

Executive Summary

This report presents the final results of the DuPage Area Transit Plan project. The Transit Plan is the culmination of a process that actively involved the citizens of the DuPage County area, the 36 member communities of the DuPage Mayors and Managers Conference (DMMC), DuPage County Board members and staff, regional transit providers and Conference staff. Early in the project a transit inventory was developed. There were high levels of participation in establishing transit objectives and mobility needs. This was followed by a market assessment that analyzed demographic characteristics and travel patterns in the study area. Together these pieces led to the development of some initial options and opportunities that were then taken to the public for further input and refinement. Careful evaluation of public input, projected ridership levels, cost estimates, and expected effectiveness in meeting mobility objectives guided the development of the final recommended transit system, presented in this document. This report summarizes the findings and process followed. The project started in Summer 2000 and will be completed by Fall 2002.

Approach

The DuPage Area Transit Plan was conducted under the leadership and active participation of local officials in the DuPage County area. The cooperation and involvement of County staff and officials as well as the region's transit providers brought together a full range of participants for thorough discussion and input into a long range vision for transit that has been established in this process.

A hallmark of this project is the high level of public participation throughout the project; DMMC strongly believes that citizen input is essential to informed decision-making in public planning initiatives. This study can be best described as 'interactive', moving back and forth between public input and the development of technical analysis. This interactive process has provided for many opportunities to refine project recommendations as it moved forward. The chart on the following page summarizes the process that was followed during the DuPage Area Transit Plan project.

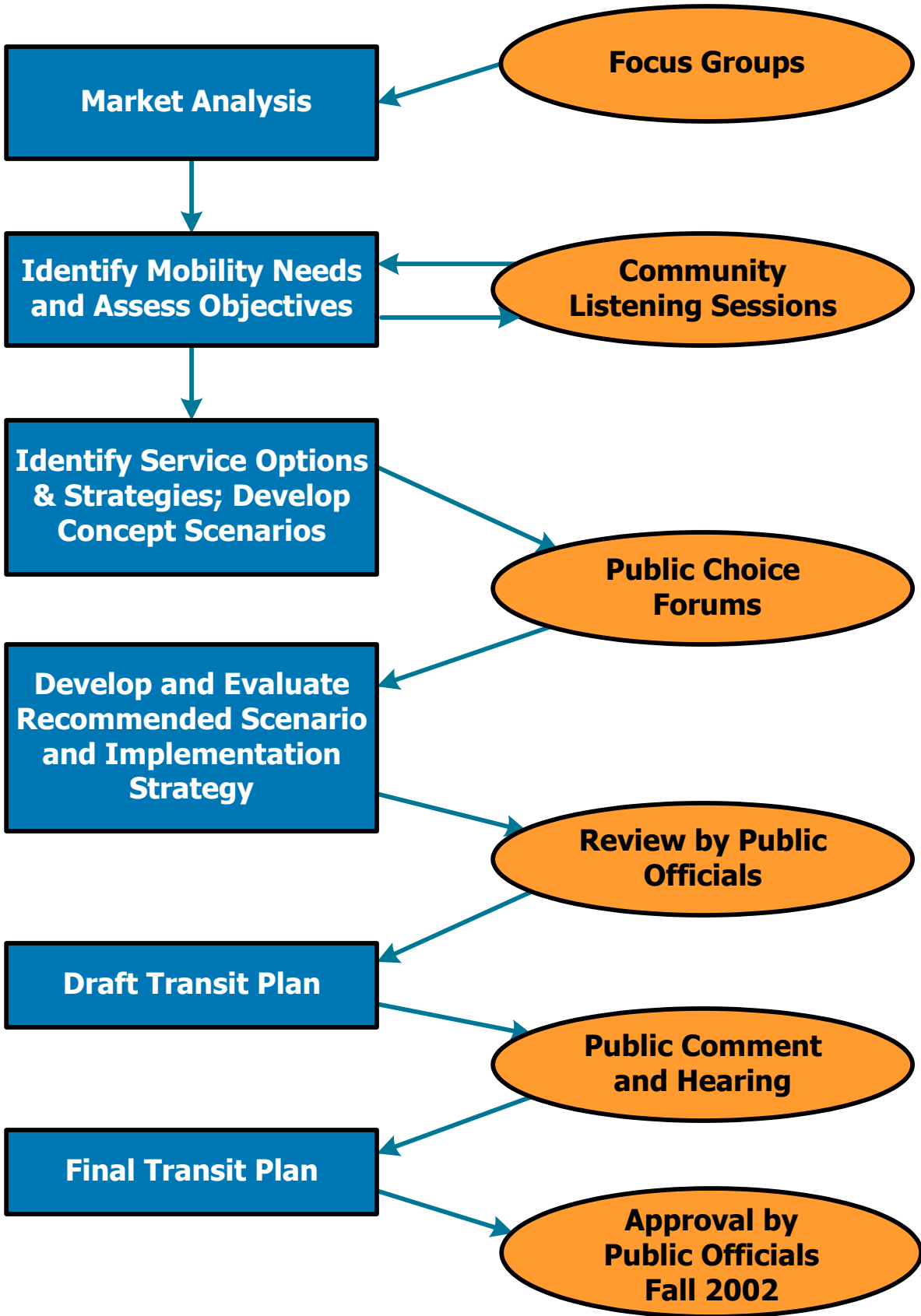
The public participation process established better two-way communications between the public and its officials through a variety of means to provide technical and market research data as well as opportunities for substantive input in this plan's development. Some of these means are listed below:

Interviews with Municipal Officials – Twenty-one local leaders from thirteen communities were interviewed between May and July 2000 at the onset of the project to gain their insights on mobility and quality of life issues in the DuPage area. These interviews helped to guide the broader data collection efforts and the formulation of public outreach strategies.

Workshops for Local Government Officials – Three workshop sessions for municipal and DuPage County officials were held to educate, promote open discussion, and enhance collaborative decision-making regarding the development of the comprehensive transit plan. These workshops played a key role by helping public officials better communicate with and make informed decisions on behalf of their constituents.

Technical Work

Public Involvement



DMMC Committee Meetings – The specially developed Transit Plan Advisory Committee (TPAC) and the Transportation Policy Committee Plus (which included representation from two DuPage County Board members), served as important vehicles for sharing technical and public outreach data among local officials and regional transit agencies on a regular basis.

Focus Groups – Two focus groups were organized to elicit the perspectives of a targeted group of stakeholders, including private citizens. The questions were designed to confirm assumptions previously provided by subject experts and local government officials, and to explore additional insights with respect to real and perceived mobility challenges.

Community Listening Sessions – Local officials throughout the DuPage County area hosted community sessions to hear from their constituents and area stakeholders about their concerns and visions for future transit. A total of eighteen sessions were held, hosted by officials from 29 communities and DuPage and Kane Counties.

Public Choice Forums – Public Choice Forums presented specific transit service options in an open house format for input from the general public. This input was instrumental in developing the recommended scenario and defining service attributes.

Invitations to Comment through Electronic and Published Media – A project web site, www.dupagetransitplan.com, was developed to make information about the plan development process, project status, and draft documents available to the public on an on-going basis. Citizens submitted comments on-line and via a project brochure with mail-back comment card that was developed with Pace’s assistance.

Public Hearing – Two public hearings were held on July 24, 2002, during a six-week public review and comment period for the draft DuPage Area Transit Plan. The public hearings were an important step to allow any and all residents of the DuPage area a final opportunity to register their comments about the draft plan.

Project Objectives

This project was developed to address issues of mobility in the DuPage County area. The overall objectives in undertaking the DuPage Area Transit Plan project were threefold:

- To bring about an informed stakeholder group of public officials, transit providers and the traveling public
- To undertake a comprehensive analysis of potential transit services, travel markets and enhancement opportunities
- To develop sound recommendations for potentially viable transit service options that meet the needs and objectives of residents, public officials, employees and businesses in DuPage

Early in the project, DuPage Mayors and Managers Conference members developed and refined a set of six mobility objectives. These objectives met perceived needs and set out goals for any transit system that this report recommended. The mobility objectives, described below, became one of the “yardsticks” for measuring the performance of the scenarios – as important as costs and ridership. The six mobility objectives are:

- Integrate transit services with all modes of the regional transportation system

- Implement transit services to reduce or contain highway traffic congestion in select corridors, subareas or employment centers
- Develop a sustainable transportation system in the DuPage County area
- Establish and ensure an appropriate level of mobility for transportation-disadvantaged residents of the DuPage County area
- Utilize public transit to link local and regional labor markets with hard-to-fill jobs in the DuPage County area
- Utilize public transit and transit-oriented development (TOD) strategies to sustain the economic vitality of mature downtowns and regional retail/commercial centers

Within the context of the above objectives, this project maximized technical analysis with input from the public and their local officials.

Current Transit Services in the DuPage Area

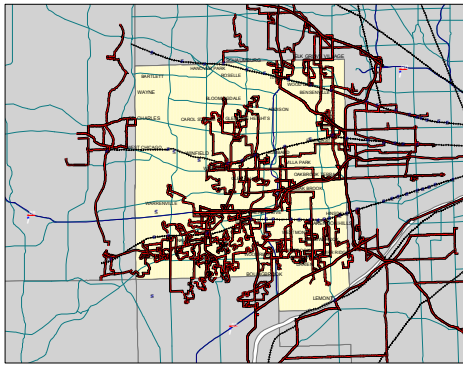
Currently, in the DuPage County area, three primary types of transit services are provided: commuter rail, general public bus service and paratransit service. Some information on each follows.

Commuter Rail: Metra runs commuter train service on three radial rail lines passing through DuPage County – the Burlington Northern/Santa Fe (BNSF), the Union Pacific West (UP-W) line and the Milwaukee District West (MD-W) line. A fourth line, the Heritage Corridor (HC), skirts the southeastern edge of the county. Nineteen million passengers use these trains annually from DuPage County to downtown Chicago and 0.2 million annually use Metra to access DuPage County. Service and schedules are heavily oriented to serving the downtown commute.

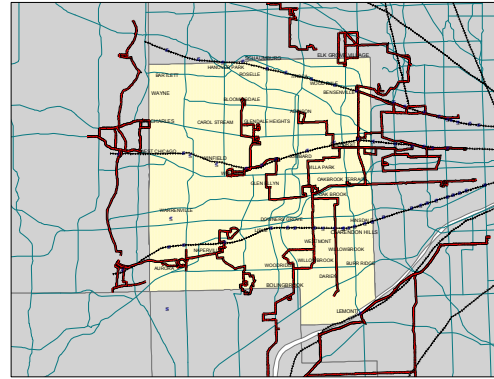
Bus Service: Bus service for the general public is provided by Pace Suburban Bus. Pace operates service on 65 routes serving DuPage County. Fifty Pace routes operate in the peak period only – most providing access from residential areas to the Metra stations, with some providing connections between Metra stations and places of work for reverse commuters. Approximately 2.6 million passengers use Pace service annually in DuPage.

Paratransit Service: Pace, DuPage County, social service agencies, townships and municipalities provide door-to-door dial-a-ride service or subsidized taxi service to DuPage elderly residents, people with disabilities or low income individuals. These services are currently in the process of moving towards a coordinated operation under the name *Ride DuPage*. Approximately 500,000 trips are provided annually.

The maps below indicate services currently available during peak and off-peak travel hours. These maps highlight the strength of the current bus system in accessing the commuter rail system for peak hour travel, compared with the very low level of transit service that is available for traveling within the DuPage County area during the off-peak hours.



Peak Period Transit Network



Off-Peak Transit Network

Recommended System – Year 2020

Services

The recommended system is designed to accomplish several things. First, a high speed corridor would be established, to connect Naperville / Aurora, the I-88 Corridor, Oak Brook, O’Hare Airport and Woodfield / Schaumburg to provide competitive inter-regional travel among key economic generators. Second, connections between local transit areas would facilitate longer distance travel within the county. Third, a system of local transit services would provide for local mobility and would also address the “last mile” need of transit passengers utilizing the high-speed corridor and/or the cross-county connectors. The recommended system would also feature connections to Kane, Will and other parts of Cook County.

The corridor, connector and circulator services are meant to work together as a system, along with Metra commuter rail, Pace feeder routes and *Ride DuPage* paratransit programs, to deliver a real alternative to the automobile in DuPage. The map on page vii shows the system that this study recommends for implementation by the year 2020.

The High-Speed Corridor

The high speed corridor, shown on the map in blue, would be a combination bus rapid transit (BRT) / express bus service operating at a reasonably high frequency (every 10 to 20 minutes). It would connect a planned transportation center at 95th Street on Metra’s proposed Outer Circumferential rail corridor (along the Elgin, Joliet and Eastern [EJ&E] railroad), downtown Naperville, Metra’s proposed Walnut Avenue station on the BNSF, and Oak Brook to O’Hare or the Northwest Transportation Center in Schaumburg. In the near term, it can start as an express bus, running several times per day.



The high-speed corridor would incorporate BRT characteristics
 Source: John Marino, IrisbusNA@aol.com

Connector Routes

The connector routes, shown on the map in green, function in concert with Metra rail lines to provide connections between circulator areas, and to facilitate cross-county travel. In order for the connector bus routes to function effectively and efficiently, significant capital investment to improve the pedestrian and roadway environment will need to be made. Pull-out lanes, bus shelters, sidewalks and other pedestrian amenities will be critical to the overall success of these routes that are planned on high-speed, wide cross-section roadways. To implement these routes over time, they will begin as small segments connecting circulator areas and over time build towards the full network of routes shown in this map. The following list summarizes the north-south corridors and east-west corridors shown on the map.

<p>County Farm Rd / IL 59 Corridor: Hoffman Estates to Naperville/Aurora</p> <p>Columbian Hoffman Estates Medical Center, Barrington Rd, Hanover Park Metra station, Jefferson Rd., County Farm Rd., County Complex, Central DuPage Hospital, Winfield Metra station, Winfield Rd, Cantera, Butterfield Rd, Batavia Rd (Fermi), IL 59 to Fox Valley Mall</p>	<p>Lake Street Corridor Hanover Park to Elmhurst</p> <p>Hanover Park Metra station to York Rd, Elmhurst Memorial Hospital</p>
<p>Roselle/Schmale/Washington Corridor: Schaumburg to Naperville/Aurora</p> <p>Woodfield Mall / Northwest Transit Center, Roselle Rd, Roselle Metra station, Stratford Square Mall, Schmale Rd, Wheaton & College Ave. Metra stations, College of DuPage, Butterfield Rd, Naperville Rd, Ogden Ave, Naperville Washington St. Metra Station, 95th St, EJ&E 95th St Metra station</p>	<p>Army Trail Corridor - Bartlett to Elmhurst</p> <p>Bartlett Metra station, Munger Rd., Stearns Rd, Bartlett Rd, Schick Rd, County Farm Rd., Army Trail Rd., Lake Street, to York Rd and Elmhurst Metra station</p>
<p>IL 53 Corridor: Glendale Heights to Bolingbrook</p> <p>From Lake Street to Glen Oaks Medical Center, Glen Ellyn Metra, College of DuPage, Danada Square, Lisle Metra station, IL 53, to Bolingbrook park-and-ride</p>	<p>North Ave Corridor - St. Charles to Elmhurst</p> <p>Charlestowne Centre Mall in St. Charles to Elmhurst Memorial Hospital</p>
<p>Addison Rd / Highland Ave Corridor - Elk Grove Village to Darien/Woodridge</p> <p>Alexian Bros. Medical Center, Arlington Hts. Rd, Itasca Metra station, Addison Rd, North Ave, Lombard Rd, Lombard Metra station, Roosevelt Rd, Highland Ave, Good Samaritan Hospital, Downers Grove Metra station to 75th Street</p>	<p>Roosevelt Rd Corridor - West Chicago to Oak Brook</p> <p>West Chicago Metra station, Roosevelt Rd, County Complex, Roosevelt Rd, Wheaton Metra station, Roosevelt Rd to Oak Brook Center Mall, Oak Brook BRT Station</p>
<p>Irving Park / York / IL 83 South Corridor - Itasca to Darien/Burr Ridge</p> <p>Itasca, Wood Dale and Bensenville Metra stations, York Rd, Elmhurst Metra station, Elmhurst Memorial Hospital, Oak Brook Center Mall and BRT station, Hinsdale Memorial Hospital, Hinsdale Metra station, 55th St, IL 83, to I-55 park and ride</p>	<p>Ogden Ave Corridor - Naperville/Aurora to LaGrange</p> <p>Fox Valley Center Mall on IL 59 to Lisle to LaGrange via Ogden Ave</p>
<p>Kingery / Cass Ave Corridor - Oak Brook/Oakbrook Terrace to Argonne</p> <p>Oak Brook BRT station, IL 83 (Kingery Highway), Ogden Ave, Cass Ave, Westmont Metra station, 75th Street Connector station, Argonne National Laboratory</p>	<p>75th Street Corridor - Naperville/Aurora to Hinsdale</p> <p>Fox Valley Center Mall on IL 59 to I – 55 park and ride IL 83 via 75th St to Hinsdale Metra station</p>
	<p>South Naperville Park and Ride Corridor - Naperville to Bolingbrook/Pace Park and Ride</p> <p>95th / EJ&E Metra station, 104th St, Boughton Rd, Naperville Rd, 107th St to I-55/IL 53 park and ride</p>

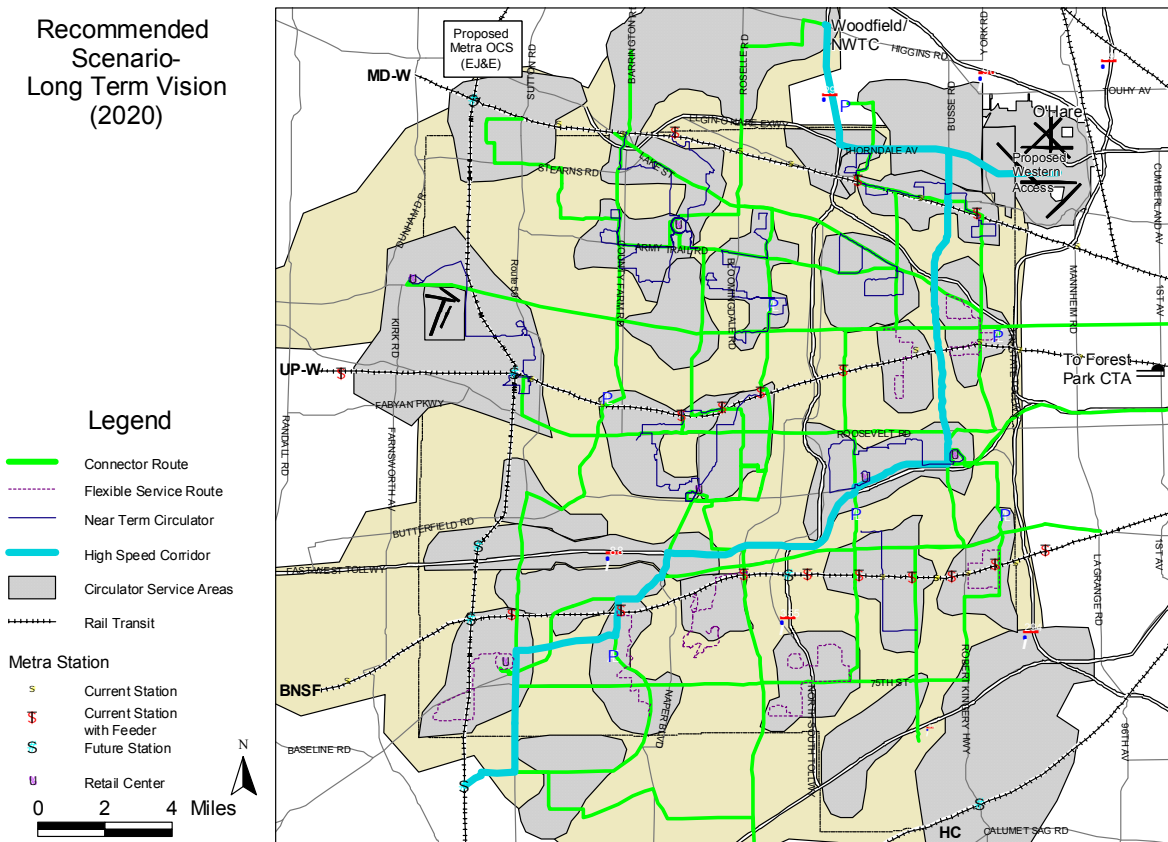
Community Circulators

Community circulators are the building blocks of the recommended system. Service in the circulator areas will be provided using small vehicles, and will differ based on the type(s) of areas they serve. For example, there are some areas where fixed route circulator(s) are recommended and other areas where flexible-route services are recommended, depending on demand and destinations. A flexible service follows a specific alignment, but if requested, the bus will leave the route, pick up or drop off the passenger and then return to the route where it left off. Some circulator service areas are recommended to be 100% demand-responsive, also known as general public dial-a-ride. Each local sponsor of circulator service will ultimately detail the service area and type of service to be provided within a given recommended service area.



Circulator services would likely operate with smaller, shuttle-type vehicles

Recommended Scenario-Long Term Vision (2020)



System Characteristics

Many characteristics of a system define and shape its performance. Throughout the course of this project, attention was focused on describing a system that is of high quality and is user friendly. Key features are summarized below.

Integration with Regional Transit Services: All services (buses, circulators, high speed, trains) must be coordinated by the service providers to work as a system to make the highest level of service available for travel.

Span of Service: By the time the system is fully implemented, transit services in the DuPage area should be operating from early morning until the late evening (6:00 a.m. to 10:00 p.m., for example), as well as offering service on Saturdays.

Frequency of Service: During peak travel periods, transit routes should operate every 20 minutes and during off-peak periods, every 30 minutes, in order to make the transit service attractive to people with other mobility options.

Fares: A seamless fare system to allow passengers to pay for any transit service in the region is strongly encouraged.

System Information: Information about the system and how to use it are critical to the success of transit, especially new services. Information should be easy to understand and readily available from a wide variety of sources, including hotels, employers, municipal centers, etc.

Marketing: Effective and proactive marketing will be a key determinant of the recommended system's success. A consistent image for the system is important. Partnerships with communities and businesses are also critical to success.

Transit Centers and Stations: Providing convenient, pleasant and safe waiting areas for transit, especially where transferring takes place, is an important component of the recommended plan. Amenities provided at transit centers will be dependent on the level of activity and type of area.

Transit Stops: At transit stops, information about service should be available and shelters provided where demand warrants. All stations and vehicles should be accessible to all persons.

Park-and-Ride: In many locations throughout the DuPage County area, there are opportunities to provide park-and-ride lots for auto access to transit service. This is particularly important for the high-speed corridor serving more distant regional destinations.

Pedestrian Facilities / Environment: Every transit rider is a pedestrian at some point in their trip. Many comments were heard throughout this project about the need to improve the pedestrian environment in the DuPage County area.

Transit Supportive Land Use: If transit is to become a viable mobility alternative in the DuPage County area, land use and development that are supportive of transit, bicycles and pedestrian mobility must be pursued.

Safety/Security: It is recommended that a high level of safety and security be provided at stations, stops and other waiting areas, via emergency phones, closed circuit television, bright lighting, patrols, etc.

Expected Impact on Mobility

A qualitative analysis revealed that implementation of the recommended transit system will have a major impact on mobility in the DuPage County area. This table illustrates the change in performance of the mobility objectives between the current system and the recommended system (L=low, M=medium, H=high impact).

Mobility Objective	Description	Current Transit System	Recommended Transit System 2020
1	Integration with regional transportation system	L	M+
2	Impact on roadway congestion	L	M
3	Sustainable transportation system	L+	H
4	Provide mobility for transit-dependent populations	L	H
5	Connect hard-to-fill jobs with labor market	L	H
6	Sustain economic activity	L+	M+

Another way to look at the impact on mobility is to look at a comparison of current ridership to estimated ridership for the recommended system. Current bus ridership in DuPage County is approximately 2.6 million passengers annually. The estimated bus (non-rail) ridership in the recommended transit system is 7.8 million riders annually. Clearly this represents a significant increase in mobility in the DuPage County area. For the purposes of this simplified discussion, Metra commuter rail ridership is assumed to continue the steady growth that has been seen over the past decade and is not included in these numbers.

In addition, the percent of population and employment with transit access for local DuPage area trips were estimated using GIS analysis for both the current and recommended system. This chart summarizes the results.

	% of population in immediate service area	% of employment in immediate service area
Current transit system (2000)	20	31
Recommended transit system (2020)	65	74

Implementation of the Plan

Given the limited amount of local transit service available in and around DuPage County today, and the almost exclusive reliance on automobile travel for meeting current mobility needs, it will be a challenging process to develop transit as an integral part of the DuPage area’s transportation system. The approach described in this plan is designed to produce a transit system in the long-term (by the year 2020) that is built in an effective and incremental way. In addition to developing transit services that meet residents’ travel needs, the transit agencies and local officials must work to educate the public on how transit works and why everyone—not just

people without other mobility options— benefits from it. People must see and experience success in the early stages of implementation; otherwise, there will be little support for the larger investments needed to bring about the later stages. With careful planning, phased implementation, and marketing and information campaigns, we can build a transit system that will significantly improve mobility and support sustainable development in the future.

Throughout the course of the phased implementation, the existing transit service will be incorporated, expanded upon or restructured to become part of the recommended system. Particular elements for special coordination and consideration include feeder bus service to commuter rail stations and the Ride DuPage paratransit services. Maximum coordination and efficiencies between these services are encouraged.

Near-Term Recommendations

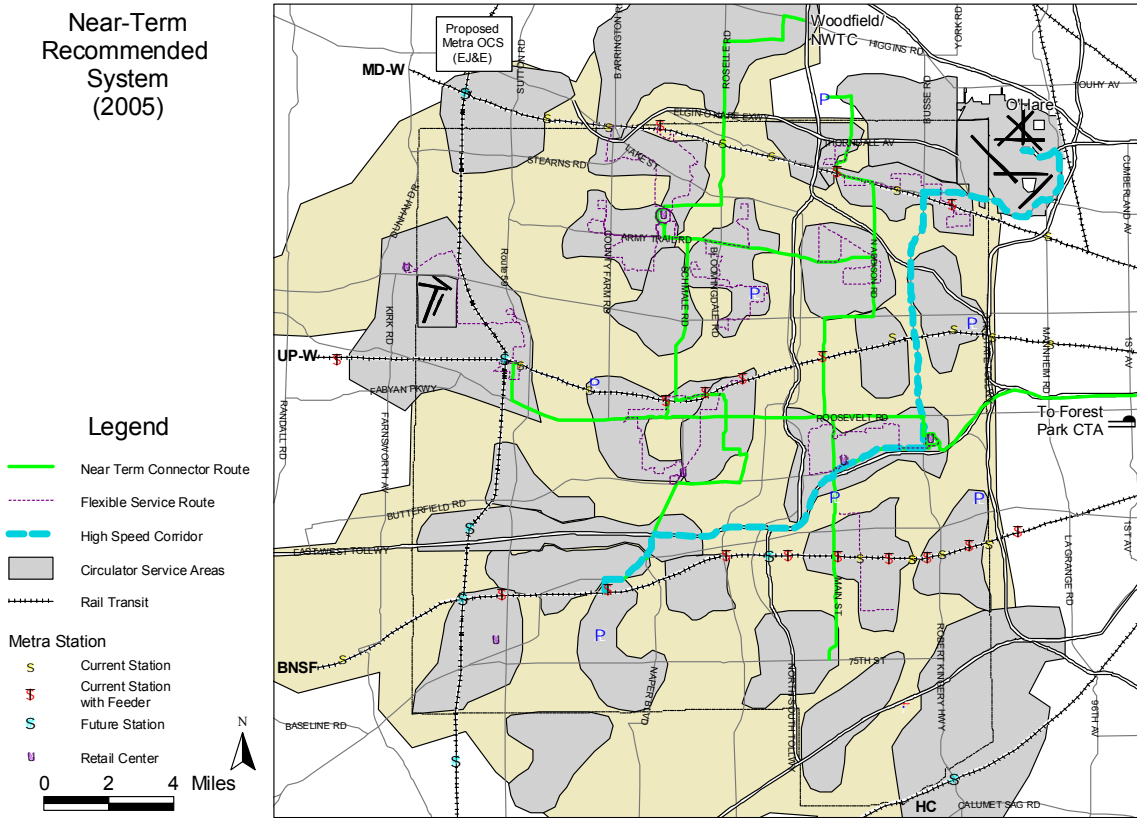
Near-term recommendations are proposed to be in place by 2007 and remain in place for an additional five years until the mid-term services are implemented. The recommended near-term transit network is shown on the following page. It is presumed that existing Pace service will continue or become incorporated and expanded into the near-term recommendations.

The near-term transit network in the DuPage County area consists of the following elements:

- An O'Hare express route originating in downtown Naperville that also serves the Oak Brook area.
- Five connector (intra-county) bus routes, offering limited-stop service between local circulator areas.
- Twenty-eight circulator areas:
 - Eleven local circulator areas with either fixed routes or flexible routes.
 - Seventeen dial-a-rides. Service in these zones would be 100% demand responsive.

Local circulators should generally operate 12 hours per day every 20 or 30 minutes. In an area where work trips can be well served, service may operate from 7:00 a.m. to 7:00 p.m. In other areas, the circulator might be more appropriately targeted to a retail market operating from 9:00 a.m. to 9:00 p.m. Some areas may require fewer hours of service, while others require more.

Near-Term Recommended System (2005)



Mid-Term Recommendations

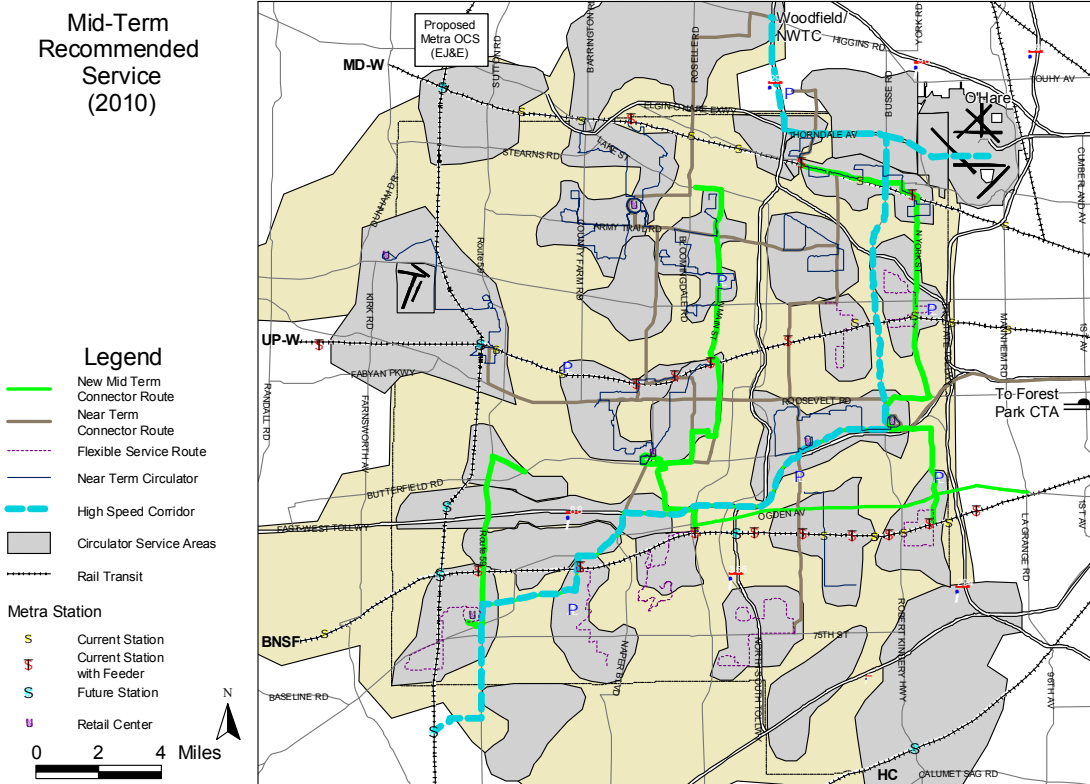
By 2012, the near-term system should have enough riders to warrant a system expansion. This expansion would include additional local circulator routes a larger connector and high speed corridor network. The following map highlights new or modified service from the near-term recommendations.

Mid-Term Services

The mid-term network would consist of the following elements:

- An expanded express high speed corridor route, extending all the way from the proposed 95th Street Station on the proposed Outer Circumferential Service to both O’Hare Airport and the Woodfield area (Northwest Transportation Center).
- Five new connector bus routes would be introduced.
- Additions and changes to circulator areas:
 - Six residential new dial-a-ride zones and four new employer-based service zones. Service in these zones would be 100% demand responsive (general public dial-a-ride).

- Eight new flexible circulator routes are added in seven circulator areas that were dial-a-ride zones in the near-term period.
- The circulator areas operating flex-route service in the near term would likely become fixed route circulators during the mid-term period, due to increasing demand.



An expansion in the number of hours of service provided in the local circulators is part of the mid-term implementation. By the year 2020, it is proposed that the long-term recommendation be fully implemented.

Costs and Funding

The following table summarizes the costs and ridership estimates by implementation time period, excluding Metra commuter rail. Costs are shown in current (2002) dollars.

Implementation Phase	Annual Operating Cost (millions)	Total Capital Cost (millions)	Annual Ridership (millions)
Short-Term Recommendations	\$17.4	\$31.8	1.8
Mid- Term Recommendations	\$26.8	\$45.5	4.0
Long-Term Recommendations	\$38.1	\$98.0	7.8

In the long-term, these costs represent an increase of \$25.4 million in annual operating costs when compared to the estimated cost of providing current bus service in DuPage County.

Clearly the issue of funding both the operating and capital costs is a significant issue for implementation. As part of this project, a number of potential sources of funding for different parts of the project have been identified. These sources range from local municipal and business contributions and partnerships, to local transit providers, to federal sources. The pursuit of funding for transit services recommended by this plan should begin right away, particularly for the more expensive and capital-intensive services, such as the high speed corridor service.

Key Implementation Challenges

Many challenges face the implementation of any bold plan. This long-term vision for transit has been shaped by input from the public and local officials from the DuPage County area. This broad base of support will be critical in maintaining momentum for the DuPage Area Transit Plan as it moves through implementation phases. It will be very important for people to see and experience success in the early stages of implementation in order to build support for the larger investments needed to bring about the later stages.

Momentum: Implementation of the transit plan requires sustaining momentum. This will be a key factor towards successful implementation of the later phases. Support by an influential leader, or advocates, in the DuPage County area will significantly help maintain and increase momentum.

Funding: Finding sources of funding will be a key challenge. An important immediate action will be to work to assemble sources of funding to assist early implementation. The first few successes will make the next steps of implementation easier.

Improved Pedestrian / Roadway Environment: In order to have an environment where transit can be sustainable, serious consideration will need to be given to accommodating the pedestrian and transit vehicle in development and re-development. One way to overcome this challenge is to collect and share information from other areas of the country where pedestrian and transit friendly design was incorporated to the benefit of all.

Marketing and Public Information: Aggressive marketing and public information will be essential. Marketing will need to be taken to a new level to shift perceptions and create awareness among new and current transit riders. Proactive marketing and the formation of key partnerships between government and social service entities, residents, business groups, major employers and others, must also be pursued.

Immediate Actions

The first steps following the plan release are critical. Nothing will help implementation of new transit services more than being able to identify some early successes. Following are some suggested immediate steps following release of the DuPage Area Transit Plan.

The process of developing the plan provides an inherent level of activity and momentum. Nothing will help plan implementation more than being able to identify some early successes. The following list of items is meant to provide some suggested immediate steps to take following completion of the Transit Plan development project.

- Set realistic goals—identify some quick successes to build upon. These might include identifying a community or business group that is interested in expanding existing service or

commencing local circulator service. Working with them to bring projects to implementation will help build momentum.

- Work with existing providers (Pace, Metra, municipalities, townships and County) to begin discussion of potential changes to existing service, augmenting existing services, or coordination with Pace Vision 2020.
- Form key partnerships with the business community to determine their needs and resources to assist in bringing a focus to transit possibilities. Leverage employers ability to provide tax-free benefits for transit to their employees.
- Further refine the recommended alternative. Prioritize, develop specific action items to pursue in the very short-term. These may include things like exploring alternative service provision options, identifying possible funding sources, with specifics such as application timelines, matching requirements, and assembling resources to assist interested communities and businesses in developing service ideas and approaches.
- Assemble an Implementation Team – including the current providers, the RTA and others – to follow through on early action items and to develop regional support and assistance in securing funding for plan implementation.
- Commence detailed study of specific implementation of the high-speed corridor service.
- Encourage and/or facilitate Transit Oriented Development (TOD) studies among communities with exiting or planned transit centers and commuter rail stations
- Monitor the progress of the following studies to assess their impact and incorporate their findings into future implementation activities.
 - Metra Outer Circumferential Service Corridor Study
 - Northwest Corridor Study
 - Pace/Metra Bus-to-Rail Study
 - Metra Inner Circumferential Study
 - BNSF Outer Corridor Study
 - Kane County Transit Market Assessment
 - DuPage County Park-and-Ride Study
 - Naperville’s Comprehensive Transportation Plan
- Monitor plan implementation and periodically update the DuPage Area Transit Plan (every three to five years) to stay abreast of current services, changing travel and land use patterns, and unforeseen needs.