

# APPENDIX H: RECOMMENDED STRATEGIES

**TECHNICAL MEMORANDUM #5** 



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## **Recommended System Improvement** Strategies

### Introduction

This memorandum presents a set of recommended transit system strategies to address the public transportation needs identified in Kane County. These system-level strategies are designed 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. The strategies address transit services as well as supporting land use policies, parking policy and management practices, and methods to encourage transit use ranging from marketing to Transportation Demand Management (TDM) incentives. Technical Memorandum 6 presents additional funding strategies to address financial resources available to carry out these system strategies.

This System Improvement Strategies memorandum first reiterates the transit needs previously identified as part of this study and then outlines the specific strategies recommended as part of the Kane County Long Range Transit Plan.

### Transit Needs

A previous phase of this study identified the transit needs in Kane County. These needs are primarily the result of a gap analysis examining disparities between community public transportation travel requirements and available transit services. The needs assessment was based on information gathered as part of:

- A review of existing services and supporting infrastructure (presented in Technical Memorandum 1)
- Demographic analysis and projections (Technical Memorandum 2)
- A transit market analysis (Technical Memorandum 2)
- Stakeholder interviews (Technical Memorandum 2)
- Transit Committee feedback (Technical Memorandum 3)

This assessment did not prioritize or exclude needs based on their feasibility (i.e. their likelihood of being implemented or funded). 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
- Desired transit connections as identified by stakeholders

### Framework for Assessing Needs

This assessment presents the resulting needs sorted into 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.

Note that strategies developed to address future needs will be prioritized into **medium-term** (6 to 15 years) and **long-term** (16 to 30 years) planning horizons based on the feasibility of implementation.

For discussion purposes, the needs were classified into three closely interrelated categories for each time frame.

**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.

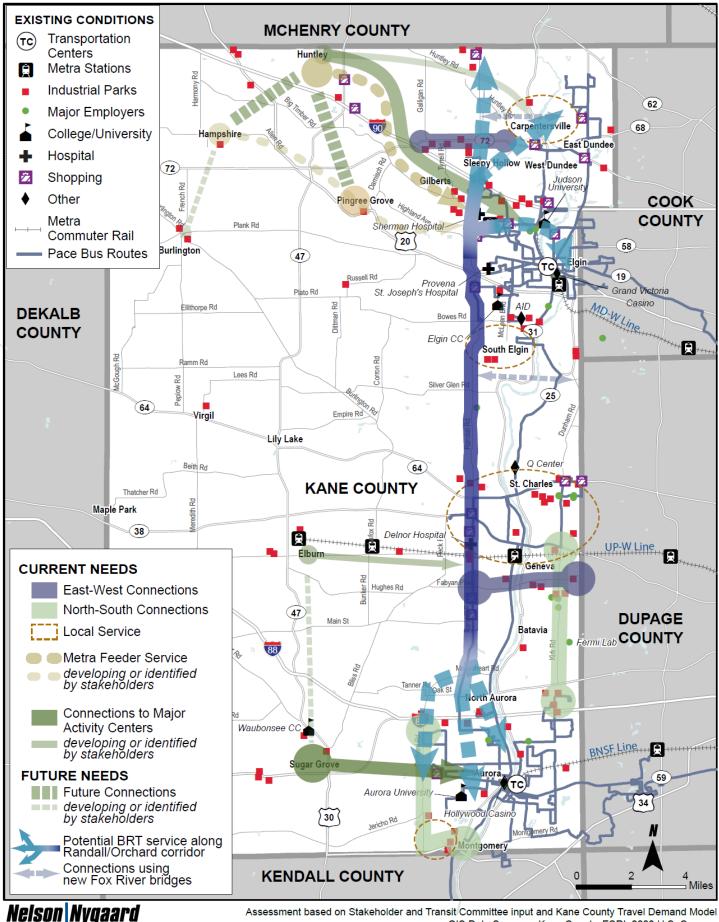
The following tables and maps summarize the identified needs.

### Figure 1 Identified Transit Needs Within Kane County

		Need identified by:		
Type of Transit Need	Specific Needs Identified	Kane County Travel Demand Model	Stakeholder Input	
Current	-			
East-west transit connections within Kane	IL 72	Х	Х	
County	Fabyan Parkway	Х	Х	
North-south transit connections within Kane	Kirk Road	Х	Х	
County	Orchard Road	Х	Х	
	Carpentersville	Х	Х	
Local bus service extension to growing	South Elgin	Х		
population and employment centers.	St. Charles/Geneva	Х		
	Montgomery	Х	Х	
	Huntley to Elgin	Х	Х	
Feeder service to Metra stations	Hampshire/Pingree Grove to Elgin		Х	
	McHenry County	Х	Х	
	Huntley to Elgin & Carpentersville	Huntley to Elgin	Х	
Connections to regional activity centers	Elburn to Randall Road		Х	
	Sugar Grove to Aurora	Х	Х	
Future				
East-west connections to growing population and employment centers in central-west	Burlington – Hampshire		Х	
parts of the county	Hampshire – Huntley	Х	Х	
East-west connections across the Fox River	Using planned new Fox River bridges	Х	Х	
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	Х	
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	Х	Х	
Connections to STAR Line (linking to east- west line to O'Hare Airport)		Х	Х	
Potential north-south service on IL 47	North County (Huntley - Pingree Grove)	Х	Х	
	South County (Sugar Grove – Elburn)	Developing	~	

### Figure 2 Transit Needs Within Kane County

consulting associates

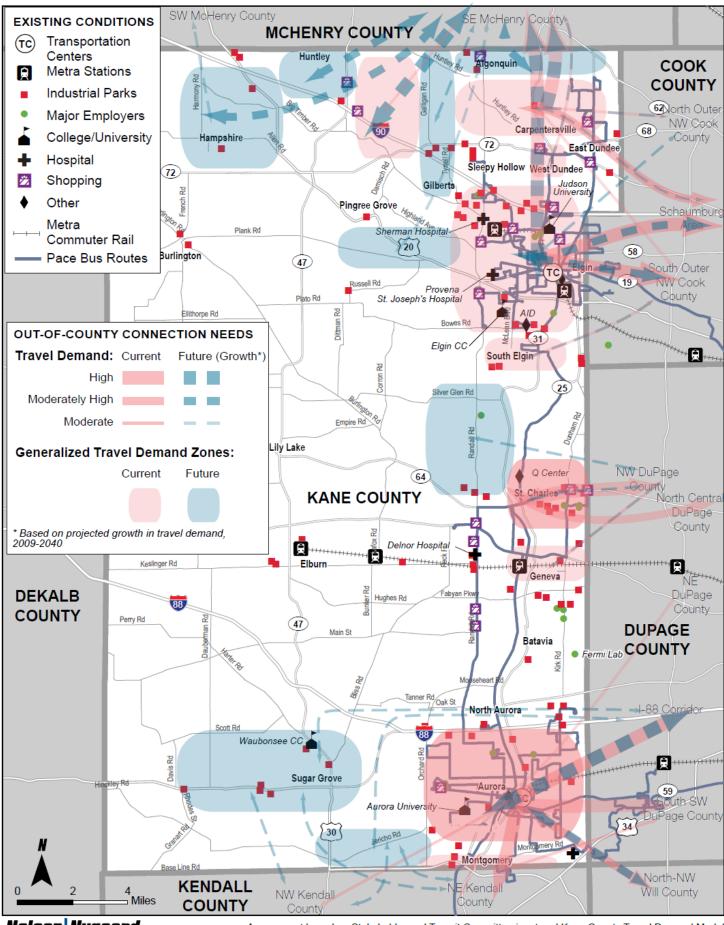


GIS Data Sources: Kane County, ESRI, 2000 U.S. Census

### Figure 3 Identified Out-of-County Needs

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

### Figure 4 Major Out-of-County Transit Needs



Nelson Nygaard

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

### Value Tradeoffs

As part of a public open house in April, 2010, County residents and stakeholders were asked to complete a web-based or hard-copy survey about transit service in Kane County<sup>1</sup>. Although the survey response rate did not allow for a conclusive statement of findings, the results reveal respondents' relative priorities and preferences for transit service and were used to inform the development of strategies. Findings related to respondent preferences for transit service goals and their support for various service options are discussed briefly below.

### **Tradeoffs in the Provision of Transit Service**

Residents expressed:

- Very slight leaning towards productivity over coverage-oriented service, but also the desire for a balance between productively and coverage
- Clear leaning towards a preference for frequent daily service over weekend/evening service
- Moderate leaning towards weekend service over later evening service
- Slight leaning towards regional service over local service
- Strong leaning towards serving work trips over non-work trips

#### **Support for Service Options**

Residents expressed the greatest level of support for "more local service in my community." Residents also expressed moderate to strong support for more frequent service and for additional cross-county service. Strong majorities of respondents indicated they were likely to use local service and more frequent service. A majority of respondents also indicated they would be likely to use cross-county service.

### **Recommended Strategies for Kane County**

This section presents a set of recommended strategies to meet the identified transit needs. Each recommendation includes an implementation timeframe, order-of-magnitude cost estimate and suggested responsible parties required for successful implementation. The 12 recommended strategies are identified with a numeric code and are organized into two broad categories:

- Service Strategies (1-6): These strategies address both the connection and level-ofservice needs and are further organized into service provided within the Fox Valley, connections from western Kane County to the Fox Valley, and intercounty service.
- Transit-Supportive Investments and Programs (7-12): These strategies are primarily focused on the third category of transit needs, summarized above, and include capital investments, policies, and programs that support transit service.

<sup>&</sup>lt;sup>1</sup> 42 surveys were provided by stakeholders and the general public (20 hard copy surveys were completed by stakeholders and members of the public and 22 were submitted via a web-based survey).

	Strategy	Description
Fox V	alley Service Strategies	Expand the local Pace bus service network in areas where
1	Expand local service network in growing population/employment centers and improve level-of- service	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.
Weste	ern 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.
Interc	ounty Service Strategy	
6	Provide regional out-of-county service	Provide connections to adjacent counties, primarily serving commuter needs, from parts of the County with and without existing fixed-route bus service.
Trans	it-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 service and 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.

### Figure 5 Summary of Recommended Strategies

### **Implementation Timeframes**

Strategies are categorized into four implementation timeframes – immediate, short, medium, and long-term. The following lists each time frame along with the assumed constraints, including available funding, land use, planning requirements and population/employment growth.

- 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 mediumterm 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.

### **Cost Estimation**

The order-of-magnitude cost estimates provided for each strategy are based on the assumptions in Figure 7. The cost assumptions do not include the following (unless noted for a particular strategy):

- Complementary ADA paratransit service, required within a <sup>3</sup>/<sub>4</sub> mile distance of fixed-route service. Appendix H.1 provides order-of-magnitude cost estimates for strategies that are likely to require ADA service to be expanded.
- Vehicle purchase costs, since vehicles may also be leased or included in the cost of contracted service.

In some cases, multiple strategies can be coordinated to serve a similar route or set of destinations at different times. For example, strategies to provide peak-hour commute service and midday local service may result in the use of similar routes serviced by the same vehicle(s). In this case, each strategy would include a separate estimate of operating cost over its span of operation, but the vehicle cost may be shared by the complementary services. For example, the same Pace Municipal Vanpool vehicle could be used to provide peak hour Metra feeder service as well as a shuttle to activity centers outside of peak commute hours.

#### Figure 6 Cost Estimation Assumptions

Service Type or Unit	Typical Elements	Unit Cost
Traditional Vanpool	Pace-provided van	Varies by number of riders <sup>(1)</sup>
Municipal Vanpool Vehicle	Pace-provided van, not including labor	\$100 / month + \$1000 one-time deposit <sup>(2)</sup>
Employer Shuttle (using Pace Vanpool vehicles)	Pace-provided van, not including labor	\$1029 / month (Employer) or \$768 / month (Non-Profit) <sup>(1)</sup>
Hourly Cost for van-type vehicle (i.e. Municipal Vanpool or Employer Shuttle)	Driver labor cost, fuel, maintenance; Pace-provided van (see above)	\$30 / Hour
Hourly Cost for mini-bus-type vehicle	Driver labor cost, fuel, maintenance; mini-bus (paratransit) type vehicle	\$52 / Hour <sup>(3)</sup>
Fixed-Route Bus Operating Cost (Pace)	Bus	\$77 / revenue hour of service <sup>(4)</sup>
Basic Transit Hub Creation/Improvements	Shelter/Concrete Pad, Lighting, Concrete Pad, Transit Maps/Schedules, Trash Can,	\$30,000 / each
Enhanced Stop (e.g. BRT)	Distinctive Shelter and Signage, Electronic Transit Information, Fare Machine	\$50,000 / each
Transportation Center with 50 space park & ride	Transit hub plus bus bays and parking spaces	\$250,000 / each
Enhanced Transit Vehicle (e.g. BRT)	Distinctive low-floor vehicle, possibly articulated	\$300,000

(1) http://www.pacebus.com/sub/vanpool/traditional\_vanpool.asp

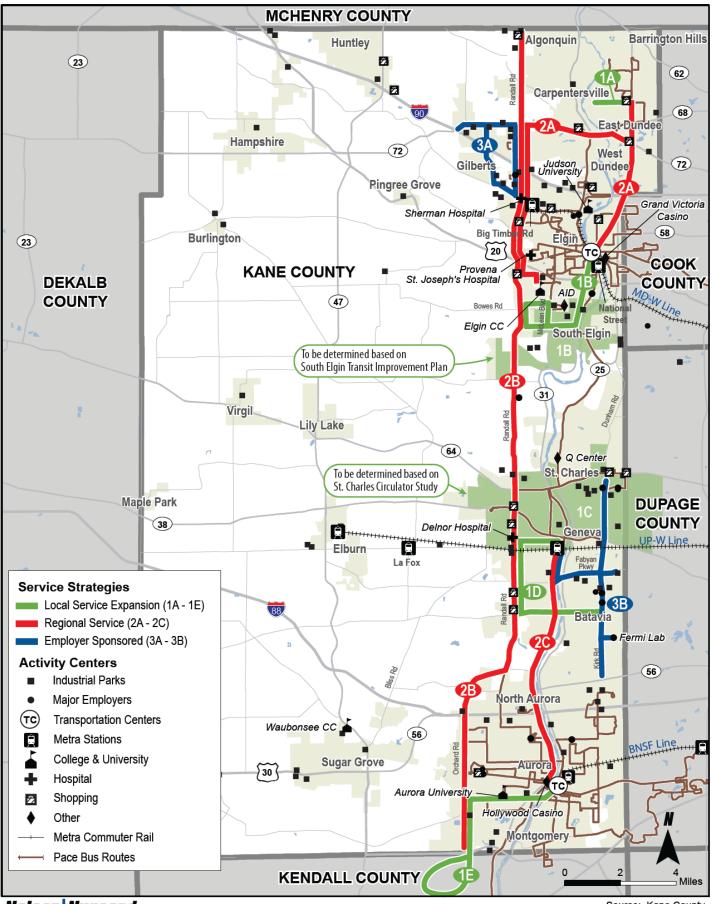
(2) Pace 2010 Budget Book

(4) Based on Pace West Joliet Call-n-Ride operating cost (2009). From Baumgartner, David S., Evaluation of a Demand-Responsive Transit Service and Analysis of its Applicability in Other Locations, Master's Thesis (Unpublished), 2009.

(4) Pace 2009 Q2 Report, cost for Kane County routes

### Service Strategies – Fox Valley

Strategies 1 - 3 are aimed at meeting current and future transit service needs for the Fox Valley, as identified from stakeholder input and supported by the Kane County Travel Demand Model. They are illustrated (where possible) in Figure 7 below, followed by a description of each strategy.





Nelson Nygaard

Source: Kane County

<ul> <li>1. Expand local service network in growing population/</li> <li>Description: This strategy would expand the local Pace bus service network warrant expanding the local service area adjacent to the</li> <li>Carpentersville and Upper Fox Valley</li> <li>South Elgin</li> </ul>	etwork in	areas where popu	•	
St. Charles/Geneva				
Batavia/Geneva				
Montgomery				
Values Tradeoffs:				
Most Productive Service		> Ba	asic Service to	all Residents
Regional Service			ocal Service	
Work Commute Trips			on-Work Trips	
Strengths:	Weakne	sses:		
<ul> <li>Allows for incremental expansion of existing service</li> <li>Increases the residential population living within walking distance of transit and provides access to additional employment/services destinations</li> <li>Enables primarily shorter-distance trips but may also enable longer connecting trips</li> <li>Provides transit options and also serves transit dependent populations</li> </ul>		Recent service c will have funding in the short-term Ease-of-implement transit environme e.g. sidewalks, pe	to implement the station dependent along idea	hese expansions Is on a suitable ntified corridors,
Recommended Strategies:				
Strategy Description	Time Frame	Service Type / Model	Est. Annual Operating Costs*	Responsibility
1A. Extend fixed route service to the Old Town Area in Carpentersville. It is assumed that the cost for this strategy will be incorporated into service restructuring as part of 2A (i) and/or (ii).	М	Fixed Route - Bus	Provided via 2A.	Pace <sup>1</sup>
<b>1B. Extend fixed route service coverage and improve frequency in</b> <b>South Elgin.</b> Currently, only two daily round trips on Route 549 serve McLean Blvd. as far south as Bowes Road. Frequency of service on Route 801, connecting Elgin to South Elgin, is limited.				
(i) This option would provide additional service between Elgin and			\$275,000	
South Elgin along the IL 31 corridor (also served by Route 801) and extend east-west coverage in South Elgin, including to McLean Blvd and Randall Road. The cost for this option assumes one bus providing hourly weekday (14 hours per day) service.	M-L	Fixed Route - Bus	Capital Cost: 1 Bus	Pace <sup>1</sup> , South Elgin <sup>2</sup>
(ii) This option would follow the recommendations of a South Elgin Transit Improvement Plan recently initiated by the Village.	TBD	TBD	TBD	Pace with South Elgin (TBD)
<b>1C. Create St. Charles - Geneva Circulator service.</b> This service would follow the recommendations of the existing circulator study. The study area is north of IL 38 and south of IL 64, and approx. 1/2 mile east of Kautz Rd. and west of Randall Rd.	М	Community Shuttle - Bus	To be determined - circulator study	Pace <sup>1</sup> , St. Charles / Geneva <sup>2</sup>

Strategy Description	Time Frame	Service Type / Model	Est. Annual Operating Costs*	Responsibility
<b>1D. Create Batavia to Geneva transit connection.</b> This service would provide an east-west connection between Randall Road and IL-31, e.g. using Wilson St. east-west through Batavia, and stopping on Randall Road and IL 38 en route to downtown Geneva, including the Geneva Metra Station. It may be possible to coordinate this strategy with 3B. Cost assumes 1 bus with hourly frequency and 12 service hours per weekday. Cost does not include potential expansion of the complementary ADA service area.	М	Community Shuttle - Bus	\$230,000 Capital Cost: 1 Bus	Pace <sup>1</sup> , Batavia/Geneva <sup>2</sup>
<b>1E. Extend fixed route bus service in Montgomery.</b> The extension would serve developing residential/employment areas in Western Montgomery and include key activity centers along Orchard Road. Cost is based on one bus with 12 weekday service hours and 30 to 45 minute headways (depending on the final route design). Cost does not include expansion of the complementary ADA service area. Funding would need to be negotiated for any portion of the service in Kendall County, which is not part of the RTA service region.	M-L	Fixed Route - Bus	\$230,000 Capital Cost: 1 Bus	Pace <sup>1</sup> , Montgomery <sup>2</sup>
<b>1F. Improve service frequencies to 15 minutes</b> as land uses along identified PTN corridors (see 10A) reach transit-supportive levels, building on the existing/developing urban form in Elgin and Aurora.	М	Fixed Route - Bus	Not determined	Pace <sup>1</sup>
<b>1G. Provide late evening and weekend service</b> along PTN corridors and/or in transit markets where it is warranted by demand (e.g. serving educational institutions). This strategy is likely to require expansion of ADA service hours.	L	Fixed Route - Bus	Not determined	Pace <sup>1</sup>

\*All costs are annual operating costs unless otherwise noted. Identified cost does not include ADA Paratransit costs. These are estimated in Appendix H.1 if applicable.

<sup>1</sup>Financial and Operations

<sup>2</sup>Financial Support

2. Improve/provide regional service in Kane County				
Description:				
This strategy would improve or provide regional connections between key destinations or along major corridors in the				
urbanized parts of Kane County. The strategy includes:			le el ellerig illej	
Bus Rapid Transit along Randall Road, including th	o dovolo	nmont of transit n	odos and nark 8	rido facilitios
		prinerit or transit ri	oues and park o	
North-south and east-west corridors and connection	-			
These are medium- to long-term strategies, supported by			el demand, but	contingent on the
development of transit-supportive land-use patterns along th	ese corr	idors.		
Values Tradeoffs:				
Most Productive Service			Basic Service to	all Residents
		/		
Regional Service			Local Service	
Work Commute Trips			Non-Work Trips	
Strengths:	Weakı	nesses:		
<ul> <li>Enables longer-distance trips within the County</li> </ul>	•	Land use alone	a many maior c	orridors precludes
<ul> <li>Provides transit options and also serves transit</li> </ul>				bus service in the
dependent populations			•	particular large
				ck of pedestrian
		infrastructure, e	,	
	•	•		ires the presence
		of transit nodes	s, which would n	eed to be fostered
		over the mediu	m- to long-term	
Recommended Strategies:	•			
			Est. Annual	
	Time	Service	Operating	
Strategy Description	Frame	Type / Model	Costs*	Responsibility
2A. Improve service levels and regional connections in the Upper	Traine	Type / Model	00313	Responsibility
Fox Valley.				
(i) Develop transit service along North Randall Road and IL 72,			¢750.000	
providing a connection between the Upper Fox Valley and Randall Road			\$750,000	
and connecting the gap in service on Randall Road between			Capital Cost: 1-	
approximately US 20 and I-90. The costing for this option assumes an			2 additional	Pace <sup>1</sup> ,
extension of (or connection to) Route 803 west of Spring Hill Mall	M-L	Fixed Route - Bus	buses beyond	Carpentersville,
(Route 803 runs along IL 72 and IL 25 through West and East Dundee			existing,	East/West Dundee <sup>2</sup>
and Carpentersville) with 30 minute weekday peak headways and 45			assuming	
minute headways at other times, and 14 service hours on weekdays and			extension of	
12 service hours on Saturdays. This strategy helps meet the need for service along IL 72 that is also addressed in 3A.			Route 803.	
(ii) Improve the frequency of transit service between the Upper Fox			\$235,000	
			φ200,000	
Valley and Flain This option assumes an increase of from depending 60				Pace <sup>1</sup> with
Valley and Elgin. This option assumes an increase of from generally 60 minute headways on Route 543 between Carpentersville and Elgin to 30			Capital Cost:	Pace <sup>1</sup> with Carpentersville.
minute headways on Route 543 between Carpentersville and Elgin to 30	M-L	Fixed Route - Bus	Capital Cost: One additional	Carpentersville,
	M-L	Fixed Route - Bus		Carpentersville, East Dundee,
minute headways on Route 543 between Carpentersville and Elgin to 30 minute headways for 12 of 14 current weekday service hours and 8 of	M-L	Fixed Route - Bus	One additional	Carpentersville,

Strategy Description	Time Frame	Service Type / Model	Est. Annual Operating Costs*	Responsibility
<ul> <li>2B. Create a Randall Road BRT / regional express service, including development of transit nodes, park &amp; ride facilities, etc. Cost assumes service between Oswego and Algonquin, 5 stations with park &amp; rides and 10 other stops, and the following service levels:</li> <li>Weekday: headways of 15 minutes (30 minutes eve.), 17 hours/day</li> <li>Saturday: headways of 20 minutes (30 minutes eve.), 15 hours/day</li> <li>Sunday: headways of 30 minutes, 14 hours/day</li> <li>Funding would need to be negotiated for any portion of the service in Kendall County, which is not part of the RTA service region. The cost does not include expansion of the complementary ADA service area and hours.</li> </ul>	L	BRT	\$5.5 M Operating \$7.5 M Capital	Pace <sup>1</sup> , Randall Road Municipalities <sup>2,3</sup> , Kane County <sup>3</sup>
<ul> <li>2C. Improve service levels on Route 802 along II 31 between Aurora and the Batavia/Geneva/St. Charles area.</li> <li>(i) Provide midday service between ATC and Charlestown Mall (i.e. trips currently terminating at Airport/Overland in North Aurora) on weekdays and Saturdays</li> <li>(ii) Increase peak frequency to 30 minutes on weekdays (assumes all trips currently serving Charlestowne Mall), i.e. not terminating in North Aurora</li> </ul>	M-L	Fixed Route – Bus	(i) \$140,000 (ii) \$155,000 Capital Cost: 1 additional bus beyond existing	Pace <sup>1</sup>

\*All costs are annual operating costs unless otherwise noted.

Identified cost does not include ADA Paratransit costs. These are estimated in Appendix H.1 if applicable.

<sup>1</sup>Financial and Operations

<sup>2</sup>Financial Support

#### 3. Develop employer-sponsored transit services in Kane County Description: This strategy would provide employer-sponsored service to major employment areas. Successful models for such service exist in the Chicago area, including the Lake Cook TMA and Pace Shuttle Bug service. The strategy includes service on the: IL 72/Big Timber Road/North Randall Road Corridor Kirk Road/Fabyan Parkway Corridors Values Tradeoffs: **Most Productive Service Basic Service to all Residents Regional Service** Local Service Work Commute Trips **Non-Work Trips** Strengths: Weaknesses: Enables service to employment areas where • TMA formation may be difficult until there is urban design and land use patterns are not consensus on the benefits of transportation conducive to traditional fixed-route service options and they may be dependent on one or more large employers, whose departure can be a major challenge to continuity of the service **Recommended Strategies:** Est. Annual Time Service Operating Costs\* **Strategy Description** Frame Type / Model Responsibility 3A. Develop transit service to employment sites along IL 72 and \$105,000 Local Big Timber Road (west of Randall Road). This would serve as a TMA/Employer businesses/TMA<sup>1</sup>, S-M feeder from Big Timber Metra station, serving reverse commuters, and Shuttle - Bus Capital Cost: Area municipalities would also connect to existing bus routes. Assumes eight daily peak 1 Bus with Pace3, weekday service hours. See also 2A. 3B. Develop transit service to employment sites on the Kirk Road / \$105,000 Local Fabyan Parkway corridors, including Fermi Lab. This would serve as TMA/Employer businesses/TMA<sup>1</sup>, S-M a feeder from the Geneva Metra station/transportation center, serving Shuttle - Bus Capital Cost: Batavia with reverse commuters, and would also connect to existing bus routes. 1 Bus Pace<sup>3</sup>. Assumes eight daily peak weekday service hours. 3C. Foster the development of Transportation Management Associations to facilitate such employer-sponsored services as S-L See 12A well as other Transportation Demand Management (TDM)

\*All costs are annual operating costs unless otherwise noted

strategies. See 12A for details on this strategy.

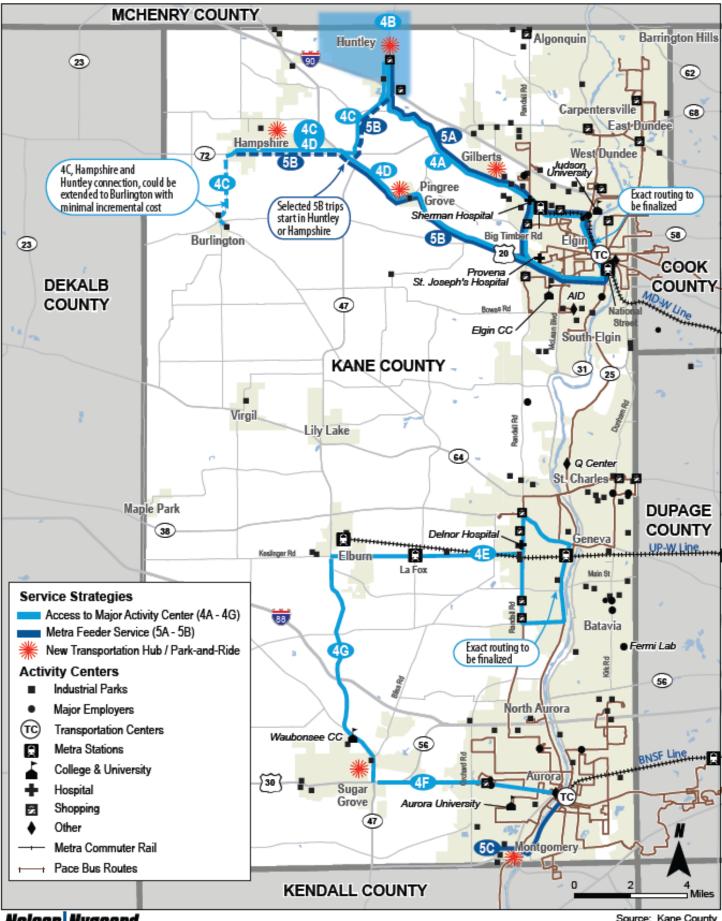
<sup>1</sup>Financial and Operations

<sup>2</sup>Financial Support

### Service Strategies – Western Kane County

Strategies 4 - 5 are aimed at meeting current and future transit service needs for Western Kane County, where there is no existing fixed-route bus service. These needs were identified from stakeholder input and confirmed using the Kane County Travel Demand Model. They are illustrated (where possible) in Figure 9 below, followed by a description of each strategy.

### Figure 9 Service Strategies for Western Kane County



Neison N aaro consulting associates

Source: Kane County

#### 4. Provide access to major activity centers in Kane County

#### Description:

This strategy would 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. This strategy is focused on serving home-based other trip types and as such it would likely not be suitable for commuters or students who depend on more regular and frequent daily service. In the short-term, this strategy recommends community-based service using Pace Municipal Vanpool vehicles to meet these needs. In the longerterm, increased/demonstrated market demand may justify transitioning to higher levels of service, reflected in medium or longer term service provided by larger buses as opposed to smaller, more flexible vehicles. Pace would take a larger financial and operational role, however municipalities would continue to provide financial support for these services. Values Tradeoffs: **Most Productive Service** Basic Service to all Residents **Regional Service** Local Service Work Commute Trips **Non-Work Trips** Strengths: Weaknesses: Enables longer-distance access to services for Land use along many major corridors precludes • • efficient service by traditional fixed route bus transit dependent populations service in the short to medium term, in particular Use of small vehicles in the short-term allows large setbacks from the street, lack of pedestrian buses to serve multiple destinations and costing assumes time for flexible dropinfrastructure, etc. offs/pick-ups

Recommend	led Strateg	ies:

Oferstern Description	Time	Service	Est. Annual Operating	Deenersikilite
A. Provide service from Huntley to Elgin.	Frame	Type / Model	Costs*	Responsibility
(i) Service provided using municipal vanpool. Cost includes driver, fuel, and maintenance costs and assumes 5 day/week service, 5 round trips per day, and allows some time for deviations and a loop serving key destinations. Operations may be coordinated with Huntley Metra Feeder Service 5A(i), i.e. complementary times serving a different market.	S	Community Shuttle – Municipal Vanpool	\$80,000	Huntley <sup>1</sup> , Pace <sup>3</sup>
(ii) Fixed-route bus. The cost, which is a share of combined service provided by 4A(ii) and 5A(ii), assumes two buses operating at 45 minute headways for 12 hours on weekdays and 10 hours on Saturdays. Cost does not include complementary ADA service, which would likely be required.	М	Community Shuttle – Bus	\$310,000 Capital Cost: 1 Bus	Pace <sup>1</sup> , Huntley <sup>2</sup>
<b>4B. Provide Huntley Circulator service.</b> Cost assumes hourly frequency, with 12 hours of service on weekdays and 10 hours on Saturdays. Cost does not include complementary ADA service, which would likely be required.	L	Community Circulator	\$275,000 Capital Cost: 1 Bus	Pace <sup>1</sup> , Huntley <sup>2</sup>
<b>4C. Provide Burlington/Hampshire to Huntley transit</b> <b>connection.</b> Cost includes driver, fuel, and maintenance costs and assumes 3 day/week service, 3 round trips per day, and allows some time for deviations and a loop serving key destinations. May connect to 4A.	S	Community Shuttle – Municipal Vanpool	\$30,000	Hampshire, Burlington <sup>1</sup> , Pace <sup>3</sup>

Strategy Description	Time Frame	Service Type / Model	Est. Annual Operating Costs*	Responsibility
<b>4D. Provide service from Pingree Grove to Elgin, with trips starting in Huntley or Hampshire.</b> Cost includes driver, fuel, and maintenance costs and assumes service 3 days per week, 4 round trips per day, and allows some time for deviations and a loop serving key destinations. Service is assumed to supplement/build upon 4A/4C.	М	Community Shuttle – Municipal Vanpool	\$40,000	Pingree Grove, Huntley, Hampshire <sup>1</sup> , Pace <sup>3</sup>
<b>4E. Provide a transit connection from Elburn to Randall Road</b> <b>for access to services</b> . Service can also include other destinations in the Batavia - Geneva area.				
(i) 3 days per week, 3 round trips per day, providing access to services; allows some time for deviations and a loop serving key destinations	S-M	Community Shuttle – Municipal Vanpool	\$30,000	Elburn <sup>1</sup> , Pace <sup>3</sup>
(ii) Fixed-route bus, assuming one bus providing 10 hours of service on weekdays and Saturdays, with hourly frequencies. In the long- term, it is assumed that frequent connecting service will be available. Cost does not include complementary ADA service.	L	Community Shuttle – Low Frequency Bus	\$235,000 Capital Cost: 1 Bus	Pace <sup>1</sup> , Elburn <sup>2</sup>
<b>4F. Provide service from Sugar Grove to Aurora.</b> Should include service to Waubonsee Community College and connect to Pace 529 service to Randall Road, and Aurora Transportation Center.				·
(i) 3 days per week, 3 round trips per day, providing access to services; allows some time for deviations and a loop serving key destinations.	S-M	Community Shuttle – Municipal Vanpool	\$30,000	Sugar Grove <sup>1</sup> , Waubonsee Community College <sup>2,</sup> Pace <sup>3</sup>
(ii) Fixed-route bus, assuming 10 hours of service on weekdays and Saturdays, with hourly frequencies. In the long-term, it is assumed that frequent connecting service will be available. Cost does not include complementary ADA service.	L	Community Shuttle – Low Frequency Bus	\$235,000 Capital Cost: 1 Bus	Pace <sup>1</sup> , Waubonsee Community College <sup>2</sup> , Sugar Grove <sup>2</sup>
<b>4G. Provide service from Sugar Grove to Elburn.</b> Should include service to Waubonsee Community College. Cost assumes 3 days per week, 3 round trips per day.	М	Community Shuttle – Municipal Vanpool	\$30,000	Sugar Grove <sup>1</sup> , Waubonsee Community College <sup>2</sup> , Pace <sup>3</sup>

\*All costs are annual operating costs unless otherwise noted.

Identified cost does not include ADA Paratransit costs. These are estimated in Appendix H.1 if applicable.

<sup>1</sup>Financial and Operations

<sup>2</sup>Financial Support

#### 5. Provide Metra Feeder service

#### **Description:**

covered by 4A.

This strategy would 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. In the short-term, this strategy recommends community-based service using Pace Municipal Vanpool vehicles to meet these needs. In the longer-term, increased/demonstrated market demand may justify transitioning to higher levels of service. Pace would take a larger financial and operational role, however municipalities would continue to provide financial support for these services. As this plan was being developed. Metra is experimenting with funding feeder service in Naperville and dialogue is ongoing between Pace and Metra management. Values Tradeoffs: **Most Productive Service Basic Service to all Residents Regional Service** Local Service Work Commute Trips **Non-Work Trips** Strengths: Weaknesses: Dispersed residential and employment land uses • Increases access to Metra • make it difficult to provide efficient service and May alleviate Park & Ride capacity constraints may require park & ride access Can help build awareness of transit Free or low-cost parking at some Metra stations May complement strategy #4, utilizing same may be a disincentive to use of Pace feeder vehicles to serve different transit markets, i.e. service, which currently costs \$1.75 each way. different times of day and destinations **Recommended Strategies:** Est. Annual Time Service Operating Strategy Description Frame Type / Model Costs\* Responsibility 5A. Provide Metra feeder service from Huntley to Big Timber Metra and/or Elgin. Operations may be coordinated with Huntley Regional Service Connection (4A), i.e. complementary times serving a different market. (i) Peak hour connecting service using municipal vanpool. Cost assumes six total hours of peak service, 5 days per week, and allows Feeder Shuttle -S \$40,000 Huntley<sup>1</sup>, Pace<sup>3</sup> some time for deviations and a loop serving key destinations. The Municipal Vanpool base vehicle cost is assumed to be covered by 4A. (ii) Service transitions to bus. The cost is a share of combined service \$120,000 Feeder Shuttle provided by 4A(ii) and 5A(ii) and assumes two buses operating at 45 М Capital Cost: Pace<sup>1</sup>, Huntley<sup>2</sup> Bus minute headways. 1 Bus 5B. Pingree Grove to Elgin including downtown Transportation Center and/or Big Timber Metra station (with optional origins in Pingree Grove, Feeder Shuttle -М \$40.000 Hampshire or Huntley). Cost assumes six total hours of peak Huntley, Hampshire<sup>1</sup>, Municipal Vanpool service, 5 days per week. The base vehicle cost is assumed to be Pace<sup>3</sup>

Strategy Description	Time Frame	Service Type / Model	Est. Annual Operating Costs*	Responsibility
5C. Montgomery to Aurora Transportation Center, serving planned Montgomery Park & Ride at intersection of IL 31 / Webster Street. The feeder could serve employers around Aucutt Road west of the Park & Ride, who could provide funding support. Funding would need to be negotiated for any portion of the service in Kendall County, which is not part of the RTA service region.				
(i) Cost assumes six to eight total hours of service. It may also be possible to coordinate / complement this strategy with 6I (expansion of Route 907 Metra feeder from Oswego).	S	Feeder Shuttle – Municipal Vanpool	\$40,000 to \$60,000	Montgomery <sup>1</sup> , Local businesses <sup>2</sup> , Pace <sup>3</sup>
(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	Feeder Shuttle – Bus	See 1E	Pace <sup>3</sup> , Montgomery <sup>2</sup> , Local businesses <sup>2</sup>

\*All costs are annual operating costs unless otherwise noted <sup>1</sup>Financial and Operations <sup>2</sup>Financial Support <sup>3</sup>Coordination/Support

#### 6. Provide regional out-of-county service

#### Description:

(i) Vanpool

hours with 45 minute headways

(ii) Fixed Route Bus. Cost assumes 2 buses operating during peak

6F. Aurora Area to Naperville, SW DuPage County, or I-88

This strategy would provide connections to adjacent counties, primarily serving commuter needs, from parts of the County with and without existing fixed-route bus service. In the short- to medium-term, this strategy focuses on traditional vanpools to supplement existing Metra commuter rail and Pace buses that serve Cook and DuPage Counties. Vanpool strategies can be considered both to employment sites and as feeder service to Kane County Metra stations. Similar approaches to Strategies #3 and #5 (TMAs and other employer-sponsored and feeder services) applied in adjacent counties would support intercounty connection needs by providing last-mile service to employment sites. In the medium- to long-term, additional peak fixed-route and express service could be provided to employment sites in other counties.

Values Tradeoffs:				
Most Productive Service			Basic Service t	o all Residents
Regional Service			Local Service	
Work Commute Trips			Non-Work Trip	S
Strengths:	Weakn	lesses:		
• Provides longer-distance connections to	•	Jurisdictional bo	undaries betw	veen counties, in
employment sites not served by Metra		particular those n		,
Recommended Strategies:				
Strategy Description	Time Frame	Service Type / Model	Est. Annual Operating Costs*	Responsibility
McHenry County				
6A. Elgin Area to SE McHenry County		1	T	I
(i) Vanpool	S - M	Traditional Vanpool	N/A	Regional businesses / employees <sup>2</sup> , Pace <sup>3</sup>
(ii) Fixed Route Bus. Cost assumes 2 buses operating during peak hours with 45 minute headways	L	Commuter Fixed- Route Bus	\$310,000	Pace <sup>1</sup>
6B. Hampshire/Huntley to SE McHenry County – Traditional vanpool	S - L	Traditional Vanpool	N/A	Regional businesses / employees <sup>2</sup> , Pace <sup>3</sup>
6C. Hampshire/Huntley to SW McHenry County – Traditional vanpool	M - L	Traditional Vanpool	N/A	Regional businesses / employees <sup>2</sup> , Pace <sup>3</sup>
Cook County			•	
6D. Elgin Area to Cook County				
(i) Vanpool	S - M	Traditional Vanpool	N/A	Regional businesses / employees <sup>2</sup> , Pace <sup>3</sup>
(ii) Improve frequency of Route 554 Fixed Route Bus to NW Cook County (Elgin to Hoffman Estates, Streamwood, Schaumburg). Cost assumes 1 additional bus on the route, operating during peak hours.	M-L	Commuter Fixed- Route Bus	\$175,000	Pace <sup>1</sup>
(iii) Design/provide an additional fixed bus route to NW Cook County. Cost assumes 2 buses operating during peak hours with 45 minute headways	M-L	Commuter Fixed- Route Bus	\$310,000	Pace <sup>1</sup>
(iv) I-90 Express Bus Service. Assumes origin in Huntley area and peak-hour service.	L	Express Commuter Service	\$475,000	Pace <sup>1</sup>
DuPage County				
6E. Geneva-St.Charles Area to NW DuPage County (e.g. Bartlett				
Business Park)				

S - M

M-L

Traditional Vanpool

Commuter Fixed-

Route Bus

N/A

\$310,000

Regional businesses

/ employees<sup>2</sup>, Pace<sup>3</sup>

Pace<sup>1</sup>

Strategy Description	Time Frame	Service Type / Model	Est. Annual Operating Costs*	Responsibility
Corridor				
(i) Vanpool	S - M	Traditional Vanpool	N/A	Regional businesses / employees <sup>2</sup> , Pace <sup>3</sup>
(ii) Fixed Route Bus to SW DuPage County. Cost assumes 2 buses operating during peak hours with 45 minute headways	M-L	Commuter Fixed- Route Bus	\$310,000	Pace <sup>1</sup>
(iii) I-88 Express Bus Service. Assumes origin in Sugar Grove area and peak-hour service.	L	Peak Only Express Service	\$475,000	Pace <sup>1</sup>
Will County				
6G. Aurora Area to Will County	S - L	Traditional Vanpool	N/A	Regional businesses / employees <sup>2</sup> , Pace <sup>3</sup>
Kendall County				
6H. Sugar Grove / South East-Central Kane County to North Kendall County	L	Traditional Vanpool	N/A	Regional businesses / employees <sup>2</sup> , Pace <sup>3</sup>
<b>6I. Aurora Area to NE Kendall County</b> . Cost for extension of 907 feeder shuttle (longer term recommendation (ii)) assumes increasing service span or frequency. Increasing frequency would incur an additional capital cost (1 bus).	(i) S (ii) M-L	(i) Traditional Vanpool (ii) Expansion of 907 Feeder Shuttle	(i) N/A (ii) \$80,000 (possible capital cost of 1 bus)	(i) Regional businesses / employees <sup>2</sup> , Pace <sup>3</sup> (ii) Pace <sup>1</sup>

\*All costs are annual operating costs unless otherwise noted

<sup>1</sup>Financial and Operations

<sup>2</sup>Financial Support

### **Transit-Supportive Investments and Programs**

#### 7. Improve capital facilities that provide access to transit

#### **Description:**

This strategy would improve and prioritize/coordinate investments in the different types of capital facilities that provide access to transit. It identifies three categories of facilities:

- Bus stop amenities (e.g. shelters), design standards, and placement policy. These facilities are an
  instrumental part of passenger comfort, but are also closely related to customer information and marketing
  (Strategy #11).
- Transportation centers/hubs, including Park & Ride facilities, as necessary. These facilities include a higher level of amenities than stops, serve as connection points between transit routes, and facilitate ridesharing and vanpool coordination.
- Bicycle/pedestrian facilities provide access to a stop or station by bicycling and walking for short trips and facilitate safe and convenient access to destinations (related to Strategy #8, Improve Access to Metra Stations, and #10, Transportation and Land Use).

Values Tradeoffs:	
Most Productive Service	Basic Service to all Residents
Regional Service	Local Service
Work Commute Trips	Non-Work Trips
Strengths:	Weaknesses:
<ul> <li>Provides the infrastructure necessary to attract and retain transit riders</li> </ul>	<ul> <li>Built environment along existing / potential corridors is not conducive to transit service</li> </ul>

#### **Recommended Strategies:**

Strategy	Time Frame	Total Estimated Capital Costs	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, where they will be most visible to passengers. Locate stops at opposing sides of the street so that they can be served with safe pedestrian crossings. Although many Pace bus routes operate at least partially on a flag stop basis, placing route signs at logical locations along the route allows amenities to be placed at major stops (see [ii]) and the visibility to potential passengers helps market the route and system.	S-M	Not determined	Pace <sup>1</sup>
(ii) Develop bus stop amenity design standards and a policy for where and at what level to provide stop amenities. Development of the standards and policy would draw from Pace guidelines and involve coordination with municipalities to prioritize amenities at the most highly used stops. The criteria could include number of boardings, transfer locations, etc. and could be used by municipalities and Pace to prioritize improvements. Amenities include shelters, seating, trash cans, passenger information, etc.	S	N/A	Pace with Municipalities and Kane County

Strategy	Time Frame	Total Estimated Capital Costs	Responsibility
7B. Develop transportation centers or hubs, park & ride facilities, and related amenities in local municipalities throughout the County. Kane County would develop transit facility design standards, drawing from Pace guidelines, and work with each jurisdiction where there is existing or planned transit service to identify a location for a transportation center or hub. Possible amenities at all transportation centers/hubs are similar to those for bus stops (7A(i) above), but should also include bicycle parking.			
(i) Provide and/or improve transportation centers/hubs in urbanized areas of existing transit service: Elgin Big Timber, Downtown and National Street; South Elgin, St. Charles; Geneva; Batavia; Carpentersville; East Dundee (in conjunction with Dundee Crossings project), and Montgomery. Cost assumes \$30,000 per location.	S-M	\$300,000	Municipalities <sup>1</sup> , Pace <sup>2,3</sup>
(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. Outside of urbanized areas, these hubs may include park & ride spaces, including for vanpool use. This strategy should consider the location of future station areas and may include land banking for station areas and/or transit-oriented development. Cost assumes \$250,000 per location, with 50 parking spaces, shelter(s), bike parking, and 2 bus bays.	S-L	\$1,250,000	Municipalities <sup>1</sup> , Pace <sup>3</sup>
7C. Improve Pedestrian and Bicycle Facilities			
(i) Conduct an inventory of pedestrian conditions and access (sidewalks, crossings, pedestrian cut-throughs/paths, etc.) to stations, major stops, and along the PTN, identify and prioritize improvements, and work with local municipalities to address deficiencies through local capital improvement programs (CIPs).	S-L	N/A	Municipalities <sup>1</sup> , Kane County <sup>3</sup>
(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	N/A	Municipalities <sup>1</sup> , Kane County <sup>3</sup>

<sup>1</sup>Financial and Operations

<sup>2</sup>Financial Support

#### 8. Improve access to existing Metra commuter rail service and stations

#### Description:

This strategy includes programs, policies, and physical access improvements to enable and encourage alternative means to access Metra commuter rail service. Several of the existing Metra stations in Kane County have park & ride capacity constraints; in 2008, park & rides with over 95% of capacity utilized were Aurora TC (97%), Geneva (100%), and Elgin (98%). This strategy provides alternatives to expanding parking at these urban stations and includes:

- Implement Transportation Demand Management (TDM) strategies including parking pricing to balance supply and demand, overlapping with Strategy #12, TDM
- Improve connecting transit service to/from Metra including shuttle, feeder and station area vans
- Improve the quality and visibility of transit information at Metra stations, overlapping with Strategy #11, Marketing
- Improve the marketing of rideshare and vanpool matching options, overlapping with Strategy #11
- Improve pedestrian/bicycle access to stations, overlapping with Strategy #7, Transit-Supportive Investments Values Tradeoffs: **Most Productive Service** Basic Service to all Residents **Regional Service** Local Service Work Commute Trips Non-Work Trips Strenaths: Weaknesses: Uncertain feasibility of TDM/pricing strategies Metra stations are perceived as a strength of • • existing transit in Kane County Free or low parking pricing may make it difficult Bicycle and pedestrian access to stations can to incentivize use of transit options effectively serve short trips Current transit reliability • **Recommended Strategies:** Time Strategy Costs Responsibility Frame 8A. Implement Transportation Demand Management strategies. TDM and pricing parking appropriately to balance parking supply and

demand and provide incentives for using non-single occupant vehicle modes to access Metra stations.	S-L	N/A	Metra, Municipalities
<b>8B. Improve connecting transit service to Metra.</b> Ensuring well- timed transfers on bus service connecting to/from Metra stations would make transit a better option for connecting to Metra service. Pace and local municipal partners should ensure that routes meet passengers' destination needs and coordinate with Metra to determine whether this information can be obtained as part of Metra's regular passenger surveys.	S	N/A	Pace, Municipalities (partnering for bus service), Metra
<b>8C. Improve the quality and visibility of transit information at Metra stations and the marketing of transportation options to passengers.</b> Transit information at stations would inform passengers about transportation options and could include Pace route/schedule information, wayfinding, and rideshare/vanpool matching information (see 11). This strategy includes marketing rideshare and vanpool matching to Metra passengers – at both origin and destination stations (see 11).	S	N/A	Municipalities, Pace
8D. Improve pedestrian/bicycle access to stations, including street crossings and sidewalks (see 7C), and 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	N/A	Pace, Metra, Municipalities and Kane County

#### 9. Support Metra commuter rail and intercity rail capital expansion plans Description: This strategy would support documented plans to expand Metra commuter rail service along the existing rail infrastructure in Kane County, the proposed north-south STAR line in western Cook and DuPage Counties, and intercity rail initiatives that serve Kane County. The strategy includes: • Develop TOD plans for proposed station areas (relates to Strategy #10, Transportation and Land Use Coordination) Demonstrate and build ridership potential through vanpools and community shuttles (relates to Strategy #5, Provide Metra Feeder Service, and #6, Provide Regional Out-of-County Service) Support planned expansion initiatives on the three existing Metra lines serving Kane County • Establish connecting service to future stations on the proposed north-south segment of the STAR Line and/or • future intercity rail service Values Tradeoffs: **Most Productive Service Basic Service to all Residents Regional Service** Local Service **Non-Work Trips** Work Commute Trips Weaknesses: Strengths: Existing rail infrastructure is a significant asset Limited funding means that other strategies will • need to meet communities' stated desires for service **Recommended Strategies:** Time Total Estimated Strategy Responsibility Frame **Capital Costs** 9A. Develop TOD plans for proposed/potential station areas, e.g., Gilberts, Huntley, Hampshire, Pingree Grove, Sugar Grove, Municipalities<sup>1</sup>, RTA<sup>2</sup>, S-M N/A Montgomery, in coordination with a PTN Policy (10A) that Metra<sup>3</sup>, Pace<sup>3</sup> identifies current and planned transit corridors. 9B. Demonstrate and build ridership potential through vanpools Municipalities with Pace, S-M N/A and feeder service to existing Metra stations. Metra 9C. Support planned expansion initiatives on the three existing Metra lines serving Kane County. (i) MDW Line. Proposed extension from Big Timber Road station to Gilberts and Huntley, with possible spur to Hampshire and station in L \$777,000,000 Metra<sup>1</sup>, Municipalities<sup>3</sup> Pingree Grove. (Not included in CMAP Go To 2040 Plan.) (ii) UPW Line. Proposed improvements on current line М \$558,000,000 Metra<sup>1</sup>, Municipalities<sup>3</sup> (iii) BNSF Line. Proposed extension from Aurora to Oswego, with possible extension to Sugar Grove. (Not included in CMAP Go To L Not determined Metra<sup>1</sup>, Municipalities<sup>3</sup> 2040 Plan.) 9D. Explore the feasibility of/need for Metra stations at key nodes Metra<sup>3</sup>. on the existing Metra lines in Kane County. This strategy should L N/A Kane County<sup>3</sup>, Pace<sup>3</sup> be coordinated with the study of potential BRT on Randall Road (2B). 9E. Establish connecting service to future stations on the Pace<sup>1</sup>, Metra<sup>3</sup>, M-L Not determined proposed north-south segment of the STAR Line Municipalities<sup>3</sup> 9F. Support future rail service by focusing growth and Municipalities<sup>3</sup>, Pace<sup>3</sup>, investments near transportation centers/hubs and by providing M-L N/A Kane County<sup>3</sup>, Metra<sup>3</sup> future connecting service. <sup>1</sup>Financial and Operations <sup>2</sup>Financial Support

10. Transportation-Land Use Coordination				
Description:				
This strategy would link planned transit investments	and land use	policies. It emphasizes	identifying transit corridors	
based not only on current and projected land use, b		-		
primary approaches included in this strategy are:				
<ul> <li>Develop a Primary Transit Network (PTN) p</li> </ul>	olicy that iden	tifies desired transit co	rridors and focuses transit	
supportive land use policy, and thereby end				
corridors		ourages transit-support	we development on those	
Develop development design guidelines and	•			
<ul> <li>Create a model transit overlay zone and end</li> </ul>	courage local i	municipalities to apply i	t around transit nodes and	
PTN corridors				
<ul> <li>Create TOD Plans for Metra stations, other tr</li> </ul>	ansportation c	enters/hubs, and transit	nodes	
<ul> <li>Adopt a "Complete Streets" policy and coor</li> </ul>	dinate bicycle	and pedestrian improv	ements to ensure network	
completeness	,	· ·		
Values Tradeoffs:				
Most Productive Service		> Basic	Service to all Residents	
Destioned Service			Demise	
Regional Service <			Service	
Work Commute Trips		Non-W	ork Trips	
Strengths:	Weakne	sses:		
• Supportive land use is a necessary element	for •	<ul> <li>Need to coordinate policy between multiplication</li> </ul>		
efficient transit service and levels of service t		municipalities	F	
meet the stated goals of Kane County and lo				
municipalities	ou.			
Recommended Strategies:				
	Time			
Strategy	Frame	Costs	Responsibility	
10A. Develop a Primary Transit Network (PTN) policy. A PTN				
would identify current and future primary transit corridors. A PTN				
defines desired transit corridors where the highest level of service		N/A	Municipalities, Pace, Kane	
desired (as opposed to specific routes) and is a policy mechanism	to		County	
link land use to transit. Appendix F provides a detailed discussion PTN concepts.	or			
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	N/A	Pace, Metra, Kane County	
(ii) Integrate design review into the development review/approval				
process. This could take the form of a new design review board wi			Municipalities, Pace, Kane	
municipal and county representation. Encourage local municipalitie		N/A		
to promote development with incentives rewarding developers who		11/7	County	
			County	
follow the guidelines.	)			
follow the guidelines. 10C. Enact transit-supportive zoning overlay districts to apply transit nodes and PTN Corridors	)			
follow the guidelines. <b>10C. Enact transit-supportive zoning overlay districts to apply</b> <b>transit nodes and PTN Corridors</b> (i) Develop a model transit overlay zone, including density, mixed	/ to			
follow the guidelines.         10C. Enact transit-supportive zoning overlay districts to apply transit nodes and PTN Corridors         (i) Develop a model transit overlay zone, including density, mixed uses, parking minimums/maximums, and bicycle/pedestrian	)	N/A	Municipalities, Kane	
follow the guidelines. <b>10C. Enact transit-supportive zoning overlay districts to apply</b> <b>transit nodes and PTN Corridors</b> (i) Develop a model transit overlay zone, including density, mixed uses, parking minimums/maximums, and bicycle/pedestrian environment	y <b>to</b>		Municipalities, Kane County	
follow the guidelines.         10C. Enact transit-supportive zoning overlay districts to apply transit nodes and PTN Corridors         (i) Develop a model transit overlay zone, including density, mixed uses, parking minimums/maximums, and bicycle/pedestrian	y <b>to</b>		Municipalities, Kane County Municipalities, Kane	
follow the guidelines. <b>10C. Enact transit-supportive zoning overlay districts to apply</b> <b>transit nodes and PTN Corridors</b> (i) Develop a model transit overlay zone, including density, mixed uses, parking minimums/maximums, and bicycle/pedestrian environment	y to S	N/A	Municipalities, Kane County	

Strategy	Time Frame	Costs	Responsibility
<b>10E. Identify/redevelop transit nodes along key PTN corridors.</b> Redevelopment should follow the land use design guidelines (above) and include use of infill development to reduce setbacks	S-M	N/A	Municipalities (redevelopment) and Kane County/Municipalities (identify nodes)
<b>10F.</b> Adopt a Complete Streets policy. A Complete Street policy would require that major new or reconstructed county-owned arterial roads and bridges provide bicycle/pedestrian access and are designed to accommodate transit – including the planned Fox River bridges.	S	N/A	Municipalities, Kane County
<b>10G. Coordinate countywide bicycle plans to ensure network</b> <b>completeness.</b> Coordinate local CIPs to prioritize network improvements to and around major transit nodes/stations	S	N/A	Municipalities, Kane County
<b>10H. Coordinate pedestrian improvements based on network</b> <b>completeness.</b> Work with local municipalities to adopt measures of pedestrian quality (such as sidewalk completeness) for evaluating the quality of local pedestrian networks to and around major transit nodes/stations, and coordinate CIPs based on these criteria.	S	N\A	Municipalities, Kane County

#### 11. Improve marketing and customer information Description: This strategy would take steps to improve the understanding and perception of public transit among Kane County residents and others who work in or visit Kane County. Its goals include expanding the current perception that equates transit service with Metra and making transit part of a community vision for "sustainability." including congestion relief. Improve transit ease-of-use and perceived reliability by expanding trip planning options (e.g., Google Transit) and making real-time stop arrival information available Increase the visibility of transit and transit information, using stop amenities as a marketing tool and making rider/ridesharing options information available at key locations Values Tradeoffs: Most Productive Service Basic Service to all Residents **Regional Service** Local Service Work Commute Trips Non-Work Trips Strenaths: Weaknesses: The existing quality of service is not sufficient to • Increases awareness and understanding of • attract choice riders existing service Cost-effective solution and public-private partnerships can assist with funding **Recommended Strategies:** Strategy Time Frame Responsibility Costs 11A. Expand transit trip planning options for Kane County. Although the RTA trip planner can be used for trips on all Chicagoarea transit providers, Google Transit is supported for only CTA and Metra trips. Integrating Pace with Google Transit would increase the S-M Not determined Pace<sup>1</sup>, RTA<sup>1</sup> visibility of transit options for Metra passengers using Google Transit to plan trips to/from Kane County and provide greater capabilities for mobile device users. 11B. Make real-time stop arrival information available by automated phone, web, and/or text message: Improve Not determined S Pace, Metra, RTA perceived reliability 11C. Use stop amenities to increase visibility of transit S-M Not determined Pace, Municipalities 11D. Develop a transit map for Kane County that shows regional attractions, local transit services and connections to adjacent counties. Although the overall RTA system map includes Kane County, a map focused on Kane County would provide an Municipalities<sup>1</sup> with Kane increased level of detail and thereby promote an understanding of S Not determined County<sup>1</sup> and Pace<sup>3</sup>, Metra<sup>3</sup> available transit options for County residents and visitors. Such a map could be used as part of 11E and include a greater range of available transit options in the western part of the County as they are provided under this plan. 11E. Design and place improved transit information at key locations (Transportation Centers, Metra stations, libraries, retail S Not determined Pace<sup>1</sup> stores) <sup>1</sup>Financial and Operations

<sup>2</sup>Financial Support

#### 12. Transportation Demand Management (TDM) Programs

#### **Description:**

This strategy would provide incentives to use transit, including tax benefits and parking incentives. It includes the use of Transportation Management Associations (TMAs) for implementing these strategies for key concentrations of employers.

- Promote tax-free passes (Metra, Pace and Vanpool)
- Parking incentives
- Transportation Management Associations (TMAs): Kirk Road, IL 72/Big Timber/North Randall Road. This relates to Strategy #3, Expand Employer-sponsored Transportation

It also includes the use of TDM strategies that municipalities can use when working with local employers and developers to:

Identify initiatives

incentive programs

(i) Batavia Area - Kirk Road / Fabyan Parkway

(ii) Elgin-Gilberts Area - IL 72/Big Timber/North Randall Road

12B. Promote tax-free purchase of passes (Metra, Pace, and

• Quantify mode splits

<ul> <li>Track shifts to alternative modes of travel</li> </ul>			
Values Tradeoffs:			
Most Productive Service		Basic Ser	rvice to all Residents
Regional Service	•	Local Ser	vice
Work Commute Trips		Non-Wor	k Trips
Strengths:	Weakn	esses:	
<ul> <li>TDM strategies are a cost-effective solution relative to capital intensive supply-side solutions, but are effective at encouraging choice riders to use transit</li> <li>Takes advantage of federal tax breaks for transit</li> </ul>	•	TDM may not be effec given existing service qu	tive at attracting riders ality
Recommended Strategies:			
	Time		
Strategy	Frame	Costs	Responsibility <sup>1</sup>
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	S-M	N/A	Municipalities, Pace, Metra,

 Vanpool)
 (promote)

 12C. Parking incentives
 L
 Not determined
 Large employers

 12D. Develop local TDM plans or incorporate TDM elements into comprehensive plans.
 M
 N/A
 Municipalities with Pace and Kane County

 <sup>1</sup>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.
 D
 Image: Not determined with plans and providing/administering parking incentives and tax benefit programs with the assistance of the entities identified.

S-L

N/A

Kane County

RTA (administer and

promote), Metra and Pace

# **APPENDICES**

### Appendix H.1: ADA Paratransit Cost Estimates

Order of magnitude cost estimates were developed for strategies that are likely to require an expansion of Pace ADA Paratransit service. These estimates are subject to considerable uncertainty and are intended to illustrate that ADA Paratransit service will be a significant cost component of developing fixed-route bus service (as opposed to municipal vanpool-based service) outside of the existing ADA service area and particularly in the western part of the County. The uncertainty is due to factors including the actual level of population growth that will have occurred when the strategies are implemented and the capacity of existing ADA service to accommodate at least a portion of the incremental changes in the availability of and demand for ADA paratransit service. This is particularly true for limited expansion directly adjacent to the existing ADA service area boundary.

The assumptions used in developing the estimates include:

- The 2009 and projected 2040 population in transportation analysis zones (TAZ) within a three-quarter mile buffer of recommended service routes and outside of the existing Pace ADA service area. The low end of the capital and operating cost ranges assumes 2009 population while the high end is based on the projected 2040 population.
- The existing rate of ADA trips per capita over the Pace ADA service area (regionwide), 0.33 annual trips per service area resident.
- An hourly service cost of \$63, the average cost of Pace ADA service, from the 2009 National Transit Database.

The strategies in the table below are expected to require complementary ADA Paratransit service. Reasons that a service strategy would not require complementary ADA service include:

- It expands frequency of service or coverage within the existing ADA service area and/or hours of service.
- The route will be able to make deviations, e.g., municipal vanpool-based services. As these services transition to fixed-route bus service, e.g., 4A(ii), 4E(ii), and 4F(ii), ADA service would need to be provided.
- The service is commuter-oriented, operating only at peak times, e.g. Metra feeder service.

### Figure 9 Order-of-Magnitude Cost Estimates of ADA Paratransit Expansion for Individual Service Strategies

Strategy	Estimated Capital Cost Impact	Estimated Annual Operating Cost Impact
<b>1B(ii) Extend transit coverage in South Elgin, following</b> recommendations of the South Elgin Transit Improvement Plan.	To be determined based on study.	
<b>1C. Create St. Charles - Geneva Circulator service</b> , following the recommendations of the existing circulator study.	To be determined based on study.	
<b>1D. Create Batavia to Geneva transit connection</b> . Assumes 12 hours per weekday.	0 to 1 vehicle	\$100,000 to \$120,000
<b>1E. Extend fixed route bus service in Montgomery.</b> . Assumes 12 hours per weekday.	0 to 1 vehicle	\$70,000 to \$180,000
<b>1G. Provide late evening and weekend service</b> along PTN corridors and/or in transit markets where it is warranted by demand.		
<b>2B(ii) Create Randall Road BRT / regional express service.</b> Assumes 17 hours per weekday, 15 hours on Saturdays, and 14 hours on Sundays.	4 – 8 vehicles	\$1M to \$1.5M
4A (ii) Provide Huntley to Elgin fixed-route bus service.	2 – 4 vehicles	\$250,000 to \$600,000
<b>4B Provide Huntley Circulator service.</b> Assumes 12 hours per weekday and 10 hours on Saturdays.	1 – 2 vehicles	\$120,000 to \$260,000
<b>4E(ii) Elburn to Geneva.</b> Assumes 10 hours per weekday and on Saturdays.	1 – 2 vehicles	\$120,000 to \$190,000
<b>4F(ii) Sugar Grove to Aurora.</b> Assumes 10 hours per weekday and on Saturdays.	1 – 2 vehicles	\$110,000 to \$200,000