and their opinions about their work environment. Some questions were asked about how workers traveled to their jobs and worker preference on job location. Results showed that employees feel the number one improvement requested was a change in job location or commute. The survey did find that transportation is a considerable challenge. Of interest to this study, while just 7.9 percent of those surveyed took public transportation to work, 22.3 percent said they would prefer to take public transit to work, highlighting a latent demand for transit connectivity.

RTA Shuttle Bug Pilot Program

The RTA initiated a pilot program in partnership with Pace and Metra to identify and establish new reverse-commute oriented shuttle bus service in the region in 2014. The program was intended to identify locations that were candidates for this type of connecting service between an employment center and nearby Metra station and fund a two-year pilot operation through a public/private partnership.

One of the favorable locations identified was in DuPage County. In April 2015, Pace Route 465 – Belmont Station-Esplanade Shuttle Bug began operations between the Metra/BNSF station at Belmont Avenue and Hamilton Partners Esplanade office development in Downers Grove. The Esplanade high-rise office campus, with over 4,000 employees was seen as an ideal location, with a high density of employees and a 15-minute shuttle connection to Metra express trains from Chicago. Hamilton Partners provided on-site marketing to tenants and financial and logistical support for the Pace service.

Despite these positive attributes, after two years of operation the route was averaging approximately 35 trips per day, short of its goal of 60 trips per day.

Alternatives for providing this last-mile connection by establishing partnerships between Transportation Network Companies (TNC's – such as Uber and Lyft) and either Hamilton Partners or individual tenants were explored but not seen as viable. Hamilton Partners and Pace have agreed to continue operation past the end of the RTA-funded pilot. Hamilton Partner sees value in the service to its tenants to reduce auto trips, and for employee recruitment and retention.

A second area in DuPage County that the Shuttle Bug Program is pursuing for the reverse commute market is Oak Brook. Oak Brook has one of the highest number of employees of any suburban job cluster and has had a long-time interest in last-mile and transit connections. A challenge is that employment is located in owner-occupied or multi-tenant buildings, without an umbrella owner such as found at the Esplanade. To help coordinate with multiple entities, RTA has partnered with the Oak Brook Chamber of Commerce. Efforts to bring a final partnership together are continuing.

Hamilton Lakes/Innova Shuttle

Innova is a Chicago regional company that has developed a two-seat all-electric vehicle. Innova, Choose DuPage, and Hamilton Partners have collaborated to initiate an on-demand shuttle connection between the Metra Itasca station and the nearby Hamilton Lakes Business Park. The service is available during the morning and evening rush hour and represents an innovative, privately-initiated solution to the last-mile problem.

Metra/Uber Marketing Partnership

In 2016, Metra and Uber entered into a joint marketing agreement. TNC's such as Uber can be a last-mile solution and provide options to extend the access to and from Metra stations for times and locations where Pace does not provide service. Metra has utilized the marketing agreement to promote last-mile use of Uber.

Wood Dale

The City of Wood Dale is interested in pursuing last-mile business connectivity, recognizing that the largely light-industrial businesses employ workers whose homes are widely distributed around the Chicago region. Local Wood Dale corporations have set up employer-based shuttles to and from the Wood Dale Metra station. This corporate-sponsored last mile model may hold advantages and unique partnering possibilities in this corridor.

DuPage County Long Range Transportation Plan

DuPage County has begun its first-ever long range transportation plan. One of the principal goals of the plan is to foster a competitive economy and to promote a transportation network that creates economic efficiencies, locational advantages through access to all forms of transportation, and access to employees. The DuPage County Advisory Committee has identified retention and attraction of highly qualified labor as extremely important to the continued prosperity of the County. They see last mile

services as being an integral part of the economic development toolbox that counties and communities can use to ensure sustained success.

Summary and Next Steps

The DuPage County Board and ChooseDuPage economic development organization continue to promote the last mile issue as one of the highest priorities in the County. The traditional reverse commute, using Metra to move commuters living in Chicago to suburban jobs, is a market of interest to employers and municipalities in DuPage County. It is also a market that has been a long-time challenge to serve with traditional fixed-route public transit. It is a challenging market due to a number of reasons:

- Majority of worker home locations are not conducive to using transit for trips to the study corridors. On the eastern side of DuPage approximately only 10-15 percent of employees live in areas with access to Metra in a reasonable time. This drops to just 0.4 percent of home locations for workers in the Warrenville Road corridor.
- High density of employment is needed to support traditional shuttle connections, and many office development campus designs with set-backs and no sidewalks work against transit usability.
- The need to make connections at both the home and work ends of a transit trip add to travel time and cost. This makes it difficult to compete against driving, especially with the availability of free parking.
- Little flexibility in scheduled transit times, and limits to rush-hour only service further reduce attractiveness of transit. Light-industrial jobs are particularly difficult to serve due to shift hours not in line with transit's peak hours of operation and large block-sizes making walking difficult.

With these factors reducing the percent of employees that are able to use transit effectively, large and dense employment is needed to produce sufficient volume of transit riders to support the high costs of fixed-route transit.

Outreach efforts through the *DuPage Transit Connectivity Study*, and other agency activity, have begun to explore the applicability of new technology-based mobility options. Such efforts are aimed at engaging property owners and employers in developing partnerships towards more effective strategies to increase transit use. [Appendix C](#) provides a matrix of current providers and mobility products with potential applicability in DuPage.

The advantages of these new options are in flexibility and potential to be effective in a broader, lower density application. Disadvantages include continual and rapid evolution of products and providers, with unproven track records. Their promise is to expand the reach of transit's fixed route system and serve not just the limited market of the reverse commute from Chicago, but have wider use for more trip purposes, thus reducing auto dependency for mobility within DuPage. With reverse-commute from Chicago being only a small piece of the total commute trip-making, strategies that can attract the vast majority of workers in these corridors to alternative modes of transportation have the most potential to be impactful.

The continued building and fostering of partnerships between public agencies, governments and private entities will be necessary to move forward with new mobility options. Partnerships enable development of solutions that are scaled and structured to meet specific needs and availability of resources. Actions to help foster these partnerships include:

- Education and outreach on mobility options
- Develop a multi-agency advocate team to approach corporate decision makers
- Identify corporate or private network champions to move ideas into reality
- Pilot projects to test and identify successful solutions
- Peer to peer information sharing among businesses on best practices
- Identify capital infrastructure needs and coordinate efforts to implement through Councils of Government
- Promote transit friendly development designs and requirements
- Utilize existing programs such as Safe Routes to Schools, Complete Streets

DuPage County DOT will continue to work to build such partnerships to help increase and maintain the viability of the county workforce into the future.

[Appendix A – Market Conditions Executive Summary](#)

[Appendix B – John Noel Conference \(agenda and workshop summary\)](#)

[Appendix C – Mobility Provider Matrix](#)

DUPAGE TRANSIT CONNECTIVITY STUDY



Appendix A



Regional
Transportation
Authority

DUPAGE TRANSIT CONNECTIVITY STUDY

Market Conditions Executive Summary

Purpose

DuPage County is interested in assisting employers and employees to improve commuting options and opportunities. In partnership with the RTA, DuPage County has initiated the **DuPage Transit Connectivity Study** to assess business' public transit needs by identifying first and last mile transportation challenges. The County recognizes there is growing demand for mobility options especially for people who come from Chicago or from other suburban areas. The County seeks to reduce commute times and improve access to jobs in the project areas for these inter-county and longer range commuters. The goal is to make jobs more accessible by improving commuting options, to improve employee attraction and retention for DuPage county employers, and to sustain that accessibility.

The DuPage Transit Connectivity Study begins with the task of assessing the current market conditions for the proposed study areas: Wood Dale, Addison, and Warrenville Road in Naperville. A strong understanding of market conditions allows area employers, employees, and other stakeholders to be identified for outreach activities.

Background

DuPage County has the highest population and employment density of any county in the region outside of Cook County, and continues to grow. Existing transit provided by Metra, Pace, and CTA serve tens of thousands of passengers in DuPage every weekday. While the existing transit network does a good job of serving trips destined into the City of Chicago and Loop, transit connectivity remains a challenge within DuPage and for reverse commute trips.

The majority of workers in DuPage reside in dispersed areas outside of the county, with limited transit options directly connecting their home location to their work. In addition, employment densities tend to be more concentrated in areas further from rail, making last-mile connections to employment challenging.

The three selected study areas of Wood Dale, Addison, and Warrenville are within 1 to 3 miles of multiple Metra stations providing potential opportunities for transit connections, though each offers a different set of challenges and opportunities. These corridors were chosen because they attract a high number of trips from throughout the region.

87%
of employees
working in DuPage
County drive alone
to work

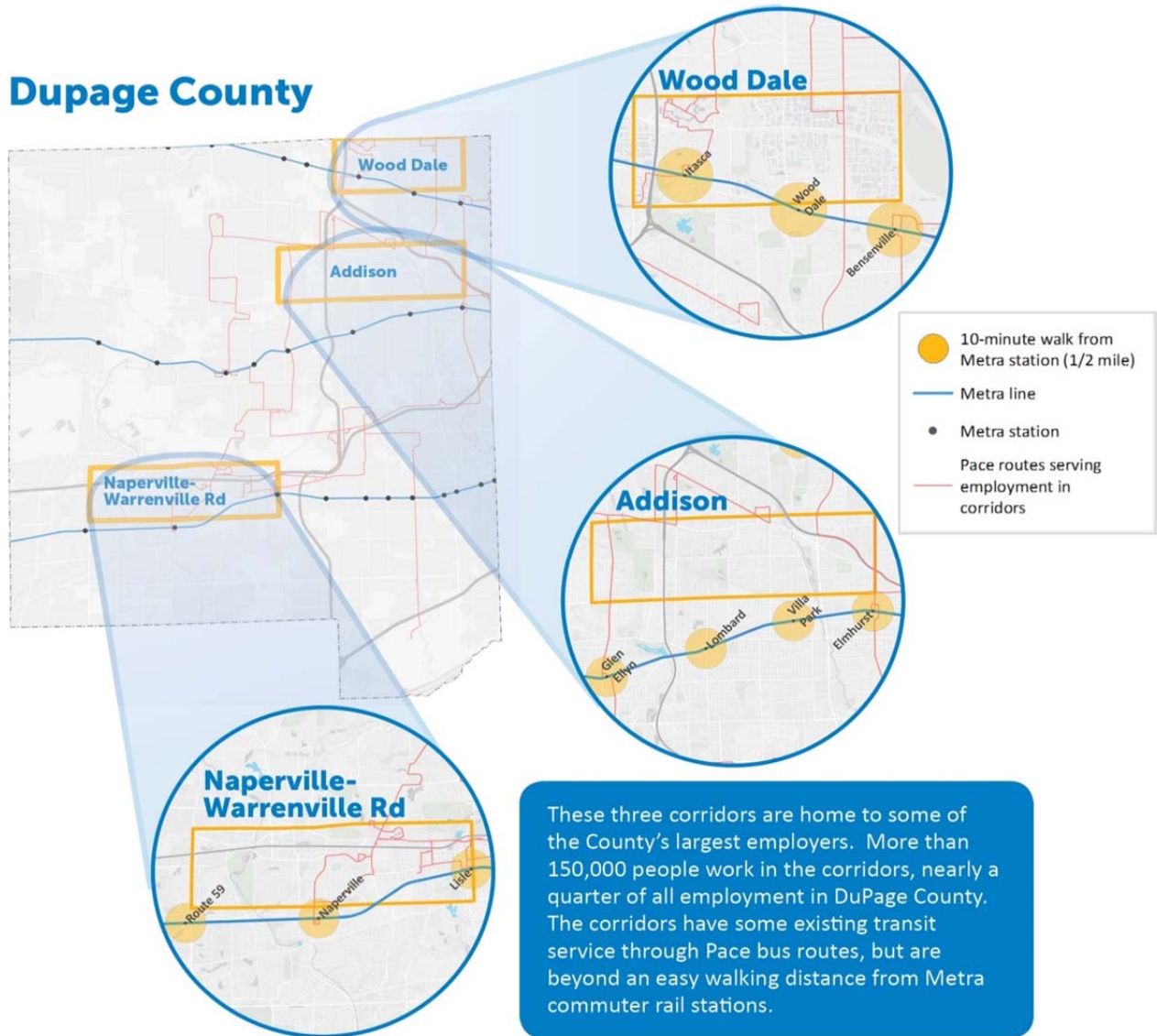
47%
of employees
working in DuPage
County wish there
were more transit
options

The Wood Dale corridor is primarily made up of light manufacturing and industry within Wood Dale and Bensenville, neighboring O’Hare International Airport. It also includes Itasca, home to the Hamilton Lakes office park.

The Addison corridor consists of light manufacturing and industry with some residential density concentrated around Elmhurst. It includes an industrial park that is the fourth largest in Illinois with more than 17 million square feet of industrial and warehousing business.

The Naperville-Warrenville Road corridor is typified by campus-style corporate offices, including technology companies and professional employment. This corridor is near downtown Naperville, which is a densely populated area with mixed use development.

Dupage County



Methodology

A market conditions assessment for the three study areas analyzed:

- Total trips attracted
- Transit potential for those trips based on origin location and demographics
- Transit availability near locations of employment
- Pedestrian environment
- Travel time analysis
- Potential for last-mile improvement

Analysis of these characteristics helps to understand commute patterns, identify gaps in transit access, and examine the effects of last-mile improvements. The market conditions assessment will ultimately inform the type of improvements that make sense for the County and businesses to pursue given the unique characteristics of the study areas and narrow the focus of the project moving forward.

Overview of Findings

Wood Dale Corridor

The Wood Dale corridor primarily attracts trips originating from surrounding areas in northern DuPage County, northwest Cook County and western portions of Cook County near the City of Chicago. Many of the workers in the corridor reside along Metra's Milwaukee District West (MD-W) line, which serves the corridor with three stations. When compared to the other two corridors, Wood Dale has a lower share of Millennials that can access the corridor via Metra.

Currently, corridor Metra stations have a significant share of passengers alighting during the morning and midday, representing nearly one quarter of daily activity. This suggests that commuters are already accessing local jobs via transit. Daily Pace bus service that connects to the CTA Blue Line at Rosemont serves a portion of the corridor and is well-utilized. Pedestrian access is below average with incomplete sidewalk networks and large block size.

Current transit commute times to the Wood Dale corridor are roughly three times as long as average drive time for the same trip. The addition of a last-mile service could significantly improve transit times by as much as 19 percent.

Addison Corridor

The Addison corridor attracts trips primarily from adjacent areas in central DuPage County, northwest Cook County and western portions of Cook County near the city of Chicago. Addison also attracts a high number of trips from within the corridor due to the corridor's mix of business and residential areas.

73,500

work trips are made into the
Wood Dale corridor every
weekday

4,798

people per square mile work
in the corridor, compared to
a regional average of 1,058

1,837

people per square mile live
in the corridor, compared to
a regional average of 2,973

86,000

work trips are made into the Addison corridor every weekday

3,655

work in the corridor, compared to a regional average of 1,058

3,360

people per square mile live in the corridor, compared to a regional average of 2,973

Of the three corridors, Addison has the highest share of trips originating from areas served by Metra, nearly double that of the Wood Dale corridor. Addison trips also originate from areas with zero-vehicle household rates approximately 50-60 percent higher than Wood Dale and three times higher than Warrenville Road.

The Addison corridor is served by Metra UP-W and MD-W lines, though all stations nearest the corridor are beyond walking distance. Daily Pace bus service is available on the edges of the corridor only. Pedestrian access is average, though sidewalk completeness and network connectivity are better in the more residential areas than in the areas of greater employment. Approximately 1,000 passengers get off trains at the corridor's six Metra stations in the morning or midday, representing 17 percent of daily boardings and alightings.

Current transit times to the Addison corridor are roughly three times as long as average drive time for the same trip. The addition of a last-mile service would have an impact of seven percent reduction in average transit travel time.

Naperville-Warrenville Road Corridor

Naperville-Warrenville Road is the largest trip attractor among the corridors, with 25 percent more trips overall than Addison and coming primarily from areas within northwest DuPage, eastern Kane, and northern Will Counties. The corridor attracts a small number of trips from Cook County and areas served by the Metra BNSF line. Naperville-Warrenville Road trips originate from areas with average income higher than either the Addison or Wood Dale corridors.

The Naperville-Warrenville Road corridor is served by three stations along Metra's BNSF line, though none are within walking distance of the core employment areas. Pace operates many traditional commute routes in the area, and has introduced a new all-day service on Warrenville Road. Approximately 1,500 passengers get off trains in the morning or midday at the corridor's three Metra stations representing 13 percent of daily activity. In the high employment areas, pedestrian access is below average characterized by higher speed roads, limited sidewalk connectivity, and difficult or lengthy access to buildings from bus stops.

Current transit times to the Naperville-Warrenville Road corridor are a little less than three times as long as average drive time for the same trip, but can be significant at as high as two hours in length. A last-mile solution results in a decrease in average travel times on transit by about 6 percent overall.

92,000

work trips are made into the Naperville-Warrenville Road corridor every weekday

4,111

people per square mile work in the corridor, compared to a regional average of 1,058

3,405

people per square mile live in the corridor, compared to a regional average of 2,973

Recommendations

The three corridors analyzed in this study all have unique commute needs that will be best addressed by different transit mobility solutions. This section summarizes the Corridor Assessment for each study area and provides a framework for the development of potential transit connectivity solutions.

Wood Dale Corridor

Wood Dale is primarily business oriented and contains little residential density. Solutions here should focus on improving connections from nearby Metra stations and the CTA Blue Line targeted to specific businesses or sites and reducing fixed-route bus travel times from northwest Chicago. Pedestrian infrastructure is incomplete and existing transit service is commuter oriented, limiting transit's effectiveness in the area.



Figure 1 Aerial of typical Wood Dale development typology

The corridor has the potential to attract a respectable amount of commute trips on Metra as well as CTA connections via Pace Rosemont service. However, while the area attracts trips from throughout the region, the majority of the trips are from near or adjacent areas. While a last-mile service could potentially target commuters connecting from Metra, a broad mobility concept might be challenging due to the lack of residential in the corridor.

Addison Corridor

Addison contains a mix of high-density employment and residential areas. Due to the residential, pedestrian, and employment characteristics of the corridor, a broader mobility hub concept that unites various services providing shared-use mobility could be effective, especially if centered near Metra stations with high ridership and higher-density mixed use development, such as Elmhurst. This concept could include many connectivity solutions including improved last-mile connections to Metra,



Figure 2 Aerial of typical Addison development typology

non-motorized transportation options, or generalized ride-sharing/pooling opportunities. Pedestrian infrastructure is more complete in residential areas than in employment areas, providing greater mobility opportunities for residents. The corridor is located between two Metra stations on different lines, connected by Pace fixed-route service, providing greater potential for increasing the reverse commute market; though the rest of the corridor largely lacks fixed-route bus service. Total trips attracted to the corridor are high and many are from origins with a high share of zero-vehicle households. The corridor has the potential to attract commuters from areas of Chicago that contain higher shares of Millennials.

Naperville-Warrenville Road Corridor

Naperville-Warrenville Road is characterized by low-density campus-style employment with little residential development nearby. This environment could support a broader mobility-hub concept that includes localized circulation via non-motorized or shared-use services in and around the Naperville downtown. A part of the mobility hub solution could also include more targeted last-mile service to participating employers in the Warrenville Road corridor. Such a concept could be beneficial to existing reverse-commuters to area Metra stations



Figure 3 Aerial of typical Naperville-Warrenville Rd development typology

but also could target the high concentrations of trips originating in the Aurora area. Pedestrians have incomplete networks and have to traverse large building setbacks, parking, and landscape elements to access places of work. Pace fixed route service is substantial, though it is geared toward serving the strong traditional commute market. Newly restructured Pace bus route service will increase all-day mobility in the Naperville-Warrenville Road corridor. While not a strong reverse commute market from Chicago, the corridor attracts a high number of trips, and trip origins are well-defined and concentrated from the southwest quadrant of DuPage and the Aurora area. Household income of workers and attraction of Millennials are high in the corridor suggesting that technology based efforts to enhance or market transportation alternatives could prove effective. While not in the Naperville-Warrenville Road corridor as defined, areas directly surrounding the Naperville Metra station have higher residential densities and more mixed-use development.

Next Steps

The next step of the DuPage Transit Connectivity Study is for DuPage County to use the information provided in this Market Conditions Assessment to collaborate with employers to develop practical solutions for the three corridors. To help outreach efforts and inform local employers on potential last mile solutions DuPage County, Choose DuPage, and the RTA will be co-hosting the John Noel Conference in September 2016. The conference will highlight findings from this Market Conditions Assessment and bring together local stakeholders, transit agencies, transportation providers, and mobility experts to engage in conversation and produce innovative ideas for increasing the connectivity to transit for DuPage residents and workers.

Potential last-mile solutions will be identified specific to the unique characteristics of each corridor. These partnership, service, or infrastructure enhancements will be assessed for their feasibility by identifying methods of funding and paths toward implementation.

DUPAGE TRANSIT CONNECTIVITY STUDY



Appendix B



Division of
Transportation



Regional
Transportation
Authority



SHARED-USE
MOBILITY CENTER

DuPage County 2016 John Noel Public Transit Conference Shared Mobility Workshop

Last-mile mobility solutions for the western suburbs

Sept 21, 2016, 8AM-3:00PM

Power Forward DuPage, 28600 Bella Vista Pkwy., Warrenville IL

Agenda

Morning session

8:30AM Registration opens; coffee & networking

9:00AM Welcome

James Zay, DuPage County Board Member, District 6

Kirk Dillard, Chairman, RTA

9:40AM Shared-mobility picture in Chicagoland and nationally

POLL QUESTIONS

Sharon Feigon, Shared Use Mobility Center (SUMC)

10:10AM DuPage County/RTA Last Mile Corridor Marketing Study

John Loper, DuPage County DOT

Will Gillespie, RTA

10:45AM Public/Private panel - What do we need to Serve Employers and Employee Commutes in the Suburbs?

Moderator – Ron Lunt, Hamilton Partners

Sean Reynolds, Jones Lang LaSalle

Kon Savoy, Teska

Michael Bolton, Pace

David Kralik, Metra

Sharon Feigon, SUMC

John Carpenter, ChooseDuPage

11:30PM Lunch on-site (Main Conference Room)

www.sharedusemobilitycenter.org



Afternoon session

12:00PM Private mobility operator lunch panel (SUMC moderates)

POLL QUESTIONS

Representatives from:

Uber, Lyft, InnovaEV, ZipCar, Zagster, Getaround

1:00PM Making the Connection Breakouts

Workshop 1: Innovative Transit Solutions: *How can we improve the last-mile connection with the existing public transit network, to make transit a preferred option for workers in DuPage?*

Description: This workshop is aimed at the mechanics of using the existing public transit network alongside innovative agency and private sector mobility solutions. Topics of discussion will be current challenges for utilizing public transit, potential last-mile service options, transferring between transit and private mobility, fare and payment structures, employer programs, physical infrastructure needs, and land use considerations.

Workshop 2: Emerging Mobility Partnerships: *How can we improve mobility in DuPage and make it easier for everyone to get around without a personal vehicle?*

Description: This workshop is aimed at generating ideas for improving mobility in the County through emerging mobility options and potential private partnerships. Topics of discussion will be mobility without a personal auto, on-demand flexibility, shared rides, service coverage areas, midday and off-peak needs, technology opportunities, and business-provider partnership frameworks.

2:00PM Reports/summaries from breakouts, and discussion

POLL QUESTION

2:40PM Closing

2:45PM Vehicle and Product Demonstrations



Division of
Transportation



Regional
Transportation
Authority



SHARED-USE
MOBILITY CENTER

DUPAGECOUNTY

John Noel Conference/ SUMC Workshop

John Noel Conference Workshop Outcomes - Challenges

Workshop 1

- Cul de sacs/low density developments/lack of network connectivity
- Lack of Sidewalks and last 500' – no path to destination, incomplete roadway to land use transition
- Three generations of sprawl and zoning regulations have led to separated uses
- Timing/Availability of transit for shift workers
- Changing commuting and other trip purpose habits

Participants identified attempts to change habits and discussed the Downers Grove Shuttlebug service to the Esplanade. Participants suggested that there are impediments from all sides including right sizing equipment, guaranteed ride home, site related and ADA challenges.

Workshop 2

- People who are unable to drive either due to disability or age
- Aging in place – the population is growing and seniors require great consideration in last mile
- Cooperation between public and private sectors. It is difficult to begin and continue strong relationships in the suburbs.
- Reaching the right people in private organizations – need a champion to start and sustain a service
- Education – attendees felt that much more education should be focused on informing people how to use transit, and, specifically, how to help children and young adults become comfortable with that choice
- Marketing: Attendees felt that efforts often fall short of the target without the education component
- Free parking

John Noel Conference Workshop Outcomes – Possible Solutions

Workshop 1

- Need to identify who would be involved – who is that champion?
- On the fly equipment changes and on-demand shuttles
- Flag stops in employment centers and more appropriately laid out land uses
- New carpool models: UberCommute, GoogleWaze, etc.
- Realign Incentives: Parking is free and transit is out-of-pocket cost; charge for parking and use Transit Benefits to reduce transit cost.
- Greater flexibility in incentives and benefits
- Work schedule flexibility
- Multi-modal trip routing and planning technology with real time information
- Bike to work program with more aggressive incentives and better facilities
- Autonomous vehicles
- Congestion pricing to fund transit and first/last mile connections
- Employer contributions – specific business park, HOA, TMA models mentioned

Workshop 2

- Able to order Lyft/Uber rides for others – “Concierge” model discussed
- Pilot projects – continue projects but do a better job of identifying appropriate metrics of success
- Start relationships with businesses early
- Reach younger generations and educate
- Education from employers – need advocates and mentors at the businesses; perhaps a role for our public transit professionals
- Dynamic pricing – allows people to change routines to fit economic needs
- Private sponsorship and advertising

John Noel Conference Workshop Outcomes – Possible Next Steps

Workshop 1

- Track data on employee retention and attrition and develop metrics for commute options.
- Behavioral Changes
 - Incentives
 - Data on benefits – for organizations
 - Peer to Peer sharing among HR and businesses
 - Being vocal
 - Wellness aspect
- Land use/Infrastructure
 - Growth without growing parking
 - Right size parking and parking locations
 - Use pricing to reduce parking need, such as parking cash-out
 - Map sidewalks, know where gaps are and have employers help improve
 - Healthy Roads/Complete Streets/Safe routes to school
 - Partnerships on winter maintenance of sidewalk and trails
 - Site review of transit supportiveness during development or redev
- Technology
 - API from transit agencies
 - Service info – making info seamless across agencies
 - Disseminate information better throughout region and markets

Workshop 2

- Start relationships – public and private
- Pilot projects – more of, better structured
 - Commuter Parking
 - Using idle cars/car sharing
- Employer education on providers and options
- Young adult and teen outreach
- Community meetings with public and private reps
- Find local champions
- Develop multi-talented advocate team for local outreach

DUPAGE TRANSIT CONNECTIVITY STUDY



Appendix C

LAST-MILE/MOBILITY ON DEMAND (MOD) PROVIDERS

Providers	Description	Geo Coverage	Vehicle - Driver	Readiness	First/Last Mile	Employer/Agency Involvement	Transit Benefit	Notes
RIDE HAIL								
Uber Lyft	App-based request and payment for individual door-to-door.	Broad	Private and independent	Mature in most of RTA region	Yes, but high-cost for commuting	Corporate account to share cost, or public subsidy	No	Typical cost for 15-minute last-mile trip in range of \$9 - \$15; informal pooling could bring cost down, with corporate share.
RIDE HAIL -- POOL								
Uber Pool Lyft Line	App-based request and payment for door-to-door, pooled with other individual users.	Broad	Private and independent	Mature in most of RTA region	Yes, but high cost for commuting	Corporate account to share cost, or public subsidy	Yes, restricted	Several joint discussions with property owners and Uber/Lyft held. Corporate concern with cost, need to manage/organize and "liability" for missed trips.
MICRO TRANSIT								
Pace Call-n-Ride	Cell phone based 1-24 hr reservation, on-demand, door to door. Ventra/cash payment on board.	Defined service area	Public agency	In operation; Pace vehicle supply constrained for expansion	Yes; limited or unknown actual use on existing routes. Some scheduled Metra connections in place.	None – public transit route	Yes	Existing driver cell-phone system limits to one vehicle in service area reducing capacity and optimization of trip scheduling. Pace piloting smartphone app.
Via	App based request and payment. Designated stops but not defined route.	Defined service area	Contract driver with larger private vehicle	Limited to certain parts of City of Chicago	Potential, but requires high density of trips and need for all-day demand.	Would be necessary to bring to region through pilot funding.	Yes	Via not interested in expanding beyond City of Chicago as of end of 2016.
Chariot, RidePal Bridj*	App based request and payment. Designated stops along a mostly defined route.	Defined service area	Provider vehicle and driver	Chariot entering Chicago market	Potential, but requires high density of trips	None required	Yes	Corporate sponsorship and/or crowd scouring. *Note Bridj ceased operations on 5/1/2017
CAR/VAN POOL								
Pace Vanpool, vRide (transitioning to Enterprise Rideshare)	Pre-organized subscription program.	Broad	Provider vehicle, private driver	Pace program in operation (vehicle supply constrained)	Yes; some existing use for Metra work trips.	None required	Eligible (if provided by employer)	Has had limited use serving last-mile.

LAST-MILE/MOBILITY ON DEMAND (MOD) PROVIDERS

Providers	Description	Geo Coverage	Vehicle - Driver	Readiness	First/Last Mile	Employer/Agency Involvement	Transit Benefit	Notes
Scoop, Waze	Peer –to-peer. App-based daily matching for one-way carpool trips either as driver or rider.	Broad	Private	Scoop not in Chicago area but interested in expansion; Waze active	MOD pilot with BART for first-mile pilot; needs high density of trips (10,000 employees)	Model uses employer partners. Would be necessary to bring to region through pilot funding.	?	Scoop model is designed to ease uncertainty/loss of flexibility of traditional carpool; primary market is long home-to-work trips. Practicality for rail station pickup/drop off for short trip uncertain. Waze provides no assurance of ride match.
Carma, Carzac, Duet, MuV, TwoGo, Hytch	Carpooling platforms	Broad	Private	Various stages	Limited application			
VEHICLE SHARE								
Zip Car Enterprise	Hourly/daily rate car share for members, return car to pickup location	Parts of City and select suburbs	Provider vehicle, individual driver		No, due to need to return to pickup location.			
Car2Go	One-way car share, hourly rates for members, on demand or up to 30-minutes prior reservation. Park anywhere in operating area.	Defined operating area	Provider vehicle, individual driver	Not currently in Chicago;	Yes, if density supports sufficient use to be profitable for provider	Subsidy of cost to employee probably needed	?	Guaranteed availability at Metra and work location for return seems problematic. Current rate of \$0.41 per minute puts cost between transit and Ride Hail Pool
Getaround	Peer-to-peer carshare, return car to pickup location, advance reservations	Defined area	Private vehicle offered for sharing	Only parts of City	Perhaps	None required	?	Model would need to be developed to provide cars at Metra PNR's for use during the day allowing certainty and flexibility for both parties.
Divvy, Zagster	Bike share, one way. Kiosk or kiosk-free versions in operation.	Defined operating area	Provider owned vehicle	Only in parts of City and select suburbs	Yes, within biking distance	Subsidy likely required	?	Divvy integration with Ventra app underway; existing last-mile use evident. Reduced use during winter.

LAST-MILE/MOBILITY ON DEMAND (MOD) PROVIDERS

Providers	Description	Geo Coverage	Vehicle - Driver	Readiness	First/Last Mile	Employer/Agency Involvement	Transit Benefit	Notes
DEVELOPING								
Innova	Hybrid car-share/ride-hail using electric 2 passenger vehicle.	Defined operation area	Provider vehicle, driver employee in pilot.	Pilot in operation Itasca/Hamilton Lakes	Yes – current focus of model.	Subsidy likely required.	?	Vehicle limited maximum speed and capacity; larger vehicle in development
EasyMile	Automated 12 pax vehicle for short trip shuttle on predefined route.	Small area	Automated provider owned vehicle	Pilots and demonstration	Yes	Unknown	?	French company with Denver office. Lists First Transit as partner.
APPS/SOFTWARE								
TransDev	Software for dispatching and MOD							Contract operator for transit services and developing autonomous technology; also supplies software for dispatching and multimodal mobility
TransLoc	Software vendor for transit scheduling, dispatching and real-time information							Specializes in micro transit applications
RideAmigos, Luum	Provider of TDM software and apps	Defined municipal corporate partner	Sharing and pooling software	On-going	Not prime focus	Requires municipal or campus TDM program	yes	Luum partnering with ULI Labs/City Digital



RTAChicago.org

RTA Administration Offices
175 West Jackson Boulevard, Suite 1650
Chicago, Illinois 60604

Phone: 312-913-3200

Follow us on Facebook and Twitter

 [ChicagoRTA](https://www.facebook.com/ChicagoRTA)  [@RTA_Chicago](https://twitter.com/RTA_Chicago)