



Lake County Division of Transportation

# Paratransit Market Study for the Lake County Region

FINAL

April 2019

**N**  
NELSON  
NYGAARD

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&  
Associates, Inc.



IMPROVING MOBILITY IN LAKE COUNTY

- Transportation
- Mobility Solutions
- SmartWay
- All public, responsible, private transportation providers
- Chicago Metropolitan Agency for Planning (CMAP)
- Transportation from
- Metropolitan
- Higher

RECOMMENDATIONS

Research and Analysis

The recommended recommendations are based on the research. Key research findings include:

- Public and private input
- Existing and potential transportation resources in Lake County
- Operational issues related to existing and potential resources in Lake County
- Recommendations based on the following findings:
  - Community needs
  - Existing facilities
  - Transportation needs

Implementation Considerations

- Some recommended strategies may be implemented
- Some strategies require additional funding
- Some strategies require additional funding
- Some strategies require additional funding
- "Options" should be identified to help fund

PARATRANSIT MARKET STUDY FOR THE LAKE COUNTY REGION

Next Steps



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# Executive Summary

EXIT



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El Agente de Negocios  
El Agente de Negocios

COMMENTS

Service Structures

COMMENTS

COMMENTS



Service Structures

COMMENTS

Service Structures

COMMENTS

# Executive Summary

**Lake County, Illinois completed a Paratransit Market Study to evaluate transportation options for seniors, people with disabilities, and the general public. There are a variety of services currently available, such as Pace Dial-A-Ride or township programs, to assist these populations in their travels to and from medical appointments, places of employment, and other daily activities.**

Unlike a traditional schedule bus service that runs on a published route and serves fixed bus stops, paratransit is a shared and flexible on-demand service that responds to rider requests for travel within a defined service area. Paratransit services are geared toward individuals with mobility limitations that prevent them from accessing scheduled bus service, and/or live outside of an area served by scheduled bus service. This study evaluated the range of available paratransit services, identified gaps in service relative to community needs, and recommends improvements.

The Lake County region has a number of transportation options for the general public, older adults, and individuals with disabilities. Despite having multiple services, not all services operate when people need them, or provide service where individuals would like to go, and, further, not all services are designed for the populations that are most dependent upon them. In addition to the services provided within the county, whether by the main operator, Pace, or otherwise, there are a variety of services that are also provided by the local townships, villages, cities and nonprofit organizations within Lake County. Lastly, not all individuals travel within Lake County alone. Many individuals need to access employment opportunities located in surrounding counties, as well as healthcare appointments and social gatherings located outside of the county.

In Lake County, there is currently no single information source where one can find information regarding the variety of transportation services available in Lake County or how they may be eligible to use the services; individuals may go to a number of websites, including the Lake County Division of Transportation, Pace, the unique website for their place of residence (whether township, village, or city) or a nonprofit website.

The objectives of this study were to develop a sustainable, implementable plan for improving mobility options in Lake County, and to focus the plan on target user groups, including older adults, individuals with disabilities, and those with lower incomes.

With these objectives in mind, the project team worked with the Lake County Coordinated Transportation Services Committee (LCCTSC), the Lake County Division of Transportation, the public, and a variety of stakeholders to develop a number of strategies to improve mobility options. The concepts and strategies were vetted through multiple public meetings and community surveys.

Throughout the course of the project, the project team found that transportation needs in Lake County vary widely. While some areas have robust existing service, other parts of the county lack even the most basic transportation options. Despite the large number of services in Lake County, there are service gaps that exist, particularly in the north and southwest areas of Lake County, areas that may need special types of service to meet existing transportation needs, such as service for individuals with disabilities, or more limited flexible or demand response routes in areas of low density.

To further examine the transportation needs in the county, a Transportation Propensity Index (TPI) was developed to provide a composite measure of all groups that are likely to rely on public transportation in Lake County. The TPI measures the individual densities of:

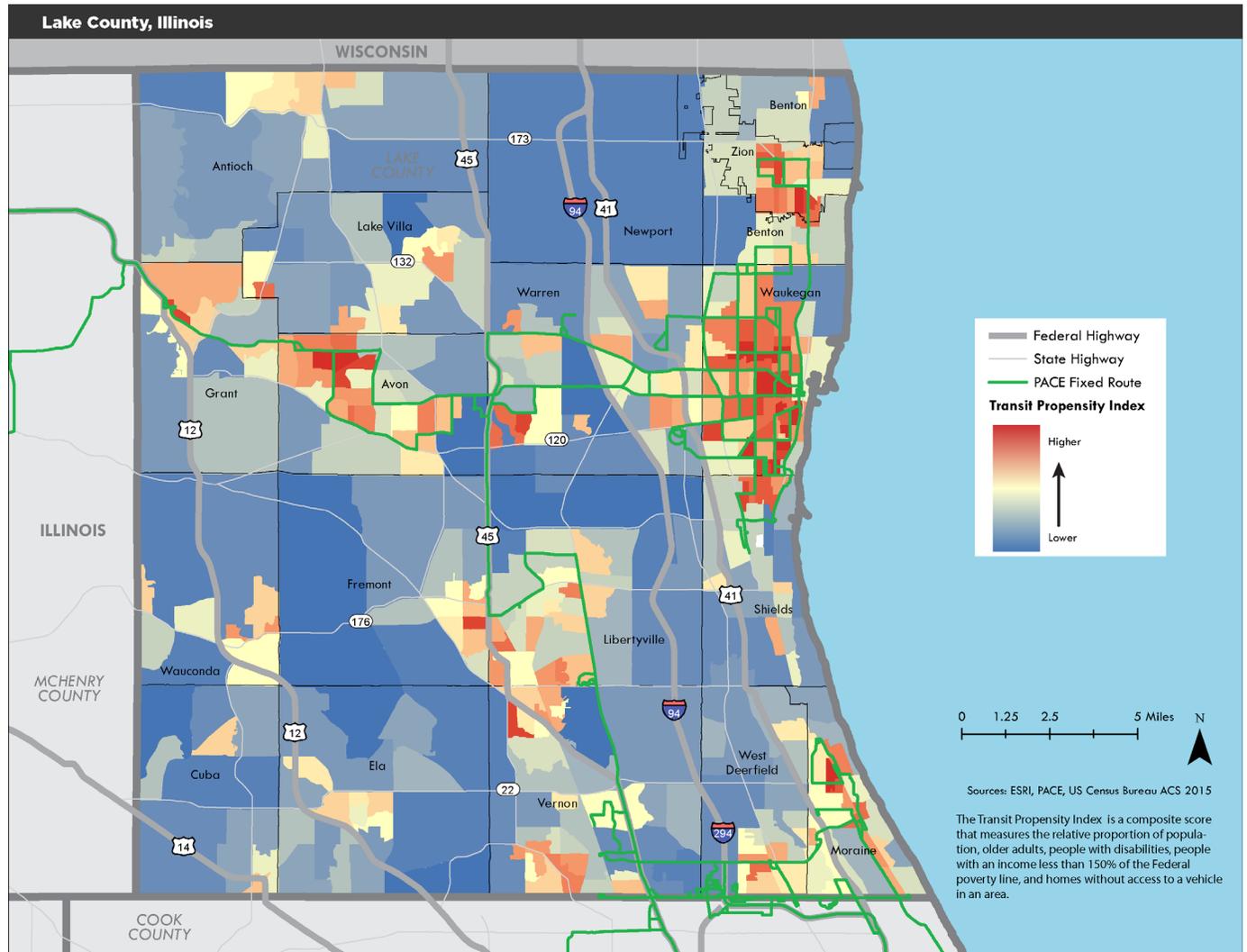
- Total population
- Older adults
- Individuals with disabilities
- People living with an income less than 150% of the poverty line
- Households without access to a private vehicle

Based on the TPI map, the project team developed an implementation plan; the primary focus being to design strategies that would:

1. Overcome the spatial gaps that prevent passengers from traveling from origin to destination in the county in an efficient manner, and
2. Address the temporal gaps when transportation services are needed but not available.

In an effort to garner maximum public and stakeholder feedback, the project team held three different rounds of public meetings at various stages in the project. The public meetings were

Figure ES-1 Transit Propensity Index



held in different geographic areas of the County, where individuals could comment on the project stages, initial findings, and proposed strategies. The conceptual strategies were presented in several public meetings throughout the county for review and comment. In addition to public meetings, a Project Advisory Committee (PAC) was established for the study, and the project team presented recommendations to the LCCTSC, the PAC, and the Committee of the Whole of the Lake County Board.

A number of potential mobility enhancement strategies were also developed to help address the gaps and needs noted above. Best practice research identified successful examples of each strategy from the northeast Illinois region or the U.S.

The study team developed a total of 11 initial strategies grouped into three different categories to address transportation needs:

- Service strategies
- Personal mobility strategies
- Mobility management strategies

Strategies represent potential services, programs, or actions, that could address transportation gaps and needs. Each strategy could be led or supported by a number of different stakeholder organizations including, but not limited to, Lake County. In addition to the strategies below, governance and organizational changes are recommended for implementation in Lake County.

Strategies are organized in three categories:

## GOVERNANCE CHANGES



### Dissolve the LCCTSC and form a Working Group to Identify the Lead Agency

- The first recommended priority for the Lake County region is to dissolve the LCCTSC and to form a working group that will identify the lead agency to advance paratransit coordination and service improvements. Once identified, it is recommended that the lead agency will create additional working group(s) and, with the working group(s), begin to move the recommended strategies from the planning phase to reality.



### Establish the RideLakeCounty Committee

- An initial recommended duty of the lead agency will be to establish the RideLake-County Committee (RLCC), define the committee's mission, goals, and responsibilities, and invite members to commit to proactive involvement. Initial responsibilities of the RLCC will be to evaluate current and potential transportation funding structures that are recommended by the lead agency.

## SERVICE STRATEGIES



### Late Night Employment Transportation Pilot

- Pace Dial-A-Ride service during late night hours for individuals who can use a fixed route bus for one leg of their commute but not the other, due to service schedules



### Enhanced On-Demand Service

- More stops where customers can board without an advance reservation, to increase use, especially as a connection to bus/rail services



### Flexible (Route Deviation) Fixed Route Service

- Smaller vehicles operating in a fixed route/demand response mode to serve lower density communities



### Expansion of Countywide Paratransit System

- Expansion of Ride Lake County Central and/or Ride Lake County West to additional communities for a phased approach to building a coordinated paratransit system that serves more of the county and uses resources more efficiently

## PERSONAL MOBILITY STRATEGIES



### Vanpools for First/Last-Mile Access to Transit

- Targeted marketing of Pace vanpool programs for work trips in Lake County



### Transportation Network Company (TNC) / Taxi Pilot

- Addition of a shared-ride component to a new or existing taxi subsidy program and opening of service to the general public, as well as a possible supplement to paratransit services



### TNC First/Last Mile Transportation—Pilot

- Subsidized trips using ride-hailing services (i.e. Uber, Lyft) to/from fixed route bus and rail services

## MOBILITY MANAGEMENT STRATEGIES



### Centralized Transportation Information and Trip Planning Assistance

- Consolidated information about transportation options in one place and help for customers to identify best options and plan trips



### Countywide Transportation Marketing Program

- Increased visibility and understanding of transportation services through a coordinated Lake County region marketing campaign, including marketing of current traditional vanpool services



### Mobility Management Staff for the Lake County Region

- New Mobility Manager position(s) to spearhead the continued coordination among transportation providers and development/implementation of mobility enhancement strategies

**Mobility Management** is a term that covers many different activities. The main objectives, however, are to offer a variety of transportation services to meet diverse needs and to connect people to the best options for their travel.

The strategies developed should be viewed not as individual solutions that will yield specific improvements, but instead as elements of a more complete and robust transportation network in the Lake County region. Each proposed strategy has a Business Plan. The Business Plan includes a Financial Plan, a Marketing Plan, and an Implementation Plan. Additionally, strategies are ranked based on return on investment for implementation and challenges to implementation.

This report is organized into four main sections: Existing Conditions, an Evaluation of Service Improvement Strategies, a Business Plan for the strategies, and Final Implementation. Within the sections, the report goes into great detail on the history of paratransit in Lake County, demo-

graphic analysis, needs assessments, service gaps and opportunities, and a detailed evaluation of the service improvement strategies themselves, each with an associated timeline.

The strategies outlined in the report are designed to work in tandem to improve overall transportation options, mobility, and connectivity in Lake County. Not all strategies need to be implemented immediately, and sustainable funding sources should be further explored, especially for larger-scale and long-term recommendations. Lastly, the strategies are designed to have a local champion, or lead agency, assisting with the implementation so that no single agency is solely responsible for the implementation of all the strategies.

# **Part I**

## **Analysis of Existing Conditions**



# 1 EXISTING CONDITIONS: INTRODUCTION

Nelson\Nygaard Consulting and RLS & Associates have been engaged by the Lake County Division of Transportation (Lake County DOT) to conduct a paratransit market analysis for the Lake County region. Lake County DOT and the Lake County Coordinated Transportation Services Committee (LCCTSC) are providing guidance to the consultant team throughout the project.

Input was also provided by a Project Advisory Committee (PAC) composed of representatives of townships and municipalities, Regional Transportation Authority (RTA), Pace, Metra, Lake County departments, human service agencies, and other local/regional stakeholders.

The primary goal of the project is to develop a sustainable and implementable plan for improving mobility for the residents of Lake County, especially older adults, people with disabilities, and individuals with lower incomes.

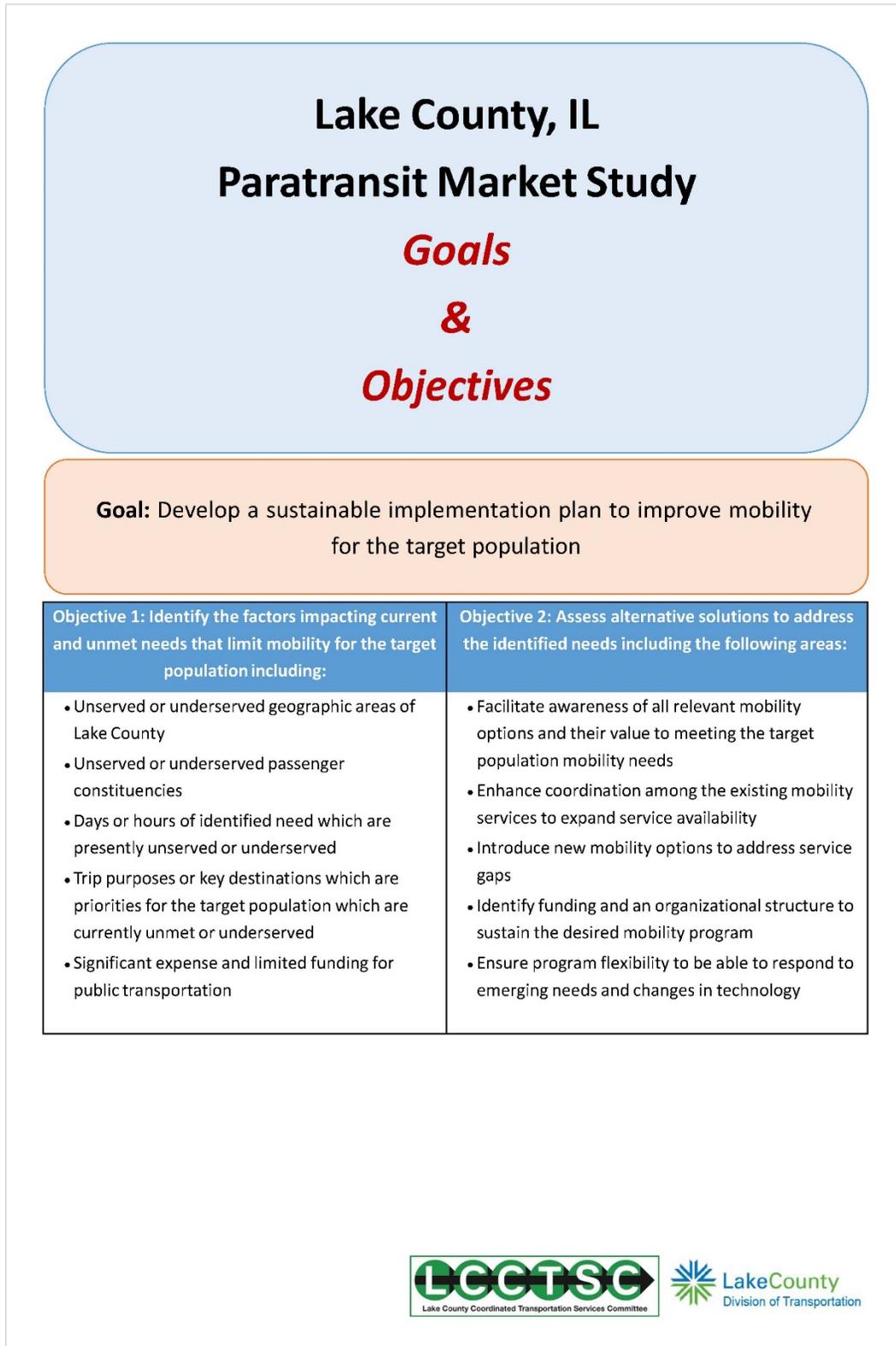
Objectives related to that goal are shown in Figure 1-1.

This report represents work toward achieving the first objective. It describes the public transportation services that are currently in operation in Lake County and assesses the mobility needs of residents that current services do not address. Data was collected through meetings with Lake County DOT, the PAC, and the LCCTSC; an online transportation provider survey; interviews with transportation providers and other stakeholders; a series of community meetings open to the public; focus group meetings; an online community survey; and a review of previous studies and plans and online sources.

Upcoming project tasks include:

- Review of national and regional best practices in the area of paratransit services and mobility management
- Development of transportation alternatives to better meet the needs of Lake County residents for the consideration of Lake County DOT and LCCTSC, stakeholders, and the public
- Preparation of business plans for each preferred alternative that will address financing, marketing, and implementation
- Two rounds of community meetings to review alternatives and final recommendations

Figure 1-1 Lake County Paratransit Market Study Goals and Objectives



## 2 HISTORY OF PARATRANSIT IN LAKE COUNTY: PLANNING CONTEXT

Several reports, plans, and studies have been prepared in recent years on topics related to public transportation in Lake County and the northeastern Illinois region, and offer both context and useful information for the current project. Those reports are summarized below, but before diving into the reports, a Lake County paratransit timeline, a review of County planning documents, and a recent county paratransit coordination policy are discussed.

### HISTORY OF PARATRANSIT IN LAKE COUNTY

Paratransit services in some Lake County communities have been in operation for decades, operated by Pace or individual townships or municipalities and supported with funding from Pace, townships, and municipalities. Throughout the years, demand-response services have also been provided by various nonprofit and human service agencies. ADA paratransit service, to complement Pace's fixed-route bus services, was implemented in the 1980s. For the past 10 years or so, expansion of mobility options and increased efficiency through coordination of paratransit services has been a topic of interest and discussion in the county. Key milestones regarding efforts to coordinate paratransit services include:

- 2005** Formation of the LCCTSC to guide paratransit coordination efforts in the county. LCCTSC members include elected officials, transportation providers, human service agencies, and other stakeholders who work to improve the coordination, efficiency, reliability, and affordability of public transportation services in Lake County, particularly paratransit services.
- 2006** Lake County adopts a resolution in support of the LCCTSC.
- 2008** Public Act 95-0708 restructured regional transit funding.
- 2008** Paratransit coordination study prepared for Pace.
- 2008** Lake County applied for and received federal New Freedom funding through the RTA for expanded Northwest Lake service in Antioch, Avon, Grant, and Lake Villa Townships (known as the Northwest Demonstration Project).
- 2008-present** Lake County applies to RTA and receives federal funding (Job Access and Reverse Commute, New Freedom, and Section 5310 grant programs) to support coordinated paratransit services. Lake County provides a portion of required non-federal match using funds from Public Act 95-0708 (1/4% sales tax funds). The Paratransit Coordinator position is also funded in part through Public Act 95-0708 (1/4% sales tax funds) as well as Unified Work Program (UWP) planning funds acquired through the Chicago Metropolitan Agency for Planning (CMAP).

- 2010** Northwest Demonstration project to implement new Pace Dial-A-Ride services in Antioch, Avon, Grant, and Lake Villa Townships.
- 2010-2011** Lake County Inter- and Intra-County Paratransit Plan prepared for Lake County DOT.
- 2012** Lake County Transportation Market Analysis Study prepared for Lake County DOT.
- 2012** Fremont and Wauconda Townships join Northwest Demonstration project.
- 2015** Listening sessions with Townships on paratransit services and needs conducted by Lake County DOT and the LCCTSC
- 2016** Lake County DOT received Section 5310 grant for the RideLakeCounty Central service, an expansion of the Central Lake Service in Libertyville Township and the villages of Libertyville and Mundelein, and service was initiated in this year.
- 2016** Northwest Demonstration project re-branded as RideLakeCounty West, incorporating Pace Northwest Lake Dial-A-Ride services; services expanded to include general public riders.
- 2016** Lake County applied for and received UWP funds through CMAP to conduct a Paratransit Market Study for the Lake County Region. Actual study initiated in late 2016.
- 2016** The Public Works and Transportation Committee of the Lake County Board endorsed a coordination policy to guide the work between the Lake County DOT and LCCTSC towards the “long-term goal of coordinated countywide paratransit service”. The full policy may be found in Appendix A.

An inventory of current transit, paratransit, and other transportation services is presented in the existing services section later in this report.

## LAKE COUNTY INTER/INTRA COUNTY PARATRANSIT TRANSPORTATION PLAN

### Technical Memorandum No. 1 and 2 (2010, 2011)

#### TranSystems and Fish Transportation Group for Lake County Division of Transportation

In 2010 and 2011, the Lake County Division of Transportation (Lake County DOT) published Technical Memorandums No. 1 and No. 2 of the Lake County Inter/Intra County Paratransit Transportation Plan. The goal of this plan was to develop two possible frameworks through which demand-response transit could be coordinated in the county. One framework assumed no new resources, and the other included prioritized improvements to be supported by new resources.

Technical Memorandum No. 1 provided an inventory of public transportation services available in Lake County, and summarized existing service conditions, gaps, and overlaps. Technical Memorandum No. 2, also known as the Lake County Mobility Management Plan, describes operations, mechanisms, and a business plan for paratransit service coordination led by a partnership between the LCCTSC and Lake County DOT. Rather than presenting two frameworks of coordination as was originally intended, the operations and business plan is presented with two time horizons, assuming that no new resources and the availability of new resources are sequential steps, rather than alternate scenarios.

### Technical Memorandum No.1 (2010)

Technical Memorandum No. 1 identified a number of examples of existing service coordination, as well as barriers to coordination. Perceived obstacles to coordination at the time of the study included:

- A perceived loss of control over population, funding, dispatching, or customer service when services become coordinated or consolidated
- Concern about how coordination would affect available funding sources; grant requirements and monitoring and tracking of finances are required by most funding sources
- A potential lack of willingness by providers and customers to step outside their comfort zone.
- Current workloads can make it difficult for agencies to pursue doing things differently
- Concerns about how coordination can or will account for the varying levels of service available around the county
- Differing eligibility requirements among programs and/or jurisdictions
- Township boundaries

In addition, several locations both within and outside the county were identified as having unmet transit needs by Lake County stakeholders:

- Lake County:
  - Antioch area
  - Barrington area

- Benton Township
- College of Lake County
- Condell Medical Center, Libertyville
- Dialysis Center of America-Illinois at 1616 Grand Ave.
- Gurnee Mills
- Independent living centers
- Job training centers
- Cook County:
  - Alexian Brothers Hospital in Hoffman Estates

Using information from a 2008 study of coordinated paratransit services conducted for Pace, 51 separate paratransit service programs were identified as active in Lake County, including 21 public transportation services, six taxi subsidy programs, and 24 human service agencies.

The memo also summarized findings from stakeholder interviews and several Steering Committee meetings designed to identify priorities among potential user groups and service improvements.

## **Technical Memorandum No. 2 (2011)**

Technical Memorandum No. 2 is also known as the Lake County Mobility Management Plan. It reports that, in August 2010, the LCCTSC and Lake County DOT agreed to “jointly execute the mobility management functions” of Lake County.

As part of the study process, the Lake County Coordinated Transportation Services Committee developed “Guiding Principles” for coordination and transportation services and mobility management that included the following:

- Implement an Inter/Intra-County Paratransit Plan
- Establish borderless transportation, especially for seniors, people with disabilities, and individuals with low income
- Work toward transportation services that are:
  - ADA-compliant
  - Cost-effective, efficient, and reliable
  - Financially sustainable
  - Adequate to meet demand
- Encourage a range of services within Lake County, including coordinated paratransit services, taxi subsidy programs, volunteer drivers, and connections to Pace and Metra services
  - Coordinate with regional partners such as RTA and CMAP
- Address geographic and temporal service gaps in and between Lake County communities and between Lake and neighboring counties
- Facilitate coordinated efforts between providers, such as:
  - Consistent paratransit eligibility rules across the county
  - Coordination of vehicle hours of service, vehicle sharing, and commingling rides
  - Sharing of other resources

- Use of cost allocation strategies for fair and equitable sharing of the costs of shared or coordinated services

The pros and cons of various entities taking the lead role in paratransit coordination or mobility management activities, including the LCCTSC, Lake County DOT, Pace, a township transportation coordinator, or a nonprofit organization, were discussed in the report.

To move forward with mobility management activities in the county, the LCCTSC agreed to lead policy guidance, and Lake County DOT will support with technical assistance, organizational structure, grants, and contracts administration. Operational mechanisms for paratransit service coordination are presented with two time horizons, assuming that no new resources and the availability of new resources are sequential stages.

Initial and future activities were recommended in the areas of information, planning, and operations. Activities include the following (among others):

### **Information**

- Collect transportation service information for a resource database to be disseminated through print and online means
- Work to establish one central source of transportation information for the county

### **Planning**

- Implement an inter-county/intra-county paratransit plan
- Coordinate with regional transportation and land use planning initiative
- Develop and use performance measures to inform transportation decision making
- Work with fixed-route and paratransit providers to adjust service areas, days and hours of service, eligibility, and fares to better meet needs of Lake County residents
- Identify sustainable funding sources
- Facilitate service coordination/delivery among partners
- Identify and maximize use of new and existing technologies being planned and implemented in the region

### **Operations**

- Clarify and implement consistent transportation eligibility
- Ensure compliance with ADA requirements
- Establish uniform fares
- Facilitate joint agreements for providing backup service
- Ensure sufficient and accurate recordkeeping to support performance monitoring and billing
- Facilitate travel across jurisdictional boundaries through interagency agreements
- Facilitate advanced coordination, such as commingling trips on vehicles, coordinating operating schedules, and centralized reservations and scheduling

## LAKE COUNTY TRANSPORTATION MARKET ANALYSIS (2012)

### Cambridge Systematics and MKC Associates for Lake County Division of Transportation

In 2012, Lake County DOT published a market analysis consisting of the following three parts:

- Analysis of existing fixed-route and demand-responsive transit services in Lake County
- Evaluation of travel markets considering the socioeconomic characteristics of the travelers and the characteristics of the trips they make
- Development of transit service concepts to address the transportation needs of Lake County residents

Analysis of data pertaining to transportation services, county demographics, land use, travel patterns, and previous market research surveys was augmented by new surveys of residents, employees, and Pace riders, as well as focus group meetings to explore reactions to innovative service concepts.

Based on data from CMAP's regional travel model, five travel markets that represent the majority of trips in Lake County were identified. Those markets are:

- **Intra-Waukegan Districts:** trips within Waukegan and neighboring communities
- **Waukegan to Central Corridor:** trips from Waukegan to employment locations in the Milwaukee Avenue corridor and near Lake Cook Road
- **Greater Round Lake to Central Corridor:** trips from Greater Round Lake to the Milwaukee Avenue corridor and near Lake Cook Road
- **Greater Round Lake/West Gurnee/West Waukegan to Gurnee:** trips from Gurnee, West Waukegan, Antioch, and Greater Round Lake to the Gurnee Mills area
- **Intra-Central Corridor:** trips within the Milwaukee Avenue corridor and the Lake Cook Road corridor

The study recommended nine service improvements, which touched on fixed-route bus and rail service improvements, demand-response coordination activities, and development of new job access and flexible services. Recommendations are listed in Figure 2-1.

The extension of bus routes 565 and 570 to the College of Lake County (CLC) hub and the coordination of Dial-A-Ride service areas appear to have been implemented.

**Figure 2-1 Lake County Transportation Market Analysis Recommendations**

<b>Phase</b>	<b>Recommendation</b>	<b>Actions</b>
<b>Short-Term</b>	Fixed-Route Service Change	Shorten Route 564.
	Dial-A-Ride (DAR) Policy Coordination	Work with stakeholders to coordinate fares among DAR services. Work with stakeholders for coordination of service policies of DARs. Work with stakeholders to coordinate DAR service area boundaries.
	Metra Coordination	Enhance coordination between Metra and Pace on delays and wayfinding at transfer stations. Investigate parking solutions at stations over capacity
<b>Mid-Term</b>	Pace On Demand* and Deviating Bus	Implement new Mundelein/Libertyville Pace On Demand and/or new Vernon Hills On Demand, or alternatively, a new Milwaukee Avenue Deviating Bus Implement new Lake Forest Pace On Demand or new Townline Road Deviating Bus
	New Job Access and Reverse Commute (JARC) Express Route	Begin planning alignment, work with employers, and seek JARC grant.
	Fixed-Route Service Conversion	Convert existing Route 573/portion of 562 to Green Bay Road Deviating Bus
<b>Long-Term Recommendations</b>	Pace On Demand and Deviating Bus	Implement new Antioch On Demand, or new Antioch Deviating Bus route Implement new Lake Cook Road Deviating Bus
	Fixed-Route Service Change	Provide fixed-route service to Lindenhurst Medical Center, in conjunction with Antioch On Demand. Create an hourly Pulse Point at CLC Shift Route 565 and 570 terminus to CLC
	Metra Service Change	Increase service in both directions on North Central Service (NCS) line as feasible.

Source: Lake County Transportation Market Analysis, 2012

\*Pace On Demand is the name of the service formerly referred to as Pace Call-n-Ride (CnR)

## Update on Market Analysis

Since the Market Analysis was developed in 2012, several recommendations were rolled out by Pace for Lake County. The following represents a high level status update regarding the implementation of the recommendations from the [2012 Market Analysis](#) as of the time of this study:

- Waukegan Pulse Point Relocation Recommendation:
  - Interim relocation has been completed on Sheridan Road; long range location is still to be completed
- Fixed-Route Modifications:
  - An hourly pulse point at CLC has been established
  - Part of Route 570 has been converted to Route 565
  - Route 572 has been split into east and south segments
  - Frequency has been increased on the eastern segment of Route 572 to 30-minute headways throughout the day
  - Timed transfers have been scheduled between Routes 570, 565, both segments of Route 572, and the Round Lake Area On Demand to facilitate a timed pulse point at hourly intervals throughout the day
- New Flexible services (On Demand or Deviating Bus Service) – Vernon Hills/Mundelein On Demand implemented

## LAKE COUNTY 2040 TRANSPORTATION PLAN (2014)

### TranSystems for Lake County Division of Transportation

Lake County DOT produced the county's current 25-year long-range transportation plan in 2014. Based on population and employment forecasting by the Chicago Metropolitan Agency for Planning (CMAP), Lake County anticipates an approximate 36% population increase and 23% employment increase from 2010 to 2040. In anticipation of this growth within the county, the 2040 Transportation Plan includes 13 bus transit improvements and three Metra rail transit improvements. Of the 13 bus service improvements, five are fixed-route services, three are Pace On Demand services, four are deviating fixed-route services, and one is a shuttle service.

The proposed transit service improvements are appropriate to the specific population and employment densities and land uses in each community. Together, the proposed improvements would offer public transportation service in most parts of Lake County, with higher levels of service in the densest communities. Improvements include:

- Metra commuter rail track improvements and extension of the Metra Milwaukee District North (MD-N) Line to Wadsworth
- New fixed-route bus services
- New multimodal hubs
- New Pace On Demand services
- New “deviating,” or flexible, fixed routes

Non-motorized network improvements, primarily bikeways, are included in the plan to provide more mobility options and connections between modes.

The 2040 Transportation Plan does not deal with paratransit services.

Transit improvements are evaluated in the plan according to a number of criteria, including the presence of other transit connections, residential and employment density within ½ mile of the service or facility, development around the site—employers, health care facilities, and major retail centers—presence of a pedestrian-friendly environment, score on the RTA Transit Demand Index, and inclusion in previous plans.

Cost or revenue-neutral service improvements may be implemented with existing resources; new funding will be sought for more extensive improvements or new services/facilities, working with Pace as appropriate. As resources become available, projects will be implemented in order of priority. Of the 20 transit projects listed in the plan, three are of highest priority: Bus transit along the Green Bay Road corridor, Antioch Pace On Demand, and Gurnee shuttles. Extension of the Metra MD-N line and improvements to the NCS Line are of lowest priority. All other projects—other bus service additions, Pace On Demands and deviating bus routes, and transit hubs—fall in the middle category.

## SUSTAINABLE FUNDING FOR COORDINATED DEMAND-RESPONSE TRANSPORTATION (2016)

### **Nelson\Nygaard Consulting Associates and RLS & Associates for Regional Transportation Authority**

Community-based coordinated demand-response transportation services are a vital component of mobility for older adults, people with disabilities, and other residents of the RTA's region in Northeastern Illinois. Such services provide access to employment, health care, education, and opportunities to participate fully in community life. Financial stability is necessary for the continued operation of the services that are relied on by so many individuals in the region, yet piecing together sufficient funding each year from a variety of federal, state, regional, and local sources remains a challenge for transit agencies, as well as municipal, county, and nonprofit transportation partners. The goal of this project was to identify ways to work toward the goal of a more stable funding system for such community-based transportation services.

The focus of the project was the coordinated demand-response services operating in DuPage, Kane, Kendall, Lake, McHenry, and Will counties, which are supported in part with funding from federal transit programs through RTA. The services provided by other organizations that receive federal funding through RTA and municipal Dial-A-Ride services that are funded by regional and local sources were also considered. Federally mandated ADA paratransit services, however, were not included in the scope of the project.

The consultant team, composed of Nelson\Nygaard Consulting Associates and RLS & Associates, undertook the following activities:

- Collected information from RTA grantees through a brief online survey
- Conducted site visits with managers and key stakeholders of coordinated demand-response systems, followed up by phone interviews with other stakeholders
- Interviewed representatives of several municipal Dial-A-Ride systems that do not currently receive funding for those services through RTA
- Researched models of funding for coordinated transportation systems in other states
- Developed alternative future ridership scenarios to establish a context for the analysis of future funding sources

Members of RTA's Coordinated Public Transit—Human Services Transportation Plan Advisory Committee (HSTP-PAC) provided input and guidance throughout the project.

Key findings from the project and alternative paths to more stable funding for the region's demand-response services are summarized below.

## **Findings**

### **Current Ridership and Costs**

To learn about the current ridership and sources of funding on which coordinated demand-response systems and other RTA grantees rely, and to determine approximate levels of annual cost and ridership among the providers, the consultant team conducted a brief online survey of organizations that receive funding through the RTA and collected more detailed funding data from the coordinated demand-response systems in DuPage, Kane, Kendall, Lake, McHenry, and

Will counties. RTA also supplied data on the recent amounts of federal funding it has awarded to subrecipients, and the required local match to those funds.

County-operated coordinated demand-response systems utilize approximately \$10.4 million in federal, state, and local revenues annually. That amount includes a portion of the \$4.6 million spent on Section 5310 services in the region.

Overall, the public and private entities that receive Section 5310 funding in the region combine those funds with other federal, state, and local revenues to provide as many as 600,000 one-way passenger trips per year in Northeastern Illinois.

### Keys to Funding Success

Interviews with coordinated demand-response system representatives, as well as with representatives from three municipal Dial-A-Ride services that operate in Northeastern Illinois and do not receive federal funding through RTA, revealed a number of factors that have already proven to have a positive effect on the financial viability of coordinated services. These keys to success include the following:

- Each coordinated system came into being in large part due to the ongoing efforts of a **champion at the county or municipality level**—a leader of a major human service organization, head of a department of county government, elected county official, or county board member.
- **Local leaders who recognize the value of transportation services** to residents and communities and are committed to supporting them financially.
- **Loyal and supportive sponsor or partner organizations**, whether public or nonprofit.
- **An advisory group or coordination council** is important to maintain momentum and provide a forum for resolving issues and maintaining continuity within the coordinated system.
- **Active participation by the county Division of Transportation or other department** to provide leadership, public transportation/human services transportation expertise, and perhaps funding.
- **A lead agency** that is willing to be a subrecipient of federal funds and administer the coordinated system.
- **Ongoing education of local elected officials and potential sponsor organizations** about transportation services and the value of coordination.
- **RTA's role as administrator of federal funds**, particularly Section 5310 funding, enables counties and their partners to leverage those federal funds to make local resources go farther.
- **A standard level of subsidy from Pace to all partner municipalities** within a coordinated system is more equitable and easier to understand than the legacy system of varying subsidy amounts for certain communities.
- **A clear, equitable process for allocating system costs** among partner or sponsor organizations is critical for attracting and maintaining participation.
- **The County Share of the 2008 RTA Sales Tax** can be used to fund coordinated services. The 2008 RTA Act increased the RTA sales tax levied in the collar counties (DuPage, Kane, Lake, McHenry, and Will) from 0.25% to 0.75%.

- **Local dedicated funding sources**, such as McHenry County’s levy on property taxes for services for seniors, are very helpful.
- **Title IIIB funding from the Illinois Department on Aging (IDoA) and Area Agencies on Aging**, which federal regulations allow to be used to support transportation services for seniors, and are widely used in other states for such a purpose, has increased recently.

### Common Funding Challenges

Interviews also identified several funding challenges that affect coordinated demand-response systems and other RTA grantees, as well as municipal Dial-A-Ride services. These challenges include:

- Local match to federal grants is difficult to justify annually.
- Funding (and services) has a patchwork nature—not all communities choose to receive service or contribute to the cost of coordinated systems.
- Regional funding partnerships are needed to facilitate the regional trips residents want/need to make across service boundaries. These are currently not allowed by most coordinating bodies due to funding constraints.
- The current state fiscal environment is having an adverse impact on most coordinated system partners/sponsors because organizations are not receiving funds from state agencies on which they depend to support the coordinated systems.
- All areas have unmet transportation needs that cannot be addressed due to funding constraints in general.
- Changes to federal transit grant programs (Job Access and Reverse Commute, or JARC; New Freedom; and Section 5310) have affected the types of services that can be offered to different eligible riders. For example, elimination of the JARC program leaves no federal resources among those that are administered by RTA that are specifically targeted to work and training trips.
- More entities now must compete for 5310 funding.

### Future Funding Needs

Demand-response transportation services in Northeastern Illinois will continue to need sustainable funding sources. Currently, there are various funding sources that can help support demand-response services. The following is a discussion of current funding sources and anticipated projections related to those funding sources.

- **Federal grant programs continue to provide more or less the same amount of funding** as they do at present. FTA’s Section 5310 program has been in place, although not constructed exactly as it is today, since 1975. Annual funding nationwide totaled \$262 million in federal fiscal year 2017. The current version of the program is authorized to grow by about 2% per year until the expiration of the FAST Act in federal fiscal year 2021.
- **County, regional, and municipal sources of non-federal match continue at present levels.** Coordinated system managers and other RTA subrecipients noted that county and municipal funding match is difficult to obtain annually in many communities.
- The result of level funding will be that **transportation providers are able to serve no more than the number of riders they carry today.**

Despite the fixed funding, transportation providers may experience increased pressure to expand services due to one or more of the following factors:

- **Population increases** in their service areas. Forecasts for the region developed by the Chicago Metropolitan Agency for Planning (CMAP) show a population increase for Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will counties of 14% by 2026 and 29% by 2040 over 2010 levels.<sup>1</sup>
- **A higher percentage of older adults and people with disabilities** among the population. CMAP anticipates an increase in the proportion of adults age 65 and older from 11% in 2010 to 18% by 2040. In addition, CMAP expects there to be an increased proportion of adults with disability over the same period, however there are no identified projections for the growth of this population at this time.<sup>2</sup>
- **Expansion of service** to include new geographic areas that are currently without mobility options, new eligible riders or types of trips, and/or inter-county or regional trips.

### Alternative Paths to More Stable Funding

Changes to funding sources and methods for demand-response services supported with federal funds administered by RTA—both coordinated systems and individual municipal or agency programs—may help to make funding more sustainable. Suggestions were provided by coordinated demand-response system managers and other HSTP-PAC members, research into coordinated demand-response services in other states, and consultant team experience.

Alternatives fall into several categories:

- Changes to the use or distribution of funds from federal grant programs, including but not limited to Section 5310
- State-level funding options
- Approaches that would be implemented at the regional or county level
- Local actions to expand funding sources or utilize complementary, cost-effective services
- Regulatory or administrative improvements to complement funding source/structure changes

Funding alternatives are summarized in Figure 2-2.

Some of the options for improving sustainable funding for transportation services in the RTA region would be best suited for development at the regional level, led by RTA with participation by HSTP-PAC members and other RTA grantees, while others would be pursued more appropriately at the county level.

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<sup>1</sup> The population projection used The Chicago Metropolitan Agency for Planning *2040 Forecast of Population, Households and Employment*. However, the information currently available on CMAP's website reflects the current ON TO 2050 population forecasts:

<http://www.cmap.illinois.gov/data/demographics/population-forecast>

<sup>2</sup> <http://www.cmap.illinois.gov/documents/10180/348337/2014-12-08-HCD-7.0-Plan-Development-Aging%26Disability.pdf/381dd7be-0677-4e6e-b9a5-e828dfc1c722>

Next steps for each group of strategies are suggested below.

**Figure 2-2 Sustainable Funding Options**

Option Level/Type	Examples	Description
<b>Federal</b>	Tweak 5310 distribution	Use formula or formula/competitive mix to award funds to projects Incentivize priorities: coordination, overmatch, service performance, regional service
	Utilize additional sources	Medicaid reimbursement for eligible trips, as with Pace ADA trips in Chicago
<b>State</b>	New state subsidy program	Sustainable source of local match
	Utilize additional sources	Medicaid reimbursement for eligible trips (would also use state Medicaid dollars)
<b>Regional/County</b>	Dedicated transportation funding source	Example: McHenry County's senior property tax levy
	Greater county participation	RTA sales tax increase funds, general funds
	Standardized level of Pace subsidy	All participating municipalities receive same subsidy
	Expand service to general public in rural areas (pop. under 50K)	Expanded service would be eligible to receive Section 5311 funding for rural areas
<b>Local</b>	New partner organizations	Developers of new senior housing and other facilities
		Human service agencies whose clients use services
		Community colleges
		Hospitals
		Employers
	New service delivery methods	Volunteer driver programs Subsidize Uber/Lyft services
<b>Regulatory/Administrative Improvements</b>	Eligible matching funds	Title III B funds as match to 5310
	Cost allocation technical assistance	Educate partner organizations, facilitate regional coordination
	Access to Pace's trip data for timely budget/service monitoring	Kane and McHenry counties have access now or are planning to; add other coordinated systems and all counties
	Educational materials	Joint sharing or development of tools to inform local officials, potential sponsors

**Regional Efforts**

Revise 5310 distribution process

RTA's role in potential revisions to the current process of distributing 5310 funds among projects could include the following actions:

- Convene and facilitate an RTA grantee committee to discuss the pros and cons of different alternatives for a combination formula/competitive funding distribution process and develop revised application and award processes.
- Participation from both coordinated demand-response systems and other RTA grantees—municipalities and private nonprofit human service agencies—will be important to ensure that issues of equity are addressed in any changes to the grant application and award process.
- Issues to consider include balancing the stability provided by a formula allocation with the ability to fund new or innovative projects; use of performance standards to make funding decisions or as a way to monitor funded services, and performance measures that

would be most equitable and appropriate; regional priorities and use of funding decisions to provide an incentive for developing desired services (e.g., regional services) or characteristics (e.g., coordination among providers, local overmatch to federal funds).

Utilize additional federal sources of funding

RTA and/or Pace could act on behalf of grantees to investigate the potential for receiving reimbursement from Medicaid funds for eligible trips. The agency could facilitate a discussion between the coordinated county demand-response systems and Pace regarding Pace's experience with use of Medicaid funding to cover the cost of eligible trips provided by Pace to Medicaid recipients. The discussion should include the process for becoming an authorized provider of Non-Emergency Medical Transportation (NEMT) service, rates paid by Medicaid, and other requirements. Use of Medicaid funds was an option for eligible trips at the time when the RTA Sustainable Funding for Coordinated Demand-Response Transportation study was completed. However, as of 2017 use of Medicaid funding is no longer an available option for demand-response transportation services.

Eligible matching funds

Non-U.S.DOT funds are eligible sources of non-federal match for FTA grants according to federal regulations (see Section III 16a of 9070\_1G-Final, June 16, 2014, FTA's current Section 5310 circular), although the IDoA appears to prohibit Title IIIb funds allocated to Area Agencies on Aging in Illinois to be used in that manner.

RTA could also facilitate a possible change to this policy by approaching IDoA on behalf of grantees to discuss the use of Title IIIb funds as match to federal transit funding provided to local grantees through RTA. An important step would be to enlist the support of coordinated systems affected by this issue, such as Kendall Area Transit, in conversations with IDoA.

New service delivery efforts

RTA could take several steps to help grantees develop and implement cost-effective alternative transportation modes to complement traditional transit and paratransit services and make resources go farther:

- Share resources on volunteer driver programs and flexible voucher programs with interested grantees.
- Share results of pilot projects, such as that under development in McHenry County with RTA's assistance, that demonstrate the use of Uber, Lyft, and other shared mobility options to provide first mile/last mile services or complement public transit/paratransit services with RTA grantees.

Monitor the availability of FTA grant opportunities that would suit the development of new cost-effective service delivery options, such as the recent Mobility Pace On Demand Sandbox and Rides to Wellness funding initiatives.

New state transportation subsidy program

This approach to improving funding sustainability for the services provided by coordinated county demand-response systems and other RTA grantees is likely to be a longer-term sustainability option, due not only to the lead time needed to plan and implement a new subsidy program, but also to the current fiscal environment in the state, which is not conducive to the success of a new funding program.

Exploring this strategy and moving it forward at the appropriate time should be a regional effort undertaken by a variety of regional players including coordination bodies such as the HSTP-PAC.

Transit Cooperative Research Program (TCRP) Report 129, *Local and Regional Funding Mechanisms for Public Transportation*, provides guidance on how this issue may be addressed.

#### Technical assistance

RTA's role in technical assistance could be to compile existing resources related to the topics below and disseminate them to interested grantees.

#### *Cost allocation assistance*

- Assemble existing sources of guidance on developing an accurate transportation budget and fully allocating costs to either partners in a coordinated system or to a transportation cost center within an organization and distribute to grantees. This topic may be of particular interest to nonprofit organizations that have limited experience with the provision of transportation services, or to coordinated systems that may need to explain cost allocation to potential sponsor/partner organizations.

#### *Educational materials*

- Collect materials used by the coordinated county demand-response systems to educate local elected officials, potential partner organizations, and others about the value of transportation services, especially coordinated services, to local communities. Materials could include items such as brochures, PowerPoint presentations, new partner welcome kits, and/or other items that coordinated systems have found effective in their local outreach and education efforts.
- Share among coordinated systems and other grantees for their use. Consider developing standardized materials that present the same message but can be tailored to include specific information about a county's services and their impact on served communities or individuals, utilize a county's logo and/or color scheme, and otherwise reflect the unique environment in each county.

### **Local Efforts—Coordinated Systems**

Steps that coordinated county demand-response systems could take to develop and implement sustainable funding strategies are summarized below.

#### Standardized level of Pace subsidy

Pace and McHenry County successfully negotiated a flat rate of subsidy across all the communities participating in MCRide that have historically received subsidies from Pace. Kane and Lake counties have expressed interest in, or have begun to discuss, a similar approach for Ride in Kane and RideLakeCounty. Those counties, together with Pace, could have more detailed conversations with McHenry County DOT staff about several issues: the county actions that made a move to a standard subsidy from Pace and a standard contribution across municipal partners that would be less risky and more attractive to the partners; challenges experienced by McHenry County as the new system was developed and implemented and the solutions that helped address them; time and resources required for planning and implementing the new funding arrangement; and the expected and actual impacts on the coordinated system of the new funding arrangement.

Greater county participation in coordinated demand-response systems

McHenry and DuPage counties have both taken a strong role in providing financial support for their coordinated systems, using different approaches. McHenry County uses the county's share of the 2008 RTA sales tax to cover any funding shortfall experienced by MCRide each year (because the flat subsidies paid by partners may not cover the cost of trips that are provided), and pays about 50% of each month's invoice for service from Pace up front, thus relieving some of the financial burden for partner organizations. DuPage County is not only the lead agency for Ride DuPage but is also its largest single local funder. A number of DuPage County departments use the system to provide transportation for their customer groups.

While county participation in the funding of coordinated transportation services is undoubtedly dependent on the political environment and leadership in the county at any particular time, the factors that led to the strong roles played by McHenry and DuPage counties will be instructive for the participants in coordinated systems in other counties.

Dedicated county funding source

McHenry County can also share its experience with the passage of a property tax levy for senior services, which has been used to varying degrees to support MCRide. In addition, Kane County has pursued a 1% earmark of gas sales tax revenue to support Ride in Kane. The potential for a dedicated local funding source to support coordinated demand-response services, and the most appropriate revenue mechanism, will vary by county, but the experiences of counties that have pursued this strategy will be useful for other counties considering this approach.

New partner organizations

A variety of organizations that benefit from the services provided by coordinated systems represent potential new partners in those systems, including: health care facilities, senior residential communities, employers, community colleges, grocers and other retailers, and human service agencies.

DuPage County reported at the August HSTP-PAC meeting that Ride DuPage would be partnering with a health care provider to provide service to specific patients with subsidies from that provider. Kane County has identified several new senior housing developments that are using Ride in Kane services as a selling point with potential residents. Similar, and more, opportunities to engage non-traditional partners are likely to exist in all counties.

After identifying potential new partners, interested counties could work together to develop informational packages or presentations for meetings with those organizations, particularly private businesses, which could be tailored to each county but present a unified message.

Materials should:

- Stress the benefits of transportation services to the potential new partners, such as the customers, clients, and patients who will be brought to their offices, stores, residences, and programs
- Relay stories from current riders
- Describe the coordination that is built into the systems and the funding arrangements that support them and explain the need for subsidies
- Provide examples of similar partnerships that are in place in the region, sharing successes and offering a current list of non-traditional partners

- Offer the possibility of signs promoting the business or organization inside or outside vehicles in exchange for sponsorship, similar to the route or service sponsorships utilized by Advance Transit, a nonprofit transit provider serving Wilder, VT and Hanover, NH
- Describe the benefits of cost savings through pooling resources

*New service delivery methods*

Using cost-effective providers of trips as a complement to more traditional demand-response services could also be explored and developed at the local level by coordinating councils or Mobility Managers, using the resources provided in the appendices to the report as a starting point.

## REGIONAL TRANSIT MARKET ASSESSMENT (2017)

### Regional Transportation Authority

The Regional Transportation Authority (RTA) worked with its three service boards, Chicago Transit Authority (CTA), Metra, and Pace, to produce the 2018 Regional Transit Strategic Plan. This strategic plan sets transit goals and objectives for the RTA’s six-county service region to be pursued through 2023.

In April 2017, the RTA published a Regional Transit Market Assessment to support the 2018 Regional Transit Strategic Plan. The report examines current trends in demographics, employment, various measures of transit access, and other characteristics that should be considered as a plan for transit investment in the short term.

For this assessment, the RTA divided its six-county service region into 46 districts grouped by Chicago Metropolitan Agency for Planning (CMAP) traffic analysis zones, census tracts, county boundaries, and Chicago’s city boundaries. Four of these districts are within Lake County (Figure 2-3).

The Regional Transit Market Assessment identified key trends and associated results that relate to the role and performance of transit services across the region. Many of these trends are more directly attributed to Chicago than to the collar counties, but several trends are worth highlighting:

- Chicago’s central business district (CBD) continues its predominance as the region’s employment center and transit system hub. Major employment centers exist throughout the region, but past land use decisions make transit service challenging.
- The population of the region as a whole is aging, but mostly in Chicago and the suburbs. Older adults often exhibit higher demand for public transportation as they become less able or willing to drive themselves, or can no longer afford to own a car on a fixed income. An increased older population (age 65 and older) in suburban areas where traditional transit service cannot serve trips efficiently presents a transportation challenge.
- Where millennials, with their preference for non-driving modes, choose to live in the region is a predictor of where transit service is likely to be successful. Millennials tend to live in areas that have good transit access. Increasing the accessibility of transit service may entice younger generations to move.
- More residents are living without a personal vehicle. As this trend continues, the demand for transit service will increase.

These findings point to what Lake County’s future transit needs will likely be in the context of the RTA region, and give Lake County DOT and LCCTSC insights on what needs to prepare to serve.

**Figure 2-3 RTA Market Analysis Districts in Lake County**

District Number	RTA District Name (Major Municipalities)
3	Round Lake/Grayslake/Gurnee
4	Waukegan/North Chicago
5	Libertyville/Vernon Hills
6	Lake Forest/Highland Park

Source: Regional Transportation Authority, Regional Transit Market Assessment, 2017



### 3 EXISTING SERVICES

This chapter describes local bus, paratransit, and other transportation services that are currently available to Lake County residents.

#### TRANSPORTATION PROVIDER INVENTORY

Figure 3-1 shows Pace fixed routes, Pace On Demand (formerly known as Pace Call-n-Ride) services, Dial-A-Ride (Ride Lake County) services operated by Pace, and paratransit services operated by townships and municipalities on a map of Lake County.

Figure 3-1 Map of Local Bus and Paratransit Services in Lake County, 2017

### Lake County, IL Existing Paratransit & Local Bus Services

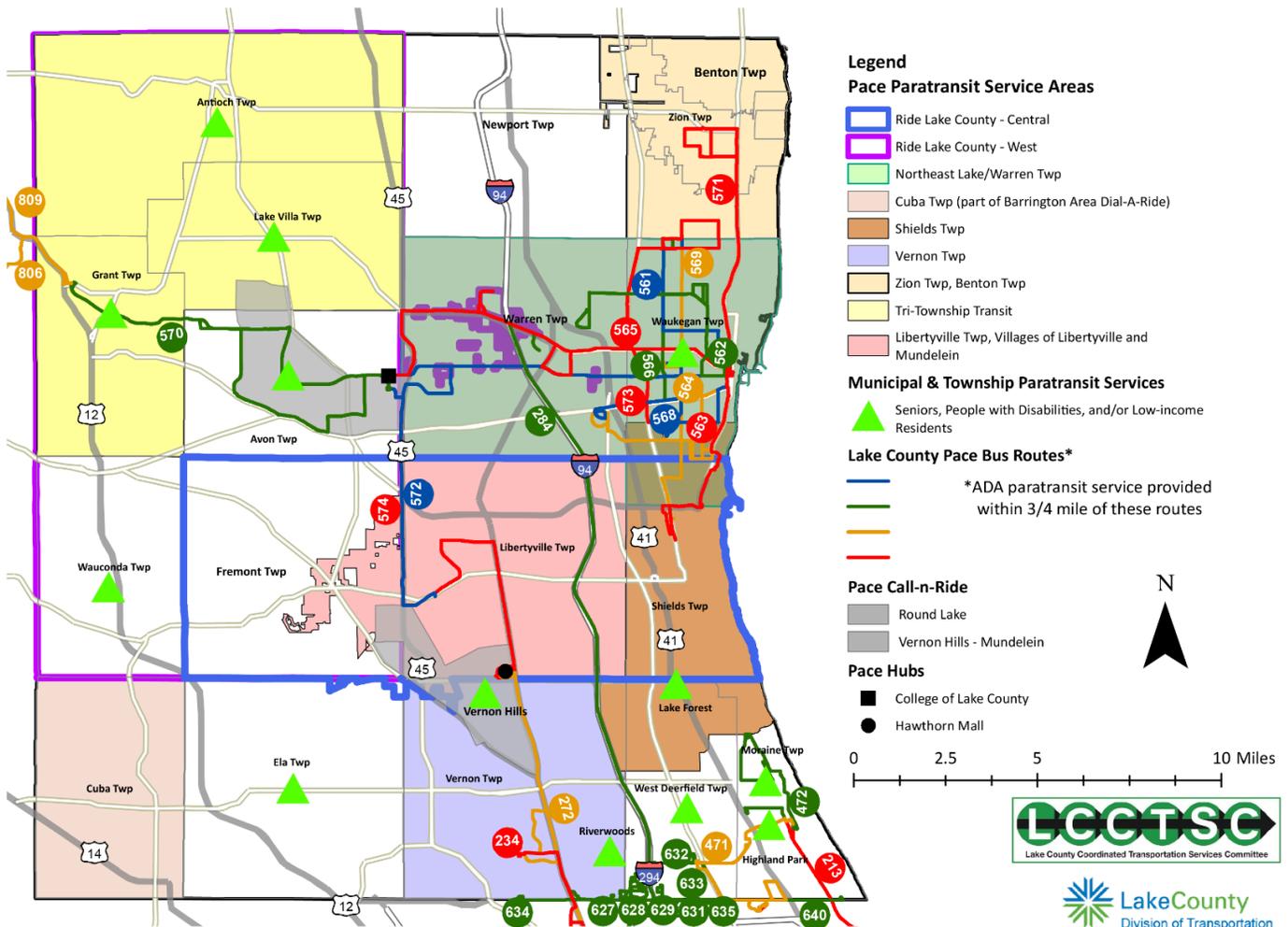


Figure 3-2 summarizes the service characteristics of most of those services. Key points about the various services are noted below.

## **Pace Fixed Route, ADA Paratransit, and Pace On Demand Services**

Pace local fixed-route bus services operate primarily in the more densely populated eastern portion of Lake County.

A restructuring of bus services in Lake County took place in phases during 2012 and 2013. Service changes before the next restructuring effort may be initiated by suggestions from riders or the public, or recommendations from Pace service planning staff based on changes in markets, ridership, or on-time performance of current routes.

As required by the Americans with Disabilities Act, paratransit service for individuals who are unable to use fixed-route service is provided within  $\frac{3}{4}$  of a mile of all fixed bus routes. ADA paratransit service is available during the same days and hours of service as the fixed bus routes, and must meet other comparability requirements as well.

The RTA administers an ADA paratransit eligibility determination process for the region. Individuals must complete an application form and participate in an in-person interview at an RTA interview and assessment center in order to be considered for ADA paratransit eligibility.

Eligible individuals may make trips within a corridor that extends  $\frac{3}{4}$  of a mile around each fixed route during the days and hours that service on that route is in operation. In Lake County, ADA paratransit service generally begins at 5:30 or 6 a.m. and ends between 6 and 10 p.m. on weekdays; begins between 7 a.m. and 9 a.m. and ends between 6 and 11 p.m. on Saturdays on a limited number of routes; and is offered between 10 a.m. and 8 p.m. on Sundays on three routes.

Pace Shuttle Bug routes provide weekday peak-hour service between Metra commuter rail stations or Chicago Transit Authority (CTA) stops and specific employment sites. Shuttle Bug services are open to the public. Shuttle Bug routes operate in the southeastern section of Lake County in the Lake Cook Road corridor, where there is a density of jobs and the commuter schedules work conveniently in the reverse direction. The Transportation Management Association (TMA) of Lake Cook manages the program on behalf of the partner organizations.

The costs of operating a Shuttle Bug route are shared between Metra, Pace, and the employer. Pace and Metra split half of the cost and the employer contributes the other 50%.

Pace On Demand services offer demand-response curb-to-curb service that may be scheduled from one hour to one day in advance. Service is available to the general public within a designated area between 6 a.m. and 6:15 p.m. on weekdays. Two Pace On Demand services operate in Lake County: one in the Round Lake area and the other in Vernon Hills/Mundelein.

It is important to note the differences between Pace On Demand (formerly known as call-n-ride) and the Dial-a-Ride services offered in Lake County. The details of Dial-a-Ride are highlighted later in this section. In general, most Pace dial-a-ride services offered in Lake County have eligibility stipulations based on age or disability and require trip reservations in advance. Pace On Demand offers reservation-based, shared-ride service in 11 designated service areas throughout the region. On Demand is also open to the general public, and although any trip scheduled must start or end within the On Demand zone, booking is more flexible than dial-a-ride

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**Figure 3-2 Characteristics of Paratransit Services in Lake County, 2017**

Community/Provider	Service	Service Area	Eligibility	Span of Service (days/hrs.)	Fare Structure	Annual Budget	Annual Ridership	Revenue Sources
Advocate Good Shepherd Hospital	Human Services Agency – Medical Trips	Limited to trips from specific zip codes to AGSH and outpatient locations	Patients	NA	NA	NA	NA	NA
Advocate Health	NA	NA	NA	NA	NA	NA	NA	NA
Antioch Township	Township Van Taxi Voucher	Township	People with disabilities and older adults, medical appointments	Usually Wednesdays	Free	NA	NA	Taxes
Avon Township	Township Van	Avon, 20 mi radius of Avon Township building	People with disabilities and older adults	M-Th: 9 AM - 2 PM	\$1/trip	\$8,400	600	Taxes
Barrington Area	Pace Dial-a-Ride, Taxi Voucher	Barrington and Cuba Townships and the Villages of Barrington, South Barrington, Lake Barrington, North Barrington, Barrington Hills, and Tower Lakes.	People with disabilities and older adults	M-F: 9 AM - 4 PM	\$2/trip	\$90,000-100,000 township and village contributions	2,860	Funding is from local share and Pace subsidy. Townships provide 60% of funding, and villages split remaining 40% according to ridership
Benton/Zion Townships	Pace Dial-a-Ride, Taxi Voucher	Benton Township, Zion Township	DAR: General public, Vouchers: people with disabilities, older adults	M-F: 8:30 AM - 5:30 PM	\$0.80 for people with disabilities, older adults, and students \$1.60 for others	Townships spent \$8,850 in FY 2016	3,200	Corporate Fund/General Assistance Fund Split between townships and Pace subsidy
Catholic Charities	Contracted Transportation Vendor	Lake County; however, participants may be transported to Cook, McHenry, and Southern Wisconsin medical facilities.	Lake County older adults 60+; medical trips only	M-F: 8 AM - 5 PM	Donations only	\$59,259	1,500	Aging and Disability Resource Network/Northeast II Medical Transportation Grant
Center for Enriched Living	Human Services Agency – Program Activities	NA	Clients (people with disabilities)	NA	NA	NA	NA	NA
Village of Deerfield	Taxi Voucher	Village, and areas outside	People with disabilities and older adults (65+)	M-F: 8 AM - 4:30 PM	\$1 + voucher per trip within the village. A voucher covers \$5 for trips outside the village	\$50,000	NA	Local funding plus small donation from a local hospital

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Community/Provider	Service	Service Area	Eligibility	Span of Service (days/hrs.)	Fare Structure	Annual Budget	Annual Ridership	Revenue Sources
Ela Township	Township Bus	Township boundaries with exception of nearest hospital/doctor buildings and trains station	Residents aged 55+ or people with disabilities	M-F: 8:30 AM - 1:30 PM (3:45 PM for medical)	\$2 (+\$1 if adding a mid-trip stop)	\$280,000	10,000	Tax dollars, Wauconda, fares
ElderCARE	Volunteer driver program	North of Route 60. Covers >75% of the county	Older adults that are LC residents	N/A	Free/Donations Accepted	\$174,000	2,490	Foundations, donors, churches
Faith In Action Volunteers of Southeast Lake County	Human Services Agency – Volunteer Driver Program	Within 10 miles of a participant's home	Older adults	NA	NA	NA	NA	NA
Village of Fox Lake	Parks and Recreation shuttle	Village Limits	General public	T, W, Th: 8 AM - 3:30 PM	\$1 people with disabilities and older adults, \$2 GP	NA	4,000	Village and Pace funds
Fremont Township	Taxi Voucher	10 mile radius of resident's address	People with disabilities and older adults (65+)	N/A	\$15 for a book worth \$30	\$1,000	NA	Township funds
Grant Township	Township Van	Grant Township, 20 mi radius of Grant Township Center	General public with low income, and people with disabilities and older adults	M, W, F: 9 AM - 3 PM	\$2 (<10 mi), \$4 (>10 mi) Half fares for older adults and people with disabilities	\$22,000	2,400	Township funds
Homestead Senior Care	Human Services Agency – Client Transportation	NA	Clients (older adults or people with disabilities)	NA	NA	NA	NA	NA
City of Highland Park	Senior Connector	NA	Older adults (50+) and people with disabilities	M-F: 9 AM - 3:30 PM	Free	NA	5,836	City funds
Independence Center	Human Services Agency – Client Transportation	Lake County	Clients (people with disabilities)	NA	NA	NA	NA	NA
City of Lake Forest/Lake Bluff	Dickinson Hall Senior Center transportation Taxi Voucher	Lake Forest, Lake Bluff, and Knollwood	Residents aged 60+ or people with disabilities	M-F: 8:45 AM - 3 PM	\$3 (\$2 if subsidy eligible)	\$36,410	1,800-2,400	Support from Lake Forest senior Citizens Foundation and nominal rider fees
Lake Villa Township	Tri-Township Transit	Lake Villa, Antioch, and Grant townships	People with disabilities and older adults	T, Th: 9 AM - 12 PM	\$2 round trip	\$18,000	NA	Funded by Lake Villa, Antioch, and Grant townships

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Community/Provider	Service	Service Area	Eligibility	Span of Service (days/hrs.)	Fare Structure	Annual Budget	Annual Ridership	Revenue Sources
Lambs Farm	Human Services Agency – Client Transportation	NA	NA	NA	NA	NA	NA	NA
Little City/Countryside Association for People with Disabilities	NA	NA	NA	NA	NA	NA	NA	NA
Moraine Township	Township Van Taxi Voucher	Moraine and 15 mi radius of the township borders	People with disabilities and older adults	M-F: 8:30 AM - 4 PM	\$4 (\$2 if income-qualified)	\$267,266	NA	Township funds and support of a local non profit
Pace ADA Paratransit Services for North and Central Lake County	Pace ADA Paratransit	3/4 mi radius around fixed route service in Village of Beach Park, Village of Grayslake, Village of Indian Creek, City of Waukegan, Village of Fox Lake, Village of Gurnee, Village of Libertyville, Village of Mundelein, City of North Chicago, City of Park City, Village of Round Lake, Village of Round Lake Beach, Village of Round Lake Park, Village of Vernon Hills, and City of Zion	People with disabilities	M-F: 6 AM - 10 PM; Sa: 8 AM - 11 PM; Su: 10 AM - 8 PM	\$3/round trip	Not separated out by region	Not separated out by region. All suburban ADA trips equal to 940K rides in FY 2015	Regional sales tax and public transportation fund
Pace ADA Paratransit Services for Southeast Lake County	Pace ADA Paratransit	Portions of Village of Buffalo Grove, Village of Deerfield, City of Highland Park, City of Highwood, Village of Lake Forest, Village of Lincolnshire, Village of Riverwoods and Village of Wheeling	People with disabilities	M-F: 6 AM - 10 PM; Sa: 8 AM - 11 PM	\$3/round trip	Not separated out by region	Not separated out by region. All suburban ADA trips equal to 940K rides in FY 2015	Regional sales tax and public transportation fund
Pace Northeast Lake/Warren Township Dial-A-Ride	Pace Dial-A-Ride	Warren Township, Waukegan Township, Northern Shields Township	Older adults and people with disabilities	M-F: 6:30 AM – 6 PM	\$1/trip	NA	NA	Split between Pace subsidy and Warren Township, Shields Township, cities of North Chicago and Lake Forest
Pace Northwest Lake Dial-a-Ride	Pace Dial-a-Ride	Antioch, Avon, Grant, and Lake Villa townships	People with disabilities and older adults	M-F: 8:30 AM - 4 PM	\$1/trip	\$307,190	8,051 (2017)	Regional sales tax and public transportation fund

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Community/Provider	Service	Service Area	Eligibility	Span of Service (days/hrs.)	Fare Structure	Annual Budget	Annual Ridership	Revenue Sources
RideLakeCounty Central/Pace Central Lake Dial-a-Ride	Pace Dial-a-Ride	Fremont Township, Village of Libertyville, Libertyville Township, Village of Mundelein, Shields Township. Greenleaf Ave., Medical Offices, Lake County Health Department North Chicago Health Center, Walmart Supercenter Fountain Square Plaza, West Lake Forest Metra Station, Advocate Condell Outpatient Services, and the College of Lake County	People with disabilities and older adults	M-F: 5:30 AM - 6:45 PM	\$3 (<10 mi) \$6 (>10mi) Dialysis subscription trips \$5 one-way flat fare	\$139,238*	(2017) 4,851 (2018) 5,306	Townships of Fremont and Libertyville; Villages of Libertyville and Mundelein; Pace subsidy, Regional Transportation Authority, federal grants, ¼% sales tax from Lake County
RideLakeCounty West	Pace Dial-a-Ride	Antioch Township, Avon Township, Fremont Township, Grant Township, Lake Villa Township, Wauconda Township, Gurnee Mills area, Greenleaf Ave., Medical Offices, Mundelein Metra Station, Advocate Condell Hospital, Lake County Center for Independent Living, Health Reach Clinic, and the Libertyville Sports Complex.	People with disabilities, older adults, GP	M-F: 5:30 AM - 6:45 PM	\$3 (60+, PWD, <10 mi), \$4 GP, \$6 (60+, PWD, GP >10mi) Dialysis subscription trips \$5 one-way flat fare	\$462,146	(2017) 11,469 (2018) 10,796	Townships of Antioch, Grant, Lake Villa, Avon, Wauconda and Fremont; Pace subsidy, RTA, federal grants, ¼% sales tax from Lake County
Village of Riverwoods	Taxi Voucher	NA	Older adults	N/A	N/A	\$700	NA	Village funds
Shields Township	Pace Dial-a-Ride	Shields Township, North Chicago, Lake Forest, College of Lake County, Erie Family Health Center, Lake County Center of Independent Living, Greenleaf Medical Offices, West Lake Forest Metra Station, Sunset Foods, College of Lake County (Lakeshore Campus), Search Inc., Waukegan, Hawthorne Mall, Walmart Super Center Fountain Square, and Highland Park Hospital.	People with disabilities (60+) and older adults	M-F: 6 AM - 6 PM	\$3, with trips over 10 miles costing extra	\$5,500	2,700	Local taxes and Pace Subsidy
Village of Vernon Hills	Senior Shuttle	Origin must be within Vernon Hills	Village residents 55+ years	M-F: 8:30 AM -3:30 PM Medical Trips: M, W AM, F Shopping: T, W PM, Th	free (shuttle); \$2 GP, \$1 Older Adult (DAR)	\$ 45,000	Used by about 750 residents	Sales Tax

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Community/Provider	Service	Service Area	Eligibility	Span of Service (days/hrs.)	Fare Structure	Annual Budget	Annual Ridership	Revenue Sources
Vernon Township	Pace Dial-a-Ride (Paratransit Service Provider Agreement with Pace) Taxi Voucher	Vernon Township	DAR: general public , older adults (65+), People with disabilities Vouchers: people with disabilities, older adults	M-F: 8:30 AM - 3:30 PM	\$1 for people with disabilities, older adults, and students \$2 GP Free for children under 7	\$9,588	3,196	Property Taxes
Warren Special Recreation Association	Human Services Agency -- Program Activities	NA	Program participants	NA	NA	NA	NA	NA
Warren Township	Township van and shopper shuttle Taxi Voucher	Van service within Township Weekly shopper shuttle to specific destinations	Older adults	Wednesday	\$1 for shopper shuttle Taxi voucher is \$3 or \$15 in ten ticket books	\$ 25,000**	8,600**	Property Taxes
Wauconda Township	Pace Dial-a-Ride Township Van	Wauconda Township to Countryside in Palatine	Older adults, people with disabilities	M-F: 7 AM - 3:30 PM	Free	\$120,000	4,976	Property Taxes
Waukegan Township	Township Van Taxi Voucher	Township boundaries along with five locations outside of the Township for medical appointments	Residents aged 55+	M-F: 8 AM - 4:30 PM	18 tickets per month, per person registered; 1 ticket = 1 ride	\$38,000 plus driver costs \$250,000/year for taxi tickets	12,000	Property Taxes
West Deerfield Township	Township Van Taxi Voucher	West Deerfield, 5 mi radius, Lake Forest Hospital, Glenbrook Hospital, Highland Park Hospital, North Chicago VA Hospital	People with disabilities and older adults; focused on medical trips	NA	\$5 round trip / \$2 veterans	\$70,000	75 individuals	Property Taxes Grant from Healthcare Foundation of Highland Park

\*Includes cost of Libertyville Township, Village of Libertyville, and Village of Mundelein Central Lake Dial-A-Ride core service, and Fremont Township. Does not include Shields Township service cost.

\*\*Includes both Warren share of Northeast Lake/Warren Township DAR and township van service.

GP = General Public    DAR = Dial-A-Ride    NA = Not Available

## Paratransit Services in Townships and Villages

As can be seen in Figure 3-1 and Figure 3-2, many paratransit services are in operation in Lake County, particularly in the eastern half. Services fall into one of several categories:

- Dial-A-Ride services operated by Pace and funded by Pace or Pace and local communities, either for the general public or for older adults and people with disabilities
  - Northeast Lake/Warren Township
  - Barrington Area
  - Libertyville, Libertyville Township, Mundelein
  - Shields Township
  - Zion/Benton Townships
- Dial-A-Ride service operated by a municipality or township under a Paratransit Service Provider Agreement with Pace and funded by Pace and the municipality or township.
  - Vernon Township
- Coordinated Dial-A-Ride services that combine the service areas of individual township Dial-A-Rides and add expanded service areas/destinations, days/hours of service, and eligible riders. These services are operated by Pace and funded by Pace, local communities, federal grants through the RTA, and Lake County.
  - Ride Lake County Central
  - Ride Lake County West
- Paratransit services operated by townships, primarily for older adults and people with disabilities.
  - Avon
  - Antioch
  - Ela
  - Grant
  - Moraine
  - Warren
  - Wauconda
  - Waukegan
  - West Deerfield
  - Tri-Township Transit (Antioch, Grant, and Lake Villa Townships)
- Municipal paratransit or shuttle services.
  - Village of Fox Lake
  - Village of Vernon Hills
  - City of Highland Park
  - City of Lake Forest/Lake Bluff
  - Transportation services provided by human service agencies for particular groups of eligible users or agency clients.

Note that the communities that have partnered to create RideLakeCounty Central—Libertyville, Fremont, and Shields townships and the villages of Libertyville and Mundelein—have maintained the existing services they sponsored (which have been operated by Pace for decades) prior to the formation of the coordinated service. Grant funds from the RTA to Lake County DOT, Pace subsidy, and Lake County DOT matching funds pay for trips in the expanded service area, to destinations outside the service area, and beyond the core hours of service. To customers, the township/village funding for services is not visible. Rather, the local share for trips that fall within

the former geographic boundaries and days/hours of service are billed to the townships and villages. The local share for trips to the expanded service area and during the longer days/hours that the coordinated service offers are billed to the coordinated system, which is supported by federal funds granted to Lake County by the RTA, and matching funds from Lake County. Lake County uses ¼% sales tax revenues for the local match.

Pace’s Northwest Lake Dial-A-Ride service operates similarly within the RideLakeCounty West service. Pace subsidy is used to cover 100% of the cost of trips within the former Dial-A-Ride service area and days/hours in Antioch, Avon, Grant, and Lake Villa townships. Federal grant dollars, Lake County and Pace matching funds, and township contributions are used for trips within the expanded RideLakeCounty West service area and days/hours of service and trips for the general public. Lake County uses ¼% sales tax revenues for the local match.

Most Lake County paratransit services operate on weekdays during typical business hours or for a slightly shorter span. Some services are available during more limited hours and/or only on certain days of the week.

A number of services provide rides to popular shopping or medical destinations that are located beyond township or village boundaries.

Since service sponsors track ridership and expenses with different degrees of formality, it is not possible to determine the exact number of rides provided in Lake County annually or the exact amount spent on these services. A conservative and, admittedly, incomplete estimate is just over 84,000 one-way passenger trips and annual expenses of nearly \$2.5 million.

## Other Services

Other mobility options are available in the county, as described below.

### Pace Vanpool Programs

Pace offers a number of vanpool programs to support local transportation.

The **Vanpool Incentive Program (VIP)** includes traditional vanpools, vans used to provide service from Metra stations to employment locations, employer-sponsored van services to and from transit stops/stations, and vans provided to nonprofit organizations for work trips for people with disabilities. Approximately 58 traditional vanpools, in which riders form their own groups and share the costs of the vanpool, are used to travel to employers in Lake County. Figure 3-3 shows the destinations within Lake County and the number of vans travelling to each location.

**Figure 3-3 Current 2017 Pace VIP Vanpools to Lake County Destinations**

Company/Destination	Location	Number of Vans
Abbott Laboratories	Abbott Park	6
Aon Risk Services	Lincolnshire	3
Baxter Healthcare Corporation	Deerfield	3
Continental Automotive Systems	Deer Park	2
Dean Witter, Discover Financial	Riverwoods	14
Hospira	Lake Forest	1

Company/Destination	Location	Number of Vans
Army Headquarters—USMEPCOM	North Chicago	4
Naval Supply—Great Lakes	Great Lakes	2
Peer Bearing Company	Waukegan	1
Trustmark Insurance	Lake Forest	1
Veterans Administration	North Chicago	21

Source: Pace

Pace’s **Community Vanpool Program** is well utilized in Lake County. The program leases vehicles to townships and villages for their use in service to the general public (services may be targeted to older adults, people with disabilities, and/or individuals with lower incomes, however). Two types of vehicles are available: 1) smaller vans, which include ramp-equipped minivans that seat 2-3 ambulatory riders plus a rider who uses a wheelchair, and 7-passenger converted vans, and 2) larger lift-equipped 12-passenger vans, that are sometimes referred to by recipients as buses.

Lease terms include an initial payment of \$1,000 and a monthly fee of \$100 that covers vehicle maintenance for the smaller vans and minivans, leased from a Pace-approved vendor. Vehicle recipients are responsible for the maintenance of the larger vehicles. Recipients of both types of vehicles are responsible for all other expenses, including fuel and insurance costs. Drivers must participate in Pace’s drug and alcohol testing program and receive training through Pace.

Seven townships in Lake County lease vehicles from Pace to use in their local transportation services.

**Taxi Subsidy Programs**

Thirteen townships and municipalities in the county underwrite the cost of taxi trips for people with disabilities and/or older adults. Tickets or vouchers are sold for a percentage of the face value or distributed at no cost to eligible individuals; the municipality or township covers the remaining cost. The tickets or vouchers are then used by individuals to pay for trips with participating taxi companies.

Communities that subsidize taxi trips for eligible riders include:

- Cuba Township
- Benton Township
- Fremont Township
- Libertyville Township
- Moraine Township
- Vernon Township
- Warren Township
- Waukegan Township
- West Deerfield Township
- Zion Township
- City of Lake Forest
- Village of Deerfield
- Village of Riverwoods

**Catholic Charities**

Catholic Charities is part of the Aging and Disability Resource Network of Northeastern Illinois (ADRN/NEIL) overseen by the Area Agency on Aging (AAA) of Northeastern Illinois. In that role,

Catholic Charities receives a medical transportation grant from the AAA, composed of federal and state/local matching funds, to provide medical trips for individuals age 60 and over. Individuals must not have other sources of transportation to their medical appointments, and are limited in most cases to 2-3 rides/month. Residents of Lake County may use the service to travel within the County, as well as to medical appointments in McHenry County, Cook County, and border counties in Wisconsin. Destinations also include medical facilities in Chicago and Milwaukee. The program is designed to meet needs for as many individuals as possible, rather than to provide transportation for a small number of individuals to ongoing, frequent treatments such as dialysis, chemotherapy, or radiation.

Catholic Charities contracts with service vendors that operate service between 8 a.m. and 5 p.m. on weekdays.

## **ElderCARE**

ElderCARE arranges for volunteer drivers to transport residents of northern Lake County (north of Illinois Route 60) age 65 or older, or individuals with a disability under age 65, to medical appointments. Trip requests must be placed 10 days in advance. Volunteers offer door-through-door service.

Service is organized around four zones:

- Zone 1: Zion to Lake Bluff
- Zone 2: Grayslake, Lindenhurst, Lake Villa, Antioch
- Zone 3: Libertyville/Mundelein
- Zone 4: Fox Lake

Destinations range from Kenosha, WI to the Village of Bannockburn.

Volunteers must have U.S. citizenship and a valid driver's license and undergo a background check. ElderCARE provides additional insurance for volunteers.

Funding sources include rider donations and contributions from foundations, churches, and other organizations. Rider donations are applied to program expenses; drivers are not reimbursed, but may deduct the cost of their time from income taxes.

## **SERVICE MODELS**

Public paratransit services in Lake County employ several different service models, as mentioned briefly above:

- Pace ADA paratransit service and Pace On Demand service
- Pace Dial-A-Ride services
- Dial-A-Ride services also operated by Pace but funded not only by Pace but also the local communities (including two services that operate in multiple townships)
- Coordinated local Dial-A-Ride services operated by Pace and funded by Pace, local communities, federal grant funds, and Lake County
- Township services operated by the townships with their own vehicles or vehicles leased from Pace
- A unique hybrid in Vernon Township, where the township operates the Pace Dial-A-Ride service

- Services operated by municipalities

Figure 3-4 details the responsibility for different functions—rider registration; reservations, scheduling, and dispatch; service delivery; vehicle ownership; and funding—in the programs that employ each service model.

Pace contracts with First Transit to operate ADA paratransit and Pace On Demand services, and township services operated by Pace in Lake County. First Transit also manages and staffs the North Mobility Management Call Center that handles reservations and scheduling for ADA Paratransit, Pace On Demand, and Dial-A-Ride services in Lake County. The call center is located in a Pace facility in McHenry County and handles McHenry County services as well.

Call-takers determine the service for which each customer is eligible, using eligibility parameters established by service sponsors, and assign trips to the correct service and funding source. The Trapeze reservations/scheduling/dispatch software is used at the call center to record reservations, schedule trips, and track data for reporting and billing. Rides for ADA paratransit and all Dial-A-Ride services are combined on vehicles for maximum efficiency.

All customer calls, including “where’s my ride?” calls throughout the day, are handled through the call center.

First Transit handles dispatching for these services from a Lake County operating facility.

Township and municipal services rely on manual methods of taking trip reservations and scheduling trips. Transportation or administrative staff take calls, record trip requests, and pass assignments along to drivers.

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**Figure 3-4 Lake County Paratransit Service Models**

Service	Rider Registration	Reservations/Scheduling/Dispatching	Service Delivery	Owner of Vehicle(s)	Funders
<b>Pace Services</b>					
ADA Paratransit	RTA	Pace (First Transit)	Pace (First Transit)	Pace	Pace
Pace On Demand: Round Lake Area, Vernon Hills/Mundelein	Not Applicable	Pace (First Transit)	Pace (First Transit)	Pace	Pace
<b>Dial-A-Ride</b>					
Barrington Area	Pace*	Pace (First Transit)	Pace (First Transit)	Pace	Pace Barrington, Cuba Townships 6 Barrington area villages
Central Lake	Pace	Pace (First Transit)	Pace (First Transit)	Pace	Pace, Libertyville Township, Villages of Libertyville and Mundelein
Northeast Lake/Warren Township	Pace	Pace (First Transit)	Pace (First Transit)	Pace	Pace Warren Township
Northwest Lake (now part of Ride Lake County West)	Pace	Pace (First Transit)	Pace (First Transit)	Pace	Pace
RideLakeCounty Central	Pace*	Pace (First Transit)	Pace (First Transit)	Pace	Pace Fremont Township RTA Lake County
RideLakeCounty West	Pace*	Pace (First Transit)	Pace (First Transit)	Pace	Pace Antioch Township Lake Villa Township Avon Township Grant Township Fremont Township Wauconda Township RTA Lake County
Shields Township	Pace*	Pace (First Transit)	Pace (First Transit)	Pace	Pace Shields Township Cities of Lake Forest and North Chicago, Waukegan Township
Vernon Dial-A-Ride	Township/Pace*	Township dispatches and employs driver	Township	Pace	Pace Vernon Township
Zion/Benton Dial-A-Ride	Pace*	Pace (First Transit)	Pace (First Transit)	Pace	Pace Zion, Benton Townships
<b>Local Township Bus/Van Services</b>					
Antioch Township	Township	Township	Township	Township - 1 van	Antioch Township
Avon Township	Township	Township	Township	Pace 1 van leased by township through Community Vanpool Program (CVP)	Avon Township

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Service	Rider Registration	Reservations/Scheduling/Dispatching	Service Delivery	Owner of Vehicle(s)	Funders
Ela Township	Township	Township	Township	Township - 2 buses	Ela Township
Grant Township	Township	Township	Township	Pace 1 bus, 1 van leased by township through CVP	Grant Township
Moraine Township	Township	Township	Township	Pace 2 vans leased by township through CVP	Moraine Township, with Highland Park Hospital Foundation grant
Warren Township	Township	Township	Township	Township - 2 buses	Warren Township
Wauconda Township	Township	Township	Township	Pace 1 van, 1 bus leased by township through CVP	Wauconda Township Village of Island Lake
Waukegan Township	Township	Township	Township	Pace 2 leased vehicles Township 3 vehicles	Waukegan Township
West Deerfield Township	Township	Township	Township	Township - 1 vehicle	West Deerfield Township
Tri-Township Transit	Lake Villa Township	Lake Villa Township	Lake Villa Township	Pace 1 leased vehicle through CVP	Antioch Township Grant Township Lake Villa Township
<b>Municipal Services</b>					
Village of Fox Lake	Village	Pace (First Transit)	Village	Pace 1 vehicle leased through CVP	Village of Fox Lake
Village of Vernon Hills	Village	Village	Village	Village - 1 van	Village of Vernon Hills
City of Highland Park	City	City	City	City - 1 vehicle	City of Highland Park
City of Lake Forest/Lake Bluff	Dickinson Hall Senior Center	Dickinson Hall Senior Center	Dickinson Hall Senior Center	City - 1 car, 1 van	City of Lake Forest Senior Citizens Foundation

\*Based on partners' definition of eligibility

## CURRENT FUNDING

Figure 3-4 identified the entities that supply financial support to the various paratransit services in operation in Lake County.

Funding arrangements are various and some are complicated. Key points about funding for Lake County's services include the following:

- Expenses for the coordinated RideLakeCounty Central and RideLakeCounty West services are split as follows: Operating costs minus fare revenues and liquidated damages recovered by Pace from its contractor equal net operating costs. Subject to its annual budgetary constraints, Pace subsidizes 25% of those costs; the remaining 75% is the local share, which is covered by federal grants and local funds. The Pace share of the RideLakeCounty West service is capped at \$100,000 per year
- Federal grants from the RTA to Lake County DOT cover 50% of the RideLakeCounty Central local share and Lake County DOT matching funds combined with Pace subsidy provide the other 50%. Lake County DOT uses ¼% sale tax funds for its portion of the local share.
- Federal grants cover 50% of the local share of the RideLakeCounty West services; Pace and Lake County DOT provide 25% each. Lake County DOT uses ¼% sale tax funds for its portion of the local share. The six townships also contribute an “overmatch” totaling \$40,000 per year to cover the cost of trips taken by general public riders in the West service.
- Together, the federal grants combined with Pace and Lake County DOT funds remove the responsibility of providing local match to the federal grants used in the RideLakeCounty Central and RideLakeCounty West services from the participating townships and villages.
- Federal funds, received by Lake County DOT from the RTA and matched with funding from Pace and Lake County DOT, made the formation of the two coordinated services possible. Federal funds cover 50% of the local share of the RideLakeCounty West and RideLakeCounty Central services.
- RideLakeCounty Central's core services—the Pace Dial-A-Ride services in place in Libertyville Township, Shields Township, and the villages of Libertyville and Mundelein prior to the formation of the expanded, coordinated services—account for the majority of Central trips and expenses. Pace covers 75% of the net costs of those services and townships and villages cover 25% percent.
- Pace is an important funding partner in Lake County, providing the major share of funding for its own Dial-A-Ride services (75-100%) and a significant share (up to 25%) of the net operating costs of the coordinated RideLakeCounty Central and RideLakeCounty West services.
- Township contributions to Pace Dial-A-Ride services are relatively modest.
- Township funding for their in-house services ranges from several thousand to several hundred thousand per year.
- Few municipalities contribute to the cost of Dial-A-Ride or township van services that are open to their residents.
- Fare revenues are an important source of funds for paratransit services, especially the Pace Dial-A-Rides and the two coordinated services.

The sources of funds that are used to support paratransit services in Lake County, by funding entity, are outlined below.

## **Pace**

In addition to fares and other operating revenues, which contribute a substantial amount to Pace's annual budget, Pace receives funding from federal, state, and regional sources.

Operating surpluses from the funding sources described below and others are transferred to Pace's capital program to supplement the capital funding that Pace obtains from a variety of federal, state and regional sources.

## **State and Regional Funds**

As one of the RTA's Service Boards (which also include CTA and Metra), Pace receives an allocation of regional RTA sales tax revenues and matching funds from a state sales tax that makes up the Public Transportation Fund (PTF). Legislation passed in 2008 (Public Act 95-0708) increased the RTA sales tax from 1% to 1.25% in Cook County and from .25% to .75% in the five collar counties. Of the .50% increase in sales tax in the collar counties, .25% goes directly to the RTA, to Pace, and the remaining .25% can be used for public safety, transportation, and transit at the discretion of the collar county boards. The legislation also established an allocation process for the new funds and changes to the RTA's governance and oversight responsibilities. Pace and the other Service Boards continue to receive funds from the original RTA sales tax and PTF matching funds according to the allocation formulas and process established prior to 2008 and also receive RTA sales tax revenues and PTF matching funds through the new formulas and process established in 2008.

The 2008 legislation also created the Suburban Community Mobility Fund (SCMF) to be administered by the RTA. The SCMF is a dedicated source of funding for Pace to be used for non-traditional suburban transit services, including dial-a-ride services, vanpools, ridesharing, and reverse commute services. Created with an initial funding level of \$20 million, the RTA is required to deposit that amount in the account, adjusted for the percentage change in sales tax revenues for the previous year.

Pace, through the RTA, also receives state funding for the provision of ADA paratransit service throughout the RTA region.

## **Federal Funds**

Pace also receives federal transit funds from a number of grant programs, including:

### **Section 5310: Enhanced Mobility of Seniors and Individuals with Disabilities Program**

Section 5310 provides formula funding to states for the purpose of meeting the transportation needs of seniors and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs.

Capital projects are eligible for funding. Most funds are used to purchase vehicles or provide preventive maintenance for transit fleets, but acquisition of transportation services under contract, lease, or other arrangements, and state program administration are also eligible expenses. The maximum federal share is 80%, however it is 50% for operating assistance. State or

local funding sources may provide local share. In the Chicago region, a portion of Pace's regional call centers are funded with 5310 funds.

### **Section 5316: Job Access and Reverse Commute (JARC)**

This Federal Transit Administration (FTA) grant program, repealed with the passage of the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) transit reauthorization, was designed to support work, training, and other related trips for individuals with lower incomes and work trips from urban or rural origins to employment in suburban areas.

Funds awarded to recipients prior to the program's repeal are still available for use. However, as of 2016, awarded JARC funds had been completely utilized in Lake County and no longer support transportation services.

### **Section 5317: New Freedom**

The FTA's New Freedom program was also repealed by MAP-21. The focus of this program was to support services for people with disabilities beyond services required by the ADA and new services or programs designed to address gaps in the public transportation services for people with disabilities.

As of summer 2018, Lake County drew down all awarded New Freedom funding to support paratransit services provided by Pace.

### **Congestion Mitigation and Air Quality (CMAQ)**

Administered by the Federal Highway Administration (FHWA), the CMAQ program supports different types of projects that have a positive impact on traffic congestion and air quality. Funds are allocated to states that contain urbanized areas that are either in a maintenance status or non-attainment for the National Ambient Air Quality Standards (NAAQS) and may be transferred into other federal transportation grant programs. CMAQ funds that are transferred into the Surface Transportation Block Grant program may be used for transit projects. Transit providers often use transferred CMAQ funds to implement new services that meet the program's objectives.

## **RTA**

The RTA administers state and regional sources of public transportation funding, as described briefly in the Pace section above. In addition to RTA sales tax revenues and the matching state funds, the RTA receives federal and state funding to support various programs and projects. Several federal programs are of particular relevance to paratransit services in Lake County.

### **Sections 5316 and 5317**

The RTA was the recipient of JARC (Section 5316) and New Freedom (Section 5317) funds for the Chicago urbanized area prior to their repeal in 2012. Lake County DOT received JARC and New Freedom funding through the RTA for the RideLakeCounty West service. As of summer 2018, all JARC and New Freedom grants were expended for RideLakeCounty West.

### **Section 5310: Enhanced Mobility of Seniors and Individuals with Disabilities**

FTA's Section 5310 program has several objectives. The first is to continue the traditional focus of the program, which is the provision of capital assistance to nonprofit organizations that provide transportation services for older adults and people with disabilities. As in most FTA programs,

capital projects funded under the 5310 program may include mobility management activities. Mobility management covers a broad range of activities that seek to expand mobility options by coordinating public transit and other transportation services and making it easier for individuals to find out about and access the transportation services that can best meet their needs.

MAP-21, passed in 2012, revised the 5310 program to include the objectives of the repealed New Freedom program:

- Provide services for people with disabilities that exceed the requirements of the ADA
- Make fixed-route services more accessible to people with disabilities
- Develop new alternatives to public transportation for people with disabilities

Funds are allocated to designated recipients in large urban areas and to states for small urban and rural areas. The RTA is the designated recipient for the Chicago urbanized area, and is responsible for distributing the area's allocation to subrecipients for specific programs and projects.

At least 55% of an area's 5310 allocation must be to address the program's first objective. Eligible subrecipients are nonprofit organizations (or public transit providers, in some circumstances) and eligible activities are capital or mobility management projects and the acquisition of services through contracts or other arrangements.

Up to 45% of an area's allocation may be spent on projects designed to meet the objectives of the former New Freedom program, which include mobility management activities and operating assistance. Eligible subrecipients may be nonprofit organizations, state or local governments, or public transit providers.

The RTA is the recipient of Section 5310 funds for the Chicago urbanized area. Lake County DOT has received 5310 grants through the RTA to support the RideLakeCounty Central and RideLakeCounty West services.

## **Lake County Division of Transportation**

As mentioned above, Public Act 95-0708 increased the regional sales tax collected in the collar counties by 1/2 of a percent. Half of that amount is retained by the counties and may be used for transportation or other purposes.

Lake County DOT uses 1/4% sale tax funding to support its Paratransit Coordinator position and to provide local matching funds to the federal grants that support the RideLakeCounty Central and RideLakeCounty West services. County funds from this source are used, together with funding from the federal grants, Pace, and townships, to cover the cost of RideLakeCounty Central and RideLakeCounty West trips beyond the service areas and days/hours of service of the original, separate township/village Dial-A-Ride services.

## **Townships and Municipalities**

Townships fund their own transportation services and support the Dial-A-Ride services that operate in their areas primarily with property tax revenues. Other sources of funding include donations from foundations, hospitals, and other local organizations.

Municipalities use local revenues and similar contributions and donations to support their services.

## **Sustainability**

Sustainability of funding for paratransit services is a concern of most stakeholders in Lake County.

Threats to the reliability of current paratransit funding sources include a proposed cap on property taxes (the subject of legislation currently before the Illinois state legislature), the proposed elimination of townships as one of the local governmental structures in Illinois, and the non-permanent nature of grant funding.



## 4 NEEDS ASSESSMENT

This chapter describes the demographic characteristics of Lake County, which can indicate areas in which public transportation services are needed and the types of services that are appropriate to specific areas. In addition, comments from the public and stakeholders regarding transportation challenges and needs are summarized.

### MARKET ANALYSIS

Successful public transportation achieves highest efficiency levels in communities where clusters of people and destinations exist. Analyzing overall population and employment density provides insights into the overall market for public transportation in Lake County.

Public transportation services provide both “choice” riders and those without other transportation options with connections to jobs, services, family and friends, and medical providers. In many cases, transit-dependent population density follows similar patterns as overall population density; for example, those with disabilities tend to cluster in general population centers. In some cases, however, transit-dependent people are disconnected from city centers, making the need for transit more acute. Analyzing concentrations of population demographics with commonly high rates of transit use – adults 65 and older, people with low incomes, people with disabilities, and people living in households without access to a car– reveals places where transit would likely find customers. Additionally, the analysis examines in further detail the:

- Density of population—groups that typically have a higher tendency to use public transportation
- Current travel patterns for commute trips
- Specific density thresholds to indicate where fixed-route services are appropriate and cost effective

## Total Population

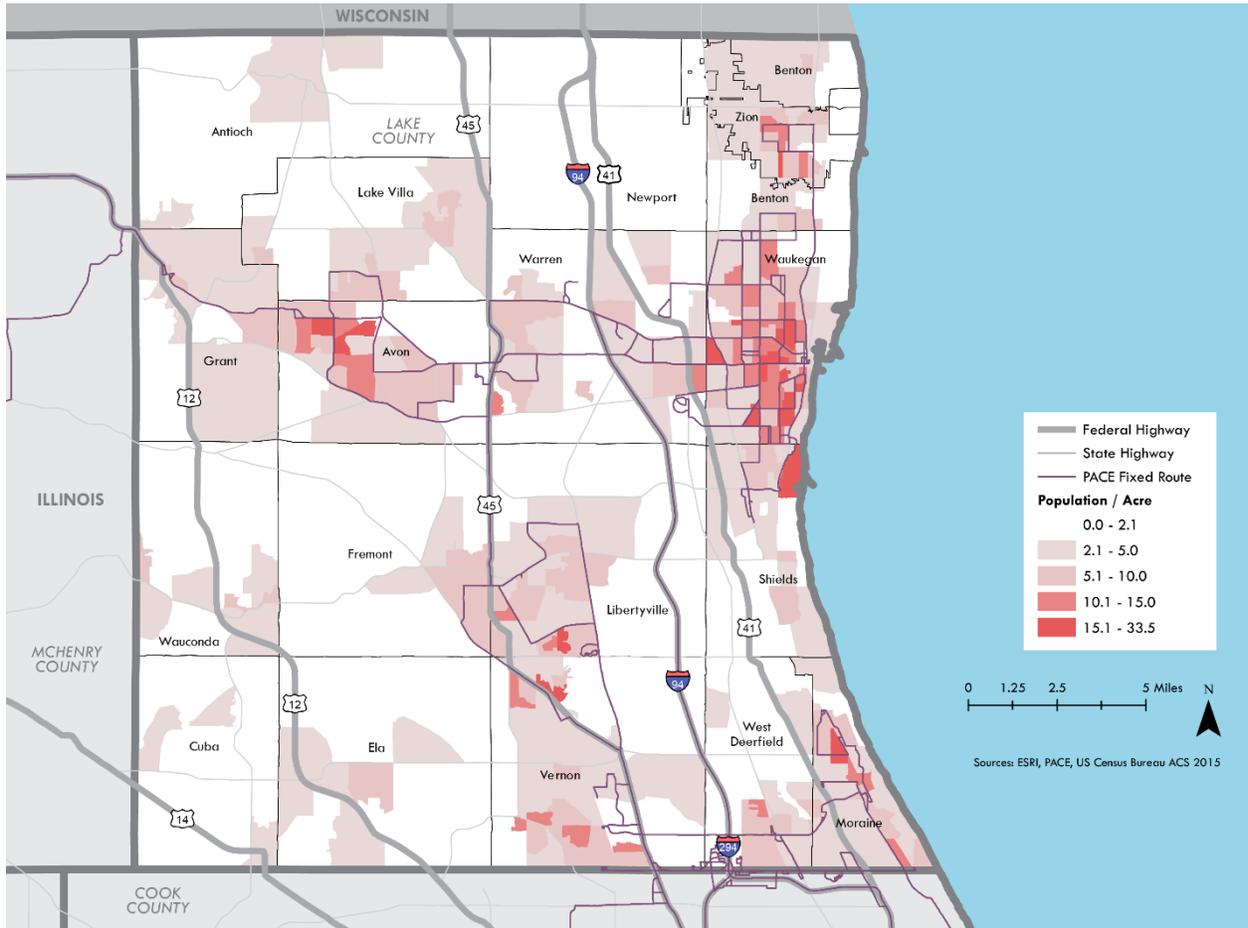
Population density is an important factor in transit market analysis because the clustering of people helps determine where public transportation can be operated the most cost-effectively given service providers' limited resources.

To provide context, the total population of Lake County was 702,898 in 2015, with an overall density of 2.5 people per acre. Figure 4-6 lists population demographic characteristics by municipality within the county.

Figure 4-1 illustrates the population density of Lake County. Overall, the most densely populated areas are east of I-94, in Waukegan and west of US 45, around Avon Township; and along the Metra Union Pacific North (UP-N) line, with additional density along the Metra Milwaukee District North (MD-N) and Metra North Central Service (NCS) lines in central Lake County. Communities with the highest populations and population densities include:

- Most populous incorporated municipalities: City of Waukegan (88,570), Village of Buffalo Grove (41,591), and Village of Wheeling (37,982). Parts of both of the villages of Buffalo Grove and Wheeling are located in Cook County.
- Most populous townships: Waukegan Township (90,552), Vernon Township (67,649), and Avon Township (64,881)
- Densest incorporated communities: City of Highwood (11.9 people per acre), City of Park City (9.8 people per acre), and Village of Round Lake Beach (8.6 people per acre)
- Densest townships: Waukegan Township (6.7 people per acre), Moraine Township (4.5 people per acre), and Avon Township (4.5 people per acre)

Figure 4-1 Population Density in Lake County, 2015



## Older Adults

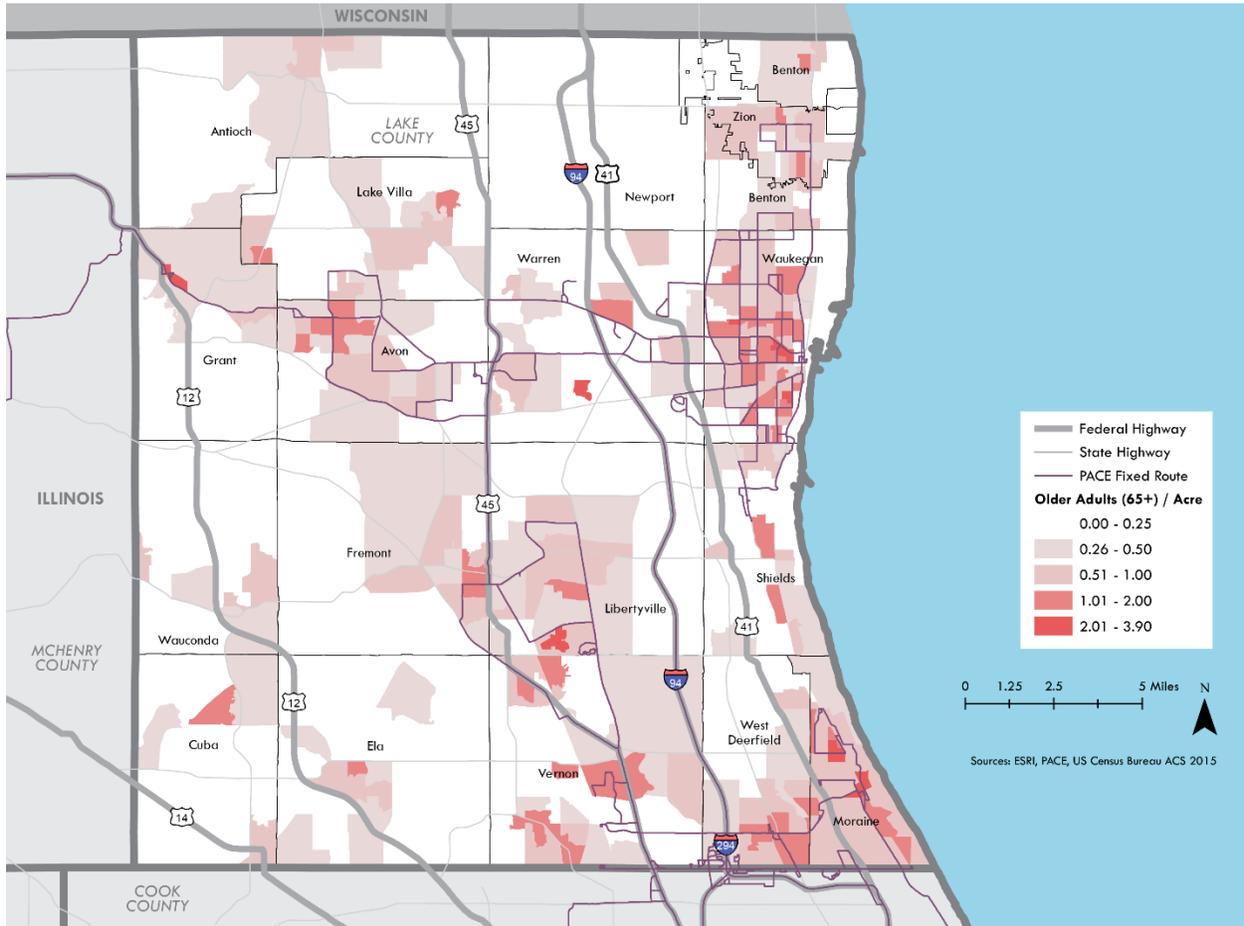
Older adults (age 65 and older) typically use public transportation more frequently than the general population. Older adults often exhibit higher demand for transit as they become less capable or willing to drive themselves, or can no longer afford to own a car on a fixed income.

The total older adult population in Lake County was 82,377 in 2015. Figure 4-2 illustrates the density of older adults in Lake County.

Broadly, the areas most densely populated with older adults are east of US 41 and along the Metra UP-N line, with additional density in southeast Lake County. The following highlights focus in on the communities in Lake County with the most and densest concentrations of older adults:

- Incorporated municipalities with the highest percentage of older adults: Village of Lake Barrington (35%), Village of Lincolnshire (34%), and Village of Barrington Hills (26%). Note that the Village of Barrington Hills is partially located in Lake County.
- Townships with the highest percentage of older adults: Cuba Township (21%), Moraine Township (19%), and Newport Township (15%)
- Incorporated communities with densest concentration of older adults: Village of Round Lake Park (1.6 people per acre), City of Highwood (1.5 people per acre), and Village of Buffalo Grove (0.9 people per acre; part of which is located in Cook County).
- Townships with densest concentration of older adults: Moraine Township (0.9 people per acre), Waukegan Township (0.6 people per acre), and West Deerfield Township (4.5 people per acre)

Figure 4-2 Density of Older Adult (65+) Population in Lake County, 2015



## People with Disabilities

People with disabilities often are dependent on public transit service. Some types of disabilities may prevent people from driving. Access to transportation is an important factor in allowing people with disabilities to access services and live independently. Public transit providers are required to provide ADA paratransit for people whose disability prevents them from utilizing local fixed-route transit service, within a three-quarter mile distance of the local fixed-route transit stops.

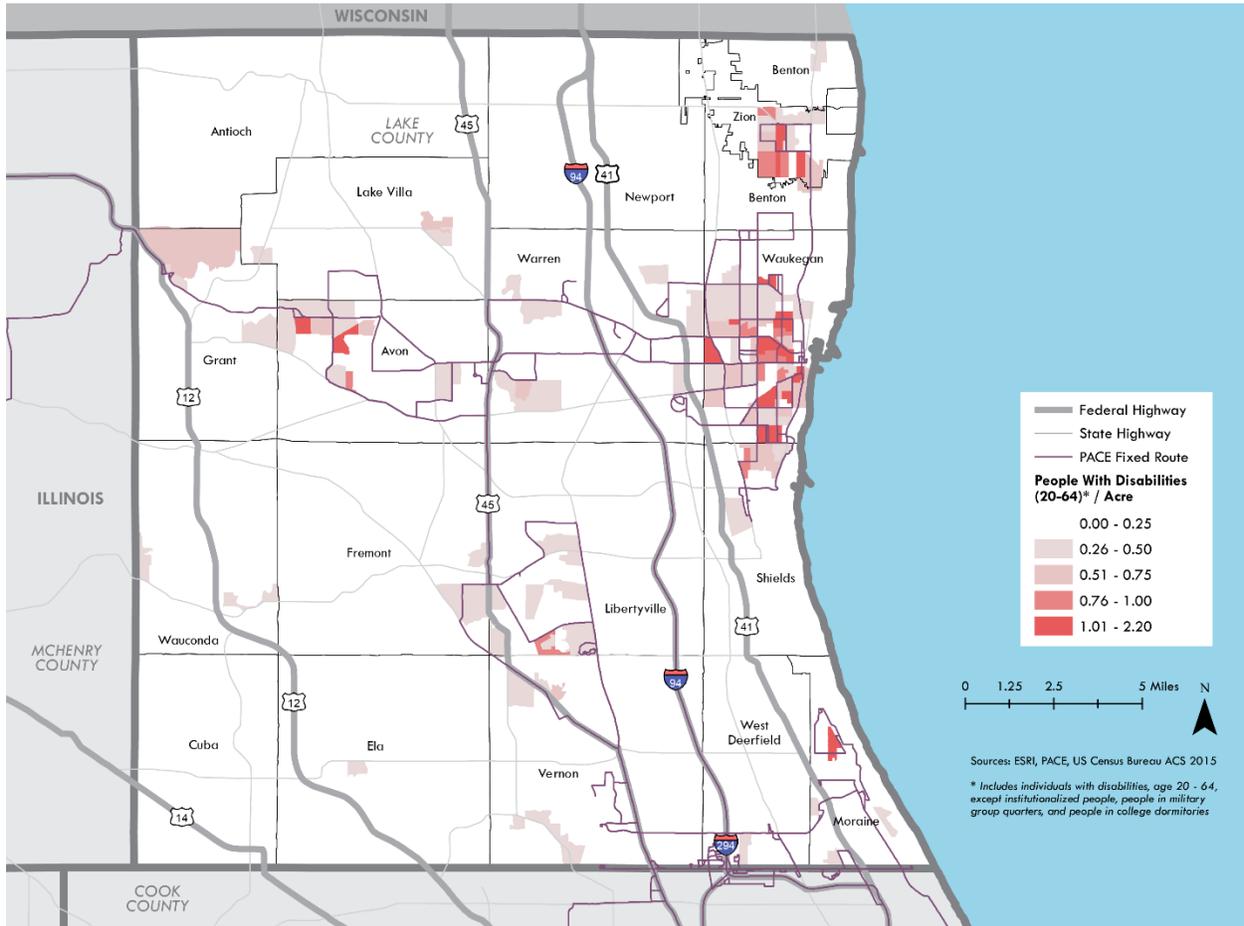
The total population of people with disabilities in Lake County was 56,416 in 2015. This is approximately 4% of people with disabilities in Illinois.

In general, the areas most densely populated by people with disabilities are in Zion, Waukegan, Moraine and Avon Townships.

- Incorporated municipalities with the highest percentage of people with disabilities: Village of Lincolnshire (16%), Village of Fox Lake (14%), and Village of Beach Park (13%)
- Townships with the highest percentage of people with disabilities: Zion Township (13%), Antioch Township (11%), and Benton Township (11%)
- Incorporated communities with highest densities of people with disabilities: City of Highwood (1.1 people per acre), City of Park City (0.7 people per acre), and Village of Round Lake Park (0.7 people per acre)
- Townships with the highest densities of people with disabilities: Waukegan Township (0.7 people per acre), Zion Township (0.5 people per acre), and Moraine Township (4.5 people per acre)

Figure 4-3 illustrates the density of people with disabilities in Lake County.

Figure 4-3 Density of People with Disabilities in Lake County, 2015



## People in Low-Income Households

For the purposes of this analysis, households are classified as low-income if their total annual income earned is less than 150% of the federal poverty level (FPL). The FPL is the income eligibility criterion for various social service programs in Illinois and around the country. As of 2015, the year for which data was collected, the FPL ranged from an annual household income of \$11,770 to \$40,890, depending upon household size.<sup>3</sup>

The total population of people living in low-income households in Lake County was 114,791 in 2015. Figure 4-4 illustrates the density of people in low-income households in the county.

Overall, the areas most densely populated by people in low-income households are in northeast Lake County, with additional density concentrated between the north ends of the Metra MD-N and NCS lines. The following highlights focus in on the communities in Lake County with the most and densest concentrations of people living in low-income households:

- Incorporated municipalities with the highest percentage of people in low-income households: City of Park City (42%), City of Waukegan (35%), and Village of Round Lake Park (31%)
- Townships with the highest percentage of people in low-income households: Waukegan Township (38%), Zion Township (30%), and Avon Township (22%)
- Incorporated communities with highest density of people in low-income households: City of Park City (4.1 people per acre), City of Highwood (3.3 people per acre), and Village of Round Lake Beach (2.5 people per acre)
- Townships with highest density of people in low-income households: Waukegan Township (2.6 people per acre), Zion Township (1.2 people per acre), and Avon Township (1.0 people per acre)

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<sup>3</sup> The FPL per household is based on a graduated scale of the number of individuals in a household, \$11,770 being the FPL for a one-person household, and \$40,890 for an eight-person household. The FPL guideline is also graduated further at a rate of \$4,160 more per additional household member above eight. Data presented in Figure 12 and Figure 14 from Table C17002 reflects individuals who were classified based on their household's income relative to the FPL for the 2015 ACS data year. Source: U.S. Department of Health and Human Services. "Annual Update of the HHS Poverty Guidelines" January 22, 2015. <https://www.federalregister.gov/documents/2015/01/22/2015-01120/annual-update-of-the-hhs-poverty-guidelines>.



## Households without a Motor Vehicle

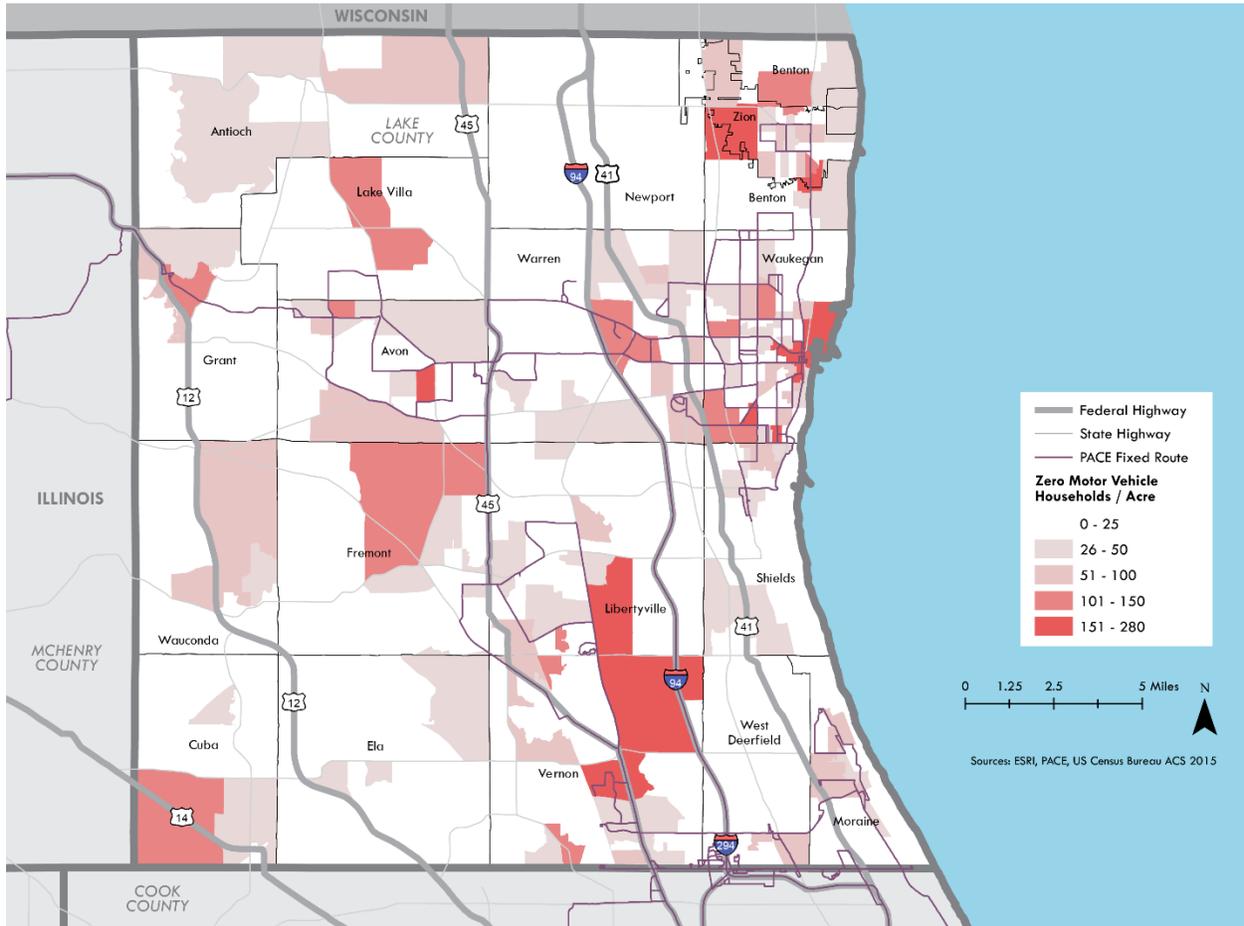
One of the most influential indicators of transit need is whether a household has access to a motor vehicle. This may represent households without the economic means of owning or leasing a motor vehicle, households that choose not to own or lease one, or individuals who are unable to drive.

The total number of Lake County households without a motor vehicle was 11,635 in 2015. In general, the areas most densely populated by households without a motor vehicle are in northeast Lake County, and in between Metra's NCS and MD-N lines in southern Lake County. The following highlights focus in on the communities in Lake County with the most and densest concentrations of households without a motor vehicle:

- Incorporated municipalities with the highest percentage of households without a motor vehicle: Libertyville (15%), City of Zion (14%), and City of Highwood (12%)
- Townships with the highest percentage of households without a motor vehicle: Zion Township (14%), Waukegan Township (11%), and Vernon Township (5%)
- Incorporated communities with the highest density of households without a motor vehicle: City of Highwood (0.5 households per acre), City of Park City (0.2 households per acre), and City of Zion (0.2 households per acre)
- Townships with the highest density of households without a motor vehicle: Waukegan Township (0.2 households per acre), Zion Township (0.2 households per acre), and Moraine Township (0.1 households per acre)

Figure 4-5 illustrates the density of households without a motor vehicle in Lake County.

Figure 4-5 Density of Households without a Motor Vehicle in Lake County, 2015



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**Figure 4-6 Lake County Demographic Characteristics, by Municipality, 2015**

Jurisdiction <sup>[A, B]</sup>	Total Population <sup>[1]</sup>	Older Adults (65+) <sup>[2]</sup>	% Older Adults <sup>[2]</sup>	People with Disabilities <sup>[3]</sup>	% People with Disabilities <sup>[3]</sup>	Low-Income Population <sup>[4]</sup>	% Low-Income Population <sup>[4]</sup>	Zero Motor Vehicle Households <sup>[5]</sup>	% Zero Motor Vehicle Households <sup>[5]</sup>
<b>United States</b>	316,515,021	44,615,477	14%	38,601,898	12%	77,153,916	24%	10,628,474	9%
<b>Illinois</b>	12,873,761	1,737,988	14%	1,362,286	11%	2,902,450	23%	518,792	11%
<b>Lake County</b>	<b>702,898</b>	<b>82,377</b>	<b>12%</b>	<b>56,416</b>	<b>8%</b>	<b>114,791</b>	<b>16%</b>	<b>11,635</b>	<b>5%</b>
<b>Townships <sup>[A]</sup></b>									
<b>Antioch Township</b>	27,630	3,863	14%	2,907	11%	4,323	16%	351	3%
<b>Avon Township</b>	64,881	5,301	8%	4,442	7%	14,458	22%	786	4%
<b>Benton Township</b>	19,048	2,414	13%	2,001	11%	2,936	15%	193	3%
<b>Cuba Township</b>	16,771	3,605	21%	1,512	9%	1,491	9%	319	5%
<b>Ela Township</b>	43,185	4,679	11%	2,586	6%	2,864	7%	256	2%
<b>Fremont Township</b>	32,564	4,991	15%	2,173	7%	2,779	9%	253	2%
<b>Grant Township</b>	26,803	2,742	10%	2,327	9%	5,251	20%	397	4%
<b>Lake Villa Township</b>	40,416	4,082	10%	3,140	8%	3,661	9%	377	3%
<b>Libertyville Township</b>	53,627	6,492	12%	4,126	8%	5,529	10%	846	4%
<b>Moraine Township</b>	34,101	6,443	19%	2,905	9%	4,062	12%	604	5%
<b>Newport Township</b>	6,788	1,048	15%	541	8%	434	6%	39	2%
<b>Shields Township</b>	36,450	3,690	10%	2,233	6%	4,749	13%	365	4%
<b>Vernon Township</b>	67,649	9,198	14%	4,712	7%	5,874	9%	1,222	5%
<b>Warren Township</b>	64,689	6,097	9%	4,552	7%	8,841	14%	895	4%
<b>Wauconda Township</b>	22,186	2,415	11%	1,910	9%	3,722	17%	278	3%
<b>Waukegan Township</b>	90,522	8,044	9%	9,394	10%	34,801	38%	3,068	11%
<b>West Deerfield Township</b>	31,337	4,815	15%	1,887	6%	1,663	5%	257	2%
<b>Zion Township</b>	24,251	2,458	10%	3,068	13%	7,353	30%	1,129	14%
<b>Cities and Villages <sup>[B]</sup></b>									
<b>Antioch</b>	14,386	1,286	9%	1,196	8%	2,326	16%	172	3%
<b>Bannockburn</b>	1,390	110	8%	67	5%	142	10%	17	6%
<b>Barrington</b>	10,576	1,968	19%	848	8%	893	8%	274	7%
<b>Barrington Hills <sup>[C]</sup></b>	3,370	882	26%	128	4%	396	12%	28	2%
<b>Beach Park</b>	13,833	1,886	14%	1,814	13%	1,752	13%	64	1%

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Jurisdiction <sup>[A, B]</sup>	Total Population <sup>[1]</sup>	Older Adults (65+) <sup>[2]</sup>	% Older Adults <sup>[2]</sup>	People with Disabilities <sup>[3]</sup>	% People with Disabilities <sup>[3]</sup>	Low-Income Population <sup>[4]</sup>	% Low-Income Population <sup>[4]</sup>	Zero Motor Vehicle Households <sup>[5]</sup>	% Zero Motor Vehicle Households <sup>[5]</sup>
Buffalo Grove <sup>[C]</sup>	41,591	5,578	13%	3,227	8%	3,233	8%	728	5%
Deerfield	18,588	2,802	15%	1,156	6%	818	4%	300	4%
Deer Park	3,323	401	12%	153	5%	158	5%	14	1%
Fox Lake <sup>[C]</sup>	10,539	1,696	16%	1,492	14%	2,498	24%	384	9%
Fox River Grove <sup>[C]</sup>	4,739	344	7%	266	6%	485	10%	48	3%
Grayslake	21,117	1,718	8%	1,184	6%	2,501	12%	340	4%
Green Oaks	3,850	413	11%	285	7%	263	7%	2	0%
Gurnee	31,136	3,354	11%	2,536	8%	3,147	10%	487	4%
Hainesville	3,690	263	7%	162	4%	335	9%	-	0%
Hawthorn Woods	7,634	999	13%	465	6%	298	4%	-	0%
Highland Park	29,789	6,134	21%	2,522	8%	2,691	9%	391	3%
Highwood	5,391	694	13%	509	9%	1,507	28%	243	12%
Indian Creek	569	58	10%	40	7%	32	6%	-	0%
Island Lake <sup>[C]</sup>	8,041	675	8%	603	7%	1,002	12%	45	1%
Kildeer	3,938	458	12%	194	5%	137	3%	26	2%
Lake Barrington	4,934	1,721	35%	616	12%	361	7%	198	8%
Lake Bluff	5,813	1,005	17%	374	6%	349	6%	46	2%
Lake Forest	18,951	3,531	19%	1,361	7%	1,298	7%	73	1%
Lakemoor <sup>[C]</sup>	6,535	350	5%	597	9%	720	11%	23	1%
Lake Villa	8,878	837	9%	785	9%	564	6%	150	5%
Lake Zurich	19,923	1,659	8%	1,101	6%	1,630	8%	158	2%
Libertyville	20,395	3,066	15%	1,574	8%	1,164	6%	435	6%
Lincolnshire	7,271	2,481	34%	1,131	16%	447	6%	291	10%
Lindenhurst	14,414	1,530	11%	1,047	7%	976	7%	173	3%
Long Grove	8,086	956	12%	276	3%	480	6%	17	1%
Mettawa	430	85	20%	16	4%	73	17%	5	3%
Mundelein	31,624	3,278	10%	2,059	7%	4,272	14%	365	3%
North Barrington	3,032	507	17%	193	6%	125	4%	16	1%
North Chicago	29,925	1,566	5%	2,057	7%	7,968	27%	721	11%
Old Mill Creek	152	31	20%	14	9%	18	12%	2	3%

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Jurisdiction <sup>[A, B]</sup>	Total Population <sup>[1]</sup>	Older Adults (65+) <sup>[2]</sup>	% Older Adults <sup>[2]</sup>	People with Disabilities <sup>[3]</sup>	% People with Disabilities <sup>[3]</sup>	Low-Income Population <sup>[4]</sup>	% Low-Income Population <sup>[4]</sup>	Zero Motor Vehicle Households <sup>[5]</sup>	% Zero Motor Vehicle Households <sup>[5]</sup>
Park City	7,432	449	6%	526	7%	3,127	42%	159	7%
Port Barrington <sup>[C]</sup>	1,451	139	10%	90	6%	133	9%	18	3%
Riverwoods	3,811	737	19%	104	3%	132	3%	15	1%
Round Lake	18,446	1,044	6%	1,020	6%	2,713	15%	74	1%
Round Lake Beach	27,966	2,094	7%	1,991	7%	7,947	28%	324	4%
Round Lake Heights	2,908	117	4%	187	6%	766	26%	16	2%
Round Lake Park	7,957	2,068	26%	872	11%	2,503	31%	162	5%
Third Lake	1,246	163	13%	89	7%	101	8%	4	1%
Tower Lakes	1,158	191	16%	94	8%	68	6%	3	1%
Vernon Hills	25,768	2,839	11%	1,994	8%	3,347	13%	646	7%
Volo	3,757	235	6%	233	6%	147	4%	21	2%
Wadsworth	3,700	762	21%	165	4%	195	5%	36	3%
Wauconda	13,140	1,433	11%	1,181	9%	2,131	16%	219	4%
Waukegan	88,570	7,492	8%	8,209	9%	30,691	35%	2,638	9%
Wheeling <sup>[C]</sup>	37,982	4,726	12%	3,167	8%	9,252	24%	749	5%
Winthrop Harbor	6,849	904	13%	651	10%	931	14%	116	5%
Zion	24,251	2,458	10%	3,068	13%	7,353	30%	1,129	14%

Notes:  
 [A] Total population and households of townships add up to 100% of Lake County total population and households.  
 [B] Total population and households of cities and villages do not add up to 100% of Lake County total population and households, due to several cities and villages having land in Lake County and Cook, Kane, and/or McHenry counties.  
 [C] Denotes city or village with population in in Lake County and Cook, Kane, and/or McHenry counties.

Sources: American Community Survey (ACS) 2015 five-year estimates:

- [1] Table B01003.
- [2] Table B01001. Older adults as a percentage of the total population.
- [3] Table B18101. Disability population as a percentage of the civilian noninstitutionalized population.
- [4] Table C17002. Low-Income population is a sum of people whose household incomes are less than 150% of the federal poverty level.
- [5] Table B25044. Zero motor vehicle households include both owned and rented households who possess zero private motor vehicles.

## RECENT DEMOGRAPHIC CHANGES

The RTA 2017 Regional Transit Market Assessment included a summary of changes in demographics and other characteristics within the Chicago area, including Lake County, observed from 2009 to 2014. For this analysis, the RTA divided the entire RTA service area into 46 districts, with Lake County being divided into four districts:

- **Round Lake/Grayslake/Gurnee (Northwest Lake County):** approximately west of US 41 and north of IL-137
- **Waukegan/North Chicago (Northeast Lake County):** approximately east of US 41 and north of IL-137
- **Libertyville/Vernon Hills (Southwest Lake County):** approximately west of I-94 and south of IL-137
- **Lake Forest/Highland Park (Southeast Lake County):** approximately east of I-94 and south of IL-137

Figure 4-7 and the following paragraphs summarize those changes.

Figure 4-7 RTA Assessment Summary

Lake County District	County Region	District Name	Change in Demographic/Employment 5-year Estimates (2004-2009 to 2010-2014)					
			Population	Employment	Low Income Households	Zero Vehicle Households	Older Adults	Millennials
3	NW	Round Lake / Grayslake / Gurnee	5%	27%	13%	37%	31%	3%
4	NE	Waukegan / North Chicago	-3%	-15%	8%	0%	0%	6%
5	SW	Libertyville / Vernon Hills	1%	4%	24%	41%	23%	1%
6	SE	Lake Forest / Highland Park	-9%	-12%	14%	30%	9%	-11%

Source: 2009 – 2014 American Community Survey (ACS) via Regional Transit Market Assessment (2017)

### Population

From 2009 to 2014, Lake County’s total population remained relatively constant, with a 0.1% increase observed in American Community Survey (ACS) data. The most significant changes within Lake County observed at the RTA district level occurred in southeast and northwest Lake County. Southeast Lake County decreased in population by 9%; northwest Lake County gained 5% more residents over the same period.

### Employment

Lake County employment increased by 2.7% from 2009 to 2014. As with population change, northwest Lake County also experienced the most growth in employment, with a 27% increase in jobs. Northwest Lake County’s employment increase—in the Round Lake/Grayslake/Gurnee area—was the third highest of

all 46 RTA districts, behind only Hegewisch/South Deering/Calumet (Chicago) and Plainfield/Bolingbrook. Employment in the southwest district—Libertyville and Vernon Hills—also increased over the period, by 4%. Employment in Lake County’s southeast and northeast districts fell by 12% and 15%, respectively.

## Low-Income Households

Low-income households increased throughout Lake County, as well as the other four collar counties and suburban Cook County. Southwest Lake County experienced the most significant increase in Lake County low-income households, at 24%; the sixth highest increase in low-income households of the 46 RTA districts.

## Zero-Vehicle Households

Of the five collar counties, suburban Cook County, and Chicago, Lake County experienced the most growth in zero-vehicle households, at 18.7%. This increase was observed throughout the county, except in northeast Lake County, which remained relatively constant.

Zero-vehicle households increased 30%-41% in northwest, southwest, and southeast Lake County. Southwest Lake County experienced the sixth highest increase in zero-vehicle households in the 46 RTA districts; three of the five districts experiencing higher increases were within Chicago where transit accessibility is greater.

## Older Adults

Lake County’s population of older adults increased by 17.9% from 2009 to 2014. Older adult populations grew throughout the RTA region, except in Chicago; Lake County experienced the third highest increase in older adults, behind Will County and Kane County, with increases of 25.2% and 32.1%, respectively.

Northwest Lake County’s 31% increase in older adults was the sixth highest of the 46 RTA districts. The 23% increase in older adult residents of southwest Lake County also contributed significantly to the county’s overall increase.

## Millennial Population

The number of millennial residents—defined in the RTA’s Transit Market Assessment as adults age 20-34—did not change significantly in Lake County overall, increasing 1.7% from 2009 to 2014. However, Lake County joined Kane County and suburban Cook County as the only three counties in the RTA region that gained millennials in this period.

Growth in millennials took place in northwest, northeast, and southwest Lake County, rising 1%-6% in each district. Southeast Lake County’s millennial population decreased by 11%, the fifth highest percent reduction of all 46 RTA districts.

## EMPLOYMENT

Examining where jobs and potential workers are located can help to identify areas in which public transportation connections are likely to be needed.

### Destinations

As mentioned above, the Round Lake/Grayslake/Gurnee and Libertyville/Vernon Hills areas experienced growth in employment between 2009 and 2014. Employment is concentrated in other parts of the county as well, even if jobs in those areas did not increase, or may have even decreased, over that period.

Figure 4-8 shows the number of jobs located in each township in 2015 according to the U.S. Census American Community Survey.

Vernon, Libertyville, Warren, West Deerfield, Waukegan, and Ela townships top the list, with approximately 20,500 to 55,600 jobs located in each area.

### Origins

For some job seekers, public transportation connections between the communities in which they reside and areas in which employment is concentrated will be important, and perhaps the key to finding and maintaining employment.

According to the Illinois Department of Employment Security (IDES), the unemployment rate in Lake County in December 2017, not adjusted for seasonal fluctuations, was 4.9% of the civilian labor force (over the age of 16).<sup>4</sup> Other estimates of recent unemployment levels in the county include:

- U.S. Census American Community Survey (ACS) 2016: 7%
- ACS 2015: 7.9%

Live Well Lake County, a steering committee whose members include governmental, community-based, health care, and educational organizations that work together to improve the health and wellbeing of Lake County residents, presents unemployment data by zip code, obtained from the 2011-2015 ACS Five-Year Estimates, on its website; data can be viewed using an interactive mapping feature. Live Well Lake County defines unemployment rate as the percentage of the working population of the county over age 25 who are “chronically unemployed.” In 2015, the “chronic” unemployment rate for Lake County, was 7.9%. As shown in Figure 4-9, downloaded from the Live Well Lake County interactive mapping site, communities (zip codes) in the county with unemployment rates higher than that for the county as a whole include:

Figure 4-8 Jobs by Township, 2015

Township	Number of Jobs in 2015
Vernon	55,603
Libertyville	50,917
Warren	28,172
West Deerfield	27,852
Waukegan	26,537
Ela	20,584
Shields	16,813
Moraine	13,961
Avon	13,586
Cuba	10,561
Fremont	7,571
Wauconda	7,468
Grant	7,144
Lake Villa	4,945
Zion	4,732
Antioch	4,622
Benton	1,357
Newport	1,151
<b>Total</b>	<b>303,576</b>

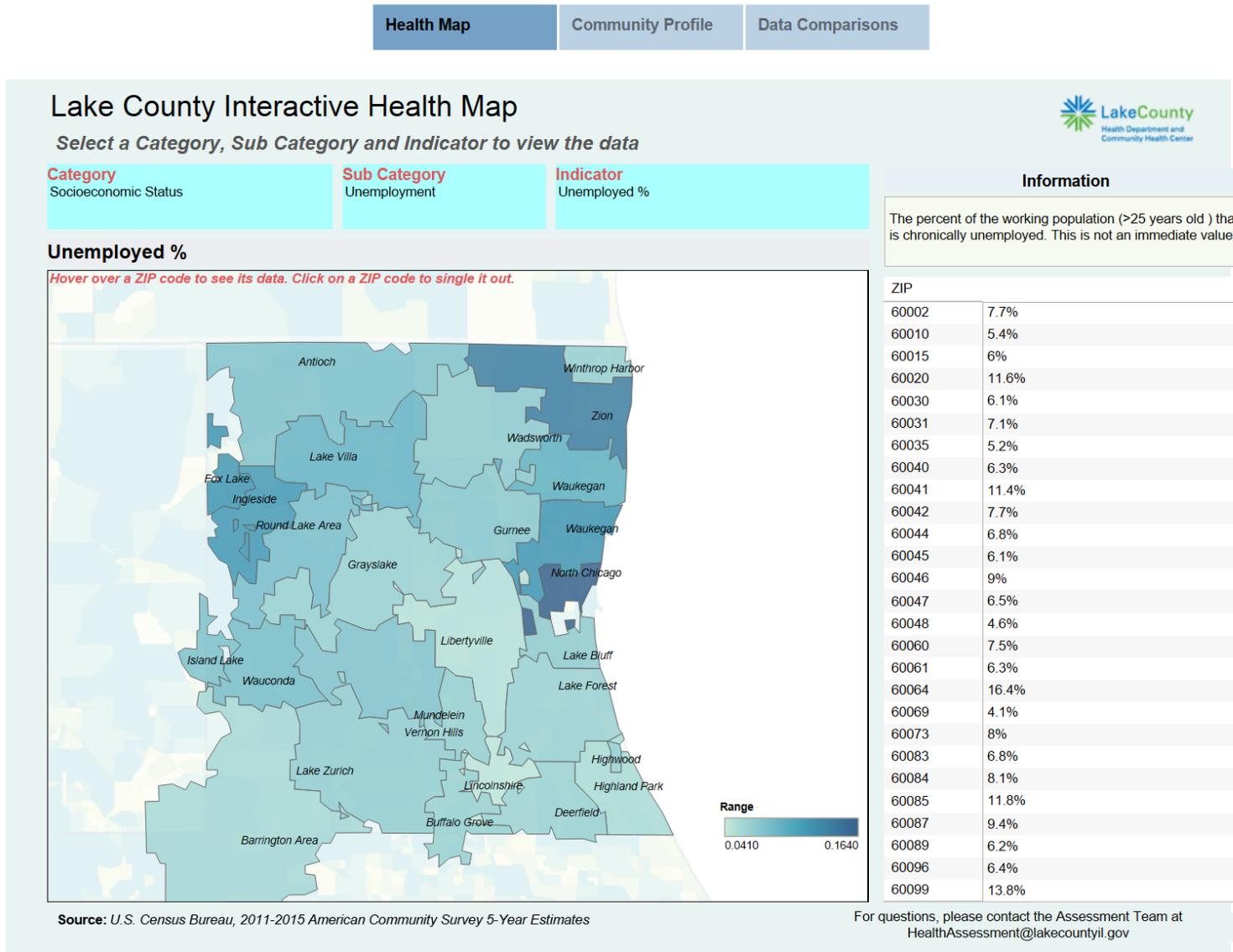
Source: U.S. Census American Community Survey 2015

<sup>4</sup> Data from Illinois Department of Employment Security, 2017.

- 60087, Waukegan 9.4%
- 60041, Ingleside 11.4%
- 60020, Fox Lake 11.6%
- 60085, Waukegan 11.8%
- 60099, Zion 13.8%
- 60064, North Chicago 16.4%

In those communities, public transportation connections to the Gurnee, Libertyville/Vernon Hills, and Warren Township areas where jobs are concentrated will be especially important because of their relatively higher rates of unemployment.

Figure 4-9 Unemployment Rate by Zip Code in Lake County, 2015



**Job Seekers**

There are multiple programs that support special populations who are seeking employment. Veteran populations, for example, are prioritized by the Job Center of Lake County, and will be given special support and priority ranking when seeking jobs. This is significant as there is a larger military-based population in Lake County. Other special populations who would need access to employment and may rely on public transportation include older adults, individuals with disabilities, youth and minority populations, and ex-offenders. It is important to ensure some type of transportation allows these special populations to access Workforce Development and Job Centers within the county.

**Travel Patterns**

Figure 4-10 shows the share of commuting trips made by driving alone, transit, and other means, in each of the Lake County regions used in the RTA 2017 Regional Transit Market Assessment.

The northwest, northeast, and southwest regions show similar characteristics, with ¾ or more of commuters driving alone to work, 3-5% using transit, and 14-23% traveling by some other means. The southeast region, including Lake Forest and Highland Park, shows a lower percentage of commuters driving alone (57%), and a slightly higher percentages using transit (8%) and other means (25%), likely due to the region’s relative proximity to Chicago.

Figure 4-11 presents the counties that Lake County residents commute to, and Figure 4-12 presents the counties that people employed in Lake County live in. Figure 4-13 presents this data as the number of commute trips beginning and ending in each Lake County township. Figure 4-14 presents the largest volumes of Lake County commute trips as travel flows within and between its townships.

Approximately one in two Lake County residents are employed within Lake County. Most residents commuting to employment locations outside of Lake County work in Cook County (36%). DuPage, McHenry, Kane, Will, and other nearby counties receive individual shares of 6% or less of all Lake County commuters. Pace provides paratransit service to all five of the collar counties; however, it does not serve all townships within Lake County.

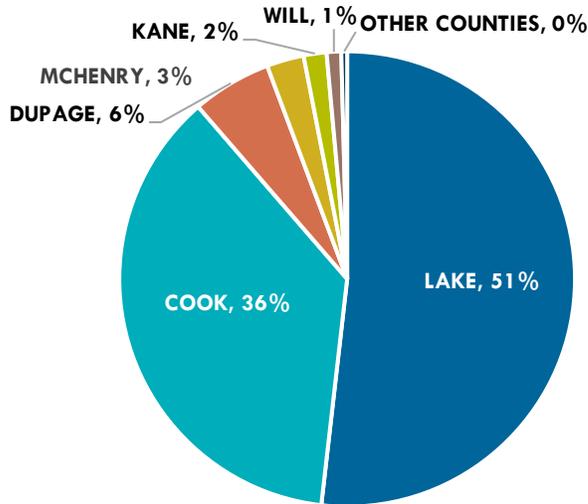
**Figure 4-10 Commute Trip Mode Share in 2014, Lake County Districts**

Lake County District	County Region	District Name	Work Commute Mode Share 2014		
			Drive Alone	Transit	Other Means
3	NW	Round Lake / Grayslake / Gurnee	83%	3%	14%
4	NE	Waukegan / North Chicago	74%	3%	23%
5	SW	Libertyville / Vernon Hills	81%	5%	15%
6	SE	Lake Forest / Highland Park	57%	8%	25%

Source: 2009 – 2014 American Community Survey (ACS) via RTA Regional Transit Market Assessment (2017)

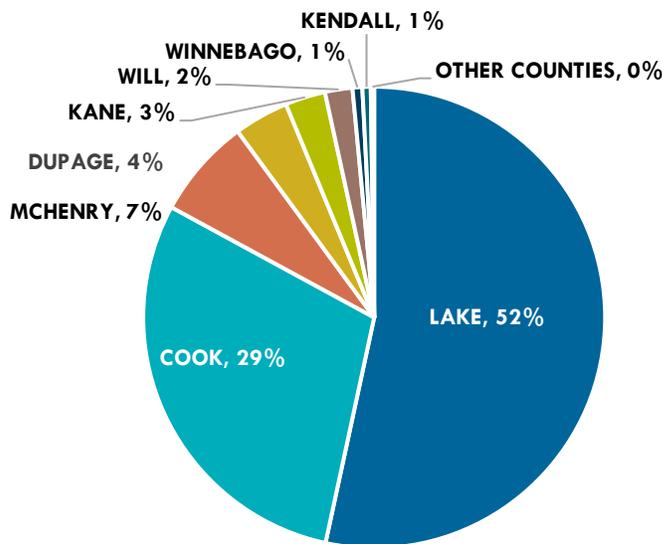
Approximately one in two workers employed in Lake County reside within Lake County. Most workers residing outside of Lake County, live in Cook County (29%). McHenry, DuPage, Kane, and other nearby counties are home to individual shares of 7% or less of all Lake County workers. Again, Pace provides paratransit service to all five of the collar counties, however it does not serve all townships within Lake County.

**Figure 4-11 Commute Trips from Lake County, by County, 2015**



Source: LEHD LODES 2015

**Figure 4-12 Commute Trips to Lake County, by County, 2015**



Source: LEHD LODES 2015

**Figure 4-13 Commute Trip Origins and Destinations By Township, 2015**

<b>Township</b>	<b>Origin</b>	<b>Destination</b>
Antioch	24,800	9,637
Avon	55,612	28,583
Benton	18,963	3,448
Cuba	6,791	8,157
Ela	25,847	25,516
Fremont	26,433	13,493
Grant	22,599	14,907
Lake Villa	41,104	11,612
Libertyville	48,074	114,791
Moraine	16,721	21,953
Newport	7,026	2,678
Shields	16,596	40,584
Vernon	42,413	72,840
Warren	66,117	62,057
Wauconda	17,639	11,549
Waukegan	71,976	53,500
West Deerfield	15,446	36,213
Zion	20,555	13,194
<b>Total</b>	<b>544,712</b>	<b>544,712</b>

Source: LEHD LODS 2015



## Commute Mode Share

The RTA's 2017 Transit Market Assessment provides a snapshot of commute mode shares in 2014, as reported in 2014 ACS data. Throughout Lake County, driving alone was the most common commuting mode used by residents. For three of the four RTA districts in Lake County, the drive alone mode share was 74%-83%.

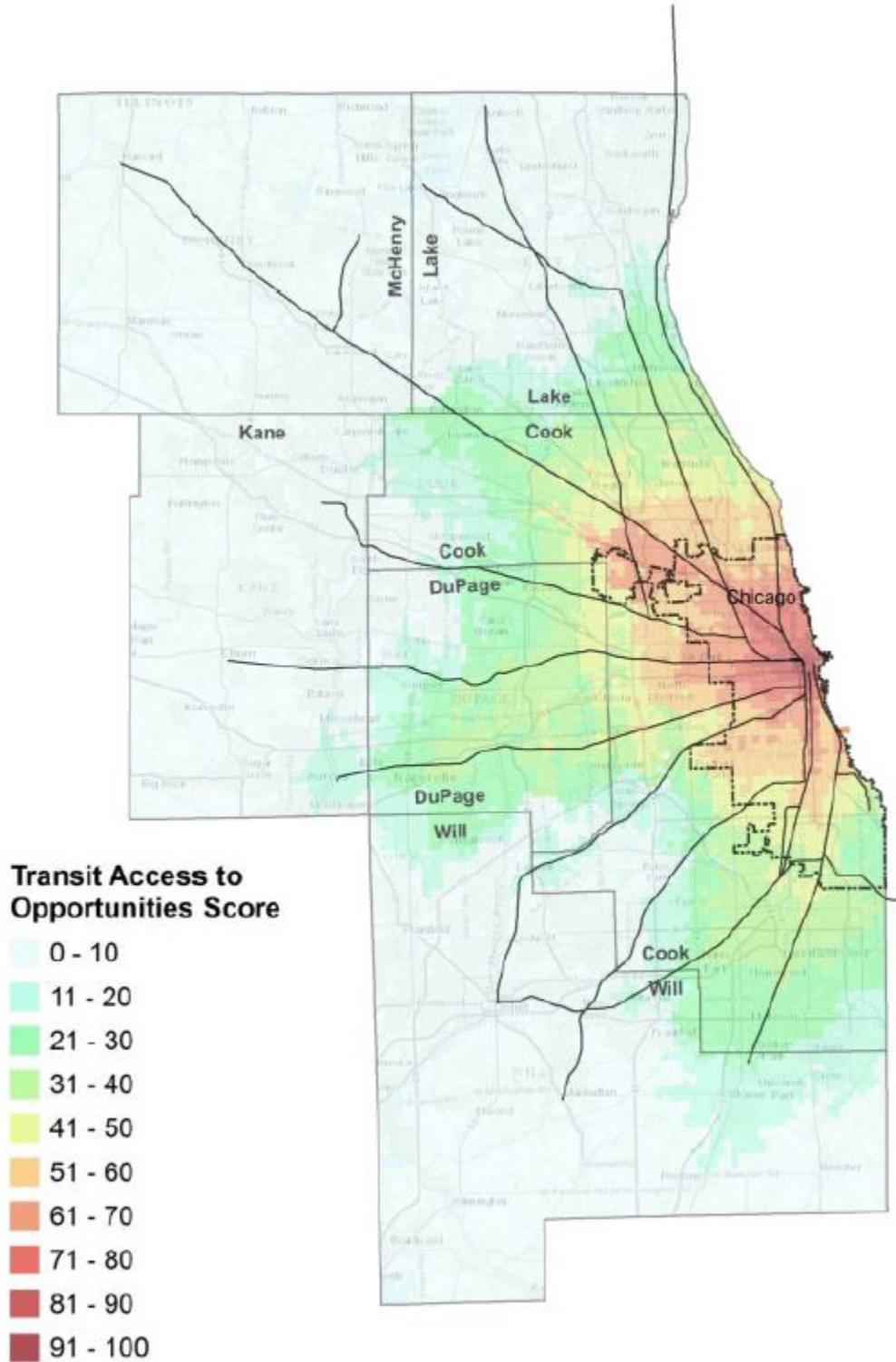
Southeast Lake County had the lowest drive alone mode share, at 57%; at the same time southeast Lake County had the highest transit mode share of the county, with 8% of residents commuting by transit. Southeast Lake County also had the highest share of commute trips by modes other than driving alone and transit in the county, with 25%; this includes commuters travelling by carpool, bike, working from home, and other modes. Southeast Lake County's 25% share of commute modes other than driving alone and riding transit is the fourth highest of all 46 RTA districts, topped only by three districts in Chicago: Loop/Grant Park, Near North Side/River North/Gold Coast, and Near West Side/West Loop districts.

## Transit Access to Opportunities Score

A "transit access to opportunities score," also known as a "transit access score," is a metric used to assess transit's ability to connect residents to opportunities, using a 100-point index. The score illustrates a person's mobility by transit based on an activity's location; the higher the access score, the more of that activity people are able to access within a common or benchmark commute time. Using one "opportunity" as an example, the RTA has evaluated access scores for transit's ability to connect residents to work, measuring the number of jobs accessible within 90 minutes of travel time by transit (Figure 4-15).

According to the RTA's 2017 Transit Market Assessment, the average resident in the Chicago metropolitan region has access to 1.1 million jobs, or 27% of all region jobs within 90 minutes by transit – an average Access Score of 36. For the majority of communities within Lake County, the transit access score is 10 or less. Southern Lake County communities with access to Metra routes, including Highland Park, Deerfield, and Buffalo Grove, have the highest transit access scores, in the 31 – 40 point range, close to the metro region average. Lake County transit access scores drop off below the 30-point range north of IL Route 22, west of the Metra MD-N line, and north of Lake Forest.

Figure 4-15 RTA Region Transit Access to Work Score



Source: RTA Regional Transit Market Assessment, 2017

## Transit Accessible Places Score

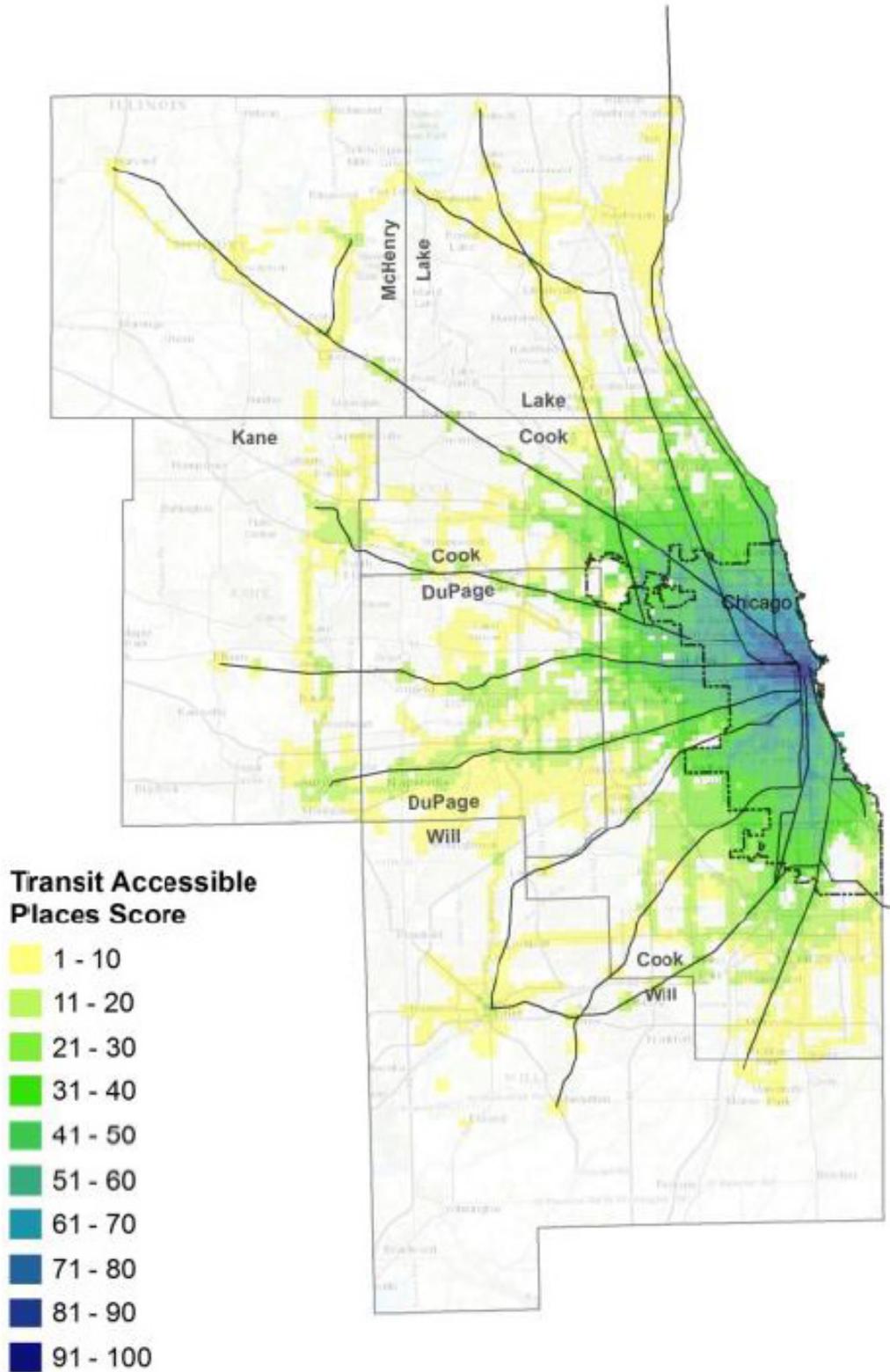
A transit accessible places score is a metric used to assess a place's ease of being accessed by local residents using existing transit services. Where the transit access score evaluates the number of opportunity locations that can be reached in a set amount of time, the transit accessible places score evaluates the number of residents that reach a place within a set amount of time by transit. A common application of this is the example of a business owner or developer selecting a location where a large number of potential customers are within reach by a reasonable length transit trip.

According to the RTA's 2017 Transit Market Assessment, the Chicago metropolitan region has an average transit accessible places score of 32 out of 100. The communities in the southeast corner of Lake County, especially Deerfield and Highland Park, are those in the county that are closest to the Chicago metro region average. Communities along Metra's three commuter rail lines connecting Lake County to Chicago maintain transit accessible places scores between one and 10. The majority of Lake County has a transit accessible places score of less than one, meaning that many Lake County communities are located in places where few residents can access destinations within a reasonable length transit trip (Figure 4-16).

The transit access to opportunities score described above is a measure of the ease of reaching valued destinations from a point of origin. The transit accessible places score is the inverse; it measures the ease by which residents can reach a destination.

An easy way to think about it is: origins with high scores for transit access to opportunities are great places to live for connections to destinations by transit. Destinations with high transit accessible places scores are great places for the location of an organization if easy access for the population at large by transit is important or desirable.

Figure 4-16 RTA Region Transit Accessible Places Score



Source: RTA Regional Transit Market Assessment, 2017

## Transit Access to Opportunities Outlier Markets

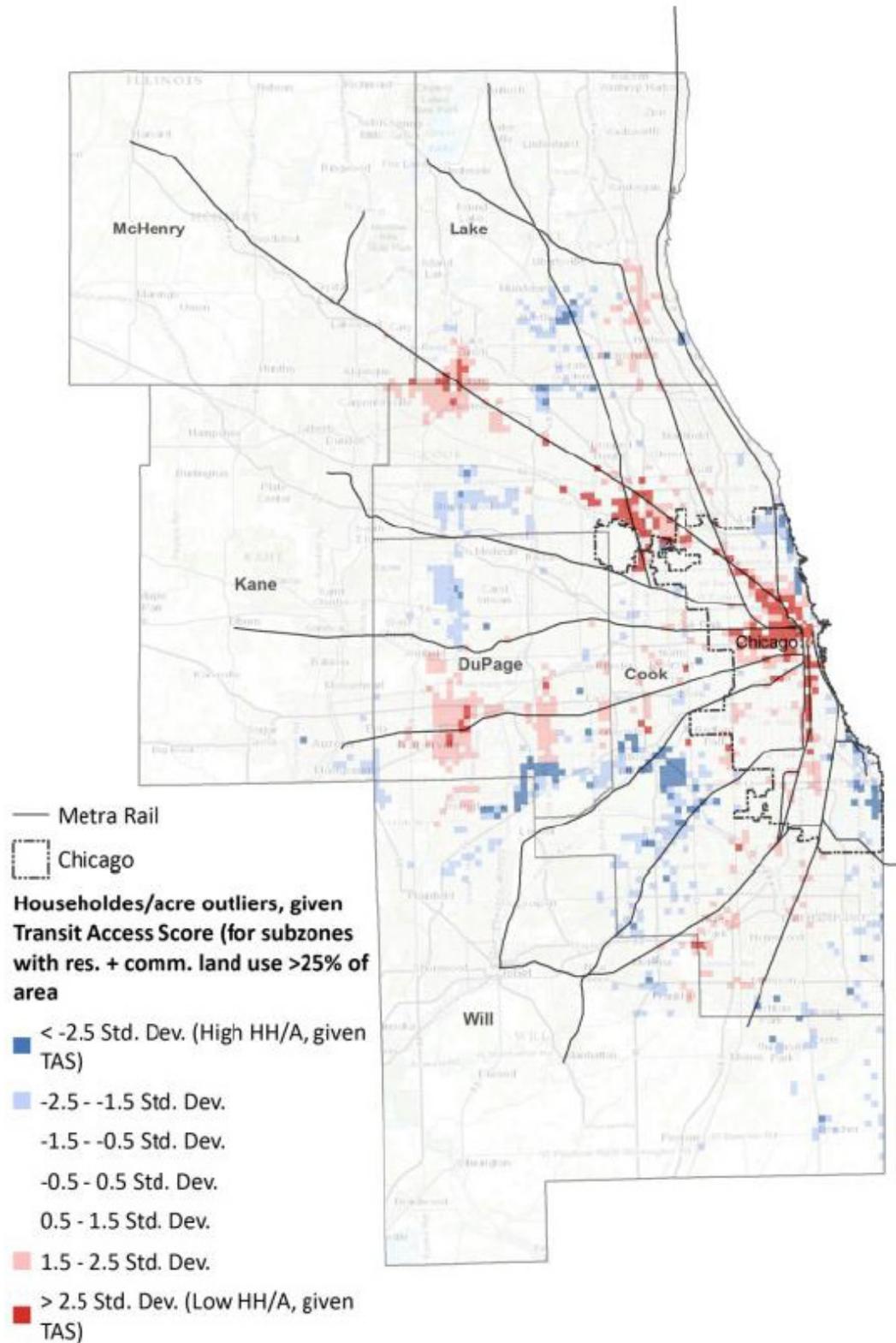
When assessing a transit access score, an important addition is population density; while transit accessibility to jobs provides a key measure of people's ability to make two of their most important trips in a day, this accessibility is only as meaningful as the number of people residing within close proximity to service access. The RTA used regression analysis to consider the likelihood a location has a higher or lower household density based on its transit access score. All of the information referenced in this section was obtained as a part of the 2017 RTA analysis.

In Figure 4-17, blue areas are places where household densities are high given the transit access score (i.e., many households with low transit access), and red areas are places where household densities are low given the transit access score (i.e., few households despite high transit access).

In Lake County, areas in and around Barrington and western Shields Township have lower household densities than expected given their transit access scores. This indicates that new infill transit-oriented development (TOD) in Barrington and western Shields Township could be effective in connecting more people to job opportunities through existing transit services. Vernon Hills and Highland Park on the other hand have higher household densities relative to their level of transit access to jobs. These are areas where more people are choosing to reside, despite low transit accessibility.

The RTA took this data further by weighting the regression analysis on household density and access score with amounts of vacant residential parcels. Figure 4-17 shows that areas in blue with higher amounts of vacant residential parcels are also areas with low household densities and high transit access scores. This is further evidence that infill transit-oriented development (TOD) could be effective in connecting more people to job opportunities through existing transit services in Barrington and western Shields Township.

Figure 4-17 Household Density Outliers Based on Transit Access Score



Source: RTA Regional Transit Market Assessment, 2017

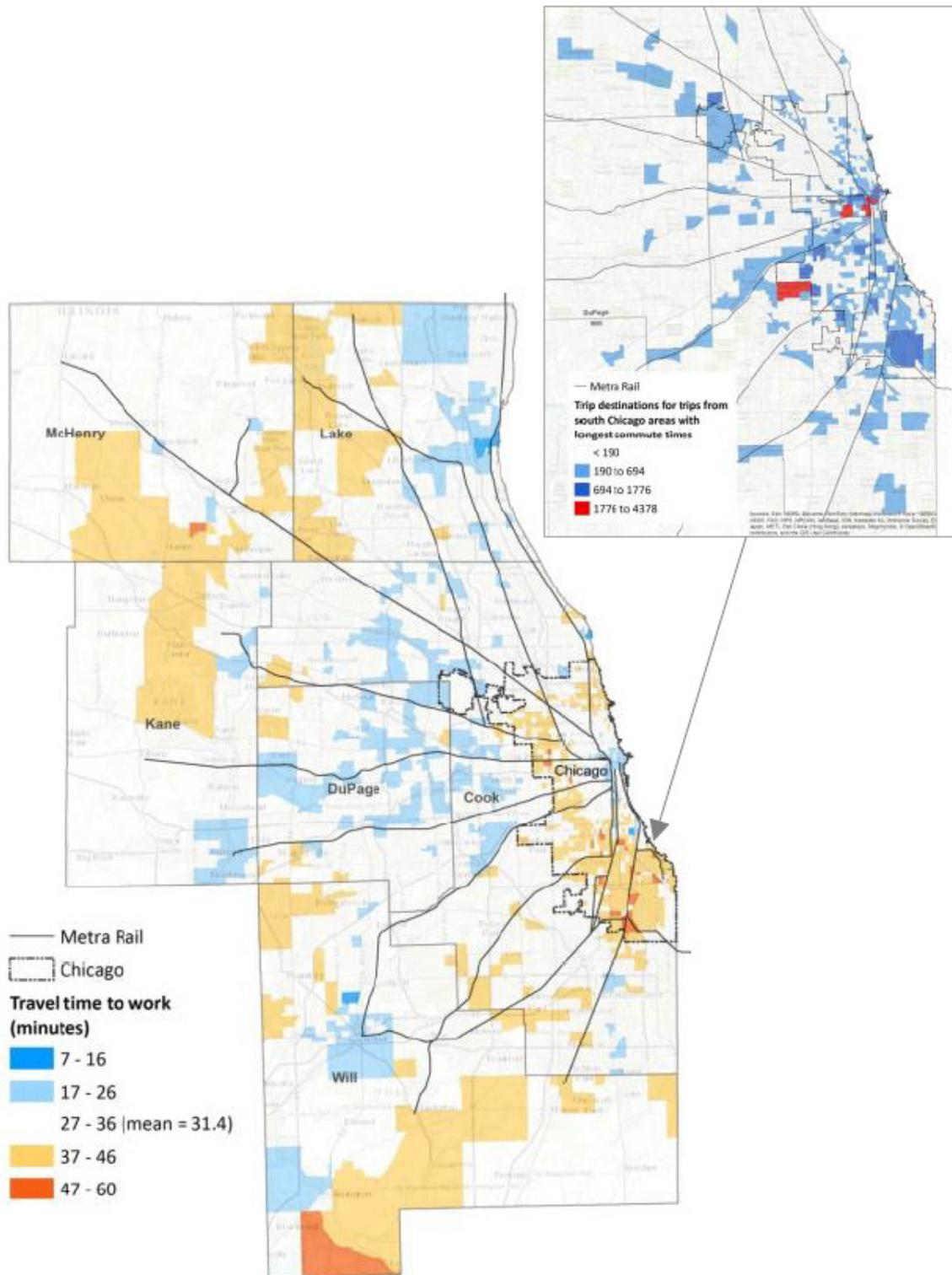
## Travel Time to Work

According to the 2017 RTA Transit Market Assessment, the average travel time to work across all modes is 31.4 minutes, within its six-county service region. Most commute trips are between 27 and 36 minutes, but there are areas throughout the region with longer or shorter average commute trip times (Figure 4-18). Commute trip times account for one-directional travel only. When separated by mode, the average commute trip times for the entire RTA region are as follows:

- Drive Alone: 29 minutes
- Bus: 43 minutes
- Subway: 45 minutes
- Commuter Rail: 65 minutes

In Lake County, communities where the average commute trip time is lower than average are generally on the east side of the county, and communities with higher than average times are generally on the west side of the county. The lowest average commute trip times in Lake County are found in and around North Chicago. Communities within Antioch, Grant, southeastern Lake Villa, western Fremont, Cuba, southwest Elmhurst, and central Vernon townships have higher than average commute times, between 37 and 46 minutes.

Figure 4-18 RTA Region Travel Time to Work



Source: RTA Regional Transit Market Assessment, 2017

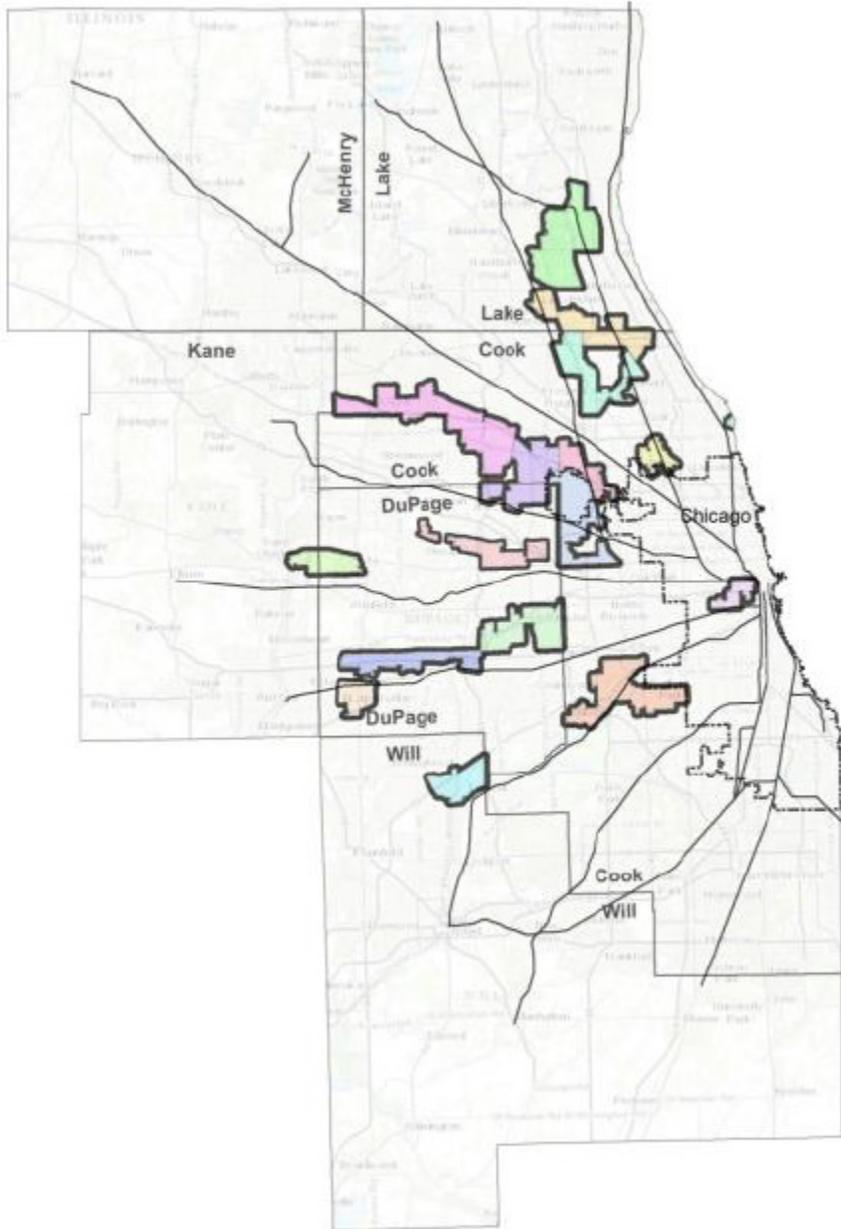
## Employment Corridors

For its 2017 Transit Market Assessment, the RTA used 2010 Census Transportation Planning Package (CTPP) data to identify clusters where high numbers of work trip destinations were located. Based on these clusters, 20 employment corridors were identified in the RTA's six-county region (Figure 4-19). Two of these corridors are located in Lake County: Mettawa and Lake Cook.

Out of these 20 employment corridors, the Mettawa corridor has the second lowest average transit accessible places score and average transit access to opportunities score (Figure 4-20). This indicates that the Mettawa corridor is not easily accessible by transit, and commuters to the corridor live in communities with low transit access to employment.

The Lake Cook corridor, at the boundary between southeastern Lake and northeastern Cook counties, has an average transit access score close to the regional average, however its average transit accessible places score is significantly below the regional average (Figure 4-20). This indicates that commuters to the Lake Cook corridor reside in communities with higher transit access to opportunities than the Lake Cook corridor; improved transit access within the Lake Cook corridor could offer these commuters more viable opportunities to switch to commuting by transit.

Figure 4-19 RTA Region Major Employment Corridors (2010)



Source: RTA Regional Transit Market Assessment, 2017

**Figure 4-20 Access Scores for Major Regional Employment Corridors (2010)**

Corridor	Average Transit Accessible Places Score (at destinations)	Average Transit Access to Opportunities Score (at origins)
Loop	84.7	53.3
River North	76.8	57.7
West Loop	87.9	52.1
UIC / Medical District	77.6	54.7
Evanston	34.3	53.2
Rosemont / Des Plaines	33.6	44.0
Skokie / Niles	42.2	49.1
Oak Brook	7.3	30.9
Wood Dale / Elk Grove	13.2	33.7
Lake Cook	10.6	29.9
Addison	3.7	30.9
Rt. 59	9.1	18.9
I-88 / Warrenville	6.4	23.5
I-90	4.2	26.1
O'Hare South	21.0	43.1
Northbrook	13.0	36.4
Bollingbrook	2.4	21.2
St. Charles	0.0	14.8
Mettawa	0.4	17.4
MDW / Bedford	14.2	37.3
<b>Regional Average</b>	<b>36.4</b>	<b>31.2</b>

Source: RTA Regional Transit Market Assessment, 2017

Note: Regional averages are based on scores of places within each corridor, not an average of each of the 20 corridors' average scores.

## PUBLIC OUTREACH

The project team used a variety of methods to engage the public and stakeholders in a discussion of current public transportation services in Lake County between January 2017 and September 2018. Those efforts and the input received from Lake County residents are described below.

### Approach

In order to solicit input from the public officials, transportation providers, other stakeholders, and the public, the project team, including Lake County DOT staff and LCCTSC leadership, used a variety of tools to obtain feedback on transportation issues and service gaps including:

- Meetings with the Project Advisory Committee (PAC)
- Community meetings
- Online surveys of transportation providers and the public
- Focus groups, including a Township Summit
- Stakeholder interviews

**Figure 4-21 Stakeholder Input Groups by Type of Meeting**

Community Meetings	Stakeholder Interviews	Focus Groups
Libertyville Township	Various Township/Municipal Operators	Health Care
Round Lake Beach	Metra	Job Access
Wauconda Township	Pace	Mobility Issues
Waukegan Township	Non-profit agencies	Transportation Providers
	RTA	Township Summit

Figure 4-21 highlights the types of meetings held during the first quarter of 2017 to obtain input on the need and gap issues.

Community meetings were held in an open house format at four locations across the county including Libertyville Township, Round Lake Beach, Waukegan Township and Wauconda townships in January 2017. As shown in Figure 4-22, 82 stakeholders participated in the drop-in sessions and more than 50 comments and suggestions were recorded at those sessions. An online comment form was available for individuals who were unable to attend the community meetings in person or wished to provide additional input. Additionally, the team conducted interviews with stakeholders and follow-up interviews with Township Operators outside of the Township Summit.

Five focus groups were organized by the topics listed below and conducted in March 2017:

- A **Health Care** focus group including hospitals and medical transportation professionals
- A **Job Access** focus group including employers and job development agencies

**Figure 4-22 Participation in Community and Stakeholder Meetings**

Event	Number of Participants
Round Lake Beach Community Meeting	34
Waukegan Community Meeting	16
Libertyville Community Meeting	24
Wauconda Community Meeting	8
<i>Subtotal</i>	<i>82</i>
Township Summit	17
Transportation Providers Focus Group	12
Job Access Focus Group	6
Mobility Issues Focus Group	5
Health Care Focus Group	3
<i>Subtotal</i>	<i>43</i>
<b>Total</b>	<b>125</b>

- A **Mobility Issues** focus group including customers and advocates for persons with disabilities
- A **Transportation Providers** focus group including public, private and non-profit transportation providers
- A **Township Summit** was held for a detailed discussion of current transportation services and needs from the perspective of township officials.

A total of 43 individuals participated in the focus group meetings and Township Summit.

An online survey was distributed to transportation providers in January to collect more detailed information about their services.

In-person and telephone interviews were conducted with public officials, transportation providers, and advocacy agencies for more in-depth discussions of service gaps and issues. Representatives of the following stakeholders were interviewed between March and May 2017:

- Grant Township
- Lake Villa Township
- Libertyville Township
- Warren Township
- Waukegan Township
- Barrington Area Council on Aging
- City of North Chicago
- Village of Deerfield
- Village of Fox Lake
- Village of Lake Forest
- Village of Long Grove
- Village of Mundelein
- Village of Vernon Hills
- Catholic Charities
- ElderCARE
- Lake County Center for Independent Living
- Lake County Partners
- Lake County United
- MC Ride (McHenry County)
- Metra
- Pace Fixed Route
- Pace Paratransit
- Pace Vanpool Programs
- PADS
- RTA
- TMA of Lake Cook

Finally, an online community survey was also used to solicit public and stakeholder opinions on the positive characteristics of current services and service gaps and problems encountered in using the transportation services. Lake County DOT shared links to the survey widely with stakeholders for distribution to their networks of contacts. The survey was open between March and May 2017. Results of the community survey are summarized later in this chapter.

## Summary of Comments from Meetings, Interviews, and Transportation Provider Survey

The information obtained through the community meetings, focus groups, stakeholder interviews, and the transportation provider survey provided useful input on a variety of categories of unmet service needs and gaps in the provision of service. These hundreds of comments are summarized across the following five categories:

- **Temporal Gaps:** including the span of hours, days of operation, and frequency of services offered
- **Spatial Gaps:** areas in the county that have no or limited service, and gaps between key origins and destinations
- **Service Design:** the types of services such as advance reservation and fixed-schedule service needs
- **Eligibility:** the different customer populations served by the service including older adults, individuals with disabilities, students, and the general public
- **Cost:** issues related to grant funding, sharing of costs among operators, and fare and donation policy issues

### Temporal Gaps

One common theme that was raised in community meetings, focus groups, and stakeholder interviews was the need for expanded hours, particularly in the early morning and early to mid-evening hours. Most of these comments, however, were raised more by customers and customer advocates than by provider participants. One temporal issue that was raised by multiple providers participating in the provider focus group was the challenge of multiple shift start/finish times beyond the traditional 1<sup>st</sup>/2<sup>nd</sup>/3<sup>rd</sup> shift model.

An example of a temporal gap is the need for earlier morning hours focused on employment. In locations like the Great Lakes Naval Station, individuals need transportation to work shifts starting prior to 6 a.m. There is also a need for additional peak period a.m. and p.m. service for persons with disabilities using non-Pace municipal services.

Evening service gaps identified by community meeting participants included mid-evening return trips from all three CLC campuses and retail employment jobs that are not currently offered on some of the demand-response services. This included the need for later service to address the needs of returning 2<sup>nd</sup> shift workers and inbound 3<sup>rd</sup> shift workers. Participants in the provider focus group also cited the need for expanded hours for job access in general.

The need for weekend service was also raised by several participants in the community meetings and the Mobility Issues focus group. A specific issue was the lack of Saturday service on some Pace fixed-route services, which means that ADA paratransit service would not be available on Saturdays.

When asked to identify service improvements that would attract more riders, 46% of respondents to the transportation provider survey (townships and others) included service at different times of day and 38% selected more frequent services and service of different days of the week. Comments in response to that question and in the Township Summit included weekend service (Sunday service in North Chicago and Waukegan Township was also mentioned specifically) and increased service hours.

## Spatial Gaps

Comments on spatial gaps included both the need for better connectivity within Lake County and access to regional destinations outside the county. Participants in the Job Access focus group cited the lack of services south and west of North Chicago as particularly critical for individuals seeking to connect with employment centers in both the North Chicago area and for residents of North Chicago seeking employment in the Vernon Township area. This specifically raised the issue of a lack of east-west connections, particularly focused in the southern portion of Lake County. At present, transit does not provide needed connections between the Lake Cook Corridor and other parts of Lake County and northern Cook County.

Participants in the Job Access focus group also noted that lack of transportation connections to certain areas inhibits employment of veterans and other job seekers. Veterans agency representatives explained that employers are willing to hire veterans (partially due to tax credits that are available to employers who contract with veterans for transitional work), but transportation is a barrier. The Vernon Hills Sam's Club and other employers in the village were noted as potential employment sites for individuals who want to work. Other employment areas include:

- Lincolnshire (Vernon Township)
- Village of Bannockburn
- Tri-State Industrial Park in Gurnee
- Waukegan Road in Waukegan
- Amhurst Lake Business Park (Waukegan)
- Lakeview Corporate Woods (Vernon Hills)

The TMA is exploring some options to address last mile issues in Lincolnshire, though the west side of the village has reasonable transit access and connections to the Buffalo Grove and Lake Cook Metra stations via existing Pace fixed-route service.

The TMA is also working with Pace, Metra, and the Village of Bannockburn, and some employers, to reestablish Shuttle Bug service that previously existed. Limited vehicle availability and reluctance to fund service are challenges.

The group noted that the biggest need is for potential employees who face transportation barriers—those with jobs have already found a way to get there. Transportation days/hours of service, as well as geographic connections, are important to job seekers, who may be pursuing jobs with non-traditional hours.

Customers participating in the community meetings identified a number of needed connections within Lake County. Round Lake Beach meeting participants raised the need for more connectivity between municipal and RideLakeCounty services with the Pace fixed-route services at CLC. The move of the Secretary of State office to Lake Zurich was cited as a needed destination in the RideLakeCounty West and RideLakeCounty Central services. The lack of Pace services in some of the unincorporated areas of Lake County was also cited in both community meetings and the Mobility Focus group.

Participants in both the Libertyville and Waukegan area community meetings cited the need for connecting destinations in Waukegan and Mundelein. Seniors in Libertyville cited the need for connection to the Gurnee area including retail destinations such as Sam's Club. The Walmart in Zion Township is another specific destination that Lake County residents would like to reach.

Connections to Metra Stations from municipalities were also raised as a gap, including a connection between Waukegan and the Metra Station in Zion to allow additional train options for Zion area residents. Currently, there are not as many trip options for residents in Zion as there are to Waukegan.

Several regional spatial gaps included the need for service better connecting areas in Lake County with destinations outside the county and vice-versa. Among the areas cited were large employers in Pleasant Prairie and Kenosha, WI (Amazon, Meijer, ULine) and the need for a more direct connection between Waukegan and McHenry County that could serve movement in both directions along the Route 120 corridor.

Transportation providers responding to the survey identified the following destinations for which they receive requests for service that they are not able to provide:

- Northwestern Medicine Lake Forest Hospital (formerly Lake Forest Hospital)
- Condell Medical Center
- Highland Park Hospital
- Westfield Mall/Hawthorn Mall
- Gurnee Mills
- Evanston (Central St. and Davis St. Stations)
- Pleasant Prairie and Kenosha, WI

Township Dial-A-Ride and local services often serve limited destinations outside of township borders. However, participants in the Township Summit identified the following unserved destinations for their riders:

- CLC (multiple providers mentioned)
- Pleasant Prairie and Kenosha for medical appointments
- Hospitals in Chicago and Wisconsin
- Riverwoods
- Walmart in Zion

## **Service Design**

One of the challenges for customers seeking to identify the appropriate service to meet their need is the overlap of services provided through townships, municipalities, and Pace. While the intent of this overlay of services has been to expand the availability of service, it is difficult for users not familiar with the system to identify the appropriate service that meets their needs. This is particularly true of the overlaps between township, municipal, and Pace-operated paratransit services including the two RideLakeCounty services and ADA paratransit. While experienced users participating in community meetings seemed to have an understanding of how to use multiple services, these same individuals raised the issue of the tradeoff between service expansion and a more user-friendly set of services.

Better information about service options was selected by 38% of respondents to the provider survey as an action that would attract more riders. The need for increased marketing of services was mentioned several times in open-ended survey questions about suggested service improvements.

Another key service design element raised by a number of participants in community meetings and focus groups was the availability and reliability of transfers between paratransit services and both Pace fixed-routes and other paratransit services. Two locations cited were the CLC and Hawthorn Mall, both of which offer connections to multiple Pace fixed-route services. The Pace fixed-route representative interviewed also suggested that focus on hubs like CLC and Hawthorn Mall might have potential for future fixed-route service expansion if first/last mile access were promoted at these locations. The need for a more formal transit node in the North Chicago area was mentioned by Transportation Provider and Job Access Focus group participants as a means of promoting the integration of first/last mile service with Pace fixed-route services.

Participants in the Libertyville community meeting and Transportation Provider and Mobility Issues focus groups voiced concerns with long travel times on Pace paratransit services, especially for trips involving transfers, and paratransit on-time performance. Comments were echoed in some interviews with township/municipal providers and other stakeholders. Difficulties had been experienced directly by individuals or reported to townships or municipalities. Time spent on waiting lists for subscription service, which would alleviate some of the long and uncertain travel times for recurring trips, was also cited as a service issue. Township/municipal providers expressed uncertainty about whether Pace had the resources to expand its capacity if more coordinated services were considered for development.

The Pace vanpool programs, including the Locally Based and Community Vanpool programs (which lease vehicles to municipalities for expanding their transportation services), have provisions that allow them to serve targeted populations such as older persons but are to be open to the general public during the hours and geographic area that they serve. Comments from participants at community meetings suggested the need to ensure that individuals other than the targeted populations could be served on trips where the service area and time permit utilization of these services.

Another issue raised by both focus groups and customers was the need for designing services to meet off-hour needs when the density of trip demand is limited, including 2<sup>nd</sup> shift returns and 3<sup>rd</sup> shift arrivals during the late evening. This issue was raised both by the Job Access focus group and at the community meetings.

The issue of how to utilize Transportation Network Companies (TNC) such as Uber and Lyft, particularly with regard to first/last mile services was raised in multiple community meetings and the employer focus group. McHenry County cited recent development of a pilot program involving Uber and this was also raised as an issue to be examined by the Transportation Provider focus group and also mentioned as a key project to watch closely by RTA interviewees. The Transportation Provider focus group participants also mentioned the use of non-app customer reservation methods to provide a more user-friendly environment for technology challenged passengers. Metra interview participants also noted their co-marketing of TNC services connection with first/last mile access to Metra rail stations. Finally, both Metra and RTA interview participants cited the challenge of creating first/last mile services similar to Shuttle Bug but able to utilize a lower cost model that would have application at locations with lower employment densities.

Maximum ride time for customers was cited by participants in the Mobility Issues focus group and multiple community meetings as a service design concern and also related to ensuring minimum wait time at transfer points. This also related to concerns with ensuring connectivity between last mile services such as Shuttle Bugs and Metra rail service.

## Eligibility

Among the eligibility issues raised, the most frequent dealt with enabling members of the public to use services targeted for particular rider groups. This included ensuring that persons with disabilities could use services targeted for senior citizens, particularly municipally operated services.

One issue raised in the community meetings was enabling non-residents to use municipal services as a connector with Pace fixed-route services. One issue cited in the Mundelein interview raised the question of why some general public Mundelein residents would qualify for RideLakeCounty West service while other general public residents could not qualify for RideLakeCounty Central service. Another issue was ensuring that low-income persons are provided an equal priority with senior citizens on municipally operated services.

The needs of students seeking employment were also cited as not being eligible for services that might provide first/last mile access to Pace fixed-route services serving key employment centers.

Another eligibility issue cited was the ability to add last minute trips to existing advance reservation vehicle runs to both offer flexible service and increase productivity. Another community meeting participant cited the need for ensuring that a companion could ride on municipal services when there is sufficient seating capacity available.

Several transportation providers that currently serve older adults would like to expand their services to include people with disabilities. Other providers see the need for service for the public or low-income individuals in their communities.

## Cost Issues: Fares and Funding

### Fares

The cost of customer fares was cited as a burden for some low-income residents and several community meeting participants raised the possibility of lower cost feeder fare on services such as RideLakeCounty West which might also encourage the use of Pace fixed-route services by individuals who do not currently use the services. Another community meeting participant raised the issue of reducing fares for veterans without disabilities.

Thirty-eight percent of respondents to the provider survey identified lower fares as a service change that would attract riders. Lower fares were also mentioned in answers to the open-ended question about suggested service improvements. Transportation providers in Avon and Wauconda townships noted during the Township Summit that there is no traction for higher fares in their communities (currently \$1 in Avon and free in Wauconda).

### Funding

One interviewee, Catholic Charities, raised the issue of equitable cost sharing that might encourage more municipal services to consider consolidation with other services.

The Transportation Provider focus group raised several points relating to the need for a greater commitment to funding transit regionally rather than on a local basis. Participants also cited the expense of serving low-density areas of the county, the lack of available funds to meet local match requirements for grants, and a question of whether the RTA might consider designation of a portion of the sales tax revenue to support expansion of transportation services.

Comments from transportation providers during the Township Summit and in responses to the provider survey echoed those concerns about funding sustainability. Some townships expressed the opinion that they are not equipped to take responsibility for funding expanded or countywide services, and are looking to municipalities and Lake County to play larger funding roles. There is general concern about the proposed cap on property tax revenues—the only source available to townships—and the proposed elimination of townships as a governmental structure.

When asked about the best approach to partnering on transportation services and sharing costs, transportation provider survey respondents offered the following thoughts:

- Add employers as partners
- Bill participating communities on the basis of ridership (mentioned several times)
  - Rely more on funding from townships than municipalities
- Share efforts to market services and recruit volunteer drivers (for organizations that administer volunteer driver programs)
- Use increased ridership data to identify potential partners
- Engage health care providers, employers, and retailers through outreach and education about the benefits of public transportation services to their employees and customers, and the potential value of their future participation in joint funding

When asked about the impacts to their in-house services if local and/or county funding were reduced, transportation providers responded:

- We could keep our service as long as we had the Pace subsidy
- We would limit destinations outside our area
- We would reduce service availability
- We would look for local business sponsors
- If we lost property tax revenues, we would not be able to provide service
- If we lost municipal funding, our service would be curtailed or terminated
- We would keep our van service, but would withdraw from RideLakeCounty West

Transportation Providers responded as follows to the survey question regarding sustainability options they would like to see explored further (multiple answers were possible and the percentage of respondents favoring that option is included with each option):

- Dedicated transportation funding source at the federal, state, county, or local level (100%)
- Standardized level of Pace subsidy for all communities that receive service (61%)
- Contributions from partners whose constituents benefit from services, such as hospitals and health care providers, housing developers, employers, human service agencies, and schools/colleges (77%)
- New complementary service delivery methods, such as subsidized Uber/Lyft rides or volunteer driver programs (62%)
- Greater county participation, through use of RTA sales tax or general funds, for example (69%)

## COMMUNITY SURVEY

In order to gain a more comprehensive view of local perspectives on public transportation in Lake County, and include the voices of residents unable to attend local meetings, the study team conducted a community survey. Surveys were distributed online to solicit stakeholder opinions on the positive characteristics of current services and for the identification of service gaps and problems encountered in using the transportation services.

A total of 280 respondents completed the survey between February 27, 2017 and May 27, 2017. A summary of their responses is presented below.

### Residence

Survey respondents live in 43 different communities in Lake County and, as shown in Figure 4-23, the largest number of respondents reported their home address as Mundelein, Grayslake, or Lake Zurich.

**Figure 4-23 Most Frequent Community of Residence**

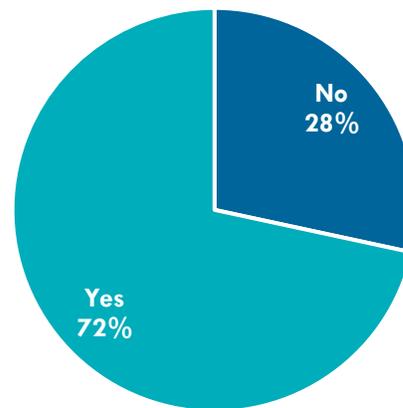
Community	No. of Respondents
Mundelein	42
Grayslake	21
Lake Zurich	21
Lake Bluff	18
Libertyville	16
Gurnee	12
Wauconda	11
Lake Barrington	10
Vernon Hills	10

### Transit Awareness

As shown in Figure 4-24, when asked about their awareness of public transportation services in Lake County, nearly ¾ of respondents replied that they were aware of service in the county.

**Figure 4-24 Public Transportation Awareness**

Are you aware of public transportation services in Lake County?



## Services Used and Frequency of Use

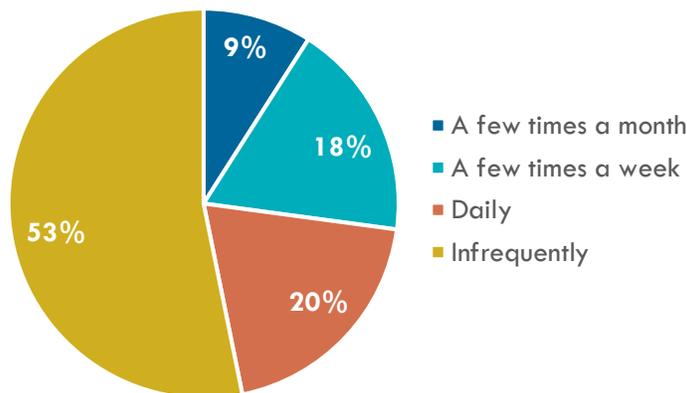
Survey participants were asked whether they use any of the 28 different systems identified by the survey. As shown in Figure 4-25, the most commonly used service in Lake County is Metra Rail service, followed by local Pace fixed-route bus service. The third most commonly used service is the Dial-a-Ride service offered by Libertyville, Libertyville Township, and Mundelein; however, this service is actually a part of RideLakeCounty Central, as is also the case for the Fremont Township service, making this one of the more commonly used services.

**Figure 4-25 Frequently Used Services**

Service	No. of Respondents	Pct	Service	No. of Respondents	Pct
Metra Rail Services	81	32%	Vernon Hills-Mundelein PACE On Demand	8	3%
Pace Fixed-Route Bus	25	10%	Pace Northwest Dial-a-Ride	7	3%
Libertyville, Libertyville Township, Mundelein	20	8%	Avon Township	6	2%
Pace ADA Paratransit Services	19	8%	Ela Township	6	2%
Fremont Township	15	6%	Waukegan Township	6	2%
Pace Northeast Dial-a-Ride	8	3%	Fox Lake, Grant Township	5	2%

Survey respondents who use public transportation in Lake County were also asked about the frequency of their use. As shown in Figure 4-26, few users of any given service report using the service frequently. Over half of the reportedly used services are used infrequently. Among services with five or more reported users, only four have riders that report using the service more than half of the time: Pace ADA Paratransit, Pace Northeast Dial-a-Ride, Vernon Hills-Mundelein PACE On Demand, and Waukegan Township’s service. None of the reported Pace ADA Paratransit riders report using the service infrequently.

**Figure 4-26 Frequency of Use**



## Importance of Transit

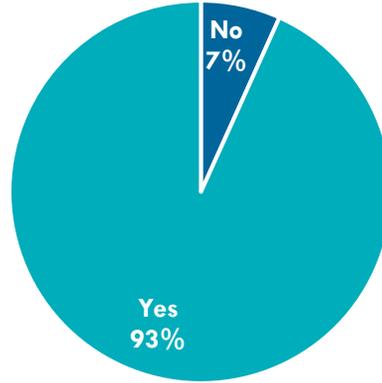
The survey asked participants whether they believed that transit is an important part of their community, to which an overwhelming 93% responded yes, as shown in Figure 4-27.

Survey respondents were asked to comment on why they believe that transit is important.

This question received 177 responses, which were categorized by the consultant team. As shown in Figure 4-28, a majority of the respondents mentioned access for transit dependent populations, which included people who rely on transit, those who cannot drive, zero-vehicle households, older adults, and people with disabilities.

**Figure 4-27 Importance of Transit**

Do you feel transit is an important component of this community?



**Figure 4-28 Reasons for Transit's Importance**

Category of Comment	No. of Responses
Transit dependent populations	100
Older adults	33
Access	23
People with disabilities	22
Need for better service	18
Congestion mitigation	16

## Transit Successes

Survey participants were asked about what successes could be found among current transit services, whether related to service areas, populations, or otherwise.

This open-ended question received 146 responses, which were categorized by the consultant team. As shown in Figure 4-29, the most commonly cited successes were for transit dependent populations, particularly for older adults. Despite these successes, many people took this opportunity to report various elements that do not work well, representing the second most common type of response.

Figure 4-29 Transit Successes

Successes	No. of Responses
Transit dependent populations	51
Not a success	44
Older adults	35
Access to trains	16
People with disabilities	11
Buses	8

## Transit Difficulties

In addition to the local transit successes, the survey asked respondents about transit difficulties in the area. Respondents were specifically asked to identify difficulties with destinations served, trip types completed, travel time offered, and other matters.

In total, there were over 200 responses to these four prompts. As shown in Figure 4-30, the responses to the types of difficulties vary considerably. In particular, the most commonly identified difficulty in the area was for intra-county trips, followed by shopping trips, and trips that serve appointments.

Figure 4-30 Transit Difficulties by Category

Destinations Served	No. of Responses	Trip Types Completed	No. of Responses	Travel Time Offered	No. of Responses	Other Matters	No. of Responses
Intra-county trips	12	Appointments	8	Service hours too short	6	Spatial gaps	7
Shopping	9	Last Mile Trips	7	Non-peak times	5	Frequency of service	6
Jobs	5	No service	4	Weekend service	3	Information gaps	4
Inter-county trips	5	Bus Trips	4	Long trips	3	Few options	4
Medical destinations	5	Commuting	4	Last minute Trips	2	Capacity of service	3

## Unmet Trip Needs

Survey participants were asked whether they have difficulty completing trips, and what destinations they have difficulty reaching with the use of existing services.

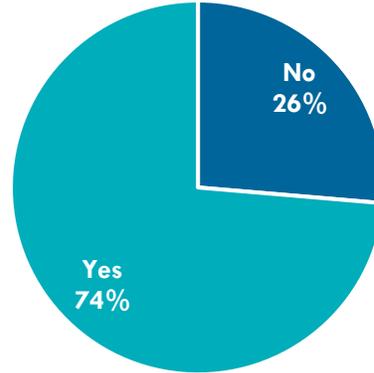
As shown in Figure 4-31, most respondents to this question have had trouble reaching their destinations via public transportation.

Respondents were also asked to identify the specific trips they are unable to take via public transportation. The origins, destinations, and trip types for these difficult trips have been organized below in Figure 4-32.

Please note that the categories below are a summary of the most commonly cited individual trip origins, destinations, and trip types, rather than any specific trip. For example, while Mundelein was the most commonly cited origin for trips that were difficult to make via public transportation, trips from there to Libertyville were not necessarily the most commonly cited combination (and are unlikely to be, given that they are both in the RideLakeCounty Central Area). Notably, work commute was the most commonly cited trip that was difficult to take using public transportation.

**Figure 4-31 Difficulty Meeting Travel Needs**

Are there travel needs that you find difficult to complete using public transportation?



**Figure 4-32 Difficult Trip Origins, Destinations, and Types**

Origin Location	No. of Responses	Destination Location	No. of Responses	Trip Types	No. of Responses
Mundelein	21	Libertyville	18	Work Commute	50
Lake Bluff	16	Unincorporated or Other	18	Medical	37
Gurnee	13	Gurnee	17	Shopping	18
Libertyville	11	Vernon Hills	13	Social	14
Grayslake	10	Barrington	12	Personal Business (e.g. see professional or social services)	12
Round Lake	10	Waukegan	12	School Commute	7

## Barriers to Use of Existing Service

The survey asked respondents to provide open-ended responses to what types of barriers exist that prevent the use of existing transit services in Lake County.

The consultant team categorized these responses, with the most frequently cited categories shown below in Figure 4-33. The most commonly cited constraints related to the existing service area, with riders either unable to access services in their area, or services not providing sufficient access to their destinations. Other issues related to the schedule and span of service, as well as eligibility, were also frequently cited.

Figure 4-33 Barriers to Existing Services

Barrier Category	No. of Responses
Service Area	44
Schedule	19
Eligibility	13
Fare Price	11
Last Mile	9

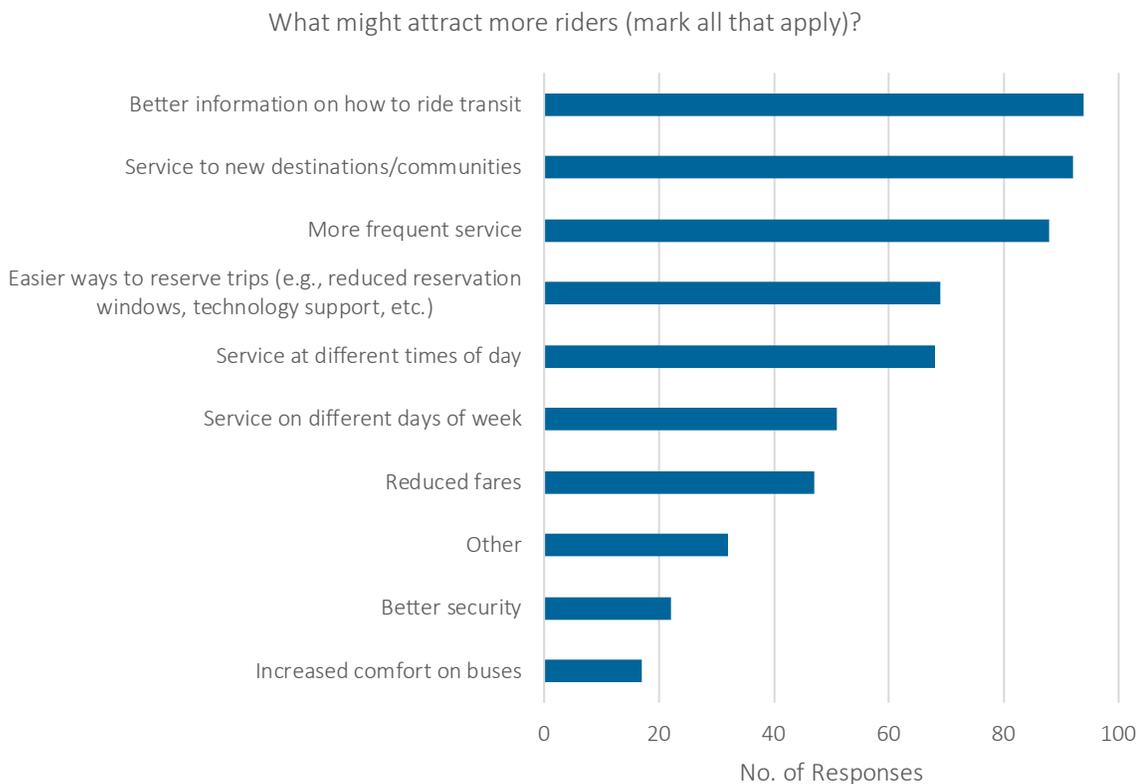
Respondents were also asked to comment on any cultural barriers that existed to using the existing services. Though there were considerably fewer responses to this question, there were some commonly cited themes: language, technology gaps among different age groups, issues for people with disabilities, and public perception of transit.

## Methods to Attract New Riders

In a jump away from perspectives on existing services, participants were asked what elements might be used to improve the attractiveness of transit in order to gain new riders.

As shown in Figure 4-34, participants were offered nine different transit improvements, and were also able to suggest their own. The most commonly cited solution was better information, followed closely by an expansion of the service area, as well as more frequent service. Most of the suggested solutions related to service improvements that could be categorized in one of the other options.

Figure 4-34 Methods to Attract New Riders



## Final Comments

Finally, survey participants were asked to provide comments on any matters not previously covered in the survey. In addition, the Project Study Team received verbal feedback from public meetings regarding a concern over efficiency and on-time performance of the current dial-a-ride services, which may be seen as a barrier to using paratransit regularly.

The consultant team summarized these responses into broad, repeating categories, which are shown below in Figure 4-35. The most commonly cited response was a need to expand existing service areas, followed by a need for better service information.

Figure 4-35 Final Comments

Comment Category	No. of Responses
Expanded service areas	18
Need for better information	6
Service hour expansion	4
Reservations	3
Work commuting	3
Lack of options	3

## 5 ANALYSIS OF SERVICE GAPS AND OPPORTUNITIES

This section examines Lake County’s paratransit services by community and user group to identify spatial and temporal service gaps, and limits in service options faced by different current and potential rider groups. That information, together with comments from the public and stakeholders, is summarized in a Strengths, Weaknesses, Opportunities, and Threats (SWOT) table. The SWOT analysis identifies not only gaps in the current service network, but potential strategies for addressing those gaps.

### PARATRANSIT SERVICES BY COMMUNITY

Figure 5-1 lists services in Lake County by community, organized alphabetically by township. Not all, but most, communities are included and the table is intended to represent services available within Lake County only. Services are listed by community, and service type, including access to Pace fixed bus routes, ADA paratransit, Shuttle Bug and Pace On Demand services, Dial-A-Ride services, and taxi subsidy programs.

Figure 5-1 not only shows the services that are available to residents of each community, but also highlights geographic areas that receive little service in comparison to others, and areas in which multiple, overlapping services are in operation, highlighted on the figure.

Communities with access to fixed-route and ADA paratransit service are listed below. Most of these communities are located in the eastern portion of the county. The table highlights the availability of fixed-route service, multiple paratransit services, or limited transportation options apply not only to residents of townships but also to those of the municipalities within their limits.

- Avon Township
- Benton Township
- Fremont Township
- Grant Township
- Libertyville Township
- Moraine Township
- Shields Township
- Vernon Township
- Warren Township
- Waukegan Township
- West Deerfield Township
- Zion Township

Communities with multiple options include:

- Antioch Township
- Avon Township
- Fremont Township
- Grant Township
- Lake Villa Township
- Warren Township
- Waukegan Township
- Village of Vernon Hills
- City of Highland Park
- City of North Chicago

Communities with limited options, either because few services are available or because some available services are open only to people with disabilities and/or older adults, include:

- Barrington Area townships and villages (service and eligibility limitations)
- Ela Township (service and eligibility limitations)
- Libertyville Township (eligibility limitations)
- Cuba Township (eligibility limitations)
- Wauconda Township (service and eligibility limitations)

One community, Newport Township, has no public transportation options (no fixed route, paratransit, dial-a-ride, On Demand, or township services) available for residents. As such, Newport is not covered in the table.

## **PARATRANSIT SERVICES AVAILABLE TO DIFFERENT USER GROUPS**

Figure 5-2 summarizes service options available to the public, older adults, people with disabilities, and individuals with lower incomes. Service limitations, such as days/hours of service or eligible trip purposes, are noted.

Pace services have the most inclusive rider and trip purpose eligibility policies and the most extensive days and hours of service. Among Dial-A-Ride and municipal/township van services, services for specialized groups—usually people with disabilities and/or older adults, but in some cases, individuals with lower incomes—predominate. About half of the services are limited in the days/hours of service provided and/or eligible trip purposes. This means that having one or more Dial-A-Ride or township/municipal van service available in a community does not indicate that most transportation needs are met.

**Paratransit Market Study for the Lake County Region | Existing Conditions | FINAL**  
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**Figure 5-1 Lake County Bus and Paratransit Services by Community, 2018**

Community	Township(s)	Pace Fixed Route Bus Service	Pace ADA Paratransit Service	Pace On Demand	Shuttle Bug Route(s)	Pace Dial-A-Ride	Township Dial-A-Ride	City/Village Transportation Service	Taxi Ticket/Voucher Program
Antioch Township	Antioch	No	No	No	No	RideLakeCounty West	Tri-Township Transit Township van service	No	No
Village of Antioch	Antioch	No	No	No	No	RideLakeCounty West	Tri-Township Transit Township van service	No	No
Avon Township	Avon	570, 590, 565, 574	Yes	Round Lake Area	No	RideLakeCounty West	Township van service	No	No
Village of Round Lake	Avon, Fremont, Grant	570, 590	Yes	Round Lake Area	No	RideLakeCounty West	Avon and Grant Township van services Tri-Township Transit	No	No
						RideLakeCounty Central			
Village of Bannockburn	West Deerfield	No	No	No	No	No	Township van service	No	Yes (Township)
Village of Barrington**	Cuba, Ela	No	No	No	No	Barrington Area Dial-A-Ride	Yes - Ela	No	Yes (Cuba Township)
Benton Township	Benton	571, 573	Yes	No	No	Benton/Zion Dial-A-Ride	No	No	Yes
Cuba Township	Cuba	No	No	No	No	Barrington Area Dial-A-Ride	No	No	Yes
Village of Barrington Hills**	Cuba	No	No	No	No	Barrington Area Dial-A-Ride	No	No	Yes (Township)
Village of Lake Barrington**	Cuba	No	No	No	No	Barrington Area Dial-A-Ride	No	No	Yes (Township)

\*Township residents not living in Villages of Libertyville or Mundelein

\*\*Portions of these municipalities are located outside of Lake County and only services offered within Lake County are included in this table

- Open to general public
- Open to seniors and/or people with disabilities

**Paratransit Market Study for the Lake County Region | Existing Conditions | FINAL**  
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Community	Township(s)	Pace Fixed Route Bus Service	Pace ADA Paratransit Service	Pace On Demand	Shuttle Bug Route(s)	Pace Dial-A-Ride	Township Dial-A-Ride	City/Village Transportation Service	Taxi Ticket/Voucher Program
Village of Tower Lakes	Cuba	No	No	No	No	Barrington Area Dial-A-Ride	No	No	Yes (Township)
Village of North Barrington	Cuba, Ela	No	No	No	No	Barrington Area Dial-A-Ride	No	No	Yes (Cuba Township)
Ela Township	Ela	No	No	No	No	Some communities: Barrington Area Dial-A-Ride	Township bus service	No	No
Village of Lake Zurich	Ela	No	No	No	No	No	Township bus service	No	No
Fremont Township	Fremont	572, 574, 593	Yes	Vernon Hills - Mundelein	No	RideLakeCounty Central*	No	No	Yes
						RideLakeCounty West	No		
Village of Grayslake	Avon, Fremont	570, 572, 574, 590	Yes	Round Lake Area	No	RideLakeCounty West	Avon Township van service	No	No
						RideLakeCounty Central			
Grant Township	Grant	570, 806	Yes	No	No	RideLakeCounty West	Tri-Township Transit Township van service	No	Discontinued recently
Village of Fox Lake**	Antioch, Grant	570, 806	Yes	No	No	RideLakeCounty West	Township van service Tri-Township Transit	No	No

\*Township residents not living in Villages of Libertyville or Mundelein

\*\*Portions of these municipalities are located outside of Lake County and only services offered within Lake County are included in this table

- Open to general public
- Open to seniors and/or people with disabilities

**Paratransit Market Study for the Lake County Region | Existing Conditions | FINAL**  
 Lake County Division of Transportation

Community	Township(s)	Pace Fixed Route Bus Service	Pace ADA Paratransit Service	Pace On Demand	Shuttle Bug Route(s)	Pace Dial-A-Ride	Township Dial-A-Ride	City/Village Transportation Service	Taxi Ticket/Voucher Program
City of Highwood	Moraine	472	Yes	No	No	No	Township van service	No	Yes (Township)
Village of Indian Creek	Vernon	No	Yes	No	No	General Public throughout Vernon Township	No	No	No
Island Lake**	Wauconda	No	No	No	No	Dial-A-Ride offered for Disabled populations to Countryside in Palatine	Township bus service	No	No
Lake Villa Township	Lake Villa	590	Yes	Round Lake Area	No	RideLakeCounty West	Tri-Township Transit	No	Discontinued
Village of Round Lake Beach	Lake Villa, Avon	570, 590	Yes	Round Lake Area	No	RideLakeCounty West	Avon van service Tri-Township Transit	No	No
Village of Round Lake Heights	Lake Villa, Avon	570	Yes	No	No	RideLakeCounty West	Avon van service Tri-Township Transit	No	No
Village of Round Lake Park	Avon, Fremont	570, 590	Yes	Round Lake Area	No	RideLakeCounty West	Avon van service Tri-Township Transit	No	No
						RideLakeCounty Central (portion in Fremont Township)			
Libertyville Township	Libertyville	574, 593	Yes	Vernon Hills - Mundelein	No	RideLakeCounty Central*	No	No	Yes
Village of Libertyville	Libertyville	574	Yes	No	No	RideLakeCounty Central	No	No	Yes (Township)

\*Township residents not living in Villages of Libertyville or Mundelein

\*\*Portions of these municipalities are located outside of Lake County and only services offered within Lake County are included in this table

- Open to general public
- Open to seniors and/or people with disabilities

**Paratransit Market Study for the Lake County Region | Existing Conditions | FINAL**  
Lake County Division of Transportation

Community	Township(s)	Pace Fixed Route Bus Service	Pace ADA Paratransit Service	Pace On Demand	Shuttle Bug Route(s)	Pace Dial-A-Ride	Township Dial-A-Ride	City/Village Transportation Service	Taxi Ticket/Voucher Program
Village of Mundelein	Libertyville, Fremont, Vernon	572, 574, 593	Yes	Vernon Hills - Mundelein	No	RideLakeCounty Central	No	No	No
Moraine Township	Moraine	471, 472, 213	Yes	No	Yes	No	Township van service	City of Highland Park Senior Connector	Yes
City of Highland Park	Moraine, West Deerfield	213, 472, 471, 626, 628, 640	Yes	No	Yes	No	West Deerfield van service Moraine Township van service	Highland Park Senior Connector	Yes (Townships)
Shields Township	Shields	563, 569	Yes	No	No	RideLakeCounty Central Northern Shields is part of Northeast Lake/Warren Township	Subsidy for village residents' RideLakeCounty West trips within historical Dial-A-Ride hours and service area*	Lake Forest and Lake Bluff senior car and van services	Discontinued
City of Lake Forest	Shields, Moraine, Libertyville, Vernon, West Deerfield	No	No	No	No	RideLakeCounty Central (portion of city in Shields and Libertyville Townships)	West Deerfield van service (portion of city in West Deerfield Township), Moraine Township van service (portion of city in Moraine Township)	Lake Forest and Lake Bluff senior car and van services	Yes (Vernon, Moraine, West Deerfield Townships)
						Vernon Township Dial-A-Ride (portion of city in Vernon Township)			

\*Township residents not living in Villages of Libertyville or Mundelein

\*\*Portions of these municipalities are located outside of Lake County and only services offered within Lake County are included in this table

- Open to general public
- Open to seniors and/or people with disabilities

**Paratransit Market Study for the Lake County Region | Existing Conditions | FINAL**  
Lake County Division of Transportation

Community	Township(s)	Pace Fixed Route Bus Service	Pace ADA Paratransit Service	Pace On Demand	Shuttle Bug Route(s)	Pace Dial-A-Ride	Township Dial-A-Ride	City/Village Transportation Service	Taxi Ticket/Voucher Program
City of North Chicago	Shields, Waukegan	563, 564, 569, 568	Yes	No	No	Shields Dial-A-Ride Northeast Lake/Warren Dial-A-Ride	Township van service for seniors (portion of city in Waukegan Township)	No	Yes (Waukegan Township)
Vernon Township	Vernon	593, 574, 576, 626, 272, 234	Yes	Vernon Hills-Mundelein	Yes	Vernon Township Dial-A-Ride	No	Vernon Hills Senior Shuttle	Yes
Village of Buffalo Grove**	Vernon	234, 272, 626 634,	Yes	No	Yes	Vernon Township Dial-A-Ride	No	No	Yes (Township)
Village of Vernon Hills	Vernon, Libertyville	272, 574, 593	Yes	Vernon Hills - Mundelein	No	RideLakeCounty Central* (only part of Vernon Hills; portion of Village in Libertyville Township)	No	Vernon Hills Senior Shuttle	Yes (Townships)
						Vernon Township Dial-A-Ride			
Village of Gurnee	Warren	562, 565, 572	Yes	No	No	Northeast Lake/Warren Dial-A-Ride	Township van service	No	Yes (Township)
Warren Township	Warren	562, 565, 572, 568, 564	Yes	No	No	Northeast Lake/Warren Dial-A-Ride	Township van service, weekly shopper shuttle for seniors	No	Yes
Wauconda Township	Wauconda	No	No	No	No	RideLakeCounty West	Township bus service	No	No

\*Township residents not living in Villages of Libertyville or Mundelein

\*\*Portions of these municipalities are located outside of Lake County and only services offered within Lake County are included in this table

- Open to general public
- Open to seniors and/or people with disabilities

**Paratransit Market Study for the Lake County Region | Existing Conditions | FINAL**  
 Lake County Division of Transportation

Community	Township(s)	Pace Fixed Route Bus Service	Pace ADA Paratransit Service	Pace On Demand	Shuttle Bug Route(s)	Pace Dial-A-Ride	Township Dial-A-Ride	City/Village Transportation Service	Taxi Ticket/Voucher Program
City of Waukegan	Waukegan, Warren, Benton	561, 562, 563, 564, 565, 566, 568, 569, 571, 572, 573	Yes	No	No	Open to seniors and/or people with disabilities Northeast Lake/Warren Dial-A-Ride	Open to seniors and/or people with disabilities Township van service for seniors	No	Yes (Townships)
Waukegan Township	Waukegan	561, 562, 563, 564, 565, 566, 568, 569, 571, 572, 573	Yes	No	No	Open to seniors and/or people with disabilities Northeast Lake/Warren Dial-A-Ride	Open to seniors and/or people with disabilities Township van service for seniors	No	Yes
Village of Deerfield**	West Deerfield, Moraine	471, 626, 627, 628, 629, 631, 632, 633, 634, 640	Yes	No	Yes	No	Open to seniors and/or people with disabilities Township van service	Senior Car Program	Yes (Village)
Village of Riverwoods	West Deerfield	626, 627, 628, 631, 632, 634	Yes	No	Yes	No	No	No	Yes (Village and Township)
West Deerfield Township	West Deerfield	472	Yes	No	Yes	No	Open to seniors and/or people with disabilities Township van service	No	Yes
Wheeling**	Vernon	272, 234, 626, 604	Yes	No	Yes	Vernon Township DAR (portion of Village in Vernon Township)	No	No	Yes (Township)
Zion Township	Zion	571	Yes	No	No	Open to general public Benton/Zion Dial-A-Ride	No	No	Yes

\*Township residents not living in Villages of Libertyville or Mundelein

\*\*Portions of these municipalities are located outside of Lake County and only services offered within Lake County are included in this table

- Open to general public
- Open to seniors and/or people with disabilities

**Figure 5-2 Lake County Paratransit Services by Rider Groups Served**

Service	Public	Older Adults	People with Disabilities	Individuals with Lower Incomes
Pace Fixed Route Services	●	●	●	●
Pace Shuttle Buses	○	○	○	○
ADA Paratransit			●	
Pace On Demands: Round Lake Area, Vernon Hills/Mundelein	●	●	●	●
TriState Park Shuttle	○	○	○	○
<b>Dial-A-Ride</b>				
Northeast Lake/Warren Township		●	●	
Northwest Lake (now part of Ride Lake County West)		●	●	
Barrington Area		●	●	
Libertyville/Libertyville Township/Mundelein (Central Lake, now part of Ride Lake County Central)		●	●	
Ride Lake County Central		●	●	
Ride Lake County West	●	●	●	●
Shields Township		●	●	
Vernon Township	●	●	●	●
Wauconda Township			●	
Zion Township/Benton Township	●	●	●	●
<b>Local Township Bus/Van Services</b>				
Antioch Township		○	○	
Avon Township		○	○	
Ela Township		●	●	
Grant Township		○	○	○
Moraine Township		●	●	
Warren Township		●	●	
Wauconda Township		●		
Waukegan Township		●		
West Deerfield Township		●	●	
Tri-Township Transit		○	○	
Village of Fox Lake	○	○	○	○
Village of Vernon Hills		●		
City of Highland Park		○	○	
City of Lake Forest/Lake Bluff		○	○	
Catholic Charities		○		
ElderCARE		○		

● Service 5-7 days per week, at least 7 hours of service/day      ○ Limited service days, hours, and/or trip purposes

## SWOT ANALYSIS

The Strengths, Weaknesses, Opportunities, and Threats (SWOT) associated with transportation services in Lake County are presented in Figure 5-3.

- **Strengths** include the fixed-route and flexible services that currently provide mobility for community residents, the multiple options that are available to residents in some townships, significant resources that are contributed locally to transportation, support from Lake County and Pace, and the interest in coordination and perhaps a countywide paratransit system from stakeholders at all levels.
- Contrasted to service strengths are some gaps in the transportation network, which are listed in the **Weaknesses** section of the table: the western half of the county has few fixed-route services and limited paratransit options in some areas; services for the general public are limited countywide; regional travel is inhibited by jurisdictional boundaries; many paratransit services are limited in terms of rider or trip eligibility and/or days and hours of service; eligibility requirements and available service options are hard to identify and/or understand; and connections are missing between population centers and important employment corridors.
- There are more items listed in the **Opportunities** quadrant of the table than in any other. They include the many services that are currently operating in the county and the fact that many of them are operated by Pace, which will make further coordination easier; Pace's support for paratransit coordination and suggestions for fixed-route tweaks; coordination is in place between townships/municipalities and continues to grow; service overlaps offer chances to streamline and improve efficiency; Pace hubs offer opportunities to use paratransit as a feeder to fixed-route services; the Barrington Area Dial-A-Ride, RideLakeCounty Central, and RideLakeCounty West services present foundations for further coordination; neighboring counties may offer useful coordination models; and RTA sales tax revenues represent a potential future funding source.
- There are a few **Threats** to the expansion of paratransit services in the county: proposed elimination/consolidation of townships and caps on property tax revenues; the impermanent nature of grant funding that currently supports coordinated services; concerns about whether Pace has the resources to expand services; and the value that townships place on their own local transportation services, which, together with concerns about funding sustainability and lack of incentives, make it difficult for them to consider joining a larger, coordinated system.

**Figure 5-3 Lake County Transportation Services SWOT Analysis**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>▪ Fixed-route services appropriately serve areas with the highest population and/or employment density</li> <li>▪ Shuttle Bug and vanpool services provide employment transportation cost-effectively where density and commuter service schedules support them</li> <li>▪ Residents of some villages and townships have access to multiple transportation options</li> <li>▪ Resources devoted to current transportation services are significant (a rough, conservative estimate is \$2.5 million annually, excluding Pace subsidy for some of its Dial-A-Ride services)</li> <li>▪ There is much interest among stakeholders in a countywide paratransit system</li> <li>▪ Stakeholders at all levels are supportive of transportation services</li> <li>▪ Support within Lake County Government is strong—financial and management/administration—for local transportation services Pace is an important funding partner</li> </ul>	<ul style="list-style-type: none"> <li>▪ Residents of some villages and townships have access to few or limited transportation options</li> <li>▪ Most services are not open to the general public</li> <li>▪ Roughly half of the county’s paratransit services are limited in terms of days/hours of service or eligible trip types</li> <li>▪ Jurisdictional boundaries inhibit convenient regional trip-making</li> <li>▪ Service areas and eligibility requirements (riders and trips) are complicated and difficult for riders and potential riders to understand</li> <li>▪ Services are much more limited in the western half of the county</li> <li>▪ Connections between the Waukegan area and the dense employment area in the south central portion of the county are not well served</li> <li>▪ Need for connections from more areas to employment in the Gurnee Mills area</li> </ul>

Opportunities	Threats
<ul style="list-style-type: none"> <li>▪ There are many transit and paratransit services and resources in Lake County to work with</li> <li>▪ There is much interest among stakeholders in a countywide paratransit system</li> <li>▪ Many services are operated—including reservations, scheduling, dispatching, and operation of vehicles—by Pace</li> <li>▪ Pace is supportive of coordination efforts and open to potential fixed-route changes, subject to performance requirements</li> <li>▪ Coordinated systems are already in place in the Barrington, RideLakeCounty Central, and RideLakeCounty West areas and could be expanded</li> <li>▪ Communities are discussing further coordination partnerships: Waukegan and Shields Township, Village of Vernon Hills and RideLakeCounty Central</li> <li>▪ Overlapping services represent duplicated functions that could be coordinated or consolidated for improvements in efficiency</li> <li>▪ Transit hubs such as CLC and Hawthorn Mall offer potential for increased use of paratransit as a first/last mile access to Pace fixed routes</li> <li>▪ RTA sales tax revenues that are allocated to Lake County are a potential source of funding for coordinated service expansion</li> <li>▪ Neighboring DuPage, Kane, and McHenry counties have been working on coordinated services for a long time and may offer helpful models for Lake County</li> <li>▪ Expanding services would provide the opportunity to increase equity (for users and funders)</li> <li>▪ Increasing transportation access to jobs would contribute to economic development in the county. More transportation options would help Lake County address workforce needs and help the county compete against other IL and WI locations for incoming employers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Current coordinated services are supported with New Freedom and 5310 grants, which are not seen as a sustainable funding source</li> <li>▪ Townships and municipalities are reluctant to contribute their local funding to larger coordinated systems without more reliable long-term funding</li> <li>▪ Townships and municipalities are uncertain that Pace has the resources to expand paratransit services. Feedback from the public received during this study included concerns regarding Pace Dial-a-Ride on time performance and long travel times on buses. Pace notes that their on time performance for services in Lake County is 95%.</li> <li>▪ Property taxes, the only revenue source that township have for supporting transportation services, may be capped in the future</li> <li>▪ Legislation to eliminate and/or consolidate townships in Illinois has just passed both houses of the legislature, and the Governor is expected to sign the bill (SB0003)</li> <li>▪ Township-operated bus and van services are seen as important local services, which is a disincentive to coordination</li> </ul>

## POTENTIAL STRATEGIES TO STRENGTHEN PARATRANSIT SERVICES

The information presented in this report—pertaining to previous paratransit studies, current services and funding, county demographic characteristics, and extensive public outreach—suggests some areas to consider as service improvement alternatives are developed. The list below is not exhaustive; other potentially applicable strategies are likely to be identified during the next phase of the project.

Phased or incremental improvement strategies include the following:

1. **Make existing services easier to find, understand, and use**
  - a. Build on LCCTSC/Lake County DOT’s consolidation of information about paratransit and human service agency transportation in the county on its website and further streamline and centralize information about transportation service options in the county
2. **Market services countywide**
  - a. Consider rebranding, using the “RideLakeCounty” model
  - b. A centralized information source, such as a single website (LCCTSC has made a previous attempt to put all transportation information in Lake County on a website)
3. **Continue to tweak fixed-route services to address identified service gaps** by providing access to important destinations or facilitating connections between services
  - a. Promote use of paratransit as first/last mile connection to Pace fixed routes where appropriate
4. **Explore employment transportation options and other new services to address specific service gaps**
5. **Expand or combine existing coordinated services into larger systems**
  - a. Make days/hours of service, eligibility, fares, and other service policies consistent
  - b. (this strategy could also be done as part of strategy #1, without expansion or consolidation of services)
  - c. Develop cost allocation and funding method that is acceptable to all coordinated service partners
6. **Add new services to unserved or underserved areas**
7. **Appoint Mobility Management staff within the county**, with responsibility for keeping the momentum around coordination going and overseeing development and implementation of transportation services and programs
8. **Develop and implement a countywide paratransit system**



## **Part 2**

# **Evaluation of Service Improvement Strategies**



## 6 EVALUATION OF SERVICE IMPROVEMENT STRATEGIES: INTRODUCTION

This memo represents the second stage in the development of a sustainable, implementable plan for improving mobility options in Lake County for all residents, but particularly for older adults, people with disabilities, and individuals with lower incomes.

A number of potential transportation improvement strategies are evaluated in this memo, for the consideration of the Project Study Team (PST) and Project Advisory Committee (PAC). Potential improvement strategies were developed based on an analysis of data collected from transportation providers, stakeholders, and the public regarding existing transportation services and unmet mobility needs, the findings of which are described briefly below, and discussed in detail in Part 1, *Analysis of Existing Conditions*.

Strategies fall into several categories: 1) service strategies, 2) personal mobility strategies, and 3) mobility management strategies.

Following this chapter's review of key findings about transportation services and needs in the county, the memo presents a more detailed look at the feasibility of each of these options. Chapter 7 includes a description of a best practice model from the region or elsewhere in the U.S. for each strategy.

Chapter 8 includes a summary of each strategy as it would be implemented in Lake County: impacts on the organizations that are assumed to participate and estimates of benefits, challenges, and cost. Implementation issues are also identified. In Chapter 9, potential strategies are evaluated using those criteria and their applicability to areas with different geographic characteristics.

These potential service improvement strategies and their relative rankings in the evaluation framework will be presented to and discussed with the PAC to identify the preferred set of strategies. Input from the public and stakeholders will be sought at the same time. After selection of the final set of preferred strategies (up to three), the project team will develop financial, implementation, and marketing plans for those strategies.

### REVIEW OF FINDINGS

Previous work has included collection of information about paratransit services in the county today and unmet transportation needs through:

- Meetings with Lake County Division of Transportation (Lake County DOT), the Project Advisory Committee (PAC), and Lake County Coordinated Transportation Services Committee (LCCTSC)

- An online transportation provider survey
- In-person and telephone interviews with transportation providers and other stakeholders
- A series of community meetings open to the public
- Focus group meetings
- An online community survey
- A review of previous studies and plans and online sources

Key findings are summarized below.

## Existing Services

Many services operate in Lake County today, including:

- Metra commuter rail service, which is focused primarily on providing frequent access to Chicago from the collar counties during peak hours on weekdays and less frequent service during off-peak hours on weekdays and on weekends
- Pace fixed-route bus services, which serve specific stops according to a set schedule
- Pace ADA complementary paratransit service, open to eligible individuals who are unable to use fixed-route bus services due to a disability, and meeting six federally required service criteria that make it comparable to fixed-route service (e.g., service area, days and hours of service, fare, and capacity)
- Pace Dial-A-Ride service, which may be available to people with disabilities, older adults, and/or the public
- Shuttle Bug public employment shuttles jointly funded by Metra, Pace, and employers and managed by the Transportation Management Association of Lake-Cook (TMA); some employers also offer private shuttles for their employees
- Pace vanpools
- Pace On Demand (previously known as Call-n-Ride as seen in Figure 1-1) services, which offer curb-to-curb service to the public within specified service areas with a reservation up to one hour in advance
- Coordinated systems (RideLakeCounty Central and RideLakeCounty West) overlaid on some community dial-a-ride services provided by Pace
- Single or joint township van/bus services for older adults, people with disabilities, and/or people with lower incomes
- Municipal van/bus services for older adults, people with disabilities, and/or people with lower incomes
- Taxi subsidy programs, which offer tickets or coupons at a discount to eligible individuals—typically
- Human service agency transportation provided for specific rider groups using van service or volunteer drivers

Figure 6-1-1 shows Pace fixed routes, Pace On Demand services, Dial-A-Ride services operated by Pace, and paratransit services operated by townships and municipalities on a map of Lake County.

### **Pace Fixed Route Bus, ADA Paratransit, Shuttle Bug, and On Demand Services**

As shown in Figure 6-1, Pace local fixed-route bus services operate primarily in the more densely populated eastern portion of Lake County. As required by the Americans with Disabilities Act, paratransit service for individuals who are unable to use fixed-route service is provided within  $\frac{3}{4}$  of a mile of all fixed bus routes. ADA paratransit service is available during the same days and hours of service as the fixed bus routes, and must meet other comparability requirements as well.

Pace operates Dial-A-Ride services in over a dozen townships and their municipalities. Most services are open to older adults and people with disabilities; some are open to the public. Dial-A-Ride services generally operate on weekdays, 8-12 hours/day. Some are funded 100% by Pace; most are funded by Pace and participating townships and municipalities.

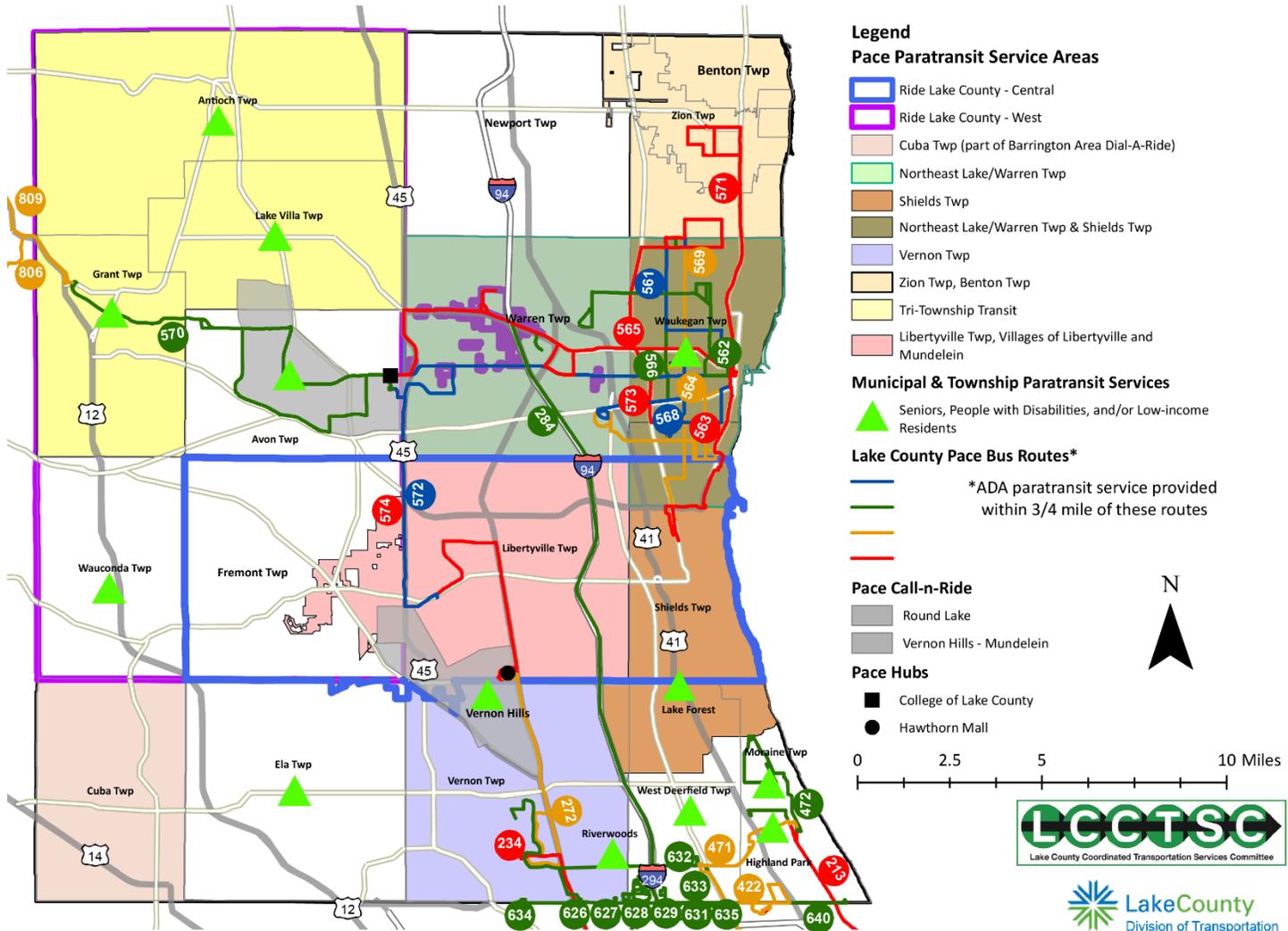
Pace On Demand services provide advance scheduling and on-demand service for the public on weekdays. Lake County communities in the Round Lakes and Vernon Hills/Mundelein areas are served by Pace On Demand.

Not depicted in Figure 6-1 are Pace's vanpool programs. The Vanpool Incentive Program includes traditional vanpools, vans used to provide service from Metra stations to employment locations, employer-sponsored van services to and from transit stops/stations, and vans provided to nonprofit organizations for work trips for people with disabilities. Approximately 58 traditional vanpools, in which riders form their own groups and share the costs of the vanpool, are used to travel to employers in Lake County, including Abbott Laboratories, Dean Witter/Discover Financial, and the Veterans Administration.

Pace's Community Vanpool Program leases vehicles of two different types to townships and villages for their use in service to the general public (services may be targeted to older adults, people with disabilities, and/or individuals with lower incomes, however).

Figure 6-1 Map of Local Bus and Paratransit Services in Lake County, 2017

## Lake County, IL Existing Paratransit & Local Bus Services



## **Pace Dial-A-Ride Services**

Most Dial-A-Ride services in the county are operated by Pace either for the general public or for older adults and people with disabilities, and funded by Pace or Pace and local communities. The following list highlights Dial-A-Ride services in areas of Lake County:

- Northeast Lake/Warren Township
- Barrington Area, including the townships of Barrington and Cuba townships and the villages of Barrington, South Barrington, North Barrington, Lake Barrington, Barrington Hills, and Tower Lakes
- Libertyville, Libertyville Township, Mundelein
- Shields Township
- Zion/Benton Townships
- In Vernon Township, Dial-A-Ride service is operated by the township under a Paratransit Service Provider Agreement with Pace and funded by Pace and the township.

## **Coordinated Dial-A-Ride Services**

In addition to the Dial-A-Ride services operated by Pace in individual townships or groups of contiguous townships, two coordinated Dial-A-Ride systems offer service across participating communities. RideLakeCounty Central, serving Libertyville, Fremont, and Shields townships and the villages of Libertyville and Mundelein, and RideLakeCounty West, serving Antioch, Avon, Grant, Lake Villa, Wauconda, and Fremont townships, overlay expanded service area/destinations and hours of service on the existing Pace Dial-A-Ride services in those communities. RideLakeCounty West services are open to the public, while RideLakeCounty Central services may be used by older adults and people with disabilities only.

## **Township Services**

Nine townships—Antioch, Avon, Ela, Grant, Moraine, Warren, Wauconda, Waukegan, and West Deerfield—provide bus/van service for their residents. Most of these services are available to older adults and people with disabilities; some also serve individuals with lower incomes. In general, township services operate fewer service days and/or hours than Dial-A-Ride services. Most lease vans and buses from Pace through its Community Vanpool program, but several operate township vehicles.

Three townships—Antioch, Grant, and Lake Villa—also participate in a shared service for their residents, operated on behalf of all by Lake Villa Township.

Ten townships—Antioch, Benton, Cuba, Libertyville, Moraine, Vernon, Warren, Waukegan, West Deerfield, and Zion—subsidize taxi trips for people with disabilities and/or older adults.

## **Municipal Services**

Four municipalities—Village of Fox Lake, City of Highland Park, City of Lake Forest/Lake Bluff, and Village of Vernon Hills—offer bus/van services for older adults, people with disabilities, and/or the public. Some of these services provide trips to limited destinations, such as a senior center.

Three municipalities—Village of Deerfield, Village of Riverwoods, and City of Lake Forest/Lake Bluff—subsidize taxi trips for people with disabilities and/or older adults.

## Human Service Transportation

Not shown in Figure 6-1 are the services offered by a number of human service organizations in the county.

Catholic Charities and ElderCARE provide transportation for medical trips for older adults. Catholic Charities contracts transportation service for residents of Lake County, and ElderCARE matches older adults in northern Lake County with volunteer drivers.

Other organizations provide transportation services for clients or target groups, including:

- Advocate Good Shepherd Hospital
- Center for Enriched Living
- Faith in Action Volunteers of Southeast Lake County
- Homestead Senior Care
- Independence Center

Organizations believed to provide transportation, but which did not respond to a survey for information about their services, include:

- Advocate Health
- Lambs Farm
- Little City/Countryside Association for People with Disabilities
- Warren Special Recreation Association

## Mobility Needs

Travel challenges that current services cause for Lake County residents were identified through analysis of information about existing services, key destinations, and locations of target populations and outreach to the public and stakeholders.

## Gaps and Overlaps in Existing Services

The level of service available to residents of different Lake County communities and different rider or potential rider groups varies quite a bit. Townships that receive both fixed-route and ADA paratransit service from Pace include:

- |           |                |                  |
|-----------|----------------|------------------|
| ▪ Avon    | ▪ Libertyville | ▪ Warren         |
| ▪ Benton  | ▪ Moraine      | ▪ Waukegan       |
| ▪ Fremont | ▪ Shields      | ▪ West Deerfield |
| ▪ Grant   | ▪ Vernon       | ▪ Zion           |

Multiple paratransit options are available in the following communities:

- |                       |                         |                         |
|-----------------------|-------------------------|-------------------------|
| ▪ Antioch Township    | ▪ Libertyville Township | ▪ Waukegan Township     |
| ▪ Avon Township       | (multiple options for   | ▪ Village of Vernon     |
| ▪ Fremont Township    | people with             | Hills                   |
| ▪ Grant Township      | disabilities)           | ▪ City of Highland Park |
| ▪ Lake Villa Township | ▪ Shields Township      | ▪ City of North Chicago |
|                       | ▪ Warren Township       |                         |

Communities with limited options, because service days and hours are limited as compared to other communities, and services are open only to people with disabilities and/or older adults, include:

- Barrington Area townships and villages
- Ela Township

Finally, Newport Township is completely without public transit/paratransit services.

### **Service Gaps for Rider Groups**

Mobility limitations for members of the three target populations—older adults, people with disabilities, and people with lower incomes—are caused by the location of current services and restrictions on eligible riders.

People with disabilities who live in communities without fixed-route bus or Pace On Demand service (which are open to the public and usable by many people with disabilities), or people who do not qualify for ADA paratransit service, must rely on Dial-A-Ride service or transportation for specific trip types provided by human service agencies. Individuals who live in communities in which Pace Dial-A-Ride service is available, but which are outside of the coordinated Dial-A-Ride services of RideLakeCounty Central and RideLakeCounty West, are restricted to trips within their home community. Those who live in communities in which township bus/van service is the only transportation option may face days and hours of service that are more limited than that provided by Dial-A-Ride services.

Older adults face similar mobility limitations but have the additional option, in some communities, of local van service that is available only to older adults, and of service for certain types of trips that may be available from human service organizations.

Options for individuals with lower incomes are the most limited. People who live in communities without fixed route or Pace On Demand service or general public Dial-A-Ride service have virtually no public transportation options available to them.

### **Public/Stakeholder Comments**

Comments provided by participants in community meetings, focus groups, and stakeholder interviews, conducted between January and May 2017, regarding transportation needs in Lake County included the following:

- Temporal service gaps
  - Early morning and evening hours, especially for work and school trips
  - Weekend service
- Spatial service gaps
  - Better connections for regional trips, both within and outside of Lake County
  - Connections to employment areas for veterans, students, and other job seekers
- Eligibility for services
  - More general public service is desirable
- Service design issues
  - Individuals have trouble identifying services that can meet their trip needs
  - Long travel times and on-time performance of Pace paratransit services

- Easier paratransit connections to Pace fixed-route bus services
- Cost issues
  - Fares are high for some low-income residents and veterans
  - Sustainability and equitable sharing of costs of service are concerns about funding transportation services in the county

These comments were echoed in responses to the online community survey.

In responses to the community survey, 131 individuals identified barriers to using transit/paratransit services. The following barriers were mentioned most often:

- Service area
- Schedule
- Eligibility
- Fare
- Service is not close enough to the destination

For more detail on outreach activities and the comments made by stakeholders in these various forums, please refer to Part 1, *Analysis of Existing Conditions*.

## SWOT Analysis

The Strengths, Weaknesses, Opportunities, and Threats (SWOT) associated with transportation services in Lake County are summarized below:

- **Strengths** include the fixed-route and flexible services that currently provide mobility for community residents, the multiple options that are available to residents in some townships, significant resources that are contributed locally to transportation, support from Lake County and Pace, and the interest in coordination and perhaps a countywide paratransit system from stakeholders at all levels.
- Contrasted to service strengths are some gaps in the transportation network, which were identified in the **Weaknesses** quadrant of the analysis:
  - The western half of the county has few fixed-route services and limited paratransit options in some areas
  - Services for the general public are limited countywide
  - Regional travel is inhibited by jurisdictional boundaries
  - Many paratransit services are limited in terms of rider or trip eligibility and/or days and hours of service
  - Eligibility requirements and available service options are hard to identify and/or understand
  - Connections are missing between population centers and important employment corridors
- There are more items listed in the **Opportunities** quadrant of the analysis than in any other. They include:
  - The many services that are currently operating in the county and the fact that many of them are operated by Pace, which will make further coordination easier
  - Pace’s support for paratransit coordination and suggestions for fixed-route tweaks

- Coordination is in place between townships/municipalities and continues to grow
- Service overlaps offer chances to streamline and improve efficiency
- Pace hubs offer opportunities to use paratransit as a feeder to fixed-route services
- The Barrington Area Dial-A-Ride, RideLakeCounty Central, and RideLakeCounty West services present foundations for further coordination
- Neighboring counties may offer useful coordination models
- RTA sale tax revenues represent a potential future funding source
- There are a few **Threats** to the expansion of paratransit services in the county:
  - Proposed elimination/consolidation of townships and caps on property tax revenues
  - The impermanent nature of grant funding that currently supports coordinated services
  - Concerns about whether Pace has the resources to expand services
  - The value that townships place on their own local transportation services, which, together with concerns about funding sustainability and lack of incentives, make it difficult for them to consider joining a larger, coordinated system

## SUMMARY OF SERVICE IMPROVEMENT STRATEGIES

When transportation services for transportation-disadvantaged individuals are provided independently by multiple organizations, the result is often duplicative services and/or administrative efforts, inefficient use of vehicles and other resources, poor service quality, and unmet transportation needs. Actions by transportation providers and other stakeholders to plan, design, fund, and deliver transportation services in a coordinated manner has been shown to address such problems.

At one end of the range of coordination activities are steps that improve communication and cooperation among interested parties while leaving separate transportation programs intact. At the other end of the range are actions that significantly change the way in which services are delivered, by consolidating transportation programs previously managed or administered by separate organizations.

The paratransit service improvement strategies for Lake County that are described in the following chapters cover the range of alternatives, selected to address the following objectives:

- Make services easier to find, understand, and use
- Market services countywide to increase awareness, support, and use
- Explore employment transportation options to address stated needs
- Add new services to address other service gaps

Specific strategies are outlined below.

### Service Strategies

Several types of improvement strategies involve changes to the public transportation services available to Lake County residents. These include:

- Late night employment transportation
- Enhanced Pace On Demand service

- Flexible, or route deviation services, in place of traditional fixed routes
- Countywide paratransit system

## Personal Mobility Strategies

Expansion or implementation of services provided by the private sector, either with or without subsidies from public or nonprofit agencies, make up another category of service improvement strategies. These services would offer expanded options for individuals:

- Vanpools for first/last mile service and employment transportation
- Taxi subsidy program modifications
- Transportation Network Company (TNC) service for first/last mile connections
- TNC service for more general paratransit trips

## Mobility Management Strategies

Mobility Management is a broad term that is used to cover a number of activities, including comprehensive coordination efforts among transportation providers and other stakeholders, and lower level, complementary programs and services. Mobility Managers can be individuals who help customers identify transportation options, plan trips, and perhaps make arrangements for those trips, or individuals or entities that have a wider range of responsibilities aimed at improving coordination among transportation programs and services and increasing mobility options.

The goals of Mobility Management activities typically include:

- Better use of transportation resources
- Cost savings or more service(s)
- Improved service quality

Services in this category include:

- A centralized source of transportation information and trip planning assistance for Lake County
- A countywide marketing program
- Mobility Management staff for Lake County

## 7 PARATRANSIT SERVICE IMPROVEMENT STRATEGIES: BEST PRACTICES

This chapter presents examples of potential service improvement strategies for Lake County as they have been implemented elsewhere in the northeast Chicago region and in other areas of the U.S. Potential strategies were suggested by the analysis of existing services conducted in the first project task and by comments from transportation providers, stakeholders, and members of the public, and include the following:

- Employment transportation services—late night transit service and vanpools for first/last-mile connections
- Enhanced Pace On Demand services
- Flexible transit services
- Taxi user-side subsidy program
- Transportation Network Company (TNC) first/last-mile service
  - TNC provision of paratransit service
- Centralized transportation information
- Countywide paratransit service
- Mobility Manager

Pace operates several of the types of services described below—including late night employment transportation, vanpools for first/last mile access to workplaces, Pace On Demand service, and deviated fixed routes—in the northeast Illinois region if not in Lake County. The descriptions below represent other examples of best practices found outside the region.

## LATE-NIGHT EMPLOYMENT TRANSPORTATION SERVICES

Transportation inbound to overnight employment locations and outbound return trips from work shifts ending in the late evening have been a challenge to transit systems across the nation including Pace in Lake County. Many job access programs have focused on separate services to address both directions of evening and overnight shifts without utilizing the existing afternoon and early morning traditional transit services. One promising practice has been to provide group ride transportation during hours when transit is not operating, and require use of the available transit service for either inbound or return service when it is available.

One of the challenges for transit agencies is how to provide connections to transit at an affordable fare for the customer. One recent strategy that is beginning to be considered by more agencies is developing vanpools designed to serve transit stations. By providing parking for the van and other support services, transit agencies are able to minimize subsidy costs and make the first/last mile portion of a transit trip affordable enough to promote the use of transit for the majority of the trip.

Late night transit service and use of vanpools to provide first and last mile connections are described below.

### South Central Transportation Authority of PA: Access to Jobs Late Night Service

#### Overview of Strategy

The South Central Transportation Authority of PA (SCTAPA) is the regional transportation authority that represents the integration of two long established transportation authorities: the Red Rose Transit Authority (RRTA), serving Lancaster County, and the Berks Area Regional Transportation Authority (BARTA) serving Berks County and Reading, PA. The SCTAPA system serves an area with a 2015 population of 951,895, has a system fleet of 223 vehicles, and provides approximately 5.1 million annual passenger trips.

The Access to Jobs program is designed to use fixed-route bus services in combination with shared-ride services to meet the needs of workers who need late night transportation.

The goal of the program is to promote BARTA and Red Rose fixed-route services when they are operating for one part of a commute, particularly for workers who are on traditional afternoon through early morning 2<sup>nd</sup> and 3<sup>rd</sup> work shifts (e.g., 3 p.m. – 11 p.m. and 11 p.m. – 7 a.m.). Most of the fixed-route services operate seven days per week. Workers use the available fixed-route service for either their inbound or outbound trip based on fixed-route availability.

The second portion of the Access to Jobs program is through the SCTAPA Shared Ride program. This program, funded through the PA Lottery, provides curb-to-curb transportation services for persons 60 and over and individuals with disabilities. The Shared Ride program provides inbound or outbound trips for Access to Jobs-approved riders at times when the fixed-route services are not available (usually the outbound trip for traditional 2<sup>nd</sup> shifts and the inbound trip for traditional 3<sup>rd</sup> shifts). The Access to Jobs component of the Shared Ride program is funded under a continuation of the former FTA Section 5316 Job Access and Reverse Commute grant which is now provided through FTA Section 5307 funding to the transit authority.

In order to use the service in the BARTA region, approved customers must meet the following eligibility criteria:

- Need transportation to and from work
- Take BARTA Bus services for one portion of the trip
- Live and travel within a 10-mile radius of the City of Reading
- Travel during times not provided by BARTA’s fixed-route service
- Household income within 150% of the federal poverty level

**Application Requirement**

An application must be completed to determine eligibility. Processing and approval of the application is handled by the SCTAPA and may take up to 21 days. All applicants will receive a letter to inform them of their eligibility.

**Project Leadership and Partner Roles**

The program requires coordination between the bus operations and the shared-ride services operations. Individuals who are approved through the application process are then registered for the Shared Ride program and are able to set up advance reservation and repeat trip service for the one-way trip during the hours not covered by fixed-route bus service.

**Measures of Project Costs and Benefits**

Data provided through the SCTAPA region for calendar years 2015 and 2016 are shown in Figure 7-1. The cost of the shared-ride portion of the trip averages approximately \$20.00 per one-way trip and the annual program costs are approximately \$300,000.00 annually for 15,000 one-way passenger trips. Based on an average of three trips per week per person, the program serves approximately 100 participants.

By pairing the one-way trip using the shared-ride program with either an inbound or outbound trip on fixed-route transit, the cost per roundtrip is significantly less than if the Access to Jobs program used a shared-ride trip for the entire roundtrip. The use of fixed-route transit paired with the Shared Ride program enables a more cost-efficient program by utilizing the fixed-route system capacity without any additional marginal cost.

**Figure 7-1 SCTAPA Access to Jobs Service Statistics**

Productivity Measure	June 2016	June 2015	Jan-June 2016	Calendar Year 2015
Shared-ride Trip Costs	\$12,999	\$15,708	\$154,392	\$294,503
One-way Passenger trips	619	748	7,352	15,001
Shared-ride Subsidy per Passenger	\$21.00	\$21.00	\$21.00	\$19.63
Average Round Trip Cost*	\$10.50	\$10.50	\$10.50	\$9.82

\* Assumes no marginal cost for use of fixed-route system capacity for fixed-route transit portion of Access to Jobs trips

## King County Metro Vanshare Program, Seattle, WA: Vanpool First/Last Mile Access to Transit

### Overview of Strategy

The King County Metro Vanshare is a subset of the Rideshare program which bridges the gap between customers and the bus, light rail, ferry, and commuter train services in the Seattle metropolitan area. The overall King County, WA transit system provides service in an area with a 2015 population of 2.17 million residents and includes light rail and an extensive bus system with a fleet of 1,928 buses. The system serves over 395,000 daily passenger trips.

The program's objective is to provide affordable first/last mile service that will encourage longer distance commuters to take advantage of the existing transit system resources. Vans are kept at the driver's home for first mile trips to a transit station, or at designated parking areas at a transit station for last mile trips being made between a transit station and an employment destination. A minimum of five participants, of which at least two must be willing to be drivers, are required to start a new Vanshare group. The costs of the Vanshare group can be shared by up to 15 participants. Identification of additional backup drivers to replace drivers leaving the group is a challenge but has not been an issue.

Vanshare provides information to enable potential riders to register for an existing Vanshare group or to start a new Vanshare group. Existing groups can be accessed through the King County Rideshare website ([VisitRideshareOnline.com](http://VisitRideshareOnline.com)) or through a Riders Wanted Bulletin on the website. A prospective participant must then complete a Commuter Van Program Application that can be accessed at the Rideshare website.

Vanshare also provides the resources for starting a new Vanshare group by completing a Commuter Van program application and recruiting Vanshare group members through the [VisitRidehareOnline.com](http://VisitRidehareOnline.com) website. This site will identify commuters who live and work in the same area, use transit, and could be potential Vanshare group participants.

### Project Leadership and Partner Roles

Program management is provided under the Rideshare program division of King County Metro.

### Measures of Project Costs and Benefits

The Vanshare program provides commuter vans for a set group fare that is shared among the Vanshare group participants. The fare includes:

- Fuel (for a maximum 20-mile roundtrip daily commute)
- Insurance
- Vehicle maintenance
- 24-hour roadside assistance
- Parking for the van at the commuter station or terminal
- Up to six emergency rides home per year (taxi reimbursement for customer need for travel during times of day when the van is not operating, in case of child care issues, customer illness, etc.)

The Vanshare group splits a monthly fare of \$185.00, which translates into a cost of less than \$2.00 roundtrip per day for the first/last mile portion of a transit commute for a group containing the minimum of five participants.

### Lessons Learned/Keys to Success

A key to the Vanshare program success is that it is based on a well-established vanpool program that includes a capital and operating program with support features, including vehicle maintenance programs, roadside assistance, and an emergency rides home program. The program also has a policy for creating parking for Vanshare vehicles at transit and ferry stations.

## ENHANCED ON DEMAND SERVICE

The On Demand model is a hybrid service that combines elements of advanced reservation/demand response and pickups at fixed locations. The Pace On Demand program (formerly known as Call-n-Ride), operated by Pace in Lake County, has derived some of its elements from the model developed nearly 20 years ago by the RTD in Denver, CO. Some enhancements to the Denver FlexRide (formerly Call N Ride) service are potential models for Pace On Demand service.

### Regional Transportation District (RTD) Denver, CO

#### Overview of Strategy

The RTD in Denver has operated general public demand-responsive transportation (DRT), now branded as FlexRide, since 2000. The FlexRide service model includes a range of services including the use of scheduled checkpoints and flex routes designed to meet the needs of various service areas. The Denver RTD serves a 2015 population of 2.92 million residents across eight counties, has a system bus fleet of 1,023 buses, and provided 101,297,072 passenger trips in 2016. Data on the number of FlexRide passengers was not available.

One service orientation of the Denver FlexRide was the focus on feeder and first/last mile trips in its newer services developed in the southwest region of the RTD service area. Here the development of light rail resulted in much greater use of the FlexRide as a feeder to traditional transit. A larger percentage of these trips was made by spontaneous boardings at scheduled checkpoints rather than advance reservation. Most of the scheduled checkpoints represent locations that provide connections with other forms of traditional bus and light rail transit as well as key commercial and employment centers. This may have application to the Lake County Pace On Demand services, which also provide connections to Metra stations and hubs for Pace fixed-route bus services.

#### Project Leadership and Partner Roles

One of the strong partnerships established under the RTD lead was the participation of the Via Mobility Services, a nonprofit transportation provider serving Boulder, CO. Given the lower hourly operating cost for the Via service, the FlexRide services in Boulder and Longmont, CO are operated by Via under the FlexRide program.

#### Measure of Project Costs and Benefits

One of the drivers of both service efficiency and quality of service to the customer is the use of spontaneous customer boarding without advance reservation. Across all of the RTD FlexRide service areas, 56% of all trips were spontaneous. As shown in Figure 7-2, the subsidy per passenger trip for the RTD ADA service was nearly four times as high as the FlexRide service average. The use of FlexRide was found to be a convenient alternative for ADA customers traveling within a FlexRide service boundary.

**Lessons Learned/Keys to Success**

One noteworthy finding from the Denver FlexRide program was their experience with a FlexRide (Highland Ranch) service that was slated for discontinuance due to poor productivity as measured in passenger trips per revenue hour. As shown in Figure 7-2, while the service productivity was considerably less than the FlexRide system average, it was much higher than the ADA (Access-a-Ride) service; a special study determined it would have cost more to provide rides for ADA customers using the ADA service than would have been saved by discontinuing the FlexRide service. Based on this analysis, the Highland Ranch FlexRide service was continued.

**Figure 7-2 Comparison of RTD Denver FlexRide Service Costs with ADA Paratransit**

Service	Boardings per Hour	Subsidy per Passenger
FlexRide Highland Ranch proposed for discontinuance	2.7	\$19.30
FlexRide system average	4.9	\$9.23
Access-A-Ride ADA service	1.4	\$36.61

## FLEXIBLE/DEVIATED FIXED ROUTE TRANSIT SERVICES

Suburban areas face the twin challenges of increasing demand among transit-dependent individuals for mobility and the inherent lower density nature of the service area. This is particularly challenging for suburban transit systems like Pace that are faced with trying to serve low productivity areas with fixed-route service. Flexible services, which follow fixed schedules for serving specified stops (sometimes along a fixed route) but will deviate to pick passengers up at their home upon request, offer coverage for low-density areas that is less costly than fixed-route and more productive than demand-response service.

Flexible service can also reduce the demand for ADA paratransit service by providing an alternative that eligible ADA passengers may find more convenient to use. According to Federal Transit Administration (FTA) guidance, flexible routes may also eliminate the need for separate ADA paratransit service. If deviations are available only to people with disabilities, deviations must meet the service requirements of ADA paratransit pertaining to service areas, days and hours of service, advance notices, fares, etc. If deviations are open to all riders, the service is considered demand-response service for the general public and ADA paratransit service is not required, but people with disabilities must have equal access to deviations.<sup>1</sup>

In Lake County, flexible services in certain areas would address comments from the public and stakeholders that the distance from bus route to destinations makes fixed-route service challenging to use.

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<sup>1</sup> <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/california-department-transportation-caltrans-sacramento> and <https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/americans-disabilities-act-guidance-pdf>, Section 7.5.4.

## Middlesex County, NJ Route Deviation Service

### Overview of Strategy

The Middlesex County Area Transit (MCAT) service is a county operated service that provides advance reservation and route deviation shuttles that complement the traditional bus and rail services provided by NJ Transit, the statewide transit agency. The county had a 2015 population of 840,900 residents and served 396,461 annual passenger trips in 2015 with a fleet of 90 vehicles. MCAT operates with a 2016 budget of \$5,347,103.00.

In central New Jersey in the early 2000s, MCAT, the community transit operator for the county, and NJ Transit were challenged with the need to provide public transit in growing suburban neighborhoods. As recent immigrant and other transit-dependent populations grew, there was a need for fixed-route bus service that could not be provided in a cost-efficient manner by NJ Transit in this mostly suburban county.

As described in a 2015 Transportation Research Record paper, MCAT developed a system of seven route deviation, fixed-schedule services that were able to serve these lower density areas using lower cost body-on-chassis buses. While many variations of deviated service exist, they generally feature fixed stops or routes, with scheduled times for serving them, plus the flexibility to deviate from those points or routes to respond to requests for pickups or dropoffs at other locations requested in advance by riders. Based on the Swedish service route model developed in the 1980s, MCAT routes were able to link more trips with residential origins and destinations, and to combine ridership from both older people and people with disabilities with the general public to support routes at a lower cost than traditional bus operations. The route deviation element of the service enabled passengers living up to ¼ mile from the defined route to arrange for curb-to-curb pickup and/or dropoff by 3 p.m. on the day prior to service. This enabled individuals who might have otherwise used a more expensive advance reservation service to use the lower cost deviated fixed-route service.

### Measure of Project Costs and Benefits

At an hourly cost of approximately \$50.00 per operating hour in 2012, the MCAT cost was considerably less than the operating cost for NJ Transit intrastate local bus service. During the same period, the first new NJ Transit local bus service in over 20 years was initiated in suburban Middlesex County near Princeton University. The service, which carried over 200 passenger trips per day in its third year, was discontinued after three years in 2015 with per passenger subsidy costs of over \$17.00 per one-way passenger trip. It was estimated that the same service, operated using a body-on chassis bus appropriately sized for the peak loads, would have had a subsidy cost of approximately \$9.00 per one-way passenger trip and could have continued as a marginally performing suburban bus route.

### Lessons Learned/Keys to Success

One of the keys to success is to identify a route design that can serve populations that have not traditionally used fixed-schedule services. A combination of careful design to provide direct service to these populations, together with travel training to develop the confidence to use these services, will encourage some of the additional ridership to support these fixed-schedule services.

Another key is to provide route variations to address the needs of specific populations at different times of the day. Similar to traditional local bus route design, operating a peak period variation that addresses employment needs along with a midday service that addresses other transportation-dependent population needs is important to generating the ridership to support these smaller fixed-schedule bus services.

## TAXI USER-SIDE SUBSIDY PROGRAM

While taxi subsidy programs are used in 13 municipalities and townships in Lake County, the use of a shared-ride taxi as a primary means of meeting the growing demand for service from older persons and individuals with disabilities has not occurred with the exception of the program operated in the Village of Deerfield (the taxi program of the City of Waukegan is also very successful, but does not include a shared ride component). This program is a local model in Lake County that is well established and has elements worthy of consideration for implementation in other Lake County municipalities.

### Village of Deerfield, IL

#### Overview of Strategy

For the past 15 years, the Village of Deerfield, IL has operated a taxi voucher program for persons 65 and over and for people with disabilities. The Village maintains contracts with two local taxi companies, American Taxi and 303 Taxi, who will accept coupons provided by the Village to eligible residents of Deerfield Village under the following conditions:

- Eligible Deerfield residents are those over the age of 65 or those with a documented disability
- Eligible Deerfield residents fill out a registration form provided at Deerfield Village Hall
- Registered participants are provided up to 50 one-way coupons per month valued at \$5.00 per coupon
- For each one-way trip within the Village, the rider provides a coupon plus \$1.00
- For trips outside the Village limits, the rider submits one coupon that reduces the meter fare by \$5.00 and pays the remainder of the metered fare
- Riders sharing a ride with a second rider will only pay \$.50 plus a coupon per rider; three riders on a trip will pay \$.25 per plus a coupon per rider

#### Project Leadership and Partner Roles

The program is managed by a Manager Analyst and assisted by an intern employed by the Village of Deerfield. The manager analyst is responsible for the mailing of coupons to registered participants, review of taxi company billing and submitted program coupons, and approving payment to the taxi vendors.

The two taxi companies are responsible for providing a monthly billing invoice that reflects the number of coupons collected.

The program management staff tracks the monthly coupon reimbursement and the number of one-way passenger trips carried by the coupons collected.

#### Measure of Project Costs and Benefits

Among the taxi programs operating in suburban communities in Lake and Cook counties, the Deerfield program has continually increased its annual budget but has also served the highest number of annual passenger trips through its program when compared to other taxi programs in Lake County. It has also become the primary form of paratransit for the community and has a much lower subsidy cost per passenger than other public forms of paratransit in Lake County.

Figure 7-3 shows the growth in both the budget for subsidizing the program and the number of annual passenger trips served over the past five years.

**Figure 7-3 Village of Deerfield Taxi Subsidy Program Statistics**

Measures	2012	2013	2014	2015	2016
Annual Cost	\$36,200	\$46,780	\$40,455	\$55,080	\$60,345
Annual Passengers	7240	9356	8091	11,016	12,069
Cost per Passenger	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00

It should be noted that the increase in subsidy funding and ridership in 2013 and the ensuing years was attributable to the discontinuance of the Deerfield Park District group ride senior transportation due to budget constraints. It seemed evident to staff that the taxi coupon program provided a means for many of these seniors to reach the destinations formerly served by the Parks program, and provided them with the ability to reach other local destinations.

**Lessons Learned/Keys to Success**

One key to the successful maintenance of this program is the role of the Manager Analyst in tracking the level of monthly trip demand and ensuring communication with the Village governing body. One example of this has been the recent growth of the program which, in 2015 and 2016, slightly exceeded the program budget. In 2016, the Manager Analyst identified a growth in trip demand to O’Hare airport and a decision was made to eliminate these longer distance discretionary vacation travel trips as an eligible destination outside the village. This has helped the program stay within its annual budget.

Another key element of success is the simplicity of the program. The use of a single coupon to subsidize the trips both within and outside the village has simplified the taxi billing and reimbursement process while providing a simple process for registered riders to identify from the taxi company what their estimated out of pocket costs would be for a given trip.

Finally, the low rider co-pays have enabled people with disabilities to be able to afford to use the service for work and attending support services that may require daily round trips for individuals with limited income.

## USE OF TRANSPORTATION NETWORK COMPANIES (TNCs)

The services offered by TNC providers such as Uber and Lyft (also known as ride-hailing or ride sourcing services) typically have the following characteristics:

- Customers place real-time trip requests, usually through a smartphone app
- Payment is by credit card through the same app
- Fares may change throughout the day in response to supply and demand
- Shared-ride fares may be available
- Drivers operate their own vehicles
- Accessible vehicles may be limited or not available

Initially launched in higher density urban areas, the recent growth of TNC services in suburban areas like Lake County has provided a new mobility resource that can supplement or complement existing transit and paratransit services. Transit providers are partnering with TNCs (and other kinds of shared-use mobility providers) to provide the following types of on-demand services:

- First/last mile connections to transit stops and stations
- Mobility options for off-peak times or low density areas that can be more cost effective than traditional fixed-route or paratransit services
- Supplemental ADA paratransit services, for hard-to-serve trips during periods of low or very high demand, in low density areas, or to distant destinations
- Alternatives for ADA customers, to reduce demand for more costly ADA paratransit trips
- Discounted services for specific user groups, such as older adults or people with disabilities

Typical goals of transit agencies or municipalities that partner with TNC providers include reducing the cost of providing service and/or offering a more flexible, spontaneous service for customers.

Implementation issues—that can be addressed through careful design of pilot programs and services—include:

- Federal regulations for nondiscrimination (Title VI) and equivalent service for people with disabilities (ADA) apply to transit/TNC partnerships
  - Availability of vehicles that are accessible to people with disabilities, including those who use wheelchairs, and trip booking and payment options for people without smartphones and/or bank accounts or credit cards need to be considered
  - Federal requirements aside, these are important customer service issues
- The dynamic pricing that may be a feature of TNC service can affect the fares paid by customers and the subsidies contributed by the transit agency or municipality

Many examples of transit/TNC partnerships that have been implemented involve the provision of first/last mile connections. There are some examples of the use of TNC services to provide supplemental or alternative options for general paratransit trips currently ongoing.

Examples of several types of service are described below. Summary information is provided in Figure 7-4.

## San Joaquin RTD, Stockton, CA: TNC First/Last Mile Service

More recently, transit agencies have recognized that TNC services can be a complement to transit and are subsidizing those services where they can improve the utilization of existing transit by offering first/last mile connections. This is particularly true for transit hubs where the cost of services to/from transit stations can be subsidized at a reasonable cost for customers using traditional transit for the majority of their trip.

### Overview of Strategy

The San Joaquin Regional Transit District (SJRTD) is public transit authority that has been recognized for its innovative contract services over the past decade. SJRTD has implemented a contract for first/last mile service with Uber to further promote the use of their fixed-route bus services as follows:

- The pilot program, implemented in July 2017 and branded as RTD GO!, had a one-year term and provides a subsidy of up to 50% and a fare (up to \$5.00) for trips originating or destined for 8-10 designated transit centers in the SJRTD fixed-route service area. Uber creates a promotion code (Promo Code) which identifies trips and their cost for monthly billing by Uber to SJRTD.
- The Promo code is made available by Uber to its users until SJRTD gives Uber notice to disable the code.
- A budget of \$50,000 is available to subsidize the eligible trips billed under the Promo Code.

RTD GO! not only provides first/last mile connections to encourage use of the bus system, but also makes service available to residents of San Joaquin County who are not close enough to the fixed route system to use it. County residents are not restricted to trips to/from transit centers, but may use Uber to travel between cities. As a result, RTD GO! expands the SJRTD service area cost effectively. RTD GO! also makes trips available between the hours of 6 a.m. and 10 p.m., Monday through Friday, earlier and later than hours during which the bus system operates.

SJRTD noted that the initial pilot uses local transit funding, which exempts the program from FTA drug and alcohol testing requirements. In addition, the use of a contracted taxi Non-Emergency Medical Transportation (NEMT) provider for the provision of accessible service allowed the ADA and Title VI issues to be addressed without the involvement of the contracted TNC company.

### Project Leadership and Partner Roles

The SJRTD Mobility Manager is responsible for leading the development of the program with the local Uber General Manager, and served as liaison with the attorneys for both organizations.

### Measure of Project Costs and Benefits

While there is no available data on the performance of the service, which began taking trips under the Promo Code in July 2017, trips are being taken and billing began in August 2017.

### Lessons Learned/Keys to Success

The negotiation process took less than four months from initiation to contract execution on June 30, 2017 and SJRTD described the process as very pleasant. They credited the smooth process to “keeping it simple” and the decision to implement a single 50% subsidy program.

SJRTD noted that they did have some union opposition but felt that since this is not fixed-route service, does not use SJRTD vehicles, and helps to increase ridership on the fixed-route bus system has reduced this opposition.

SJRTD also noted that existing taxi and other contract services like the Hopper also mitigated that opposition.

## TNC Provision of Paratransit Service

Several model programs that utilize TNCs in more general paratransit service are described below.

### Massachusetts Bay Transportation Authority (MBTA) On-Demand Paratransit Pilot Program

#### Overview of Strategy

The MBTA began a pilot program in October 2017 which ran through the end of 2017, to offer on-demand trips to customers of its ADA paratransit service, The RIDE. The goal of the pilot is to lower the cost of providing RIDE service by offering an alternative that would be both attractive to RIDE customers and more cost effective for the MBTA.

The program was initially available to 400 customers, but was expanded to include all RIDE users in March 2017; an additional 385 customers joined the program at that time. By June 2017, approximately 1,000 individuals were participating in the pilot. Monthly trips are limited based on the customer's use of The RIDE.

Service is available from 5 a.m. to 1 a.m. daily, throughout The RIDE's service area (excluding trips to and from Logan Airport).

#### Project Leadership and Partner Roles

The MBTA's partners in the on-demand pilot include Uber and Lyft.

Both companies accept trip requests via their smartphone apps; Lyft also offers a telephone booking option. Uber made a limited number of smartphones available to customers for the period of the pilot program, for booking trips only. The response time for trips is 5-30 minutes.

Both companies make accessible vehicles available to customers who need them. Lyft leases accessible vehicles from a paratransit provider; Uber's UberWAV service utilizes accessible taxis. ADA-level assistance is not available from Uber or Lyft drivers.

Customers register with either Uber or Lyft. In order to use the service during the pilot, customers must have a payment method on file with The RIDE. Fare payment is through all of the methods accepted by Uber and Lyft, including credit cards, debit cards, pre-paid debit cards, Apple Pay, and PayPal.

Originally, trip fares were split as follows: customers paid the first \$2, the MBTA subsidized up to \$13, and customers were responsible for any fare beyond \$15. Now, UberPOOL customers pay the first \$1, the MBTA subsidizes up to \$41, and customers pay any remaining fare. Users of all other Uber services and Lyft services pay the first \$2, the MBTA subsidizes up to \$42, and customers pay any additional fare.

#### Measure of Project Costs and Benefits

Between October 2016 and February 2017, 10,000 rides were provided (ridership reached about 13,000 trips by mid-March). Traditional RIDE trips decreased by 18% while traditional trips plus pilot trips increased by 28%. By February, before the MBTA's subsidy amounts were increased, the average customer fare for an Uber or Lyft trip was \$4.38, as compared to an average fare of \$5.25 for a same-day RIDE trip (provided by the MBTA as "premium" service for ADA customers). The average MBTA subsidy for pilot trips was \$9, as compared to \$31 for a traditional RIDE trip. Total RIDE costs for the MBTA declined over that period by 6%.

Using the TNC option was estimated to have saved RIDE customers an average of 34 minutes per trip.

### **Lessons Learned/Keys to Success**

Noteworthy lessons from the pilot program to date include:

- The availability of on-demand trips resulted in lower total ADA paratransit costs for the MBTA, factoring in the subsidies paid for the non-ADA on-demand trips.
- The pilot has been favorably viewed by RIDE customers, who value the ability to make spontaneous trips, pay a lower fare, and save travel time.
- Only about 1% of trips taken during the pilot have been on accessible vehicles. Lyft had contracted for a minimum number of vehicle hours with its paratransit provider partner, so was seeking a more cost-effective way of acquiring accessible vehicles.

## Pinellas Suncoast Transit Authority (PSTA) TD Late Shift Pilot

### Overview of Strategy

PSTA has experimented with several different TNC partnerships and was awarded a Mobility On Demand (MOD) Sandbox grant from FTA in 2016. The aim of the MOD project is to develop dispatching technology that would combine TNC, taxi, and wheelchair van options for its ADA and dial-a-ride customers, and integrate fare payment for on-demand options into its existing fare payment mechanisms. The TD Late Shift Pilot is one of those efforts, aimed at transportation-disadvantaged individuals (TD).

The TD Late Shift Pilot ran from August 2016 through August 2017.

Individuals who were unemployed or earned less than or equal to 150% of the federal poverty limit and had no other transportation options were eligible for the pilot program. Individuals were also required to be registered TD customers who used PSTA bus service for most trips, and to purchase a monthly TD pass (passes with a \$70 value are sold to TD customers for \$11) in order to use TD Late Shift service. During the pilot program, participants received up to 23 free rides per month from Uber, United Taxi, or a provider of wheelchair-accessible service, from their homes and workplaces between 9 p.m. and 6 a.m. daily, when PSTA bus service is not available. Each participant was also eligible for one urgent daytime trip per month for a fare of \$3.

TD Late Shift service is now one of the TD programs offered by PSTA. The maximum number of free rides has been increased to 25 per month. Hours have changed slightly; trips must be taken between 10 p.m. and 6 a.m.

New Uber Central service, which enables a business or sponsor organization to book and pay for rides on behalf of customers, will offer booking and fare payment options for users without smartphones or credit cards.

### Project Leadership and Partner Roles

PSTA's partners in the TD Late Shift Pilot included Florida's Commission for the Transportation Disadvantaged (CTD), Uber, United Taxi, and a local provider of wheelchair-accessible service. PSTA registered customers and administered the program, including monitoring, and billing. For work trips, PSTA subsidizes the entire fare; for the daytime urgent trips, the agency subsidizes fares after the first \$3. The providers handled trip booking, provision of service, and billing to PSTA.

### Measure of Project Costs and Benefits

The pilot program was originally funded with a \$300,000 grant from the CTD, matched with \$30,000 in local funds.

Benefits to TD Late Shift users included elimination of transportation as a barrier to work, ability to take 2<sup>nd</sup> or 3<sup>rd</sup> shift jobs, and the convenience of TNC service—quick response time, real-time vehicle location information, and safer trips home or to work late at night.

### Lessons Learned/Keys to Success

PSTA built the TD Late Shift Pilot on its successful "Direct Connect" service, which made subsidized Uber, Lyft, and taxi trips available to eligible users to and from bus stops as a way to address under-performing bus routes. Experience with the TD Late Shift service showed PSTA that the performance of one program—such as demand and trip costs—cannot be assumed for another program that serves a different user group, geographic area, or time of day. TD Late Shift service, which focused on individuals who had no other transportation options, were traveling during times when bus service was not available, and were able to travel anywhere in Pinellas County, resulted in higher costs than the more restricted Direct Connect service.

## Ride KC Freedom On-Demand

### Overview of Strategy

Kansas City Area Transportation Authority (KCATA) has partnered with Transdev (operator of KCATA's fixed-route and paratransit services) to provide RideKC Freedom On-Demand, a one-year pilot program that began in April 2017.

RideKC Freedom is the name of KCATA's paratransit services, which include ADA paratransit service and demand-response service for other individuals with disabilities and, in parts of the service area, older adults.

RideKC Freedom on-demand provides on-demand service similar to that available from companies such as Uber and Lyft. Service is available in two distinct zones.

Trips are provided by three contracted service providers: zCar, Yellow Cab, and 10/10 Taxi (which operated accessible vehicles). All vehicles are branded with the RideKC Freedom markings.

All RideKC Freedom customers are eligible to use the on-demand service. (The general public may also use the service, but pays the entire trip fare.) Each individual may take up to four trips per day, and take up to three guests along on the trip.

Riders reserve trips through Transdev's mobile app or by phoning the RideKC call center. Fares may be paid with cash or by credit or debit card, with or without using the app.

ADA riders pay \$3 for the first eight miles of a trip, and \$2 per each additional mile. Older adults pay \$5 for the first eight miles and \$2 per mile thereafter. General public riders pay \$10 for the first five miles and \$2 per additional mile. KCATA subsidizes the difference between the general public fare and ADA fare for ADA and older adult riders.



### Project Leadership and Partner Roles

KCATA's partners include Transdev and the three contracted service providers.

### Measure of Project Costs and Benefits

Since this pilot program is relatively new, no information is available yet about outcomes.

**Figure 7-4 Transit/TNC Partnerships: Program Information**

<b>Characteristic</b>	<b>SJRTD First/Last Mile Service, RTD GO!</b>	<b>MBTA On-Demand Paratransit Pilot</b>	<b>PSTA TD Late Shift Pilot</b>	<b>RideKC Freedom On-Demand Pilot</b>
<b>Location</b>	San Joaquin County, CA	Boston, MA metropolitan area	Pinellas County, FL	Kansas City, KS area
<b>Population</b>	733,709	3,109,308	960,730	Two specific zones
<b>Purpose or Goal</b>	Expand reach of fixed-route system economically Encourage use of fixed-route system by providing first/last mile connections	Alternative service for ADA customers Reduction in total cost of providing ADA service	Transportation to jobs when bus service is not in operation for eligible users	More flexible, spontaneous mobility option for paratransit customers
<b>Partners</b>	SJRTD, Uber	MBTA, Uber, Lyft	PSTA, FL Commission for the Transportation Disadvantaged, Uber, United Taxi, wheelchair service provider	KCATA, Transdev, Yellow Cab, 10/10 Taxi, zCar
<b>Initiation Date and Duration</b>	July 2017 One year	October 2017-December 2017	August 2016-August 2017	April 2017-April 2018
<b>Description</b>	County residents eligible for subsidized Uber trips from city to city SJRTD service area residents eligible for subsidized Uber trips to 8-10 transit stations Service hours: M-F, 6 am – 10 pm	Users of the RIDE ADA service eligible for subsidized Uber, Lyft trips anywhere in RIDE service area Service hours: M-Sun, 5 am – 1 am	TD customers meeting income requirements receive up to 23 (now 25) free Uber rides per month between home and work Service hours: Daily, 9 pm – 6 am (now 10 pm – 6 am)	RideKC Freedom customers eligible for subsidized on-demand trips
<b>Options Available</b>	None reported	Telephone booking Accessible vehicles	Booking and fare payment through Uber Central (no smartphone or credit card required) Accessible vehicles	Telephone booking Fare payment by cash, credit or debit onboard (smartphone for app access not necessary) Accessible vehicles

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Characteristic	SJRTD First/Last Mile Service, RTD GO!	MBTA On-Demand Paratransit Pilot	PSTA TD Late Shift Pilot	RideKC Freedom On-Demand Pilot
<b>Fare/Subsidy</b>	SJRTD pays up to 50% and \$5 of Uber fare	Initially: customer pays first \$2, MBTA pays next \$13, customer pays rest of fare UberPool customers pay first \$1, and any fare over \$41, MBTA pays rest Now: customer pays first \$2 and any fare over \$42, MBTA pays rest	Fare subsidized entirely by PSTA	ADA users pay \$3 for first 8 miles, \$2 per additional mile Older adults pay \$5 for first 8 miles, \$2 per additional mile KCATA pays rest of fare for ADA, older adult trips General public pays \$10 for first 5 miles, \$2 per additional mile
<b>Funding Sources</b>	\$50,000 from SJRTD budget Local transit funds	MBTA budget; no federal funds Roughly \$117,000 Oct. 2016-March 2017	\$300,000 grant from FL CTD \$30,000 local match	
<b>Outcomes</b>	Not yet available	Originally open to 400 riders; opened to all RIDE customers and 385 additional riders joined 13,000 rides by March 2017 Average fare: \$4.38 Average subsidy: \$9 6% decrease in total RIDE costs	Increased access to 2 <sup>nd</sup> and 3 <sup>rd</sup> shift jobs Real-time vehicle information for users Improved safety late at night	Not yet available

## CENTRALIZED TRANSPORTATION INFORMATION

As evidenced in the preceding chapter, there are many transportation services currently in operation in Lake County, with different service areas, days and hours of service, policies regarding eligible riders and trips, demand-response trip reservation procedures, fares, and other characteristics. Anyone wishing to identify the best provider for a particular trip must first be aware of all the options and then know where to find information about each one. Members of the public and stakeholders made repeated comments about the difficulty of finding and interpreting information about available transportation services.

Much information about fixed-route and paratransit service in Lake County is available online and by phone from Pace. Online trip planning assistance is available through the RTA. Consolidation of information about paratransit services available in Lake County on the Lake County DOT website is a helpful local complement to these regional services. Further consolidation of transportation information and addition of other assistance to Lake County residents attempting to find the best options for their trips would address community comments and encourage use of existing services.

There are a number of different approaches to providing transportation information from a centralized source, which vary in levels of technical complexity and cost. Printed directories are a cost-effective option and valuable for potential customers who do not have internet access or computer skills, but they are difficult to update in a timely way. Online directories are a common upgrade; see the Pima Find-A-Ride example below.

Increasingly, a county or region will utilize a central, single point of contact (a website and/or call center, often called a “one-call/one-click” resource) that offers more than information about available services. One-call/one-click systems can vary considerably in the degree of trip planning and booking assistance they provide for customers, and in their use of technology to support those functions. Consequently, development and implementation costs can vary quite a bit as well.

Moving from simple to complex, one-call/one-click systems may consist of:

- A centralized list of transportation services, conveyed over the phone or on a website
- An online directory that transportation providers can update directly
- Opportunities for the user to narrow transportation options based on selected criteria
  - By speaking with a person
  - Through online prompts (Pima Find-A-Ride, highlighted below, is at this level)
- Trip planning assistance
  - With the help of a person or an online system
- Trip booking assistance
  - From a person or via a transferred call to the transportation provider
- Direct trip booking
  - Via web-based scheduling or portals to participating providers’ reservations systems
  - With more or less integration of different providers’ schedules

Connections with existing 211 or 511 systems or Aging and Disability Resource Centers (ADRCs), and mobile applications that enable users to access information or book trips from their smartphones or interactive kiosks are also possible.

One-call/one-click systems may include only specialized services, such as ADA paratransit and services available for older adults, people with disabilities, veterans, or other groups with particular mobility challenges, or they may also include information about general public fixed-route and paratransit services, ride-matching programs, taxis and other private transportation services, volunteer driver programs, voucher/subsidy programs, vehicle sharing programs, and real-time services available through transportation network companies (TNCs) such as Uber and Lyft.

### Partners and Roles

Partners in a one-call/one-click system typically include some combination of the area’s regional public transportation provider, metropolitan or regional planning organization, United Way (which often operates 211 service) or Aging and Disability Resource Center, and human service agencies. Statewide efforts may involve a state DOT as a major partner.

### Costs and Benefits

The primary benefits of one-call/one-click systems are improved customer service through simplified access to information about transportation services and increased ridership due to better promotion of transportation services.

Simple one-call/one-click directories may be constructed using Word, Excel, or Access and either printed or hosted on a website. More complex systems are typically either 1) phone-based and staffed by mobility specialists to provide assistance to users, or 2) software products that are custom-built based on paratransit reservations and scheduling packages. At least one open source software product that may be used free of charge to develop new one-call/one-click systems and tailored to meet local needs is currently available, and was used for several of the systems created with Veterans Transportation and Community Living Initiative (VTCLI) grants from the Federal Transit Administration (FTA).

Based on the experiences of VTCLI grantees and recipients of grants from the prior federal Mobility Services for All Americans (MSAA) initiative, which funded the development of eight Transportation Management Coordination Centers (TMCCs), the planning, design, and development of a sophisticated one-call/one-click system may take several years, and costs may range from several hundred thousand to a million or more dollars.

Several examples illustrating the range of possibilities are described below.

**Pima Association of Governments (PAG)** is the regional planning and policy agency for the metropolitan Tucson area. Pima Find-A-Ride (<https://www.pagregion.com/tabid/1266/default.aspx>) is an online listing of agencies that provide public and human service transportation in the PAG region. Users can click on check boxes for area of service, modes of transportation, and eligibility to narrow the search of transportation information resources. For example: if a user checks “Tucson Urban Area,” and “ADA Certification” the inventory will show the two providers that offer ADA paratransit service. Clicking on a provider’s name opens a window that includes days and hours of service, fare information, and phone number.

Provider Name	Area of Service	Modes of Transportation	ADA Certification
Sun Shuttle	Tucson Urban Area	Van	Yes
Sun Van	Tucson Urban Area	Van	Yes

**DISCLAIMER:** While every effort has been made to ensure the accuracy of the information, the Pima Association of Governments (PAG) makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof. Inspection of the actual information in the directory does not constitute an endorsement by PAG.

To request an update to the provider information, include additional information, or to add an agency to the inventory, please contact us at [info@pagregion.com](mailto:info@pagregion.com).

This list is best view in Google Chrome, Firefox, or Internet Explorer 10.0.

## FindMyRidePA

[www.findmyridepa.com](http://www.findmyridepa.com)

### Overview of Strategy

FindMyRidePA is a service from the Commonwealth of Pennsylvania that offers trip planning and matching for customers looking for a ride, and is designed to help anyone identify and evaluate transportation options to meet their travel needs.

FindMyRidePA was implemented initially in central PA, and is now available in seven counties with the service to be expanded to five more counties in the near future.

FindMyRidePA grew out of an initiative to make transportation options more readily available to veterans and military families, but now serves anyone who needs transportation in the counties served. At present, only public transportation services are included; future enhancements include the addition of information about private and nonprofit services.

In addition to identifying services that match customer needs, FindMyRidePA helps with trip planning and, if the most suitable transportation service happens to be the county-based coordinated system, it can help with booking a trip. Customers enter their trip requirements and are presented with trip options and cost estimates for those trips. There is also a feature for those with specialized transportation needs in which seniors, people with disabilities, and low-income individuals can take shared-ride services, which are provided free of charge or at highly discounted rates.

FindMyRidePA offers some of the highest functionality of a one-call /one-click system by providing an automated digital system with a website as well as a smartphone app. Trips can be designed for fixed-route bus systems, and even booked using shared-ride services. Further, for customers who cannot access the digital system, a personalized phone service is also available to schedule trips.

### Project Leadership and Partner Roles

Spearheaded by the Pennsylvania Department of Transportation and the Central Pennsylvania Transportation Authority, the transit authority serving central Pennsylvania and operating as rabbittransit, FindMyRidePA was developed with funds from PennDOT and the Pennsylvania Department of Military and Veterans Affairs and a \$2 million VTCLI grant from the FTA.

### Transportation Link-Line: Schuylers County, NY

Transportation Link-Line is a free information and assistance service that connects people in Schuylers County and neighboring communities with transportation options. In

the mid-high segment of the functionality spectrum, Transportation Link-Line also provides public outreach, transit

orientation, and responds to public inquiries regarding transportation options. Call-takers at Link-Line help connect callers with specific services and assist with trip booking as needed. Link-Line includes scheduling and routing software, a central repository of information, and a multimedia marketing and outreach campaign to educate the public.



### Measures of Project Costs and Benefits

FindMyRidePA was built on a software platform (1-Click/CS, developed by Cambridge Systematics) that has also been used for several other large one-call/one-click systems. The software enables tracking of usage statistics to assist with project evaluation. Figure 7-5 shows statistics tracked for FindMyRidePa from its implementation in 2014 through July 2015.

In addition to the initial \$2 million federal VTCLI grant from FTA and matching funds from PennDOT (likely about \$400,000), rabbitransit received an additional grant from FTA’s Rides to Wellness initiative of \$1.2 million, matched with \$510,000 from PennDOT, to develop software that would link appointments made at two large community health centers with the FindMyRidePA’s ride scheduling feature.

The developer of the open source software used by many one-call/one-click systems, including FindMyRidePA, provided typical development and operating cost estimates.

The purchase price for an off-the-shelf package can range from \$50,000 to \$125,000, depending on several factors: which agency will host the system, how many agencies are involved in the project, and how much time and effort are needed to clean the data that will be stored in the system. Off-the-shelf systems can include most any mode of transportation—fixed-route transit, paratransit, human service transportation, taxis, TNC services, volunteer rides, walking/biking, driving, and more. Enabling trips to be booked on TNC services can also be an off-the-shelf feature.

**Figure 7-5 FindMyRidePA Characteristics and Usage Statistics, 2014-2015**

Statistic	Number
Agencies	3
Providers	6
Services	8
Total Users (generating at least one trip)	799
Registered Users	187
Logins by Registered Users	770
Trips	1,710
Desktop	1,093
Tablet	41
Phone	117
Kiosk	295
Itineraries	10,003
Bike	---
Carpool	---
Drive	---
Paratransit	3,885
Transit	6,148
Selected Itineraries	
Bike	---
Carpool	---
Drive	---
Paratransit	831
Transit	490
Bookings	315

Source: NCHRP Report 832, State DOTs Connecting Users and Rides for Specialized Transportation; Volume 1: Research Report; Transportation Research Board, 2016

Advanced features or enhancements—and their typical price tags—include the following:

- Integration with paratransit scheduling software for trip booking: \$25,000 to \$150,000; interface with some paratransit scheduling systems is less expensive than with others
- Integration with 211 systems: \$25,000 to \$150,000
- Integration with medical scheduling software to coordinate medical appointments with trip reservations: currently being developed for a current customer and will be available to others at a price to be determined
- Custom user interface for a specific look and feel: price varies; FindMyRidePA features a custom-designed interface

Ongoing hosting, maintenance, and support charges typically range from \$10,000 to \$36,000 annually.

## COUNTYWIDE PARATRANSIT SYSTEM

Many paratransit services operate in Lake County, supported by groups of partners (such as Pace, townships and municipalities, and Lake County) or single townships or municipalities. Some services are open to the public while others are limited to older adults or people with disabilities. Township and municipal services typically operate relatively limited days and hours of service. Residents of many communities have more than one service available to them, while residents of other communities have no transportation options. Operation of the majority of these services by Pace improves their efficiency, but efforts to manage and administer these multiple services are duplicated among partners. A rough estimate of the cost of all paratransit service in the county is \$3.4 million per year.

Consolidation and expansion of existing services into a countywide paratransit system would address the current gaps in service, reduce duplication of efforts to manage and administer services, and perhaps generate cost savings that could be invested in service to currently unserved areas.

Four of the collar counties have implemented coordinated paratransit systems that offer useful examples for Lake County. Characteristics of the four systems, which are at different stages of development, from relatively recent implementation to more than 10 years of operation, are summarized in Figure 7-6. More detailed descriptions of each system are provided below, as well as an example of a municipal and township coordinated system, the Barrington Area Dial-A-Ride.

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**Figure 7-6 Characteristics of Collar County Coordinated Paratransit Systems**

		Structure			Service Characteristics						2016 Service		
System Name	Start Date	Administrative Agency	Partners/Sponsor Organizations	Service Provider(s)	Eligible Riders	Eligible Trips	Service Area	Service Area Population	Days/Hours	Fare	Annual Trips	Annual Total Cost	Cost/Trip
Ride DuPage	2004	DuPage County Community Services	21 county, municipal, and nonprofit programs under Ride DuPage umbrella; some programs have multiple sponsors	First Transit and taxi companies, under contract to Pace	Varies by program, but generally older adults, people with disabilities, or people with incomes 125-200% of poverty level	Varies by program—trips to work, medical appointments, county offices, VA hospitals, special events	DuPage County; occasional long-distance trips	916,924	24/7	\$1.50 first 6 miles, \$1.50 each additional mile	103,438 (2015)	\$2,476,652 (2015)	\$23.94
Ride in Kane	2008	Association for Individual Development (AID)	Kane County Division of Transportation, 12 municipalities and three nonprofit organizations	Three bus and five taxi providers under contract to Pace	Older adults, people with disabilities, and in some communities, people with lower incomes	Varies, some include commute to work	Kane County	531,715	24/7	\$4/trip up to 10 miles and \$1.50/additional mile	89,169 1,524 individuals	\$2,659,157	\$29.82
MCRide	2012	McHenry County Division of Transportation	McHenry County Division of Transportation, 19 participating townships and municipalities	First Transit and taxi providers, under contract to Pace	General public in participating cities and townships, seniors and persons with disabilities in townships	No restrictions	Various communities in McHenry County, one community extending into Kane County, one community extending into Lake County, and 13 point destinations	307,004	M-F/6:00 AM - 7:00 PM, Sat/Sun 9:00 AM - 5:00 PM	\$3.00 first 5 miles general public/\$1.50 first 5 miles seniors and persons with disabilities & \$.25 for each additional mile	101,384 trips 2,618 individuals	\$1,866,000	\$18.40
Will-Ride	2010	Will County Paratransit Coordination Council (PCC) through County Executive's Office	6 townships	MV Transportation under contract to Pace	Seniors, residents with a disability, those in need of transportation to work	Up to sponsor organizations	7 townships including 10-mile radius around borders in Will County	689,529	M-F/8:00 AM - 5:00 PM	\$2 for any ride within the township of origin/\$4 for ride with destination outside township of origin	7,425 trips 373 individuals	\$308,374	\$41.53

## DuPage County's Ride DuPage

### Comparison to Lake County

In 2016, DuPage County's estimated population was 916,924. With an area of 334 square miles, the county's density is 2,782 people per square mile, making it the densest collar county by far and much denser than Lake County. With an estimated 2016 population of 703,047, and an area of 448 square miles, Lake County's density is 1,570 people per square mile.

DuPage County also receives the highest level of public transportation service in the collar counties, including:

- Four Metra commuter rail lines
- Over 70 Pace fixed bus routes
- Pace ADA paratransit service
- Pace vanpools
- Pace Dial-A-Ride service in four communities
- Ride DuPage
- A taxi subsidy program sponsored by a number of townships, municipalities, and DuPage County Public Health, and administered by DuPage County (Pilot II subsidized taxi service)
- Individual municipal taxi subsidy programs
- Individual municipal paratransit services

### Overview of Strategy

Ride DuPage has been in operation since 2004, coordinating human service transportation services for a number of sponsor organizations in DuPage County. DuPage County Community Services has been the lead agency for Ride DuPage since the formation of the system.

While service availability varies by sponsor and customer type, 24/7 services are generally provided for older adults, people with disabilities, and people with lower incomes. Eligible trip types are specified by sponsors and may include medical, employment/training, special event, or general purpose trips. A number of Ride DuPage sponsors subsidize work trips. Most Ride DuPage trips remain within the county, but some sponsors allow long-distance trips. Fares are also established by each sponsor organization for its customers.

### Project Leadership and Partner Roles

As noted above, the DuPage County Department of Community Services is the lead agency for the system.

Sponsor organizations—including DuPage County departments, municipalities within the county, and human service agencies—subsidize 21 transportation services/programs under the Ride DuPage umbrella. Sponsor organizations include:

- DuPage County Department of Community Services and Adult Daycare, Workforce Development, Health Department, Senior Services, and Veterans Assistance Commission
- City of Naperville, Lisle Township, Wheatland Township
- Milton Township, Village of Glen Ellyn, City of Wheaton
- Ray Graham Association
- Parents Alliance Employment Project
- Supported Employment Association
- West DuPage Special Recreation Association

Sponsors are responsible for registering customers (according to their own eligibility requirements), handling some complaints, and processing monthly invoices from Pace for the cost of service.

Service is operated by First Transit and several taxi companies, under contract to Pace. First Transit's responsibilities include operation of a call center to handle trip requests and coordinate vehicle schedules.

The DuPage County Paratransit Coordinating Council (PCC), disbanded in 2015, helped to attract new sponsor organizations and provided a forum in which sponsors, stakeholders, municipal dial-a-ride providers, and consumers could discuss service, policy, and administrative issues. The PCC has been replaced by bi-monthly or quarterly meetings of sponsor organizations.

### **Measures of Project Costs and Benefits**

In 2015, 103,438 one-way passenger trips were provided through Ride DuPage programs at a total cost of \$2,476,652, or \$23.94 per trip. Funding sources included Section 5310 funding for operating assistance matched by DuPage County general funds, municipal general funds, and Pace subsidies to specific communities (referred to as "legacy systems") and supplemented with fare revenues. Section 5310 funds are granted by RTA to several different sponsor organizations (DuPage County and the City of Naperville, for example). Prior to 2014, the FTA Section 5316 (Job Access and Reverse Commute, JARC) and 5317 (New Freedom) programs also supported Ride DuPage programs.

In the initial days of Ride DuPage, sponsors used to providing a set amount of subsidy for a constant number of dial-a-ride buses per day were faced with uncertainties regarding demand, and therefore cost, of service under the new coordinated model. Sponsors, particularly new sponsor organizations, are now able to plan more confidently for the needs of customers based on their own experience or that of DuPage County.

### **Lessons Learned/Keys to Success**

The director of the Department of Community Services identified a number of factors that have contributed to the success of Ride DuPage:

The economic strength and political interest of DuPage County was instrumental in the establishment and ongoing success of Ride DuPage. The county, through the Department of Community Services, served as a champion for creating and supporting Ride DuPage and has remained not only the lead agency for the system but also the largest single local funder.

Municipalities that prioritize transportation services for residents and continue to fund them are the core of the system. Local leadership values transportation services for residents and actively supports them.

A clear and equitable method for allocating costs among the sponsors of coordinated services, or municipalities that may be involved in a local sponsorship consortium, is very important for attracting and maintaining partnerships.

Nonprofit organizations have very limited sources of funding to use as local match.

Pace's cost allocation procedure, which includes a flat fee to cover use of the call center and a passenger mileage-based component, evens out differences in needs and resources across sponsors (e.g., need for accessible vehicles, or availability of local taxi services).

Municipal sponsors find it very difficult to reduce or eliminate transportation services that are established and valued by customers if sufficient funding is not available.

Municipal sponsors must persuade local boards annually to continue funding the services.

## Kane County's Ride in Kane

### Comparison to Lake County

The estimated population of Kane County in 2016 was 531,715. With an area of 521 square miles, Kane County's density is 1,020 people per square mile, approaching that of Lake County.

Public transportation services are similar to those available in Lake County—Metra commuter rail service, over 20 Pace fixed bus routes and ADA paratransit service, and Pace vanpool service. Pace Dial-A-Ride service in Kane County communities has been replaced by Ride in Kane.

### Overview of Strategy

Kane County adopted a paratransit coordination study in 2003, which recommended the consolidation of a subset of the 40 paratransit programs that were in operation in the county at the time. The Kane County Paratransit Coordination Council (KCPCC) was formed as the first step in the coordination effort.

In 2008, the Ride in Kane (RIK) service was created to combine previously existing dial-a-ride services. Today, the system includes 12 township and municipal sponsors and three human service sponsors. Curb-to-curb service is available 24 hours a day, 365 days a year for older adults, people with disabilities, and low-income individuals traveling to work. Service is provided within Kane County and specified destinations outside the county. Trips may be limited in terms of distance, allowable number per customer per week or month, or purpose. In addition, several sponsors make trips available only to their own program clients. Fares are the same across sponsored groups—\$4/trip up to 10 miles and \$1.50/additional mile.

Program costs net of fare revenues, Kane County's contribution, and federal funds are allocated to sponsors based on trips and miles used by their participants. Pace subsidies are applied to bills for some communities. KDOT funding is divided among sponsors based on mileage.

### Project Leadership and Partner Roles

Partners include Kane County Division of Transportation (KDOT), the Association for Individual Development (AID) Pace, and a variety of program sponsors—townships, municipalities, and human service agencies. AID, always a strong champion for better serving county residents' needs through coordinated services, is now the lead agency for management and administration of the program. KDOT also has a major role, providing leadership and funding for the coordinated system.

AID is the grant recipient for federal dollars received through the RTA, and is responsible for all grant management tasks. AID also handles user registration for smaller sponsors as well as its own clients. AID works with Pace on monthly billing to sponsors and preparation of reports, and leads, with KDOT, the KCPCC.

Pace contracts for operation of a call center (shared with DuPage County, one separate township service, Pace On Demand and ADA paratransit service) and provision of services. Service providers include three bus providers and five taxi providers.

KDOT not only provides leadership and staff assistance for the system, but also supports Ride in Kane with annual funding, which offsets the cost of service countywide.

Sponsors are responsible for setting eligibility (person and trip) policies, registering new users, and participating on KCPCC. They also provide local match funding.

KCPCC membership is open to representatives from organizations, agencies, and governments that provide, or are interested in providing, paratransit service in Kane County for their clients/residents. A limited number of citizen representatives can also join the KCPCC. The committee is responsible for policy guidance, implementation of the 2003 coordination study recommendations, and ensuring that consumers have a voice in system planning and decision making. A Sponsor Subcommittee meets to discuss and determine fare and service policies and operating procedures for the system. KDOT, Pace, and the RTA participate in the subcommittee together with representatives of all sponsor organizations.

### Measures of Project Costs and Benefits

Coordination of services in Kane County has enabled service to more communities with consistent service policies. AID’s role as the grant recipient has enabled the system to access more federal dollars because of the Section 5310 program requirements for use of funds by nonprofit organizations.

In 2015, Ride in Kane provided 91,852 one-way passenger trips, at a total cost (net of fare revenues) of \$2,121,107, or \$29.82 per trip. The federal share of that amount was \$1,060,553, while Kane County contributed \$115,200 to offset costs countywide, and sponsor organizations provided a total of \$945,353.

In 2016, Ride in Kane provided 89,169 one-way trips and served 1,524 passengers. Costs and funding for the year were as follows:

Total cost	\$2,659,157
Pace subsidy	\$356,208
Federal Section 5310 funding	\$767,579
Federal JARC funding	\$331,890
Kane County contribution	\$115,000
Municipalities and Townships	\$743,261
Fare revenues	\$345,219

### Lessons Learned/Keys to Success

Crucial to the formation of Ride in Kane was the work of AID’s executive director as an ongoing champion for improving mobility options for county residents by coordinating the use of transportation resources. AID’s willingness to serve as the RTA grantee and administrative lead agency, as well as a major program sponsor, helps to maintain the system’s continuity and strong relationship among sponsors and other partners.

Another very important component of the system’s success is the active involvement of Kane County government, through the Division of Transportation, as a partner.

### Barrington Area Dial-A-Ride Funding

Barrington and Cuba Townships and the villages of Barrington, Barrington Hills, North Barrington, South Barrington, Port Barrington, and Tower Lakes are funding partners in the Barrington Area Dial-A-Ride service. System goals include equitable participation by all partners, based on use of the system by their constituents.

Funding = Pace subsidy + a local share of \$90-100K per year.

The townships share 60% of total cost, split roughly 55-60% for Cuba Township and 35-40% for Barrington Township.

The remaining 40% is split between the villages based on ridership.

Prior to 2006, the Village of Barrington paid the cost of service and billed the townships. At that time, the Barrington Area Council on Aging (BACOA), which has the lead management and administrative role for the service, met with municipalities and laid out a plan for their financial participation.

Partners value the BACOA role because of its neutrality; it is not a provider and is separated from the funding component. BACOA is also able to deal with program data and who owes what, objectively.

## McHenry County's MCRide

### Comparison to Lake County

In 2016, McHenry County's estimated population was 307,004. With an area of 604 square miles, the county's density is 508 people per square mile, much less dense than Lake County.

Public transportation options in McHenry County are similar to, but more limited than, those in Lake County: Metra commuter rail serves the county. Pace operates four fixed bus routes as well as ADA paratransit service and dial-a-ride service in several communities. In addition to participating in MCRide, McHenry Township operates a paratransit service for older adults and people with disabilities in the township that runs on weekdays and Sundays from 8 a.m. to 3 p.m. (this service shares Pace's McHenry/Lake call center). Algonquin and Richmond Townships also operate bus services for older adults and people with disabilities in their township.

### Overview of Strategy

McHenry County conducted a paratransit coordination study in 2005. The study recommended consolidation of a subset of at least 11 municipal and human service agency paratransit services and development of a subsidized taxi program.

A pilot coordinated service, MCRide, began in 2012. The service initially included three township and three municipal services.

Today, partners include eight townships and eleven municipalities. All riders may travel to and from the participating municipalities, two townships, and 13 point destinations. Older adults and people with disabilities may also travel to and from the other six townships. Service is provided on weekdays from 6 a.m. to 7 p.m. and on Saturdays and Sundays from 9 a.m. to 5 p.m. Fares are the same across: \$3.00 for the first five miles for general public riders, \$1.50 for the first five miles for older adults and people with disabilities, and \$.25 per mile for each additional mile.

In March 2015, McHenry County worked with Pace and community partners to institute a new subsidy structure designed to provide more stability and equity, replacing the legacy subsidies to certain communities. Each participating community receiving a legacy subsidy agreed to have that funding committed to the MCRide program. In 2015, municipal partners agreed to pay \$2 per resident per year, and townships a flat \$6,000 per year, regardless of the ridership generated by the community. The structure and amount of partner contributions have since changed to a township rate based on population and a municipal per capita rate that factors in CMAP's Community Cohorts analysis. MCDOT agreed to continue to apply for federal and state grants and to remove much of the risk from partners by using county RTA sales tax increase revenues to cover any funding shortfall each year, and paying about 50% of each month's invoice for service from Pace up front. McHenry County also subsidizes inter-town trips. After March 2015, cities and townships are billed for their share of the month's cost and the county uses grant funds to reimburse itself for the rest of the expense.

### Project Leadership and Partner Roles

McHenry County Division of Transportation (MCDOT) plays the lead role in the management and administration of MCRide.

In the consolidated paratransit system, municipal partners are responsible for providing funding based on population and need. Townships pay a flat fee based on population.

Service is operated by First Transit, under contract to Pace, and taxi providers (taxi service began May 1, 2017). Trip requests are placed by calling the Pace call center, also operated by First Transit (and shared by McHenry Township's separate service for seniors and Lake County's Dial-A-Ride services as well as Pace ADA paratransit services).

The Implementation Task Force that helped oversee the development of MCRide, with staff assistance from MCDOT, evolved into the Public Transportation Advisory Committee (PTAC) several years ago. PTAC agencies are appointed by the county's Transportation Committee, and are charged with providing advice on all public transportation matters.

**Measures of Project Costs and Benefits**

Benefits of MCRide include expansion of the paratransit service area and more uniform service and fare policies. The new subsidy structure addressed the reluctance of potential township and municipal partners to join the consolidated system due to concerns about possible budget pressures due to high ridership. In addition, Pace and MCDOT no longer have to produce the very detailed ridership reports that were needed in the past to document subsidy levels by community, and partners no longer have to process separate monthly invoices from Pace.

In 2015, MCRide provided 105,121 one-way trips at a total cost of approximately \$1,677,000, net of fare revenues. Operating costs were offset by the following funding sources and amounts:

Federal 5310 funding	\$300,000
Pace subsidy	\$784,000
McHenry County Senior Services grant	\$270,000
McHenry County DOT	\$120,500
Partner municipalities and townships	\$203,500

In 2016, MCRide provided 101,384 one-way trips and served 2,618 passengers. Costs and funding for the year were as follows:

Total cost	\$1,866,000
Pace subsidy	\$791,000
Federal Section 5310 funding	\$333,000
McHenry County RTA sales tax revenue	\$236,000
Municipalities and Townships	\$220,000
Fare revenues	\$151,000
McHenry County Senior Services grant	\$45,000

The cost per one-way trip in 2016 was \$18.40.

**Lessons Learned/Keys to Success**

The McHenry Township supervisor and the chair of the McHenry County Board at the time were persistent champions for a coordinated paratransit service for better mobility for residents and more efficient use of transportation resources. Their support was key to the first coordination study and implementation of its recommendations.

McHenry County’s active role has led to the expansion of the service from the original pilot and to the new subsidy structure, which has provided funding sustainability for partner communities. The county’s participation also opened up the use of RTA sales tax funds for the coordinated services.

The new subsidy system was difficult for some partners to accept at first, because residents of some communities may use the system more than others, but partners now know what their contribution will be each year and are not faced with having to limit service to match fluctuating budget constraints.

In addition to revenues from the RTA sales tax increase that took effect in 2008, MCRide utilizes funding from the county’s \$1.7 million annual property tax levy for senior services. Passed by referendum in 2003 in accordance with Illinois Compiled Statutes (55 ILCS 5/5-1034), the levy makes an amount of up to .025% of property tax revenues available for social and transportation services for seniors. The county’s Senior Services Grant Commission awards an annual grant historically in the range of \$200,000-\$300,000, but now a lower amount, from the Senior Services Grant Fund to MCDOT for MCRide.

## Will County's Will-Ride

### Comparison to Lake County

Will County covers 837 square miles and had an estimated population 689,529 in 2016, for a density of 823 people per square mile.

As does Lake County, Will County receives Metra commuter rail service, service on 20 or so Pace fixed bus routes, Pace ADA paratransit service, and Pace Dial-A-Ride service in several communities. Beyond Will-Ride, New Lenox Township operates a paratransit service for residents on weekdays for trips within the township and to adjacent counties for medical trips and nursing home visits.

### Overview of Strategy

The Will-Ride program is an outgrowth of a long-term strategy being implemented in Will County, under the auspices of county leadership, to promote accessible, countywide paratransit services. The county, together with the RTA, completed a paratransit coordination study in 2010 that provided direction for the county to lead efforts to establish a coordinated paratransit service and implement mobility management services.

Will-Ride provides service in an area that includes seven contiguous townships, and a 10-mile radius around the borders of that area.

Officially, service is open to residents of the participating townships and clients of sponsor agencies if they are age 60 or older, have a disability, or need transportation to work. At present, six townships have enrolled in the program: Crete, Frankfort, Monee, Peotone, Washington, and Will. In reality, the 10-mile radius covers much of the county, and all county residents who meet the other criteria are eligible to ride.

Hours of service are 8 a.m. to 5 p.m., Monday through Friday. Twenty-four hour advance reservations are requested. Reservations may be made up to seven days in advance.

Suggested donations for the service are \$2.00 for any ride taken within the township of origin (or \$4.00 round trip). If a customer wishes to travel outside the township, the fare is \$4.00 (or \$8.00 round trip).

### Project Leadership and Partner Roles

Will County established the Will County Paratransit Coordination Council (PCC). Created by the County Executive and its founding members, the purpose of the PCC is to act as an advisory group to the Will County Executive and Will County Board.

The PCC also helps develop, implement, and provide guidance to the coordination of shared-ride transportation options within Will County so that seniors, people with disabilities, and people needing employment can access local and regional transportation services. It is responsible for educating the community, including elected officials at the federal, state, county, and local levels, on the need for funding of these coordinated transportation services.

The PCC also provides policy oversight to a full-time Mobility Manager, who works in the County Executive's office. The Mobility Manager is tasked with implementing coordination of community transportation in the county.

The Mobility Manager also serves as the liaison to the Will County Board on paratransit issues and is the main staff liaison to the PCC.

Participating townships and sponsors are responsible for registering eligible users, and determining eligible trip purposes. Eligible consumers call a consolidated call center, operated by Pace. Pace operates the service pursuant to an interlocal governmental agreement with Will County.

### Measures of Project Costs and Benefits

One-way trips in 2015 totaled 7,632. Ridership fell slightly in 2016, to 7,425 trips taken by 373 individuals. Costs and funding in that year were as follows:

Total cost (including Pace call center subsidy)	\$308,374
Pace call center subsidy	\$16,128
RTA New Freedom and JARC grants	\$102,000
Northeastern Illinois Area Agency on Aging Title III grant	\$133,037
Township contributions	\$ 32,910
Fare revenues	\$ 24,299

The cost per trip in 2016 was \$41.53.

With some period of actual operations behind them, county officials can now document that participation in the Will-Ride system is less expensive – when all costs are considered – than individual agency operation of services. This fact has facilitated the “salesmanship” role of the county. Personal outreach to individual organizations that are considering participation in Will-Ride, or those organizations that have clients who need transportation services, is deemed as essential.

### Lessons Learned/Keys to Success

Will County officials believe that the Mobility Management grant through the RTA was the key element in the initial success of the program. This grant enabled the county to serve in the role of “champion” for paratransit coordination. Without the grant, and the ability to hire a Mobility Manager, county executive staff could not have devoted sufficient time and resources to serve in this capacity.

Lessons learned by Will County are primarily related to funding. The biggest challenge faced by the new system was the availability of funding for other capital and operating expense, including local matching funds from sponsor townships. Another challenge was the change in federal transit programs during Will-Ride’s implementation phase that repealed the Section 5316 (Job Access and Reverse Commute, or JARC) and Section 5317 (New Freedom) programs and rolled their eligible activities into other grant programs. Federal funding has become more difficult to obtain as a result. The uncertainty of the Illinois state budget during the same period posed a similar challenge, making local sponsors reluctant to commit to participating financially in Will-Ride.

Another lesson is more operational in nature. The issue surrounds local perceptions regarding quality of service when call center and operations are not based locally. Officials from non-participating townships indicated that locally owned vehicles limited to serving a particular township were preferable to a service delivery model where vehicles are dispatched from a remote base of operations. The challenge was primarily seen as a “perceived” obstacle, as the Will County Mobility Manager noted that Pace holds harmless participating agencies for “deadhead” hours and miles of service and maintains service quality requirements on its paratransit operator.

## MOBILITY MANAGEMENT STAFF FOR LAKE COUNTY REGION

Mobility Managers serve as policy coordinators, operations service brokers, and customer travel navigators. They help communities develop transportation coordination plans, programs, and policies, and build local partnerships. A Mobility Manager might help coordinate support functions for community transportation services, perhaps eventually taking on the call center function for multiple community transportation providers and/or becoming the broker of a coordinated system. A Mobility Manager might also serve to organize and manage a taxi subsidy program on behalf of sponsoring organizations.

Typical Mobility Manager functions include:

- Chair a coordination council or advisory group
- Provide education and outreach to market transportation services, recruit new partner organizations, and garner community support
- Help individuals find the most appropriate transportation option for their needs
- Coordinate grant applications and compile reports
- Spearhead local coordination plan updates
- Coordinate travel training, assist with vehicle sharing programs, administer voucher programs
- Provide technical assistance to transportation providers
- Oversee coordinated operations, such as a one-call/one-click system or centralized scheduling and dispatch

A key component of a successful mobility management program, and one of the most critical roles for the Mobility Manager, is the establishment of a mobility management advisory group. The group should include transportation providers, funders, partner organizations and other stakeholders, and advocacy groups. With the support of the Mobility Manager, this advisory committee can identify potential mobility management activities for the region, provide input and feedback as they are developed and implemented, and foster ongoing working relationships among the members of the group.

## Mobility Management in Tompkins County, NY

Tompkins County, with an estimated 2016 population of 104, 871 and an area of 492 square miles, is located in New York's Finger Lakes region and includes the City of Ithaca. Mobility Management is coordinated by the Tompkins County Department of Social Services (DSS).

### Overview of Strategy: Way2Go Program

DSS administers many of its mobility management programs and services under the Way2Go umbrella. Activities that make up Way2Go include:

- A one-call/one-click transportation repository that connects transportation information services and support functions in an integrated system to offer a convenient way for individuals to find transportation information and support. One-call/one-click services are provided by 2-1-1 Tompkins Cortland (Counties) under contract to Tompkins County.
- A car share membership program through Zimride, called the Tompkins Rideshare Program, that has 19,000 enrolled users and partners with 100 employers in the region.
- A program to pay for taxi rides or car share to transport clients to job interviews.
- A volunteer driver program that connects people with transportation options to regional medical centers.
- An employer education program and partnerships with employers to reduce transportation as a barrier to employment.
- Transportation Demand Management (TDM) activities at Cornell University.
- A senior education program to educate seniors about transportation resources and ensure safe travel.
- Travel training to ensure that seniors and people with disabilities who are able to use fixed-route services receive instruction that enables them to use the services safely and independently.
- Transportation for School Success works with school districts to promote awareness and use of transportation strategies.
- Regional Mobility Manager Outreach to support coordinated transportation education and marketing across counties in upstate NY to reduce regional transportation needs.

### Project Leadership and Partner Roles

A Chief Transportation Planner in the county DSS acts as the Mobility Manager. Key partners include Cornell University, the Ithaca-Tompkins County Transportation Council (the area's Metropolitan Planning Organization), and Tompkins Consolidated Area Transit (TCAT), the county's public transit system.

### Measures of Program Costs and Benefits

The benefits of a Mobility Manager position such as the one that is housed in the Tompkins County DSS include the following outcomes:

- Continues the momentum created by planning efforts to move coordination and service improvement strategies forward
- Ensures that staff resources are available to implement mobility and coordination strategies
- Can highlight mobility challenges and opportunities and raise awareness
- Creates a community resource to promote and build support for existing and future transportation programs and services

Tompkins County utilizes an average of \$385,000 per year to fund the mobility programs listed above plus a biannual training conference for mobility managers working in upstate New York.

The annual salary cost of a Mobility Manager position might range between \$40,000 and \$70,000, depending on whether the Mobility Manager is part- or full-time and what agency houses the position.

In 2016, approximately 3,400 individuals used Way2Go.org. Visits to the website in 2015 and part of 2016 totaled 8,600. In-person outreach by Way2Go's transportation and community educators resulted in 1,242 direct contacts with members of the public. Tompkins County's partner for disseminating transportation information over the phone, 2-1-1 Tompkins Cortland, responded to 1,374 calls about transportation and made 1,411 referrals to transportation providers in 2016.

### **Lessons Learned/Keys to Success**

The existence of an advisory group, coordinated and assisted by the Mobility Manager, has been shown to be an important component of mobility management programs that continue to develop and thrive. The structure and forum for regular, organized input from a variety of stakeholders can help to ensure that the program remains important to the community and focused on meeting the needs of community members.

As with other types of coordination efforts, a local champion can be key to the success of a mobility management program.



## 8 SERVICE IMPROVEMENT STRATEGIES FOR LAKE COUNTY

Figure 8-1 summarizes service improvement strategies for Lake County. Information about each potential strategy as it would be implemented in Lake County includes identification of partners and roles, benefits, potential challenges, estimated cost, and implementation issues.

Strategies in three categories include the following:

### **Service Strategies**

- Late-Night Employment Transportation
- Enhanced On Demand Service
- Flexible(Deviated Fixed Route) Transit Services
- Countywide Paratransit System

### **Personal Mobility Strategies**

- Vanpools for First/Last-Mile Service
- Taxi User-Side Subsidy Program
- TNC First/Last-Mile Service
- TNC Supplemental Service
- TNCs as Paratransit Providers
- Targeted Marketing of Traditional Vanpool Services

### **Mobility Management Strategies**

- Centralized Transportation Information and Trip Planning Assistance
- Countywide Marketing Program
- Mobility Management Staff for the Lake County Region

**Figure 8-1 Service Improvement Strategy Summary**

Strategy	Gap/Need Addressed	Description	Possible Partners	Benefits	Challenges	Estimated Cost to Implement
<b>Transit Service Strategies</b>						
<b>Late-Night Employment Transportation</b>	Evening service	Use shared-ride subscription service (Dial-A-Ride) as a complement to existing fixed route bus	Pace Lake County Workforce development agencies TMA Lake Cook Lake County Partners Employers	Provides connection to 2 <sup>nd</sup> or 3 <sup>rd</sup> shift jobs Increases use of fixed-route system for one leg of work trips	Finding funding for subsidy of shared ride one-way trip and eligibility for riders.	\$55,000 for a late evening service pilot, perhaps for Route 565 or Route 563 Size of area served and level of service will affect cost
<b>Enhanced On Demand Service</b>	Demand-response service efficiency	Use of On Demand to provide spontaneous trips at more designated stops and as feeder to transit Online booking was available at end of 2018	Pace	Expand On Demand to include more spontaneous boarding at key stops	Scheduling for pickup times at designated key stops	Pilot program with no additional costs
<b>Flexible (Deviated Fixed Route) Transit Services</b>	Service in areas without sufficient density to support traditional fixed-route service	Use of more cost-effective flexible services to provide more service in low density areas	Pace	Use lower cost contractors and smaller buses in low density areas	Funding for new services even at a lower cost.	Pilot program with no additional costs

**Paratransit Market Study for the Lake County Region | Service Improvement Strategies | FINAL**  
Lake County Division of Transportation

Strategy	Gap/Need Addressed	Description	Possible Partners	Benefits	Challenges	Estimated Cost to Implement
<b>Countywide Paratransit System</b>	<p>Service gaps caused by separate paratransit service</p> <p>Duplication of management and administrative effort</p>	Addition of communities to RideLakeCounty Central or RideLakeCounty West as first step to countywide system	<p>Lake County, Pace, nonprofit organization, or other regional organization</p> <p>Guidance provided by Lake County paratransit oversight committee</p>	<p>More inter-regional trips</p> <p>Expansion of service to unserved communities</p> <p>Consistent service policies across communities</p> <p>Services that are easier to understand for users</p> <p>More equitable subsidy structure</p>	<p>Convincing communities to participate, particularly townships with their own services</p> <p>Funding sustainability</p> <p>Future of townships</p>	<p>Depends on communities added in each phase</p> <p>Incentive funding, such as subsidy of local match or inter-township trips, for example, offered for a specified period of time to encourage participation</p> <p>Public information campaign - minimal cost</p>
<b>Personal Mobility Strategies</b>						
<b>Vanpools for First/Last-Mile Service</b>	First mile connections to make transit service more usable (last mile connections are currently marketed and used)	Market existing option to use Metra Feeder vanpool services to provide first and last mile transportation between employers and transit stations	<p>Pace</p> <p>Lake County</p> <p>Workforce development agencies</p> <p>TMA of Lake Cook</p> <p>Lake County Partners</p> <p>Employers</p>	<p>Greater use of Pace Metra Feeder services for first mile connections</p> <p>Increased access to jobs</p>	Marketing through employers, Lake County Partners, and TMA to increase use of vanpools to transit	Covered by vanpool users

**Paratransit Market Study for the Lake County Region | Service Improvement Strategies | FINAL**  
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Strategy	Gap/Need Addressed	Description	Possible Partners	Benefits	Challenges	Estimated Cost to Implement
<b>Taxi User-Side Subsidy Program</b>	Successful, cost-effective model for taxi subsidy programs Possible alternative to more costly Dial-A-Ride or local bus/van services	Expanded use of taxi subsidy programs for general public and specialized transportation Additional shared-ride component for greater efficiency	Municipalities Lake County Pace	Lower subsidies for local bus/van services Lower fares for shared-ride users More flexible, spontaneous service option for users	Shifting funding from in-house municipal services to taxi contract services	\$50,000 for taxi subsidy pilot to replace or complement existing local Dial-A-Ride or bus/van services
<b>TNC First/Last-Mile Service (SJRTD)</b>	First/last mile connections between transit services and origins/destinations (not focused on work trips)	Contracts with TNC to provide subsidize first/last mile service to/from transit stations	Lake County Pace Workforce development agencies TMA of Lake Cook Lake County Partners Employers TNCs	Improved access to fixed-route system Increased bus and rail ridership	Meeting federal requirements (accessibility, non-discrimination) if federal funds are used	\$50,000 for TNC feeder pilot program
<b>TNC Supplemental Service in Areas Not Served by Fixed-Route System (SJRTD)</b>	Service option for residents of communities without fixed-route service	Contract with TNC to provide city-to-city service for county residents outside of fixed-route service area	Lake County Pace Municipalities			
<b>TNCs as Paratransit Providers Alternative for ADA Customers (MBTA)</b>	High cost of ADA paratransit service	Contract with TNCs to provide subsidized service that can be used by ADA paratransit customers	Pace Lake County	ADA customers use more cost-effective option for some trips, lowering total cost of ADA service More flexible, spontaneous travel option for customers	Funding for trip subsidies Meeting federal requirements if federal funds are used	Flexible; depends on amount budgeted for subsidies

**Paratransit Market Study for the Lake County Region | Service Improvement Strategies | FINAL**  
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Strategy	Gap/Need Addressed	Description	Possible Partners	Benefits	Challenges	Estimated Cost to Implement
<b>TNCs as Paratransit Providers Late-Night Service (PSTA)</b>	Lack of options for traveling to work when fixed route system is not in operation	Contract with TNCs to provide subsidized service between home and work between 10 pm and 6 am	Pace Lake County Workforce development agencies TMA Lake Cook Lake County Partners Employers TNCs	Increased access to jobs Safer late night travel for users More use of fixed route system for one leg of work trips	Funding for trip subsidies Meeting federal requirements if federal funds are used	Flexible; depends on amount budgeted for subsidies
<b>TNCs as Paratransit Providers Service Option for Specific Groups (RideKC Freedom)</b>	Limited access to service for certain groups, depending on community of residence	Contract with TNC (or paratransit service provider) to provide subsidized service for older adults and/or people with disabilities	Pace Lake County Municipalities	Cost-effective service for target populations in areas that are currently unserved	Funding for trip subsidies Meeting federal requirements if federal funds are used	Flexible; depends on amount budgeted for subsidies
<b>Targeted Marketing of Traditional Vanpool Services</b>	Employment transportation options	Marketing of Pace's traditional vanpool program to Lake County residents, particularly those living in Waukegan and working/seeking jobs in Gurnee or Libertyville/Vernon Hills areas	Pace, with assistance from Lake County workforce development agencies and other county agencies	Increased access to job-rich areas that are not well served by public transportation	Reaching target audience of job seekers	Staff time Tailored marketing materials  Outreach events Modest costs if partner agencies assist

**Paratransit Market Study for the Lake County Region | Service Improvement Strategies | FINAL**  
Lake County Division of Transportation

Strategy	Gap/Need Addressed	Description	Possible Partners	Benefits	Challenges	Estimated Cost to Implement
<b>Mobility Management Strategies</b>						
<b>Centralized Transportation Information and Trip Planning Assistance</b>	Lack of awareness of transportation options Duplication of public information efforts	Build on Pace call center to provide expanded paratransit service information and trip planning/booking assistance through call center staff or Mobility Manager.  Other options include a relatively low cost online transportation directory plus trip planning assistance and a relatively high cost one-call/one-click system with staff	Pace and Lake County or other regional organization	Improved mobility when county residents are aware of all services  Increased ridership	Maintaining up to date information  Funding for mobility management component	Part of Mobility Manager position  Costs associated with increased Pace staff and other call center expansion expenses
<b>Countywide Marketing Program</b>	Limited awareness and support for all of Lake County's transportation options	Marketing campaign, brand tweaking, materials, and activities to promote services countywide	Lake County or Mobility Manager	Improved awareness of services Increased ridership Increased support among potential funders	None	Minimal, if designed as a project for CLC or other college business students, in conjunction with LCDOT Public Information Officer and county Communications Department

**Paratransit Market Study for the Lake County Region | Service Improvement Strategies | FINAL**  
 Lake County Division of Transportation

Strategy	Gap/Need Addressed	Description	Possible Partners	Benefits	Challenges	Estimated Cost to Implement
<b>Mobility Management Staff for the Lake County Region</b>	Service improvement strategies require dedicated staff time for successful implementation	Mobility Management Staff to facilitate coordination of transportation services within Lake County and oversee implementation of strategies to address service needs and gaps.	Mobility Management Staff could be housed within LCDOT or another Lake County department, by a nonprofit transportation provider, or by an independent nonprofit organization	Continued momentum and staff resources needed for implementation of coordination/mobility management strategies	Need to find Mobility Management Staff with the right skills	Part-time to full-time salary of approximately \$40,000-70,000 to start. Support staff likely to be needed as program grows.

## SERVICE STRATEGIES

### Late-Night Employment Transportation

This type of program could have specific application in Lake County given some of the unmet work transportation needs identified. These include evening services to employment centers but might also include return trip transportation for college students who are not able to make their evening return trip by Pace fixed-route services from each of the three CLC campuses.<sup>2</sup> Late night service could also address identified gaps in service for retail employee return trips that occur beyond the evening span of Pace bus services. The program's key strength is utilizing the existing capacity of the fixed-route bus system and providing the missing link that might keep customers from utilizing available transportation services.

One potential pilot approach might be to focus on the use of the Round Lake and Vernon Hills On Demand programs to provide the one-way trip not covered by fixed-route transit. This might include subsidizing all or part of the traditional On Demand fare for individuals who may not be able to afford the cost during the initial month of employment. This might include early morning hour employment trips to serve early work shift needs before 6 a.m. at locations like the Great Lakes Naval Station, for example.

The use of the shared-ride application process for registering eligible individuals is one of the important components of the program. In the aforementioned example of utilizing the existing Lake County Pace Dial-A-Ride services, the application process for eligible customers might be handled through the Pace reservations line for the limited number of applications for a pilot program. It is envisioned that the long-term application process would probably be best served by the Pace call center.

A potential application of this type of service might be in the form of a pilot 565 Night Owl service to complement the existing 565 service operating between the College of Lake County and the Waukegan Metra station, making intermediate stops along the line. Proposed hours of service would be 10:00 p.m. – 11:55 p.m. This would focus on the need in areas of Waukegan served by transit and where the number of unemployed individuals is over 2,500 and is about four times that of the other Lake County urban centers.

Another potential pilot program could focus on Route 563, which provides service from the vicinity of Waukegan Metra station to Great Lakes Naval Base and Rosalind Franklin University Clinics. Abbott Laboratories and Lovell Federal Health Care Center are also located along the route. Service operates on weekdays only, from approximately 6:30 a.m. to 6:30 p.m.

A pilot service—which would best be designed with input from employers and workforce development organizations and other stakeholders in addition to Pace—would operate under contract with the Pace contracted paratransit operator and would provide service at the same fare as the 565. Passengers would be required to register for the subscription service by providing proof that they are using the service to get to or from employment and that they are using the 565 for either the afternoon/evening inbound trip or an early morning return trip. The pilot might include subsidizing all or part of the typical \$2 – \$4 Dial-A-Ride fare for individuals who may not be able to afford the cost during the initial month of employment.

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<sup>2</sup> In addition, First Transit operates a shuttle Monday through Thursday (school days only) that leaves CLC at approximately 10 p.m. and drops off passengers in Waukegan, North Chicago, and the City of Grayslake.

## Enhanced On Demand Service

The Pace On Demand services have some basis in the pioneering work done by RTD Denver but may be able to consider some other elements of the Denver CnR program, including promotion of spontaneous boarding where it is effective for first/last mile customers accessing traditional transit. Individuals who are eligible for ADA paratransit may benefit from the On Demand program through spontaneous boarding without need for advance reservation. The use of On Demand service may also provide the first and last mile service that will promote use of Pace fixed-route services by ADA eligible riders. The application of checkpoints could also increase the efficiency of existing Pace On Demand services in the Round Lake and Vernon Hills-Mundelein service areas.

Another enhancement to On Demand service is the availability of online trip booking, which would improve the efficiency of reservations and scheduling of On Demand trips and enable shorter response times to customer requests for a ride. Pace implemented this feature for all On Demand services at the end of 2018.

### Round Lake On Demand/Call-n-Ride Checkpoint Service

The objective of this modification would be to establish one or two timepoints **in addition to** the College of Lake County as locations where there would be an established timepoint where passengers could board the vehicle on a spontaneous basis.

This would be done to encourage additional riders who could use the service without reservation to access CLC and make connections to the Pace bus routes without need for a reservation.

## Flexible (Deviated Fixed Route) Transit Services

The use of community transit or contract service operators (such as First Transit in Lake County) to operate smaller, right-sized fixed-schedule services may be a means to free up operating funding to provide additional services in low density areas of the county with demand for fixed-schedule service but not able to support traditional bus transit.

A review of the cost and productivity of existing bus routes may recommend routes that are good candidates for route deviation. Route deviation would also enable more direct service to apartment complexes, medical plazas and shopping centers. This may also enable older adults and people with disabilities to use lower cost fixed-schedule services that can provide more of a curb-to-curb ride than traditional bus service.

Pace's long range plan, Vision 2020, describes a network of services that includes mainline, traditional fixed-route bus service along major arterials (high capacity urban roads), and community-based services such as deviated fixed routes or On Demand services to connect riders and pedestrians in lower density areas to those mainline bus services.

Areas that might have sufficient origins and destinations that could be linked by this type of route are the portions of Avon and Warren townships that are not served by current Pace fixed routes. Service could be provided from apartments and congregate senior housing to connect with shopping centers and transit connections at the College of Lake County main campus and employment destinations in the Village of Gurnee.

Other potential locations, identified in Lake County's 2040 Transportation Plan, include:

- Antioch to Gurnee Mills

- Green Bay Road between Waukegan and Lake Bluff
- Town Line Road from Lake Forest to Hawthorn Mall
- Lake Cook Road from Highland Park to Wheeling

## Countywide Paratransit System

Addition of communities to the existing coordinated RideLakeCounty Central and/or RideLakeCounty West, as a first step toward a countywide paratransit system, would address the following objectives:

- Make services easier for users to identify and understand
- Expand services to more communities
- Make services more consistent across the service area
- Facilitate more inter-community travel
- Maximize use of the resources that are applied to transportation in Lake County

A first step toward a countywide system could be a pilot program that expands the service area of either RideLakeCounty Central or RideLakeCounty West. There are a number of possible expansions that would address current gaps in service and facilitate trips between communities.

- **Expand RideLakeCounty Central** to include Northeast Lake/Warren Township, which would provide access to jobs in the Libertyville and Vernon Hills areas from Waukegan Township and North Chicago, and one or more of the following:
  - Vernon Township, which would provide access to more jobs
  - Ela Township, to expand the options available to residents of that community
  - Zion/Benton Township Dial-A-Ride, for a similar benefit to those communities
  - Townships in the current and expanded RideLakeCounty Central service area that operate their own bus or van services could be invited to participate in the coordinated Dial-A-Ride system
- **Expand RideLakeCounty West** to include Northeast Lake/Warren Township Dial-A-Ride, which would offer service to the eastern side of the county for residents of the RideLakeCounty West townships and municipalities, and one or more of the following:
  - Ela Township
  - Barrington Area Dial-A-Ride (which would greatly expand the services available to residents of the Barrington area communities, but would be complicated by the fact that some of them are located in Cook County)
  - Townships in the current and expanded RideLakeCounty West service area that operate their own bus/van services could be invited to participate in the coordinated Dial-A-Ride system

In addition to communities to be covered by an expanded system, key decision areas include:

- **Lead agency:** Lake County, Pace, or a nonprofit organization like AID in Kane County or BACOA in the Barrington Area
- **Funding partners:** Not only Lake County, the federal government (through the RTA), and Pace (for communities currently receiving service), but all participating communities and nonprofit or human service sponsors should share in funding the service

- **Cost allocation:** Options include using miles and/or trips to allocate costs, as in Kane County and the Barrington Area, or a flat fee or cost per resident, as in McHenry County
- **Policy guidance:** Lake County paratransit oversight committee, municipal/township partners, Lake County Board, and Pace with input from stakeholder organizations and the public
- **Service policies:** days and hours of service, eligibility (people and trips), service areas and destinations, fares

## PERSONAL MOBILITY STRATEGIES

### Vanpools for First/Last-Mile Service

One of the key infrastructure advantages in Lake County is the existence of an established vanpool program through Pace. The development of a vanpool subset that takes advantage of the lower cost for first/last mile services achievable through vanpooling (but oriented to bringing customers to transit) would be a complement to the existing Shuttle Bug program and would leverage the use of vanpool drivers.

Pace's Metra Feeder program currently markets vanpool service as a way to make last mile connections between a Metra station and employment sites. Participants take Metra to the station closest to their employer and use a vanpool vehicle that is parked at that station to complete their trips to the workplace. Metra Feeder vanpools may also be used to provide the first mile of a work trip—the vehicle is parked overnight at the driver's home, and the vanpool group uses it to get to the first Metra station. This option is not actively marketed at present, however.

### Targeted Marketing of Traditional Vanpool Services

Pace's Vanpool Incentive Program includes, among other vanpool options, traditional vanpool service that provides individuals with similar origins and destinations with a cost-effective means of traveling to work. Over 50 traditional vanpools currently operate in Lake County, most traveling to employers located in Deerfield, North Chicago, Riverwoods, and other communities in the Lake-Cook corridor. Targeted marketing of the Vanpool Incentive Program in Lake County could encourage use of this resource to meet the needs of individuals that currently do not have access to employment-rich areas. As noted previously, stakeholders repeatedly noted the need for connections between the Waukegan area and jobs located in Gurnee and surrounding communities and the Libertyville/Vernon Hills area.

Targeted marketing of the Metra Feeder program—both the first and last mile options—and traditional vanpool to employees who work in Lake County would not only benefit commuters, but would also increase use of the programs. A marketing initiative could be carried out jointly between the TMA of Lake-Cook and/or Lake County Partners and the Pace Vanpool Incentive Program to target potential vanpool participants needing transportation service between a Metra station and key employment sites or between home and work.

Data from Live Well Lake County and the Illinois Department of Employment Security (IDES) confirm that Waukegan (along with North Chicago, Zion, Round Lake Beach, and other communities) has a higher rate of unemployment than the county as a whole. In addition, Lake County Workforce Development, the Lake County Veterans Assistance Commission, and Catholic Charities job developers who work with veterans reported that many of the individuals they work with live in Waukegan or North Chicago. Half of the individuals participating in Workforce

Development programs between July 2016 and September 2017 lived in Waukegan (33% of 848 individuals), Zion (11%) or North Chicago (6%).

Job developers mentioned the following employment areas that are hard to reach without a car:

- Lincolnshire (Vernon Township)
- Village of Bannockburn
- Tri-State Industrial Park in Gurnee
- Waukegan Road in Waukegan
- Amhurst Lake Business Park (Waukegan)
- Lakeview Corporate Woods (Vernon Hills)

The vanpool marketing initiative could begin by concentrating on connecting those residential and employment areas.

## **Taxi User-Side Subsidy Program**

The Village of Deerfield has been able to offer a flexible form of transportation for its older residents and individuals with disabilities while keeping the subsidy costs at a relatively low rate. The program has enabled individuals with disabilities to reach a variety of destinations including competitive employment locations and Metra and Pace fixed-route bus services.

Since the two major taxi companies, American and 303, cover a substantial portion of Lake County, a shared-ride taxi program could have application in some of the lower density areas of the county. This might include areas within Cuba, Ela and the Barrington area townships and villages. It might also prove to be a complementary service in areas with existing township service such as Wauconda or Waukegan townships.

One future application might also include using a form of taxi voucher program for shared-ride subscription trips where a portion of the cost of a vehicle trip could be shared among multiple riders paying a set fare and the remainder subsidized through public funding. This might be done by selling coupons to members of the general public for a reduced price which could be used for these types of subscription trips.

Given the Village of Deerfield's coupon value of \$5.00, the subsidy cost per passenger of \$5.00 is considerably less than that for the various Pace and township paratransit services that are currently operated. The growing usage of the service suggests the potential for another application: a shared-ride taxi subsidy program for first and last mile service to bus and rail stops/stations and short direct trips.

The proposal would be to negotiate a feeder fare that would enable individuals riding on a shared basis to a Metra station where they would be able to access Pace bus and Metra rail service. The feeder service would be offered at a \$1.00 fare (same as the Deerfield program's fare) but would be open to the general public for employment transportation. The taxi company would offer a discounted rate for additional riders that would reduce the average subsidy per passenger trip from the current rate. The objective would be to generate additional rider volume that would make up for the reduced revenue per passenger through the shared-ride subsidy rate.

## **TNC First/Last-Mile Service**

Given the presence of Uber operations in Lake County and the use of contract services by Pace and some of the municipalities in Lake County, it appears that a simplified pilot effort similar to the SJRTD Uber contract could have some potential in Lake County. Since there are some key bus and rail transfer points, the use of a program for first/last mile could be a cost-efficient way of experimenting with the use of TNC services on a pilot basis.

A potential pilot could be designed to provide a limited service to and from the Great Lakes and North Chicago Metra stations. A subsidy of \$5.00 per one-way trip would be provided to a TNC passenger who is provided a code that can be used on trips to and from the eligible transit destinations.

## **TNC Service in Areas Not Served by Fixed Route System and TNCs as Paratransit Providers**

There are several service gaps or needs that could be addressed through contracts with TNCs, such as Uber and Lyft, which offer flexible, spontaneous service for customers. If trips are subsidized by a sponsor agency to lower the fares for customers, the subsidy per trip is likely to be lower than the current levels of per-trip subsidies for public fixed-route rail, bus, and paratransit services.

Contracts with TNCs could be used to provide:

- First/last mile service to bus stops and rail stations
- City-to-city trips for individuals who live outside the fixed-route/ADA paratransit service area
- Alternative service for ADA paratransit customers, to add a flexible, spontaneous option for customers and reduce the overall cost of providing ADA service
- Late night service for work trips
- Service for particular user groups, such as older adults or people with disabilities, who may have limited options

As shown by the examples in the previous chapter, transit agencies have experimented with partnerships with Uber and Lyft to offer such services as pilot programs, with the transit agency subsidizing trips for customers. Other examples not included in this report show that municipalities have conducted similar experiments. Total budgets for subsidies have been relatively modest, such as the \$50,000 allotted for the SJRTD RTA GO! program, or more expansive, such as the \$117,000 spent to date by the MBTA on its On-Demand Paratransit Pilot.

Depending on the specific issue to be addressed by subsidized TNC service, a pilot program could be managed by Lake County, Pace, or another partner. A number of stakeholder organizations could contribute funds for the necessary trip subsidies.

Note that in Kansas City, the transit agency's partner was its paratransit provider, which offered a TNC-like service using its own mobile app, and not a TNC company.

## MOBILITY MANAGEMENT STRATEGIES

### Centralized Transportation Information and Trip Planning Assistance

There are currently several sources of transportation and trip planning assistance available to Lake County residents:

- Detailed information about Pace fixed-route and paratransit service is provided online. The RouteFinder enables customers to locate bus routes by route number, community, or other criteria.
- RTA sponsors an online trip planner, which is available on the RTA and Pace websites. The tool identifies itineraries, including driving, walking, and biking directions, for Metra, CTA, and Pace services.
- The regional Mobility Management Call Center operated by First Transit for Pace that serves McHenry and Lake counties provides information about Pace paratransit service and handles trip reservations.

Building on the Pace Mobility Management Call Center to include information about other paratransit services in Lake County and personal trip planning assistance from a mobility specialist would provide a one-call/one-click resource for Lake County residents. Providing expanded information and personal trip planning assistance through the Pace call center is one option. Another would be to follow the model of some areas where 211 service is used as the main repository of transportation information, but trip planning and other assistance is provided by a mobility manager or mobility specialist housed in another organization. In Lake County, a mobility manager or specialist could provide updated information about other non-Pace paratransit services and transportation options to the call center on a regular basis, and coordinate with the call center to handle calls from customers needing personal assistance with trip planning or reservations.

Other options include a relatively low cost online transportation service directory plus trip planning assistance provided by a mobility manager or specialist and a relatively high cost and technologically advanced one-call/one-click system with staff to provide trip planning assistance.

As mentioned later as part of a countywide marketing program, public outreach and education would be an important element of rolling out a centralized information resource for Lake County.

Pace staff noted in an interview that consolidated transportation information and other assistance is likely to be a regional issue, of value to other counties in the Pace service area, and necessary to support inter-county trips. If planning for a more regional consolidated information/call center proceeds, any interim Lake County services could be folded into that regional effort.

### Countywide Marketing Program

Regardless of whether a countywide paratransit system is implemented, the development of a countywide transportation marketing program would inform current and potential riders (and human service agency personnel) about the services that are available to them and make the services easier to understand and use. Increasing the visibility of transit and paratransit services within local communities would also help to garner funding support.

The approach to marketing should be coordinated among the various providers either by the county or by a committee, consisting of transit providers and human service agency representatives, established for that purpose.

The program could include the following elements:

- Development of a symbol and color scheme to extend the “RideLakeCounty” brand as a means of identifying services and providers as part of a more coordinated transit/paratransit network
- Promotion of a centralized information resource through the Pace call center and mobility management staff for Lake County, if implemented
- Creation of a coordinated social media approach involving Pace, RTA, Lake County and other Lake County divisions, township, and municipality partners, and other stakeholders
- Maps and schedules that highlight connections between services
- Development of a Transportation Guide that describes services and how to use them; for widespread dissemination, the guide could be published in local newspapers and posted on local and county websites
- An approach for targeted marketing of the Pace Vanpool Incentive Program for access to jobs in the Gurnee and Libertyville/Vernon Hills areas
- Preparation of a year-long calendar of marketing activities and promotions

Transit authorities have been able to obtain valuable marketing assistance at little cost by working with local colleges to design a project for an intern or a group of business students to complete as part of a marketing course. The development of a marketing campaign, symbol/color scheme, and/or information materials might be of interest to students at College of Lake County. Excellent templates for marketing plans and materials of all types are available free of charge from National RTAP (<http://nationalrtap.org/marketingtoolkit/>).

## **Mobility Management Staff for the Lake County Region**

Most, if not all, of the service improvement strategies described in this chapter could be planned and executed or coordinated by dedicated part-time or full-time mobility management staff for the county or several sub-county regions.

While these agencies may not currently perform this function, it is recommended that the position(s) could be housed within Lake County DOT or another Lake County department, at the RTA, at Pace, or in a nonprofit agency. Because of universal and ongoing needs for transportation to medical services, regional health systems or rural health networks have taken on mobility management duties very successfully in other areas.

Initially, the mobility management staff could be a part-time position, expanding to full-time roles as more strategies reach the implementation stage. If trip planning assistance is provided as part of a centralized information strategy, additional mobility management assistance would likely be required.



## 9 EVALUATION OF SERVICE IMPROVEMENT STRATEGIES

This chapter looks at proposed service improvement strategies in the context of an initial evaluation framework that considers the geographic characteristics of Lake County communities and criteria that capture community needs and support, transportation benefits, financial issues, and implementation considerations. The preliminary evaluation methodology and results are discussed below. Evaluation of the selected set of preferred improvement strategies will be refined, considering more detailed plans for each alternative, in the next phase of the project.

### EVALUATION METHODOLOGY

#### Geographic Classification

First, Lake County municipalities were assigned to one of six geographic categories, based on location, density of population and employment obtained from Census data, and other considerations. Geographic categories and the communities in each are:

- The **Countywide** classification applies to the entirety of Lake County and includes all cities, villages, and unincorporated areas.
- **Medium Urban** communities are the most densely populated, with 50,000-100,000 residents.
  - City of Waukegan
- **Suburban Medium Density** communities are those that are near Cook County or the City of Waukegan and generally have higher-than-average population and employment density compared to Lake County as a whole. These cities attract or generate a significant flow of commuters on a daily basis.

– Bannockburn	– Highland Park	– Lincolnshire
– Barrington	(could also be small urban)	– Lindenhurst
– Buffalo Grove	– Highwood	– Long Lake
– Deerfield	– Knollwood	– Park City
– Forest Lake	– Lake Zurich	– Riverwoods
– Fox River Grove		– Wheeling
- **Suburban Medium Density Clusters** are made up of communities that have higher density of population and/or employment than Lake County as a whole and contain

employment/education, commercial, medical, and other destinations that attract trips from other communities.

- Libertyville
- Mundelein
- Vernon Hills
- Gurnee
- Gages Lake
- Grandwood Park
- Round Lake
- Round Lake Beach

- **Suburban-Adjacent Low-Density/Bedroom Communities** are Lake County cities and townships that are adjacent to Suburban Medium Density cities but have a lower-than-average population and employment density compared to Lake County as a whole. Some of these cities may have neighborhoods with medium-density characteristics.

- Antioch
- Barrington Hills
- Beach Park
- Channel Lake
- Deer Park
- Fox Lake
- Fox Lake Hills
- Green Oaks
- Hainesville
- Hawthorn Woods
- Indian Creek
- Island Lake
- Kildeer
- Lake Barrington
- Lake Bluff
- Lake Catherine
- Lake Villa
- Lakemoor
- Long Grove
- Mettawa
- North Barrington
- Old Mill Creek
- Port Barrington
- Round Lake Heights
- Round Lake Park
- Third Lake
- Tower Lakes
- Venetian Village
- Volo
- Wadsworth
- Wauconda
- Winthrop Harbor

- **Small Urban Communities** are Lake County cities that are not part of the contiguous metro area development pattern but that have population and employment characteristics at higher densities than surrounding areas (populations of 18,000-50,000). These cities either feature or are immediately adjacent to concentrations of employment, commercial uses, medical services, or other activity generators that also may draw from the surrounding suburban or rural areas.

- Highland Park
- Lake Forest
- North Chicago
- Zion

Next, each strategy was scored numerically, on a scale of 1 to 5 (with 5 being the best score), on four evaluation criteria--Community, Transportation Benefits, Financial, and Implementation. Communities in which the strategies are likely to be most effective were also identified.

## Evaluation Criteria

Definitions of the four evaluation criteria and indicators of different levels of ranking, which were used to assign a somewhat subjective score along the 1-5 scale to each service improvement strategy, are as follows:

### Community

- Level of community support
- Serves stated need(s)
- Accepted by target populations
  - 1: Low community support
  - 3: Moderate community support and serves stated need(s)
  - 5: High community support and serves stated need(s)

### Transportation Benefits

- Number of likely beneficiaries
- Number of issues addressed
- Ease of use
  - 1: Small number of residents benefit, addresses one concern
  - 3: Moderate number of residents benefit, addresses multiple concerns
  - 5: Large number of residents benefit, addresses multiple concerns, growth potential

### Financial Issues

- Overall cost
- Funding availability and sustainability
  - 1: Highest cost to implement (\$500,000 to \$1 million)
  - 2: High cost to implement (\$250,000 to \$500,000)
  - 3: Medium cost to implement (\$100,000 - \$250,000), moderately cost effective and feasible
  - 4: Low cost to implement (\$50,000 to \$100,000), cost effective and financially feasible
  - 5: Lowest cost to implement (under \$50,000), most cost effective and financially feasible

### Implementation Issues

- Implementation timeframe
- Potential for phased implementation
- Potential for coordination among stakeholder to facilitate implementation
- Specific implementation issues
  - 1: Long term (5+ years), may require high upfront fixed costs, difficult implementation issues, least coordination potential

- 3: Medium term (3-4 years), moderate implementation issues, less coordination potential
- 5: Short term (1-2 years), or capable of being implemented in stages, few implementation issues, potential for coordination increases likelihood of implementation

Results of those detailed rankings are shown in the table in Appendix B.

## Overall Ratings

Figure 9-1 summarizes the average rating of each service improvement strategy and the geographic classifications in which it would be applicable, showing how well the strategy could work in the different types of communities of Lake County. It is important to note that these rankings are only initial ratings, and may be subject to change as the strategies take more detailed shape later in the study report.

Most strategies would be equally or nearly as effective in communities of different sizes and development patterns. Several strategies, however, would be applicable only on a countywide basis: centralized information and trip planning assistance, countywide marketing, a countywide paratransit system, and a Mobility Manager for Lake County.

Among the service strategies, highest rated were enhancements to On Demand service and use of flexible services (route deviation) in place of fixed-route services in some areas. A countywide paratransit system received a slightly lower rating, primarily due to challenges associated with implementation and funding. Late night employment transportation received a rating on par with a countywide paratransit system.

Among the personal mobility strategies, vanpools for first/last mile service and employment trips, and expansion/modification of taxi subsidy programs received the highest ratings. The group of potential TNC services received slightly lower ratings due to issues of availability, potential use by some target groups, and required accessibility and nondiscrimination policies if federal funds are used.

The mobility management strategies of a countywide marketing program and a mobility manager for the county received high ratings. Centralized information and trip planning assistance received a lower rating because of the need to coordinate with the Pace call center, which could have a greater cost, and will require more effort to implement.

In later sections of the study report are financial, implementation, and marketing plans for the preferred service improvement strategies, selected by Lake County DOT with input from the PAC, LCCTSC, and community meetings.

**Figure 9-1 Summary of Service Improvement Strategy Initial Ranking**

<b>Service Improvement Alternative</b>	<b>Average Ranking</b>	<b>Community Applicability</b>
<b>Service Strategies</b>		
Late-Night Employment Transportation	3.8	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density
Enhanced On Demand Service	4	Suburban Medium Density Clusters (current On Demand service area)
Flexible (Deviated Fixed Route) Transit Services	4.5	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density
Countywide Paratransit System	3.8	Countywide
<b>Personal Mobility Strategies</b>		
Vanpools for First/Last-Mile Service and Targeted Marketing of Traditional Vanpool Services	4.1	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density Suburban Adjacent Low Density
Taxi User-Side Subsidy Program	3.8	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density Suburban Adjacent Low Density
TNC First/Last-Mile Service	3.6	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density
TNC Supplemental Service	3.3	Suburban Adjacent Low Density to other parts of county
TNC Alternative for ADA Paratransit Customers	3.4	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density
TNC Late Night Employment Service	3.4	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density
TNC Service for Specific User Groups	3	Suburban Adjacent Low Density to other parts of county
<b>Mobility Management Strategies</b>		
Centralized Transportation Information and Trip Planning Assistance	4	Countywide
Countywide Marketing Program	5	Countywide
Mobility Management Staff for the Lake County Region	4.8	Countywide



## **Part 3**

# **Business Plan**



# 10 INTRODUCTION

## PROJECT OBJECTIVES

The purpose of the paratransit market study is to aid in the development of a *sustainable, implementable plan for improving mobility options* in Lake County. The selected mobility options may benefit all residents, but will focus on the *target user groups of older adults and individuals with disabilities*.

## Transportation Service Gaps and Needs

Over 40 known transportation services and programs operate in Lake County, including fixed-route bus and rail service, several types of paratransit service (ADA paratransit, Dial-a-Ride, On Demand, township/municipality vans), employer shuttles, vanpools, taxi subsidy programs, and volunteer ride programs. Operators include Metra, Pace, the townships, municipalities, and human service agencies. Several of these services are shared or operated by multiple towns and townships in the county.

However, the level of service available to residents of different Lake County communities and different riders or potential rider groups varies quite a bit. In some communities, multiple options are available. In others, particularly in the western half of the county, options are more limited, and services are restricted to particular groups (older adults, people with disabilities) and/or operate during limited days and hours.

## Community Meetings

To collect feedback from Lake County residents and transportation stakeholders on potential mobility enhancement options, a second round of community meetings were held January 23-25, 2018. Using an open house format, participants visited four stations where descriptive material was on display and the consultant team/Lake County Division of Transportation (Lake County DOT) staff were available to provide explanations and answer questions. Stations included:

**Station 1:** Project Overview

**Station 2:** Findings (information gathered during previous phases of the project)

**Station 3:** Potential Strategies to Enhance Mobility

**Station 4:** Next Steps

In addition to the community meetings, potential mobility enhancement strategies were presented and discussed with the Project Advisory Committee (PAC) to identify the preferred set of strategies. Input from the public and stakeholders was sought at the same time. After public discussion of the strategies, the project team developed financial, implementation, and marketing plans for those strategies.

## **SECTION PURPOSE**

The purpose of this section is to provide business plans, including financial, marketing, and implementation steps, for the variety of proposed strategies. A Business Plan for each potential strategy that was reviewed by the general public, PAC, and Project Steering Committee is included in this section.

# 11 OUTREACH AND NEEDS IDENTIFICATION

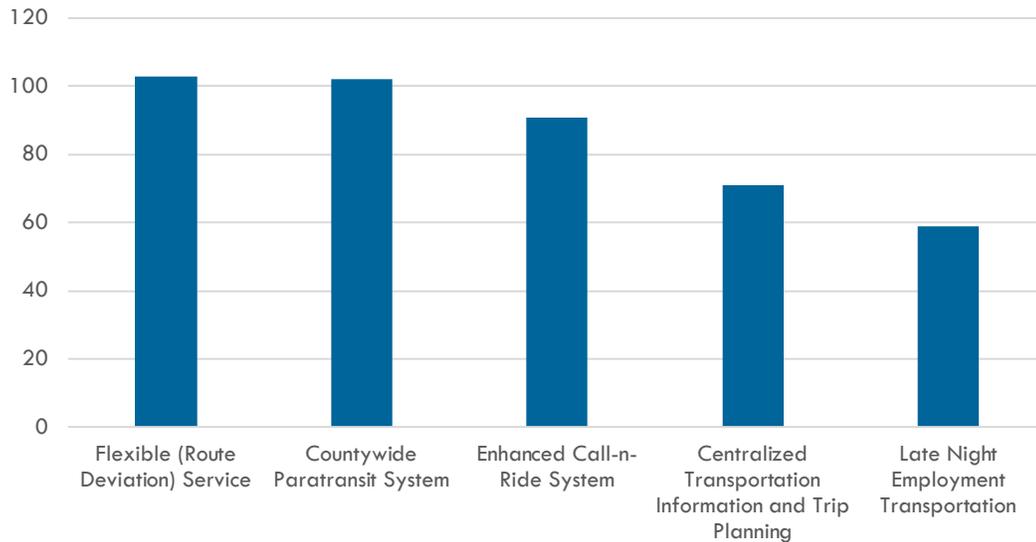
## SUMMARY OF OUTREACH

Following the assessment of existing conditions in the Lake County region, and the associated strengths, weaknesses, opportunities, and threats (SWOT) analysis, the study team began to explore potential service improvement strategies that would be appropriate for the area. The initial draft strategies were developed in concert with the Lake County Division of Transportation, and were informed by public outreach efforts performed for the existing conditions portion of the project, including public meetings as well as a community survey. The study team developed a total of 13 initial strategies grouped into three different categories: service improvement strategies, personal mobility strategies, and mobility management strategies. These initial strategies were presented to the public in three different formats during the fourth week of January 2018:

- **Public Meetings:** This second set of public meetings took place at four different locations in Lake County. Attendees were asked to share their thoughts on the initial recommendations using comment cards, mark-ups on maps, and by speaking with the study team and Lake County representatives. Meeting attendees were also asked to indicate their preference for the potential strategies, and were able to choose up to five of the 13 strategies.
- **Project Advisory Committee (PAC):** Separate from the public meetings, the 13 strategies were presented to the PAC as one large group. The committee was then split into three smaller groups to discuss the potential strategies by category, and to help identify strengths and shortcomings of the proposed solutions. PAC members were further encouraged to share any additional feedback with the study team after the meeting.
- **Lake County Coordinated Transportation Services Committee (LCCTSC):** This standing committee was also formally presented with the draft strategies as one group. The strategies were then explored further in a guided discussion from the study team.

In addition to the meetings described above, a public survey was conducted that asked respondents to identify which five strategies they would like to see put into action, and then rank their priorities. Over 150 responses were generated via the public survey. Within the public survey, the most popular strategies according to their average ranking are depicted in the following figure:

Figure 11-1 Public Responses on Transportation Strategies



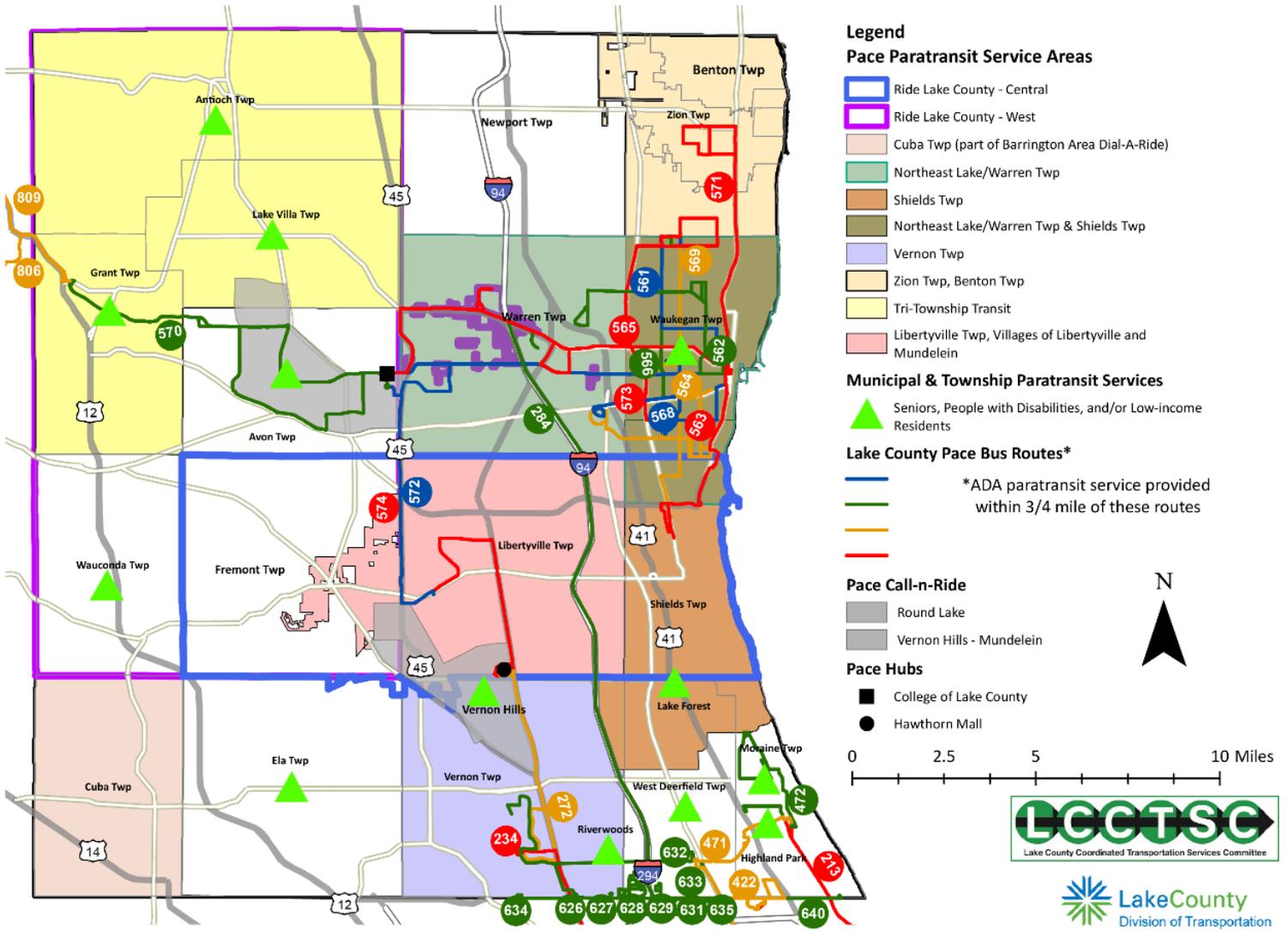
## TRANSPORTATION NEED INDICATORS

Transportation needs vary widely in Lake County. While some areas have robust existing service, other parts of the county are in need of even the most basic transportation options. The following discussion presents methods to examine and evaluate transportation needs across the county. The discussion will frame the ways that service improvements could enhance transportation access in Lake County, and it will explore how various geographic areas will require different transportation solutions.

As shown in Figure 11-2, there is a wide variety of publicly available transportation in Lake County. While many of the services are concentrated on the east side of the county, there are some services available in the western half of the county. With the exception of Newport Township, there is at least one transportation service available in each township or municipality. There are, however, service gaps that exist, particularly in the north and southwest of Lake County; areas that may need special types of service to meet existing transportation needs.

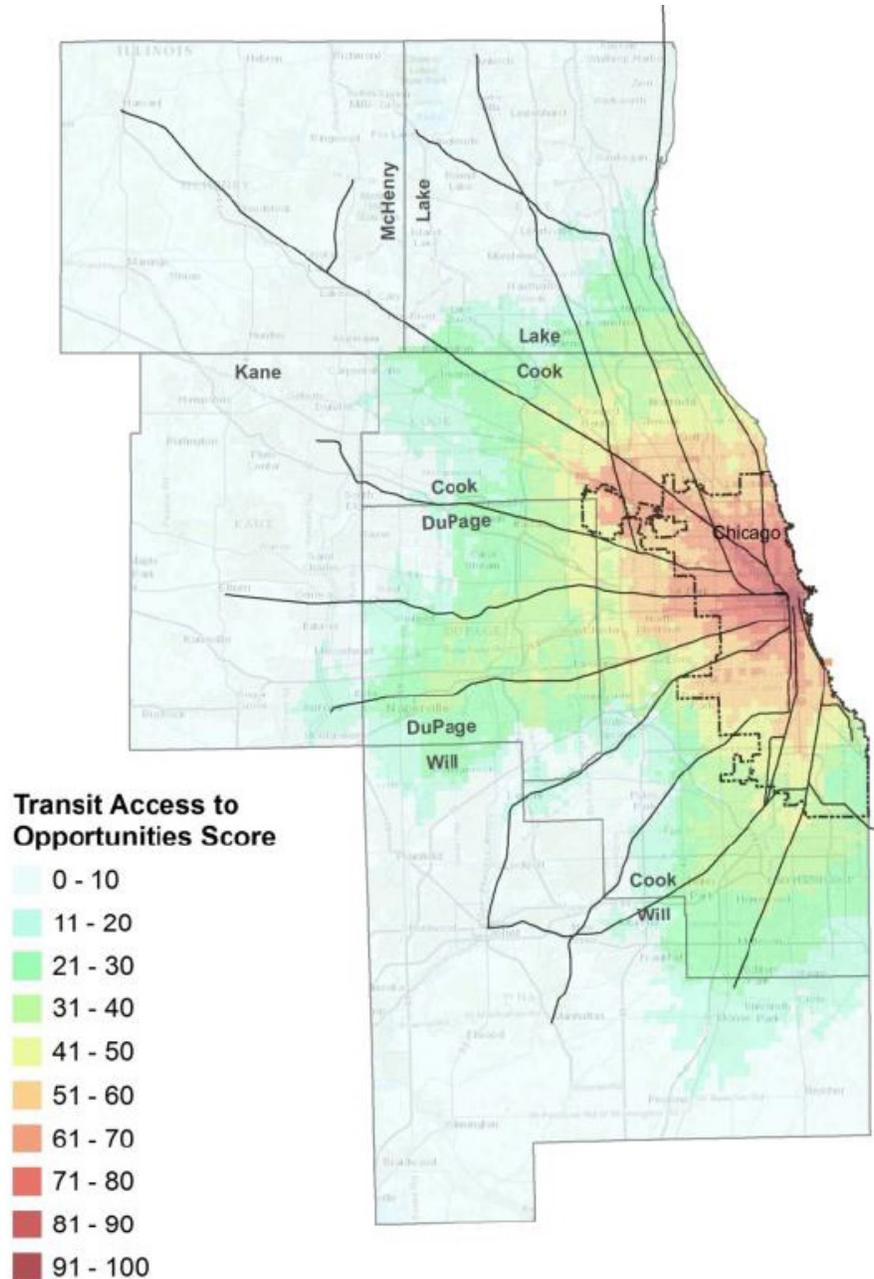
Figure 11-2 Map of Local Bus and Paratransit Services in Lake County, 2017

## Lake County, IL Existing Paratransit & Local Bus Services



The existence of the transit services listed above, however, does not provide a complete picture of where services are available to residents. The map shown in Figure 11-3 displays higher and lower concentrations of transit options available at an origin level. The areas along the Cook County line and near Lake Michigan have the highest concentrations of transit access in the county. Much of the rest of the county, however, has relatively low access to transit. The map scores on the following two maps are based on the national transit/walk score index, which ranks areas from highest to lowest access to opportunities, with 100 being ideal, and 0 being no access.

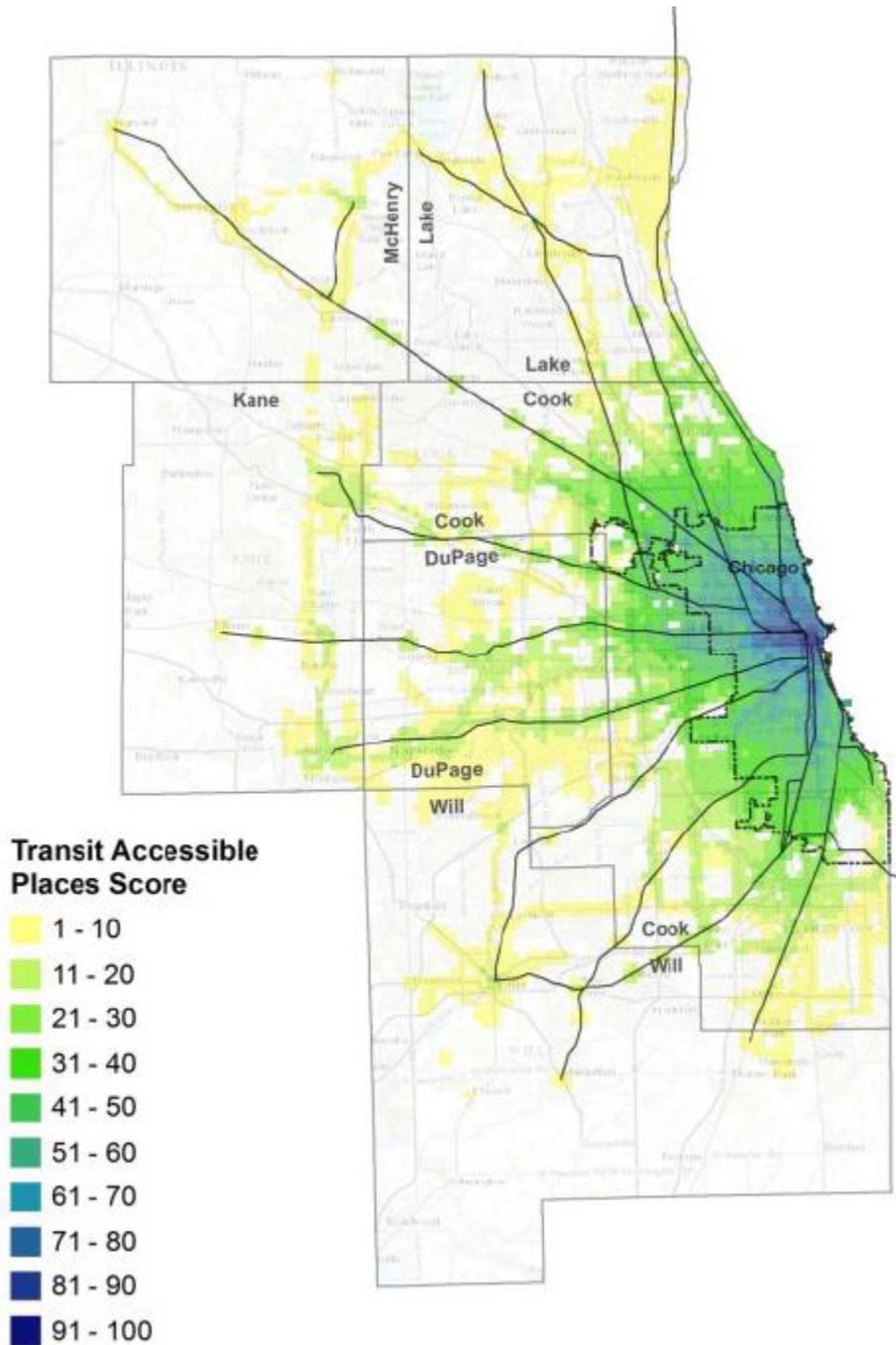
**Figure 11-3 RTA Region Transit Access to Opportunities Score**



Source: RTA Regional Transit Market Assessment, 2017

Figure 11-4 depicts areas in the Regional Transportation Authority (RTA) region that are readily accessible via transit. Similar to Figure 11-3, Figure 11-4 shows that outside of the areas in the east of Lake County, and in close proximity to Metra stations, there are few areas that are transit accessible in the southwest and north areas of the county.

Figure 11-4 RTA Region Transit Accessible Places Score



Source: RTA Regional Transit Market Assessment, 2017

## Transit Propensity Index

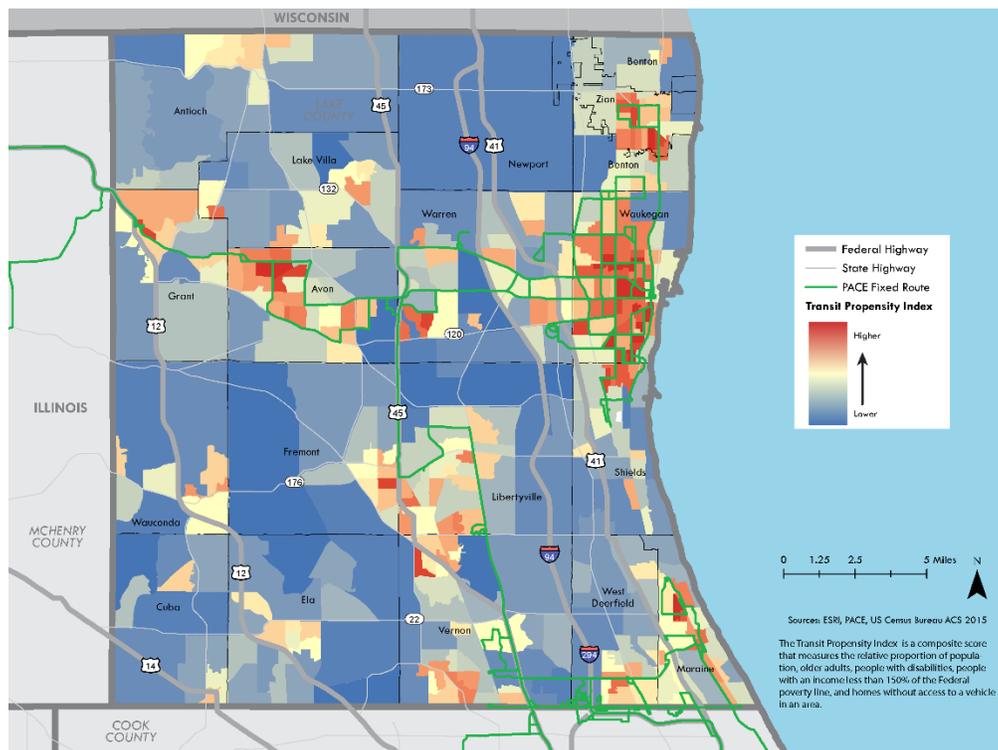
Existing services can only drive the understanding of public transportation needs to a certain extent. As a supplement to public input on local needs and existing service analysis, the study team identified the likelihood of local transit use via a composite demographic index. The Transit Propensity Index (TPI) shown in Figure 11-5 was developed to provide a composite measure of all groups that are likely to rely on public transportation in Lake County. Within a census block group, the TPI measures:

- individual densities of total population
- older adults
- people with disabilities
- people living with an income less than 150% of the poverty line
- households without access to a private vehicle

For each indicator, the density for any given measure within a census block group is then compared to all other areas in Lake County, and grouped by percentile into quintiles. The measure is then scored 0-4 according to which quintile it falls within (the lower quintile scores zero, while the highest scores 4).

The scores for all measures are then summed and mapped to display which block groups in Lake County have the highest composite needs within the area. While the map below displays where the largest concentrations of transit dependent people live, it does not provide a complete picture of transportation needs.

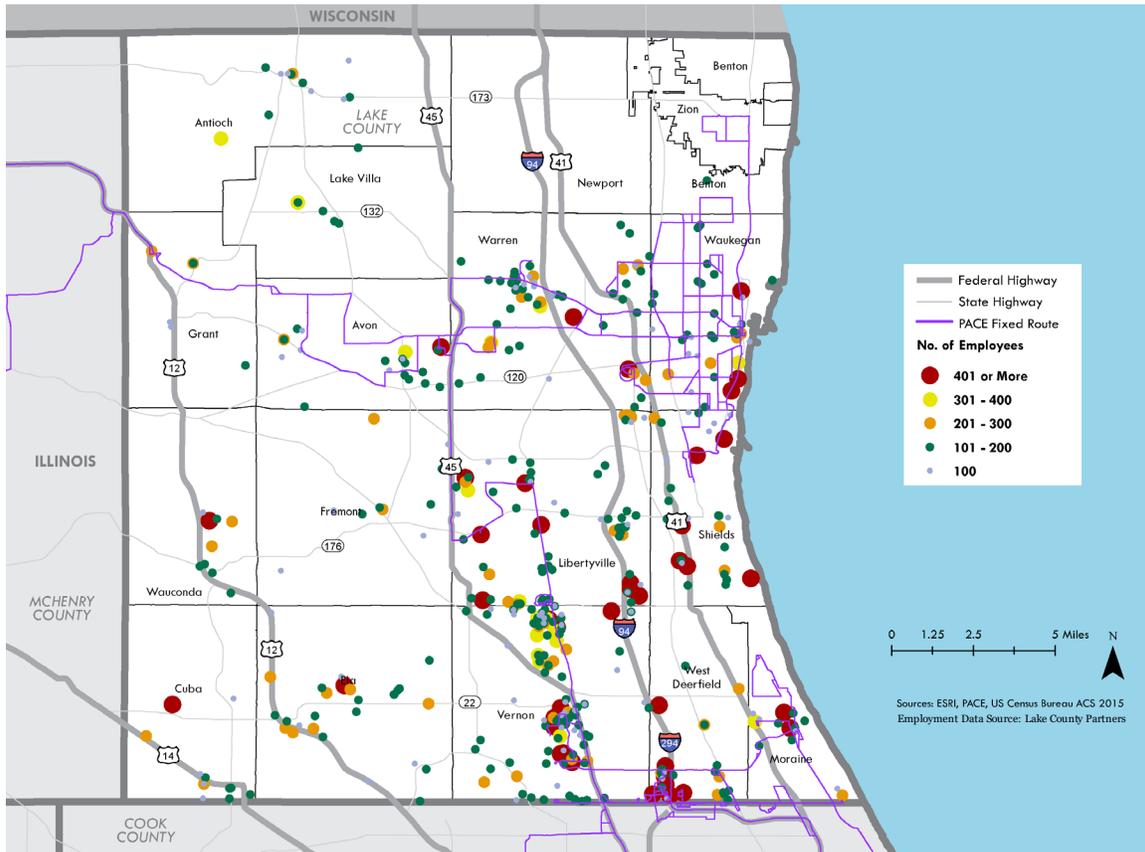
Figure 11-5 Transit Propensity Index



## Lake County Employers

The study team mapped the locations of employers in Lake County with 100 or more employees. The map, shown in Figure 11-6, demonstrates the concentrations of major employers denoted by size.

Figure 11-6 Lake County Large Employers

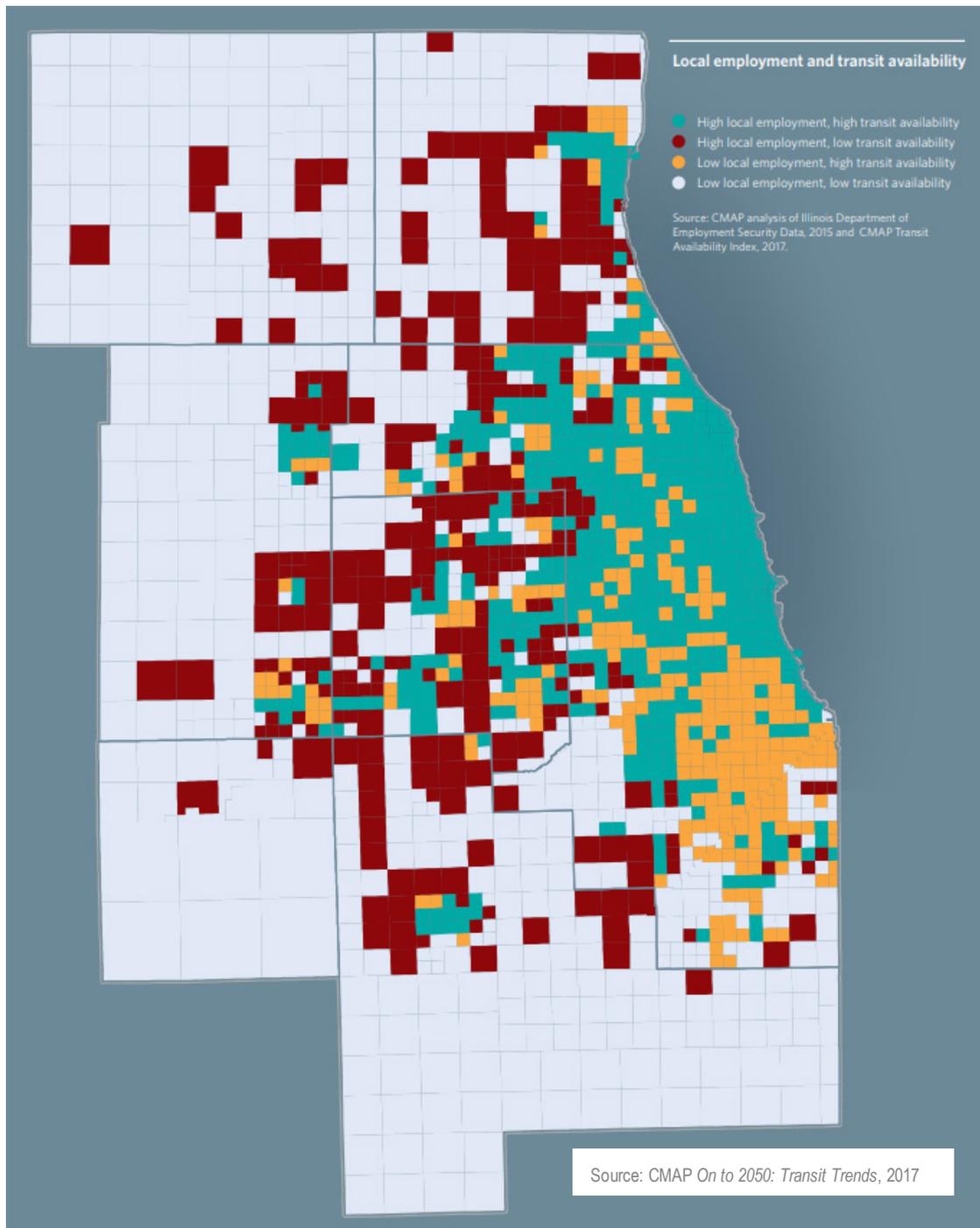


Lake County has over 400 employers with more than 100 employees, representing over 70,000 total workers, some who use some form of public transportation to commute to work. These employers include retail, healthcare, manufacturing, educational, and agricultural businesses. Among these businesses, approximately 50% are located within a ¼ mile of an existing Pace bus route. Accordingly, the majority of businesses served by Pace's fixed-route services are concentrated in only a few different townships. The list of the employers referenced in the map may be found in Appendix C.

## Employment and Transit Availability

As shown in Figure 11-7, a composite measure of employment locations and transit availability in the Chicago area shows that there is substantial variety in access to jobs and transit according to where in Lake County a person is located. According to the Chicago Metropolitan Agency for Planning (CMAP), there is a large number of jobs in the areas with low transit availability (shown in red). This mix of high job availability and low transit availability suggests that a variety of employment-based solutions could be effective in those areas of the county.

Figure 11-7 Local Employment and Transit Availability



## 12 IMPLEMENTATION PLAN

The primary focus of the implementation plan is to design strategies that potentially:

- 1) Overcome the spatial gaps that prevent passengers from traveling from origin to destination in the county in an efficient manner
- 2) Address the temporal gaps when transportation services are needed but not available

Pockets of high-density population and/or employment density are found throughout Lake County, but particularly in the central and eastern portions of the county. Transportation services are available in much of the central and eastern portions of the county during the workday, based on where individuals are located in the county. However, during late night and early morning hours, services are limited or non-existent. In western Lake County, both the population densities and the available transportation services are less than in the east, and services are also limited or non-existent during extended evening and early morning hours.

The strategies included in this implementation plan are intended to improve the family of transportation services available throughout Lake County. The plan presents strategies that will address the most significant needs for employment-related transportation and extended hours of service. The strategies propose a significantly expanded paratransit service for older adults and individuals with disabilities and, with additional public or private funding, could be enhanced to improve transportation for the general public.

Based upon the successes of this implementation plan, the partners and stakeholders will have the necessary tools to replicate service expansions throughout the county as demand is identified and additional funding becomes available. Mid- to long-range improvement strategies are defined later in the section. This group of strategies is considered mid- to long-range because they are recommended after the initial strategies and after pilot programs have demonstrated success.

### TRANSPORTATION IMPROVEMENT STRATEGIES

Three groups of paratransit improvement strategies are recommended based on the findings of the needs assessment and stakeholder input. Each strategy is designed for implementation as an individual program. The selected strategies were determined by stakeholders to be best suited for the local conditions, serving the target markets and making desired trips.

Stakeholders may choose to implement any of the 11 proposed strategies or a combination thereof. There is no sequence of implementation because the success of each program is largely dependent upon the availability of funding and leadership, as well as the priorities established by the various transportation stakeholder organizations. All strategies are described for a specific community or group of people or businesses but designed to be easily replicated anywhere in Lake County.

## ORGANIZATIONAL STRUCTURE IMPROVEMENT STRATEGIES

As the demographic, employment, and socioeconomic conditions in Lake County continue to evolve, the organizations that directly provide or sponsor paratransit services must continue to work together to manage the overall transportation system. Each of the transportation improvement strategies in this section include a discussion of responsible parties for implementation, administration, funding, and/or oversight. While full consolidation is not necessary for the implementation of the strategies, several will require inter-agency coordination for implementation. Additionally, if strategies recommend a move toward a single Lake County region paratransit service, then a lead entity and the administrative and management structure will need to be identified.

The following paragraphs describe the organizational structure to oversee progress on implementation of transportation improvement strategies. This organizational structure recommends dissolving the LCCTSC but maintaining a subset of that organization as an advisory body. Funding sources for the recommended organizational structure are discussed later in the plan.

### Lead Agencies

Each of the transportation improvement strategies will require a lead agency for implementation, monitoring, and managing funds. Where a lead agency can be identified, it has been listed with the description of each strategy. In situations where no lead agency has been identified, the term “lead organization” is listed to represent the responsibilities of a public, private, or nonprofit entity.

### RideLakeCounty Committee

As the County and various organizations that are providing transportation (either directly operating service or funding service) work to implement the transportation improvement strategies, it will be important for all stakeholders involved in the planning process to continue to stay aware of the successes and failures of each program so others can learn and make progress toward addressing needs. It is recommended that select members from the LCCTSC form a RideLakeCounty Committee. The dissolution of the LCCTSC is recommended and a new committee formed made up of service providers and agencies in the region that have a vested financial interest in transportation services. The committee will be formed in conjunction with feedback from the LCCTSC and Lake County DOT. It is suggested that the new committee should have representation from several organizations, balancing the need to have broad representation from community stakeholders, and the need to keep the committee from becoming too large. Possible representation may include the following organizations or organization types:

- Regional Transportation Authority (RTA)
- Pace
- Townships/Municipalities
- Lake County
- Representatives from Nonprofit Agencies
- Representatives from Health and Medical Community
- Representatives from Veteran and Military Communities
- Representatives from Workforce and/or Major Employers

- Representatives from Education/Schools/Higher Education Institutions
- RideLakeCounty Central & West representative(s)
- Great Lakes Naval Base
- Representation from Transportation Network Companies

The RideLakeCounty Committee will coordinate with local transportation planning partners by acting as an advisory board for transportation planning decisions as the strategies contained in this plan are implemented. Working groups may be formed outside of the committee to inform on various project strategies; for example, working groups to focus on Late Night Transportation, First Mile/Last Mile Connections, and Countywide Marketing, to name a few.

Ultimately, if countywide paratransit services are achieved, the RideLakeCounty Committee could become the advisory board for a new entity that is responsible for paratransit services in Lake County. That new organization could be created as a new nonprofit organization or as a new department within a regional agency such as Lake County or Pace. The new entity would require additional staff and creation of by-laws.

### **Mobility Manager(s) for the Lake County Region**

A mobility manager, or managers as the case may be, could be hired through a single agency or hired through multiple agencies in Lake County. Employees may be shared and funded amongst multiple agencies needing mobility management services. If hired, it is envisioned that the mobility manager(s) for the Lake County region could report to the RideLakeCounty Committee as they work with stakeholders to facilitate implementation of the transportation improvement strategies. The mobility manager(s), with advice from the RideLakeCounty Committee, could also assist individual lead agencies for transportation improvement strategies with preparation of Requests for Proposals (RFPs) for third-party operators, suggest goals and objectives, monitor performance, assist with outreach, and help to identify future funding sources. It is important to note that the number of staff positions needed to provide mobility management functions for the Lake County region directly relates to the level of service desired for the coordinated services. For example, if it is envisioned that the mobility management staff would perform the work suggested above, and if they were also responsible for assisting in implementation of coordination strategies and helping the public find travel options and plan transit trips, it is very likely that multiple staff would be needed to perform these functions.

## **SERVICE STRATEGIES**

### **Late-Night Employment Transportation Pilot**

Transportation inbound to overnight employment locations and outbound return trips from work shifts ending in the late evening have been a challenge to transit systems across the nation, including for Pace in Lake County. Public and stakeholder input received during this planning process identified late-night employment transportation as a leading unmet need or gap in available transportation resources in Lake County. Access to jobs has repeatedly been identified by stakeholders as a need in Lake County. The top priority rating for employment-related transportation is also supported by statistics from RideLakeCounty Central and West, which indicate half of the trips provided for older adults and individuals with disabilities today are for employment-related purposes; see Figure 12-1.

This strategy focuses on shared ride (vanpool/carpool/shuttle) or taxi/Transportation Network Company (TNC) services to address both directions of evening and overnight shifts while also utilizing the existing traditional public transit and paratransit services. Late-night transportation will provide group ride transportation during hours when transit is not operating and will require use of the available public transit or paratransit service for either inbound or return service when and where it is available. In areas where no transit service is available, the late-night transportation pilot will be used for both the inbound and outbound trip.

The late-night employment transportation pilot for Lake County is designed to create new mobility options for employees working evenings or overnight work shifts when and/or where other fixed-route or paratransit services are not running. A key intent of the pilot is to create access and/or improve commuter transportation options to 2<sup>nd</sup> and 3<sup>rd</sup> shift employees.

Employers not located on an existing bus route or within the service area of a paratransit service, or who have shifts that do not match the current transit operating hours, will benefit from the late-night employment transportation pilot because the potential market for employees will be expanded to include older adults and individuals with disabilities who would otherwise have no, or limited, transportation options. Therefore, potential employees who are eligible for late-night transportation services and are otherwise not served by a fixed route or ADA paratransit will also benefit from having new transportation-to-work options. A proposed working group will determine the implementation details further, with the steps outlined in the next section.

## Implementation Steps

A phased approach to implementation of late-night transportation will permit participating organizations and transportation providers time to develop the program in a gradual and sustainable fashion. The program is designed with the flexibility required to meet changes in demand as new opportunities to involve employers and employee groups are identified, and sustainable funding sources are secured. Late-night employment transportation will require additional funding from private businesses or through public/private partnerships. Providers for late-night transportation have not been identified but could include vanpools, carpools, taxis, TNCs, or shuttles.

### Phase I

*Connect groups of job seekers with employers that are seeking employees and individuals with disabilities during non-traditional work hours.*

Through this planning process, Goodwill Great Lakes identified a significant need to fill early and late shift, entry-level positions for food service workers at Naval Station Great Lakes in North Chicago. The Goodwill Great Lakes workforce consists of approximately 574 individuals with significant disabilities, many of whom do not drive. The total job vacancy for food service workers was 201 positions at the time of this report. These include full- and part-time positions. The job placement goal is 15 to 25 employees per month. Goodwill Great Lakes would like to improve its ability to recruit and fill positions with employees living in outlying areas, as well as continuing job placement services for employees who live near the Naval Station.

Naval Station Great Lakes is served by Pace Route 563, which provides weekday service to Waukegan and Rosalind Franklin University Medical Clinics. Major employment destinations on the route include:

- Abbott Labs

- Downtown North Chicago
- Lovell Federal Health Care Center
- Great Lakes Naval Training Center
- Rosalind Franklin University

Route 563 also has stops at North Chicago and Great Lakes UP-N Metra Stations.

Weekday hours of operation are between 6:20 a.m. and 6:40 p.m.

Currently, employees using Route 563 must transfer at the Naval Station to Goodwill's on-base shuttle to get to/from the Visitor Center at 610 Farragut Avenue and their worksites.

Goodwill Great Lakes currently funds shuttle services from Cook County, Illinois, and Racine and Kenosha counties, Wisconsin. The Chicago area and Racine shuttles are operated through a contract with First Student. The Kenosha shuttle is operated by Kenosha Achievement Center. These shuttle services, like Route 563, take passengers to the perimeter gate of the Naval Station where passengers transfer to an on-base shuttle. The on-base shuttle trip is 45 to 60 minutes. Travel time for the entire one-way trip could take passengers 1.5 to 2 hours, depending upon the length of time they are riding Pace.

There are three shift times for Goodwill Great Lakes employees at the Naval Station, which begin as early as 4:45 a.m. and end as late as 8:15 p.m. Currently, only commuters on the mid-day shift (10:00 a.m. to 2:15 p.m.) have the option of using Pace. A commuter option for the breakfast (4:45 a.m. and 5:15 a.m. start) and dinner (8:15 p.m. and 8:45 p.m. end) shifts is needed.

#### Partner Roles/Responsibilities

A transportation provider for the program will be identified through a formal RFP process conducted by Goodwill Great Lakes with the assistance of Lake County DOT if desired. The RFP process would be similar to the procedures used to secure agreements with First Student and the Kenosha Achievement Center. Goodwill Great Lakes will oversee and manage the program and the contract with the provider in the same manner that it currently manages agreements with other transportation services in the program. If requested by Goodwill Great Lakes, Lake County DOT, in conjunction with the RideLakeCounty Committee, could assist with reviewing the proposals and selecting a successful bidder.

Upon adoption of this strategy, Goodwill Great Lakes will work with the selected provider to design a vanpool/carpool or rideshare program for employees traveling to/from the Naval Station. The selected transportation provider could be a TNC, private operator, or public agency depending upon the eligibility requirements of funding utilized for the project and the bidders that respond to the RFP. Ultimately, the selected operator will be responsible for providing the appropriate vehicle(s) for the program – some of which will be wheelchair accessible. Each vanpool/carpool or rideshare vehicle will require a driver with the necessary qualifications to safely transport individuals with disabilities. Qualifications should include Passenger Assistance Safety and Sensitivity (PASS) training when a wheelchair accessible vehicle is used for service; PASS is a nationally accepted passenger-assistance program.

Goodwill Great Lakes will be responsible for identifying potential funding sources, distributing the RFP and accepting/reviewing program applications, and determining eligibility for passengers using the program. The selected transportation provider will be responsible for setting up an invoicing/billing structure and performance monitoring/reporting program with Goodwill Great Lakes. Funding, however, will be a concern to ensure the program's success. Initial funding

sources, as well as longer-term sustainable funding sources need to be identified to help fund the pilot. The RideLakeCounty Committee may be a resource to assist Goodwill Great Lakes with the process of identifying grants and other local, regional, or federal funding sources.

Upon discussions with Goodwill Great Lakes, it is understood that Goodwill Great Lakes and its partners will be responsible for identifying available funding to subsidize the commuter transportation program. Potential federal funding sources are identified in the next chapter. Federal funding requires a local match. In some cases, local matching funds can be derived from other federally funded programs so long as the federal dollars were not originally allocated to the U.S. Department of Transportation. It is noted that the Federal Transit Administration (FTA) would consider the scope of this program to be eligible for a Section 5310 Program for mobility of seniors and individuals with disabilities grant. Service provided by TNCs may not meet the regional eligibility requirements for Section 5310 Program funding.

## **Phase II – Expanding to Include Mid-Size Employers**

Phase II of the late-night employment transportation program involves incorporating employers with 200 to 500 jobs that are in need of a sustainable workforce for 2<sup>nd</sup> and 3<sup>rd</sup> shifts. Mid-size employers in Lake County are the most likely category that are seeking employees. These employers are not currently participating in privately sponsored shared-ride services for employees currently administered by the Transportation Management Association (TMA) of Lake Cook, making them ideal candidates for a late-night transportation program. Late-night transportation options will reduce the likelihood of transportation as a barrier to employment.

Eligibility for Phase II will depend upon available, sustainable funding from private businesses or public/private partnerships. Priorities established through this study are:

- Older adults and individuals with disabilities
- Individuals with low incomes
- Veterans
- The general public with no reliable access to a vehicle for employment purposes or non-drivers

### Partner Roles/Responsibilities

This geographic area of eastern Lake County is suggested during Phase II based upon Transit Propensity Index results which indicate the area has the highest likelihood for demand.

Phase II will expand upon the Phase I program with the existing operator(s), or it has the option of adding different transportation operators through an approved procurement process or other local agreements.

For Phase II, a lead organization must be identified to take the following roles, at minimum:

- Work with property managers, the Building and Operations Management Association (BOMA), and Chambers of Commerce to promote the success of Phase I to existing and potential mid-size employers in the eastern half of Lake County and encouraging said employers to join the program
- Promote and monitor the program performance
- Work with participating employers to continue to develop a program that meets their demands and needs

- Monitor the provider's performance, determine eligibility, accept customer feedback, and manage the billing/invoicing/contract procedures

Alternatively, the contractual agreement with the transportation provider could incorporate nearly all administrative functions and the lead agency would then be relieved of the day-to-day responsibilities.

The lead organization could be a public, nonprofit agency in order to be eligible for future FTA grants and certain other local grants, should such grant funding become available. Potential funding sources are discussed in the Funding section of this report. Potential lead organizations include Lake County Partners, Lake County Workforce Development Team, Lake County DOT, or the TMA of Lake-Cook.

Attracting employers into the program is an additional responsibility that could be implemented through a strong promotional program and managed by the lead agency.<sup>1</sup> Pace also offers useful tools and information about promoting Pace Ride Share at the workplace.

### **Phase III – Expanding to Include the General Public Anywhere in Lake County**

As the late-night employment program gains momentum for various eligible passenger groups in the designated geographic area, the successful program platform could be expanded to include the general public anywhere in Lake County. This option would be implemented to fill the gap in access to employment when and/or where other public transportation services are not operating. Trips would only be authorized when an existing service is not available.

#### Partner Roles/Responsibilities

Partner roles and responsibilities are the same as those identified in Phase II but will require additional capacity, funding, and staffing to include an expanded geographic service area as well as expanded eligibility that includes the general public. Therefore, additional funding from public/private partnerships for administrative and operating functions will be required, to scale. Registration for employees using the program should be straightforward and the employees or their sponsoring agency will handle that responsibility. The program coordinator will be responsible for overall program oversight, billing, and contract and grants management. Some recruiting responsibilities could also be handled by the lead agency.

### **Capacity Needs for Late-Night Employment Transportation**

Goodwill Great Lakes will work to refine the level of demand for Phase I of the program. Initial estimates based on data available from Goodwill Great Lakes indicate that there are currently 358 Goodwill Great Lakes' employees from Lake County who are working in these food service positions (more than three times the number of employees from Cook County). Employment opportunities are 365 days per year. For the purpose of this report, it is assumed that all 358 of the current Lake County employees will ride to and from work on the transportation program.

It was not possible from available data to estimate the number of employees per shift. However, on average, employees from the Chicago, Racine, and Kenosha areas ride approximately two times or more per week. Assuming the same ridership trends would apply to Lake County

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<sup>1</sup> One successful example of a promotional program that could be replicated in Lake County is the Back 'N' Forth Club. The Back 'N' Forth Club is a free program of San Luis Obispo (California) Regional Rideshare that assists employers in educating and empowering employees to make smart commuter choices through education and tools. Additional information about the program is available at <https://rideshare.org/program/back-n-forth-club/>.

employees if service were available, weekly ridership demand would be approximately 763 round trips per week or 39,652 annual round trips. As employment positions are filled, ridership will increase.

If the service in Lake County is not offered during normal operating hours for Pace, the total number of trips would be reduced. Data on the number of positions available by shift was not available at the time of this study and could not be estimated.

Vehicle size and capacity will be determined based on the necessary capacity for wheelchair accessible vehicles and on the amount of ridesharing that can be accomplished. Current estimates show that ridesharing with 12-passenger vans or larger would be required, especially if vehicles are wheelchair accessible. However, capacity will need to be refined through coordination with Goodwill Great Lakes.

Phases I, II, and III are separate programs to be implemented independent from one another. Capacity needs for Phase II and Phase III will depend upon the employers that want to support late-night employment transportation service and the geographic size of the service area. The larger the area, the more vehicles will be required. The higher possibility for grouping trips for pickup and dropoff points in close proximity, however, would make larger vehicles with higher seating capacity the more affordable option.

### **Estimated Costs**

If this program is publicly subsidized or funded, the lead agency is strongly encouraged to develop a contractual agreement that incorporates an incentive for providing shared-ride TNC services. Shared-ride TNC trips are beneficial because they help to conserve program expenses and other resources. If the lead agency controls the responsibility for setting up the trips, then the agency may coordinate the shared-ride schedule and dictate to the provider which passengers to pick up for each trip.

Costs for transportation services of TNCs (such as Uber, Lyft, or microtransit) or taxi providers will vary depending on the scope and parameters of the program. In general, TNC and taxi services are funded at a per-trip rate. Based on available funding, the program would be set up to offer a limited number of free or low-cost rides to each passenger each month during the hours when the person needs to travel to and from work. The funding entity will pay the balance of the trip cost to the operator.

Cost details for participation in Pace's Community Vanpool Program would be negotiated between the lead organization and Pace. Contracts for the vanpool could either be established between Pace and the lead organization, which would be overseeing the program for multiple employers, or between Pace and a single employer. If the contract is directly between an employer and Pace, the lead organization's responsibilities would be diminished. Lease terms with the existing Pace vanpool programs include an initial payment of \$1,000 and a monthly fee of \$100 that covers maintenance for the smaller vans and minivans; with vehicles obtained from a Pace-approved vendor. Although vanpools could be important for first and last mile service, there may be a need to identify drivers for these vanpools if the intended passengers (people with disabilities) are unable to operate the vehicle.

Another lower cost option for the program, would be to expand operating hours for Dial-A-Ride to accommodate 2<sup>nd</sup> and/or 3<sup>rd</sup> shift work. This option is recommended as a long-range goal for Phases II and III after demand for services is known through the pilot projects. It could be a short- to mid-range goal for Phase I if a ridership base from Goodwill Great Lakes is identified.

The lead organization will require one part-time program coordinator for Phases II and III of the program. If hired, the Lake County region mobility manager(s) could be the program coordinator. The responsible individual will handle grants management and monitoring of program performance and compliance. If no mobility manager is hired, it is recommended that program coordinator duties be added to an existing employee within the lead organization because responsibilities are not likely to require more than 15 to 20 hours per week, depending upon the level of responsibility. The program coordinator responsibilities are likely to increase with the implementation of Phase III; however, it is unlikely to require more than a part-time position. Conversely, program coordinator responsibilities may remain minimal if the transportation provider supplies promotional and outreach/education materials and the participating employers assist with outreach and program development.

**Figure 12-1 Phase Summary Late-Night Employment Transportation Pilot**

Phase	Cost Categories	Estimated Cost Vanpool	Estimated Price TNC/Taxi
<b>Phase I</b>	Vehicle Lease	\$1,000 one-time fee/vehicle	\$0
	Monthly fee	\$100/month	\$0
	Passenger/Sponsor Fare	\$73 to \$112/month**	\$7 to \$24/one-way trip* \$13 to \$43/one-way trip for 6 or more passengers
	Estimated Annual Total	\$2,076 to \$2,544/vehicle + One-time fee of \$1,000 per vehicle	\$873,600 to \$2.9M for single-rider services \$270,400 to \$894,400 for shared-ride services
<b>Phase II</b>	Vehicle Lease	\$1,000 one-time fee/vehicle	\$0
	Monthly fee	\$100/month	\$0
	Program Coordinator	\$0 to \$10,000/year	\$15,000 to \$20,000/year
	Passenger/Sponsor Fare	\$73 to \$112/month**	\$7 to \$24/one-way trip* \$13 to \$43/one-way trip for 6 or more passengers
	Estimated Annual Total	\$173 to \$212 per vehicle per month plus a one-time fee of \$1,000	\$873,600 to \$2.9M for single-rider services \$270,400 to \$894,400 for shared-ride services
<b>Phase III</b>	Vehicle Lease	\$1,000 one-time fee/vehicle	\$0
	Monthly fee	\$100/month	\$0
	Program Coordinator***	\$0 to \$20,000/year	\$20,000 to \$25,000/year
	Passenger/Sponsor Fare	\$73 to \$112 per month**	\$7 to \$24/one-way trip* \$13 to \$43/one-way trip for 6 or more passengers
	Estimated Annual Total	\$173 to \$212 per vehicle per month plus a one-time fee of \$1,000	\$873,600 to \$2.9M for single-rider services \$270,400 to \$894,400 for shared-ride services

\*Based on average cost of a trip pool, UberX, or UberXL trip between North Chicago and Lake Bluff (less expensive end of the scale) and North Chicago and Mundelein (more expensive end of scale).

\*\* Based on the Pace 2016 Monthly Vanpool Passenger Fare Schedule ([www.pacebus.com/sub/vanpool/traditional\\_vanpool.asp](http://www.pacebus.com/sub/vanpool/traditional_vanpool.asp)). Fares are based on distance and number of people sharing the vehicle. Drivers do not pay. Back-up drivers receive a discount.

\*\*\*Cost to coordinate trips; not the total salary.

## Issues to Consider

There are several issues for participating organizations to consider in administration of this program:

- Transportation Network Companies (TNCs) or taxi agreements can be arranged for single-trip rides or shared rides to employment locations. This flexibility makes TNCs a more affordable option for programs with low ridership, shorter trips, or for small groups that share rides.
- The provider must be held to strict performance and service monitoring standards. Key performance standards include, but are not limited to, the following:
  - On-time performance (if the driver is part of the provider's services).
  - Safe, well-maintained vehicles.
  - Reliable service.
  - Reasonable travel times to/from destinations. Transit agencies typically establish their own trip-length standards. Industry best practices for time on a vehicle is not to exceed one hour.
  - Regular and comprehensive driver background checks and participation in an approved drug and alcohol testing program.
- TNCs interviewed during this planning process indicated that they do have resources for wheelchair accessible vehicles (WAVs) and drivers that are qualified to secure mobility devices. Both organizations presented some limitations on the availability of WAVs and qualified drivers and additional costs that would be associated with use of a wheelchair accessible vehicle. As these companies typically use independent vehicle owners to derive their vehicle fleet, there may not be any WAVs available in an area. Purchase of these vehicles however may be promoted through local grant funding or other means such as requiring taxi companies to maintain a certain percentage of WAVs in their fleet.
- Depending on the program, eligible Pace Community Vehicle recipients may or may not be responsible for maintenance of the larger vehicles. Participants in Pace's Municipal Vehicle Program are not responsible for maintenance costs, but participants in the Locally Based Vehicle Program are responsible for these maintenance costs. Recipients of large or small Pace vehicles are responsible for all other expenses, including fuel and insurance costs.
- Background checks, training requirements, and drug and alcohol testing standards for taxis and TNC drivers vary by provider and must be clarified in the contractual agreement.
- Pace Community Vanpool drivers must participate in Pace's drug and alcohol testing program and receive training through Pace.
- Capacity needs for this program are projected to increase with opportunities to add new employers.
  - It is critical that sustainable, multi-year funding is secured prior to each incremental increase.
  - It is critical that the program continues to offer opportunities for new employers, agencies, or other organizations representing the passengers to join.

## Enhanced On Demand Service

Enhanced On Demand service is favorable because it offers more scheduled stops, or checkpoints, compared to traditional Pace On Demand. Potential elements for the service could include promotion of spontaneous boarding where it is effective for first/last mile customers accessing traditional transit. The promotion of On Demand for individuals who may be eligible for ADA paratransit services but could be effectively served by the On Demand program may also be a more cost efficient and customer friendly way of providing service for ADA paratransit eligible customers through spontaneous boarding without need for advance reservation. The use of On Demand service may also provide the first and last mile service that will promote use of Pace fixed-route services by ADA eligible riders. The application of checkpoints could also increase the efficiency of existing Pace On Demand services in the Round Lake and Vernon Hills-Mundelein service areas. Figure 12-2 depicts the Enhanced On Demand Service recommendation.

Another enhancement to On Demand service is the availability of online trip booking, which would improve the efficiency of reservations and scheduling of On Demand trips and enable shorter response times to customer requests for a ride. Pace implemented online booking for both the Round Lake and Vernon Hills-Mundelein On Demand service in May 2018.

The service is recommended to start in the Round Lake Area and/or Vernon Hills/Mundelein as an enhancement to the existing On Demand services, so that riders could board at more locations without an advance reservation. Other potential areas identified in the 2012 Lake County Transportation Market Analysis for an On Demand service are Lake Forest and Antioch.<sup>2</sup>

Scheduled stops would be located at fixed-route transfer points and major employment or commercial destinations. Online booking options, which are currently in development for Pace On Demand services, would be available to facilitate more efficient reservations/routing and/or shorter response times.

### Partner Roles/Responsibilities

On Demand service enhancement will be developed through a contractual agreement between Pace and the townships or municipalities where the service will be provided. The Ride Lake County Committee would facilitate discussions between Pace and the local entity and have an advisory role, as needed.

## Implementation Steps

Before enhanced On Demand service can be implemented, it is recommended that the local government representatives meet with the major stakeholders that would be impacted by the service expansion to ensure active involvement in the process. The local government entity that contracts with Pace will need to determine level of involvement for the stakeholders, both from information and cost-participation perspectives.

It is recommended that Pace, as the service provider, also provides and manages the call center.

The local governments taking part in the enhanced On Demand services should consider shared branding and marketing for the service.

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<sup>2</sup> 2012 Lake County Transportation Market Analysis, Cambridge Systematics.  
<https://www.lakecountyil.gov/DocumentCenter/View/2046/LCTMA-Executive-Summary-PDF>

## Capacity Needs

Precise capacity needs will be determined in partnership with Pace. It is projected the enhanced On Demand service will require some changes to the existing route schedules to allow for more stops. Ridership is also projected to increase as the program is publicized and more people become aware of the options.

**Figure 12-2 Enhanced On Demand Capacity Needs and Operating Hours**

Service	Hours of Operation	Operator	Accessible Vehicle Capacity
Enhanced On Demand Round Lake Area	Weekdays 6:00 AM to 6:15 PM	Pace	1 15-passenger van
Enhanced On Demand Vernon Hills/ Mundelein	Weekdays 6:00 AM to 6:15 PM	Pace	1 15-passenger van

## Estimated Costs

Costs vary depending on the additional demand placed on basic Pace transit services. Additionally, a full-time mobility manager and assistant position(s) could be involved in the process of marketing and public education about the enhanced services, defraying the costs. Before an estimate can be applied, there are issues to consider.

## Issues to Consider

The main issue with the expansion of the service, aside from cost, is the confusion in the community regarding Dial-a-Ride and On Demand. Pace rebranded their Call-n-Ride services to Pace On Demand services in December 2018. Creating new marketing and branding strategies may aid with the problem; however, it is recommended that if stakeholders wish to pursue enhanced call center services, the services are developed through a single agency. United Way is currently developing 211 services, but the option would need to be researched further to determine if 211 is the best fit for public transit information. No matter how the call center is enhanced, it is best for all agencies to participate to avoid confusion. Call center service would be aided by using a single reservation phone number for the entire Lake County area.

## Flexible (Deviated Fixed Route) Transit Services

Fixed-route transportation can be costly and may not be the best solution in areas with lower population density. The use of community transit or contract service operators (such as First Transit in Lake County) to operate smaller, right-sized fixed-schedule services may be a means to free up operating funding to provide additional services in low density areas of the county with demand for fixed-schedule service but not enough density to support traditional bus transit.

A review of the cost and productivity of existing bus routes may suggest routes that would be candidates for operation at a lower cost scale as route-deviation services. Such a change would also enable more direct service to apartment complexes, medical plazas, and shopping centers. This may also enable older adults and people with disabilities to use lower cost fixed-schedule services that can provide more of a curb-to-curb ride than traditional bus service.

Route-deviation services typically operate with fixed stops and timepoints, which enable individuals to request an off-route deviation, within a certain distance, for a pickup or dropoff at

their home or destination. The vehicle then returns to the route or next timepoint. Deviations are requested in advance and may be available to all riders or limited to people with disabilities.

A deviated-route pilot might focus on parts of the service area where fixed routes do not exist because population densities make fixed-route service cost prohibitive, yet there is a concentration of trip generators. A deviated route is often an incremental step between demand-response service and fixed-route service because passengers have the option of scheduling a deviation or walking to a bus stop. Often, as ridership increases, the deviated route transitions into a productive fixed route.

Pace's long-range plan, Vision 2020, describes a network of service that includes mainline, traditional fixed-route bus service along major arterials (high capacity urban roads), and community-based services such as deviated fixed routes or On Demand services to connect riders and pedestrians in lower density areas to those mainline bus services. Areas that might have sufficient origins and destinations that could be linked by this type of route are the portions of Avon and Warren townships that are not served by current Pace fixed routes. This might include providing service from apartments and congregate senior housing to connect with shopping centers and transit connections at the College of Lake County main campus in the Village of Grayslake, and employment destinations in the Village of Gurnee.

Suggested deviated routes, including those included in the Lake County 2040 Transportation Plan, include the following:

- Antioch to Gurnee Mills
- Green Bay Road - Waukegan to Lake Bluff
- Town Line Road - Lake Forest to Hawthorn Mall
- Lake Cook Road - Highland Park to Wheeling

## **Implementation Steps**

### Partners Roles/Responsibilities

It is recommended that Pace would potentially handle all duties associated with operations, maintenance, and scheduling, and would report service statistics. Local communities where the program is implemented would be asked to assist with planning. It is further recommended that Pace could be responsible for securing funding for this program with the assistance of public and private partners who may contribute funding as well.

It is recommended that these service pilots and/or enhancements are implemented as a function of Pace.

## Capacity Needs

Deviated-route transportation typically serves four to seven passengers per revenue hour. The following figure outlines potential hours of operation and vehicle capacity needs.

**Figure 12-3 Deviated-Route Operating Characteristics**

Service	Hours of Operation	Operator	Accessible Vehicle Capacity
Antioch to Gurnee Mills Deviated Route	Weekdays 6:00 AM to 6:30 PM	Pace	3 15-passenger vans
Green Bay Road - Waukegan to Lake Bluff Deviated Route	Weekdays 6:00 AM to 6:30 PM	Pace	1 15-passenger vans
Town Line Road - Lake Forest to Hawthorn Mall Deviated Route	Weekdays 6:00 AM to 6:30 PM	Pace	2 15-passenger vans
Lake Cook Road - Highland Park to Wheeling	Weekdays 6:00 AM to 6:30 PM	Pace	2 15-passenger vans

## Estimated Costs

Deviated-route service would be new to each of the proposed areas and therefore would require additional funding. Ridership is based upon typical industry standards of four to seven passengers per hour. Based on prior cost estimates prepared for the Lake County 2012 Transportation Market Analysis, annual operating costs for all of the routes together range from \$1,292,850 to \$1,343,850.<sup>3</sup> The figure that follows contains routes recommended from the Lake County 2012 Transportation Market Analysis and the Lake County 2040 Transportation Plan; however, ridership estimates and costs have been updated to reflect current industry standards, referenced below the figure.

**Figure 12-4 Estimated Costs by Route**

Route	Annual Revenue Hours	Annual Ridership Estimates	Annual Operating Costs Estimates
Antioch to Gurnee Mills	9,375	37,500 to 65,625	\$459,375
Green Bay Road	3,125	12,500 to 21,875	\$153,125
Town Line Road	6,250	25,000 to 43,750	\$306,250
Lake Cook Road	6,250	25,000 to 43,750	\$306,250

Annual operating costs are based on a typical industry standard of \$49 per hour.

Annual hours are based on an estimated 250 days of service per year.

<sup>3</sup> Lake County 2012 Transportation Market Analysis, Cambridge Systematics.

## Issues to Consider

- Establishing a funding source for the delivery of flexible routes is a priority. Additionally, consideration needs to be given to setting up a timeline for performance measurement for the routes to ensure sustainability of the funding source for the routes.
- Consideration should be given to fares associated with flexible services and how much should be charged relative to current services being operated by Pace and current demand-response service in the county.
- Vehicles and rolling stock to operate the routes must be considered as well: should the vehicles operating these routes be 100% wheelchair accessible, or would Pace and the municipalities be willing to consider a fleet mix for further flexibility?
- Before flexible routes are implemented, a large-scale marketing and education campaign should begin, educating the public on the new type of service and how to use flexible routes.

## Expansion of a Countywide Paratransit Service

This strategy builds upon the existing coordinated paratransit services in Lake County and works toward gradually expanding paratransit services into a countywide program. The RideLakeCounty Central program and its passengers are directly impacted by this strategy; and, passengers of RideLakeCounty West are indirectly impacted by the opportunity to reach more locations in central and eastern Lake County via a transfer to RideLakeCounty Central. Riders may also currently transfer from RideLakeCounty services to existing Dial-A-Ride services run by Pace. While the strategy does not include the entire county, an expansion of RideLakeCounty Central is a step toward achieving a countywide paratransit service with consistent days and hours of operation, eligibility, fares, and policies. Should RideLakeCounty Central services be expanded, an added benefit would be that passengers could travel to destinations without transferring between services. Removing transfers between services is a way to help increase ridership, and reduce costs for the passengers (no transfer fees). A program that is delivered with consistency and covers more geographic areas of the county is progress toward both simplifying paratransit for the rider and connecting more people and communities with desired destinations.

Local stakeholders and the public have identified employment-related transportation, particularly for older adults and individuals with disabilities, as one of the primary needs that will be addressed through expansion of RideLakeCounty Central. Other trip purposes, including non-emergency medical transportation, are also key drivers in the expansion because it will improve access and reduce spatial gaps between where people live and the location of medical services. Providing transportation mobility for people with low incomes was also a concern of the public during outreach efforts, and should be considered if funding allows. However, expansion of eligibility is likely to be a longer-term goal unless additional funding sources are identified. Current federal funding for the program is designated for improving mobility for older adults and individuals with disabilities. If other sustainable local or federal funding sources for transportation of individuals with low incomes are identified for the entire RideLakeCounty Central service area, an expansion of eligibility could be considered by the RideLakeCounty Committee.

## Implementation Steps

A countywide paratransit system would be designed for implementation in multiple phases, as follows:

- Phase I: Expand into all of Vernon Hills and Vernon Township to provide service for some parts of municipalities that straddle the township lines. At this stage, there are still spatial gaps in transportation coverage throughout the county.
- Phase II: Expand into all of Waukegan Township, the City of Lake Forest, and the City of North Chicago.
- Phase III: Expand into Warren Township.
- Phase IV: Coordinate RideLakeCounty Central and West programs to expand the service area and include more of southwestern Lake County.
- Phase V: Expand paratransit services countywide. At this phase, the entire county has access to paratransit services and there are no spatial gaps in service for eligible riders during normal hours of operation.

For the purpose of this study, the following service characteristics will remain unchanged throughout each expansion phase:

- RideLakeCounty Central will continue to provide curb-to-curb transportation for eligible riders.
- Hours of operation will continue to be 5:30 a.m. to 6:45 p.m.
- Passengers will call 24 hours in advance to make a trip reservation. Passengers may make reservations up to seven days in advance for work, medical appointments, and College of Lake County trips.
- Cancellations require at least a two-hour notice.
- All vehicles are wheelchair accessible.
- Riders under age 16 must be accompanied by an adult.
- Fare structure (all fares to be reviewed/adjusted by RideLakeCounty Committee):
  - \$3.00 each way for trips under 10 miles for adults age 60+ and individuals with disabilities.
  - \$6.00 each way for trips over 10 miles for adults age 60+ and individuals with disabilities.
  - \$4.00 each way for trips under 10 miles for the general public (RideLakeCounty West only).
  - \$6.00 each way for trips over 10 miles for the general public (RideLakeCounty West only).

### Phase I – Expand into Vernon Hills and Vernon Township

A larger portion of Vernon Hills and all of Vernon Township are currently located south of the RideLakeCounty Central service area boundaries. Vernon Township operates its own taxi voucher program for residents to travel for any trip purpose, except for trips to the airport. The Township also contracts with Pace for a dial-a-ride service for the general public within township boundaries. The Vernon Township Pace dial-a-ride service operates Monday through Friday, 8:30 a.m. to 4:00 p.m. Reservations must be made one day in advance. The current taxi program does not have sufficient funding to support daily trips for individuals who need transportation on a

daily basis, especially if those trips are longer-distance to destinations outside of the township because the taxi provider charges a per mile rate to the passenger.

Phase I of the expansion strategy would bring all of Vernon Hills and Vernon Township into the central service area, thereby expanding access to transportation throughout Vernon Township, Vernon Hills, Fremont Township, Libertyville Township, Shields Township, the Village of Libertyville, and the Village of Mundelein as well as connections to other public or locally sponsored transportation services such as Pace fixed-route service, and RideLakeCounty West. Seniors and individuals with disabilities in Vernon Township will benefit from the expansion including residents of Victory Center and other housing facilities for seniors and older adults in the township. Residents of Vernon Township and Vernon Hills will benefit from improved access to medical facilities, employers, and all other destinations that are located beyond the township boundaries and, therefore, not accessible through Township-funded services.

Pace may continue to be the transportation provider for RideLakeCounty Central. Coordination opportunities with other local programs will also be explored to create efficiencies and stretch local dollars and/or coordinate the use of vehicles among multiple agencies while continuing to improve services to the customer.

Vernon Hills Recreation Center currently provides transportation with its fleet of vehicles to and from the facility for program participants, including transportation for individuals with disabilities. With the expansion of the service area into Vernon Hills, opportunities for RideLakeCounty Central to coordinate with the recreation center should be explored to determine if there are opportunities for ridesharing and/or shared use of vehicles.

## **Phase II – Expand into Waukegan Township, City of Lake Forest, and the City of North Chicago**

RideLakeCounty Central serves all of Shields Township within its current service area. Shields Township has a separate agreement to coordinate transportation for Waukegan Township, the City of North Chicago, and the City of Lake Forest. During Phase II, the RideLakeCounty Central program would expand its boundaries to include Waukegan Township and the portions of North Chicago and the City of Lake Forest that are not covered by Libertyville and Shields Townships. This area is recognized through the Transportation Propensity Index (Figure 11-5) as having high densities of older adults, individuals with disabilities, and zero vehicle households. The area is also home to numerous employers. Expansion of RideLakeCounty Central will offer new opportunities for employment, non-emergency medical, and other reasons for eligible passengers. Residents and employers in the expansion area benefit as well as current passengers from the RideLakeCounty Central and West service areas, who may access important medical, employment, shopping, and other destinations that were currently inaccessible through paratransit.

The expansion will allow passengers access to additional Pace suburban bus routes and Metra stations that are operating within the expansion area. The intent of expanded paratransit services is not to duplicate existing fixed-route transportation. When appropriate for the rider, it will be critical to schedule RideLakeCounty Central trips in the expanded service only when fixed-route service is not an option. When passengers call to schedule a trip, schedulers must first verify that the origin and destination are not located on or near a fixed route and that the trip is not taking place during hours of operation for the fixed route. It is important to note that the origin and destination feature would require some additions to the current scheduling software and thus additional cost. Utilization of the RTA passenger training program to teach passengers how to use

fixed-route bus service, and the benefits that come with it (e.g., no need for an advance reservation, lower fare), will be an important aspect of keeping costs for paratransit service down and reducing duplication of publicly funded transportation services, while providing the best service to the customer.

### **Phase III – Expansion of RideLakeCounty Central into Warren Township**

The Transportation Propensity Index indicates that there are moderately high densities of older adults, individuals with disabilities, and people earning an income of 150% below the poverty level or less in Warren Township. Several employment, shopping, and entertainment opportunities are concentrated in the Gurnee Mills area. Eastern and central corridors in Warren Township are currently served by Pace fixed-route buses. Likewise, RideLakeCounty West includes the Gurnee Mills area in its options for additional destinations that are beyond its service area.

Expansion of RideLakeCounty Central into Warren Township would enhance transportation opportunities for older adults and individuals with disabilities traveling anywhere in Warren Township and also to/from destinations throughout the RideLakeCounty Central service area. The expansion would improve inter-community transportation options. When scheduling a trip in Warren Township, the reservationist would first seek to direct the passenger to use a fixed route that meets their needs. If fixed route is not a feasible option, the trip would then be assigned to RideLakeCounty Central.

This expansion of RideLakeCounty Central could replace the Township Van and Shopper Shuttle, if approved by Warren Township.

#### **Partner Roles/Responsibilities for Phases I through III**

It is recommended that Lake County could continue to act as the grant manager and assist with applications to the RTA for Section 5310 funding if another lead agency is not identified or if a nonprofit is not created to manage the grants. Additionally, it is recommended that all townships and municipalities included in the current and expanded RideLakeCounty Central service area should contribute to the local match required to sustain RideLakeCounty Central services. Partnering townships, cities, and villages should provide the required match for the portion of trips provided to and from their jurisdictions. The RideLakeCounty Committee could act as an advisory body that could review Section 5310 grant applications.

It is also recommended that Pace should continue to partner to be the provider of RideLakeCounty Central service expansions and that Pace also continue to register passengers and schedule trips through the Pace Call Center.

Additional funding sources will need to be identified prior to expansion of eligibility to include the general public or individuals with low incomes.

### **Phase IV – Coordination of RideLakeCounty Central and RideLakeCounty West**

The Transit Propensity Index indicates that there are significant densities of older adults, individuals with disabilities, and people earning an income of 150% below the poverty level or less in Avon Township and as far west as Fox Lake. Analysis of daily commuter travel patterns indicates 9,900 to 12,000 daily commuter trips from Libertyville Township to Avon Township.<sup>4</sup>

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<sup>4</sup> Source: U.S. Census Bureau, 2015.

Avon Township is currently served by RideLakeCounty West, but access to employment opportunities east of Avon Township are limited to the Gurnee Mills area.

Building on the successful expansion of RideLakeCounty Central (Phases I through III), the coordination of RideLakeCounty Central and West becomes more important. Employment travel patterns indicate that, at minimum, Avon Township is a destination for commuters from Libertyville. Currently, a passenger would need to transfer from central to west to complete the trip – which adds to travel time. Demand for transportation between the west service area and other parts of the county would take time to develop baseline data. However, from the service provider and passengers' perspective there are several benefits, including:

- The appearance of having one transportation system could help to alleviate passenger confusion over access of service and scheduling rides.
- Advertising transportation to new and potential passengers will be simplified and more straightforward. This improvement is likely to result in increased ridership.
- When scheduling trips, Pace will have the freedom to assign the trip in the most efficient way, no matter where the vehicle is originating (RideLakeCounty Central or West). If trips are covering multiple townships or going from west to east, Pace can assign the trip to allow for the smallest amount of travel time for the passenger and better cost efficiency for the program. Additionally, the better management of trip assignments may reduce administrative costs.

#### Partner Roles/Responsibilities

It is recommended that Lake County could continue to act as the grant manager and assist with applications to the RTA for Section 5310 funding if another lead agency is not identified or if a nonprofit is not created to manage the grants. Additionally, it is recommended that all townships and municipalities included in the current and expanded RideLakeCounty Central and West service areas will contribute to the local match required to sustain RideLakeCounty coordinated services. The RideLakeCounty Committee could act as an advisory board for the program and review Section 5310 grant applications. The RideLakeCounty Committee could be the administrative body for the services.

It is recommended that Pace should continue to partner to be the provider of RideLakeCounty coordinated service and that Pace should also continue to register passengers and schedule trips through the Pace Call Center.

Additional funding sources will be identified prior to expansion of eligibility to include the general public or individuals with low incomes.

#### **Phase V – Countywide Paratransit**

It is recommended that RideLakeCounty transportation service would expand to all of Lake County and provide transportation options for older adults and individuals with disabilities to anywhere in the service area. After Phases I through IV, the final stage of the service area will be to add the following townships, in the order listed, based upon the likelihood of demand for transportation:

- Benton/Zion
- Moraine
- West Deerfield

- Ela
- Cuba
- Newport

It is recommended that Pace continue to be the provider for RideLakeCounty transportation. The long-term goal of the program is that expansion of RideLakeCounty would replace all or most of the existing transportation services in these townships. Expansion will be gradual and may take several years as Pace and stakeholders work to secure the sufficient funding, vehicle fleet, and staffing to accommodate demand.

#### Partner Roles/Responsibilities

Lake County could continue to act as the grant manager and assist with applications to the RTA for Section 5310 funding if a nonprofit is not created to manage the grants. All Lake County townships and municipalities would contribute proportionally to the local match required to sustain RideLakeCounty. The designated advisory body for the program will review Section 5310 grant applications and discuss needs/plans for the future of the system.

A board of directors for RideLakeCounty will be established for a new nonprofit organization or a new department within a regional agency such as Lake County or Pace. Membership on the board of directors should be limited to 11 to 15 members representing the public and potentially the private sector. It is recommended that Lake County or Pace will chair the board of directors.

It is recommended that Pace should partner to be the provider of RideLakeCounty coordinated service. It is also recommended that Pace should continue to register passengers and schedule trips through the Pace Call Center.

Additional funding sources will need to be identified prior to expansion of eligibility to include the general public or individuals with low incomes.

### **Capacity Needs**

The following figure estimates annual ridership in each of the expansion areas. Estimates are based upon current ridership estimates or actual ridership in these communities. In total, ridership estimates for the expansion to countywide paratransit are approximately 79,870 annual one-way passenger trips. All of these passenger trips are currently being provided by townships or municipalities. The capacity may shift from those individual programs to the coordinated RideLakeCounty Central program. It is likely the number of vehicles operating in the county will be reduced as trips can be coordinated across multiple townships and other service area boundaries. However, as services are expanded, the demand for service could increase with expansion, making it necessary to expand the current fleet for the RideLakeCounty Central and West programs. These may appear contradictory, but several variables may impact the vehicle numbers needed to run the service.

**Figure 12-5 Estimated Ridership for Countywide Paratransit Service**

Geographic Location	Estimated Annual Passenger Trips	Wheelchair Accessible Vehicles
Vernon Township	3,200	1
Vernon Hills	2,250	1
Waukegan and Shields Townships	14,700	4 to 5
Warren Township	8,600	2 to 3
Ride Lake County Central	3,823	3 to 6
Ride Lake County West	11,797	3 to 6
Benton/Zion, Moraine, West Deerfield, Ela, Cuba, and Newport Townships	35,500	6 to 9
<b>Total</b>	<b>79,870</b>	<b>14 to 19</b>

**Estimated Costs**

Estimated annual costs in the figure below are based on the current cost per trip for expansion of RideLakeCounty into a countywide service and current ridership in each area. The identified annual costs include current average costs for RideLakeCounty Central and West.<sup>5</sup>

**Figure 12-6 Estimated Costs for Countywide Paratransit Service**

Geographic Location	Estimated Annual Passenger Trips	Cost per Trip*	Additional Projected Annual Cost
Vernon Township	3,200	\$24.29	\$77,728
Vernon Hills	2,250	\$24.29	\$54,653
Waukegan and Shields Townships	14,700	\$24.29	\$357,063
Warren Township	8,600	\$24.29	\$208,943
Ride Lake County Central	3,823	\$24.29	\$92,861
Ride Lake County West	11,797	\$24.29	\$286,549
Benton/Zion, Moraine, West Deerfield, Ela, Cuba, and Newport Townships	35,500	\$24.29	\$862,295
<b>Total</b>	<b>79,870</b>	<b>\$24.29</b>	<b>\$1,940,092</b>

\*Cost per trip may be impacted based upon economies of scale and increases in staffing/administrative responsibilities of the provider. Estimated cost per trip is based on the current cost per trip for RideLakeCounty Central with an increase of 10% (assuming cost will increase 2% each year and implementation occurs in 5 years).

<sup>5</sup> Estimated annual passenger trips and cost per trip are based on 2016 and 2017 monthly invoices for RideLakeCounty Central and West.

## Issues to Consider

- Sustainable federal and local financial support is required in order to sustain and/or expand the RideLakeCounty Central program.
- Creation of a board of directors will be important for the sustainability of the program.
- Expansion of eligibility will require additional sustainable local or federal funding sources that are allowable for service to the general public, veterans, individuals with low incomes, or other population groups.

## PERSONAL MOBILITY STRATEGIES

### Vanpool First/Last-Mile Access to Transit and Targeted Marketing of Traditional Vanpool Services

One of the challenges for transit agencies is how to provide first and last mile connections to transit at an affordable fare for the customer. One increasingly common strategy is developing vanpool service to serve transit stations. The transit agency typically provides reserved free parking for the van, as well as other support services, including emergency rides home, allowing the agency to minimize subsidy costs and make the first/last mile portion of a transit trip affordable enough to promote the use of transit for the majority of the trip.

One of the key infrastructure advantages in Lake County is the existence of an established vanpool program through Pace. The development of low cost first/last mile service to and from transit hubs would be a complement to the existing Shuttle Bug program. The Shuttle Bug program is a public/private partnership between Pace, the TMA, Metra, and local businesses to provide service connections between the businesses and Metra Stations. Vanpool service has the added advantage over Shuttle Bugs of using low cost vanpool drivers.

Pace's existing Metra Feeder vanpool program is primarily used for last mile service. Vehicles are provided for groups of vanpool participants to drive from a Metra station to their workplace. The vehicle remains parked at the employer during the day and the Metra station overnight. Within a vanpool group of 5 to 10 riders, there would be one assigned driver and one to two additional alternate drivers. The program may also be used for first mile service. Similar to a traditional vanpool, the vehicle is parked overnight at the driver's home and used to drive the vanpool participants to a Metra station for their commute to work. This strategy involves promoting both first mile and last mile connections available through the Metra Feeder program.

In addition to Metra Feeder, there is also the Pace Vanpool program. The Pace Vanpool includes, among other vanpool options, traditional vanpool service that provides individuals with similar origins and destinations with a cost-effective means of traveling to work. Over 50 traditional vanpools currently operate in Lake County, most traveling to employers located in Deerfield, North Chicago, Riverwoods, and other communities in the Lake-Cook Road corridor. Targeted marketing of the vanpool in Lake County could encourage use of this resource to meet the needs of individuals that currently do not have access to employment-rich areas. As previously mentioned, stakeholders repeatedly noted the need for connections between the Waukegan area and jobs located in Gurnee and surrounding communities and the Libertyville/Vernon Hills area.

Targeted marketing of the Metra Feeder program—both the first and last mile options—and Pace Vanpool to employees who work in Lake County would not only benefit commuters, but may also increase use of the programs. A marketing initiative could be carried out jointly between the

Transportation Management Association of Lake-Cook and/or Lake County Partners and the Pace Vanpool Incentive Program to target potential vanpool participants needing transportation service between a Metra station and key employment sites, or between home and work.

Stakeholders participating in outreach activities in January 2018 repeatedly noted that job seekers who live in Waukegan, including but not limited to veterans, have difficulty pursuing job opportunities in Gurnee and surrounding communities and in the Libertyville/Vernon Hills area. Data from Live Well Lake County and the Illinois Department of Employment Security (IDES) confirm that Waukegan (along with North Chicago, Zion, Round Lake Beach, and other communities) has a higher rate of unemployment than the county as a whole. In addition, Lake County Workforce Development, the Lake County Veterans Assistance Commission, and Catholic Charities job developers who work with veterans reported that many of the individuals they work with live in Waukegan or North Chicago. Half of the individuals participating in Workforce Development programs between July 2016 and September 2017 lived in Waukegan (33% of 848 individuals), Zion (11%), or North Chicago (6%).

Job developers identified the following employment areas that are hard to reach without a car:

- Lincolnshire (Vernon Township)
- Village of Bannockburn
- Tri-State Industrial Park in Gurnee
- Waukegan Road in Waukegan
- Amhurst Lake Business Park (Waukegan)
- Lakeview Corporate Woods (Vernon Hills)

The vanpool marketing initiative could begin by concentrating on connecting those residential and employment areas.

### **Implementation Steps**

The following steps are recommended for establishing an expanded vanpool program in Lake County:

- Work with Pace to expand the existing program
- Identify new funding sources to expand the program
- Work with local employers and employer associations to encourage the program
- Create a targeted and branded marketing campaign to expand the use of the program

### **Capacity Needs**

The program would need to be expanded according to demand. While Pace cannot expand the program immediately, cooperation from local partners and Pace can help facilitate the expansion of the program.

### **Estimated Costs**

The program would require an expansion of the existing vehicle fleet. However, these costs may be offset by capital grants.

## Issues to Consider

Pace cannot rapidly expand the existing programs. Expansion would require coordination with local representatives at the municipal, county, and/or private levels and may expedite the expansion and improve the outlook for capital grant applications.

## Use of Transportation Network Companies (TNCs)

Transportation Network Companies (TNCs) are a new variation on an old idea. TNCs are for-hire vehicles that can be hailed via a smartphone. As a method of expanding mobility in Lake County, a publicly sponsored and subsidized option to use TNCs and taxis is proposed. This strategy was selected because public and stakeholder input identified introduction of TNCs into the family of transportation services as a priority. Public/private partnerships with a TNC or a taxi operator can be a cost-effective way to enhance transportation and meet needs. A sponsor agency (usually a transit agency or municipality in other areas of the country) contracts with a taxi company or TNC, such as Uber or Lyft, to provide supplemental, subsidized, paratransit service for eligible customers. Customers place real-time trip requests, usually through a smartphone app. Drivers respond in their own vehicles or a vehicle owned by the taxi company.

Payment is made by credit card through the same app. Fares may change throughout the day in response to supply and demand. Shared-ride fares may be offered. Alternate arrangements for reserving trips by phone, paying with cash, or riding in an accessible vehicle could be available through the transportation provider or a third party. TNCs have established these alternative payment and trip reservations options in numerous communities nationwide where they are partnering with public transit providers.

The taxis and some TNCs offer wheelchair accessible vehicles. Certain TNCs offer Passenger Assistance Safety and Sensitivity (PASS) trained drivers with the requisite skills to secure passengers that use mobility devices.

Typical goals of transit agencies or municipalities that collaborate with TNC providers include reducing the cost of providing service and/or offering a more flexible, spontaneous service for customers. TNC and taxi providers can establish parameters of the program based on the needs of the community. Parameters such as limited hours/days of operation, limited eligibility, geofencing to limit the size of the service area, and other key factors.

This strategy would include two phases as described as follows:

### **During Phase I, the TNC Pilot Program would begin in Vernon Township. Upon the success of the Phase I pilot program, Phase II would begin, wherein the TNC or Taxi Subsidy Program Pilot is replicated in other Lake County communities that have limited transportation options. Phase I: TNC Pilot Program in Vernon Township**

Vernon Township currently has a taxi voucher program using a taxi provider. After receiving several complaints that the taxi operator is not reliable and struggling with the inability to track performance measures as well as the administrative burden of reconciling paper vouchers, the township is seeking a change to improve and track existing service, and create administrative efficiencies. Township staff were engaged as a part of the study and expressed interest in the implementation of a pilot program. As such, the pilot is included as a strategy, and researched for the study.

The current voucher program is structured so each passenger can purchase a maximum of \$75 in vouchers per month; vouchers are subsidized by the township by half. The value of the voucher is \$150 per person. Administrative oversight of the program as well as registration is handled by Township staff. Opportunities for the TNC Pilot program in Vernon Township include, but are not limited to the following:

- A call center for individuals who do not use smartphones should be set up. The call center should be identified either within the township or as a contractual relationship with another organization.
- A program for accepting cash from passengers without credit cards or bank accounts should be included.
- Residents of Vernon Township would have greater access to key locations that are outside of the township such as veterans who travel to North Chicago to access the Veterans Administration.
- First/last mile transportation could be offered by the TNC in Vernon Township at the Metra Station. Vernon Township would offer the TNC dedicated curb space at the Metra Station, similar to the spot offered for the Pace vanpool, where the TNC driver could wait for his/her riders.

### **Implementation Steps**

Implementation issues that can be addressed through careful design of pilot programs and services include:

- Federal regulations for nondiscrimination (Title VI) and equivalent service for people with disabilities (ADA) apply to transit/TNC partnerships.
  - Availability of vehicles that are accessible to people with disabilities, including those who use wheelchairs.
  - Trip booking and payment options for people without smartphones and/or bank accounts or credit cards need to be considered.
  - Federal requirements aside, these are important customer service issues.
- The dynamic pricing that may be a feature of TNC service can affect the fares paid by customers and the subsidies contributed by the transit agency or municipality.

Recommended steps in designing the Pilot program are as follows:

Step 1: Define the service parameters of the program:

- Geographic service area boundaries (geofencing)
- Days and hours when subsidized trips are available
- Eligibility
- Limitations of trip purpose (if any)

Step 2: Analyze and secure available funding:

- Identify available local and federal funding sources based upon eligibility requirements or other factors
- Consider public/private partnerships and grant opportunities that are sustainable
- Consider federal funding options that may be limited by eligibility

Step 3: Develop an operating budget:

- Determine administrative expenses (determining eligibility, monitoring performance, customer feedback, billing, grant management, reporting)

Step 4: Establish a fare/subsidy structure:

- How much will the passenger pay
- How much local subsidy will be available to each passenger or trip
- What is the allocation policy (e.g., a set amount per person, a set amount per trip)

Step 5: Design a Request for Proposals (RFP) based on all the above noted factors and solicit responses:

- The RFP for the Phase I pilot could be available as a template for other Lake County communities.

#### Partner Roles/Responsibilities

During Phase I implementation, Vernon Township could work with the RideLakeCounty Committee or Lake County DOT, if desired, to create a Request for Proposals (RFP) that outlines the scope of services for the Phase I pilot. Successful projects with TNCs involve partnerships, therefore it is important for the RFP to outline the parameters of the program (as listed above).

The selected transportation provider must have the capacity to provide statistics including but not limited to:

- Passenger trips per hour/mile
- Fare revenue collected during sponsored trips
- Passenger trips by time of day and day of week
- Trip origins and destinations (or frequent origins/destinations, at minimum) by time of day
- Trip purpose, if identified by the passenger
- Number of passengers that schedule by phone

Vernon Township may require monthly or quarterly reports from the transportation provider and will share those reports as needed with the new RideLakeCounty Committee. The RideLakeCounty Committee will review the data and share it with communities interested in replicating the program. Performance measures indicated by the data will be important for design of future pilot programs.

#### **Capacity Needs**

Capacity of Phase I will be driven by available funding to subsidize trips in combination with the amount of “fare payment” paid out of pocket by the passenger.

#### **Estimated Costs**

Costs for partnerships with TNCs are best developed as a partnership. TNCs and taxi operators establish their prices based on average cost per mile to operate the service. The local public agency seeking a partnership with TNCs will be able to determine the number of trips that can be provided based upon the available funding and the portion of the trip costs that will be paid by the passenger.

## Issues to Consider

Many examples of transit/TNC partnerships that have been implemented involve solving the problem of first/last mile connections. In comparison, there are fewer examples of TNC services to provide supplemental or alternative options for general paratransit trips. Those limited examples indicate use of TNCs to fill gaps in traditional paratransit services are cost-effective solutions. Examples of services in Lake County that could be supported or supplemented through use of TNCs include:

- Late-night employment service
  - TNC partners can provide service outside of the typical operating hours of local bus service
- Earlier or later service hours, weekend hours
  - Any community that wishes to provide a more cost-effective option for expanded hours could use TNCs to supplement or serve these needs
- First/last mile connections
  - TNCs could offer service between Metra stations, Pace bus stops, and employers not served by Shuttle Buses
- Intra-township service where not currently possible
  - Vernon Township to RideLakeCounty Central and vice versa
  - Northeast Lake Dial-A-Ride to RideLakeCounty Central
- Service in community with limited options
  - Similar to additional service days/hours—need a community looking to obtain cost-effective additional service

Examples of these types of services are found in Appendix D.

## TNC First/Last Mile Service

Given the presence of TNCs already operating in Lake County, and the use of contract services by Pace and some of the municipalities in Lake County, a simplified pilot designed to expand the reach of the fixed-route system could have potential to assist riders in Lake County. Since there are some key bus and rail transfer points, the use of a program for first/last mile could be a cost-efficient way of experimenting with the use of TNC services on a pilot basis.

A potential pilot could be designed to provide a limited service to and from the Great Lakes and North Chicago Metra stations. A subsidy of \$5.00 per one-way trip could be provided to a TNC passenger who is provided a code that can be used on trips to and from the eligible transit destinations.

## Implementation Steps

Partnership and program advocacy are key to the success of the TNC pilot. The following steps are intended to guide the pilot program.

- Identify sponsor agency
- Establish partnerships with local employers to advocate participation in, and, possibly, help finance the pilot

- Sponsor agency should set an appropriate and effective subsidy amount in order to maximize trips
  - Dollar amount, rather than distance, is recommended in order to minimize costs
- Develop partnership with locally operating TNC
  - Only Uber is currently operating in Lake County at the time of this report
- Establish program parameters
  - Users
  - Service area
  - Service hours
  - Availability to individuals vs. carpool
  - Total budget
- Monitoring of program to determine effectiveness of program

### **Capacity Needs**

The pilot should be designed to serve the first mile/last mile transportation needs of particular groups of people taking particular types of trips. In other words, the program should be circumscribed in order to minimize induced demand and instead serve people who cannot easily make a connection today. For the pilot program, the capacity of the initiative should be to serve all employees that need rides working in a specified area to and from an existing transit hub. The capacity needs will be estimated by identifying a clustered employment location that is not already served by fixed-route transit. The first mile/last mile need estimates can be generated by comparing existing trip data versus employment data.

### **Estimated Costs**

The costs are contingent upon the target population for the pilot. This service would operate on a unit-cost basis; however, it should prove easily scalable as needed. The sponsor agency can set the number of rides by first determining a budget for the program, and then deriving the number of subsidized trips that would then be available.

### **Issues to Consider**

As with the implementation of TNCs to supplement paratransit service (described below), it is critical for the sponsoring agency, be it the County, the new RideLakeCounty committee, RTA or other, to consider the parameters associated with first mile/last mile implementation:

- How many passengers per day may use the service
- What is the sponsoring agency willing to subsidize per passenger
- Who will partner in the service

### **TNC Paratransit Service**

There are several service gaps or needs that could be addressed through contracts with TNCs, such as Uber and Lyft, which offer flexible, spontaneous service for customers. If trips are subsidized by a sponsor agency to lower the fares for customers, the subsidy per trip is likely to be lower than the current levels of per-trip subsidies for public fixed-route rail, bus, and paratransit services.

Contracts with TNCs could be used to provide:

- First/last mile service to bus stops and rail stations
- City-to-city trips for individuals who live outside the fixed-route/ADA paratransit service area
- Alternative service for ADA paratransit customers to add a flexible, spontaneous option for customers and to reduce the overall cost of providing ADA service
- Late-night service for work trips
- Service for user groups, such as older adults or people with disabilities, who may have limited options

As shown by the examples in the previous section, transit agencies across the country have experimented with partnerships with Uber and Lyft to offer such services as pilot programs, with the transit agency subsidizing trips for customers. Other examples not included in this report show that municipalities have conducted similar experiments. Total budgets for subsidies have been relatively modest. Examples include the \$50,000 allotted for the San Joaquin Regional Transit District's RTA GO! program, or more expansive examples, such as the \$117,000 spent to date by the Massachusetts Bay Transit Authority on its On-Demand Paratransit Pilot. Note that in Kansas City, the transit agency's partner was its paratransit provider, which offered a TNC-like service using its own mobile app, and not a TNC company.

Depending on the specific issue to be addressed by subsidized TNC service, a pilot program could be managed by the RideLakeCounty Committee, Lake County, Pace, or another partner. Several stakeholder organizations could contribute funds for the necessary trip subsidies.

### **Implementation Steps**

The following steps and clarifications need to be taken in order to establish a TNC-based paratransit service in Lake County:

- Identify service area
- Identify target population
- Identify sponsor agency
- Establish program parameters
  - Eligibility
  - Service hours
  - Subsidy amount or distance based limitations
  - Fare amount
  - Fare type (premium vs. standard)
  - Availability to individuals vs. carpool
  - Total budget

### **Capacity Needs**

Though a TNC paratransit program would be easily scalable, it may prove difficult to anticipate demand for the program in areas where there has historically not been paratransit service. The sponsor agency may need to use Census data to approximate the service population. Additionally, without interventions, there are unlikely to be any WAVs available for customers that need them.

An additional element that may need to be considered is the inclusion and participation of local taxi companies that could simultaneously provide WAVs and accept payment via an app.

### **Estimated Costs**

The cost of this program would be scalable to the needs of the county. Once the sponsoring agency determined the program parameters, and estimated potential demand, a total budget could be derived. The cost of the program would be based on the determined subsidy structure, the amount of subsidy, and the underlying demand.

### **Issues to Consider**

It is important to recognize the limitations TNC services may provide in less populated areas of the county. First of all, it may be difficult to get drivers to pick up passengers in more outlying areas of the county. One potential solution would be to provide additional payments to drivers that pick up passengers in these areas in order to encourage service in the area. Secondly, there are issues of digital access to consider. Some riders may not have access to smartphones allowing them access to TNC apps. Other methods to request a ride would be needed for these riders.

## **MOBILITY MANAGEMENT STRATEGIES**

Mobility management strategies recommended for the Lake County region range from creating a centralized point for transportation information to actual trip planning. Currently, Lake County DOT, the RTA, and various individual townships and municipal transportation providers are the point of contact for information about transportation services. Public input identified this approach as being a disjointed effort, especially for transportation needs that cross multiple communities and/or involve more than one transportation provider.

It is recommended that the Lake County region work toward implementing a centralized transportation information and trip planning center as an expansion and combination of all the existing resources. First, it is recommended that local stakeholders work to implement some of the service strategies so the information and trip planning staff/website can accommodate more of the trip request.

The initial step in this process has been taken by the LCCTSC with its website resource for transportation services in Lake County. Creation of a more robust centralized transportation information and planning site is the next step in the process. This new resource (accessed by phone or online) is envisioned to connect riders, potential riders, families, caregivers, and human service agency staff members with identifying the transportation options available for an individual or shared-ride trip. One phone call or one website is the goal. Further assistance may be provided by a person or an online tool for trip planning. It is highly recommended that the future RideLakeCounty Committee coordinates with the RTA for potential planning and funding for mobility management services, which can potentially tie into a centralized transportation information strategy.

Many options for centralized directories are available, from printed or online directories to more complex online systems for trip planning and booking.

## Centralized Transportation Information and Trip Planning Assistance and Mobility Management Staff for the Lake County Region

There are many different transportation services currently in operation in Lake County, with different service areas, days and hours of service, policies regarding eligible riders and trips, demand-response trip reservation procedures, fares, and other characteristics. Anyone wishing to identify the best provider for a trip must first be aware of all the options and then know where to find information about each one. There are a number of different services and a variety of different policies and service areas currently in use. With such a wide variety of information sources and methods, a centralized repository of transportation information could greatly benefit residents looking to understand existing services.

Existing access to transportation information varies in Lake County. Much information about fixed-route and paratransit service in Lake County is available online and by phone from Pace, the RTA, Find Help Lake County, the LCCTSC website and various government agencies and nonprofits. Currently several sources of transportation and trip planning assistance are available to Lake County residents:

- Detailed information about Pace fixed-route and paratransit service is provided online. The RouteFinder enables customers to locate bus routes by route number, community, or other criteria.
- The RTA sponsors an online trip planner, which is available on the RTA and Pace websites. The tool identifies itineraries, including driving, walking, and biking directions for Metra, Chicago Transit Authority (CTA), and Pace services.
- The regional Mobility Management Call Center, operated by First Transit for Pace, that serves McHenry and Lake counties provides information about Pace paratransit service and handles trip reservations.

Building on the Pace Mobility Management Call Center model to include information about other paratransit services in Lake County and personal trip planning, assistance from a mobility specialist could provide a one-call/one-click resource for Lake County residents. Providing expanded information and personal trip planning assistance through the Pace call center is one option. Another option is to follow the model in some areas of the country where 211 service is used as the main repository of transportation information, but trip planning and other assistance is provided by a mobility manager or mobility specialist housed in another organization, such as the United Way.

In the Lake County region, a mobility manager or specialist could provide updated information about other non-Pace paratransit services and transportation options to the call center on a regular basis, and coordinate with the call center to handle calls from customers needing personal assistance with trip planning or reservations.

Pace staff noted in an interview that coordinated transportation information and other assistance is likely to be a regional issue, of value to other counties in the Pace service area and necessary to support inter-county trips. If planning for a more regional coordinated information/call center proceeds, any interim Lake County services could be folded into that regional effort.

Within a centralized transportation repository, information about all types of transportation options—commuter rail, fixed-route bus, dial-a-ride and ADA paratransit service, local bus and

van services, taxi subsidy programs, and volunteer ride programs—is captured in one central source. Riders, potential riders, families and caregivers, and human service agency staff members can easily identify the options available for an individual or a trip by making one phone call or visiting one website. Further assistance may be provided by a person or an online tool to plan itineraries and/or to book paratransit trips; assistance may also be provided by a smartphone app. Many options for centralized transportation directories are available, from printed or online directories to more complex online systems for itinerary planning and trip booking. There are two primary areas where central repositories vary: first in the variety of their content, and secondly in their media and abilities.

The type of information available via a central transportation information system is diverse. Some resources may include information only for specialized services, such as ADA paratransit and services available for older adults, people with disabilities, veterans, or other groups with mobility challenges. Resources may also include information about general public fixed-route and paratransit services, ride-matching programs, taxis and other private transportation services, volunteer driver programs, voucher/subsidy programs, vehicle sharing programs, and real-time services available through transportation network companies (TNCs) such as Uber and Lyft. The level of information provided is typically tailored by the organizing agency to fit the needs of its constituents or clients.

In addition to the types of information, there are several different methods to provide transportation information from a centralized source, which vary in levels of technical complexity and cost. Printed directories are a cost-effective option and valuable for potential customers who do not have internet access or computer skills, but they are difficult to update in a timely way. Online directories are a common upgrade to printed versions. They are easily updated, highly visible, and allow for ongoing edits to be provided.

While central repositories are valuable sources of information for residents, some areas have begun to utilize a central, single point of contact (a website and/or call center, often called a “one-call/one-click” resource) that offers more than information about available services. One-call/one-click systems can vary considerably in the degree of trip planning and booking assistance they provide for customers, and their use of technology to support those functions. Consequently, development and implementation costs can vary quite a bit as well.

Moving from simple to complex, one-call/one-click systems may consist of:

- A centralized list of transportation services, conveyed over the phone or on a website
- An online directory that transportation providers can update directly
- Opportunities for the user to narrow transportation options based on selected criteria
  - By speaking with a person
  - Through online prompts
- Trip planning assistance
  - With the help of a person or an online system
- Trip booking assistance
  - From a person or via a transferred call to the transportation provider
- Direct trip booking
  - Via web-based scheduling or portals to participating providers’ reservations systems
  - With more or less integration of different providers’ schedules

Connections with existing 211 or 511 systems or Aging and Disability Resource Centers (ADRCs), and mobile applications that enable users to access information or book trips from their smartphones or interactive kiosks, are also possible. In the Lake County region, one potential solution could be the expansion of the Pace Mobility Management call center to include information about more transportation services. Expansion of the call center may also include trip planning assistance which would offer a centralized transportation source. At the most basic level of information service, however, county residents need an accurate and publicly available resource to identify available transportation services.

Most, if not all, of the initiatives described in this section could be planned and executed or coordinated by a dedicated part-time or full-time mobility management staff for the entire Lake County region or several sub-county regions, depending on the level of service desired by the region. The following section describing mobility management is excerpted from the Community Transportation Association of America's job description for mobility managers:

*The mobility manager in a transportation organization serves the general public through conceptualization, planning, developing and operating programs that respond to and influence the demands of the market. These actions and supportive strategies are performed directly or in collaboration with others in order to provide a full range of travel options that are more effective in meeting needs and more efficient through reasonable pricing.*

*This position is responsible to improve business and community support for the transportation organization. It will require the development and distribution of information that explains how to utilize the available resources in meeting the diverse travel needs of the market it serves.*

*Additional duties include:*

- *Develops and directs the design, production, and distribution of specific marketing materials directed at employers, employees, human service agencies, and other entities*
- *Serves as the liaison/salesperson to community leaders in an effort to demonstrate how transportation enhances economic development*
- *Provides direct outreach to area employers and employment agencies to gain support for employer and employee transit programs*
- *Researches, develops, and writes grant applications for future funding*
- *Plans annual conference on issues relating to transportation*
- *Develops potential for future expansion of transit options across municipal boundaries*
- *Plans and coordinates special promotional events and activities related to general public transportation*
- *Makes public presentations on the benefits of mobility management for the community*
- *Builds supportive community networks*
- *Leads in the design of operational functions that are nontraditional in service delivery*

- *Is familiar with technological advances that increase travel options and/or convenience*
- *Is knowledgeable about techniques that foster transit ridership through links with land development*

The mobility management functions listed above would be logical responsibilities for a Lake County region mobility manager.

The mobility management position(s) could be housed within a Lake County department, within a transit agency, in a municipality/township, or in a nonprofit agency. Due to the universal and ongoing needs for transportation to medical services, regional health systems and rural health networks have taken on mobility management duties very successfully in other areas.

Initially, the mobility manager could be a part-time position, expanding to a full-time role and additional staff as more strategies reach the implementation stage, or a full-time position where the costs of the services provided are shared amongst multiple agencies. If trip planning assistance were provided as part of a centralized information strategy, additional mobility management assistance would likely be required; ideally, the mobility managers would be full-time positions to provide support to the region as a whole.

### **Implementation Steps**

Should the stakeholders be interested in a centralized call and information center for the Lake County region, parameters would need to be established. There are many different models for centralized information, which could be offered in the form of a website, a call center, a mobility management service, or any combination thereof. The new RideLakeCounty Committee, in conjunction with county stakeholders, would need to determine the best model. Ideally, a model could be started small, and grow over time into a more robust system. Until the parameters are established, it is difficult to determine exact costs associated with a centralized information center. With regards to a mobility manager, the stakeholders will need to determine if a mobility manager is a position needed for the Lake County region and how many positions would be needed. If the position is needed, the new RideLakeCounty Committee could determine the scope of work or services the mobility manager will be providing, and draft a job description for the position. Finally, it would need to be determined what entity is responsible for the mobility manager(s).

### **Issues to Consider**

The main consideration for the centralized information clearinghouse is where it would be housed, whether physically or online, and which agency(ies) would manage the information. The most critical component of a centralized information center is maintaining up to date information.

On the higher end of centralized information is a central call center. A single information number for all of the Lake County region would be the best recommendation for the community. Once the stakeholders have decided the route to take, there are additional considerations, including:

- How is the information updated for each program or resource
- What forms are used
- What is the process
- Telephone calls, web-based

- Does it meet Alliance of Information & Referral Systems' (AIRS) standards
- Who is trained in AIRS in the region
- Who updates the information, what time is required, and how accurate is it
- How is the function operated
- How many lines are operated at a time
- What telephone management software is used
- How are staff who answer telephone calls trained
  - In transportation services
  - In identifying related needs
  - In information and referral practices
- How do callers answer the phone
- What quality control is in place

With regard to potential mobility management staff, some key elements to consider would be:

- Drafting an inter-agency local agreement for how the position or positions are used, especially if more than one agency is contributing
- Where the mobility manager(s) will be housed, or if they are housed at more than one location
- Reporting procedures
- Performance metrics for the position and for the work the position undertakes

### **Capacity Needs**

Not applicable, per se. The mobility manager(s) should have an office, and the lead agency should discuss a fair market salary.

### **Estimated Costs**

Average salaries for mobility managers range from \$50,000-\$85,000 depending on level of experience and region(s) served. The costs of a centralized information repository would vary widely according to what form it took.

### **Countywide Marketing Program**

Regardless of whether a countywide paratransit system is implemented, the development of a countywide transportation marketing campaign would inform current and potential riders (and human service agency personnel) about the services available to them and make the services easier to understand and use. Increasing the visibility of transit and paratransit services within local communities would also help to garner funding support. Community support for public transit services was a consistent need heard during public outreach campaigns.

The approach to marketing should be coordinated among the various providers either by the county or by a committee, consisting of transit providers and human service agency representatives, established for that purpose.

The campaign could include the following elements:

- Development of a symbol and color scheme to extend the “RideLakeCounty” brand as a means of identifying services and providers as part of a more coordinated transit/paratransit network.
- Promotion of a centralized information resource through the Pace call center and mobility management staff for the Lake County region, if implemented.
- Creation of a coordinated social media approach involving Pace, RTA, Lake County, township and municipality partners, and other stakeholders.
- Maps and schedules that highlight connections between services.
- Development of a Transportation Guide that describes services and how to use them; for widespread dissemination, the guide could be published in local newspapers and posted on local and county websites.
- An approach for targeted marketing of the Pace Vanpool Incentive Program for access to jobs in the Gurnee and Libertyville/Vernon Hills areas.
- Preparation of a year-long calendar of marketing activities and promotions.

Transit authorities have been able to obtain valuable marketing assistance at little cost by working with local colleges to design a project for an intern or a group of business students to complete as part of a marketing course. The development of a marketing campaign, symbol/color scheme, and/or information materials might be of interest to students at the College of Lake County. Excellent templates for marketing plans and materials of all types are available free of charge from National RTAP (<http://nationalrtap.org/marketingtoolkit/>).

### **Implementation Steps**

The stakeholders would need to determine the scope of the marketing campaign for the county, which could be scalable. Before a marketing campaign could be established, a marketing plan, including public involvement, needs to be established for the Lake County region. Once the marketing plan is written, various plan elements could be paired with associated costs and implemented according to funding or order of magnitude.

## **SUMMARY TABLE OF IMPLEMENTATION BY TIMELINE**

The implementation timeframe for each strategy largely depends upon funding, budget cycles, and availability of vehicles. TNC or taxi operators are typically able to respond relatively quickly to requests to implement rideshare services or TNC/taxi programs. Delays for implementation on the side of the provider are typically related to ensuring the vehicles and drivers are available to meet projected demand. Service expansions requiring additional paratransit buses will require a minimum of three years preparation so the vehicle can be purchased, built, and received in time for service implementation. It is possible implementation could be expedited if funding is identified and a vehicle currently being used by another program can be reallocated for a service expansion strategy included in this report. A suggested implementation timeline is provided in the following figure.

### **Mobility Management Strategy Timeline**

The Pace Mobility Management call center may be an option for information and trip planning assistance for services operated by Pace. However, there would need to be further discussion regarding services operated by TNCs or other organizations not affiliated with Pace regarding

whether those services could (or should) be included in Pace's call center. TNC contracts can be set up to include a call center for individuals who do not use the app. However, a larger discussion between the stakeholders should be which agency (or agencies) would oversee the TNC operations and management.

The support of the RTA Mobility Management program will enhance customer awareness. It is recommended that the RideLakeCounty Committee coordinates with the RTA program to gain a better understanding of how mobility management could be arranged and funded for the Lake County region. The addition of a mobility management team for the Lake County region would enhance customer awareness and assist with identifying and/or securing local funding to continue or expand services. The mobility manager is a key component of coordinating multiple transportation services and developing coordinated transportation agreements between communities and agencies.

Mobility manager salaries typically range from \$50,000 to \$85,000 per year. Salaries are dependent upon the job description and the person's full-time or part-time status. It is recommended that the mobility managers are housed within an existing organization, to conserve additional overhead expenses (e.g., office space, phone, internet).

### **Long-Term Strategy**

In the longer term, a consolidated one-call/one-click call center would be most beneficial to residents of Lake County. The new Mobility Manager(s), once hired to support Lake County Regional services, should also coordinate closely with the RTA's mobility managers to enhance customer awareness. The expansion of a mobility management team for the Lake County region would enhance customer awareness and assist with identifying and/or securing local funding to continue or expand services.

## Service Strategies Timeline

Figure 12-7 identifies a broad timeline needed to implement the recommended strategies described above.

**Figure 12-7 Strategy Timeline**

Strategy	Phase	Timeline
Late Night Employment Pilot	Phase I	Short
	Phase II	Short
	Phase III	Short
Expansion of Countywide Paratransit (Ride Lake County Central Expansion)	Phase I	Short
	Phase II	Mid
	Phase III	Mid
	Phase IV	Mid
	Phase V	Long
TNC Supplemental Service	Phase I	Short
	Phase II	Short
Enhanced On Demand Services	Round Lake	Mid
	Vernon Hills/ Mundelein	Mid
Flexible (Deviated Fixed Route) Transit Services	Antioch to Gurnee Mills	Mid
	Green Bay Road to Lake Bluff	Mid
	Town Line Road to Hawthorn Mall	Mid
	Lake Cook Road to Wheeling	Long
Vanpool First/Last-Mile Access to Transit		Short
TNC First/ Last-Mile Service		Short
TNC Paratransit Service	Supplementing current service	Mid
Centralized Transportation Information	Consolidated One Call-One Click Center	Mid
Mobility Manager(s)	Support for entire Lake County Region	Short
Countywide Marketing Campaign (including Traditional Vanpool Marketing)		Short

# 13 FINANCIAL PLAN

## INTRODUCTION

The following section identifies current funding sources in use by the systems in the Lake County region, as well as potential funding sources for consideration with future service plans. Descriptions of the funding source by type and how the funds may be used are included in this section.

## CURRENT FUNDING SOURCES

Current funding arrangements for existing services vary and some are complicated. Services are funded through three basic categories: federal, state, and local funds for public transit. The current services in operation receive funds (in some cases, matching funds) from two or more sources. Key considerations about funding for existing paratransit services in Lake County include the following figure and bullets.

**Figure 13-1 Transit Funding Sources for Paratransit in Lake County**

Funding Sources	RideLakeCounty Central	RideLakeCounty West	Local Service (Dial-A-Ride)	Call Center
FTA Section 5310/RTA	For expanded service to more areas and extended hours 50%	For expanded service to more areas and extended hours 50%**		
PACE Subsidy	*	25%***	75-100%	80% (FTA Grant); then 20% match
LCDOT	50%	25%		20%****
Local Municipalities/Townships		****	0-25%	
<b>Total Funds Received</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

- Expenses for the coordinated RideLakeCounty Central service are split as follows: Federal FTA grants (Section 5310 funds) that flow through the RTA to Lake County DOT cover 50% of the RideLakeCounty Central expanded service costs and Lake County DOT matching funds provide the other 50% (local share). Lake County DOT uses 1/4% sales tax funds for its portion of the local share.

\*Pace also contributes approximately a \$6,000 subsidy toward Fremont Township’s participation in the RideLakeCounty Central Service.

- RideLakeCounty Central’s core service—the Pace Central Lake Dial-A-Ride service in place in Libertyville Township, and the villages of Libertyville and Mundelein prior to the formation of the expanded, coordinated RideLakeCounty Central service—accounts for the majority of Central trips and expenses. The Pace subsidy covers 75% of the net costs of that service and the township and villages cover the remaining 25% percent.
- Expenses for the coordinated RideLakeCounty West service are split as follows: Pace subsidizes 25% of the costs; the remaining 75% is covered by federal grants and local funds.
  - \*\*Federal FTA grants (Section 5310 funds) provided through the RTA cover 50% of the service cost of the RideLakeCounty West service; Pace and Lake County DOT provide 25% each. Lake County DOT uses 1/4% sales tax funds for its portion of the local share.
  - \*\*\*The Pace subsidy of the RideLakeCounty West service is 25% and capped at a maximum of \$100,000 per year.
  - \*\*\*\*The six townships involved in this service also contribute an “overmatch” totaling \$40,000 per year to cover the cost of trips taken by general public riders in the West service, as general public rides are not covered by the federal grant.
  - \*\*\*\*\* Lake County DOT pays 20% of the call center cost related to RideLakeCounty West and Central services (for these Lake County DOT grant projects only). Pace has an existing federal grant to fund the call center at an 80/20 match.
- Pace is an important funding partner in Lake County, providing the major share of funding for its own dial-a-ride services (75-100%) and a significant share (25%) of the net operating costs of the coordinated RideLakeCounty West service. However, Pace’s funding formula among their various services is not consistent throughout the county for a variety of reasons (not all directly related to Pace) and there are some “legacy” funded services in place. It is recommended that Pace Dial-a-Ride subsidy throughout the Lake County area be discussed with Pace and local partners in the future to determine whether a consistent funding formula could be used for services across Lake County.
- Township contributions to Pace Dial-A-Ride services are relatively modest.
- Few municipalities contribute to the cost of dial-a-ride or township van services that are open to their residents.
- Fare revenues are an important source of funds for paratransit services, especially the Pace Dial-A-Rides and the two coordinated RideLakeCounty services.

The sources of funds that are used to support paratransit services in Lake County, by funding entity, are outlined below.

## **Pace**

In addition to fares and other operating revenues, which contribute a substantial amount to Pace’s annual budget, Pace receives funding from federal, state, and regional sources.

Operating surpluses from the funding sources described below and others are transferred to Pace’s capital program to supplement the capital funding that Pace obtains from a variety of federal, state, and regional sources.

## State and Regional Funds

As one of the RTA's Service Boards (which also include CTA and Metra), Pace receives an allocation of regional RTA sales tax revenues and matching funds from a state sales tax that makes up the Public Transportation Fund (PTF). Legislation passed in 2008 (Public Act 95-0708) increased the RTA sales tax from 1% to 1.25% in Cook County and from .25% to .75% in the five collar counties. The legislation also established an allocation process for the new funds and changes to the RTA's governance and oversight responsibilities. Pace and the other Service Boards continue to receive funds from the original RTA sales tax and PTF matching funds according to the allocation formulas and process established prior to 2008, and receive RTA sales tax revenues and PTF matching funds through the new formulas and process established in 2008.

The 2008 legislation created the Suburban Community Mobility Fund (SCMF) to be administered by the RTA. The SCMF is a dedicated source of funding for Pace to be used for non-traditional suburban transit services, including dial-a-ride services, vanpools, ridesharing, and reverse commute services. Created with an initial funding level of \$20 million, the RTA is required to deposit that amount in the account, adjusted for the percentage change in sales tax revenues for the previous year.

Pace, through the RTA, receives state funding for the provision of ADA paratransit service throughout the RTA region.

## Federal Funds

### Congestion Mitigation and Air Quality (CMAQ)

Pace receives federal transit funds from a number of grant programs, including CMAQ. Administered by the Federal Highway Administration (FHWA), the CMAQ program supports different types of projects that have a positive impact on traffic congestion and air quality. Funds are allocated to states that contain urbanized areas that are either in a maintenance status or non-attainment for the National Ambient Air Quality Standards (NAAQS) and may be transferred into other federal transportation grant programs. CMAQ funds that are transferred into the Surface Transportation Block Grant program may be used for transit projects. Transit providers often use transferred CMAQ funds to implement new services that meet the program's objectives.

## RTA

The RTA is a pass-through agency that administers state and regional sources of public transportation funding to local agencies, as described briefly in the Pace section above. In addition to RTA sales tax revenues and the matching state funds, the RTA receives federal and state funding to support various programs and projects. Several federal programs are of relevance to paratransit services in Lake County.

### Section 5310: Enhanced Mobility of Seniors and Individuals with Disabilities

The Federal Transit Administration's (FTA) Section 5310 program has several objectives. The first is to continue the traditional focus of the program, which is the provision of capital assistance to nonprofit organizations that provide transportation services for older adults and people with disabilities. As in most FTA programs, capital projects funded under the 5310 program may include mobility management activities. Mobility management covers a broad range of activities that seek to expand mobility options by coordinating public transit and other transportation

services and making it easier for individuals to find out about and access the transportation services that can best meet their needs.

MAP-21, passed in 2012, revised the 5310 program to include the objectives of the repealed New Freedom program:

- Provide services for people with disabilities that exceed the requirements of the ADA
- Make fixed-route services more accessible to people with disabilities
- Develop new alternatives to public transportation for people with disabilities

Funds are allocated to designated recipients in large urban areas and to states for small urban and rural areas. The RTA is the designated recipient for the Chicago urbanized area, and is responsible for distributing the area's allocation to subrecipients for specific programs and projects.

At least 55% of an area's 5310 allocation must be used to address the program's first objective, to provide services for older adults and individuals with disabilities. Eligible subrecipients are nonprofit organizations (or public transit providers, in some circumstances) and eligible activities are capital or mobility management projects and the acquisition of services through contracts or other arrangements.

Up to 45% of an area's allocation may be spent on projects designed to meet the objectives of the former New Freedom program, which include mobility management activities and operating assistance. Eligible subrecipients may be nonprofit organizations, state or local governments, or public transit providers.

The RTA is the recipient of Section 5310 funds for the Chicago urbanized area. Lake County DOT, on behalf of LCCTSC, has received 5310 grants through the RTA to support the RideLakeCounty Central and RideLakeCounty West services.

## **Lake County Division of Transportation**

As mentioned above, Public Act 95-0708 increased the regional sales tax collected in the collar counties by 1/2 of a percent. Half of that amount is retained by the counties and may be used for transportation or other purposes.

Lake County DOT uses .25% sales tax funding to support its paratransit coordinator position and to provide local matching funds to the federal grants that support the RideLakeCounty Central and RideLakeCounty West services. County funds from this source are used, together with funding from the federal grants and Pace, to cover the cost of RideLakeCounty Central and RideLakeCounty West trips beyond the service areas and days/hours of service of the original, separate township/municipal dial-a-ride services.

## **Townships and Municipalities**

Townships fund their own transportation services and support the dial-a-ride services that operate in their areas with property tax revenues. Other sources of funding include donations from foundations, hospitals, and other local organizations.

Municipalities use local revenues, similar contributions, and donations to support their services.

## **Sustainability**

Sustainability of funding for paratransit services is a concern of most stakeholders in the Lake County region.

Threats to the reliability of current paratransit funding sources include a proposed cap on property taxes (the subject of legislation currently before the Illinois state legislature), the proposed elimination of townships as one of the local governmental structures in Illinois, and the non-permanent nature of grant funding. The larger issue is the need for consistent, sustainable funding sources to fund various transportation programs in the Lake County region. Planning for transit operations without consistent funding sources can be a challenge, as funding mechanisms vary. Further, the Lake County region needs to be able to demonstrate that programs are successful and may be sustained with a continuous funding source. This is difficult to do with limited to no state funding, and inconsistent grant funds for transit services.

## **Potential Funding Sources**

### **Lake County Community Development Block Grants**

Community Development Block Grants (CDBG) are one potential funding source to help expand transportation opportunities in Lake County, and are available through the Lake County Planning, Building, & Development Department. There are several requirements for these grants to be received. CDBG dollars have to benefit low- and moderate-income households. Funds are limited to two larger categories of public services and job creation.

Public services grants are competitive, and limited to \$50,000 for a 12-month period. Possible uses for a grant under this category would be paying for miles driven for low/moderate income households that lack a reasonable transportation alternative. If an existing service could expand to cover a part of the county not currently covered, CDBG may cover the financial shortfall experienced as a result of the expansion.

Job creation grants on the other hand have a higher ceiling of \$118,000. Potential grant funding could be used to help with the purchase of vehicles that would be used by a service provider to meet an unmet need (and create jobs for drivers). Funding could be used for specific vehicle types such as wheelchair accessible vehicles.

### **Public and Private Funding Sources**

Lake County stakeholders could consider partnerships with local businesses, the healthcare industry, private and public employers, and a number of other businesses to provide funding support for various transportation strategies. Enhanced transportation services benefit Lake County businesses, and connect people to much needed healthcare services as well.



## 14 MARKETING PLAN

### COUNTYWIDE MARKETING PROGRAM

None of the recommended strategies can thrive without public awareness and participation. Public awareness requires a comprehensive marketing plan, encompassing all of the various transportation services and programs available in the Lake County region that exist today, and which may be available in the future. The marketing campaign must be designed to promote and spread information about transportation services, and their value to county residents, on an ongoing basis. Elements would include brand tweaking, promotion of centralized information and trip planning, targeted marketing of Pace vanpools to key areas, and schedule of activities. County residents must not only understand that these programs exist, but also be shown how the transportation services are serving residents and improving transportation needs.

### MOBILITY MANAGEMENT STAFF FOR THE LAKE COUNTY REGION

A mobility manager for the Lake County region would be individual(s) responsible, with guidance in the near term from the RideLakeCounty Committee, for coordinating the implementation of strategies adopted as part of this planning process. Duties would include chairing or staffing the paratransit oversight committee, delivering technical assistance to transportation providers, serving as the point person for new programs and services, and conducting outreach and education to build support and new partnerships. It is envisioned that this mobility management work could require multiple staff positions to provide the desired level of service for the region.

The mobility manager position(s) would facilitate the implementation of the other strategies listed in this document. The mobility manager would additionally be fundamental to addressing the sustainability of many programs, and to addressing local control concerns. In practice, the mobility manager would operate as the area's advocate to champion the roll out and expansion of existing and proposed transportation solutions.

The position(s) would also be in charge of developing a countywide marketing campaign. Once the mobility management staff has had time to establish an understanding of the Lake County region and both perceived and real transportation challenges, the mobility manager(s) may work to develop concepts on education and information for available services, and could potentially work with the new RideLakeCounty Committee to develop campaign materials.

### COORDINATION AND EDUCATION

One of the most important elements to the success of the plan strategies is coordination with Pace. Suburban areas face the twin challenges of increasing demand among transit-dependent individuals for mobility and the inherent lower-density nature of the service area. This is

particularly challenging for suburban transit systems like Pace that are faced with trying to serve low-productivity areas with fixed-route service or with demand-response services such as On Demand services. There are a few different service improvement methods that could be used in coordination with existing services. While coordination strategies do not directly fall under marketing, per se, there is an education element to the coordination strategies that ties into countywide marketing. The coordination methods, discussed further below, should include an educational component from two perspectives: internal (for the agencies and operators providing the service, including the proposed RideLakeCounty Committee and future Mobility Managers), and external (for current and future riders).

The first of these methods recommends an enhanced On Demand service. The existing service would continue to operate as it does today, but would add checkpoint stops that would allow for spontaneous boarding. These would be scheduled stops that would allow passengers to be picked up without making a reservation or booking online. This service upgrade would allow for a more productive service that could serve more passengers. Additionally, it is recommended that more On Demand services should be created in accordance with the 2012 Lake County Transportation Market Analysis and the Lake County 2040 Transportation Plan. These additional service areas would include:

- Mundelein/Libertyville
- Lake Forest
- Antioch

The second method recommends the creation of route-deviation or flexible services, which follow fixed schedules for serving specified stops (sometimes along a fixed route) but deviates to pick passengers up at their home upon request, offer coverage for low-density areas. It is less costly than fixed-route and more productive than demand-response service.

Flexible service can also reduce the demand for ADA paratransit service by providing an alternative which eligible ADA passengers may find more convenient to use. According to Federal Transit Administration (FTA) guidance, flexible routes may also eliminate the need for separate ADA paratransit service. If deviations are available only to people with disabilities, deviations must meet the service requirements of ADA paratransit pertaining to service areas, days and hours of service, advance notices, fares, etc. If deviations are open to all riders, the service is considered demand-response service for the general public and ADA paratransit service is not required, but people with disabilities must have equal access to deviations.

In Lake County, flexible services in certain areas would address comments from the public and stakeholders that the distance from bus route to destinations makes fixed-route service challenging to use. In accordance with the Lake County 2040 Transportation Plan, flex routes should be supported in the following areas of the county:

- Antioch to Gurnee Mills
- Green Bay Road Waukegan to Lake Bluff—priority in Lake County 2040 Transportation Plan
- Town Line Road Lake Forest to Hawthorn Mall
- Lake Cook Road Highland Park to Wheeling

A review of the cost and productivity of existing bus routes may suggest routes that would be candidates for operation at a lower cost scale as route-deviation services. Operation at a lower cost would enable more direct service to apartment complexes, medical plazas, and shopping

centers. Changes in productivity will enable older adults and people with disabilities to use lower-cost fixed-schedule services that can provide more of a curb-to-curb ride than traditional bus service.

Pace's long-range plan, Vision 2020, describes a network of service that includes mainline, traditional fixed-route bus service along major arterials (high-capacity urban roads) and community-based services such as deviated fixed-routes or On Demand services to connect riders and pedestrians in lower density areas to those mainline bus services.



**Part 4**

**Implementation**



# 16 RECOMMENDED IMPLEMENTATION APPROACH

## INTRODUCTION

The recommended implementation approach is based upon research conducted throughout the planning process, including public and stakeholder input, to provide an assessment of local needs and the existing and potential resources for transportation in each community and throughout the region. The project team applied objective transit demand research on demographic and socioeconomic data in Lake County as well as industry performance standards to aid in the development of recommendations.

While some of the recommended strategies may be implemented within the current funding levels to improve paratransit services in the Lake County area, most of the strategies will require additional funding, creation of new administrative procedures, and an identification of “champions” to help foster the implementation of each strategy. The effectiveness and sustainability of most of the recommended strategies will be improved with new organizational structure for advisory and governance roles. While some strategies can be implemented with no changes to the existing framework, progress toward a more cohesive and connected paratransit service will be greater with implementation of the organizational and governance structure recommendations.

## ORGANIZATIONAL STRUCTURE/GOVERNANCE STRUCTURE RECOMMENDATIONS

Recommended paratransit services for the Lake County region are possible through a collective effort from multiple proactive stakeholder organizations and agencies. Should the strategies be pursued within the current existing governance structure, only some of the participating agencies would be involved in the actual implementation, due to availability of funding and resources. If the governance and organizational structures were to be modified for the Lake County region, more communities and stakeholders (that otherwise have limited resources) could be involved in project implementation. Some areas of the county have been unable to make progress towards a more coordinated transportation system because these areas (or organizations) may lack the support, resources, and guidance needed to establish desired services. To make progress that addresses the needs of the Lake County region, a formal organizational structure with dedicated leadership is strongly recommended. An outline of the process necessary to create that structure is provided in this chapter.

The first priority for the Lake County region is to form a working group that will identify the lead agency to advance paratransit coordination and service improvements. Once identified, it is recommended that the lead agency will create additional working group(s) and, with the working group(s), begin to move the recommended strategies from the planning phase to reality. The

following recommendations are important because the Lake County region has a wide range of transportation needs and a limited amount of available funding and resources to address the needs. When the local organizations work together with a purpose-driven approach of improving transportation throughout Lake County, growth in paratransit services becomes focused, mission-driven, and comprehensive.

The proposed recommended organizational structure preserves the opportunity for organizations to participate at a level with which they are comfortable. It does not force any organization into consolidation or loss of autonomy, but offers a foundation that will allow for the organic development of important new partnerships and transportation services.

## Recommendation

### **Dissolve the LCCTSC, Establish Working Group(s) to Help Identify a Lead Agency and Carry out the Recommended Service Strategies**

The Lake County Coordinated Transportation Services Committee (LCCTSC) has served a significant purpose and role in the evolution of paratransit services in Lake County. Membership has offered constructive input towards the overall vision for paratransit services and brought forward the priorities for improving services to older adults, individuals with disabilities, people and families with low incomes, employers, communities, and the general public.

Currently, the Lake County area is facing opportunities for changes and growth in the provision of paratransit services. Dissolving the existing LCCTSC advisory structure and creating a new entity with a fresh purpose and mission will help to successfully advance the Lake County region toward realizing its full potential for successful paratransit coordination.

It is recommended that Lake County, potentially through the Lake County Division of Transportation (Lake County DOT), identify members of working group(s) that will be formed to carry out the recommended service strategies and/or identify the lead agency, its functions, and structure. It is important to note that the working group(s) would be developed on a temporary basis in order to better identify a strong lead agency, or champion agency, and subsequently establish the long-term membership of the RideLakeCounty Committee. Possible representation on the temporal work group(s) may include the following organizations or organization types:

- Regional Transportation Authority (RTA)
- Pace
- Townships/Municipalities/Lake County
- Representatives from Nonprofit Agencies
- Representatives from Health and Medical Community
- Representatives from Veteran and Military Communities
- Representatives from Workforce and/or Major Employers
- Representatives from Education/Schools/Higher Education Institutions
- RideLakeCounty Central & West representative(s)
- Great Lakes Naval Base
- Representation from Transportation Network Companies

The group(s) should also consider including individuals directly responsible for implementation of the specific strategies.

While the working group(s) are being established, Lake County DOT will continue to function in its current role with respect to RideLakeCounty services. The specific membership of the early-on working group(s) should be defined by Lake County with input from the current LCCTSC members as appropriate. The formation of future working group(s) and their duties would then be transitioned to the lead agency once identified. Once the lead agency is identified, that agency can then assist in the formation of additional working group(s) and clearly outline their purpose, goals, and objectives.

## Recommendation

### Identify a Lead Agency

A key piece to advancing and improving paratransit coordination within the Lake County area is to identify a lead agency to spearhead coordination. The lead agency could be a new or existing local government organization, or a public or private nonprofit organization so that the agency will be eligible for various U.S. Department of Transportation and Federal Transit Administration (FTA) grant programs that support specialized transportation.

Creating a new department within an existing agency such as Lake County, the Transportation Management Association of Lake Cook (TMA), Pace, or a nonprofit to be responsible for coordinating paratransit services throughout Lake County is the recommended approach for the Lake County region. Establishing an entirely new organization to become the lead agency may not be the preferred option because there are several existing organizations with strong potential to become the lead agency for paratransit services in the Lake County area. Creating a lead agency structure within an existing organization may be the most efficient and straightforward approach.

An initial and important step for the lead agency in the process of furthering paratransit coordination in the Lake County region is for the lead agency to work with Pace to evaluate the existing legacy subsidy structure and develop a strategy to create a funding structure that it is equitable across the Lake County region.

## Recommendation

### Mobility Management Staff for the Lake County Region

Securing dedicated Mobility Manager staff for Lake County is another key element to advancing paratransit coordination. Some mobility management duties in Lake County are currently carried out as a part-time staff function within the Lake County DOT and also through RTA staff related to fixed-route services and travel training. It is recommended that Lake County DOT continue to maintain the current mobility management responsibilities it carries out throughout the development of a new organizational and governance structure for paratransit coordination in order to ensure a smooth transition to new Mobility Management staff. Part of the organization process is to identify the appropriate location, reporting structure, and responsibilities for dedicated regional Mobility Management staff.

Ultimately, it is recommended that the Mobility Management staff will be housed at the lead agency and will report to the Board of Directors at the lead agency; the details of this will largely depend on the type of agency that is the lead and what their agency structure is. A potential job description for the Mobility Management staff is provided in the Appendix E.

Mobility Management is an eligible capital activity under the FTA Section 5310 Program. If Section 5310 funding is applied to this purpose, up to 80% of Mobility Management costs could be federally

funded and a 20% local match would be required. Local match for the Mobility Manager services should be derived from local key stakeholder organizations that collectively provide funding. Mobility management is also an administrative function. The lead agency may also tap into a 10% draw-down of FTA Section 5300 funding for the purposes of mobility management without the need for a local match.

One of the responsibilities of the Mobility Management staff will be to inform and lead a transportation advisory group comprised of key stakeholder organizations that are financially (cash or in-kind) contributing to the local match for Mobility Management services.

## Recommendation

### Establish the RideLakeCounty Committee

One of the initial duties of the lead agency will be to establish the RideLakeCounty Committee (RLCC), define the committee's mission, goals, and responsibilities, and invite members to commit to proactive involvement.

Initial responsibilities of the RLCC will be to evaluate current and potential transportation funding structures that are recommended by the lead agency. It is recommended that the RLCC will be a sounding board and will contribute to the endorsement of future grant applications. Additionally, the RLCC can assist the lead agency and Pace with the reallocation of legacy funding and support Pace and other providers in determining a fair and equitable model for funding local paratransit programs.

Future responsibilities of the RLCC and working group(s), led by the Mobility Management staff, will be to work toward implementation of the recommended paratransit service structures.

## SERVICE STRUCTURE RECOMMENDATIONS

### Methodology

An evaluation of the preliminary service improvement strategies was initially conducted early in the planning process after the preliminary strategies were designed based on community input. At the final stages of the planning process, the same measures, or rating criteria, that were applied to the preliminary service strategies were also applied to the final recommendations to determine a Return on Investment (ROI) Score. The ROI Score, on a scale of 1 to 5 (5 being well-scored, and 1 being poorly scored), is a performance measure applied for the purpose of comparing the efficiency of a number of different options to each other.

In addition to the ROI Score, a rating of the issues or challenges related to implementation was applied on a scale of 1 to 5. Challenges to implementation included (1) availability of identified funding sources necessary for implementing and sustaining the service; (2) current leadership and management structures being in place to support the strategy; and (3) available capital resources.

Challenges to implementation are directly related to the anticipated timeline and, in some cases, can be overcome. For example, a strategy that requires high upfront fixed costs and has no existing or potential leadership structure in place receives a score of “1” and would be considered part of the long-term implementation plan. Over time, changes in funding and leadership could raise that rating score to a “3” and move it up on the potential implementation timeline from a long-term strategy to a mid-term strategy.

The number of years assigned to short-, mid-, and long-term recommendations are suggested as a guideline but with the understanding that the actual implementation timeframe depends upon factors that are not entirely within the control of the local leading organization(s).

The evaluation criteria for the ROI are outlined in the next section.

## Evaluation Criteria

Definitions of the Return on Investment (ROI) criteria indicators, which are assigned using a score of 1 through 5, are described in the following figure. The criteria within each rating category are the rationale for the ROI score assigned to each recommendation in the Results section of this document.

**Figure 16-1 Return on Investment Indicators for Recommendations**

Rating Category	Criteria	Score
<b>Community Benefits</b>	<ul style="list-style-type: none"> <li>▪ Level of community support</li> <li>▪ Serves stated need(s)</li> <li>▪ Benefit to target populations</li> </ul>	<p><b>1: Low</b> community support</p> <p><b>3: Moderate</b> community support and serves stated need(s)</p> <p><b>5: High</b> community support and serves stated need(s)</p>
<b>Transportation Benefits</b>	<ul style="list-style-type: none"> <li>▪ Number of likely beneficiaries</li> <li>▪ Number of priority issues addressed</li> </ul>	<p><b>1: Small</b> number of residents benefit, addresses one concern</p> <p><b>3: Moderate</b> number of residents benefit, addresses multiple concerns</p> <p><b>5: Large</b> number of residents benefit, addresses multiple concerns, growth potential</p>
<b>Economic Benefits</b>	<ul style="list-style-type: none"> <li>▪ Number of likely beneficiaries</li> <li>▪ Number of priority issues addressed</li> </ul>	<p><b>1: Small</b> number of businesses benefit, addresses one concern</p> <p><b>3: Moderate</b> number of businesses benefit, addresses multiple concerns</p> <p><b>5: Large number</b> of businesses benefit, addresses multiple concerns, growth potential</p>
<b>Addresses Spatial Gaps in Service</b>	Geographic (spatial) gaps are addressed	<p><b>1: No new service area</b> is included, but changes the mode of service</p> <p><b>3: Expands the current service area</b></p> <p><b>5: Entirely new service area</b> is covered</p>
<b>Addresses Temporal Gaps in Service</b>	The time of day service is available (temporal) gaps are addressed	<p><b>1: No new service hours</b> are included, but changes the mode of service</p> <p><b>3: Expands the current service hours</b></p> <p><b>5: Entirely new service hours</b> (such as late-night transportation)</p>

## Implementation Issues and Challenges

Various factors influence the timeframe within which recommendations could be implemented. The timeline is largely influenced by leadership, procedural, and resource challenges, and primarily focused on the following implementation challenge categories noted in the figure below:

**Figure 16-2 Implementation Challenges Indicators for Recommendations**

Implementation Challenge Category	Criteria	Timeline Score
<b>Leadership Issues</b>	<ul style="list-style-type: none"> <li>▪ Existence of a leadership structure</li> <li>▪ Leadership structure will need to be identified</li> <li>▪ Feasibility of using an existing organization for leadership or creating a new organization to lead the effort</li> </ul>	<p><b>1: Long-term (5+ years)</b>, no leadership or potential leadership has been identified</p> <p><b>3: Medium-term (3-4 years)</b>, partial leadership structure in place, less coordination potential</p> <p><b>5: Short-term (1-2 years)</b>, or capable of being implemented in stages, few implementation issues, potential for coordination increases likelihood of implementation</p>
<b>Implementation Issues</b>	<ul style="list-style-type: none"> <li>▪ Number and type of challenges to implementation (i.e., contract for services or vehicle procurements)</li> <li>▪ Type of implementation challenges and the level of difficulty to overcome them</li> </ul>	<p><b>1: Long-term (5+ years)</b>, difficult implementation issues, least coordination potential</p> <p><b>3: Medium-term (3-4 years)</b>, moderate implementation issues (i.e., contracts for service providers must be procured; additional capital procurements necessary), less coordination potential</p> <p><b>5: Short-term (1-2 years)</b>, or capable of being implemented in stages, few implementation issues, potential for coordination increases likelihood of implementation</p>
<b>Cost Implications</b>	<ul style="list-style-type: none"> <li>▪ Overall cost</li> <li>▪ Funding availability and sustainability</li> </ul>	<p><b>1: Long-term (5+ years)</b>, may require high upfront fixed costs</p> <p><b>3: Medium-term (3-4 years)</b>, moderate costs or challenges with identifying funds, less coordination potential</p> <p><b>5: Short-term (1-2 years)</b>, or capable of being implemented in stages, lower cost or fewer challenges with identifying funds, potential for coordination increases likelihood of implementation</p>

## Results

The following paragraphs and Figure 16-3 describe the results or output of the analysis of recommendations and places the recommended implementation strategies in a timeline based on the issues and challenges that will impact implementation. The matrices created to rank the recommendations by Return on Investment and implementation challenges are included in Appendix F.

## Recommendations

**Figure 16-3 Strategy Descriptions**

No.	Strategy	Description	Timeline
1	<b>Vanpool First/Last-Mile Access to Transit</b>	This strategy is designed to connect passengers on the first and last mile of their transit trip. The transit agency typically provides reserved free parking for the van, as well as other support services, including emergency rides home, allowing the agency to minimize subsidy costs and make the first/last mile portion of a transit trip affordable enough to promote the use of transit for the majority of the trip.	<b>Short-Term</b>
2	<b>Mobility Management Staff for the Lake County Region</b>	The addition of a mobility management team for the Lake County region would enhance customer awareness and assist with identifying and/or securing local funding to continue or expand services. The mobility management staff is a key component of coordinating multiple transportation services and developing coordinated transportation agreements between communities and agencies.	<b>Short-Term</b>
3	<b>Countywide Expansion of Paratransit Service (Expansion of RideLakeCounty Central)</b>	Recommended expansion of RideLakeCounty services in a series of 5 phases. The initial phase would begin with pilot projects in a couple of townships, expanding slowly over time to cover the entirety of the county.	<b>Short--and Long-Term</b>
3 (See 11)	<b>Expand RideLakeCounty Paratransit Service</b>	Expand service into all of Waukegan Township, City of Lake Forest, and City of North Chicago	<b>Short--and Long-Term</b>
3 (See 13)	<b>Expand RideLakeCounty Paratransit Service</b>	Expand service into Warren Township	<b>Short--and Long-Term</b>
3 (See 14)	<b>Coordinate and Expand RideLakeCounty Paratransit Service</b>	Expand Services into More of Southwestern Lake County	<b>Short--and Long-Term</b>
3 (See 17)	<b>Expand RideLakeCounty paratransit services countywide</b>		<b>Short--and Long-Term</b>
4	<b>TNC Supplemental Services</b>	Transportation Network Companies (TNCs) are a new variation on an old idea. TNCs are for-hire vehicles that can be hailed via a smartphone. As a method of expanding mobility in Lake County, a publicly sponsored and subsidized option to use TNCs and taxis is proposed. This strategy was selected because public and stakeholder input identified introduction of TNCs into the family of transportation services as a priority.	<b>Short-Term</b>

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No.	Strategy	Description	Timeline
4, 7	<b>Expanding the TNC/Taxi Pilot Program</b>	Depending upon the success of the TNC/Taxi Pilot Program in Vernon Township, other Lake County communities may wish to replicate the program for their residents.	<b>Mid-Term</b>
5, 10	<b>Late Night Employment Transportation</b>	Transportation inbound to overnight employment locations and outbound return trips from work shifts ending in the late evening have been a challenge. This strategy focuses on shared ride (vanpool/carpool/shuttle) or taxi/Transportation Network Company (TNC) services to address both directions of evening and overnight shifts while also utilizing the existing traditional public transit and paratransit services.	<b>Short- and Mid-Term</b>
6	<b>Countywide Marketing Program</b>	The development of a countywide transportation marketing campaign would inform current and potential riders (and human service agency personnel) about the services available to them and make the services easier to understand and use. Increasing the visibility of transit and paratransit services within local communities would also help to garner funding support.	<b>Short-and Mid-Term</b>
8	<b>TNC First/ Last-Mile Service</b>	Similar to the above vanpool strategy for first and last mile connections on transit trips, service can be designed through a TNC, like Uber or Lyft, through a contractual agreement.	<b>Short- and Mid-Term</b>
9	<b>TNC Supplemental Paratransit Service</b>	Public/private partnerships with a TNC or a taxi operator can be a cost-effective way to enhance transportation and meet needs. A sponsor agency (usually a transit agency or municipality) contracts with a taxi company or TNC, such as Uber or Lyft, to provide supplemental, subsidized, paratransit service for eligible customers.	<b>Mid-Term</b>
12	<b>Centralized Transportation Information</b>	Existing access to transportation information varies in Lake County. Much information about fixed-route and paratransit service in Lake County is available online and by phone from Pace, the RTA, Find Help Lake County, the LCCTSC website, and various government agencies and nonprofits. With such a wide variety of information sources and methods, a centralized repository of transportation information could greatly benefit residents looking to understand existing services.	<b>Mid-Term</b>
15	<b>Flexible Transit Services</b>	Route-deviation services typically operate with fixed stops and timepoints, which enable individuals to request an off-route deviation, within a certain distance, for a pickup or dropoff at their home or destination.	<b>Mid-Term</b>
16	<b>Enhanced On Demand Services</b>	Enhanced On Demand service offers more scheduled stops, or checkpoints, compared to traditional Pace On Demand services. Potential elements for the service could include promotion of spontaneous boarding where it is effective for first/last mile customers accessing traditional transit.	<b>Mid-Term</b>

## Short-Term Recommendations

### 1. Vanpool First/Last-Mile Access to Public Transit

- a. The Return on Investment (ROI) Score for this strategy is 3.8 which indicates that the strategy addresses, to a relatively large degree, the needs that were identified through public and stakeholder input. In particular, the first/last mile vanpool expansion strategy has high community support and a moderate number of residents could benefit from improved access to public transportation services for employment-related trips. Furthermore, a large number of businesses would benefit from the first/last mile vanpool because it expands the potential employee base.
- b. The strategy also has relatively low-cost implications because the scale of vanpool services is largely determined by demand (only vanpools with enough passengers to meet minimum standards are operated) and operating costs are primarily covered by the passengers.
- c. The implementation timeframe is dependent upon finding a funding source(s) for the vanpool. While much of the current funding for the vanpools does come from Pace, additional funding could come from major employers, private companies, the healthcare industry, passengers, or a combination of options. It is considered a short-term timeframe based on the assumption that Pace could expand existing vanpool services in operation in Lake County. It is also assumed that the necessary support and management structure for expansion of the current program is already in place or could be quickly adjusted.

### 2. Mobility Management Staff for the Lake County Region

- a. The ROI Score for Mobility Management is 3.0. Mobility Management scores the highest possible rating in terms of community, transportation, and economic benefits. It scores lower in impacting spatial and temporal gaps in transportation; however, the indirect benefits of the Mobility Management program would assist with addressing those gaps by leading the effort to improve/expand services.
- b. The strategy has relatively low-cost implications and is cost effective ranging between \$50,000 and \$100,000 per year per staff person.
- c. The initial implementation timeframe is short-term and, as previously stated, is a vital step in the initial phases of the plan.

### 3. Expand RideLakeCounty into all of Vernon Hills and Vernon Township

- a. The ROI Score is 3.8. The strategy scores an average rating (3) in community, transportation, and economic benefits and only moderately addresses temporal gaps in service. However, it addresses the spatial gaps in transportation by improving access to hospitals, employment, and other major trip generators that are beyond the existing service area of locally operated transportation in Vernon Hills and Vernon Township (which are currently outside of the RideLakeCounty service area).
- b. The strategy has relatively low-cost implications and is cost effective with an estimated annual cost of approximately \$130,000.

- c. The implementation timeframe is short-term because the leadership structure is in place. However, time needed to identify sustainable funding, purchase additional vehicles, and establish a contract for services through Pace will depend upon the contract process, available funding, and the schedule of the vehicle manufacturer. Arrival of a new Pace vehicle for expansion typically requires over three years for procurement. However, in the case of Vernon Township, it is possible that Pace could be approached about a vehicle loan to kick-start the program earlier.

#### 4. TNC Supplemental Services

- a. The strategy receives a mid-range ROI score of 2.2. The program has a high level of community support and would significantly improve services within Vernon Township to address temporal and spatial gaps in services compared to the existing program. However, the rating is only moderate because, on the larger scale of impact to the Lake County region, the strategy only benefits a single township. However, the implementation of the strategy can be used as an example project to demonstrate the value of TNCs in other communities throughout Lake County, and may also be seen as an early “win” for expanding services in general throughout the county.
- b. While the cost per unit of service for the pilot program will most likely be equivalent to the current taxi program offered by Vernon Township, the cost per unit of service to operate a TNC program can be higher or lower than other traditional transit, often depending upon the agreement reached between the sponsoring agency and the provider. For example, TNC trips that are single-seat origin to destination services will yield a higher cost per trip/mile/or hour than a shared-ride service.
- c. The implementation timeframe is short-term because both the township funding and management structure are anticipated to be in place and no vehicle procurements are required. During the study, Vernon Township staff indicated that the Township is prepared to subsidize this pilot up to \$40,000 per year.

#### 5. Late Night Employment Transportation – Goodwill Great Lakes Employee Transportation in Lake County to the Naval Station Great Lakes

- a. This strategy receives an ROI score of 2.2 which is moderately high. The strategy has strong community, economic, and transportation benefits for individuals with disabilities who live in Lake County and work at the Naval Station.
- b. The cost implications for the sponsoring organization (Goodwill Great Lakes) are moderate and will depend a great deal on the mode of service used to provide the employment trips as well as the hours of operation (such as just late night, or all shifts). Goodwill Great Lakes would also need to identify funding for this expanded service.
- c. The implementation timeframe is anticipated to be short-term because Goodwill Great Lakes is already administering a similar program and could expand to include other areas of Lake County with no changes in leadership for the program once funding is identified.

- d. An additional challenge that is unique to the program is that Goodwill Great Lakes does not control the travel time for passengers once they transfer from the Late Night Employment Shuttle to the Naval Base Shuttle. It is recommended that negotiations for improved services while on-base should occur with the Naval Base prior to initiation of the service and should be ongoing. The Mobility Management staff could potentially assist with this education process.

## 6. Countywide Marketing Program

- a. The ROI score is 2.2. While the score is moderate, the campaign is important to the process of educating passengers and potential passengers about existing services as well as changes and improvements in services.
- b. The cost and content of the countywide marketing campaign can be determined by the lead agency based upon available funding and should correspond to the level of service expansions and changes that are implemented.
- c. The implementation timeframe is mid-term. However, the marketing campaign would be an ongoing effort over the course of several years, and would be scalable, based on funding, marketing needs, and general demand for services.

## 7. Expanding the TNC/Taxi Pilot Program into Other Lake County Communities

- a. Depending upon the success of the TNC/Taxi Pilot Program in Vernon Township, other Lake County communities may wish to replicate the program for their residents. This strategy receives a relatively low ROI score of 1.8 because the needs have yet to be identified.
- b. Likewise, the funding sources have not yet been identified for this relatively expensive service.
- c. The potential implementation timeframe is mid-term because if a community elected to replicate the program, lead time for starting is only limited by available funding and the procurement period for securing a contracted TNC operator.

## Mid-Term Recommendations

### 8. TNC First/Last-Mile Services

- a. This strategy received a moderate ROI score of 2.6. The score is moderate to low in terms of community and transportation because of the limited number of people that would be served. The strategy potentially has strong benefits for businesses, but would only marginally improve spatial and temporal gaps in services by connecting people to other available transportation services.
- b. The cost implications of implementing a TNC service are relatively low compared to other strategies that require purchase of vehicles and expansions in staffing/management. However, TNC services could ultimately result in a higher cost per mile or passenger trip depending upon how the contracts are negotiated between the sponsoring agency and the TNC that operates the service.
- c. The implementation timeframe is short-term because no additional time is required for vehicle purchases and the majority of the management and

administrative functions are the responsibility of the TNC operator, as defined by the contractual agreement. All oversight responsibilities will fall upon the sponsoring agency.

## 9. TNC Supplemental Paratransit Services

- a. This service strategy received a moderate ROI score of 3.0. The strategy scored moderately in terms of community and transportation benefits because of the number of residents that would benefit from the expansion. While supplemental TNCs may have a significant benefit to paratransit riders, the portion of Lake County residents that would benefit from the services is moderate. Also, the community support for this option was moderate during the public involvement process. The economic benefits to businesses are minimal. Spatial gaps are not addressed because this strategy does not address an overall change in service times or areas. Some temporal gaps are addressed because of the immediate response.
- b. The true cost implications of the strategy vary largely based on the scope of services. If TNC paratransit services are implemented in a larger area, for example, the cost will be higher. One significant factor in the cost of this program is the availability of wheelchair accessible vehicles and drivers with appropriate levels of training to operate paratransit services meeting the Americans with Disabilities Act requirements.
- c. The implementation timeframe is considered mid-term because of the potential to implement the program incrementally and because no additional vehicles would be purchased by an agency.

## 10. Late Night Employment Transportation Pilot – Expand to Include Mid-Size Employers and/or Expand to Include the General Public Anywhere in Lake County.

- a. Each of these strategies has a high ROI score of 4.6 because the service can potentially meet community, transportation, and economic needs that were identified by stakeholders through the study. The strategy also fills temporal gaps that were identified in the transportation network by offering access to employment during late night hours for shift workers.
- b. The cost implications are moderate and could be mitigated if major employers get involved and contribute to the operating costs for the program through a public/private partnership.
- c. The program is a mid-term goal because funding and leadership have not yet been identified for this service.

## 11. Expand RideLakeCounty Paratransit Service into All of Waukegan Township, City of Lake Forest, and City of North Chicago

- a. With a moderate ROI score of 3.8 this strategy has strong economic benefits because of increased access to employment and shopping areas for anyone in the RideLakeCounty service area. However, the high cost of implementation (\$250,000 to \$500,000) brings the ROI score down to moderate levels.

- b. Leadership structures are partially in place but additional staffing and vehicles would need to be secured prior to implementation. There is funding in place for the existing RideLakeCounty services but additional local funding to match future Section 5310 program dollars for the expansion has not been identified. Waukegan Township, City of Lake Forest, and the City of North Chicago are already partners with Shields Township and there is a separate budget for those services for which funding has been identified. Current operating costs will be folded into this model. The timeline is short-long for this strategy as the implementation may be based on demand and order of magnitude.

### **12. Centralized Transportation Information**

- a. This strategy received a moderate ROI score of 3.0 because, although the community and transportation benefits are high, the economic impact is moderate and does not directly impact spatial and temporal gaps in services. However, as more services are implemented, the centralized information and trip planning service will begin to have a stronger impact. Therefore, the long-term ROI may be higher.
- b. The annual cost for the program is estimated to be relatively low, between \$50,000 and \$100,000. The implementation timeline is mid-term.

### **13. Expand Lake County Central into Warren Township**

- a. The ROI score of 3.4 is moderate in all categories, including cost implications. The strategy would improve access to shopping and medical services for Warren Township residents who could seamlessly travel throughout the RideLakeCounty Central service area.
- b. The implementation timeframe is anticipated to be mid-term because expansion, vehicles/drivers, and additional funding would need to be identified prior to implementation.

### **14. Coordinate RideLakeCounty Central and West Programs to Expand Services into More of Southwestern Lake County**

- a. The ROI score of 3.4 is moderately strong because this strategy would have a significant community impact and address transportation needs and spatial gaps in services. Because the population and employment opportunities in southwestern and western Lake County are fewer than in the eastern portions of the county, the relative impact is only moderate. However, when an expanded look at the new access to employment, shopping, and major medical facilities in northwestern Cook County are included in the scope, the strategy could impact a significantly higher portion of the population.
- b. The cost implications are high for this service expansion because additional vehicles and staff are likely to be required. The timeline is short- and long-term for this strategy as the implementation may be based on demand and order of magnitude.

### 15. Flexible Transit Services/Deviated Routes Operated by Pace

- a. Flexible service/deviated routes have been identified in previous studies as potential service structures and community support for those services continues to exist. This strategy received a moderately low ROI score of 2.2 because community support during the planning effort was low and the number of people impacted by the services is limited to a relatively small service area that is already served by fixed routes. While the benefit to people within the respective service area is significant, the overall benefit to the Lake County area is less impactful.
- b. Implementation of this service will depend significantly upon Pace's budget and potentially on the identification of funding by other partners. The deviated-route services are relatively expensive to sustain. However, strong ridership can make them cost effective and raise the ROI for the service area and funding agencies. The timeline for this strategy is mid.

### 16. Enhanced On Demand Services Round Lake and Vernon Hills/Mundelein

- a. A moderately low ROI of 1.8 is assigned to this strategy because the relative transportation and economic benefits are low and the community support expressed for this strategy is moderate. While this strategy does benefit the area, and addresses a gap currently present, it doesn't benefit the community on a large scale. In the long-term, however, this program could be replicated in other communities throughout the region which would raise the ROI for the Lake County area.
- b. Projected cost implications are moderate and funding has not been identified for the program. Funding is dependent upon the Pace budget and potentially on the identification of funding by other partners, and the timeline for this strategy is mid-term.

## Long-Term Recommendations

### 17. Expand RideLakeCounty paratransit services countywide

- a. With a ROI score of 5.0 this strategy rates as meeting the highest level of need. Countywide service addresses the identified community, transportation, and economic needs. It also addresses spatial gaps in services and addresses temporal gaps in services for areas that do not have transportation services or have shorter hours of access to community-based transportation services.
- b. The cost implications are high, which make this strategy a long-term goal. Additional funding will be necessary and has not yet been identified. The management and administrative structure for a countywide service will take time to build and additional vehicles may also be necessary.

## Recommendations Summary

The strategies outlined in the document are designed to work in tandem to improve overall transportation options, mobility, and connectivity in Lake County. Not all strategies may be implemented immediately, as sustainable funding sources should be further explored, especially for larger-scale and long-term recommendations. It is important to note that a champion, and/or lead

agency, should be selected to help bolster support for the implementation of projects; however, the strategies will require the support of multiple agencies, as well as community support, for continued success. Stakeholders and the community should have buy-in to the selected strategies to take ownership of the projects and make them successful. Additionally, the order in which the recommendations are implemented depends on the formation of working groups to support the work, or “heavy lifting,” the recommendations require prior to implementation.

## 17 CONCLUSION

The Lake County region is focused on expanding the transportation solutions available to all of its residents, but particularly for people with disabilities and older adults. The strategies and solutions proposed under this plan, if implemented, will greatly improve transportation access for many Lake County residents either not currently or not sufficiently served under existing mobility options.

These strategies should be viewed not as individual solutions that will yield specific improvements, but instead as elements of a more complete and robust transportation network in the Lake County region. Despite this opportunity to enhance local transportation service, this plan represents only the first of many steps to making the Lake County region an easier place to get around. The key to implementing these strategies will be a continued focus on public involvement, open communication, sustainable funding sources, and community partnerships.



## **APPENDIX A**

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### **Lake County DOT Policy for Coordination with LCCTSC**



# Appendix A Lake County DOT Policy for Coordination with LCCTSC

## Lake County Division of Transportation and Lake County Coordinated Transportation Services Committee (2016)

In 2016, the Public Works and Transportation Committee of the Lake County Board endorsed a coordination policy to guide the work between the Lake County DOT and LCCTSC towards the “long-term goal of coordinated countywide paratransit service to meet the needs of seniors, persons with disabilities or medical needs, low-income residents and those in need of transportation for access to employment.” This coordination is to be carried out through 10 work steps, including:

- Joint efforts between LCCTSC, Lake County DOT, and other regional stakeholders to enhance existing paratransit services and work toward the long-term goal of coordinated countywide paratransit services
- Application by Lake County DOT on behalf of LCCTSC for grants to support regional paratransit coordination projects
- Financial support by Lake County for a paratransit coordinator position and local match for grants received for pilot coordination projects with a regional benefit
- Joint development of a sustainable funding policy for pilot coordination projects and a coordinated countywide paratransit service

The coordination policy is intended to be flexible and may be modified as needed. The detailed policy is found below.

## Lake County Division of Transportation Paratransit Coordination with LCCTSC Policy

*Established 3/2/2016*

*Endorsed by the Public Works and Transportation Committee*

*From: County Engineer*

*Directed to: Director of Planning & Programming and Senior Planner/Paratransit Coordinator*

### **Purpose**

Provide direction to LCDOT to work with the Lake County Coordinated Transportation Services Committee (LCCTSC) to assist with their long-term goal of coordinated countywide paratransit service to meet the needs of seniors, persons with disabilities or medical needs, low-income residents and those in need of transportation for access to employment. The Public Works and Transportation Committee (PWTC) has endorsed this policy. It is intended that this policy shall be modified from time to time; as recommended by staff and as directed by the PWTC. Lake County is a partner in the coordination of regional paratransit transportation. This policy is not intended to exclude local decisions on local services, but to provide a framework for County involvement in regional coordination of services.

### **Work Plan**

The procedures outlined below shall be followed:

1. Utilize “1/4% Sales Tax funds” to provide a staff position (the Paratransit Coordinator), to serve as project coordinator to help achieve the said long-term coordinated countywide paratransit service goal of LCCTSC.
2. Work with Pace as the region’s public transit provider to broaden regional paratransit services offered to Lake County residents.
3. Work with, and provide recommendations to, the LCCTSC to identify and pursue enhancements to eligible paratransit services presently being delivered, whether by public or private providers, that can be incorporated into the reaching of the said long-term goal of coordinated countywide paratransit service.
4. Apply for grants on behalf of LCCTSC, in concert with paratransit operators, which provide a regional benefit and enable progress to be made towards reaching LCCTSC’s long-term goal of coordinated countywide paratransit service (regional benefit is considered as crossing borders and connecting areas beyond a single Township or Municipality).
5. Utilize “1/4% Sales Tax funds” to provide funding, up to 70% of the local match, for grants received for pilot paratransit projects with regional benefit (pilot project considered to be a pilot for up to 5 years from the date the service is initiated).
6. Work with the LCCTSC and the project partners to develop a sustainability plan within 2 years of the date that the grant funded pilot project service is initiated. Implementation of the sustainability plan shall begin in the 3<sup>rd</sup> year and County funding shall adjust incrementally from the 3<sup>rd</sup> thru the 5<sup>th</sup> year (County funds 70% of the local match in years 1 and 2; 55% of the local match in year 3; 40% of the local match in year 4, and 25% of the local match in year 5 with the project partners providing the balance of the local match).

7. Work with CMAP, RTA, Pace and other regional partners to evaluate the prospects of and report on the method proposed to sustain any service that may be instituted, whether by public or private providers, as part of a plan or program towards reaching the said long-term goal of coordinated countywide paratransit services.
8. Working with the Lake County Board and LCCTSC, plan for the County's ultimate role in a long-term, sustainable, countywide paratransit service (such as partially funding a consolidated paratransit 24/7 call center, or other possible countywide opportunities utilizing ¼% Sales Tax).
9. Hire a consultant to facilitate a plan to lay out the next steps to provide regional coordinated paratransit in Lake County (utilizing ¼% Sales Tax funds and possible grant funding).
10. The County will provide up to \$500,000 per year for regional paratransit related initiatives. This includes staff position, County match for grants, and any consultant fees as identified in items 1, 5, 8 and 9 above.



## **APPENDIX B**

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# Initial Evaluation of Service Improvement Alternatives



# Appendix B Initial Evaluation of Service Improvement Alternatives

Service Alternatives	Community	Transportation Benefits	Financial	Implementation	Average Rank	Community Applicability
<b>Service Strategies</b>						
<b>Late-Night Employment Transportation</b>	Addresses identified need for employment transportation when traditional transit services are not operating; can be designed to meet demand from medium density communities; identified through community meetings and surveys. <b>Rank: 4</b>	Focuses on specific need: employment transportation. Would enable potential employees to make use of existing transit by providing missing one-way trip; can be easily designed as an automatic subscription trip for daily employment; would address need of employers in low density areas seeking to attract urban job force. Number of potential users (job-seekers) is relatively high. <b>Rank: 3</b>	Makes use of existing transit subsidy for one-way trips reducing overall subsidy required; shared ride trips would be serving higher density employment destinations; would require additional subsidy source for one-way shared ride trips. Pilot program approximately \$55,000. <b>Rank: 4</b>	Use of existing shared ride contract service operator (Dial-A-Ride or On Demand) and Pace bus services; services could be implemented on a pilot basis with staged expansion; Pace is a required partner; could be coordinated with other Lake County shared ride providers and marketed/subsidized with workforce development agencies, TMA, and others. Pilot could be implemented in near term and expanded in phases. <b>Rank: 4</b>	<b>3.8</b>	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density
<b>Enhanced On Demand Service</b>	Provides both direct service from lower density and medium density areas; addresses both need for direct service and feeder to traditional transit; meets growing demand from both older person/individuals with disabilities and general public. <b>Rank: 4</b>	Addresses multiple needs. Provides spontaneous transportation at selected stops. Can also serve as a feeder to fixed route transit and rail, increasing ridership on those modes. Potential users include current and new On Demand users and ADA paratransit customers. <b>Rank: 4</b>	Can reduce subsidy per passenger in medium density areas relative to pure demand response transportation; can reduce overall subsidy costs by encouraging connections to fixed route bus and rail. Pilot program would generate minimal additional cost. <b>Rank: 4</b>	Is already an existing mode of transportation in Lake County; could be marketed to promote more spontaneous boarding and use as feeder to transit. Pace is a required partner. <b>Rank: 4</b>	<b>4</b>	Suburban Medium Density Clusters (current On Demand service area)
<b>Flexible Transit (Deviated Fixed Route) Services</b>	Addresses need for fixed schedule service in areas without existing Pace bus routes; meets general public needs beyond older persons and individuals with disabilities; encourages spontaneous boarding for customer ease of use. <b>Rank: 5</b>	Addresses multiple issues. Provides increased service efficiency in areas relying solely on demand response service. Can integrate needs of specialized and general public more seamlessly. Number of potential users similar to fixed route service. <b>Rank: 5</b>	Reduced subsidy per passenger trip relative to demand response services; can be substituted for higher cost Pace bus services in low density areas through lower operating and capital costs. Allows traditional demand response customers to be served without administrative costs associated with registration and reservations. Pilot program would generate minimal additional costs. <b>Rank: 4</b>	Can be implemented using existing contract operators with larger minibuses; service planning can be provided through existing Pace resources. Pace is a required partner. Pilot could be implemented in near term and expanded in stages. <b>Rank: 4</b>	<b>4.5</b>	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density

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Service Alternatives	Community	Transportation Benefits	Financial	Implementation	Average Rank	Community Applicability
<b>Expanding the TNC/Taxi Pilot Program</b>	Provides both direct service from lower density and medium density areas; addresses both need for direct service and feeder to traditional transit; meets growing demand from both older person/individuals with disabilities and general public. <b>Rank: 4</b>	Makes use of existing local taxi operating capacity and investment; provides curb to curb service; provides the potential for increasing as an accessible shared ride service. <b>Rank: 4</b>	Efficient utilization of existing capacity of local taxi companies; simplified subsidy of rider through user side subsidy; lower cost subsidy for services in areas where taxi companies are already operating. <b>Rank: 3</b>	Streamlined implementation given existing operating structure and vehicles; easily scalable for expansion of services; existing taxi companies cover most of Lake County. Could be implemented by municipalities in near term. <b>Rank: 4</b>	<b>3.8</b>	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density Suburban Adjacent Low Density
<b>Countywide Paratransit System</b>	Countywide benefits for users and non-users. Support expressed by transportation providers and stakeholders. Addresses stated needs for more consistent, comprehensive paratransit services. <b>Rank: 5</b>	Countywide benefits for users and non-users. Addresses need for regional trips. Addresses need for options in areas without service today. Provides more consistent service across communities. Provides improved access to health care, jobs, education, shopping. <b>Rank: 5</b>	Incentive funding likely needed to encourage participation. Funding sustainability may be challenging. Among the higher cost strategies (centralized management/administration, marketing; eventual expansion to additional communities) <b>Rank: 2</b>	Could be implemented in phases. Successful implementation requires participation by many partners. <b>Rank: 3</b>	<b>3.8</b>	Countywide
<b>Personal Mobility Strategies</b>						
<b>Vanpool First/Last-Mile Access to Public Transit</b>	Meets need for access to transit from adjacent areas beyond walking distance. Has potential for employer support. <b>Rank: 4.5</b>	Has potential for employer support; application limited to employment trips. Number of potential users (job-seekers) is relatively high. <b>Rank: 4</b>	Provides low cost connection from transit to employment centers, or for entire work trip. Significant portion of cost borne by users. Targeted marketing would increase use of existing program. <b>Rank: 4</b>	Successful Pace vanpool program in Lake County provides foundation; targeted marketing to Lake County will increase awareness and use. Licensed driver required for each vanpool. Requires coordination with TMA and workforce development agencies. Employers could also support. <b>Rank: 4</b>	<b>4.1</b>	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density Suburban Adjacent Low Density
<b>TNC First/Last Mile Service</b>	Addresses stated need for connections to fixed route system. Dependent on availability of TNC in geographic sub-regions of county; support from community will vary based on awareness of TNC service and willingness to use. <b>Rank: 4</b>	Addresses need for connections to fixed route system—major issue. Needs of general public can be addressed. Promotes use of existing transit services. Service may not be available in all parts of the county. <b>Rank: 3.5</b>	No capital investment required; TNC companies are comfortable with subsidy contracts; contracts can be set up to accommodate requirements for serving specified transit locations. Maximum budget for subsidies can be set. <b>Rank: 4</b>	Pilot programs can be set up with short lead time; coordination potential dependent on local TNC willingness to enter subsidy contract. If federal funds are used, accessibility and nondiscrimination requirements must be met. <b>Rank: 3</b>	<b>3.6</b>	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density

**Paratransit Market Study for the Lake County Region | Analysis of Existing Conditions | FINAL**  
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Service Alternatives	Community	Transportation Benefits	Financial	Implementation	Average Rank	Community Applicability
<b>TNC City-to-City Service</b>	Offers option for people in communities outside range of fixed route service; dependent on availability of TNC in geographic sub-regions of county; support from community will vary based on awareness of TNC service and willingness to use. <b>Rank: 3</b>	Cost-effective way of serving areas without the density to support fixed route service—major issue. Option for the general public. Number of potential users depends on communities in which TNC service is available. <b>Rank: 3</b>	No capital investment required; TNC companies are comfortable with subsidy contracts. Maximum budget for subsidies can be set. <b>Rank: 4</b>	Pilot programs can be set up with short lead time; dependent on local TNC willingness to enter subsidy contract. If federal funds are used, accessibility and nondiscrimination requirements must be met. <b>Rank: 3</b>	<b>3.3</b>	Suburban Adjacent Low Density to other parts of county
<b>TNC Alternative for ADA Paratransit Customers</b>	TNC service is more flexible and spontaneous for customers than traditional paratransit. Pilots in other areas indicate popularity with customers. <b>Rank: 4</b>	May address present concerns about ADA/Dial-A-Ride travel times and on time performance by diverting some trips to TNC option—major issue. Potential users include portion of current ADA paratransit users. <b>Rank: 3</b>	Serving trips that would otherwise be made on ADA paratransit service with a more cost-effective option should reduce total cost of providing ADA paratransit. In pilot programs elsewhere, subsidy for TNC trips + cost of serving ADA paratransit trips has been less than previous cost of serving ADA trips. <b>Rank: 4</b>	Pace is a required partner. If federal funds are used, accessibility and nondiscrimination requirements must be met. TNC service more likely to be available in current fixed route/ADA service area. <b>Rank: 2.5</b>	<b>3.4</b>	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density
<b>TNC Late Night Employment Transportation</b>	Addresses identified need for employment transportation when traditional transit services are not operating; can be designed to meet demand from medium density communities; identified through community meetings and surveys. <b>Rank: 4</b>	Focuses on specific need: employment transportation. Would enable potential employees to make use of existing transit by providing missing one-way trip; can be easily designed as an automatic subscription trip for daily employment; would address need of employers in low density areas seeking to attract urban job force. Number of potential users (job-seekers) is relatively high. <b>Rank: 3</b>	Makes use of existing transit subsidy for one-way trips reducing overall subsidy required; shared ride trips would be serving higher density employment destinations; would require additional subsidy source for one-way shared ride trips. Pilot program budget could be set to acceptable maximum. <b>Rank: 4</b>	Would require lead agency to oversee. Could be marketed/subsidized with workforce development agencies, TMA, and others. Pilot could be implemented in near term and expanded in phases. Federal requirements apply if federal funds are used. <b>Rank: 2.5</b>	<b>3.4</b>	Medium Urban Small Urban Suburban Medium Density Clusters Suburban Medium Density
<b>TNC Service for Specific User Groups</b>	Addresses need for service for target populations in communities with limited options. Older adults may be reluctant to try TNC service. Lack of accessible services may limit use by people with disabilities. <b>Rank: 2</b>	Offers flexible, spontaneous option in communities where fixed route/paratransit service is limited. Number of potential users is relatively low, but need may be great. <b>Rank: 2</b>	Subsidy levels likely to be low due to limited number of users. <b>Rank: 4</b>	Could be implemented in the near term. If federal funds are used, accessibility and nondiscrimination requirements must be met. <b>Rank: 4</b>	<b>3</b>	Suburban Adjacent Low Density to other parts of county

**Paratransit Market Study for the Lake County Region | Analysis of Existing Conditions | FINAL**  
 Lake County Division of Transportation

Service Alternatives	Community	Transportation Benefits	Financial	Implementation	Average Rank	Community Applicability
<b>Mobility Management Strategies</b>						
<b>Centralized Transportation Information</b>	Addressed comments about difficulty of finding information suggest support. Would have broad benefits-users, businesses, human service agencies <b>Rank: 5</b>	Broad benefits for users and non-users, including increased access to information and assistance with identifying transportation options, improved awareness of and support for existing services. Difficult to measure benefits. <b>Rank: 4</b>	Costs relatively minor if Pace call center services are expanded or modest online directory is developed - primarily cost of Mobility Manager time plus Pace expansion expenses. Funding is likely to be available. Separate, comprehensive call center would be the highest cost strategy. <b>Rank: 4</b>	Implementation depends on coordination between Pace and partner organization. Value of information depends on keeping provider information up to date. Could be implemented in short term. <b>Rank: 3</b>	<b>4</b>	Countywide
<b>Countywide Marketing Program</b>	Companion to centralized information; similar support and benefits <b>Rank: 5</b>	Benefits similar to centralized information. Additional benefit of increased ridership. Additional benefit of increasing support among elected officials and other stakeholders <b>Rank: 5</b>	Cost is minimal, especially if designed as project for CLC students. <b>Rank: 5</b>	Easy to implement in the short term. Partners could participate to expand reach of campaign. <b>Rank: 5</b>	<b>5</b>	Countywide
<b>Mobility Management Staff for the Lake County Region</b>	Not discussed with public or stakeholders yet, but likely to be supported. <b>Rank: 5</b>	Key to successful implementation of service improvement strategies. Tied to benefits of all implemented strategies. <b>Rank: 5</b>	Costs relatively minor - cost of Mobility Manager time. Funding is likely to be available. <b>Rank 4</b>	Easy to implement in the short term. <b>Rank: 5</b>	<b>4.8</b>	Countywide

## **APPENDIX C**

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### Lake County Employers



# Appendix C Lake County Employers

Data Source: Lake County Partners

Company	Number of Employees	City	Company	Number of Employees	City
A M M's Limousine Svc	100	Wheeling	Lake Forest Landmark II LLC	300	Lake Forest
A T Properties	118	Highland Park	Lake Forest Place	200	Lake Forest
Aargus Plastics Inc	125	Wheeling	Lake Forest Preserves	150	Libertyville
Abbott Laboratories	400+	North Chicago	Lake Villa Volunteer Fire Dept	109	Lake Villa
Abbott Middle School	105	Waukegan	Lake Zurich High School	185	Lake Zurich
AbbVie Inc	400+	North Chicago	Lake Zurich School Dist Admin	111	Lake Zurich
ABC Taxi	100	Fox Lake	Lakes Community High School	139	Lake Villa
Accellent	150	Wheeling	Lakeside Collection	150	Lincolnshire
Accellent Inc	275	Wheeling	Lakeside Transportation	250	Waukegan
Accu Quote	199	Wheeling	Lambs Farm Inc	250	Libertyville
Acres Group	200	Wauconda	Landscape Concepts Management	200	Grayslake
Addolorata Villa	200	Wheeling	Laremont School	162	Grayslake
Adler Park Swimming Pool	115	Libertyville	Laserage Technology Corp	150	Waukegan
Advocate Health Care	400+	Barrington	Learning Resources Inc	125	Vernon Hills
Advocate Health Care	400+	Libertyville	Leica Biosystems Inc	110	Buffalo Grove
Afx Inc	170	Waukegan	Leica Microsystems Inc	135	Buffalo Grove
AIM Specialty Health	100	Deerfield	Lexington Health Care	150	Lake Zurich
Akzo Nobel Aerospace Coatings	200	Waukegan	Lexington Health Care	150	Wheeling
Alden Estates Of Barrington	150	Barrington	Liberty Mazda	200	Libertyville
Alden Long Grove Rehab	130	Long Grove	Libertyville District 70	111	Libertyville
Aleris	150	Lincolnshire	Libertyville High School	300	Libertyville
Allendale Association	400	Lake Villa	Libertyville School Dist 70	111	Libertyville
Allendale School	134	Lake Villa	Lifeline Vascular Access	100	Vernon Hills
Alliance Data Systems	100	Buffalo Grove	Lifeline Vascular Ctr	170	Vernon Hills
American Metal Fibers Inc	100	Lake Bluff	Lincolnshire Public School	300	Lincolnshire
Americo Inc	100	Wheeling	Liquid Controls LLC	150	Lake Bluff
Amerikal Products Corp	150	Waukegan	Lmt Onfrud	125	Waukegan
ANGUS Chemical Co	135	Buffalo Grove	Lowe's Home Improvement	100	Vernon Hills
Anthony BUICK GMC	104	Gurnee	Lundbeck Inc	175	Deerfield
Antioch Community High School	151	Antioch	Macy's	200	Gurnee
Antioch School District	111	Antioch	Macy's	200	Vernon Hills
Antioch Upper Grade School	110	Antioch	Maggiano's Little Italy	150	Vernon Hills
Aon Hewitt	400+	Lincolnshire	Makray Memorial Golf Club	120	Barrington
Aqua Belle Mfg Co	157	Highland Park	Manhard Consulting LTD	100	Vernon Hills
Arden Shore	200	Waukegan	Manorcare Health Svc-Lbrtyvll	100	Libertyville
Argon Medical Devices	280	Wheeling	Mariani Landscape	300	Lake Bluff
Argos Technologies Inc	250	Vernon Hills	Mariano's	100	Lake Zurich
Avantara Rehabilitation	200	Long Grove	Mariano's	100	Vernon Hills
Barrington High School	350	Barrington	Mariano's	120	Gurnee
Barrington Middle School	155	Barrington	Mariano's	165	Buffalo Grove

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Company	Number of Employees	City	Company	Number of Employees	City
Barrington Middle School-Sta	120	Barrington	Mariott Autograph Chicago Fax	200	Lincolnshire
Barrington Pools Inc	100	Barrington	Mariott International Inc	200	Lake Bluff
Barry Finkelstein Northwestern	200	Deerfield	Mariott International Inc	200	Libertyville
Bass Pro Shops	350	Gurnee	Mariott-Chicago Deerfield	110	Deerfield
Baxter Credit Union	200	Vernon Hills	Mariott-Lincolnshire Resort	483	Lincolnshire
Baxter Healthcare	115	Antioch	MAT Holdings Inc	100	Long Grove
Baxter Healthcare	115	Antioch	MBX	100	Libertyville
Baxter Healthcare	115	Grayslake	Medline Industries Incorporated	400+	Mundelein
Baxter Healthcare	115	Highland Park	Menards	150	Fox Lake
Baxter Healthcare	115	Lake Zurich	Menards	150	Gurnee
Baxter International	400+	Deerfield	Menards	200	Long Grove
Baxter Ventures	115	Deerfield	Mercer	250	Vernon Hills
Beach Park School Dist Supt	111	Beach Park	Merex Technology Lsg Corp Del	150	Deerfield
Bel Resource Inc	450	Waukegan	Meridian IT Inc	150	Deerfield
Bell & Howell	300	Wheeling	Meridian It Inc	255	Deerfield
Belmont Trading Co	100	Buffalo Grove	Meridian Leasing Corp	100	Deerfield
Berger Excavating Contrs	150	Wauconda	Metalex	100	Libertyville
Best Buy	100	Gurnee	Metalex	112	Libertyville
Best Buy	100	Vernon Hills	Micro Metl Corp	160	Lake Bluff
Best Recycling & Waste Svc	150	Wheeling	Midland Paper Pkng & Supls	150	Wheeling
Biaggi's Ristorante Italiano	100	Deer Park	Midwest Air Technologies	101	Long Grove
Bickford Of Gurnee	100	Gurnee	Midwest Masonry Inc	250	Mundelein
Biltmore Country Club	100	North Barrington	Midwest Motorcoach	150	Gurnee
Block & Co	250	Wheeling	Midwest Veterinary Dermatology	150	Buffalo Grove
BMO Harris Bank	190	Barrington	Mitsubishi Electric Automation	200	Vernon Hills
Bob Chinn's Crabhouse-Wheeling	375	Wheeling	MMF Industries	100	Wheeling
Brand Institute Inc	100	Deerfield	Molex LLC	130	Lincolnshire
Brightstar US Inc	300	Libertyville	Mondelez International	400+	Deerfield
Brightview Landscape	125	Wheeling	Morgan Stanley Wealth Mgmt	100	Barrington
Brightview Landscape	130	Long Grove	Motor Werks Of Barrington	340	Barrington
Brookdale Vernon Hills	120	Vernon Hills	Mt St Joseph School	145	Lake Zurich
Brown Paper Goods Co	100	Waukegan	Muller Auto Group	100	Highland Park
Buffalo Grove Fitness Ctr	150	Buffalo Grove	Mundelein Administrator's Ofc	150	Mundelein
Buffalo Grove High School	260	Buffalo Grove	Mundelein High School	250	Mundelein
Burlington	105	Gurnee	Mundelein Park & Recreation	101	Mundelein
Byron Udell & Assoc	110	Wheeling	National Property Inspections	250	Lincolnshire
C & F Packing Co	130	Lake Villa	Naval Station Great Lakes	400+	North Chicago
Camp Horseshoe LLC	100	Highland Park	NCH	150	Deerfield
Camping World	100	Lincolnshire	Neil Enterprises Inc	100	Vernon Hills
Captain James A Lovell Federal Health Care Center	400+	North Chicago	Netcom Inc	140	Wheeling
Cardinal Health	450	Waukegan	Nightingale Conant	200	Wheeling
Care Of Trees	132	Wheeling	Nor States Bank	150	Round Lake
Carmel High School	100	Mundelein	North Chicago Board-Education	100	North Chicago

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Company	Number of Employees	City	Company	Number of Employees	City
Carson's	170	Vernon Hills	North Chicago City Building	250	North Chicago
Carter-Hoffmann LLC	100	Mundelein	North Chicago Energy Ctr	135	North Chicago
CDW Corporation	400+	Vernon Hills	North Chicago School Dist 187	111	North Chicago
Centre Club	138	Libertyville	North Shore School District	111	Highland Park
Cheesecake Factory	250	Lincolnshire	Northbrook Services	400	Wheeling
Chicago Bears Football	150	Lake Forest	Northfield Block Co	150	Mundelein
Chili's Grill & Bar	120	Waukegan	Northshore Highland Park Hospital	400+	Highland Park
Claridge Healthcare	180	Lake Bluff	Northwestern Lake Forest Hospital	400+	Lake Forest
Colbert Packaging	180	Lake Forest	Nosco Inc	250	Waukegan
Colborne Foodbotics	100	Lake Forest	Nypro Inc	200	Gurnee
Coldwell Banker Residential	100	Barrington	Oak Grove School District 68	150	Libertyville
Coldwell Banker Residential	115	Highland Park	Ohio Medical Corp	100	Gurnee
Cole-Parmer Instrument Co LLC	300	Vernon Hills	Old Navy	100	Gurnee
College Of Lake County	150	Waukegan	Olive Garden Italian Kitchen	100	Vernon Hills
College Of Lake County	389	Grayslake	Olive Garden Italian Kitchen	120	Gurnee
College of Lake County	400+	Grayslake	Oliver W Holmes Middle School	100	Wheeling
Community Consolidated Schools	111	Grayslake	Omni Youth Svc	100	Buffalo Grove
Community Unit School District	111	Lake Zurich	Opus Capital Markets ConsInt	100	Lincolnshire
Corptax	200	Buffalo Grove	Outback Steakhouse	200	Gurnee
Costco Wholesale	205	Lake Zurich	Overture Premiums & Promotions	100	Vernon Hills
CPI Daylighting Inc	100	Lake Forest	Packaging coporation of America	400+	Lake Forest
Crabtree Partners	200	Lake Forest	Pactiv	120	Deerfield
Cracker Barrel Old Country Str	110	Gurnee	Pactiv	120	Lake Forest
Crane Agency	200	Lake Villa	Panasonic Factory Solutions	100	Buffalo Grove
Crescent Cardboard LLC	250	Wheeling	Park At Vernon Hills	100	Vernon Hills
Cross Com National LLC	250	Buffalo Grove	Park School Campus	100	Round Lake
Crothall Laundry Svc	450	Wheeling	Parker Mobile Systems Div	200	Lincolnshire
D & W Fine Pack	120	Lake Zurich	Partners In Senior Care	100	Grayslake
D R Horton	150	Vernon Hills	Pavilion Of Waukegan LLC	100	Waukegan
Danner Day Camp	200	Lake Forest	Pci Energy Svc LLC	200	Lake Bluff
Dart Container Corp	160	Lincolnshire	Peer Bearing Co	150	Waukegan
Day-Timer Inc	200	Lake Zurich	Penray Co Inc	125	Wheeling
Dearborn Group Inc	200	Lake Bluff	Pepsico Research & Devmnt Ctr	303	Barrington
Deer Field School	250	Deerfield	Peter Baker & Son Co Inc	125	Lake Bluff
Deer Path Inn	109	Lake Forest	Pickus Construction & Equip	175	Waukegan
Deerfield High School	250	Deerfield	Plaza Hawthorn Lakes	100	Vernon Hills
Deerfields Bakery-Buffalo Grv	100	Buffalo Grove	Popcorn Factory Inc	200	Lake Forest
Degraf Concrete Constr Inc	200	Wheeling	Primary School	100	Grayslake
Deringer-Ney Inc	250	Vernon Hills	Professional Plumbing Heating	300	Barrington
Destaco Camco Products	200	Wheeling	Quick Lane	100	Barrington
Deublin Co	220	Waukegan	Quill Corporation	400+	Lincolnshire
Discover Financial Services	400+	Riverwoods	Ravinia Festival	100	Highland Park
District 116 Facilities/Oper	111	Round Lake	Ray Chevrolet Inc	150	Fox Lake
Dms Holdings Inc	200	Waukegan	Raymond Chevrolet II	108	Antioch

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Company	Number of Employees	City	Company	Number of Employees	City
Doubletree Hotel	100	Mundelein	Recreation Center-Highland Prk	125	Highland Park
Durham School Svc	220	Grayslake	Renaissance Gardens	100	Lincolnshire
E H Wachs Co	120	Lincolnshire	Resinite Corp	250	Wheeling
Eagle Test Systems Inc	136	Buffalo Grove	Rexam CP Incorporated	400+	Buffalo Grove
Echo, Incorporated	400+	Lake Zurich	Richard Wolf Medical Instr	160	Vernon Hills
Ecoplanet Bamboo Group LLC	201	Barrington	Riverside Foundation	143	Lincolnshire
Educational Insights Inc	120	Vernon Hills	Rocco Fiore & Sons Inc	300	Libertyville
Eirich Machines	100	Gurnee	Rock Chevrolet	100	Grayslake
Embassy Suites Chicago-North	100	Deerfield	Round Lake Area Park Dist	100	Round Lake
Emco Chemical Distributors Inc	240	North Chicago	Round Lake Area Park District	201	Round Lake
EMCOR Services Team Mechanical	250	Buffalo Grove	Round Lake Area Schl Dist 116	111	Round Lake
Emeric Facility Svc	250	Waukegan	Round Lake Senior High School	200	Round Lake
Engis Corp	175	Wheeling	Ruprecht Co	200	Mundelein
Essendant	400+	Deerfield	Rust-Oleum Corp	100	Vernon Hills
ETA Hand2mind	100	Vernon Hills	S D L Trucking	177	Round Lake
Eurest Services	100	Wheeling	S I Jacobson Mfg Co	200	Waukegan
Experient Inc	100	Lincolnshire	S K Greens Oaks LLC	100	Libertyville
Expo Design Ctr	140	Vernon Hills	Salter Labs Inc	300	Lake Forest
Fabrication Technologies Inc	200	Libertyville	Sam's Club	180	Vernon Hills
Fairway Talent	201	Vernon Hills	Sam's Club	220	Gurnee
Fenwal Inc	400	Lake Zurich	Sayers 40 Inc	100	Vernon Hills
Fetco	100	Lake Zurich	Schultes Precision Mfg Inc	100	Buffalo Grove
First Student Inc	295	Lincolnshire	Scotsman Ice Systems-Cust Svc	110	Vernon Hills
Fiserv	114	Antioch	Scott Byron & Co Inc	300	Lake Bluff
Fluid Management Inc	170	Wheeling	Sears	275	Gurnee
Focus Products Group LLC	100	Lincolnshire	Sedgebrook	100	Lincolnshire
Forward Space	100	Lake Forest	Segerdahl Graphics	200	Wheeling
Fremont Elementary School	100	Mundelein	Segerdahl Group	450	Wheeling
Fremont School District 79	111	Mundelein	Sentry Security Inc	100	Wheeling
Fremont School District 79 Edu	111	Mundelein	Septan-Wheeling	110	Wheeling
Friend Center	103	Deerfield	SGS Life Science Svc	120	Lincolnshire
Garlands Of Barrington	100	Barrington	Shand Morahan Inc	163	Deerfield
Gbc	201	Lincolnshire	Shire	400+	Bannockburn
Gere Marie Corp	125	Lake Zurich	Showcase Relo	120	Gurnee
GF Machining Solutions LLC	100	Lincolnshire	Siemens Corp	310	Deerfield
GFX International Inc	200	Grayslake	Siemens Industry Incorporated	400+	Buffalo Grove
Glenlake Terrace Nurse & Rehab	219	Waukegan	Six Flags	400+	Gurnee
Grabowski Law Ctr LLC	150	Buffalo Grove	Snap-On Diagnostics	100	Lincolnshire
Grainger Industrial Supply	300	Lincolnshire	Southwire Co	120	Waukegan
Grant Community High Sch Dist	111	Fox Lake	Staci Corp	201	Gurnee
Grant Community High School	110	Fox Lake	Stack On Products Co	400	Wauconda
Graphics To Go Inc	106	Waukegan	State Attorney	130	Waukegan
Grayslake Central High School	154	Grayslake	Sterling Brand LLC	100	Wheeling
Grayslake Middle School	100	Grayslake	Stonecasters LLC	100	Wauconda

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Company	Number of Employees	City	Company	Number of Employees	City
Grayslake Outpatient Ctr	150	Grayslake	Student Assistance Commission	499	Deerfield
Grayslake School District	111	Grayslake	Sullivan's Steakhouse	109	Lincolnshire
Greek American Rehab & Care	180	Wheeling	Sunset Food Mart Inc	150	Libertyville
GURNEE Centre Club	140	Gurnee	Sunset Foods	150	Long Grove
Gurnee School District 56	111	Gurnee	Sunset Foods	250	Highland Park
Gurnee Village Hall	250	Gurnee	Super Fresh Market	100	Waukegan
Harbor Chase	100	Long Grove	Swiss Automation Inc	180	Barrington
Hawthorn Middle School North	100	Vernon Hills	Takeda Pharmaceuticals USA Incorporated	400+	Deerfield
Health Fitness	150	Lake Forest	Target	140	Wheeling
Heathrow Scientific LLC	101	Vernon Hills	Target	150	Lake Bluff
Heinen's	110	Barrington	Target	150	Lake Zurich
Heinen's	110	Lake Bluff	Target	150	Mundelein
Helio Precision Products Inc	200	Lake Bluff	Target	175	Waukegan
Help At Home	200	Gurnee	Target	215	Gurnee
Helpsource Of North Shore Inc	360	Buffalo Grove	Target	224	Highland Park
Henri Studio LLC	150	Wauconda	Target	300	Vernon Hills
Hershey Co	140	Deerfield	Taubensee Steel & Wire Co	120	Wheeling
Highland Park High School	170	Highland Park	Tella Technology	100	Lake Zurich
Highland Park Hospital	100	Buffalo Grove	Temps Now Employment-Placement	200	Gurnee
Highlands At Lake Forest	100	Lake Forest	Tenneco Inc.	400+	Lake Forest
Hillcrest Elementary School	110	Antioch	Terrace Nursing Home	100	Waukegan
Hi-Tech Pdr & Auto Svc	120	Wheeling	Tetra Pak Inc	150	Vernon Hills
Holiday Inn Gurnee Convention	120	Gurnee	TGI Friday's	120	Gurnee
Home Depot	100	Deerfield	Top Notch Realty Team	149	Barrington
Home Depot	100	Mundelein	Trans Global Scientific Inc	300	Vernon Hills
Home Depot	150	Gurnee	Travanse Living At Grayslake	100	Grayslake
Home Depot	150	Lake Zurich	Trustmark Insurance Company	400+	Lake Forest
Home Depot	150	Waukegan	TVH Parts Co	110	Grayslake
Home Depot	175	Vernon Hills	Twin Orchard Country Club	100	Long Grove
Home Warranty Of America Inc	100	Buffalo Grove	U S Security Assoc Inc	100	Wheeling
Honeywell Analytics	160	Lincolnshire	United Conveyor Corp	200	Waukegan
Hunt Club Park Aquatic Ctr	120	Gurnee	United States Alliance Fire	250	Lake Forest
Hyatt Regency Deerfield	150	Deerfield	University-St Mary-The Lake	100	Mundelein
Hydraforce Inc	320	Lincolnshire	US Post Office	100	Deerfield
I3 Group Inc	200	Lincolnshire	US Post Office	106	Barrington
Illini Inc	150	Vernon Hills	US Post Office	150	Waukegan
IMC Holdings	300	Grayslake	US Tsubaki Automotive LLC	200	Wheeling
Incredible Technologies Inc	130	Vernon Hills	US Tsubaki Holdings Inc	175	Wheeling
Indian Creek Police Dept	200	Libertyville	USA Blue Book Inc	300	Waukegan
Indian Trails Library	120	Wheeling	Usg Corp Innovation Ctr	150	Libertyville
Infineon Technologies	100	Libertyville	Utopia Inc	300	Mundelein
Inland Die Casting Co Of IL	160	Wheeling	Valspar Corp	160	Deerfield
Insight Beverages	180	Lake Zurich	Valspar Corp	160	Wheeling

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Company	Number of Employees	City	Company	Number of Employees	City
Ipcc	150	Lake Forest	Valspar Corp	160	Wheeling
Isi	150	Buffalo Grove	Vantage Performance Materials	150	Gurnee
Ivanhoe Club	100	Mundelein	Vapor Bus Intl	185	Buffalo Grove
Ivy Hall Elementary School	100	Buffalo Grove	Vernon Area Public Library	130	Lincolnshire
Jelly Belly Candy Co	200	North Chicago	Vernon Hills High School	100	Vernon Hills
Jewel-Osco	100	Barrington	Veterans Of Foreign Wars	150	Libertyville
Jewel-Osco	145	Lake Zurich	Victory Centre Supportive Lvng	100	Vernon Hills
Jewel-Osco	150	Fox Lake	Victory Centre-Vernon Hls	100	Vernon Hills
Jewel-Osco	150	Mundelein	Village	103	Deerfield
Jewel-Osco	160	Wauconda	Village Of Vernon Hills	109	Vernon Hills
Jewel-Osco	200	Antioch	Village-Buffalo Grove Police	130	Buffalo Grove
Jewel-Osco	200	Buffalo Grove	Vista Health System	400+	Waukegan
Jewel-Osco	200	Highland Park	Vista Medical Ctr West	111	Waukegan
Jewel-Osco	200	Lake Forest	Vonco Products LLC	200	Lake Villa
Jewel-Osco	200	Lake Zurich	Walgreen Boots Alliance, Inc.	400+	Deerfield
Jewel-Osco	200	Libertyville	Walmart	218	Vernon Hills
Jewel-Osco	250	Waukegan	Walmart Supercenter	238	Wheeling
Jewel-Osco	275	Waukegan	Walmart Supercenter	284	Gurnee
Jewel-Osco	300	Gurnee	Walmart Supercenter	300	Lake Zurich
Jst Corp	250	Waukegan	Walmart Supercenter	350	Waukegan
Karl Knauz Bmw	300	Lake Bluff	Walmart Supercenter	475	Antioch
Keats Manufacturing Co	120	Wheeling	Warren Barr North Shore	100	Highland Park
Keller Williams Realty	150	Barrington	Warren Township High Sch Dist	111	Gurnee
Kemper Insurance Co	250	Long Grove	Warren Township High School	235	Gurnee
Kenall Manufacturing Co	100	Gurnee	Waste Management	100	Antioch
Kiley Developmental Ctr	423	Waukegan	Wauconda Care	120	Wauconda
Klein Tools Inc	200	Lincolnshire	Wauconda Community Sch Dist	111	Wauconda
Knauz	300	Lake Bluff	Waukegan Community Unit Sch	100	Waukegan
Knauz Continental Autos Inc	300	Lake Bluff	Waukegan Police Dept	245	Waukegan
Kohl's	110	Gurnee	Waukegan Station	100	Waukegan
Kohl's	120	Lake Zurich	Weinberg Community For Senior	105	Deerfield
Kohl's	135	Vernon Hills	Westin Chicago North Shore	248	Wheeling
Kubota Engine America Corp	120	Lincolnshire	Westrock	150	North Chicago
L J Thalmann Co	300	North Chicago	Wheeling Park Dist-Cmnty Rec	200	Wheeling
LaCosta Facility Support Services	400+	Wauconda	Wheeling Police Dept	100	Wheeling
Laidlaw Education Svc	125	Wheeling	Whitehall Of Deerfield	230	Deerfield
Lake Bluff School District 65	111	Lake Bluff	Whole Foods Market	150	Deerfield
Lake County Circuit Court Clrk	100	Waukegan	Wickstrom Auto Group	100	Barrington
Lake County Community Action	250	Waukegan	Wieland Metals Inc	100	Wheeling
Lake County Forest Preserve	100	Wauconda	Wildfire-Lincolnshire	160	Lincolnshire
Lake County Forest Preserves	100	Libertyville	Willow Creek Community Church	300	Barrington
Lake County Grading Co LLC	280	Libertyville	Winchester House	300	Libertyville
Lake County Health Dept	401	Waukegan	Wintrust Wealth Management	113	Grayslake
Lake County Juvenile	100	Vernon Hills	Woodland Consolidated Sch Dist	179	Gurnee

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Company	Number of Employees	City	Company	Number of Employees	City
Lake County Juvenile Probation	200	Vernon Hills	Woodland Foods	150	Waukegan
Lake County Press Inc	300	Waukegan	Woodland Intermediate School	184	Gurnee
Lake County Probate Dept	175	Waukegan	Woodland Middle School	260	Gurnee
Lake County Sheriff	417	Waukegan	World Wide Fitting Corp	150	Vernon Hills
Lake County Sheriff's Dept	100	Libertyville	WW Grainger	400+	Lake Forest
Lake County Transportation Div	115	Libertyville	Yaskawa America Inc	150	Buffalo Grove
Lake Forest Academy	101	Lake Forest	Yaskawa America Inc	190	Waukegan
Lake Forest Bank & Trust Co	100	Lake Forest	YMCA	130	Waukegan
Lake Forest Club	150	Lake Forest	Zeller Plastik Inc	150	Libertyville
Lake Forest College	400+	Lake Forest	Zenith Electronics LLC	160	Lincolnshire
Lake Forest Health & Fitns Ctr	138	Lake Forest	ZF Services LLC	180	Vernon Hills
Lake Forest High School	462	Lake Forest			



# **APPENDIX D**

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## TNC Examples



## Appendix D TNC Examples

Below is a list of examples of partnerships between TNCs and transit agencies.

### **Boston, MA**

The MBTA, Boston's public transit agency, has a partnership with ride-hailing companies Uber and Lyft to provide The RIDE customers with on-demand paratransit service. The On-Demand Service Pilot looks to supplement the MBTA's traditional ADA paratransit service, The RIDE, by extending the pilot to all RIDE eligible passengers. Through this pilot, the MBTA is subsidizing up to \$40 of each trip, leaving customers responsible for a minimum of \$2 and any amount over \$41. This innovative pilot is proving to be both cost and time saving; allowing customers a savings of approximately \$1 and greatly reduced trip times when compared to the same trips using traditional Ride services. The savings also extend to the MBTA as they have calculated pilot users to be roughly 1% less costly, saving the agency about \$2,800 per month.

### **Pierce County, WA**

Pierce County allocated federal funds to begin a pilot utilizing ride-hailing companies, like Uber and Lyft, to help solve the issue of road congestion, manage capacity at high demand park-and-ride lots, and improve the use of public transportation. The pilot allows passengers to enter a promotional code on their ride-hailing application and receive a subsidized trip to and from transit centers. Pierce County officials are hoping the pilot improves public transportation while also generating large savings by allowing the removal of routes with low ridership.

### **Pinellas County, FL**

After a successful pilot in 2016, the Pinellas Suncoast Transit Authority (PSTA), the public transportation provider for Pinellas County in Florida, has continued and expanded their "Direct Connect" program. The program is a partnership with ridesharing companies, such as Uber and locally based United Taxi, which aims to provide first/last mile solutions by connecting residents with PSTA stations. The Direct Connect program is simple to use, allowing passengers traveling to or from the 24 designated stations across the county, to save up to \$5 on their rides (making the average cost per customer about \$1). Also included under the program, travelers needing wheelchair assistance may request a "wheelchair transport" ride and receive a \$25 discount.

### **Sanford, FL**

The City of Sanford, Florida has joined the cities of Altamonte Springs, Lake Mary, Longwood, and Maitland to form the Municipal Mobility Working Group (MMWG). Together, the MMWG has formed a public/private partnership with Uber to address regional mobility concerns. Building on the success of an earlier pilot, the cities will continue to subsidize 20% of the fare for Uber trips that end within their respective city limits, and 25% to trips that begin or end at SunRail Stations within their cities in an effort to encourage public transit use. The partnership between the cities also extends the 20% subsidy to include users traveling between the five cities, allowing residents a much greater range of access that better meets the needs of their dynamic lifestyles. The partnership serves as an innovative national model for cities looking to create cost-effective alternatives to address their mobility issues.

**Figure D-1 TNC Summary**

City and Agency	Partner	Subsidy	Notes
MBTA Boston, Mass.	<ul style="list-style-type: none"> <li>▪ Uber</li> <li>▪ Lyft</li> </ul>	Up to \$40 per trip	Only for ADA paratransit customers
Pierce County Transit Pierce Co., Wash.	<ul style="list-style-type: none"> <li>▪ Uber</li> <li>▪ Lyft</li> <li>▪ Taxi companies</li> </ul>	Estimated at \$11 per trip	Assists with congestion, high demand park-and-ride lots, and improve use of public transit
PSTA Pinellas Co., Fla.	<ul style="list-style-type: none"> <li>▪ Uber</li> <li>▪ United Taxi</li> </ul>	\$5 per trip	For trips to or from 24 different transit stops
MMWG Sanford, Fla.	<ul style="list-style-type: none"> <li>▪ Uber</li> </ul>	\$63,000 annually	For trips to and from transit, and intercity trips

## TNC Cost per Mile in Lake County

With assistance from the Chaddick Institute for Metropolitan Development at DePaul University, the study team was able to develop cost estimates for users of TNCs in the Lake County region. The data below in Figure D-2 is based on 19 trips modeled by the Chaddick Institute for both Uber and Lyft. These trips were modeled in the late morning between 10 a.m. and 12 p.m. for trips between Lake County Metra stations, and other locations in the county. The results are additionally distinguished between individual rides (Lyft, UberX) and shared rides (Lyft Line, Uber Pool). As shown below the average cost per trip has a range of \$12-\$14.50 depending on the company used and type of ride taken. Cost savings of 9-18% were also shown when using an apps carpool function rather than an exclusive ride.

**Figure D-2 TNC Trip Cost Estimates for Lake County**

Summary Table	Lyft Estimates		Uber Estimates	
	Lyft	Lyft Line	UberX	Uber Pool
No. of Trips	19		19	
Mean Distance (miles)	6.7		6.7	
Mean Trip Time (minutes)	14.7	19.8	16.4	25.8*
Cost per Trip	\$13.16	\$12.03	\$14.56	\$12.07
Cost per Mile	\$1.96	\$1.79	\$2.16	\$1.79
Cost per Hour	\$53.59	\$36.46	\$53.39	\$27.97

Source: Chaddick Institute for Metropolitan Development, DePaul University

\*Uber Pool trip times are the mean value of the estimated trip time provided by Uber.

## **APPENDIX E**

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### Mobility Manager Job Description



# Appendix E Mobility Manager Job Description

There are a variety of job descriptions that agencies may use to hire a mobility manager or managers. This appendix incorporates a sample job description from the National Center for Mobility Management, which may be used to craft a job description for Lake County.

## GENERAL MOBILITY MANAGER JOB DESCRIPTION

**SCOPE OF WORK:** The mobility manager in a transportation organization serves the general public through conceptualization, planning, developing and operating programs that respond to and influence the demands of the market. These actions and supportive strategies are performed directly or in collaboration with others in order to provide a full range of travel options that are more effective in meeting needs and more efficient through reasonable pricing. This position is responsible to improve business and community support for the transportation organization. It will require the development and distribution of information that explains how to utilize the available resources in meeting the diverse travel needs of the market it serves. Some skills, abilities and competencies that enhance the performance of this position are: Change agent Problem solver Innovative thinker Leadership Collaborative partnerships Negotiator Conflict resolution Mediator Persuader Empathy Communicator Customer focus Initiator Team builder Visionary Management skills.

**ESSENTIAL JOB FUNCTIONS:** Below is a list of actions that are required in the fulfillment of the duties: • Develops and directs the design, production and distribution of specific marketing materials directed at employers, employees, human service agencies and other entities; • Serves as the liaison/ salesperson to community leaders in an effort to demonstrate how transportation enhances economic development; • Provides direct outreach to area employers and employment agencies to gain support for employer and employee transit programs; • Researches, develops and writes grant applications for future funding; • Plans annual conference on issues relating to transportation; • Develops potential for future expansion of transit options across municipal boundaries; • Plans and coordinates special promotional events and activities related to general public transportation; • Makes public presentations on the benefits of mobility management for the community; • Builds supportive community networks; • Leads in the design of operational functions that are nontraditional in service delivery; • Is familiar with technological advances that increase travel options and/or convenience; • Is knowledgeable about techniques that foster transit ridership through links with land development.



## **APPENDIX F**

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### Ratings for Strategies



# Appendix F Ratings for Strategies

## ROI Ratings

Recommendation	Phases of the Strategy (if applicable)	Community Benefits	Transportation Benefits	Economic Benefits	Addresses Spatial Gaps in Service	Addresses Temporal Gaps in Service	Score
<b>Service Improvement Strategies</b>							
<b>Late-Night Employment Transportation</b>	Phase I: Goodwill Great Lakes Employee Transportation in Lake County to the Naval Station	1	1	1	3	5	2.2
	Phase II: Expanding to Include Mid-Size Employers	5	5	5	3	5	4.6
	Phase III: Expanding to Include the General Public Anywhere in Lake County	5	5	5	3	5	4.6
<b>Enhanced On Demand Service in Round Lake Area and Vernon Hills/Mundelein</b>	N/A	3	1	1	3	1	1.8
<b>Flexible Transit (Deviated Fixed Route) Services</b>	Deviated Routes	3	3	1	3	1	2.2
<b>Countywide Paratransit System</b>	Phase I: Expand into all of Vernon Hills and Vernon Township	3	5	3	5	3	3.8
	Phase II: Expand into all of Waukegan Township, City of Lake Forest and City of North Chicago	3	5	5	3	3	3.8
	Phase III: Expand Ride Lake County Central into Warren Township	3	3	5	3	3	3.4
	Phase IV: Coordinate Ride Lake County Central and West Programs to expand into more of southwestern Lake County	5	5	3	3	1	3.4
	Phase V: Expand paratransit services countywide. Entire county would have access to paratransit services.	5	5	5	5	5	5

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Recommendation	Phases of the Strategy (if applicable)	Community Benefits	Transportation Benefits	Economic Benefits	Addresses Spatial Gaps in Service	Addresses Temporal Gaps in Service	Score
<b>Personal Mobility Strategies</b>							
<b>Vanpool First/Last-Mile Access to Transit</b>	N/A	5	5	5	3	1	<b>3.8</b>
<b>Expanding the TNC/Taxi Pilot Program</b>	Phase I: TNC Pilot Program in Vernon Township	5	1	1	1	3	<b>2.2</b>
	Phase II: TNC or Taxi Subsidy Program Pilot is replicated in other Lake County Communities	3	1	1	1	3	<b>1.8</b>
<b>TNC First/Last Mile Service</b>	N/A	3	3	3	3	1	<b>2.6</b>
<b>TNC Supplemental Paratransit Service</b>	N/A	5	5	1	1	3	<b>3</b>
<b>Mobility Management Strategies</b>							
<b>Centralized Transportation Information</b>	N/A	5	5	3	1	1	<b>3</b>
<b>Mobility Management Staff for the Lake County Region</b>	N/A	5	3	5	1	1	<b>3</b>
<b>Countywide Marketing Program</b>	N/A	3	3	3	1	1	<b>2.2</b>

## Implementation Ratings

Recommendation	Phases of the Strategy (if applicable)	Financial Issues	Leadership Issues	Implementation Issues	Score
<b>Service Improvement Strategies</b>					
<b>Late-Night Employment Transportation</b>	Phase I: Goodwill Great Lakes Employee Transportation in Lake County to the Naval Station	3	5	5	<b>4.3</b>
	Phase II: Expanding to Include Mid-Size Employers	3	3	3	<b>3.0</b>
	Phase III: Expanding to Include the General Public Anywhere in Lake County	3	3	5	<b>3.7</b>
<b>Enhanced On Demand Service in Round Lake Area and Vernon Hills/Mundelein</b>	N/A	3	4	1	<b>2.7</b>
<b>Flexible Transit (Deviated Fixed Route) Services</b>	Deviated Routes	2	4	3	<b>3.0</b>
<b>Countywide Paratransit System</b>	Phase I: Expand into all of Vernon Hills and Vernon Township	4	5	5	<b>4.7</b>
	Phase II: Expand into all of Waukegan Township, City of Lake Forest and City of North Chicago	2	4	3	<b>3.0</b>
	Phase III: Expand Ride Lake County Central into Warren Township	3	4	3	<b>3.3</b>
	Phase IV: Coordinate Ride Lake County Central and West Programs to expand into more of southwestern Lake County	2	4	3	<b>3.0</b>
	Phase V: Expand paratransit services countywide. Entire county would have access to paratransit services.	1	4	1	<b>2.0</b>
<b>Personal Mobility Strategies</b>					
<b>Vanpool First/Last Mile Access to Transit</b>	N/A	5	4	5	<b>4.7</b>
<b>Expanding the TNC/Taxi Pilot Program</b>	Phase I: TNC Pilot Program in Vernon Township	2	5	5	<b>4.0</b>
	Phase II: TNC or Taxi Subsidy Program Pilot is replicated in other Lake County Communities	2	3	5	<b>3.3</b>

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<b>Recommendation</b>	<b>Phases of the Strategy (if applicable)</b>	<b>Financial Issues</b>	<b>Leadership Issues</b>	<b>Implementation Issues</b>	<b>Score</b>
<b>TNC First/Last Mile Service</b>	N/A	<b>1</b>	<b>3</b>	<b>5</b>	<b>3.0</b>
<b>TNC Alternative for ADA Paratransit Customers</b>	N/A	<b>2</b>	<b>3</b>	<b>5</b>	<b>3.3</b>
<b>Mobility Management Strategies</b>					
<b>Centralized Transportation Information</b>	N/A	<b>4</b>	<b>4</b>	<b>3</b>	<b>3.7</b>
<b>Mobility Management Staff for the Lake County Region</b>	N/A	<b>4</b>	<b>4</b>	<b>5</b>	<b>4.3</b>
<b>Countywide Marketing Program</b>	N/A	<b>3</b>	<b>4</b>	<b>5</b>	<b>4.0</b>