KANE COUNTY
LONG RANGE TRANSIT PLAN

2040 Long Range Transit Plan

ADOPTED JUNE 14, 2011

RLS & Associates, Inc.

Nelson|Nygaard
consulting associates

Cover photo sources: Nelson\Nygaard except for paratransit vehicle photo from Pace.

PARTICIPANTS

The Transit Committee established by the Kane/Kendall Council of Mayors served as the steering committee for this project. The Transit Committee consisted of municipal and County representatives and representatives from the Regional Transportation Authority (RTA), Pace, Metra, and the Chicago Metropolitan Agency for Planning (CMAP). The Transit Committee, as well as members of the public who attended project open houses and completed surveys, provided important input and feedback for Kane County staff and the consulting team.

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Appendices

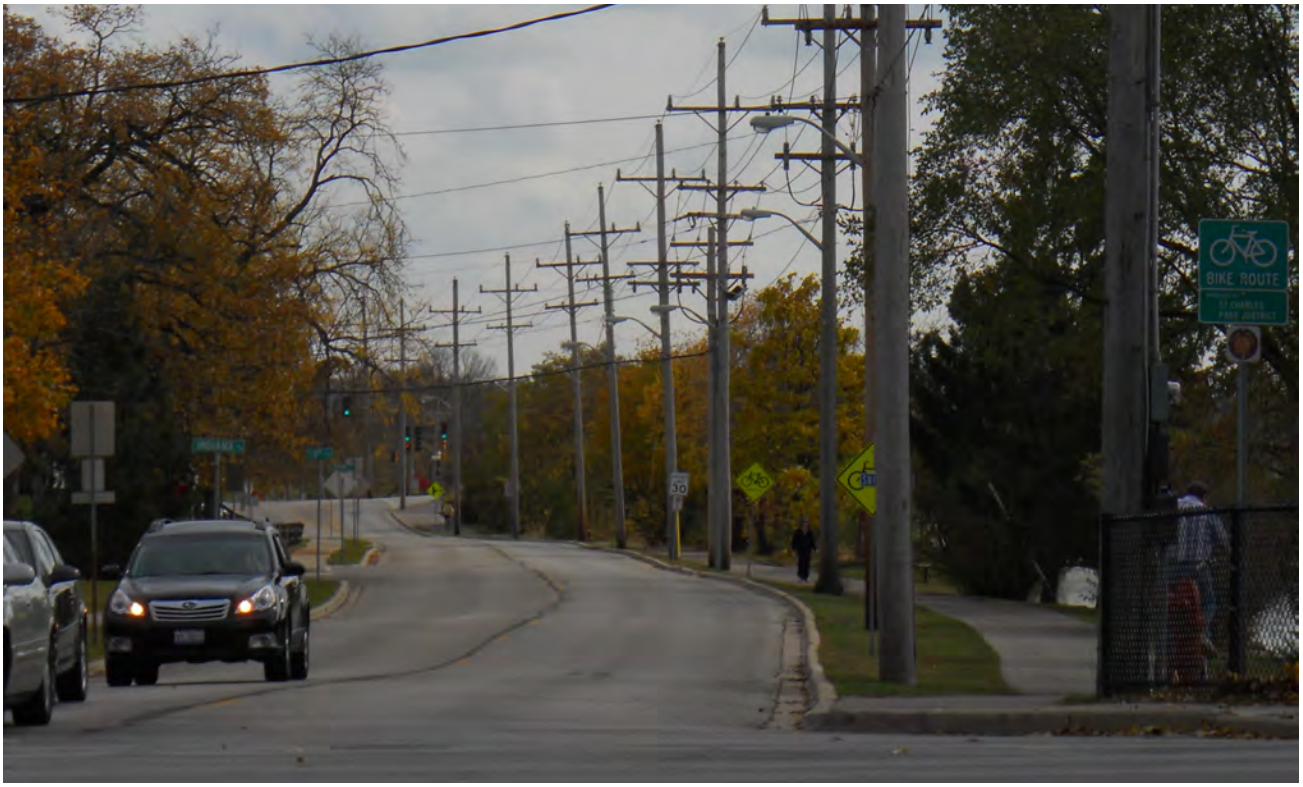
FIGURES

ACRONYMS

ADA	Americans with Disabilities Act
APC	Automatic Passenger Counter
APTA	American Public Transit Association
APTS	Advanced Public Transportation Systems
AoA	Administration on Aging
AT	Assistive Technology
ATP	Accessible Transportation Program
AVL	Automatic Vehicle Location
BRT	Bus Rapid Transit
CAD	Computer Aided Dispatch
CASD	Computer Aided Scheduling and Dispatch
CMAQ	Congestion Mitigation and Air Quality
DMU	Diesel Multiple-Unit Car
DOT	Department of Transportation
DR/DRT	Demand Response Transportation (paratransit)
E&D	Elderly and Disabled
EMS	Emergency Medical Services
FHWA	Federal Highway Administration (also FHA)
FR	Fixed Route
FTA	Federal Transit Administration
GIS	Geographic Information System
GP	General Public (related to FTA 5311 Funds)
GPS	Global Position Systems (typically satellites)
HCT	High Capacity Transit
HOV	High-Occupancy Vehicle
ITP	Individual Trip Planner
ITS	Intelligent Transportation Systems
JARC	Job Access Reverse Commute
LOS	Level of Service
MAAP	Mobility Awareness and Assistance Program

ACRONYMS (CONTINUED)

MDT/MDC	Mobile Data Terminal/Mobile Data Computer
NTD	National Transit Database
OCS	Overhead Contact System
O-D	Origin-Destination
PDA	Personal Data Assistant
POP	Proof-of-Payment
ROW	Right-of-Way
RTAP	Regional Transportation Assistance Program
	Rural Transportation Assistance Program (state and federal programs)
RTP	Regional Transportation Plan
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SOV	Single Occupant Vehicle
SPD	Seniors and People with Disabilities (formerly SDSD)
STP	Surface Transportation Programs
STIP	Surface Transportation Improvement Projects
TAC	Technical Advisory Committee
TDD	Telecommunications Device for the Deaf
TDM	Transportation Demand Management
TMA	Transportation Management Association
TMC	Traffic Management Center
TMV	Transit Maintenance Vehicle
TOD	Transit-Oriented Development
TSM	Transportation System Management
TSP	Transit Signal Priority
TSP	Transportation System Plans
TTY	Text Telephone
TVM	Ticket Vending Machine
VMT	Vehicle Miles of Travel



According to the Centers for Disease Control, there is no single better indicator of public health than rates of walking. Investments that encourage walking and bicycling, and that facilitate walking/bicycle connections to transit, allow moderate levels of physical activity to be incorporated into daily routines.

Kane County's extensive regional trail system, including the Fox River Trail on the east side of the Fox River in St. Charles (top), provides alternative bicycle and pedestrian routes for short trips and can facilitate longer trips in conjunction with transit. Bicycle and pedestrian facilities across the Fox River (bottom) provide important connections to destinations and linkages between trails.

Source: Nelson\Nygaard

EXECUTIVE SUMMARY

The Kane County 2040 Long Range Transit Plan (LRTP) is the transit element of Kane County's long-range comprehensive planning efforts, building upon previous plans that addressed transit, including the County's 2030 Transportation and Land Resource Management Plans, and 2002 Transit Opportunity Assessment. Today, most Kane County residents who have access to a car depend on it for travel. These earlier plans identified the need to address automobile dependence in Kane County in order to accommodate projected population and employment growth while mitigating increased traffic congestion and its adverse impacts on air quality and quality of life. They also recognized the relationship between existing land use patterns in the County and the challenge of providing efficient transit service. Reducing automobile dependence and fostering land use patterns that support "active" forms of transportation like walking, bicycling, and transit (which typically involves at least one walking trip) are now increasingly recognized as key elements of healthy living and sustainability.

In the public outreach conducted for the LRTP, numerous stakeholders articulated the importance of providing quality transit service for people who depend on it by making transit a more convenient, reliable travel option for County residents. Current economic conditions make it hard for private and public entities to invest in new services and sustain existing ones. Pace, along with other public transit providers, has struggled to maintain existing bus routes and has had to cut some services in the past. Strategies to make transit a viable travel option for County residents must recognize these fiscal constraints in the short term. With this in mind, the short-term strategies in the LRTP focus on implementing non-traditional services sponsored by municipalities and employers, changing development patterns, integrating transit with land use planning, and improving transit marketing and information.

Sidewalks are an important capital facility that supports transit and enables safe access to stops and stations for all passengers. Transit amenities, such as the benches at this bus stop for Pace route 802 in Geneva, make waiting for the bus more comfortable, particularly in adverse weather conditions. The threshold for installing a shelter at Pace bus stops is a minimum of 10 boardings per day.

Source: Nelson\Nygaard

The Aurora Transportation Center (left) provides access to Pace buses, Metra commuter rail, and Greyhound intercity buses. Bicycle racks located at Kane County Transportation Centers and Metra stations facilitate bicycle access. In addition to bicycle racks, the Elburn Metra station (right) facilitates Kiss & Ride and Park & Ride access.

Source: Nelson\Nygaard

Project Overview

The project, iniitated in 2009, was based on an analysis of existing and planned transit services and market potential. The analysis used the most recent data available at the time it was conducted (2009 or 2010). The Kane/Kendall Council of Mayors Transit Committee served as the project steering committee and includes representatives of municipalities, transit service providers, and County staff. The project team held three meetings with the Transit Committee and conducted focus groups and individual meetings with representatives of major medical and higher education institutions, major employers, and social service organizations; online surveys; and two public open houses. Project materials and meeting notices were also posted on the County's website.

Based on input from stakeholders and the public, and the analysis of transit services and markets, the LRTP identifies current and future unmet needs for public transportation services and recommends strategies and implementation actions for improving transit service over the next 30 years. In the outreach efforts for the LRTP, stakeholders articulated the importance of transit service, particularly for County residents with no other transportation options, and a belief that there is a need to improve existing service to make transit a better option for all residents. Issues identified as part of the LRTP include reliability of service and limitations in the frequency, hours (span), geographic coverage, and pedestrian access of current service. If these issues can be overcome, there is an opportunity to capitalize upon the stated support for transit articulated by stakeholders. A central theme of the LRTP is that improving transit service in the County and achieving the County's transportation goals, including reducing congestion, depends on creating an integrated process for transit service providers and municipalities to coordinate transit service with land use planning and development.

Additional detail on the planning process and methodology can be found on pages 5–8 of the complete report.

Existing Conditions for Public Transit in Kane County

Pace and Metra provide most public transit services in Kane County under oversight of the Regional Transportation Authority (RTA). Figure ES-1 provides an overview of the existing transit service in Kane County and the region.

Existing transit service in the County is centered around the transportation centers in downtown Elgin and Aurora, which are served by both Metra commuter rail and Pace bus service. The highest level of Pace service in the County operates from these hubs to local destinations in the Elgin and Aurora areas. Pace fixed-route bus service also operates in and between other municipalities in the Fox Valley, but service is relatively infrequent and land use patterns (such as buildings deeply set back from the street and a lack of safe, direct pedestrian routes and street crossings) are generally not conducive to providing efficient, convenient transit service. Pace also operates demand-responsive ADA Paratransit service within a ¾ mile distance of its fixed-route bus system.

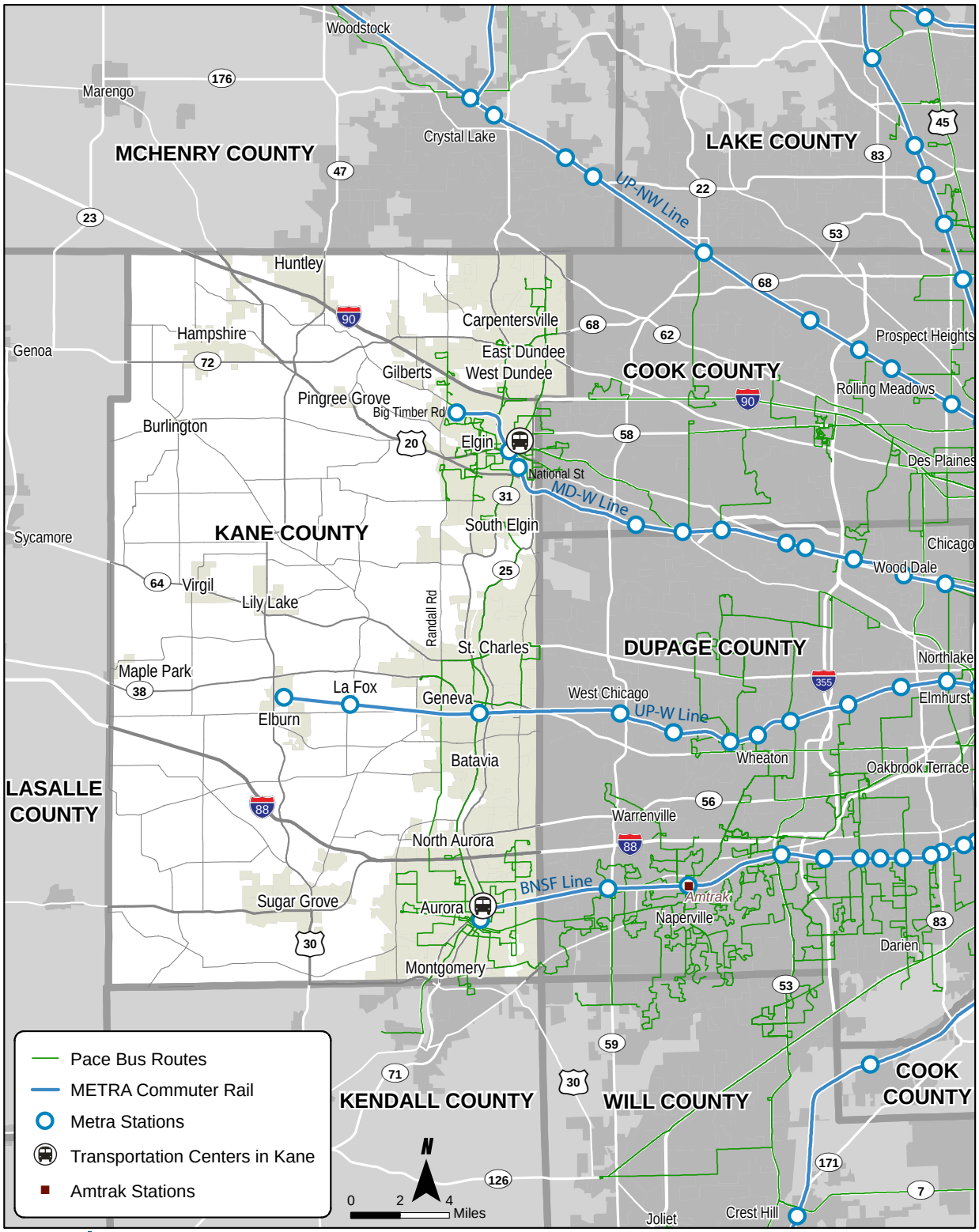
The County is served by three east-west Metra lines that operate as often as every 15 to 30 minutes during peak hours. In addition to the Elgin and Aurora Transportation Centers, Kane County Metra stations are located at National Street and Big Timber Road in Elgin, and in Geneva, La Fox, and Elburn.

The western and central parts of the county are predominantly rural and have no regular public transit service, outside of the Metra stations in Elburn and La Fox. The Ride in Kane program, launched in 2008, coordinates dial-a-ride services funded or supported by 18 local sponsors (municipalities and non-profits) in all parts of the County using a regional call center operated by Pace. Pace also operates several vanpool programs, with 30 vans in use countywide as of 2009.

Kane County has an extensive network of regional trails, and trail facilities in close proximity to the two Transportation Centers and other Metra Stations in the County. All Pace buses are equipped with front bicycle carriers that can hold two bikes. Metra stations have bicycle racks and bicycles are allowed on-board Metra trains, with restrictions during peak hours.

Additional detail on existing public transit conditions can be found on pages 9–20 of the complete report.

Figure ES-1 Existing Regional Transit Network in Collar Counties



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Source: Kane County, ESRI, Census 2000

Transit Needs

This study identified the key unmet transit needs for Kane County based on an analysis of gaps between community public transportation travel needs and available transit services. The individual needs can be characterized as:

- **Gaps** between existing transit services and requirements for time-sensitive travel such as work or school commutes;
- **Insufficient levels of transit service** making public transportation inconvenient relative to automobile travel;
- **Missing connections in the public transit network** between population centers and major retail/employment centers; and
- **Desired transit connections** as identified by stakeholders and supported by the Kane County Travel Demand Model.

A transit market analysis, which helped inform the analysis of needs, can be found on pages 21-29 of the complete report. Additional detail on transit needs can be found on pages 31–34 of the complete report.

Strategic Approaches

The LRTP provides a toolkit of strategic approaches for addressing the identified public transportation needs and making transit an attractive mode of travel to destinations. These approaches consist of:

- **Transit service strategies** to provide missing connections, increase level-of-service (frequency and hours of service), and expand the types of services offered; and
- **Transit-supportive or non-service strategies**, including land use policies, parking policies and practices, and methods for encouraging transit use, ranging from improving marketing to targeting incentives at potential transit users.

Additional detail on strategic approaches can be found on pages 35–44 of the complete report.

The lack of sidewalks and other pedestrian infrastructure along many parts of Randall Road is a significant barrier to transit use. On Randall Road there are no pedestrian crossings to provide access to stops or destinations on the other side of the street outside of signalized intersections, which are generally about 1/3 of a mile (or more) apart.

Source: Kane County

Recommended Strategies

Drawing on the toolkit of strategic approaches, the LRTP recommends 12 strategies to meet the identified transit needs, summarized in Figure ES-2. These strategies will help Kane County realize the benefits of transit—increased travel choices, community livability, and congestion relief through reduced vehicle trips.

A central transit-supportive strategy is to enact a Primary Transit Network (PTN) policy—an approach to coordinating transit and land use that entails agreement between municipalities and service providers (Pace) on the corridors where the highest level of transit service is desired and most feasible, and focuses strategies on those corridors.

Figure ES-2 Summary of Recommended Strategies

Fox Valley Service Strategies		
1	Expand local service network in growing population/employment centers and improve level-of-service	Expand the local Pace bus service network in areas where population and employment growth may warrant expanding the local service area adjacent to the existing Pace network and/or increasing the level of transit service.
2	Improve/provide regional service in Kane County	Improve or provide regional connections between key destinations or along major corridors in the urbanized parts of Kane County.
3	Develop employer-sponsored transit services in Kane County	Provide employer-sponsored service to major employment areas.
Western Kane County Service Strategies		
4	Provide access to major activity centers in Kane County	Provide connections to major institutions in Kane County, including shopping, medical, and civic institutions, from parts of the County that currently lack fixed-route bus service. These connections would provide limited service aimed at transit-dependent populations, operating a limited number of daily trips up to several days per week.
5	Provide Metra Feeder service	Provide connections to Metra Stations in Kane County from parts of the County that currently lack fixed-route bus service. These connections would provide primarily commuter-oriented weekday peak hour service, with limited mid-day trips, and would rely on transportation hubs with small park & ride facilities in each origin municipality.
Out-of-County Service Strategy		
6	Provide regional out-of-county bus service	Provide connections to adjacent counties, primarily serving commuter needs, from parts of the County with and without existing fixed-route bus service.
Transit-Supportive Strategies		
7	Improve capital facilities that provide access to transit	Improve and prioritize/coordinate investments in the different types of capital facilities that provide access to transit.
8	Improve access to existing Metra commuter rail stations	Includes programs, policies, and physical access improvements to enable and encourage alternative means to access Metra commuter rail service.
9	Support Metra commuter rail and intercity rail capital expansion plans	Support documented plans to expand Metra commuter rail service along the existing rail infrastructure in Kane County.
10	Coordinate transportation and land use	Link planned transit investments and land use policies. The strategy emphasizes identifying transit corridors based not only on current and projected land use, but on creating opportunities for developing around transit.
11	Improve marketing and customer information	Improve the understanding and perception of public transit among Kane County residents and others who work in or visit Kane County.
12	Implement Transportation Demand Management (TDM) programs	Provide incentives to use transit, including tax benefits and parking incentives.

Additional detail on recommended strategies can be found on pages 45–64 of the complete report.

Implementation Action Plan

The LRTP calls out specific actions as the key initial steps that Kane County, municipalities and partner agencies (Pace, Metra, the RTA, and CMAP) can take to implement the identified strategies. Drawn from the strategies identified in the previous section, the recommended actions include developing policies, identifying or creating organizations responsible for coordinating transit service and supporting policies, creating informational materials, and conducting detailed planning for short to long-term service strategies. The actions are summarized below.

Coordinate Transit and Land Use

1. Establish the Kane/Kendall Council of Mayors Transit Committee as a forum to discuss and facilitate ongoing coordination of transit service and policy development.
2. Enact a Primary Transit Network (PTN) policy that identifies corridors with the highest potential ridership and where the County and municipalities aspire to have the highest level of transit service over time.
3. Develop a model transit overlay zoning ordinance for adoption around transit nodes and PTN corridors.
4. Create development design guidelines and integrate design review into the development review process.
5. Adopt a Complete Streets Policy.

Coordinate Transit-Supportive Capital Improvement Plans

6. Develop bus stop amenity design standards and a policy for where and at what level to provide stop amenities.
7. Develop a program of transit-supportive capital improvements, coordinated with local Capital Improvement Plans (CIPs), including bus stops at major intersections, bicycle/pedestrian facilities, and transportation centers/hubs.

Market and Promote Transit

8. Promote transit options in Kane County, including healthy/active living campaigns, use of vanpool/ridesharing options, and use of tax-free purchase of passes and benefits.
9. Design a regional transit map for Kane County and feature this map as part of improved transit information displays.
10. Design local area maps for Metra stations that include bicycle/pedestrian access routes and connecting transit service and feature these maps as part of improved transit information displays.
11. Publish "open" transit data, making it available to applications such as Google Maps and mobile devices.
12. Review/update marketing materials on a regular basis.

Expand/Improve Transit Service

13. Provide transit service in western Kane County using the Pace Municipal Vanpool program.
14. Implement local, regional, and inter-county service improvements as warranted by demand and permitted by available funding.
15. Develop connecting service to Metra stations in Kane County, including the proposed STAR Line, and the planned Amtrak station on Randall Road.

Develop Employer-Sponsored Transit Services

16. Create Transportation Management Associations (TMAs) for major industrial/employment areas such as Kirk Road in St. Charles/Geneva/Batavia and IL 72/Big Timber Road west of Randall Road in Elgin/Gilberts. Apply for grant funding to conduct TMA feasibility studies.

Maintain/Enhance Transit Funding

17. Pursue continued grant funding, develop a stable long-term funding source, and encourage municipalities to identify local match funding. Foster coordination between all partners (existing sponsors and identified implemenators). Identify funding to expand service for County residents and programs not currently served by Ride in Kane.
18. Monitor the level of transit service provision in Kane County relative to the County's contribution to sales tax funding for Pace. Ensure that resources are equitably distributed as higher densities and transit-supportive land use patterns take hold in the County.

Create Transportation Demand Management (TDM) Programs

19. Create local TDM plans, or incorporate TDM elements into local comprehensive plans.

Additional detail on implementation actions can be found on pages 65–71 of the complete report.

INTRODUCTION

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The Kane County 2040 Long Range Transit Plan (LRTP) is the transit element of Kane County's long-range comprehensive planning efforts. The study, initiated in 2009, built upon previous plans, including the County's 2030 Transportation and Land Resource Management Plans and the 2002 Transit Opportunity Assessment. The 2040 LRTP documents existing transit conditions, analyzes market potential, identifies transit needs and recommends strategies and implementation actions for improving transit service in the County.

The primary objectives of the LRTP are to:

- Analyze existing public transportation services, use patterns and potential transit markets;
- Identify unmet transit needs and develop short-, medium-, and long-term recommendations for public transportation service and/or facility improvements;
- Improve coordination of land use and transportation, in order to allow increased levels of transit service to be provided in the future;
- Incorporate County transit goals into Kane County's long range comprehensive planning process; and
- Identify opportunities for coordinating transit system planning efforts between the County, municipalities, and regional agencies/service providers.

What is the role and importance of transit for Kane County?

Most Kane County residents are currently dependent on the automobile for travel. Much of the western and central parts of the county are predominantly rural and land use patterns are not conducive to transit even in many of the urbanized areas of the County. Yet in the public outreach efforts for this LRTP, stakeholders articulated the importance of transit service, particularly for County residents with no other transportation options, and the need for improved service. The County's previous transportation and land use plans identified the need to address automobile dependence in Kane County in order to accommodate projected population and employment growth while mitigating increased traffic congestion and its adverse impacts on air quality and quality of life. Stakeholders also recognized the relationship between existing land use patterns in the County and the challenge of providing efficient transit service. Reducing automobile dependence and fostering land use patterns that support "active" forms of transportation like walking, bicycling, and transit (which typically involves at least one walking trip) are now increasingly recognized as key elements of healthy living and sustainability.

How is the LRTP organized and intended to be used?

The LRTP is comprised of an Executive Summary, the LRTP itself, and a set of appendices, consisting largely of the technical memorandums completed at each stage of the planning process. The LRTP is intended as a more concise, accessible document, but each major section references the location of detailed materials in the appendices. The major sections of the LRTP are:

- **Planning Process and Methodology** includes an overview of public outreach and documents underlying assumptions in the LRTP.
- **Existing Transit Services** describes current conditions for transit services in the County provided by Pace, Metra, and others.
- **Transit Markets** analyzes demographic and economic conditions and provides growth projections from the County's travel demand model.
- **Transit Needs** identifies current and future unmet needs for public transportation services.
- **Strategic Approaches** describes general approaches to meeting the identified needs.
- **Recommended Strategies** enumerates specific strategies, within 12 categories, to address the identified gaps and needs. Each strategy is targeted for a specific planning horizon based on community goals and likely feasibility of implementation (including land use and available funding).
- **Implementation Action Plan** identifies specific actions and responsibilities for initiating implementation of the recommended strategies.

Figure 1 shows the relationship between each section of the LRTP and the appendices. Appendix A provides a glossary and Appendix B documents the results of all outreach efforts. Appendices C-H provide each of the technical memorandums developed over the duration of the study. Each memorandum used the most recent data available at the time it was written (2009 or 2010).

Figure 1 Relationship between LRTP Sections and Appendices

LRTP Sections	Appendices (Detail)
	Appendix A: Glossary
Planning Process and Methodology	Appendix B: Public Involvement
Existing Transit Services	Appendix C: Existing Transit Service (Tech Memo #1)
Transit Markets	Appendix D: Market Analysis (Tech Memo #2)
Transit Needs	Appendix E: Needs Assessment (Tech Memo #3)
Strategic Approaches	Appendix F: System Strategies (Tech Memo #4)
	Appendix G: Funding Strategies (Tech Memo #6)
Recommended Strategies	Appendix H: Recommended Strategies (Tech Memo #5)
Implementation Action Plan	N/A

Pace Route 802, shown on 3rd Street through Geneva, runs between St. Charles and the Aurora Transportation Center.

Source: Nelson\Nygaard

PLANNING PROCESS AND METHODOLOGY

This section summarizes the planning process used to develop the LRTP, including public involvement efforts and important methodological assumptions. The LRTP was based on an analysis of existing and planned transit services and market potential and an assessment of needs not met by current services, leading to recommended strategies and actions for improving transit service in the County. The next section describes the role of the Kane/Kendall Council of Mayors Transit Committee and other public outreach in each phase of developing the LRTP.

Appendix B provides additional information on public involvement, including stakeholder interviews/focus groups, transit committee members, transit committee meeting minutes, and survey results.

Public Involvement

As shown in Figure 2, the following public involvement activities provided important input used in developing the LRTP:

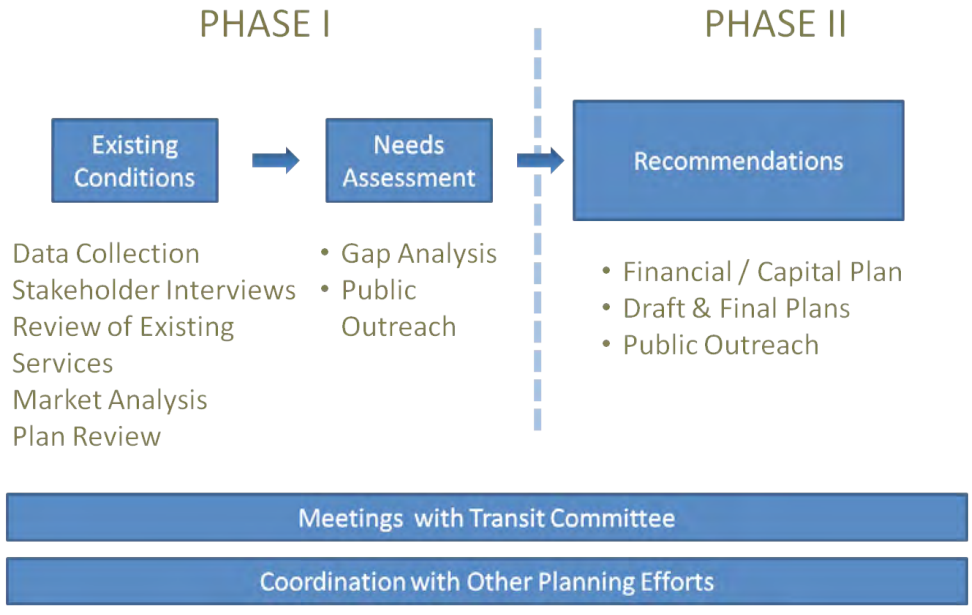
- **Stakeholder Outreach.** At the onset of the project, the consultant team organized and facilitated a series of focus groups or individual meetings including representatives of major medical and higher education institutions, major employers, and social service organizations. A list of representatives is provided in Appendix B.
- **Transit Committee.** A Transit Committee established by the Kane/Kendall Council of Mayors served as the steering committee for the LRTP. The Transit Committee was comprised of representatives of Kane County municipalities, the Chicago Metropolitan Agency for Planning (CMAP), the Regional Transportation Authority (RTA), Metra, Pace, and Kane County transportation staff. Three meetings were held over the duration of the project to facilitate discussion of the Technical Memorandums that are the basis for this document (Appendices C – H), and obtain feedback from the Committee. Additional input was solicited using the online survey and written feedback forms (see below). A list of representatives is provided in Appendix B.
- **Open Houses.** Two public open houses were held at the Kane County Government Center in Geneva to allow stakeholders, additional municipal representatives, and members of the public to review project materials, presented on poster boards (also available for download on the project website), interact with County and service provider staff and the consultant team, and provide feedback. The open houses were promoted through notices on-board Pace vehicles, at Metra Stations, in local newspapers, and on the County's website.

In addition, electronic and printed mediums were used to make project information available to the public and obtain input from project stakeholders and the public:

- **Project Website.** Kane County developed and maintained a project website[1] to organize project materials and make them available to the public. Each technical memorandum was posted to the project website for public review. The website allowed comments to be submitted to the County project manager for the LRTP.
- **Surveys.** Online and printed surveys were developed prior to each public meeting to obtain information and feedback from residents and other respondents. The link to each online survey was posted on the County's website and disseminated in outreach materials for each meeting. Printed survey forms were made available at the open house and for download on the County's website. The first survey asked questions about usage patterns, perceptions, and values related to transit. The second, shorter survey asked for feedback on the strategies presented at the second open house and in the materials available for download on the project website. Appendix B provides a summary of the online and printed survey results and survey forms.

1 http://www.co.kane.il.us/dot/planning/2040TransitPlan.aspx

Figure 2 Planning Process



County Travel Demand Model

The Kane County Travel Demand model, updated in 2009 as part of the County's 2040 Transportation Plan update, provided a key source of information regarding the current and projected distribution of population and employment in the County in 2009 and 2040, and the origins and destinations of trips both within Kane County and to/from surrounding counties. Travel data from the model was used to confirm and/or supplement information provided by stakeholders and the public.

The first public open house presented information about existing transit services, a market analysis, and the needs assessment.

Source: Nelson\Nygaard

KANE COUNTY DIVISION OF TRANSPORTATION

Carl Schoedel, P.E., Director of Transportation, County Engineer

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Send Comments

2040 Transit Plan

The County completed a Transit Opportunity Assessment Study in 2002 which identified transit markets throughout the County. This study will update those findings and also make transit service recommendations. The Kane County 2040 Transit Plan is an integral component in the County's long range comprehensive planning process. This study will identify existing transit conditions and document market potential, recommend transit improvements and identify funding strategies to inform a comprehensive Long Range Plan that will integrate land use and transportation goals and objectives.

Major tasks of this planning effort include:

- Document existing and planned services
- Conduct a market analysis
- Provide a current and future needs assessment
- Make system improvement recommendations
- Investigate public and private funding sources
- Conduct public and stakeholder meetings

The Kane County 2040 Transit planning efforts are partially funded by an RTAP grant from the Regional Transportation Authority (RTA).

Transit Committee

The Transit Committee was established by the Kane/Kendall Council of Mayors and is comprised of Kane County municipal representatives, the RTA, Metra, Pace Suburban Bus, County Transportation and Land Use staff and other interested individuals.

The Transit Committee acts as the project steering committee for Transit planning efforts.

Transit Committee Meeting Agendas

2010-01-28 Transit Committee Meeting #1 Agenda
2010-04-14 Transit Committee Meeting #2 Agenda
2010-07-22 Transit Committee Meeting #3 Agenda

Meeting Notes

TC#1 Meeting Notes

Public Open House Meetings

April 15, 2010 2040 Transit Plan Open House #1 Meeting Materials
August 9 2010 Open House Boards and Strategy Summary - large file may take a while to download
August 9 2010 Open House Press Release

Public Survey

Provide feedback on the proposed transit system strategy recommendations by participating in a short survey: http://www.surveymonkey.com/s/KaneCoTransitOpenHouse2.

Other Documents

1. Technical Memorandum 1 - Existing Transit Services
2. Technical Memorandum 2 - Transit Market Analysis
3. Technical Memorandum 3 - Transit Needs Assessment
4. DRAFT Technical Memorandum 4 - System Strategies
5. 8-4-2010 DRAFT Technical Memorandum 5 - Recommended System Strategies
6. 8-4-2010 DRAFT Technical Memorandum 6 - Funding Strategies

Kane County's 2040 Transit Plan Project Website, http://www.co.kane.il.us/dot/planning/2040TransitPlan.aspx

EXISTING TRANSIT SERVICES

As part of the Regional Transportation Authority's (RTA) six-county region, Kane County is served by both regional and local public transportation services. Pace and Metra provide most public transit services in Kane County under RTA oversight. This section provides a brief overview of transportation services and facilities in the County.

This section summarizes Technical Memorandum #1, Existing Transit Services, which is included as Appendix C. The memorandum was developed using the most recent data available at the time it was written.

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Pace Fixed-Route Bus Service

Pace operates 217 bus routes serving 240 communities in the RTA six-county region, including 23 fixed-route buses within Kane County. Service is focused around the Elgin and Aurora Transportation Centers (TCs) with relatively low-frequency service provided along the rest of the Fox Valley. All routes serving Kane County, except Route 803, serve either one of these two transportation centers. Both TCs allow transfers to Metra commuter rail and Greyhound buses, however there is no direct transit connection between the two transportation centers.

Most routes operate between 12 and 14 hours a day from Monday through Saturday and provide 30 to 60 minute frequencies of service. Most routes serving the City of Elgin provide service as often as every 30 minutes. Routes serving Aurora typically operate every 40 minutes or longer on weekdays, and some routes serving the west side of Aurora operate every hour or more on Saturdays. Routes 801 and 802, which connect the Geneva Metra Station with the Elgin and Aurora Transportation Centers, respectively, operate every 50 minutes during peak hours; Route 801 operates every 90 minutes or longer outside of peak hours and on Saturdays. There is no late evening (after 9:30 pm) or Sunday service on any route. Figure 3 describes all Pace bus routes serving Kane County, including frequencies, service hours, and average ridership on weekdays and Saturdays.

All fixed-route buses are wheelchair accessible and equipped with bike racks. The one-way fare is $1.75 for the general public and $0.85 for youth and people with disabilities. Seniors aged 65 or older may ride free through the RTA's Seniors Ride Free program. People with disabilities (age 16 or older) who meet income eligibility requirements can also ride free with an RTA Circuit permit. Passengers with a Metra monthly pass can purchase a Link-Up pass for $39, which allows them to ride Pace and CTA on limited days and times. Discounted passes are available for students and commuters.

Figure 4 shows the Pace route network with the level of daily weekday boardings at points along the routes. The highest ridership is concentrated at the downtown Elgin and Aurora Transportation Centers. Figure 5 identifies the ten stop locations with the highest boarding activity and the routes that serve each location. Besides the two transportation centers, these locations include destinations in the Upper Fox Valley, the Geneva Metra Station, and the Naperville Metra Station and Westfield Fox Valley Mall in DuPage County. It should be noted that there may be multiple individual stops within close proximity due to the "flag stop" operation on most Pace routes, where passengers can flag down a bus or request a stop anywhere along the route where it is safe to do so.

Long-Term Ridership Trends

Overall, Pace ridership in Kane County increased by 12% between August 2004 and August 2009. Figure 6 shows the change in daily ridership by route over this period. Of the 23 routes serving Kane County, 12 routes experienced increases in ridership. Route 907 doubled its ridership. Route 530, connecting Aurora and Naperville, had the highest net gain, an increase of 263 riders. In contrast, ridership declined on eight routes. Route 528 had the largest reduction (38%); Pace eliminated Saturday service on this route in February 2010.

Pace fixed-route bus service in Kane County is focused around the Elgin and Aurora Transportation Centers and provides relatively low-frequency service along the Fox Valley. Routes 801 and 802 (shown above) connect the Geneva Metra Station with the Elgin and Aurora Transportation Centers, respectively, operating every 50 minutes during peak hours.

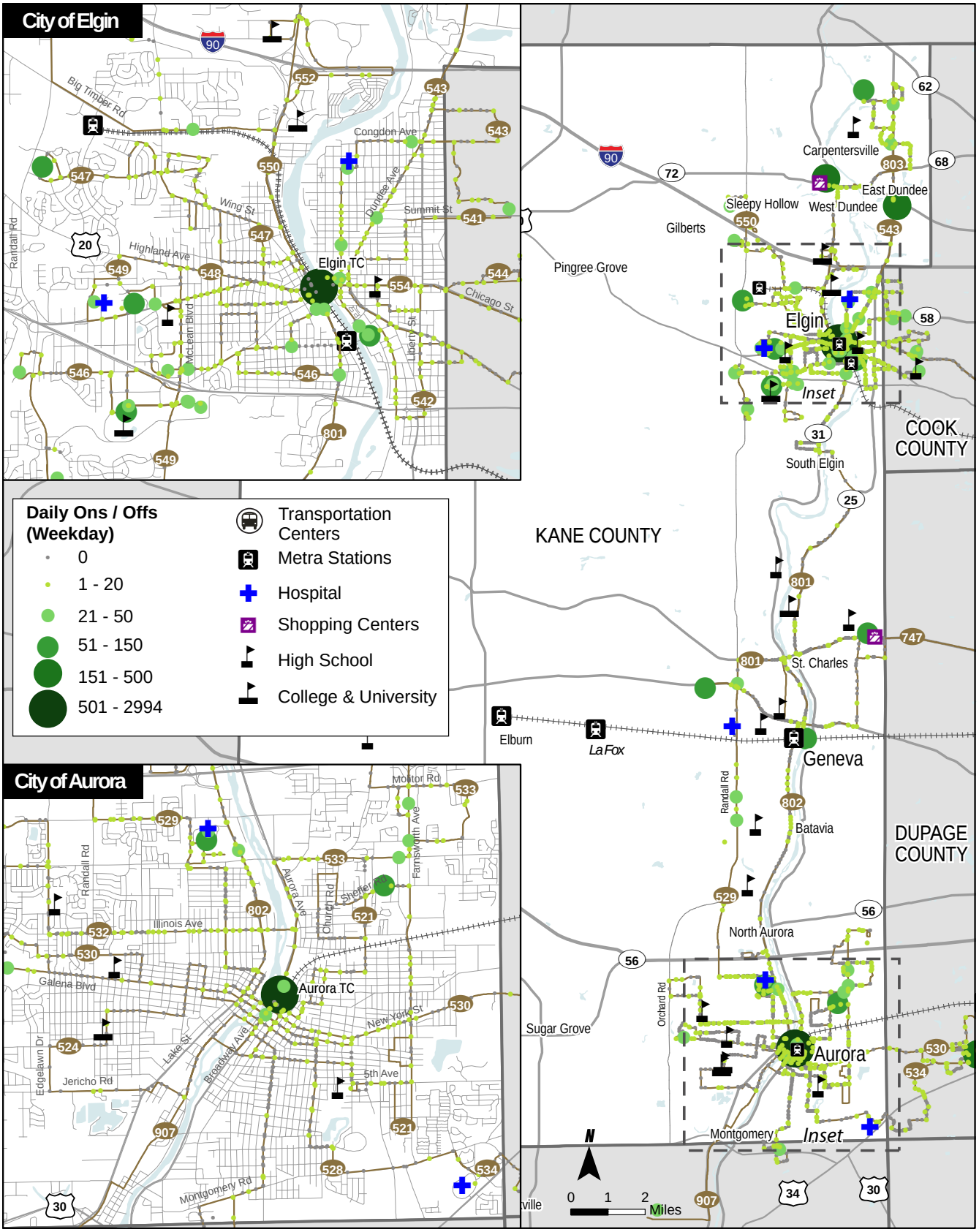
Source: Nelson\Nygaard

Figure 3 Pace Fixed Bus Routes Serving Kane County

Route	Route name	Communities Served	Hubs / Metra Stations Served	Base Frequency (min.)	Peak Frequency (min.)	Weekday Service Hours	Average Weekday Daily Ridership [1]	Saturday Frequency (min.)	Saturday Service Hours	Average Saturday Daily Ridership [1]
521	East Circulator	Aurora	Aurora TC / Metra	40	40	6:00 am - 6:00 pm	328	40	7:30 am - 5:30 pm	131
524	West Aurora Circulator	Aurora	Aurora TC / Metra	40	40	6:00 am - 6:00 pm	146	80	7:30 am - 5:30 pm	63
528	Aurora TC - Rush-Copley Med Ctr	Aurora, Montgomery	Aurora TC / Metra	40	40	6:00 am - 6:00 pm	119	Service cut (Feb 2010)		61
529	Randall Road - 5th Street	Aurora, Batavia, Geneva	Aurora TC / Metra	1 hr	1 hr	6:00 am - 9:30 pm	412	1 hr	7:30 am - 9:30 pm	194
530	West Galena-Westfield Fox Valley Ctr	Aurora, Naperville	Aurora TC / Metra, Naperville Metra	30	30	6:00 am - 9:15 pm	756	30	7:00 am - 9:15 pm	608
532	Illinois Avenue	Aurora	Aurora TC / Metra	40	40	6:00 am - 6:00 pm	140	80	8:00 am - 5:00 pm	44
533	Molitor	Aurora	Aurora TC / Metra	40	40	6:00 am - 6:00 pm	221	40	7:30 am - 5:30 pm	152
534	Fox Valley Villages / Rt 59 Metra Station	Aurora	Route 59 Metra	None	Peak only	AM / PM peak hours only	68	None	None	NA
541	Northeast Elgin	Elgin	Elgin TC / Metra	30	30	6:00 am - 8:30 pm	302	30	7:15 am - 6:30 pm	176
542	Bluff City	Elgin	Elgin TC / Metra	30	30	6:00 am - 8:30 pm	282	30	7:30 am - 6:30 pm	200
543	Dundee-Carpentersville	Carpentersville, East Dundee, Elgin	Elgin TC / Metra	1 hr	30	6:00 am - 7:45 pm	256	1 hr	7:45 am - 6:30 pm	183
544	Chicago Street	Elgin	Elgin TC / Metra	30	30	6:00 am - 7:30 pm	214	30	7:15 am - 6:00 pm	152
546	Orange-Walnut	Elgin	Elgin Terminal / Metra	30	30	6:00 am - 7:30 pm	303	30	7:30 am - 6:00 pm	206
547	Wing Park	Elgin	Elgin Terminal / Metra	30	30	6:00 am - 7:30 pm	315	30	7:15 am - 6:00 pm	226
548	Highland	Elgin	Elgin TC / Metra	30	30	6:00 am - 7:30 pm	315	30	7:15 am - 6:00 pm	131
549	South Randall	Elgin	Elgin TC / Metra	1 hr	30	6:30 am - 8:30 pm	337	1 hr	7:30 am - 6:30 pm	187
550	Big Timber - North Randall	Elgin, Sleepy Hollow	Elgin Terminal / Metra	1 hr	30	6:30 am - 7:00 pm	151	None	None	NA
552	North State - Spring Hill Mall	Elgin, West Dundee	Elgin Terminal / Metra	30	30	6:00 am - 8:30 pm	332	30	7:15 am - 7:00 pm	331
554	Elgin - Woodfield	Elgin, Hoffman Estates, Schaumburg, Streamwood	Elgin TC / Metra, Northwest TC	None	Peak only	AM / PM peak hours only	102	None	None	NA
801	Elgin-Geneva	Elgin, Geneva	Elgin Terminal / Metra	90	50	8:15 am - 7:00 pm	64	100	9:00 am - 5:00 pm	75
802	Aurora-St. Charles	Aurora, Batavia, Geneva, North Aurora, St Charles	Aurora TC, Geneva Metra	50	50	5:30 am - 8:30 pm	194	50	7:15 am - 7:00 pm	183
803	Carpentersville Local	Carpentersville, East Dundee, West Dundee	None	1 hr	30	5:30 am - 9:30 pm	312	30	7:00 am - 6:30 pm	278
907	Oswego- Aurora Metra Shuttle	Aurora, Oswego	Aurora TC , Oswego P&R	None	Peak only	AM / PM peak hours only	294	None	None	NA
							5,963			3,581

[1] Average Ridership is based on January - July, 2009

Figure 4 Pace Route Network and Weekday Daily Boardings/Alightings, October 2009



Nelson|Nygaard consulting associates

Source: Pace, Kane County, Illinois DOT

Figure 5 Top 10 Major Pace Destinations in 2009 (October, Weekday)

Stops	Pace Routes Serving the Stop	Weekday Daily Ridership		
		Boardings	Alightings	Total
Elgin TC	541, 542, 543, 544, 546, 547, 548, 549, 550, 552, 554, 801	1,396	1,598	2,994
Aurora TC	521, 524, 528, 529, 530, 532, 533, 802	424	441	865
Spring Hill Mall	552, 803	145	134	279
Westfield Fox Valley Shopping Mall *	530	88	137	225
Walmart (East Dundee)	543, 803	113	87	200
Fox View Apartments	803	66	72	138
Lyle / Grandstand	548	60	65	125
Naperville Metra station*	530	62	60	122
Second / Elgin C. College	549	62	51	113
Geneva Metra station	801, 802	34	38	72

* Westfield Fox Valley Shopping Mall and Naperville Metra station are located outside of Kane County.

Data Source: Pace

Figure 6 Pace Daily Ridership by Route from 2004 to 2009 (Weekday, August)

Route #	Pace Route Name	2004	2009	% Change
907	Oswego - Aurora Metra Shuttle	46	100	117%
529*	Randall Road - 5th Street	215	414	93%
530	West Galena-Westfield Fox Valley Shopping Mall	516	779	51%
554	Elgin - Woodfield	110	143	30%
802	Aurora-St. Charles	254	316	24%
550	Big Timber - North Randall	139	161	16%
549	South Randall	306	339	11%
521	East Circulator	216	236	9%
534	Fox Valley Villages / Rt 59 Metra Station	57	59	4%
547	Wing Park	327	339	4%
533	Molitor	202	206	2%
801	Elgin-Geneva	211	216	2%
524	West Aurora Circulator	137	137	0%
546	Orange-Walnut	312	313	0%
548	Highland	302	302	0%
552	North State - Spring Hill Mall	404	370	-8%
541	Northeast Elgin	331	297	-10%
542	Bluff City	342	301	-12%
803	Carpentersville Local	357	306	-14%
544	Chicago Street	257	215	-16%
543	Dundee-Carpentersville	348	287	-18%
532	Illinois Avenue	179	142	-21%
528	Aurora Transportation Center - Rush-Copley Med. Ctr.	213	131	-38%
TOTAL		**6,396**	**7,177**	**12%**

* A service adjustment extended Route 529 to Aurora TC in October 2005.

Data Source: Regional Transportation Asset Management System

Metra Commuter Rail

Metra operates 11 commuter rail lines in the RTA six-county region, connecting downtown Chicago with suburban communities. Kane County is served by three of the lines and seven stations in the county, with over 6,000 weekday boardings. As shown in Figure 7, Metra commuter rail service runs every 15 to 30 minutes, depending on the station, during peak hours. The service operates every hour midday. Weekend service runs less often, with a service frequency of one hour or more. Metra operates every day, except at the Big Timber Road station where Sunday service is not provided. Fares are based on distance and one-way fares range from $2 to $8.

Figure 8 shows Metra lines and stations along with daily ridership.

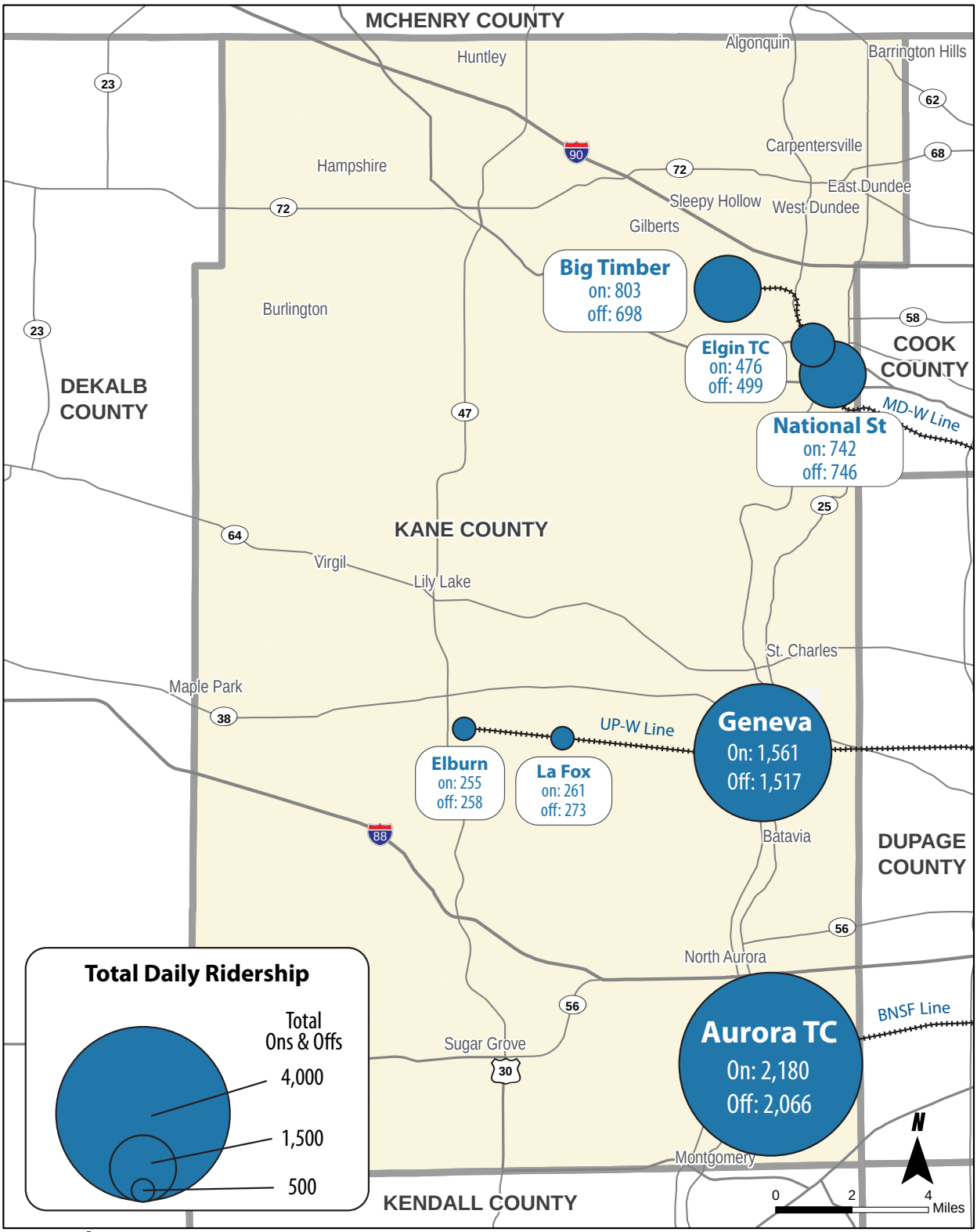
Three Metra lines connect Kane County to Cook and DuPage counties, and downtown Chicago. There are stations in Elgin, Geneva, Aurora, La Fox and Elburn (shown above).

Source: Nelson\Nygaard

Figure 7 Metra Commuter Rail Service Frequency by Metra Station

Metra Line	Metra Station	Service Frequency			Service Hours
		Weekday Midday	Weekday Peak	Weekend	
MD-W Line	National St	1 hr	20 min	1 hr in AM / 2 hrs in PM	4:30 AM – 2:00 AM (Mon – Fri) / 6:00 AM – 2:00 AM (Sat – Sun)
	Elgin TC	1 hr	20 min	1 hr in AM / 2 hrs in PM	4:30 Am – 2:00 AM (Mon – Fri) / 6:00 AM – 2:00 AM (Sat – Sun)
	Big Timber Rd	1 hr	30 min	None	5:30 AM – 2:00 AM (Mon – Fri)
UP-W Line	Geneva	1 hr	20 min	2 hrs	5:30 AM – 2:00 AM (Mon – Fri) / 6:30 AM – 2:00 AM (Sat – Sun)
	La Fox	1 hr	30 min	2 hrs	
	Elburn	1 hr	30 min	2 hrs	
BNSF Line	Aurora TC	1 hr	15 min	1 hr in AM / 2 hrs in PM	4:30 AM – 2:00 AM (Mon – Fri) / 5:30 AM – 2:00 AM (Sat – Sun)

Figure 8 Metra Weekday Daily Boardings/Alightings, Fall 2006



Source: Metra, Kane County

Nelson|Nygaard consulting associates

Pace ADA Paratransit Service

As required by the Americans with Disabilities Act of 1990 (ADA), Pace provides ADA paratransit service within ¾-mile of fixed-route services[1] during the same hours that the fixed-route service operates, using 19- and 23-foot lift-equipped vehicles. To use the service, riders must obtain a permit through the RTA's ADA Paratransit Certification program and schedule a trip the previous day. The one-way fare is $3.00, and one registered personal care attendant can ride free. Subscription service is also available for regular trips, subject to a waiting list.

Pace Paratransit vehicles serve individuals who are unable to use fixed-route bus service, within a ¾-mile of fixed bus routes.

Source: Nelson\Nygaard

Ride in Kane Service

The Kane County Paratransit Coordinating Council and Pace launched the Ride in Kane dial-a-ride program in 2008 to improve coordination among dial-a-ride services within the county. Initial funding for the program came from federal grants. Pace has funding and service agreements with cities, townships and non-profit agencies to provide services to seniors, low-income populations and people with disabilities. Sponsors are required to contribute at least 50% local matching funds to finance the program, not including fare revenue. As of December 2009, 18 sponsors provide services through this program. As of July 2009 there were over 3,400 registered users, an increase of 18% from January 2009, and Ride in Kane provided over 8,000 trips per month. About 58% of trips are for work purposes while nearly 20% are medical trips. Services are coordinated at a central call center operated and maintained by Pace. Fares are $3.00 for a one-way ride for the first 10 miles and $1.50 per additional mile. The total operating cost in 2009 was $2.4 million.

1 Express, or intercity, services that operate "closed-door" between long distance stops are not required to provide complementary paratransit service.

Pace Vanpool Program

Pace provides a variety of vanpool services under its Vanpool Incentive Program (VIP), described below. As of 2009, there were 30 vans in use in Kane County.

- **Traditional Vanpool Program** provides a van for commuters who share similar work locations and schedules. A monthly fee per participant covers all costs including fuel, tolls, maintenance, and insurance. For example, the cost is $85 per month per rider for seven to eight employees traveling less than 20 miles. Of the 23 such vans in use in Kane County as of 2009, 12 vans travel to Kane worksites while 11 vans bring Kane workers to sites outside of the County.
- **Metra Feeder Program** provides a van to travel to and from a Metra Station. Participants pay $58 per month, but parking and Metra fares are not included.
- **Employer (Corporate) Shuttle Program** provides vans to employers to transport their employees to worksites from nearby transit stops. Participating employers pay for the van rental and supply a driver. There is a discounted rate for non-profit agencies.
- **Advantage Program** leases vans to non-profit organizations and agencies that offer transportation to people with disabilities for travel to workplaces or rehabilitation centers, when their clients are not able to use regular ADA paratransit service or live outside of the ADA service area.
- **Municipal Vanpool Program** provides vans to municipalities or not-for-profit agencies to provide community-based services. Pace charges a monthly fee of $100 in addition to a $1,000 security deposit per vehicle. Municipalities pay for all operating costs including fuel, insurance, and maintenance, which differentiates this program from other Pace vanpool programs.

Pace's vanpool program provides vehicles ranging from minivans to conversion vans for different uses, such as the Metra station feeder shown above.

Source: Pace, http://www.pacebus.com/sub/vanpool/van_types.asp

Other Transportation Services

Private companies and organizations also provide transportation services. These include:

- **Go Airport Shuttle** (Continental Airport Express) provides door-to-door shuttle services to and from the Chicago O'Hare International Airport, with a one-way fare of $50 or more.
- **Delnor Hospital** operates Delnor Health Ride, a free shuttle service to and from Delnor Hospital facilities in Geneva and St Charles.
- **Greyhound** buses stop at the Elgin and Aurora transportation centers and provide interstate travel options to Kane County residents.
- **Amtrak** serves the Naperville Transportation Center, served by Pace Route 534 from Aurora.

Other services include limousines, taxis, and non-emergency medical transportation providers.

Private providers, such as the taxicabs shown at the Aurora Transportation Center, can serve important transportation connections, particularly at Metra stations outside of Pace service hours.

Source: Nelson\Nygaard

Transportation Facilities

Bus Stops and Amenities

On most Pace bus routes, buses can be flagged down by passengers anywhere along the route and make stops by request at locations where it is safe to do so. Two routes with posted bus stops are Route 529 on Randall Road between Sullivan Road and the Judicial Center and Route 530 between Aurora Avenue / West Street and Metra Naperville station. Bus shelters may be installed at high-volume bus stops[2] and both shelters and amenities such as lighting and benches typically rely on private funding. Pace has a bus shelter maintenance program, called "Adopt-a-Shelter," where a volunteer can pick a shelter to "adopt" from available shelters listed on the Pace's website in exchange for 10-ride tickets on a monthly basis.

Amenities are limited even along transit corridors that have posted bus stops, including parts of Randall Road.

Source: Kane County

Transportation Centers

There are two transportation centers in Kane County. Both of these transfer locations connect Pace bus routes with Metra commuter rail and Greyhound bus services.

- **Aurora Transportation Center (ATC) / Metra Station:** The ATC is located on N. Broadway Street east of the Fox River in downtown Aurora and is served by eight Pace bus routes. There are four parking lots adjacent to the station, providing a total of 1,290 parking spaces, with a parking fee of $1.50 per day. These lots were at capacity with 97% of spaces occupied on weekdays, based on a 2008 parking study.[3]
- **Elgin Transportation Center / Metra Station:** This facility is located on Chicago Street in downtown Elgin. This TC is served by 11 Pace bus routes. A total of 476 parking spaces are provided at the Elgin Metra station, with a parking fee of $1.50 per day. A parking count conducted in 2008 showed that 98% of the parking spaces were occupied on weekdays.[4]

2 The Pace Development Guidelines (1999; currently being updated) provide general guidance on the provision of amenities at busier stops. A high volume bus stop is determined by Pace staff on a case by case basis based on variables such as service frequency, ridership, and pedestrian links.

3 Regional Transportation Asset Management System, http://www.rtams.org/rtams/asset?id=51210380

4 Regional Transportation Asset Management System, http://www.rtams.org/rtams/asset?id=51212366

Park-and-Ride Facilities

The fixed-route bus system in Kane County does not have dedicated park-and-ride facilities. However parking is available at or adjacent to the Aurora and Elgin Transportation Centers as well as the other Metra station areas in Kane County. Figure 9 shows parking utilization at these facilities in 2008. Parking is free at the Geneva station, while there is a daily charge of between $1.25 to $1.50 elsewhere.

Figure 9 Metra Station Parking Utilization, 2008

Routes	Station	Daily Fee	Capacity	Utilization Rate in 2008
MD-W Line	National St	$1.50	567	87%
	Elgin TC	$1.50	147	98%
	Big Timber Rd	$1.50	692	82%
Union Pacific / West Line	Geneva	N/A	1,008	100%
	La Fox	$1.50	301	79%
	Elburn	$1.25	294	73%
BNSF Line	Aurora TC	$1.50	1,290	97%

Transit Operating Costs and Funding Sources

Sales tax receipts (state and regional) and transit fares cover most of the cost of operating transit service in the Chicago region, including Kane County. Figure 10 lists the operating cost for each of the regional public transit services in Kane County, along with each revenue or funding source. With the exception of the Ride in Kane program, these costs are for the entire service area, not just Kane County.

Figure 10 Transit Operating Cost Summary

Service	Pace Bus[1]	Pace ADA Paratransit	Pace Vanpool	Ride in Kane[2]	Metra[3]
Budget Item / Year	**2008**	**2008**	**2008**	**2008**	**2009***
Net Operating Cost	$172.0M	$107.6M	$3.9M	$2.4M	$603M
Fare Revenues	$28.4M	$7.9M	$3.8M	$0.7M	$326M
Sales Tax Revenue	$91.6M	$99.7M			$265M
Other Revenues	$29.0M		$0.1M		$109M
Local Matching Funds	$14.6M			$1.7M	
Federal Funds	$7.1M			$1.6M	

* Projected

Notes: (1) $1.3M operating deficit; (2) Local match consists of Pace contributions, sponsors' contributions, and other local funding sources, but does not include fare revenues; numbers do not add to total cost due to rounding; (3) Operating revenues exceed operating costs.

Sources: Pace 2010 Annual Budget Book (November 2009), Pace Staff (Ride in Kane), and Metra 2009 Budget and Program Book. Pace and Metra costs are systemwide.

Regional Bicycle/Pedestrian Trails and Connections

Kane County has an extensive regional trail network, comprised of four primary trails, many developed along former railroad rights-of-way:

- **Fox River Trail.**
- **Great Western Trail** between DeKalb County and the Fox River Trail in St. Charles.
- **Illinois Prairie Path (IPP)**, which splits in Wheaton into the Elgin, Geneva, and Aurora branches and the Batavia spur. All but the Aurora branch connect to the Fox River Trail.
- **Virgil Gilman Trail** between Sugar Grove and the Fox River Trail in Aurora.

Other existing trails include the Fermi Laboratory Trail, linking two branches of the IPP, a Kirk Road sidepath, and Mid-County Trail. Gaps in these trails are among the planned or proposed regional and local trails in the County. St. Charles and Geneva have the most developed local trails and/or bikeways, followed by Algonquin, Elgin, South Elgin, and Aurora.[5] The majority of regional trails are under the jurisdiction of the Kane County Forest Preserve District, while municipalities and park districts are responsible for local trails and portions of the Fox River Trail.

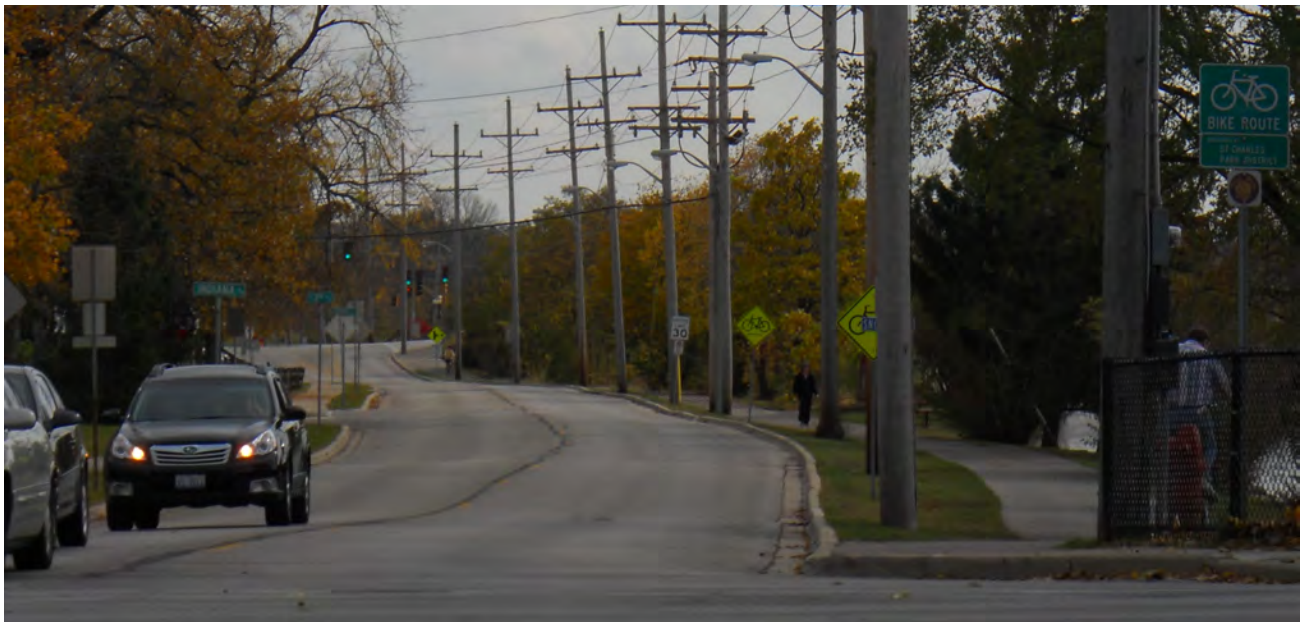
Regional and/or local trail facilities run in close proximity to the Metra Stations in Kane County. The Elgin Station is across the river from the Fox River Trail and has an easily accessible river crossing. The National Street Station in Elgin is also across the river from the Fox River Trail and is within approximately one mile of the IPP Elgin Branch. The Aurora Station is connected to the Fox River Trail and IPP Aurora Branch. The Geneva Station is within two blocks of a local trail, connecting to the Fox River Trail.[6]

Bicycle - Transit Integration

Metra stations have bicycle racks and all Pace buses are equipped with front bicycle carriers that can hold two bikes. Metra stations have bicycle racks and bicycles are allowed on-board Metra trains, with restrictions during peak hours.

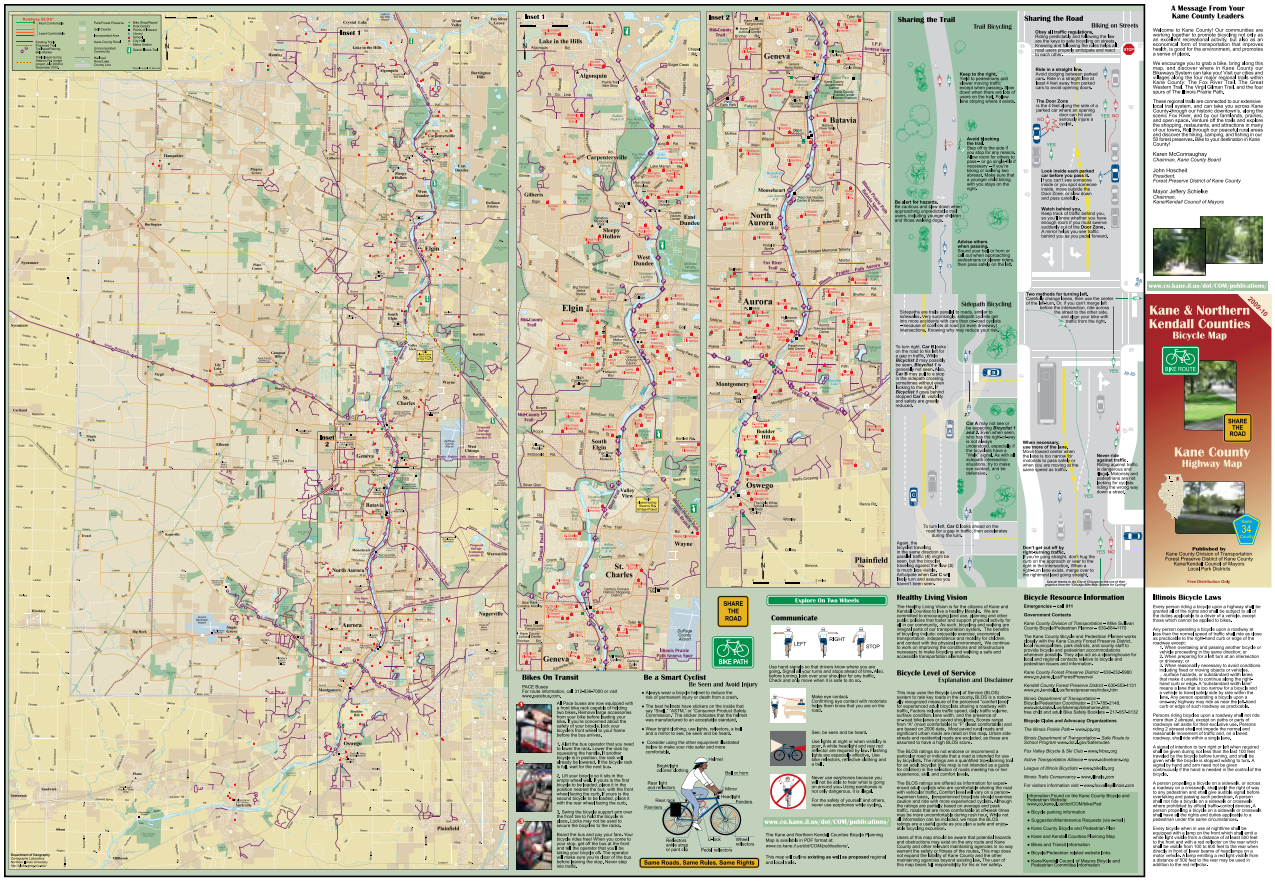
5 Kane County Bicycle and Pedestrian Plan, 2002

6 Kane County Bicycle and Pedestrian Plan, 2002



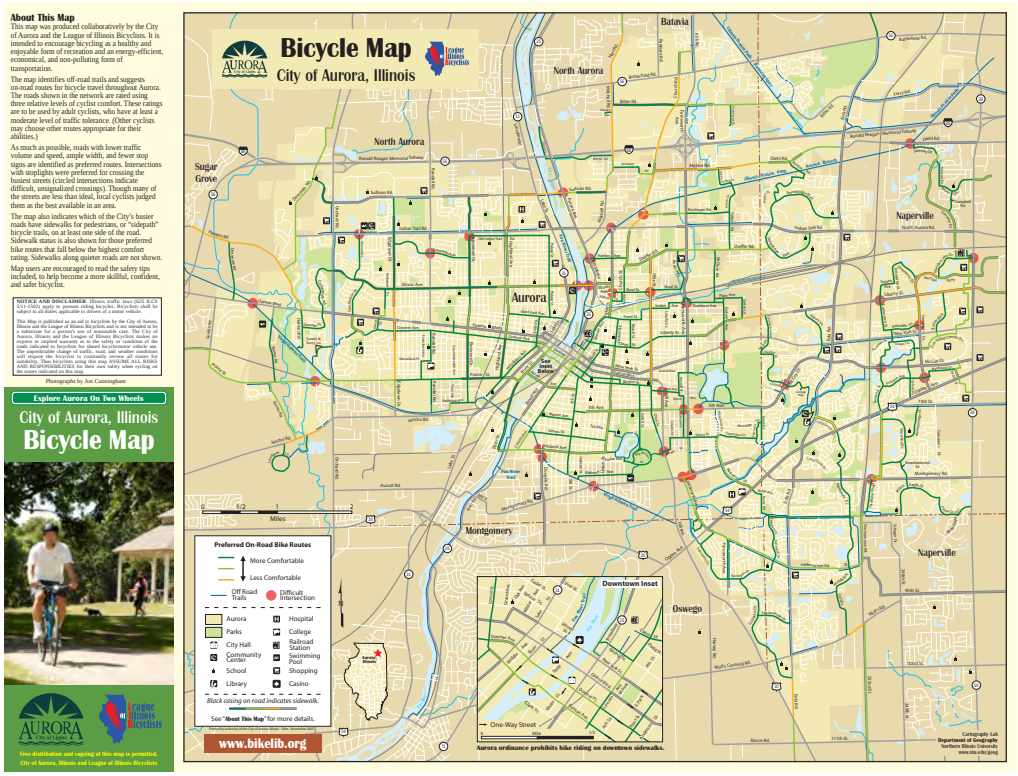
This separated path along Riverside Avenue (IL 25) through St. Charles, part of the Fox River Trail, provides a bicycle and pedestrian route that could be used to access the Geneva Metra Station, an approximately 3 mile trip from downtown St. Charles.

Source: Nelson\Nygaard



The Kane and Northern Kendall Counties Bicycle Map shows existing and planned trails, and provides information about using the bicycle racks on Pace buses. A planning map available from the County also shows proposed and conceptual trails.

Source: http://www.co.kane.il.us/dot/COM/PUBLICATIONS/



A local bicycle map for Aurora, produced by the City and the League of Illinois Bicyclists, shows trails and on-street bicycle routes, as well as the presence of sidewalks and difficult intersections. The Fox River Trail and Illinois Prairie Path (IPP) serve the Aurora Transportation Center (ATC) from the north while on-street routes connect to ATC from the Virgil Gilman Trail to the south.

Source: http://www.aurora-il.org/documents/planning/map_bicycle.pdf

TRANSIT MARKETS

The market for transit in Kane County is driven by the aggregate need to travel to and from major activity centers; the type of services that are provided and who they serve; how well those services meet travel needs; and the conditions that dictate individual travel choices. This section provides a picture of transit markets in Kane County both now and in the future.

This section summarizes Technical Memorandum #2, Market Analysis, which is included as Appendix D. The memorandum was developed using the most recent data available at the time it was written.

County Profile

Kane County is comprised of 16 townships and 28 municipalities and extends about 30 miles north to south and 18 miles east to west. Its 522 square mile land area consists of three principal land use areas – an urbanized corridor along the Fox River on the east side of the county and transitions to agricultural uses and rural villages on the western side. Kane County is located about 30 miles west of Chicago and is one of six counties that form a "collar" around Chicago. The County is becoming increasingly sub-urbanized as Chicago suburban expansion moves past the established Fox River communities into new residential subdivisions in formerly rural communities in the central part of the county. Kane County's attractions include its commuting proximity to downtown Chicago and surrounding suburban job centers, high quality-of-life, and relatively affordable housing market.[1] The County's population can be characterized as affluent, heavily reliant on the automobile for transportation, and like other areas nationwide, the percentage of residents age 65 and older is rapidly increasing.

Demographic Profile

Kane County has a population of nearly 500,000 people, according to the American Community Survey 3-year estimate for 2006-2008. The County's two largest cities, Aurora and Elgin, comprise nearly 57% of its population.

Figure 11 provides population data and lists key demographic groups that have a greater propensity to use transit. People in these groups are more likely to be transit-dependent—because they may be unable to drive or may lack access to an automobile. With the exception of youth, these groups comprise smaller shares of the County's population than the regional, state and national averages.

Population age 65 and older: Older adults tend to be more frequent users of public transportation because they may be unable to drive their own personal vehicle, choose not to drive for some or all trips, or no longer have access to a vehicle. Over 41,000 Kane County residents, or nearly 8.5% of the population, were age 65 and older, on average from 2006-2008.

As in other parts of the nation, the population of older adults in Kane County is growing and is forecast to grow dramatically as the baby boom generation turns 65 starting in 2011. As shown in Figure 12, the population age 65 and older in Kane County

1 Kane County Land Resource Management Plan, 2004

Figure 11 Basic Population Characteristics

Area	Total Population	% Persons Aged 65+	% Persons w/ a Disability	% Below Poverty Level	% HH without a Vehicle	% Youth (Under 18)
United States	301,237,703	12.6%	12.1%	13.2%	8.8%	24.5%
Illinois	12,829,014	12.1%	10.3%	12.1%	10.1%	24.8%
Chicago Metro Area	9,502,094	10.9%	9.5%	11.6%	11.5%	25.8%
Kane County	497,667	8.4%	7.5%	8.4%	4.5%	29.5%
Aurora	175,074	6.2%	8.2%	11.3%	5.4%	30.8%
Elgin	107,027	7.7%	8.2%	10.9%	5.5%	28.5%

Sources: 2006-2008 American Community Survey 3-Year Estimates. Poverty based on population for whom poverty status is determined. Disability from 2008 American Community Survey 1-Year Estimate, based on Civilian Non-Institutionalized Population. Vehicle availability is for percentage of households (HH), 2006-2008.

Figure 12 Kane County Projected Population Change, 2000-2030

Age Group	2000	2010	2020	2030	Change 2000-2030
Overall	404,834	516,914	630,563	679,403	68%
65 and older	34,038	46,618	74,699	106,115	212%
% 65 and older	8.4%	9.0%	11.8%	15.6%	-

Source: Illinois Department of Commerce and Economic Opportunity (DCEO),

is projected to grow by 212% between 2000 and 2030. In 2030, this segment of the population is projected to comprise nearly 16% of the population, up from about 9% (2010).

Persons with disabilities: Individuals with disabilities also tend to have a significant need for public transit services and often rely on public transportation for everyday travel and/or commute needs. In 2008, nearly 38,000 residents or 7.5% of Kane County's population had one or more disabilities.

Low income households: Low-income people tend to be more frequent users of public transit, including users of transit for commuting purposes. The Census Bureau considers a person to be in poverty if their family's income is below a threshold based on family size and the ages of family members. Over 41,000 people or nearly 8.5% of Kane County's population were below the poverty level (as measured between 2006 and 2008).

Households without access to a vehicle: Households that do not have access to a vehicle may not have the means of owning a vehicle, may be unable to drive, or, particularly in urban areas, may choose not to own a vehicle. Nearly 7,500 Kane County households (4.5%) do not have a vehicle available.

Youth, under age 18: Older youth under the age of 18 may use local transit services if they are unable or unwilling to drive themselves or are unable to obtain a ride. In general, their trips are more likely to be located within the community where they live. Kane County has a relatively large youth population, with nearly 30% of the population under age 18.

Distribution of Transit-dependent Populations

Figure 13 illustrates the geographic distribution of transit-dependent populations in Kane County, based on an index of transit-dependency determined using 2000 Census data.[2] The map shows that the greatest concentrations of transit-dependent populations are located not only in the Aurora and Elgin areas. There are also moderate-to-high levels of transit-dependency in the Upper Fox Valley, South Elgin, Tri-Cities area (St. Charles, Geneva, and Batavia), and North Aurora. Huntley has a high concentration of older adults (25%), comprising over 5,000 people (although it is not apparent on the map due to its large Census block groups and thus relatively low densities).

2 Calculated based on the combined densities of older adults, persons with disabilities, and low-income residents using 2000 U.S. Census data for each Census block group. Although it is nearly 10 years old, data from the 2000 U.S. Census is the best available data source for identifying the density and distribution of transit-dependent populations at the more detailed census block group level.

Economy

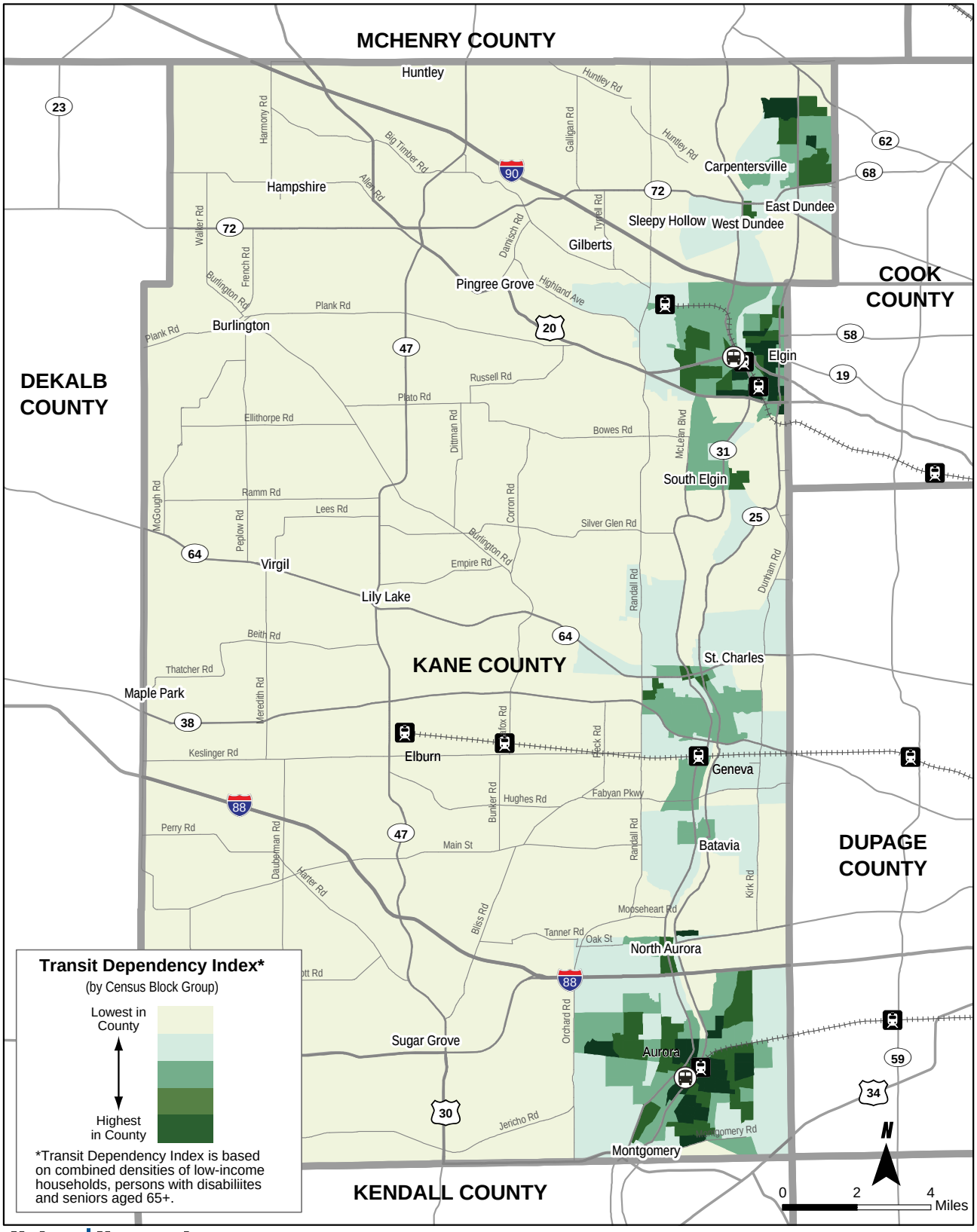
About 85% of Kane County employment is in the private sector, with about a quarter of private sector jobs in goods-producing sectors such as manufacturing and about three-quarters in service sectors such as health care and retail trade. The goods-producing sector, particularly manufacturing, has been gradually declining as a share of the local economy even before the recent economic downturn. Kane County's land availability and relatively low land prices have made it attractive for companies already located in Kane County or migrating from Cook or DuPage Counties. Most of the county's commercial development has traditionally been located in the downtown communities and along urban arterials of municipalities (Geneva, Aurora, Elgin and St. Charles) along the Fox River. More recently, a significant focus of commercial activity has shifted to the Randall / Orchard Road corridor, and to a much lesser extent along IL 47. In addition, industrial parks have been developed along the major transportation corridors including the I-88 (Aurora) and I-90 (Elgin) tollways.

According to 2006 data from the Illinois Department of Employment Security (IDES), 75% of jobs in Kane County are concentrated in the following five sectors, listed in order of number of people employed in the County:

- **Educational and Health Services**, with nearly 44,000 jobs, includes a number of medical centers, the Illinois Department of Human Services, and several colleges and universities.
- **Retail/Wholesale Trade, Transportation, and Utilities** includes over 1,300 retail establishments that provide over 20,000 jobs and comprise both large stores such as Walmart, Target, and Meijer and many smaller retailers located throughout the county. More than 1,000 wholesale establishments provide over 10,000 jobs.
- **Manufacturing** provides nearly 35,000 jobs, including durable goods such as electronic equipment, industrial parts, and metal fabrication – companies such as Dukane Corp. and SKF USA.
- **Professional and Business Services**, with nearly 33,000 jobs, includes Fermi Lab, the largest employer in the county.
- **Leisure and Hospitality** employs nearly 20,000 people and includes the Hollywood and Grand Victoria Casinos.

Professional/Business Services, Education/Health, and Leisure/Hospitality are the three fastest growing sectors, while Manufacturing is declining in size. Figure 14 provides a breakdown of all of the employment sectors in Kane County.

Figure 13 Transit Dependency Index Map



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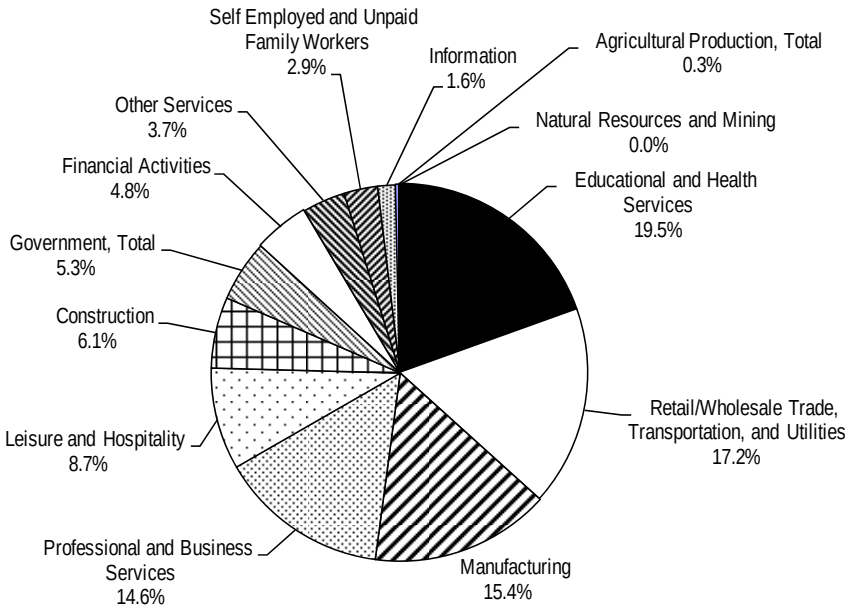
Source: Kane County, ESRI, Census 2000

Figure 14 Kane County Employment by Sector, 2006



Source: Illinois Department of Employment Security, 2006

Even major institutions that are good opportunities for transit (Delnor Hospital, top) and relatively dense concentrations of employment (Kirk Road at Fabyan Parkway, bottom) that are deeply setback from the roadway and lack good pedestrian access are challenging to serve efficiently with transit.

Source: Nelson\Nygaard. Aerial photo from Kane County.

Employment Centers

Employment centers in Kane County are generally clustered north-south along the Fox Valley and east-west along major transportation corridors. Concentrations of particular note are:

- Around the I-90 corridor, including a large cluster of office/industrial parks near the Big Timber Road Metra station (also the site of the new Sherman Hospital facility), along IL 72 east of the tollway, and along Randall Road;
- In the Tri-Cities area, including along the Kirk Road corridor between IL 64 and I-88, Fabyan Parkway in Batavia, Keslinger Road as far west as Elburn, and Randall Road; and
- Along the I-88/IL 56 corridors in North Aurora and near Sugar Grove, and between Orchard Road and IL 31.

However, even in these relatively concentrated employment areas, there is no transit service along corridors such as Big Timber Road and IL 72 west of Randall Road, and along Kirk Road and Fabyan Parkway near Batavia. Land use, as shown in the images at left, is one challenge to providing fixed-route service efficiently on these corridors.

Commute Travel Behavior and Patterns

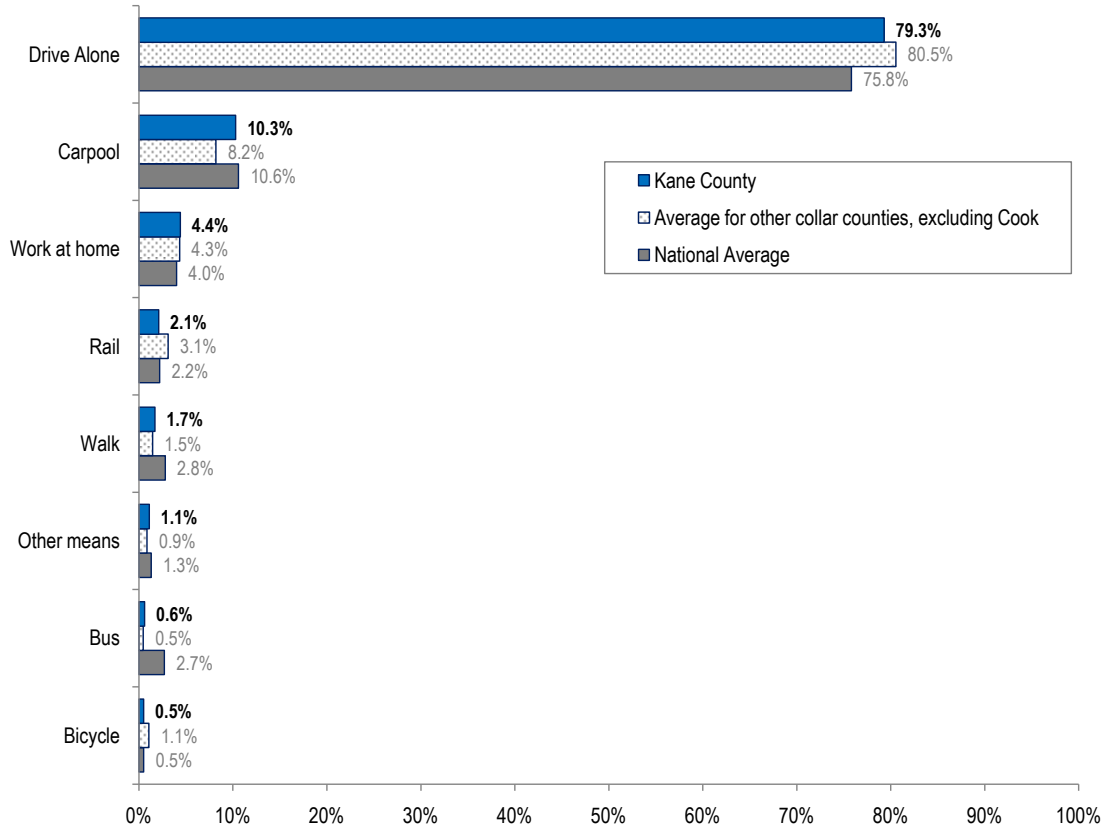
Data from the U.S. Census shows that Kane County residents are highly dependent on the automobile for travel to work. Figure 15 shows the means of transportation (mode share) for Kane County residents who travel to work, in relation to the average for the other "collar" counties (excluding Cook County), as measured between 2006 and 2008:

- **Drive Alone:** about 79% of Kane County residents drive alone to work, the third highest rate among the collar counties and about 3.5 percentage points higher than the national average.
- **Carpool:** Over 10% of residents carpool to work, higher than the other counties and nearly equal to the national average.
- **Public Transportation:** A combined 2.7% of residents take public transportation to work, of which slightly more than 2% or about 4,900 people ride a train (nearly 5% of Aurora residents) and just 0.6% or about 1,600 people ride the bus. The rail mode share is the lowest of the other counties. Bus usage is comparable to the other counties but about two percentage points below the national average.
- **Non-Motorized Transportation:** About 1.7% of residents walk to work (including 2.6% in Elgin) and 0.5% commute by bicycle. The rate of walking is slightly higher but the rate of bicycling about half that of the other counties.
- **Work from Home:** Over 4% of residents work from home, similar to the other counties.
- **Other Means of Transportation:** Other forms of transportation, including taxicab and motorcycle, are used by slightly more than 1% of residents.

Based on Journey-to-Work data from the 2000 U.S. Census, there were 193,000 Kane County residents 16 and older who worked. County residents comprised over 61% of the workers in Kane County and 56% of County residents worked in Kane County. Most of the Kane County residents who commuted outside of the County worked in Cook and DuPage Counties – about 18% each.

About twice as many Kane County residents commute to work in Cook and DuPage Counties as reverse commute into Kane County from those counties. Of these 68,000 reverse commuters, over 18,000 live in Cook County and nearly 17,000 live in DuPage County. About 13,000 reverse commuters live in Lake, McHenry, or Will Counties and nearly 19,000 live outside of the six-county region.

Figure 15 Means of Transportation to Work, Average 2006-2008



Notes: (1) Percentage of workers sixteen and older. (2) Other means includes taxicab and motorcycle.
(3) Collar county average includes DuPage, Kendall, Lake, McHenry, Kendall, and Will. Counties but excludes Cook County.

Source: 2006-2008 American Community Survey, 3-Year Estimates.

Future Trends

Projected Population and Employment Growth

Recently updated 2040 population and employment projections developed by Kane County for the 2040 Transportation Plan were also used for the LRTP. As shown in Figure 16, over the next 30 years (2009 to 2040) Kane County is projected to grow by over 100,000 households (58%), nearly 300,000 people (57%), and over 100,000 jobs (41%). These rates of growth are slower than the County's earlier projections, used in developing its 2030 Transportation Plan.

Figure 16 Population and Employment Projections

	2009	2040	Change	% Change
Households	172,855	273,830	100,975	58%
Population	512,599	804,546	291,947	57%
Employment	261,770	368,494	106,724	41%

Source: Kane County

Population and Employment Density and Distribution

The distribution and density of population and employment are two of the most important determinants of demand for public transportation services. In general, high concentrations of both population and employment density translate into a higher demand for transit service. The left and right panes of Figure 17 illustrate the concentrations of population and jobs in the county for 2009 and 2040, based on Kane County projections. The color-coded key in the legend of each map shows the range of population density on the vertical axis and the range of employment density on the horizontal axis:

- Yellow shaded areas on the map denote areas with the highest population density, up to about 26 persons per acre in 2009 and about 52 persons per acre in 2040, but low employment density
- Blue shading identifies areas with the highest employment density, up to about 73 jobs per acre in 2009 and nearly 85 jobs per acre in 2040, but low population density
- Green shading (yellow + blue) shows where combined population and employment densities are/will be highest

Not surprisingly, densities are higher in the urbanized areas of the county along the Fox Valley and particularly in both Aurora and Elgin. In 2009, the Fox Valley municipalities all have some higher density areas around their downtown core, primarily surrounded by employment areas. Intensified densities are projected by 2040, including along parts of Randall Road near Aurora, the Tri-Cities area, and Elgin. The 2040 map also shows increased residential densities west of Randall Road in the Elgin area and in/near Huntley, Hampshire, Pingree Grove, and Sugar Grove.

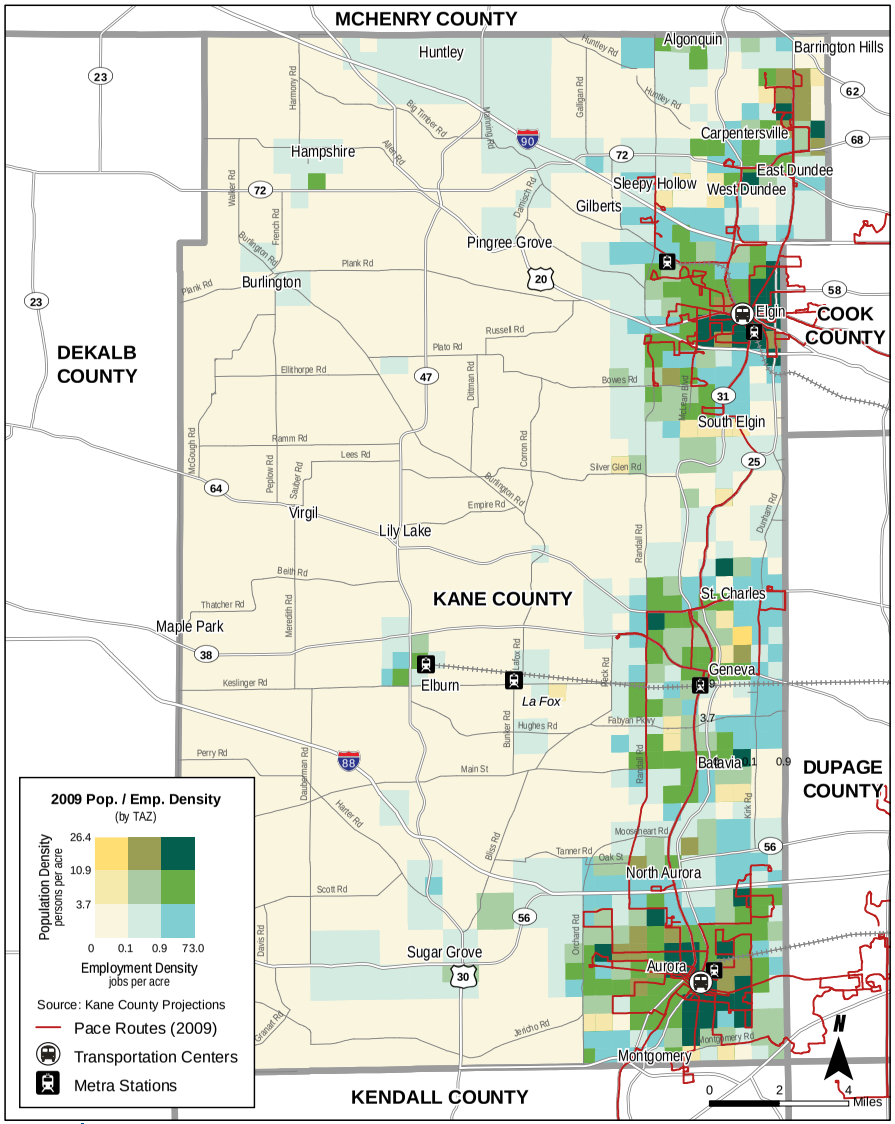
Focus Areas for Planned Growth

The County's conceptual vision for land use is described in the 2030 Land Resource Management Plan, which anticipated the need to accommodate 50% of population growth in the Fox Valley Urban Corridor and the remaining 50% of growth in the "Critical Growth Area" located west of the urban corridor. The County anticipated that meeting these growth targets would allow 50% of the County's land area to be preserved in the Agricultural/Rural Village area and open space. Figure 18, based on projections used in developing the County's 2030 Transportation Plan, lists the projected share of land area and population in each area by 2030 as well as the recommended land use and development strategies.

The 2030 Transportation Plan projected that the largest population growth through 2020 would occur in the Gilberts and Huntley area and that employment growth would be strongest in northern Kane County, mainly along U.S. 20 and I-90. Although the latest projections for the 2040 Transportation Plan indicate that the rate of growth has been lower than anticipated, growth generally appears to be occurring consistently with the County's land use plan, through infill in the Urban Corridor and in/around the Priority Places in the Critical Growth Area. This can be seen in the 2009 and 2040 population and employment density maps in Figure 17.

Figure 17 Current and Future Population and Employment Maps

2009



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2040 Projected

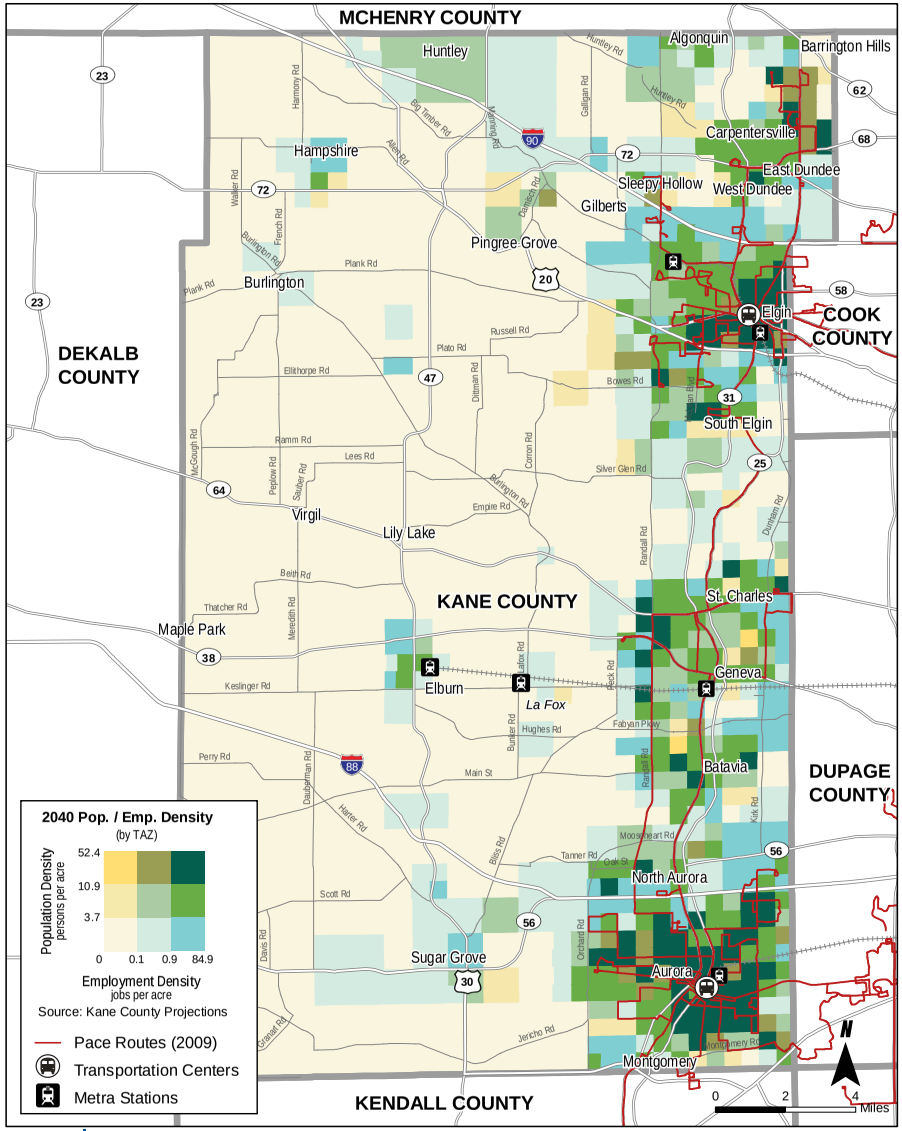

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Figure 18 2030 Land Resource Management Plan Strategy Areas

Strategy Area [1]	Geographic Location	2030 LRMP Strategies	2030 % of Kane County Land Area	2030 % of Kane County Population
Urban Corridor	Eastern part of the county along Fox River	Downtown revitalization, neighborhood preservation, redevelopment, infill	24%	70%
Critical Growth Area	Central part of the county west of Urban Corridor	Smart growth and "priority places"	22%	27%
Agricultural/Rural Village Area	Western part of the county	Preserve farmland and open space	54%	3%

Notes: (1) As part of the 2040 update to the LRMP, the Kane County Regional Planning Commission recently recommended renaming the strategy areas as the Sustainable Urban; Critical Growth; and Agriculture/Food, Farm and Small Town areas (Source: 2040 Conceptual Land Use Strategy report, August 2010).

Source: Kane County 2030 Land Resource Management Plan.

Travel Patterns

Data from the Kane County travel demand model for 2009 and for 2040 was used to assess current and anticipated future travel patterns, as well as evaluate needs for transit service expressed by stakeholders (discussed in the next section). The model classifies trips within Kane County into:

- **Work travel:** between home and work, or "home-based work."
- **Non-work:** between home and other destinations (home-based other) and between different non-home locations (non-home based).

A limitation of the model is that for trips between Kane County and neighboring counties it combines these trip purposes together and with other purposes such as freight. Major travel patterns identified by the model include:

- North-south travel in the Fox River Valley largely between nearby municipalities, with mainly short-to-medium distance trips between adjacent or nearby municipalities, or into McHenry or Kendall counties from nearby communities. These patterns are all projected to intensify by 2040.
- East-west travel patterns using transportation corridors connecting Kane County to adjacent areas of Cook and DuPage Counties, including shorter-distance trips such as between the Aurora and Naperville areas and longer-distance trips such as between the Elgin and Schaumburg areas. By 2040, these travel patterns will intensify and also include travel from the St. Charles-Geneva area to northwest DuPage County.
- For work trips within Kane County there is strong travel demand:
  - Within the Aurora (particularly southeast), Elgin, and Carpentersville areas and secondarily within the St. Charles and Geneva areas; the most significant projected growth by 2040 is within Aurora.
  - In the northern part of the County between Elgin and Upper Fox Valley municipalities (e.g. Carpentersville), with significant growth projected between Elgin and Carpentersville by 2040.
  - In the southern part of Kane County, between Aurora and Batavia, and Aurora and Montgomery. By 2040, moderate growth is projected between Aurora and Batavia as well as between Aurora and Elgin.
- The most significant work travel pattern from central or western Kane County to the Fox Valley is from Huntley to Elgin, with significant growth projected by 2040.
- For non-work travel, the strongest demand is within the Aurora and Elgin areas, followed by the St. Charles-Geneva-Batavia area. There is also travel demand from Hampshire to Huntley and from Sugar Grove to Aurora. By 2040, the most significant growth is within the Huntley area and between Huntley and Elgin. Moderately strong growth is projected within and between the St. Charles-Geneva-Batavia and Aurora areas. Moderate growth is also projected between Elburn and the Geneva-Batavia areas.

TRANSIT NEEDS

The key unmet transit needs for Kane County were identified primarily based on a gap analysis that examined disparities between community public transportation travel requirements and available transit services. The needs assessment was based on the review of existing transit services and supporting infrastructure and demographic and transit market analysis, summarized in the previous sections and included in their entirety as Appendices C and D, as well as stakeholder interviews and feedback from the Transit Committee (included in Appendix B).

The individual needs can be characterized as:

- Gaps between existing transit services and requirements for time-sensitive travel such as work or school commutes;
- Insufficient levels of transit service making public transportation inconvenient relative to automobile travel;
- Missing connections in the public transit network between population centers and major retail/employment centers; and
- Desired transit connections as identified by stakeholders and supported by the Kane County Travel Demand Model.

This section summarizes Technical Memorandum #3, Transit Needs Assessment, which is included as Appendix E. The memorandum was developed using the most recent data available at the time it was written.

Needs Framework and Categories

The needs are not prioritized or excluded based on feasibility (i.e., likelihood of being implemented or funded) but instead are identified within the following broad categories based on when the gaps are most relevant:

- **Current Needs:** Needs that exist today, or will soon be realized, based on existing gaps in service or supporting investments, and constrained by current travel behavior and existing regulatory environments.
- **Future Needs:** Needs that will be realized in future years. These are needs that will result from: expected growth in population and employment along with increases in traffic congestion; the aging of the population; and prospects for major land use developments – all unconstrained by current behavior and policies.

Strategies developed to address current needs are considered short-term (1 to 5 years) while future needs are prioritized into medium-term (6 to 15 years) and long-term (16 to 30 years) planning horizons based on the feasibility of implementation.

The framework has three closely interrelated elements, all necessary to make transit an attractive mode of travel to destinations and to realize the benefits of transit desired by Kane County – increased travel choices, community livability, and congestion relief through reduced vehicle trips.

- **Connections:** Gaps between where Kane County residents need to travel by public transportation and where transit services are available.
- **Level of service:** Gaps between when / how often individuals require transportation and the hours of operation along with the frequency of service for available transit services.
- **Transit-supportive investments and policies:** Needs identified in terms of the requisite funding, supporting infrastructure, land use and transportation policies or programs that are missing (and are achievable in the specified timeframe) to make transit work. These investments and policies are essential to make it feasible to meet the identified connection needs with transit service that is convenient, attractive and cost-effective.

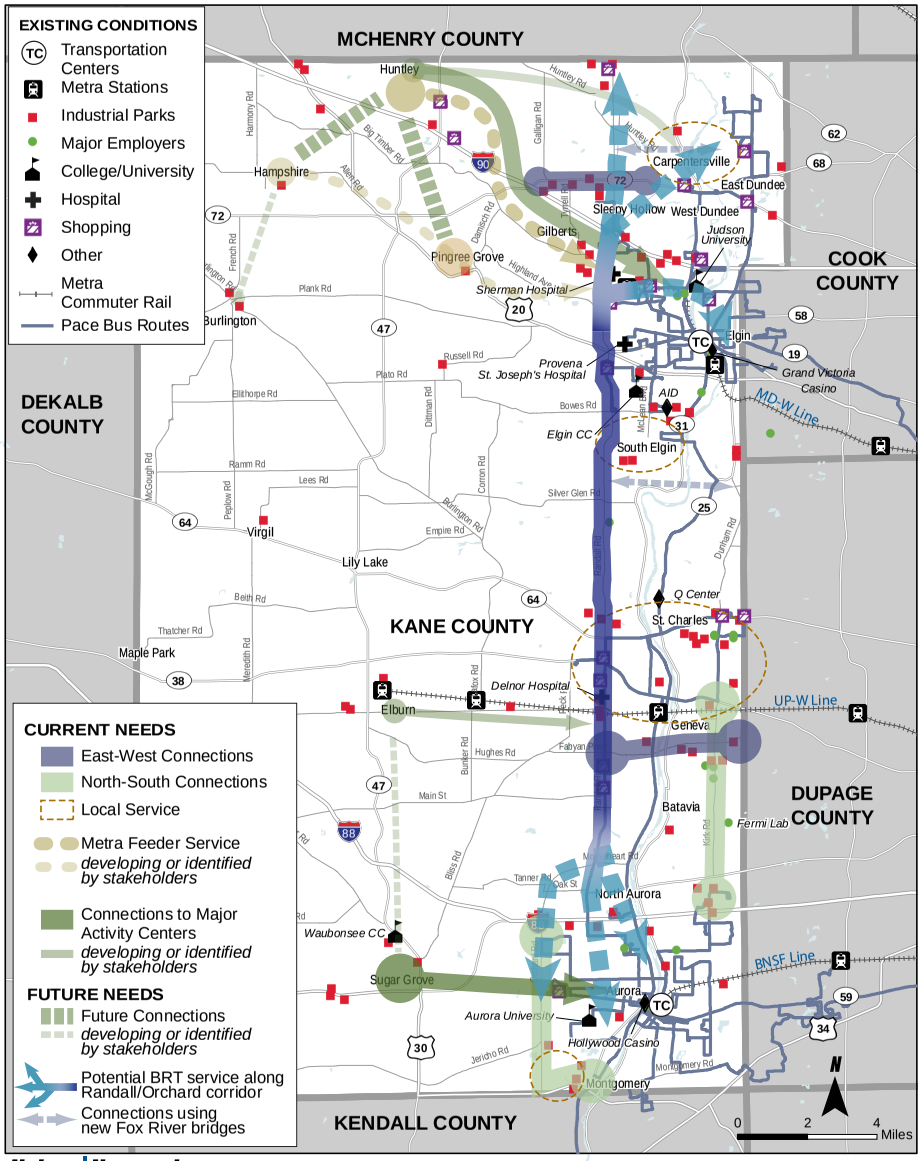
The needs are summarized in Figure 19. The connection needs are illustrated in Figure 20 (within Kane County) and Figure 21 (out-of-county).

Figure 19 Transit Needs Summary

	Current	Future
Connections	• East-west and north-south transit connections within Kane County • Local service extension to growing population and employment centers • East-west and north-south intercounty transit connections • Feeder service to Metra stations • Connections to regional activity centers	• East-west connections to growing population and employment centers in central-west parts of the county • East-west connections using planned new Fox River bridges • Increased intercounty connections • Connections to new Metra stations as possible expansion occurs • Connections to STAR Line (linking to east-west line to O'Hare Airport) • Potential north-south service on IL 47
Level of Service	• Metra: frequency/reliability • Pace bus service: • Hours of service (nights) • Frequency of service • Reliability (schedule adherence) • Off-peak/weekend service	• Local service to meet increased demand • High capacity/quality north-south level of service • Ensure reliability as congestion increases
Transit-supportive Investments and Policies	• Pedestrian access and amenities • Funding for transit • Park-and-ride facilities • Fleet replacement and expansion • Transit-supportive land use planning	• Congestion relief • Transit-supportive development • Increasing transit ridership (marketing) • Park-and-ride facilities • Fleet replacement and expansion • Passenger amenities • Funding for transit

Figure 20 Transit Needs within Kane County – Connections

Type of Transit Need	Specific Needs Identified	Need identified by: KC Travel Demand Model	Need identified by: Stakeholder Input
Current			
East-west transit connections within Kane County	IL 72	X	X
	Fabyan Parkway	X	X
North-south transit connections within Kane County	Kirk Road	X	X
	Orchard Road	X	X
Local service extension to growing population and employment centers.	Carpentersville	X	X
	South Elgin	X	
	St. Charles/Geneva	X	
	Montgomery	X	X
Feeder service to Metra stations (work trips)	Huntley to Elgin	X	X
	Hampshire/Pingree Grove to Elgin		X
	McHenry County	X	X
Connections to regional activity centers (primarily non-work trips)	Huntley to Elgin & Carpentersville	Huntley to Elgin	X
	Elburn to Randall Road		X
	Sugar Grove to Aurora	X	X
Future			
East-west connections to growing population and employment centers in central-west parts of the county	Burlington – Hampshire		X
	Hampshire – Huntley	X	X
East-west connections across the Fox River	Using planned new Fox River bridges	X	X
Connections to new Metra stations as possible expansion occurs	e.g. Montgomery, Sugar Grove, Hampshire, Big Rock, Pingree Grove, Maple Park	Based on overall needs	X
Potential rapid bus service (e.g., BRT) along the Randall Road / Orchard Road corridor	Short to medium-length trips along corridor and from Fox Valley and western County to activity centers along the corridor	X	X
Potential north-south service on IL 47	North County (Huntley - Pingree Grove)	X	X
	South County (Sugar Grove – Elburn)	Developing	



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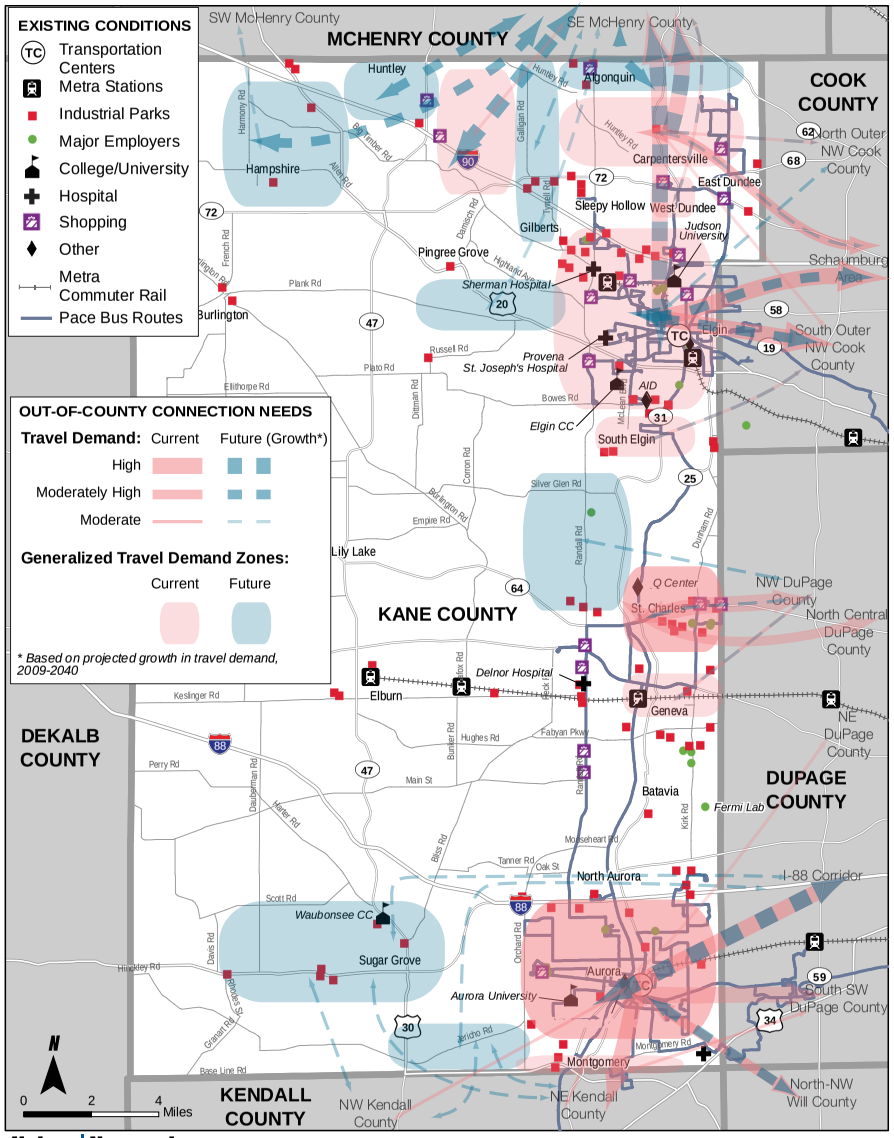
Assessment based on Stakeholder and Transit Committee input and Kane County Travel Demand Model
GIS Data Sources: Kane County, ESRI, 2000 U.S. Census

Figure 21 Out-of-County Transit Needs – Connections

Type of Transit Need	Specific Needs Identified	Need identified by: Kane County Travel Demand Model	Need identified by: Stake-holder Input
Current			
East-west intercounty transit connections	Limited connections to Cook & DuPage Counties	X (growing by 2040)	X
	No direct service to NW Will County	X (growing by 2040)	
	No/limited connecting service to Central Will County	X	
North-south intercounty transit connections	No/limited connecting service to McHenry County	X (Most significant growth by 2040)	X
	No direct service to Kendall County	X (growing by 2040)	X
Future			
Intensified intercounty connections	All current needs except those to central Will County projected to increase	X	
North-south intercounty transit connections	From west of Fox Valley to McHenry/Kendall Counties	X	
Connections to STAR Line to access Will/ DuPage/ Cook Counties and O'Hare Airport	From Fox Valley and Elburn	X	X



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Assessment based on Stakeholder and Transit Committee input and Kane County Travel Demand Model
GIS Data Sources: Kane County, Kane County Economic Development Advisory Board, ESRI, 2000 U.S. Census

STRATEGIC APPROACHES

This section provides a toolkit of strategic approaches for addressing the public transportation needs presented in the previous section. These approaches consist of:

- Transit service strategies to meet the first two categories of needs – providing missing connections and increasing level-of-service (frequency and hours of service); and
- Transit-supportive or non-service strategies to meet the third category of needs, including land use policies, parking policies and practices, and methods for encouraging transit use, ranging from improving marketing to targeting incentives at potential transit users (Transportation Demand Management or TDM).

This section summarizes Technical Memorandum #4, Strategic Approaches, and Technical Memorandum #6, Funding Strategies, which are included as Appendix F and Appendix G, respectively. Each memorandum was developed using the most recent data available at the time it was written.

A central transit-supportive strategy is to enact a Primary Transit Network (PTN) policy – an approach to coordinating transit and land use that entails agreement between municipalities and service providers (Pace) on the corridors where the highest level of transit service is desired and most feasible, and focuses both service and non-service strategies on those corridors

Transit Service Strategies

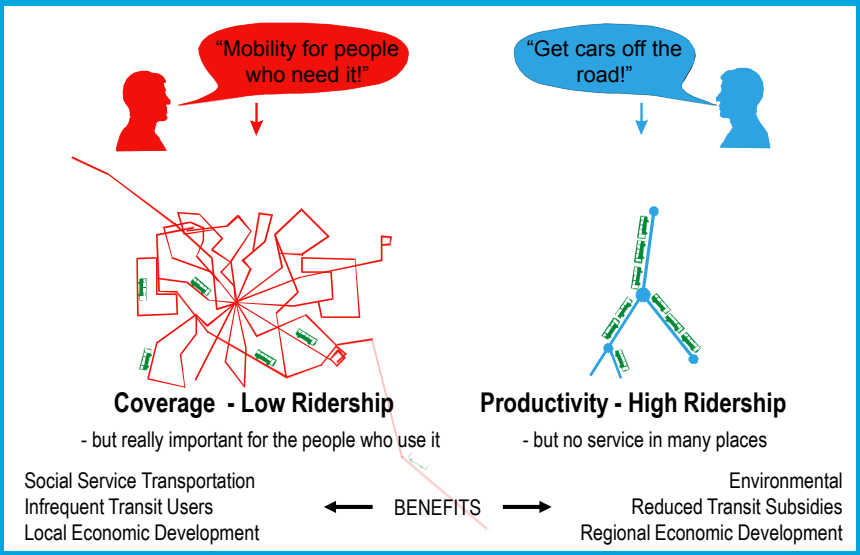
Transit services typically fall into three categories: productivity-oriented, coverage-oriented and commuter-focused, each addressing a particular goal for transit. Productivity (measured in passenger boardings per hour) is a basic measure of how much transportation an agency is providing in the community for its present level of investment. Productive routes provide frequent service that maximizes ridership and offer a convenient alternative to the automobile. Coverage-oriented service provides broad, but relatively infrequent service that has low ridership and productivity. However, coverage plays an important role in ensuring that transit dependent residents have access to key medical, social and other lifeline services. As illustrated in the graphic below, Pace must balance the competing goals of productivity and coverage within the communities that it serves. Finally, commuter-focused services provide transportation to employment sites.

Different types of transit services are typically deployed to meet community transit needs for each of these categories of service. These services range from high- to low-frequency and utilize vehicles ranging from small vans to full-size buses. Figure 22 provides a brief description of each type of service along with typical transit modes (or vehicle types) and operating responsibility.

Shuttles and circulators provide community-based service. The "Hop, Skip, Jump" buses in Boulder (CO) provide a successful circulator service coupled with a branding and marketing strategy, and contrast with the unbranded bus shown on the opposite side of the street. The St. Charles Circulator study is an effort to develop this type of service in Kane County.

Source: Nelson\Nygaard

Coverage-oriented services provide a needed service, but tend to run infrequently and simply cannot compete with the automobile. In turn, this means fewer benefits for the region in terms of air quality and congestion management.



Productivity-oriented services can help a region meet its air quality and congestion mitigation goals and offer an alternative to automobile travel. Although fares pay a higher percentage of costs, these services require a larger number of buses and vehicle operators and are typically the most expensive to operate.

Figure 22 Summary of Service Design Policy Guidelines

Route Type	Service Description	Mode of Service	Operating Entity
Productivity-Oriented Services			
High Frequency Fixed-Route	Frequent (15-miunte or better), fast (limited number of stops), two-way service in densest corridors with quality anchors	Bus (Future Rapid Bus or Rail)	Pace, Metra
Moderate Frequency Urban Local Fixed Route	All-day local service, 30-minute frequency of service	Bus	Pace
Coverage-Oriented Services			
Low Frequency Urban Local Fixed Route	60-minute frequency of service, primarily on weekdays	Bus	Pace or Local Sponsor
Community Shuttle/ Circulator	Local circulation	Bus, Vintage Trolley, Mini-Bus, Van	Local Sponsor
Feeder	Local circulation with connection to regional transportation	Bus, Mini-Bus, Van	Local Sponsor
Flex Bus	Local circulation with optional point-to-point service with curbside pickups/drop offs on demand	Bus, Mini-Bus	Pace or Local Sponsor
On-Demand (Dial-a-Ride)	Point-to-point service with curbside pickups and dropoffs	Mini Bus, Van	Local Sponsor Nonprofit Organization
Special Commuter Services			
Employer/Commuter Rail/Bus	Limited stop services serving one or two primary destinations	Rail, Bus, Commuter Coach	Service Board (Metra, Pace) Local Sponsor Private Provider
Vanpools	Shared ride, driven by one of the passengers, typically to place of employment	Van	Pace[1] Private employers[1] Employees[2]

1 Employee incentives, marketing, and/or program administration.
2 Drive vehicles and cover operating costs.

Supportive Strategies

Supportive or non-service strategies are aimed to meet the identified needs for transit-supportive investments, policies, and programs. These types of strategies aim to increase the propensity to use transit in Kane County communities, building overall demand for transit service and reducing barriers to using public transportation.

Land Use Strategies

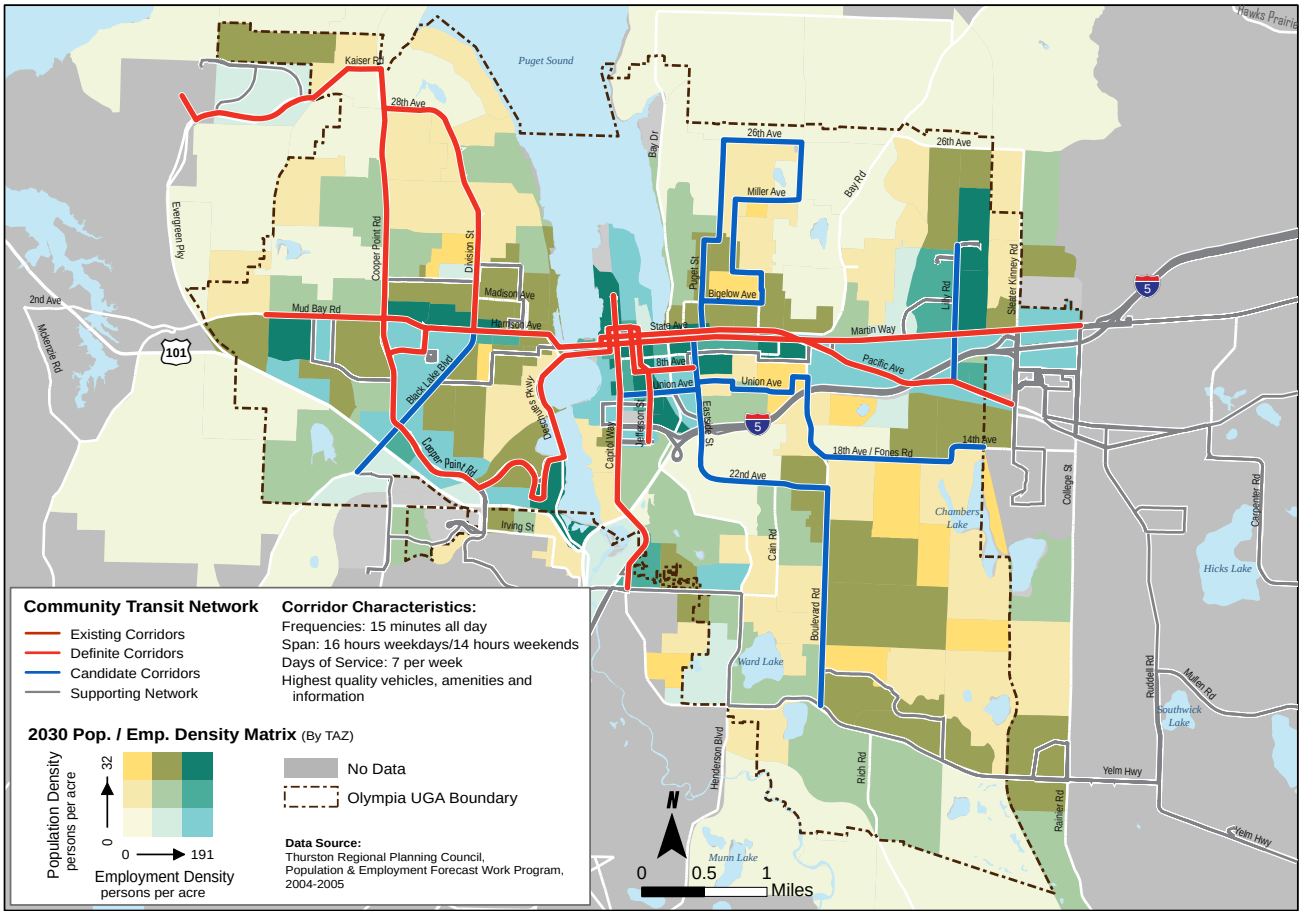
A Primary Transit Network (PTN) and transit-overlay zones are two tools for fostering transit-supportive land use (described in the callout box below) and focusing investments in high-quality transit service and supporting amenities and infrastructure.

Utilize a Primary Transit Network (PTN) Policy to Coordinate Transit and Land Use

A Primary Transit Network (PTN) is a network of transit corridors planned and developed for the greatest transit ridership and community benefit. A PTN is not intended to be a separate route system, but a set of corridors and connections that will form a high-quality network of transit services, no matter how they are served. The PTN is several things at once:

- A joint commitment by the municipalities, Kane County, and Pace to:
  - Protect the operating speed and reliability of transit operations on these corridors;
  - Improve service with a long-term goal of 15-minute frequency all day, and for as much of the evening and weekend as can be afforded; and
  - Market the network as the mobility solution for dense parts of Kane County.

Figure 23 Sample PTN Map



A PTN is not intended to be a route system, but a set of corridors and connections that form a high-quality network of transit services. This sample PTN from Olympia (WA) has the following service attributes:

- Frequency: Every 15 minutes or better all day in the long term
- Span: At least 15 hours a day, 7 days per week
- Speed: No less than 40% of speed limit
- Reliability: Runs on schedule

Source: Nelson\Nygaard. GIS Data Source: Thurston Regional Planning Council, ESRI

- A policy tool to help focus transit-oriented development around corridors where transit can be provided most cost-effectively and to maximize ridership potential. PTN corridors should be selected, in part, for the presence of high-density development and other transit-oriented uses and future development should also be high-density and transit-oriented. Transit-intensive land uses should be encouraged along PTN corridors, but should be discouraged away from the PTN, especially where there is no existing transit service or planned service.
- A basis for prioritizing physical amenities and other capital expenditures within Kane County to protect transit operating speed and reliability, provide visibly distinct amenities, and convey a sense of permanence.
- A foundation for the eventual development of other high frequency modes.

The goal of PTN service is to permit a rich and diverse life to be led relying on PTN service for all transportation. To most effectively reduce dependence on single occupant vehicles, PTN service needs to operate seven days a week, with service hours appropriate to the economic life of the areas served, and with a frequency of service every 15 minutes. This frequency represents a well-established threshold where the psychology of transit use changes: where service is less frequent, passengers must plan their trip around the schedule; at this frequency or above, passengers can go to a stop and expect that service will be along soon. This frequency also permits a more spontaneous connectivity between lines without the need for timed connections. "Voluntary transit dependence," which is much more common than it appears, is a crucial element of the long-term growth of PTN service, and of transit-oriented sustainability in the surrounding community.

Although transit service every 15 minutes should be the goal for PTN corridors, attaining this level of service will be a long-term effort in Kane County. One approach to implementation would be to increase service frequency as allowed by changes in land use patterns, incentives for using transit relative to other modes, perceptions of transit, and funding levels for transit. The strategies described in this section are aimed at helping Kane County bring about these changes.

Enable and Encourage Mixed-Use Development

The separation of uses should not be mandated along transit corridors and mixed-use development should be promoted along targeted transit routes. If developed in a compact and walkable form, the mixing of residential, retail, office and/or commercial activities in close proximity will encourage more pedestrian, bicycle and transit travel. Trips generated by mixed-use development tend to be shorter in distance, helping to lower overall vehicle miles traveled in Kane County.

Encouraging mixed use and moderate-density development along and within walking distance of existing and potential transit corridors will help create population and employment densities that can support higher levels of transit service. The downtowns of Fox Valley municipalities have a walkable urban form with store windows along the sidewalks (as in St. Charles, top) and attractive pedestrian amenities (as in Geneva, bottom).

Sources: Creative Commons, Flickr user Architekt2 (top); Nelson\Nygaard (bottom)

Ensure Transit-Supportive Zoning around Transit Corridors

In addition to promoting mixed uses, zoning codes should not constrain development densities along transit corridors or within areas targeted for Transit Oriented Development (TOD). There is a strong correlation between increases in population and employment densities and the use of transit. Zoning codes should also encourage quality access to commercial buildings by restricting deep building setbacks, away from transit stops and pedestrian paths.

Utilize Development Design Guidelines to Promote Walkable Communities

Local municipalities should encourage safe and dignified pedestrian paths within their built environments. Walking must be safe, comfortable, and appealing – including from trip origins to transit stops and from transit stops to final destinations – if community members are to seek out alternatives to automobile travel. Design guidelines can help promote interesting street-level facades that engage pedestrians whereas long stretches of high, blank walls create uninviting travel routes. The use of tree canopies, architectural features and awnings are other design elements that can be promoted via design guidelines to encourage walking.

Manage the Supply and Demand for Parking

The oversupply of parking is one of the greatest deterrents to the use of alternate modes of travel. Conversely, once the use of transit and pedestrian travel is enabled, limiting the supply of parking can encourage a greater use of non-automobile travel and put the land that would have been dedicated for parking to more productive uses. Figure 24 contrasts a suburban view of parking, typical of most of Kane County today, with a transit-supportive parking environment that has a more urban character.

Transportation options must be in place for the management of parking to be viable. This means that high quality transit service and supportive land uses are needed before parking strategies can be pursued.

Park-and-ride facilities for public transportation should undergo similar scrutiny as part of a strategic transit access plan, aimed at avoiding an oversupply and limiting the number of drivers traveling through congested corridors.

Codify Supportive Strategies in Transit Overlay Zones

Transit-supportive strategies can be embodied in local zoning codes, design guidelines and other development standards. A Transit-Overlay Zone is a coordinated set of regulations to ensure and provide incentives for transit-supportive development around transit corridors. A Transit-Overlay Zone can be adopted by municipalities around Primary Transit Network (PTN) corridors or other areas.

Figure 24 Suburban vs. Transit-Supportive Parking Perspective

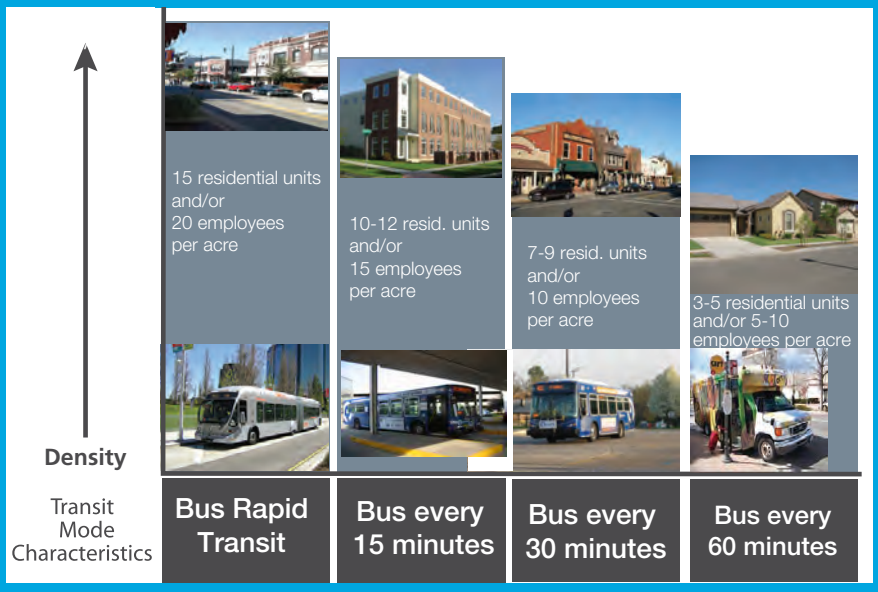
Typical Suburban View of Parking	Transit-Supportive View of Parking
• It is assumed that everyone drives • There is separate parking for each store/building • Parking is free • Parking supply is planned to meet worst case demands (i.e. to handle peak holiday shopping) • The pedestrian environment is difficult to navigate – even between nearby destinations • Streetscapes are oriented to the automobile	• The needs of drivers are balanced with those of transit users and pedestrians • Parking is shared between different uses • People may need to walk a short distance to their final destination (which encourages a vibrant commercial environment) • Demand for parking may be balanced with supply through pricing • Parking does not dominate the streetscape

PRINCIPLES OF TRANSIT-SUPPORTIVE LAND USE

Land use plays a critical role in how much and how often people travel by each available mode – automobile, transit, bicycle or walking. The features of land use and urban form that encourage more compact development and support efficient transit service have come to be known by the shorthand of the "D's," which are described below:

Density: Population and employment by geographic unit (e.g., per square mile, per developed acre).

Figure 25 Land Use and Quality of Transit Service



The graphic above illustrates typical residential or employment densities needed to support frequent transit service along a corridor and to make transit attractive to "choice" riders – who have access to an automobile.

Source: Nelson\Nygaard

Diversity: Mix of land uses, typically residential and commercial development, and a degree of balance in an area.

Design: Neighborhood layout and street characteristics, particularly connectivity, sidewalks and design features that enhance the pedestrian and bicycle friendliness of an area.

Destination accessibility: Ease or convenience of trip destinations from point of origin, often measured in terms of distance from the central business district or other major centers.

Distance to transit: Ease of access to transit from home or work (e.g., bus or rail stop within ¼ – ½ mile of trip origin).

The downtowns of Fox Valley municipalities have many characteristics of the "D's". Shown: downtown St. Charles (left) and Geneva (right)

Source: Nelson\Nygaard

Encourage Transit Use through Programs and Marketing

Transportation Demand Management (TDM) strategies offer people an alternative to automobile travel and are a cost-effective approach to reduce the demand for single-occupant vehicle travel. Below is a general list of typical TDM programs aimed at encouraging transit use:

- **Transit Pass Programs:** Universal or broad-based transit pass programs have proven to be among the most effective policy tools for increasing transit ridership. These passes typically provide unlimited transit rides on local or regional transit providers for a low monthly fee, often absorbed entirely by the employer, school, or developers.
- **Alternative work schedules and telecommuting:** Varying worker shift times and/or allowing employees to work from home shifts travel out of peak periods and reduces the number of work trips. Common alternative work schedule programs include flextime, compressed work weeks, and staggered shifts.
- **Bicycle parking:** Providing secure bicycle parking, lockers, and changing facilities and improving connections between PTN routes and employment centers promote multimodal travel.
- **Guaranteed Ride Home:** Providing a guaranteed ride home in case of emergencies (typically via a taxi voucher), gives a sense of security to those that can walk, bike, rideshare or use transit as their commute mode.
- **Parking management and pricing:** Managing the supply of parking through shared parking programs, "unbundling" the price of parking from building sale or lease costs, regulating and pricing parking facilities, and discounting parking prices for carpools/vanpools can encourage a mode shift away from automobile travel.
- **Commuter financial incentives:** Offering cash incentives is a highly effective way to promote alternative commute options and may include offering employees the option of "cashing out" a subsidized parking space, a travel allowance, transit benefits and/or ride-share benefits. Federal and local programs are available to subsidize many of these financial incentives. The federal tax code allows employers to provide tax-free contributions toward employee transit and vanpool benefits. These "qualified transportation fringe" benefits can be deducted from corporate gross income for purposes of taxation when paid for by an employer. In addition, both the employer and employee save on taxes since neither pays federal income or payroll taxes on these benefits – up to a current limit of $230 per month.

The Eco-Pass program in downtown Boulder (CO), sponsored by the Central Area General Improvement District, provides fully subsidized transit passes to employees and led to double-digit increases in the transit mode share.

Source: Denver Business Journal. http://denver.bizjournals.com/denver/stories/2006/08/21/story3.html

Commuter-oriented bicycle parking can include lockable outdoor storage lockers and racks (shown), indoor racks in under-utilized space in parking garages, and enclosures or rooms provided by employers.

Source: Nelson\Nygaard

Funding Strategies

Many of the improvements recommended in the LRTP will require funding from sources at various levels of government. Transit funding in Kane County comes from federal, state, regional (RTA), and local sources; fares paid by transit passengers; and the private sector. Most funding programs require a local match, typically a minimum of 20% of the total, and typically serve different purposes. Funding needs can be classified into several major categories as described below:

- **Service strategies** will require both operating and capital funding support. Figure 26 lists the primary types of operating and capital funding sources available for different types of service strategies.
  - **Operating funding programs** include both ongoing operations and demonstration projects. In the Chicago region, sales taxes are a major source of transit operating funding and are allocated to service boards such as Pace and Metra to support their operations. Fares are also a significant revenue source. Municipalities (or private employers) may contribute a portion of funding, particularly to match grants supporting operations of new transit services. However, it is important to identify funding sources to sustain new service beyond the initial duration of grants, typically up to two years.
  - **Capital funding programs** are used to pay for transit vehicles, facilities such as bus shelters and transportation hubs, and other infrastructure enhancements such as transit priority at traffic signals or communications equipment. Federal and RTA grants are primarily intended to fund these types of capital expenses. Pace looks to municipal and private sources to support installation of benches and shelters, although it has also partnered with municipalities to use shelter advertising revenues to recoup capital costs and pay for maintenance.
- **Transit-supportive capital infrastructure**, such as sidewalks and bus pullouts, is usually locally-funded. Grants are also available for facilities such as bikeways and trails, from sources such as the Illinois Bike Path Grant and Illinois Transportation Enhancements programs.
- **Planning grants** support transit- and land use-focused planning activities such as Transit-Oriented Development (TOD) plans and transit service implementation assistance. Funding sources for these purposes include the RTA Community Planning and Subregional Planning grant programs and Illinois Tomorrow Corridor Planning grant program.

Pace Employer Commuter Grant Program

Pace has initiated a new program called the Employer Commuter Grant which supports employers who encourage employees to travel to work in the northeastern Illinois region via rideshare or public transportation. These employers are eligible for a grant of up to $20,000 to subsidize a qualified Employee Commuter Program. The Employer Commuter Grant is managed by Pace with funds coming through the Illinois Department of Transportation.

Transportation Funding for Municipalities

In 2010, the Kane/Kendall Council of Mayors compiled a brochure, titled "Transportation Funding Sources for Municipalities," that describes a variety of transportation funding sources. The brochure is available at: http://www.co.kane.il.us/dot/COM/PUBLICATIONS/brochure.pdf

Figure 26 Summary of Service Types and Funding Sources

Route Type	Primary Operating Funding Sources	Primary Capital Funding Sources
Productivity-Oriented Services		
High Frequency Fixed-Route	Fares, Sales Taxes	Federal (FTA 5309/5307)
Moderate Frequency Urban Local Fixed Route	Fares, Sales Taxes, Municipal	Federal (FTA 5309/5307)
Coverage-Oriented Services		
Low Frequency Urban Local Fixed Route	Fares, Sales Taxes, Municipal	Federal (FTA 5309/5307)
Community Shuttle/Circulator	Municipal	RTA (ICE Grant), Pace Vanpool Incentive Program
Feeder	Municipal	RTA (ICE Grant), Federal (FTA JARC), Pace Vanpool Incentive Program,
Flex Bus	Municipal	RTA (ICE Grant), Federal (FTA JARC or New Freedom), Municipal
On-Demand (Dial-a-Ride)	Fares, Municipal, Non-Profits	Federal (FTA 5310 or New Freedom)
Special Commuter Services		
Employer/Commuter Rail/Bus	Fares, Sales Taxes, Public/Private Partnerships	Public/Private Partnerships
Vanpools	Employee/Employer Contributions or Fees[1], Pace Employer Commuter Grant Program	Pace Vanpool Incentive Program

1 For employee incentives, marketing, and/or program administration.

RECOMMENDED STRATEGIES

Drawing on the strategic approaches, this section presents a set of recommended strategies to meet the identified transit needs. Each recommendation includes an implementation time frame, order-of-magnitude cost estimate and suggested responsible parties required for successful implementation. The 12 recommended strategies are organized into two broad categories:

- **Transit Service Strategies (1-6):** These strategies provide missing connections and increase the level of transit service (frequency and hours of service). The types of service include shuttles, feeders, and circulators. The strategies are organized into service provided within the Fox Valley (1-3), connections from western Kane County to the Fox Valley (4-5), and out-of-county service (6).
- **Transit-Supportive Investments and Programs (7-12):** These strategies include capital infrastructure, land use policies, and programs to encourage transit use.

This section summarizes Technical Memorandum #5, Recommended Strategies, which is included as Appendix H. The memorandum was developed using the most recent data available at the time it was written.

Implementation Time Frames

Strategies are categorized into four implementation timeframes – immediate, short, medium, and long-term. The implementation time frames recognize that Pace, along with other public transit providers, has struggled to maintain existing bus routes and has had to cut some services. Strategies to make transit a viable travel option for County residents must recognize these fiscal constraints in the short-term. Figure 27 lists each time frame along with the assumed constraints, including available funding, land use, planning requirements and population/employment growth.

Cost Estimation

Each strategy is assigned a relative operating cost based on an order-of-magnitude cost estimate, corresponding to the following ranges:

- Low: < $50,000
- Medium: $51,000 - $250,000
- High: > $250,000

The description of each strategy identifies whether it would require ADA service to be expanded and provides a qualitative assessment of the cost impact. More detailed operating cost estimates and identified capital costs are included in Appendix H.

Recommended Strategies

Figure 28 summarizes the recommended strategies. The subsequent tables in this section provide details for these strategies. Two maps are also provided to illustrate the service strategies.

Figure 27 Implementation Time Frames

Time Frame	Plan Year	Description
Immediate	First Year (or early short-term)	This time frame identifies strategies that do not require significant capital or operating investments, and primarily relate to policy or marketing. The identified strategies are designed to initiate fundamental shifts in the attitudes towards and perception/understanding of transit in the County.
Short-term	1-5 years	Short-term funding is assumed to be similar to the current level, and significant capital or operating outlays for new services are infeasible. As revenues recover, Pace is likely to restore recent service cuts prior to funding new services.
Medium-term	6-15 years	In the medium-term, additional funds are more likely to be available to support increased service levels and new services. These strategies respond to future transit needs and the travel patterns identified in the Kane County travel demand model. Transit-supportive development and land use patterns will be needed to support transit service.
Long-term	16-30 years	Long-term strategies follow similar assumptions as medium-term strategies, including the future travel patterns predicted by the 2040 travel demand model. This timeframe should also be sufficient to realize substantive land use and traveler behavioral changes.

Pace Municipal Vanpool vehicles (left) could be used by municipalities to develop service to major institutions and services. The same vehicles could be used at complementary times to develop feeder service to Metra stations (right), oriented to commuters. Where demand justifies increased service levels and/or larger vehicles, these services could transition to a fixed-route bus and increased Pace responsibility.

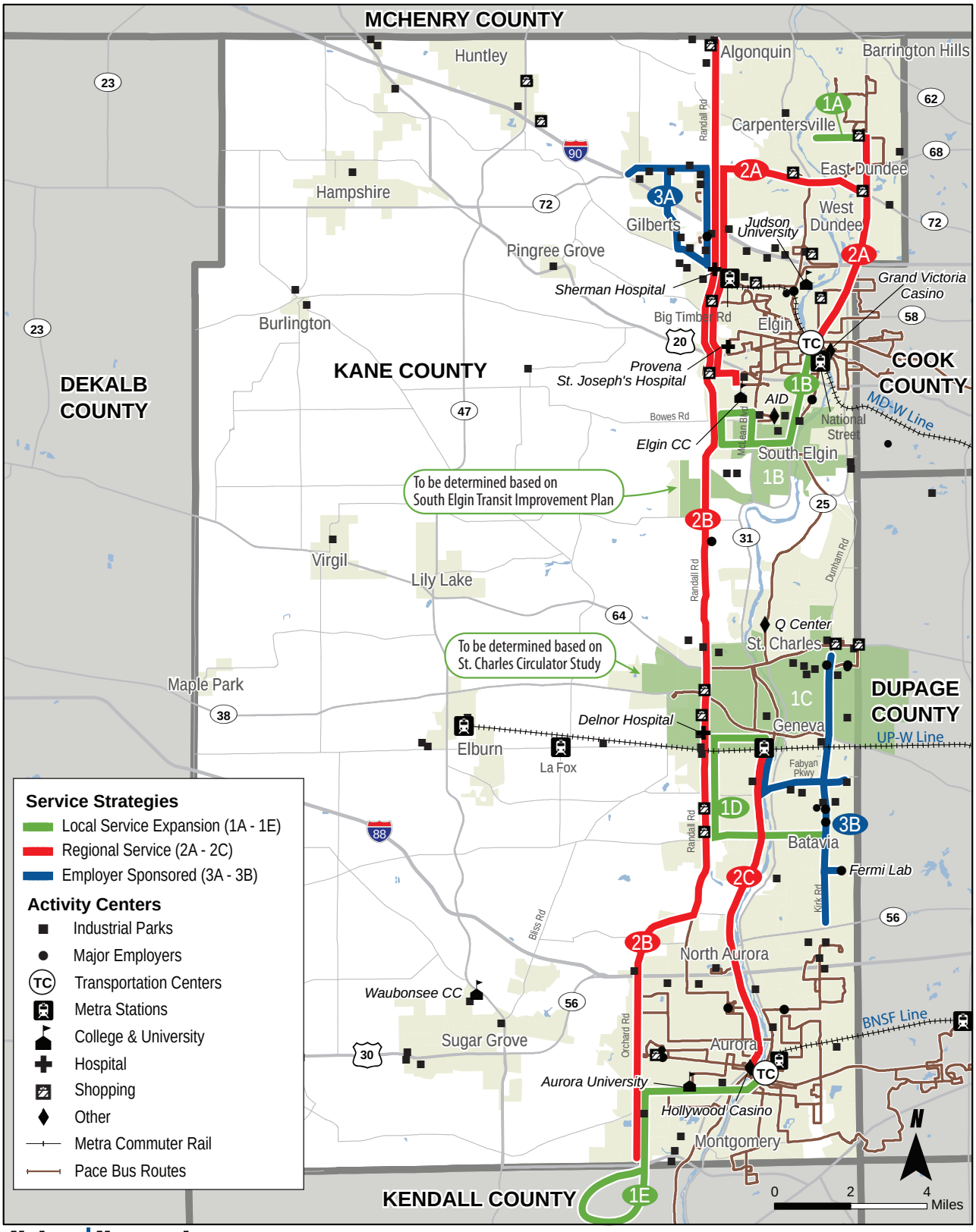
Sources: Pace (left photo); Creative Commons License, Flickr user Michael Bryant (right photo)

Figure 28 Summary of Recommended Strategies

	Strategy	Description
Fox Valley Service Strategies		
1	Expand local service network in growing population/employment centers and improve level-of-service	Expand the local Pace bus service network in areas where population and employment growth may warrant expanding the local service area adjacent to the existing Pace network and/or increasing the level of transit service.
2	Improve/provide regional service in Kane County	Improve or provide regional connections between key destinations or along major corridors in the urbanized parts of Kane County.
3	Develop employer-sponsored transit services in Kane County	Provide employer-sponsored service to major employment areas.
Western Kane County Service Strategies		
4	Provide access to major activity centers in Kane County	Provide connections to major institutions in Kane County, including shopping, medical, and civic institutions, from parts of the County that currently lack fixed-route bus service. These connections would provide limited service aimed at transit-dependent populations, operating a limited number of daily trips up to several days per week.
5	Provide Metra Feeder service	Provide connections to Metra Stations in Kane County from parts of the County that currently lack fixed-route bus service. These connections would provide primarily commuter-oriented weekday peak hour service, with limited midday trips, and would rely on transportation hubs with small park & ride facilities in each origin municipality.
Out-of-County Service Strategy		
6	Provide regional out-of-county bus service	Provide connections to adjacent counties, primarily serving commuter needs, from parts of the County with and without existing fixed-route bus service.
Transit-Supportive Strategies		
7	Improve capital facilities that provide access to transit	Improve and prioritize/coordinate investments in the different types of capital facilities that provide access to transit.
8	Improve access to existing Metra commuter rail stations	Includes programs, policies, and physical access improvements to enable and encourage alternative means to access Metra commuter rail service.
9	Support Metra commuter rail and intercity rail capital expansion plans	Support documented plans to expand Metra commuter rail service along the existing rail infrastructure in Kane County.
10	Transportation-Land Use Coordination	Link planned transit investments and land use policies. It emphasizes identifying transit corridors based not only on current and projected land use, but on creating opportunities for developing around transit.
11	Improve marketing and customer information	Improve the understanding and perception of public transit among Kane County residents and others who work in or visit Kane County.
12	Transportation Demand Management (TDM) Programs	Provide incentives to use transit, including tax benefits and parking incentives.

Service strategies 1-3 address the need to provide missing transit connections and improve level-of-service, i.e. frequency and hours of service. Figure 29 illustrates these strategies.

Figure 29 Service Strategies for Fox Valley (#1, #2, and #3)



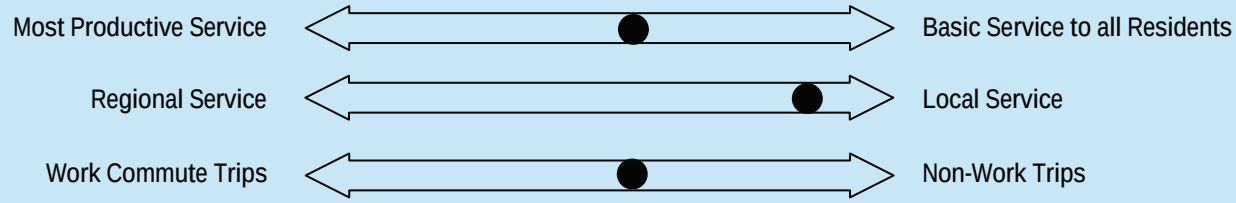
Nelson|Nygaard consulting associates

Source: Kane County

Strategy #1: Expand Local Bus Service

There are areas in the Fox Valley where population and employment growth may warrant expanding the local bus service to areas adjacent to the existing Pace bus network and/or increasing the level of transit service (frequency or service hours). Due to funding constraints, this is a medium- to long-term strategy, i.e. beyond the first five years of the LRTP.

Value Tradeoffs:



Strengths:

- Allows for incremental expansion of existing service.
- Increases the residential population living within walking distance of transit and provides access to additional employment/services destinations.
- Enables primarily shorter-distance trips but may also enable longer connecting trips.
- Provides transit options and also serves transit dependent populations.

Weaknesses:

- Recent service cuts make it unlikely that Pace will have funding to implement these expansions in the short-term.
- Ease-of-implementation depends on a suitable transit environment along identified corridors, e.g. sidewalks, pedestrian crossings, etc.

Strategy Description	Time Frame	Est. Annual Operating Costs	Responsibility
1A. Extend fixed route service to the Old Town Area in Carpentersville.	M	Provided via 2A	Pace[1]
1B. Extend fixed route service coverage and improve frequency in South Elgin.			
(i) Additional service between Elgin and South Elgin along the IL 31 corridor (Route 801) and extend east-west coverage in South Elgin.	M-L	Medium	Pace[1], South Elgin[2]
(ii) Follow recommendations of South Elgin Transit Improvement Plan.	TBD	To be determined	Pace with South Elgin (TBD)
1C. Create St. Charles - Geneva Circulator service. Follow recommendations of the existing circulator study.	M	To be determined	Pace[1], St. Charles/ Geneva[2]
1D. Create Batavia to Geneva transit connection. Provide an east-west connection between Randall Road and IL-31, e.g. using Wilson St. east-west through Batavia.	M	Medium[1]	Pace[1], Batavia/ Geneva[2]
1E. Extend fixed route bus service in Montgomery. Serve developing residential/employment areas in Western Montgomery and include key activity centers along Orchard Road. Strategy would require expanding the complementary ADA service area. Detailed design should coordinate with 5C(ii), Metra Feeder service.	M-L	Medium[1]	Pace[1], Montgomery[2]
1F. Improve service frequencies to 15 minutes as land uses along identified PTN corridors (see 10A) reach transit-supportive levels, building on the existing/ developing urban form in Elgin and Aurora.	M	Not determined	Pace[1]
1G. Provide late evening and weekend service along PTN corridors and/or in transit markets where it is warranted by demand.	L	Not determined	Pace[1]

Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years

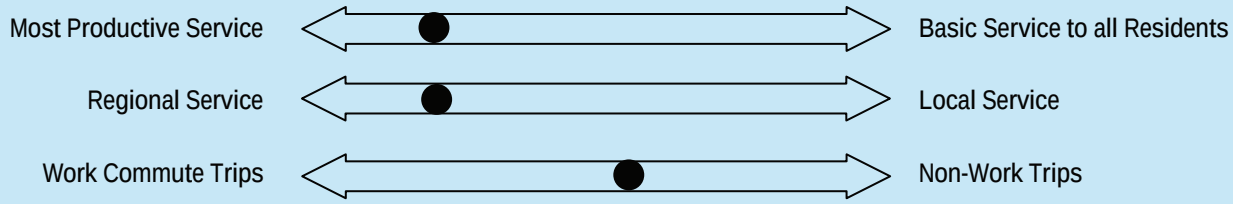
Costs: Low: < $50,000, Medium: $51,000 - $250,000, High: > $250,000. All costs are annual operating costs unless otherwise noted. [1]ADA expansion would increase cost category to "High."

Responsibility: [1]Financial and Operations, [2]Financial Support, [3]Coordination/Support

Strategy #2: Provide New Regional Bus Service

This strategy would improve or provide regional connections between key destinations or along major corridors in the urbanized parts of Kane County such as Randall Road, IL 72, and IL 25/31 This is a medium- to long-term strategy due to funding constraints and necessary changes in land use policy and development patterns to support transit (see Strategy #10).

Value Tradeoffs:



Strengths:

- Enables longer-distance trips within the County.
- Provides transit options and also serves transit dependent populations.

Weaknesses:

- Land use along many major corridors precludes efficient service by fixed route bus service in the short to medium term (in particular large setbacks from the street, lack of pedestrian infrastructure, etc.).
- Efficient regional service requires the presence of transit nodes, which would need to be fostered over the medium- to long-term.

Strategy Description	Time Frame	Est. Annual Operating Costs	Responsibility
2A. Improve service levels and regional connections in the Upper Fox Valley.			
(i) Develop transit service along North Randall Road and IL 72, connecting Upper Fox Valley and Randall Road.	M	High	Pace[1], Carpentersville[2], East/West Dundee[2]
(ii) Improve the frequency of transit service between the Upper Fox Valley and Elgin.	M	Medium	Pace[1] w/ Carpentersville[2], East Dundee[2], Elgin[2]
2B. Create a Randall Road BRT / regional express service, including development of transit nodes, park & ride facilities, etc. Kane County is currently conducting a feasibility study, described on the following page.	L	High[1]	Pace[1], Randall Road Municipalities[2,3], Kane County[3]
2C. Improve service levels on Route 802 along Il 31 between Aurora and the Batavia/Geneva/St. Charles area, including (i) midday service between ATC and Charlestown Mall and (ii) increase in peak frequency to 30 minutes on weekdays	M	(i) Medium (ii) Medium	Pace[1]

Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years
Costs: Low: < $50,000, Medium: $51,000 - $250,000, High: > $250,000. All costs are annual operating costs unless otherwise noted. [1]ADA expansion would result in additional operating costs.
Responsibility: [1]Financial and Operations, [2]Financial Support, [3]Coordination/Support

Increasing Pace fixed-route bus service levels is a medium-to-long term strategy due to the need to develop densities supportive of higher service levels and improve pedestrian conditions, such along Randall Road at IL 64 in St. Charles as shown. The current financial climate further limits application of fixed-route service strategies in the short-term. Expanding service coverage into new areas requires expanding the ADA paratransit service area, to within a 3/4 mile distance of fixed-route bus routes.

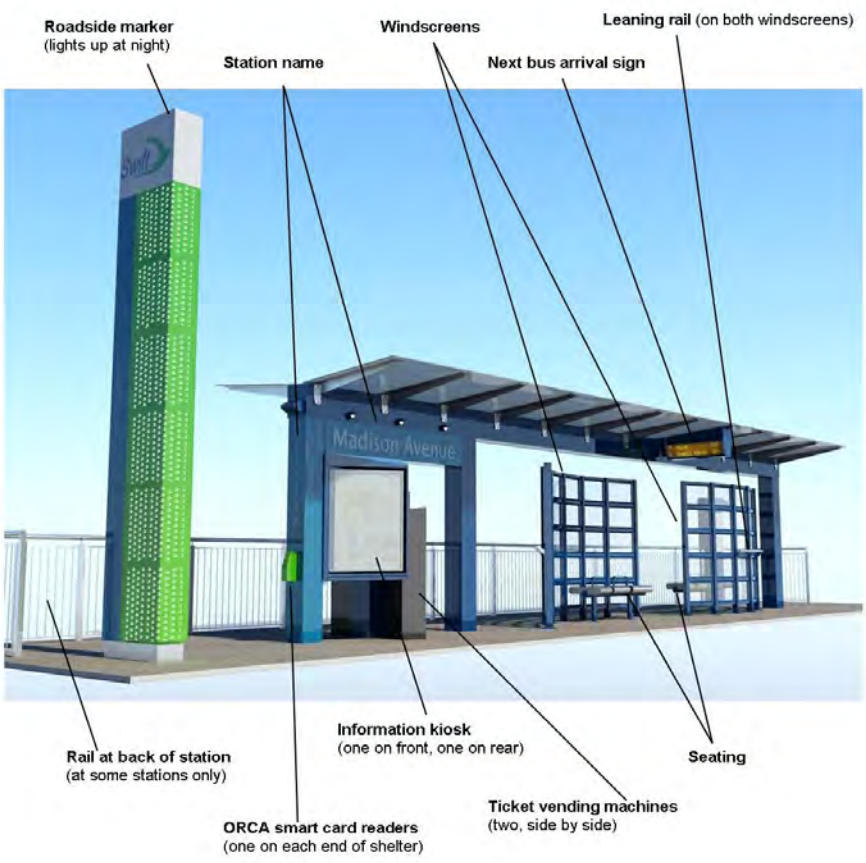
Source: Nelson\Nygaard

Kane County Randall/Orchard Road Corridor BRT Feasibility Study

Kane County is currently studying whether BRT can be supported in the Randall/Orchard corridor by 2040, including:

- Future conditions needed to successfully accommodate BRT along the corridor.
- Potential benefits to the region from development of BRT, in terms of traffic congestion and emission reductions, overall air quality improvements, increased land values, job creation and economic development.
- Incremental steps and immediate actions that local governments can take to bring BRT to Kane County in the future.

Source: http://www.co.kane.il.us/dot/planning/brt.aspx



Bus Rapid Transit (BRT) uses features typically associated with rail service to provide a high-quality passenger experience. The annotated station schematic (left) and information kiosk (right) Swift BRT line along Highway 99 in Snohomish County, WA. A case study of this BRT line is included in Appendix F.

Source: Community Transit (left), Flickr user Atomic Taco (right).

Strategy #3: Develop Employer-Sponsored Transit Service

Transit service sponsored by employers can transport workers from a rail or bus station to employment sites that are dispersed within an area, are deeply setback from the road, and/or are the dominant land use. Under these conditions, it may not be feasible to provide fixed-route bus service. This is a strategy that can be implemented starting in the short-term (1-5 years).

Value Tradeoffs:

Strengths:

- Enables service to employment areas where urban design and land use patterns are not conducive to traditional fixed-route service.

Weaknesses:

- TMA formation may be difficult until there is consensus on the benefits of transportation options and they may be dependent on one or more large employers, whose departure can be a major challenge to continuity of the service.

Strategy Description	Time Frame	Est. Annual Operating Costs*	Responsibility
3A. Develop transit service to employment sites along IL 72 and Big Timber Road (west of Randall Road). This would serve as a feeder from the Big Timber Metra station.	S-M	Medium	Local businesses/ TMA[1], Area municipalities with Pace[3]
3B. Develop transit service to employment sites on the Kirk Road / Fabyan Parkway corridors, including Fermi Lab. This would serve as a feeder from the Geneva Metra station/transportation center.	S-M	Medium	Local businesses/ TMA[1], Batavia with Pace[3]
3C. Foster the development of Transportation Management Associations in Kane County.	S-L	Not determined	See 12A

Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years
Costs: Low: < $50,000, Medium: $51,000 - $250,000, High: > $250,000.
All costs are annual operating costs unless otherwise noted.
Responsibility: [1]Financial and Operations, [2]Financial Support, [3]Coordination/Support

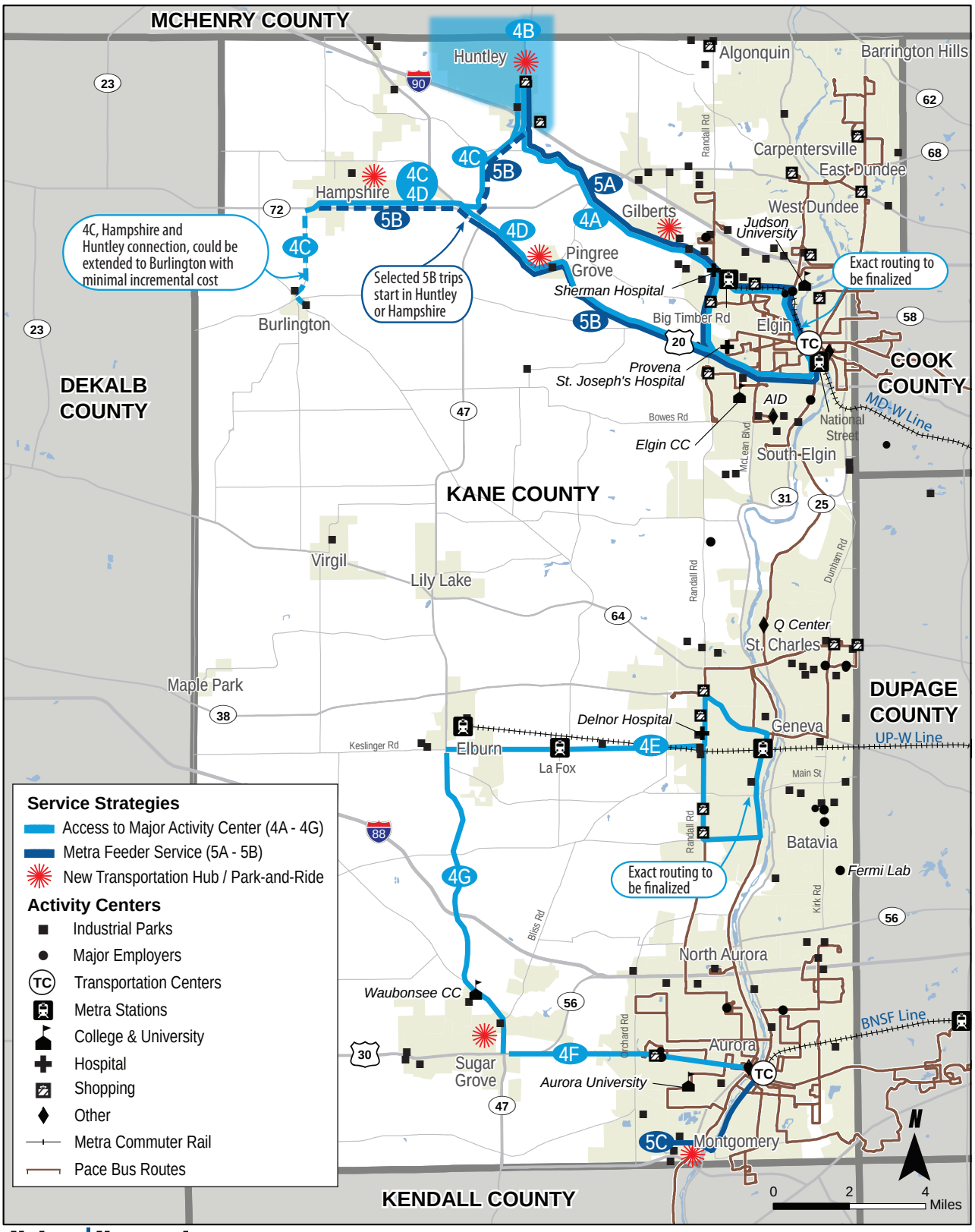
TMA OF LAKE-COOK

One role of Transportation Management Associations (TMAs) is to facilitate the development of employer-based services. The Lake Cook TMA manages Pace Shuttle Bug service (above) to nearby Metra stations. According to the TMA, 72% of riders drove alone to work before taking the shuttle and 15% have no alternative to the service. Local Chambers of Commerce are also typical sponsors of these types of services.

Source: Lake Cook TMA

Strategies 4-5 are primarily focused on addressing transit service needs in Western Kane County, where there is no fixed-route transit service, for both non-work and work trips. Figure 30 illustrates these strategies.

Figure 30 Service Strategies for Western Kane County (#4 and #5)



Source: Kane County

Strategy #4: Provide Access to Major Activity Centers (non-work trips)

These connections would provide limited service to major institutions in Kane County, including shopping, medical, and civic institutions, from parts of the County that currently lack fixed-route bus service and would primarily serve transit-dependent populations. There would be a limited number of daily trips up to several days per week. In the short-term (1-5 years) municipalities could initiate these services at relatively low cost using the Pace Municipal Vanpool program. In the medium- to long-term, as growth occurs and funding is less constrained, these services could be expanded and Pace would play a larger role in operations and funding.

Value Tradeoffs:

Strengths:

- Enables longer-distance access to services for transit dependent populations.
- Use of small vehicles in the short-term allows buses to serve multiple destinations and costing assumes time for flexible drop-offs/pick-ups.

Weaknesses:

- Land use along many major corridors precludes efficient service by traditional fixed route bus service in the short to medium term, in particular large setbacks from the street, lack of pedestrian infrastructure, etc.

Strategy Description	Time Frame	Est. Annual Operating Costs	Responsibility
4A. Provide service from Huntley to Elgin, including to Metra stations.			
(i) Municipal vanpool, 5 days per week.	S	Medium	Huntley[1], Pace[3]
(ii) Fixed-route bus.	M	High	Pace[1], Huntley[2]
4B. Provide Huntley Circulator service.	L	High[1]	Pace[1], Huntley[2]
4C. Provide Burlington/Hampshire to Huntley connection, 3 days per week.	S	Low	Hampshire[1], Burlington[1], Pace[3]
4D. Provide service from Pingree Grove to Elgin, starting in Huntley or Hampshire, 3 days per week.	M	Low	Pingree Grove[1], Huntley[1], Hampshire[1], Pace[3]
4E. Provide a connection from Elburn to Randall Road, including Batavia/Geneva and the Geneva Metra station.			
(i) 3 days per week	S-M	Low	Elburn[1], Pace[3]
(ii) Fixed-route bus	L	Medium[2]	Pace[1], Elburn[2]
4F. Provide service from Sugar Grove to Aurora, including to Waubonsee Community College, Randall Rd, and ATC.			
(i) 3 days per week	S-M	Low	Sugar Grove[1], Waubonsee C.C[2], Pace[3]
(ii) Fixed-route bus	L	Medium[2]	Pace[1], Waubonsee C.C[2], Sugar Grove[2]
4G. Provide service from Sugar Grove to Elburn, 3 days per week, including to the Metra station.	M	Low	Sugar Grove[1], Waubonsee C.C[2], Pace[3]

Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years
Costs: Low: < $50,000, Medium: $51,000 - $250,000, High: > $250,000. All costs are annual operating costs unless otherwise noted.
[1]ADA expansion would result in additional operating costs. [2]ADA expansion would increase cost category to "High."
Responsibility: [1]Financial and Operations, [2]Financial Support, [3]Coordination/Support

Strategy #5: Provide Metra Feeder Service (Commuters)

These connections would provide primarily commuter-oriented weekday peak hour service to Metra Stations in Kane County from parts of the County that currently lack fixed-route bus service. These connections would provide limited midday trips and would rely on transportation hubs with small park & ride facilities in each origin municipality. In the short-term (1-5 years), municipalities could initiate these services at relatively low cost using the Pace Municipal Vanpool program, operating at complementary times to the services provided in Strategy #4.

Value Tradeoffs:

Strengths:

- Increases access to Metra.
- May alleviate Park & Ride capacity constraints.
- Can help build awareness of transit.
- May complement strategy #4, utilizing same vehicles to serve different transit markets, i.e. different times of day and destinations.

Weaknesses:

- Dispersed residential and employment land uses make it difficult to provide efficient service and may require park & ride access.
- Free or low-cost parking at some Metra stations may be a disincentive to use of Pace feeder service, which currently costs $1.75 each way.

Strategy Description	Time Frame	Est. Annual Operating Costs	Responsibility
5A. Provide Metra feeder service from Huntley to Big Timber Metra and/or Elgin. May be coordinated with Huntley Regional Service Connection (4A).			
(i) Peak hour connecting service using municipal vanpool, 5 days per week.	S	Low	Huntley[1], Pace[3]
(ii) Service transitions to bus.	M	Medium	Pace[1], Huntley[2]
5B. Pingree Grove to Elgin including downtown Transportation Center and/or Big Timber Metra station (with optional origins in Hampshire or Huntley), 5 days per week, using municipal vanpool.	M	Low	Pingree Grove[1], Huntley[1], Hampshire[1], Pace[3]
5C. Montgomery to Aurora Transportation Center, serving planned Montgomery Park & Ride at intersection of IL 31 / Webster Street. Could also serve employers around Aucutt Road.			
(i) Peak hour service using municipal vanpool, 5 days per week; could be coordinated with 6I (existing Route 907).	S	Low to Medium	Montgomery[1], Local businesses[2], Pace[3]
(ii) If demand exceeds Municipal Vanpool vehicle capacity or warrants service outside of commute hours, this strategy could be coordinated with detailed service design for 1E (fixed route expansion).	M-L	See 1E	Pace[3], Montgomery[2], Local businesses[2]

Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years
Costs: Low: < $50,000, Medium: $51,000 - $250,000, High: > $250,000.
All costs are annual operating costs unless otherwise noted.
Responsibility: [1]Financial and Operations, [2]Financial Support, [3]Coordination/Support

Strategy #6: Provide Regional Out-of-County Bus Service

This strategy provides connections to adjacent counties, primarily serving commuter needs, from parts of the County with and without existing fixed-route bus service. In the short-term and in parts of the county where even future demand will not support bus service, these needs can be met using the Pace Vanpool program. These strategies can be coordinated with development of the Pace Arterial Rapid Transit (ART) network, shown on page 57.

Value Tradeoffs:

Strengths:

- Provides longer-distance connections to employment sites not served by Metra.

Weaknesses:

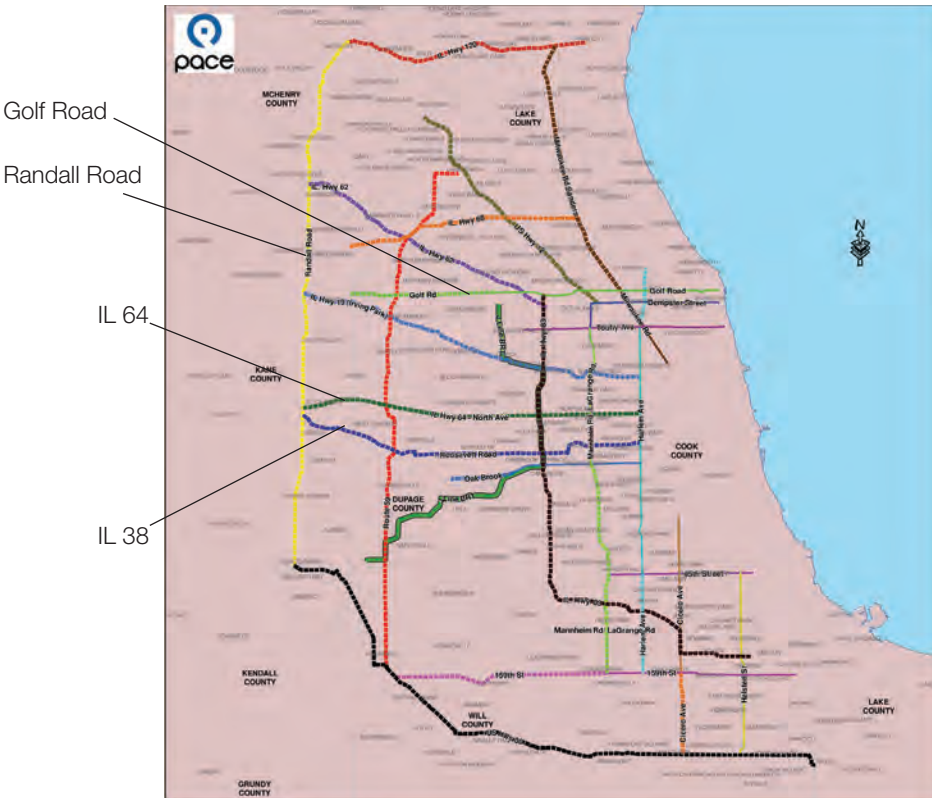
- Jurisdictional boundaries between counties, in particular those not in Pace/RTA service area.

Strategy Description	Time Frame	Est. Annual Operating Costs	Responsibility
6A. Elgin Area to SE McHenry County			
(i) Vanpool	S - M	N/A	Regional businesses / employees[2], Pace[3]
(ii) Fixed Route Bus.	L	High	Pace[1]
6B. Hampshire/Huntley to SE McHenry County – Traditional vanpool	S - L	N/A	Regional businesses / employees[2], Pace[3]
6C. Hampshire/Huntley to SW McHenry County – Traditional vanpool	M - L	N/A	Regional businesses / employees[2], Pace[3]
6D. Elgin Area to Cook County			
(i) Vanpool	S - M	N/A	Regional businesses / employees[2], Pace[3]
(ii) Improve frequency of Route 554; coordinate with Golf Road ART (see Pace ART diagram on page 57).	M-L	Medium	Pace[1]
(iii) Additional bus route to NW Cook County.	M-L	High	Pace[1]
(iv) I-90 Express Bus Service. Origin in Huntley area, destinations in Schaumburg area, peak-hour service.	L	High	Pace[1]
6E. Geneva-St.Charles to NW DuPage County, e.g. Bartlett Business Park			
(i) Vanpool	S - M	N/A	Regional businesses / employees[2], Pace[3]
(ii) Fixed Route Bus.	M-L	High	Pace[1]

Strategy #6 (Continued)

Strategy Description	Time Frame	Est. Annual Operating Costs	Responsibility
6F. Aurora to Naperville, SW DuPage County, or I-88 Corridor			
(i) Vanpool	S - M	N/A	Regional businesses / employees[2], Pace[3]
(ii) Fixed Route Bus to SW DuPage County.	M-L	High	Pace[1]
(iii) I-88 Express Bus Service. Origin in Sugar Grove area, destinations along I-88 corridor west of I-355, peak-hour service.	L	High	Pace[1]
6G. Aurora Area to Will County – Traditional Vanpool	S - L	N/A	Regional businesses / employees[2], Pace[3]
6H. Sugar Grove / South East-Central Kane County to North Kendall County – Traditional Vanpool	L	N/A	Regional businesses / employees[2], Pace[3]
6I. Aurora Area to NE Kendall County. (i) Traditional vanpool (ii) Increasing service span or frequency of 907 feeder service. Could be coordinated with 5C.	(i) S (ii) M-L	N/A Medium	(i) Regional businesses / employees[2], Pace[3] (ii) Pace[1]

Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years
Costs: Low: < $50,000, Medium: $51,000 - $250,000, High: > $250,000.
All costs are annual operating costs unless otherwise noted.
Responsibility: [1]Financial and Operations, [2]Financial Support, [3]Coordination/Support



Pace's long-term plans include several Arterial Rapid Transit or ART (similar to Bus Rapid Transit or BRT) lines providing connections between Kane County and Cook, DuPage, McHenry, and Will Counties. Existing Pace vanpool and ridesharing programs can meet current Fox Valley Area out-of-county transit needs in the short-term, and future out-of-county needs in central and western Kane County through the medium- to long-term.

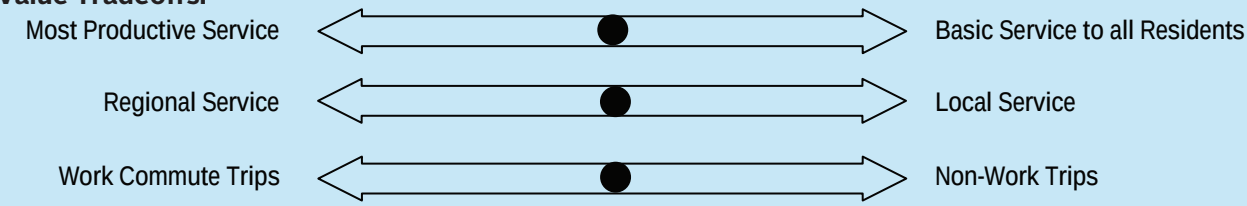
Source: Pace

Strategies 7-12 recommend investments, policies and programs that support transit service.

Strategy #7: Improve Capital Facilities–Access to Transit

This strategy would improve and prioritize/coordinate investments in the different types of capital facilities that provide access to transit. Improvements would be focused around the Primary Transit Network (see #10).

Value Tradeoffs:



Strengths:

- Provides the infrastructure necessary to attract and retain transit riders.

Weaknesses:

- Built environment along existing / potential corridors is not conducive to transit service.

Strategy Description	Time Frame	Responsibility
7A. Improve bus stops and amenities		
(i) Place bus stop signs along transit routes at major intersections and/or at access points to key destinations. Locate stops at opposing sides of the street.	S-M	Pace[1]
(ii) Develop bus stop amenity design standards and a policy for where and at what level to provide stop amenities.	S	Pace[3] with Municipalities[3] and Kane County[3]
7B. Develop transportation centers or hubs, park & ride facilities, and related amenities in municipalities.		
(i) Provide and/or improve transportation centers/hubs in urbanized areas of existing transit service.	S-M	Municipalities[1], Pace[2,3]
(ii) Provide transportation centers/hubs outside of current transit service area, to facilitate vanpools and community shuttle services: Gilberts, Huntley, Pingree Grove, Hampshire, Sugar Grove, Montgomery.	S-L	Municipalities[1], Pace[3]
7C. Improve Pedestrian and Bicycle Facilities		
(i) Conduct an inventory of pedestrian conditions and access to stations, major stops, and along the PTN, identify and prioritize improvements, and address deficiencies through local CIPs.	S-L	Municipalities[1], Kane County[3], Pace[3], Metra[3]
(ii) Identify and prioritize bicycle access improvements to stations, major stops, and along the PTN; work with local municipalities to implement improvements through local CIPs.	S-L	Municipalities[1], Kane County[3]

Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years
Responsibility: [1]Financial and Operations, [2]Financial Support, [3]Coordination/Support

Bus shelters are an example of a transit-supportive capital improvement and allow passengers to wait comfortably for the bus, particularly important for older riders or in inclement or hot weather. A policy based on criteria such as ridership is recommended to help prioritize installation of transit amenities. For shelters with advertising, Pace will pay for the capital costs, which are recouped through advertising revenues. and shares advertising revenues with the municipality. Ten of the shelters depicted at left were recently installed in the Village of Wheeling in partnership with Pace. If a municipality requests a non-advertising shelter at a low-ridership location (less than 10 passengers a day), Pace may ask for a local contribution to help pay for the concrete pad.

Source: Pace

Strategy #8: Improve Access to Existing Metra Service/Stations

This strategy includes programs, policies, and physical access improvements to enable and encourage alternative means to access Metra commuter rail.

Value Tradeoffs:

Strengths:

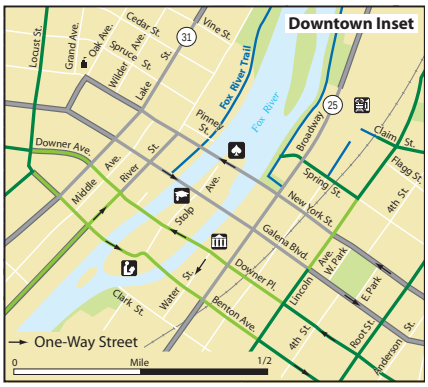
- Metra stations are perceived as a strength of existing transit in Kane County.
- Bicycle and pedestrian access to stations can effectively serve short trips.

Weaknesses:

- Uncertain feasibility of TDM/pricing strategies
- Free or low parking pricing may make it difficult to incentivize use of transit options
- Current transit reliability

Strategy Description	Time Frame	Responsibility
8A. Implement Transportation Demand Management strategies.	S - L	Metra[3], Municipalities[3]
8B. Improve connecting transit service to Metra.	S	Pace[3], Municipalities[3], Metra[3]
8C. Improve the quality and visibility of transit information at Metra stations and the marketing of transportation options to passengers.	S	Municipalities[3], Pace[3]
8D. Improve pedestrian/bicycle access to stations, including improving street crossings and sidewalks (see 7C) and expanding bicycle parking facilities at stations as warranted by demand. Market pedestrian and bicycle access options to passengers. In addition to steps defined in Strategy 7C, this strategy would include development of pedestrian and bicycle route maps to illustrate access routes to stations.	S-M	Pace[3], Metra[3], Municipalities[3] and Kane County[3]

Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years
Responsibility: [1]Financial and Operations, [2]Financial Support, [3]Coordination/Support



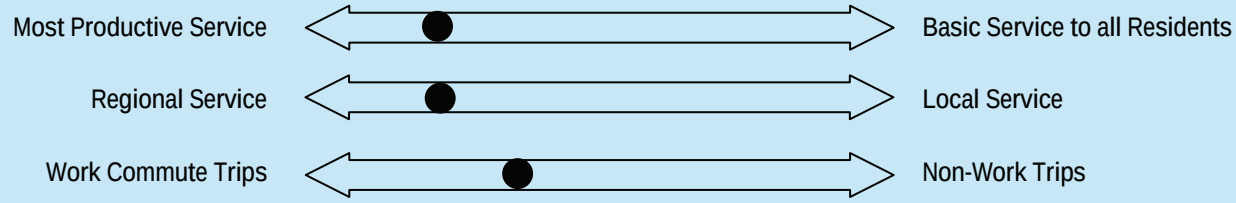
Although a variety of transit connections are available at the Aurora Transportation Center (ATC), transit information inside the station could be significantly improved, such as by providing a map of Pace bus connections in Kane County and of bicycle and pedestrian access routes. A bicycle access map produced by the City of Aurora and the League of Illinois Bicyclists includes a local transit map. The bicycle portion of the map is provided on p. 19 of the LRTP, with an inset of downtown Aurora as shown above. Expanding bicycle parking at the station as demand requires, including secure lockers, would also improve bicycle access.

Photo sources: Nelson\Nygaard. Bicycle map source: City of Aurora and the League of Illinois Bicyclists. http://www.aurora-il.org/documents/planning/map_bicycle.pdf

Strategy #9: Support Metra & Intercity Rail Expansion Plans

This strategy supports documented plans to expand Metra commuter rail service.

Value Tradeoffs:



Strengths:

- Existing rail infrastructure is a significant asset.

Weaknesses:

- Limited funding means that other strategies will need to meet communities' stated desires for service.

Strategy Description	Time Frame	Responsibility
9A. Develop TOD plans for proposed/potential station areas, e.g., Gilberts, Huntley, Hampshire, Pingree Grove, Sugar Grove, Montgomery, in coordination with a PTN policy (10A) that identifies current and planned transit corridors.	S-M	Municipalities[1], RTA[2], Metra[3], Pace[3]
9B. Demonstrate and build ridership potential through vanpools and feeder service to existing Metra stations.	S-M	Municipalities with Pace, Metra
9C. Support planned expansion initiatives on the three existing Metra lines serving Kane County.		
(i) MDW Line. Proposed extension (included in the unconstrained list in the current draft of CMAP's Go To 2040 plan)	L	Metra[1], Municipalities[3]
(ii) UPW Line. Proposed improvements on current line	M	Metra[1], Municipalities[3]
(iii) BNSF Line. Proposed extension (included in the unconstrained list in the current draft of CMAP's Go To 2040 plan)	L	Metra[1], Municipalities[3]
9D. Explore the feasibility of/need for Metra stations at key nodes on the existing Metra lines, coordinated with study of BRT on Randall Rd (2B).	L	Metra[3], Kane County[3], Pace[3]
9E. Establish connecting service to future stations on the proposed north-south segment of the STAR Line.	M-L	Pace[1], Metra[3], Municipalities[3]
9F. Support future rail service by focusing growth and investments near transportation centers/hubs and by providing future connecting service at new Metra or Amtrak stations, including the planned station on Randall Road for the Chicago-Rockford-Dubuque line.	S-L	Municipalities[3], Pace[3], Kane County[3], Amtrak[3], Metra[3]

Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years
Responsibility: [1]Financial and Operations, [2]Financial Support, [3]Coordination/Support

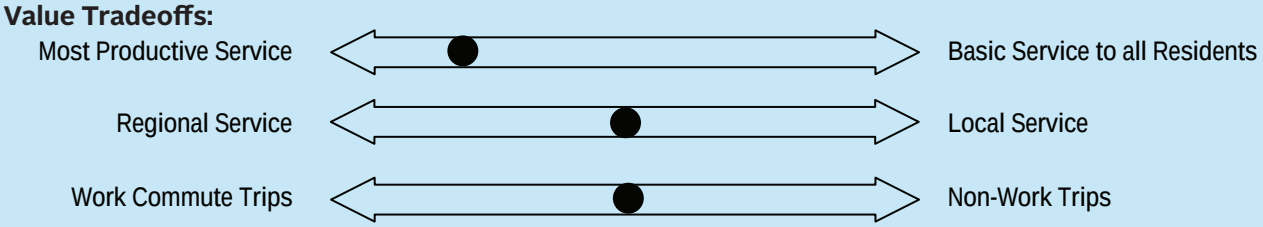
Rail expansions, including the proposed STAR Line, would create a future need for connecting transit service.

Source: Metra

Strategy #10: Improve Transit-Land Use Coordination

Land use strategies link planned transit investments and land use policies. They emphasize identifying transit corridors based not only on current and projected land use, but creating opportunities for developing around transit.

Value Tradeoffs:



Strengths:

- Supportive land use is a necessary element for efficient transit service and levels of service that meet the stated goals of Kane County and local municipalities.

Weaknesses:

- Need to coordinate policy between multiple municipalities.

Strategy Description	Time Frame	Responsibility
10A. Develop a Primary Transit Network (PTN) policy.	S	Municipalities, Pace, Kane County
10B. Create land use design guidelines and a design review process targeted at development along and in proximity to transit corridors.		
(i) Create development design guidelines.	S	Pace, Metra, Kane County
(ii) Integrate design review into the development review/ approval process.	S	Municipalities, Pace, Kane County
10C. Enact transit-supportive zoning overlay districts to apply to transit nodes and PTN Corridors		
(i) Develop a model transit overlay zone	S	Municipalities, Kane County, Pace
(ii) Adopt transit overlay zones for transit nodes and PTN corridors	S	Municipalities, Kane County
10D. Create TOD Plans for Metra stations and transportation centers/hubs, in coordination with the PTN policy.	S-M	Municipalities, Kane County, Metra
10E. Identify/redevelop transit nodes along key PTN corridors.	S-M	Municipalities (redevelopment) and Kane County (identify nodes)

A PTN, described in more detail in the previous section (see pages 38-39), is:

- A high-quality network of transit corridors and connections planned and developed for the greatest transit ridership and community benefit.
- A joint commitment to transit where local municipalities and Pace act as partners.
- A means of ensuring that transit investment is coordinated with land use policy.
- Transit-intensive land uses should be encouraged along PTN corridors, but should be discouraged away from the PTN, especially where there is no existing transit service or planned service.

The Massachusetts Smart Growth Toolkit provides resources including a model transit overlay zoning ordinance – a coordinated set of regulations to ensure, and provide incentives for transit-supportive development around transit corridors.

Appendix F (page F-11) lists additional examples and resources.

Source: http://www.mass.gov/envir/smart_growth_toolkit/

Strategy #10 (Continued)

Strategy Description	Time Frame	Responsibility
10F. Adopt a Complete Streets policy.	S	Municipalities, Kane County
10G. Coordinate countywide bicycle plans to ensure network completeness. Coordinate local CIPs.	S	Municipalities, Kane County
10H. Coordinate pedestrian improvements based on network completeness. Adopt measures of pedestrian quality. Coordinate CIPs.	S	Municipalities, Kane County

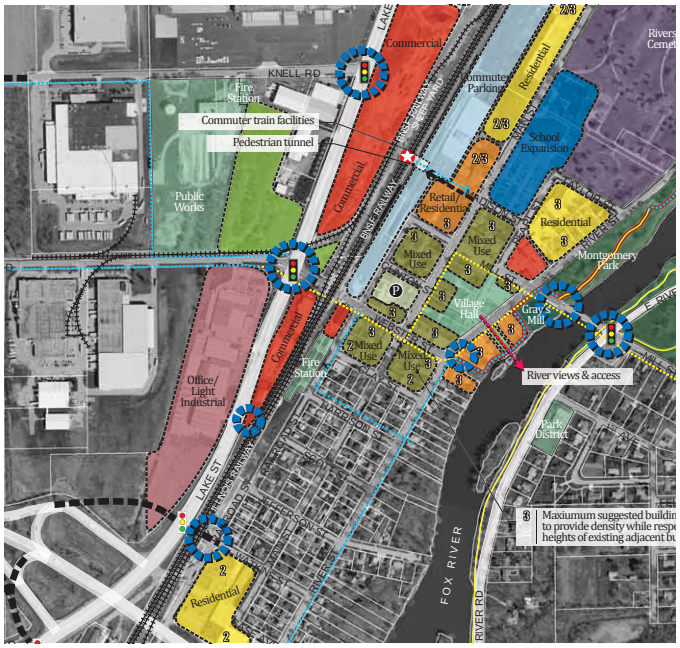
Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years

Responsibility: This strategy is focused on planning activities rather than capital improvements or implementation of specific services, therefore individual responsibilities are not specified. It is anticipated that all the identifed agencies/entities would be involved in coordination for each of the planning activities that comprise this strategy.

STATE OF ILLINOIS COMPLETE STREETS ACT

The State of Illinois enacted "Complete Streets" legislation in 2007, responding in part to a bridge in Cary, IL, that was built in the early 1990s without a safe bike or pedestrian crossing and where the Illinois DOT was forced to subsequently retrofit the bridge with a side path. The law stipulates that "in or within one mile of an urban area, bicycle and pedestrian ways shall be established in conjunction with the construction, reconstruction, or other change of any State transportation facility," with some exceptions.

More Information: CMAP Memo on IDOT Complete Street Implementation, April 2010. http://www.cmap.illinois.gov/WorkArea/DownloadAsset.aspx?id=19619



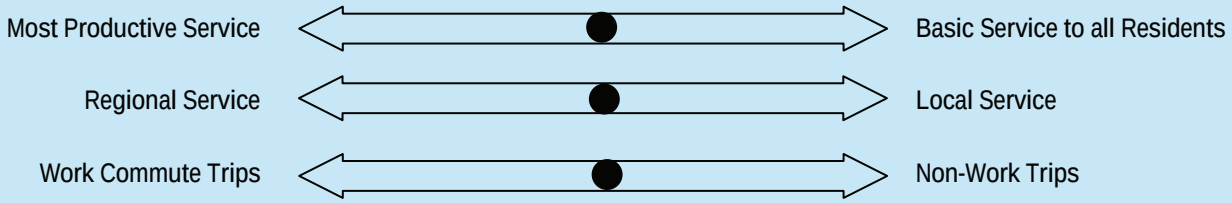
Land use strategies include creating Transit-Oriented Development (TOD) plans for potential future station areas. As shown in the concept plan above, the Village of Montgomery is developing plans for a Park & Ride facility and transit-oriented development, which could be coordinated with and support service strategies included in the LRTP as well as a proposed Metra extension.

Source: City of Montgomery, http://www.teskaassociates.com/montgomery

Strategy #11: Improve Marketing & Customer Information

Marketing strategies improve the understanding and perception of public transit among Kane County residents and others who work in or visit Kane County.

Value Tradeoffs:



Strengths:

- Increases awareness and understanding of existing service.
- Cost-effective solution and public-private partnerships can assist with funding.

Weaknesses:

- The existing quality of service is not sufficient to attract choice riders.

Strategy Description	Time Frame	Responsibility
11A. Expand transit trip planning options for Kane County.	S-M	Pace[1], RTA[1]
11B. Make real-time stop arrival information available by automated phone, web, and/or text message: Improve perceived reliability.	S	Pace[1], Metra[1], RTA[1]
11C. Use stop amenities to increase visibility of transit.	S-M	Pace[1], Municipalities[1]
11D. Develop a transit map for Kane County that shows regional attractions, local transit services and connections to adjacent counties.	S	Municipalities[1] with Kane County[1] and Pace[3], Metra[3]
11E. Design and place improved transit information at key locations (Transportation Centers, Metra stations, libraries, retail stores).	S	Pace[1]

Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years
Responsibility: [1]Financial and Operations, [2]Financial Support, [3]Coordination/Support

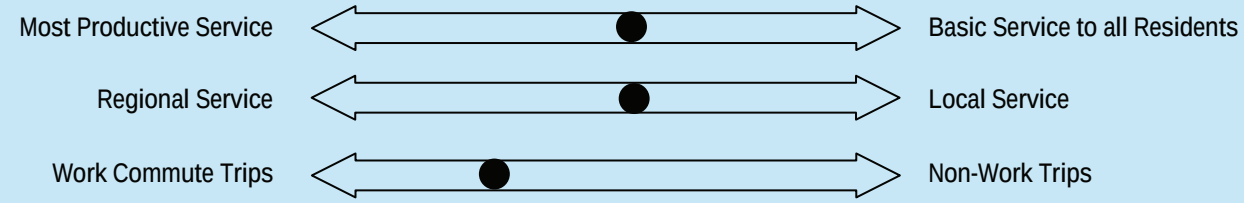
Branded shelters for high-frequency "Go Line" in Washington State advertise the high frequency of service.

Source: Whatcom Transit Authority

Strategy #12: Transportation Demand Management Programs (TDM)

TDM strategies provide incentives to use transit, including tax benefits and parking incentives.

Value Tradeoffs:



Strengths:

- TDM strategies are a cost-effective solution relative to capital intensive supply-side solutions, but are effective at encouraging choice riders to use transit.
- Takes advantage of federal tax breaks for transit.

Weaknesses:

- TDM strategies may not be effective at attracting riders given existing service quality.

Strategy Description	Time Frame	Responsibility
12A. Foster the creation of Transportation Management Associations (TMAs) to organize and fund employer shuttle services, promote and organize ridesharing programs, provide information on transit and transportation options, and coordinate incentive programs. Areas for potential development of TMAs include: (i) Kirk Road industrial areas (St. Charles/Geneva/Batavia) (ii) IL 72 /Big Timber Road employment areas (west of Randall Road in Elgin/Gilberts)	S-M	Municipalities, Pace, Metra, Kane County
12B. Promote tax-free purchase of passes (Metra, Pace, and Vanpool)	S-L	RTA[1], Metra[3], Pace[3]
12C. Parking incentives	L	Large employers
12D. Develop local TDM plans or incorporate TDM elements into comprehensive plans. Large employers or associations representing multiple employers would have responsibility for executing TDM plans and providing/administering parking incentives and tax benefit programs with the assistance of the entities identified.	M	Municipalities with Pace and Kane County, large employers[3]

Notes: Time Frame: Short: 1-5 years; Medium: 6-15 years; Long: 16-30 years
Responsibility: [1]Financial and Operations, [2]Financial Support, [3]Coordination/Support

TDM programs sponsored by large employers encourage and incentivize use of alternate modes. The TDM program at Children's Hospital in Washington State provides an individual calendar that tracks daily commute activity (shown) and a "MyCommute" dashboard that tracks employee vehicle miles traveled (VMT), number of auto trips reduced, personal cost savings from reduced vehicle operations, CO2 reduction and gas saved. TDM programs are a medium-term strategy due to the need to improve the quality of transportation options.

Source: Seattle Children's Hospital

KANE COUNTY
LONG RANGE TRANSIT PLAN

IMPLEMENTATION ACTION PLAN

Nelson|Nygaard
consulting associates

This action plan identifies the key initial steps that Kane County, municipalities and partner agencies (Pace, Metra, the RTA, and CMAP) can take to implement the strategies identified in the LRTP. Drawn from the strategies identified in the previous section, the required actions include developing policies, identifying or creating organizations responsible for coordinating transit service and supporting policies, creating informational materials, and conducting detailed planning for short- to long-term service strategies. The priority of the actions ranges from immediate and short-term (highest feasibility and lowest cost) to long-term (lower feasibility and higher cost), as shown in Figure 31. These are the same time frames as for the strategies identified in the previous section.

The recommended actions are organized into the following categories:

- Coordinate Transit and Land Use
- Coordinate Transit-Supportive Capital Improvement Plans
- Market and Promote Transit
- Expand/Improve Transit Service
- Develop Employer-Sponsored Transit Services
- Maintain/Enhance Transit Funding
- Create Transportation Demand Management Programs

The recommended actions are listed in Figure 32 along with the lead implementer, time frame for initiating implementation, and whether the action requires ongoing effort or updates. Additional supporting information on strategies and best practices is provided in the Appendices to the LRTP.

Figure 31 Action Prioritization Framework

	Immediate (First Year)	Short-Term (by 2015)	Medium-Term (by 2025)	Long-Term (by 2040)	Ongoing/Monitor
Feasibility	Includes development of policies required to initiate land use changes necessary to support efficient transit service in the future		Depends on changes in land use patterns and intensified residential and employment densities along transit corridors, brought about by the short-term policies and increased future travel demand due to growth		Requires ongoing monitoring and/or will need to be updated on a regular basis
Cost	Minimal cost requirement outside of staff time	Lowest operating / capital costs	Significant operating costs will require stabilized / increased funding levels and/or grant funding for capital costs.		Requires staff time but not constrained by funding needs

Figure 32 Recommended Actions

Action #	Recommended Actions	Lead Implementer(s)*	Immediate (1st year)	Short-Term (by 2015)	Medium to Long-Term (2016-2040)	Ongoing/ Monitor
Coordinate Transit and Land Use						
1	**Establish the Kane/Kendall Council of Mayors Transit Committee as a forum to discuss and facilitate ongoing coordination of transit service and policy development efforts between municipalities and Pace, including a Primary Transit Network (PTN).** The Kane/Kendall Council of Mayors Transit Committee may be a logical existing forum that could serve this function. The Kane County Paratransit Coordinating Council may be a potential model of an analogous council focused on transit service and related issues.	Kane/Kendall Council of Mayors (KKCOM) [1]	√			
2	**Enact a Primary Transit Network policy (Strategy 10A).** This policy should identify corridors with the highest potential ridership and where the County and municipalities aspire to have the highest level of transit service over time. The PTN policy should include the following types of classifications for PTN corridors: **Candidate PTN** – These corridors are not currently built to PTN-supportive densities but are zoned (or planned) for supportive employment and/or residential densities. They may also have land use patterns (building orientation, setbacks, pedestrian access, etc.) that need to be improved over time. **Planned PTN** – These corridors have the densities to support PTN service, and are priorities for upgrading to PTN levels of service as resources permit. **Existing PTN** – These corridors have the densities to support PTN service and are served with PTN levels. There are no such services in Kane County today, however the medium-to-long term strategies in the LRTP call for creating them as land use and funding permit, and they would be the backbone for future growth. Capital investments focused along PTN corridors provide a sense of permanence and stimulate developer confidence in transit-oriented development. The policy should include a commitment that: IF the area around a candidate corridor develops with adequate densities and land use patterns, AND IF the jurisdiction controlling the roadway is willing to include transit speed protection in its street classification policies, THEN a candidate PTN corridor will be upgraded to planned PTN status, and transit service will be implemented as resources permit. The policy should also commit to locate new transit-dependent land uses, such as social service offices, on the PTN as a matter of policy. The PTN should be updated regularly, especially following major zoning or comprehensive plan changes.	KKCOM Transit Committee[1], Municipalities[2], Pace[2], Kane County[2]	√	√		Yes

* Implementer(s): [1]Lead, [2]Support

Action #	Recommended Actions	Lead Implementer(s)*	Immediate (1st year)	Short-Term (by 2015)	Medium to Long-Term (2016-2040)	Ongoing/ Monitor
3	**Develop a model transit overlay zoning ordinance and adopt around transit nodes and PTN corridors (Strategy 10C).** Resources for developing such an ordinance are discussed elsewhere in the LRTP and include: Massachusetts Smart Growth Toolkit, http://www.mass.gov/envir/smart_growth_toolkit/ MSRC, http://www.mrsc.org/Subjects/Transpo/transitdev.aspx#example	Municipalities[1], Kane County[2]	√	√		
4	**Create development design guidelines and integrate design review into the development review process (Strategy 10A).** Pace's existing Development Guidelines document (1999, http://www.pacebus.com/sub/guidelines, and its pending update) and the draft design guidelines the County has started to develop for the Randall Road corridor can be used as a starting point.	Municipalities[1], Pace[2], Metra[2], Kane County[2]	√	√		
5	**Adopt a Complete Streets Policy (Strategy 10F).**	Kane County[1], Municipalities[1]	√	√		
Coordinate Transit-Supportive Capital Improvement Plans						
6	**Develop bus stop amenity design standards and a policy for where and at what level to provide stop amenities (Strategy 7A).** Pace's existing Development Guidelines can be used as a starting point.	Pace[1], Municipalities[2], and Kane County[2]	√	√		
7	**Develop a program of transit-supportive capital improvements (Strategy 7).** This program should be coordinated with local Capital Improvement Plans (CIPs), to identify and prioritize transit-supportive capital improvements around major transit stations/nodes/PTN corridors, including: • Bus stops at major intersections (both sides of the street) and amenities at the most highly used stops (Strategy 7A). • Bicycle/pedestrian improvements (Strategies 7C, 8D, 10G/H). • Transportation centers/hubs both within and outside current transit service area (Strategy 7B) The coordinated program should be reviewed and updated at least every two years.	KKCOM Transit Committee[1], Municipalities[2], Kane County[2], RTA[2], Metra[2], Pace[2]	√	√	√	Yes

* Implementer(s): [1]Lead, [2]Support

Action #	Recommended Actions	Lead Implementer(s)*	Immediate (1st year)	Short-Term (by 2015)	Medium to Long-Term (2016-2040)	Ongoing/ Monitor
Market and Promote Transit						
8	**Promote transit options in Kane County, including:** **(i) Healthy/active living campaigns;** **(ii) Use of vanpool/ridesharing options; and** **(iii) Use of tax-free purchase of passes and benefits (Strategy 12B).** Marketing efforts can include the materials created through other actions in this category. As noted, a key step would be to identify private sector sponsors to help with costs and promotion, such as medical institutions and Transportation Management Associations or TMAs (see Action 16).	(i) Kane County[1], Pace[2], Medical Institutions[2] (ii) Pace[1], Major Employers / TMAs[2] (iii) RTA[1], Major Employers[1] , Pace[2], Metra[2], TMAs[2]	√	√	√	Yes
9	**Design a regional transit map for Kane County that shows regional attractions, local transit services, connections to adjacent counties, and regional bike facilities (Strategy 11D).** Feature this map as part of improved transit information displays (Strategy 11E).	Kane County[1], Municipalities[2], Pace[2], Metra[2] , RTA[2], CMAP[2]	√			Yes
10	**Design local area maps for Metra stations that include bicycle/pedestrian access routes and connecting transit service (Strategy 8D).** Feature these maps as part of improved transit information displays (Strategy 11E).	Station area municipalities[1], Metra[2], Pace[2], Kane County[2], RTA[2], CMAP[2]	√	√		Yes
11	**Publish "open" transit data (e.g. compatible with the Google Transit Feed specification, making it available to applications such as Google Maps, mobile devices, and Walk Score, etc.) (Strategy 11A).**	Pace[1]		√		
12	**Review / update marketing materials on a regular basis.**	Pace[1], Kane County[2], Municipalities[2], Metra[2]				Yes

* Implementer(s): [1]Lead, [2]Support

Action #	Recommended Actions	Lead Implementer(s)*	Immediate (1st year)	Short-Term (by 2015)	Medium to Long-Term (2016-2040)	Ongoing/ Monitor
	Expand/Improve Transit Service					
13	**Provide transit service in Western Kane County using the Pace Municipal Vanpool program (Strategies 3 and 4).** Next steps include: • Identify local funding sources/levels • Identify cost options for drivers • Conduct detailed service design	Sponsoring Municipalities[1], Pace[2]	√	√	√	
14	**Implement local, regional, and inter-county service improvements as warranted by demand and permitted by available funding (Strategies 1, 2, 4, 5, and 6).** This includes improving service levels for existing and planned transit services, transitioning from service provided using municipal vanpool vehicles as warranted by demand, and implementing feeder and circulator-type services. Key steps triggered by presence of travel demand and transit-supportive land use include: • Determine appropriate local funding share and funding sources • Identify funding sources, including grant funding for capital needs • Conduct detailed service design	Pace[1], Municipalities[2]		√	√	
15	**Develop connecting service to Metra stations, including the proposed STAR Line (Strategy 9E), and to the planned Amtrak station on Randall Road (Strategy 9F).**	Pace[1], Metra[2], Amtrak[2]		√	√	
	Develop Employer-Sponsored Transit Services					
16	**Create Transportation Management Associations (TMAs) for major industrial/ employment areas (Strategy 12A).** TMAs help develop employer-sponsored transit services such as shuttles to/from Metra stations and work with member employers to promote transit and other non-drive alone options to employees. The next steps for assessing the viability of TMAs (and/or determining trigger points for viability) would be to: (i) Conduct a preliminary assessment of employer interest in forming TMAs, such as for the two potential areas identified in Strategy 12A of the LRTP (immediate): Kirk Road industrial areas (St. Charles/Geneva/Batavia) IL 72/Big Timber Road employment areas west of Randall Road (Elgin/Gilberts) (ii) If interest exists, identify and apply for grant funding for a TMA feasibility study (immediate to early short-term). (iii) Conduct a feasibility study for TMA formation in each area (short-term) The TMA Handbook: A Guide to Successful Transportation Management Associations, available from the Association for Commuter Transportation (www.actweb.org), is one resource to assist with developing a TMA.	KCCOM[1], Large Employers[1], Municipalities[2], Pace[2]	√	√		

* Implementer(s): [1]Lead, [2]Support

Action #	Recommended Actions	Lead Implementer(s)*	Immediate (1st year)	Short-Term (by 2015)	Medium to Long-Term (2016-2040)	Ongoing/ Monitor
Maintain/Enhance Transit Funding						
17	**Maintain/stabilize funding for the Ride in Kane program.** Pursue continued grant funding, develop a stable long-term funding source, and encourage municipalities to identify local match funding. Foster coordination between all partners (existing sponsors and identified implemenators). Identify funding to expand service for County residents and programs not currently served by Ride in Kane.	Kane County Paratransit Coordinating Council[1], Ride in Kane Sponsor Committee[1], Municipalities[2], Pace[2], RTA[2], Kane County[2], State of Illinois[2]	√	√		
18	**Monitor the level of transit service provision in Kane County relative to the County's contribution to sales tax funding for Pace.** Ensure that resources are equitably distributed as higher densities and transit-supportive land use patterns take hold in the County.	KKCOM Transit Committee[1], Pace[2], RTA[2]				Yes
Create Transportation Demand Management Programs						
19	**Create local TDM plans, or incorporate TDM elements into local comprehensive plans (Strategy 12D).** Effective TDM programs depend on the presence of quality transit service, making this a longer-term strategy.	Municipalities[1], Large Employers[1], Pace[2], Kane County[2]			√	

* Implementer(s): [1]Lead, [2]Support