



McHENRY COUNTY

TRANSIT PLAN UPDATE

EXISTING AND FUTURE CONDITIONS

McHenry County Transit Plan Update

Existing and Future Conditions Report
November 2018

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McHENRY COUNTY

TRANSIT PLAN UPDATE

EXISTING AND FUTURE CONDITIONS REPORT

1. Introduction

In January of 2018, the McHenry County Division of Transportation initiated the McHenry County Transit Plan Update. The objective of the Transit Plan Update is to report on the change in conditions since the transit component of the McHenry County 2040 Transportation Plan was completed in June 2013, to verify whether transit service recommendations in that Plan still meet current conditions, and to recommend new transit services and technologies.

There are three transit modes operating in the county:

- **Fixed Route Bus Service:** Five bus routes are operated by Pace Suburban Bus.
- **Commuter Rail:** Metra operates one train line in the county, with two branches.
- **Demand Response:** The MCRide dial-a-ride program has general public service in some areas of the county. There is also some demand response that is only available to seniors and individuals with disabilities. McHenry County, townships and municipalities in the county help to fund the MCRide program.
- Additionally, as required by the Americans with Disabilities Act (ADA), ADA paratransit service is provided within $\frac{3}{4}$ mile of fix route bus service in the county.

The *Existing and Future Conditions Report* provides current and projected demographic, employment, and transit information that will be used to plan future transit changes in the county.

2. McHenry County 2040 Transportation Plan

The following lists the transit service recommendations proposed in the transit component of the McHenry County 2040 Transportation Plan and their current status. In general, most fixed route restructurings were implemented but most service expansion proposals were not.

RECOMMENDATIONS PROPOSED	CURRENT STATUS
Eliminate Illinois Route 120—Chapel Hill Road routing from Pace Route 806	IMPLEMENTED
Replace Pace Route 807 Wonder Lake routing with demand response service	PARTIAL IMPLEMENTATION (routing discontinued; however, demand response service did not replace the eliminated portion of the fixed route)
Discontinue routing for Route 808 north of Metra UP-NW between Woodstock and Harvard and replace with demand response service	PARTIAL IMPLEMENTATION (routing discontinued; demand response service did not replace the eliminated portion of the fixed route)
New route from Crystal Lake to West Dundee (Spring Hill Mall) via Illinois Route 31	NOT IMPLEMENTED
New route from Crystal Lake to Elgin via Randall Road (Extension of Route 550)	IMPLEMENTED
New route from Richmond to Fox Lake Metra Station	IMPLEMENTED
New Richmond—Hebron—Spring Grove Dial-A-Ride service for the general public	PARTIAL IMPLEMENTATION (in Richmond only)
Expansion of MCRide Service Area and Integration with Midday Intercommunity Fixed Route service	PARTIAL IMPLEMENTATION (the MCRide service area has been expanded with the addition of new partners; the midday intercommunity fixed route service has been mostly eliminated in the county, however)

In addition to the transit recommendations, the McHenry County 2040 Transportation Plan recommended the following goals that are related to public transportation:

- **Goals 3: Promote Mobility for All Residents** – The Plan addresses the diverse transportation needs for all of McHenry County’s residents, including seniors, children, persons with disabilities and people without access to automobiles.
- **Goal 4: Provide Transportation Choices** – The Plan seeks to create a balance transportation system that will provide transportation choices.
- **Goal 6: Link Transportation & Land Use** – The Plan prioritizes economic development by supporting existing development and industry. The Plan seeks to leverage transportation infrastructure to promote job creation and link residents to jobs.

The Plan points out that transit use is inherently linked with active modes of transportation, such as walking and biking. These short trips taken by “active” modes of transportation are important in helping to improve community health.

The Plan also states that with the growing elderly population, many of the senior residents are underserved by public transportation. McHenry County needs to make certain improvements to accommodate the transportation needs of senior citizens, including a need for continued coordination with other entities and through public education.

As a result of the Plan findings, in July of 2013, the County Board adopted a new Strategic Plan asking MCDOT to continue funding MCRide and to create a Volunteer Driver and Transit Enhancement Program to fund cost effective transit solutions.

3. Other Plans

The following plans are either still applicable to the Transit Plan Update, or have been completed since 2010 (the year the previous update was commissioned).

A. Chicago Metropolitan Agency for Planning (CMAP) GO TO 2040

GO TO 2040, completed in 2010, is the long-range comprehensive plan for the Chicago region that includes McHenry, Cook, DuPage, Kane, Kendall, Lake, and Will counties. GO TO 2040 emphasizes an increased commitment to public transit. With its regional scope, the Plan focuses on large transportation investments that should be prioritized and implemented wisely; expensive new capacity projects should only be built if they yield benefits that outweigh their costs. Maintaining and modernizing existing infrastructure should take priority.

The Plan provides a fiscally-constrained list of recommended capital projects that includes 18 projects for the northeastern Illinois region. The following projects are in McHenry County but have not yet been implemented:

- **Metra Union Pacific North West (UP-NW) Line Improvements/Extension**

Metra UP-NW improvements include infrastructure upgrades and a 1.6 mile extension to Johnsburg from the McHenry station. Infrastructure upgrades include improvements to the existing signal system and additional crossovers and other track improvements to increase the operating capacity and reliability. The extension to Johnsburg would allow improved operations on the entire line. New yards are planned for the Woodstock and Johnsburg areas. Two additional infill stations would be added to the line: Prairie Grove on the McHenry branch and Ridgfield on the Woodstock branch.

There are several transit projects in the Plan not included in the fiscally-constrained priority list. Some of these unconstrained projects lack sufficient study thus far. Others were considered too costly for the benefits provided unless innovative financing were secured to significantly change the funding outlook. The projects in McHenry County include:

- **Metra Milwaukee District West (MD-W) Line Improvements**

The Metra MD-W Line Extension project would extend the line from its current terminus in Elgin to Marengo in McHenry County. An extension along a different route to Hampshire is also under consideration. A feasibility study of the Marengo extension was completed (see Part D for further information).

GO TO 2040 emphasizes that transit-oriented land use planning is critical to successful transit. The need for walkable communities applies to bus-supportive land use in addition to rail. The Plan points to the need for affordable housing near job centers so that transit is a viable option for commuters. Growth needs to emphasize access to transit and other transportation alternatives. The Plan supports small-scale transit improvements and providing regional planning support for local transit supportive land use.

CMAP recommends requiring supportive land use planning before new transit investments are made. It states that RTA, Pace, CTA, and Metra should prioritize investments, particularly for new service, to those areas that have or are planning for land use that supports transit. It states that investments of all types should consider multimodal needs including those of transit users, bicyclists, and pedestrians.

CMAP is the process of updating this study (ON TO 2050); it is slated to be released in October 2018.

B. Pace Vision 2020

The Vision 2020 Plan, completed in 2001 and still the document guiding Pace's service planning, outlines a blueprint for Pace's service improvements to the year 2020. It calls for a network of new services, infrastructure improvements, and a decrease in travel times. In McHenry County, the Plan proposes community transportation centers, arterial route corridors, and community-based service areas.

- **Community Transportation Centers:** Transportation centers provide comfortable, convenient locations for customers to make connections between various transit services. Transportation centers are typically located at and integrated with rail stations, community downtowns, shopping centers, and other major activity centers, and offer community transit-oriented development opportunities. These can include off-street bus bays, sheltered and heated boarding areas, and electronic passenger information systems, facilities for bus drivers and bus layovers, and access enhancements such as sidewalks or park-and-ride lots. The Plan identifies over 150 transportation centers throughout northeastern Illinois. Those proposed in McHenry County include:
 - ▶ Algonquin, near IL-31/IL-62
 - ▶ Existing McHenry Metra UP-NW station
 - ▶ Richmond, at planned Metra UP-NW station
 - ▶ Existing Crystal Lake Metra UP-NW station
 - ▶ Existing Woodstock Metra UP-NW station
 - ▶ Huntley, at planned Metra MD-W station
 - ▶ Existing Cary Metra UP-NW station
 - ▶ Existing Harvard Metra UP-NW station
 - ▶ Existing Fox River Grove Metra UP-NW station

Most of these centers, not just the ones in McHenry County, have not been built.

- **Arterial Route Corridors** – These fixed routes provide a backbone of inter-suburban transit service connecting transportation centers. Arterial route corridors proposed in the Plan for areas of McHenry County include:

RECOMMENDATIONS PROPOSED	CURRENT STATUS
IL-31 from Aurora Transportation Center to McHenry Transportation Center, serving Algonquin	NOT IMPLEMENTED
Belvidere Road from Waukegan Transportation Center to Woodstock Transportation Center, serving Prairie Crossing, Round Lake, and McHenry	NOT IMPLEMENTED
Johnsburg Road from Fox Lake Transportation Center to McHenry Transportation Center	PARTIAL IMPLEMENTATION (routing between the Fox Lake Metra and McHenry Metra Stations was on Chapel Hill Road and not Illinois Route 31)*

* The transportation centers were to be built at the two Metra stations.

- **Community-Based Service Areas** - Community-based services include many service types from demand-response in some markets to fixed routes in others, with a customized mix of service types in each community. Fixed-routes, employer shuttles, historic trolleys, community circulators, flexible routes, van services, and subscription routes aim to provide short-distance mobility within communities for the general public. The Plan identifies more than 90 such service areas for further study in partnership with communities. Proposed community-based service areas in McHenry County, some of which overlap with adjacent counties, include:

RECOMMENDATIONS PROPOSED	CURRENT STATUS
Algonquin/Carpentersville/East Dundee/West Dundee/Sleepy Hollow/Spring Mill Mall/Elgin	PARTIAL IMPLEMENTATION (The current Midday Intercommunity DAR service does not serve Elgin or Carpentersville)
Crystal Lake/Algonquin/McHenry/Woodstock	PARTIAL IMPLEMENTATION (Algonquin not served)
Huntley/Algonquin/Crystal Lake	PARTIAL IMPLEMENTATION (Algonquin not served)
McHenry/Crystal Lake/Fox Lake	IMPLEMENTED
Woodstock/Crystal Lake/McHenry	IMPLEMENTED
Richmond	IMPLEMENTED (as MCRide)
Cary/Fox River Grove	IMPLEMENTED (as Southeast McHenry DAR)
Harvard	IMPLEMENTED (as MCRide)
Wauconda/Island Lake	NOT IMPLEMENTED

Since 2020 is only two years from now, this Plan will soon be out of date; Pace is about to initiate a 2040 update.

C. Metra Marengo Extension Commuter Rail Feasibility Study

Metra completed this study in 2010 to evaluate the feasibility of extending commuter rail service on the Milwaukee District West (MD-W) Line from the City of Elgin (Big Timber Road station) to the vicinity of the City of Marengo. The study focused on the 26-mile portion of the UP-owned railroad between Elgin and the McHenry-Boone County line, traveling through the communities of Elgin, Gilberts, Huntley, Union, and Marengo.

The study determined that there would be significant capital costs involved with providing new commuter rail service to Marengo. Construction of two segments of a new second main line would be required to handle the additional train traffic on the potential UP-owned portion of an extended MD-W Line. Installation of new signalization would also be a significant cost of the project. There would be wetland and environmental issues within the corridor that would need to be studied further. In addition, the study states that ridership will need to be studied further to evaluate capacity.

Additional discussions would have to take place with the Union Pacific Railroad as the owners of this portion of railroad. The freight railroad would have to approve any capital improvements and any commuter rail service on its right-of-way. Since this document was a feasibility study, it provided initial consideration of a commuter rail extension, but much additional analysis and stakeholder involvement is needed.

Independent of this study, both the communities of Marengo and Huntley received Regional Transit Assistance Program (RTAP) grants from the RTA to prepare transit oriented development (TOD) plans around proposed Metra stations. Both communities prepared and adopted preferred plans for their community. This Plan has not advanced since the feasibility study was completed.

D. McHenry County 2030 Comprehensive Land Use Plan

The McHenry County Board adopted a 2030 Land Use Plan in 2010. It referred to the county's 2005 Transit Plan, Pace's Vision 2020 Plan, Metra's UP-NW upgrades, and future Metra service to Huntley, Marengo, and Richmond. The Plan also included recommendations for transit signal prioritization (TSP) and queue jump lanes to help implement bus rapid transit in the county. The Plan also called for the deployment of clean technology with no street level emissions, smoother rides, and matching transit equipment appropriately in high pedestrian areas. It addressed existing and forecasted roadway congestion issues, and set the groundwork for future improvements.

E. McHenry County 2030 and Beyond

This Plan, adopted in 2016, was intended as an addendum and update to the previous plan, due to the changing conditions brought on by the 2007–2008 housing crisis. The population projections used in the 2030 Plan were determined to be overly ambitious. The population growth in the county has slowed due to the aging of the population and less residents between 25 and 44 (as immigration to the county has slowed and immigrants are generally younger). The document is organized around four big ideas. The ideas most relevant to transit are discussed as follows:

- **Idea #1 (“Let’s make our communities healthy, active, and green”).** The idea promotes development that is compact, contiguous to, or located within municipalities in order to preserve rural landscapes while providing greater mobility choice for all residents. New development in the county is recommended to take advantage of greater mobility options found in and adjacent to municipalities that provide opportunities to walk, bike, or take mass transit. Any neighborhood street, whether in town or in a rural area, should be designed for safe access for transit riders of all ages and abilities. Complete street policies should be adopted and implemented at every level—municipal, county, and state.
- **Idea #3 (“Let’s grow smarter”).** This idea recommends focusing development that is compact, contiguous to, or located within municipalities, and away from areas designated for agriculture and lacking infrastructure and services. Most growth should occur in or directly adjacent to municipalities. Because of compact and contiguous development, residents and businesses in municipalities have more immediate access to water and sewer services, police and fire protection, and utilities such as natural gas and high-speed internet. New development proposed in unincorporated McHenry County should be compact and contiguous to municipalities, or otherwise, directed to municipalities to take advantage of those services too.
- Furthermore, development away from areas where these services are readily available tends to be less efficient, more costly, and strains safety resources. For this reason, areas designated for development on the Future Land Use Map cannot be assumed to be appropriate for land-use change, especially if not contiguous with municipalities. Although transit is promoted as part of this idea, the focus is on Metra, as it is assumed to be the most conducive to promoting compact development (especially transit oriented development). Specific recommendations include new commuter rail expansion to Rockford through Huntley and Marengo, as well as extended Metra service to north of Hebron through Richmond, Spring Grove, and Fox Lake (as mentioned in the previous parts of this section). These recommendations are also a part of **Idea #4 (“Let’s expand our economy”)**, which focuses on attracting more millennials to the county through expanded transit options that would link them with Chicago.

F. RTA Regional Strategic Plan 2018-2023

Released in 2018, this plan is organized around the following three goals: Deliver value on the RTA’s investment; build on the strengths of the RTA network; and stay competitive. The plan also identifies priority projects in the region. Most of the Metra and Pace projects are not specific to the County (the Metra improvements include bridge and track replacements, for instance, some of which would likely be in the county but are not identified as such). However, there is a specific recommendation to upgrading Pace’s McHenry County garage to attain a state of good repair.

G. Prairie Grove Town Center and Transit-Oriented Development (TOD) Plan

Completed in 2010, this Plan was commissioned in anticipation of a new station in Prairie Grove as part of the Metra Union Pacific North West (UP-NW) Line Improvements/Extension discussed in Part A. The village completed a nine-month study to plan and design a mixed-use town center and TOD around a future Metra station on the village’s far northwest side. For fixed route service, it proposes diverting Route 806 off Illinois Route 31 along Gracy Road to the proposed Metra station. This project is dependent on the UP-NW Line improvements, which are not moving forward at this time.

H. Municipal Comprehensive Plans

Comprehensive Plans for the cities and villages were reviewed to identify any public transportation goals or objectives. The following municipal comprehensive plans had identified supportive public transportation goals.

Village of Algonquin Comprehensive Plan (2008)

- Transportation Goal: a transportation system serving the land uses within Algonquin which allows reliable, safe, efficient, and economical movement of people and goods, both within the community and the surrounding region, and which anticipates the demands of growth.
 - ▶ Maximum use of available regional transit systems through effective and appropriate linkages.

Village of Cary Comprehensive Plan (2015)

- Transportation & Mobility Goal: Partner with IDOT and the McHenry County Division of Transportation to provide an efficient multi-modal transportation network:
 - ▶ Work with Metra, the Union Pacific railroad, IDOT and local property owners to relocate the Metra Station to the east side of the railroad tracks (this will begin construction soon).
 - ▶ Work with the Regional Transportation Authority (RTA), Pace Suburban Bus and McHenry County to examine the potential for fixed route bus service to Cary and neighboring communities.
- Partner with McHenry County to evaluate the potential for the expansion of the MCRide program to Cary.

City of Crystal Lake 2040 Comprehensive Plan | Plan Amendment (May 2011)

- Transportation Goal: Provide a comprehensive transportation system to safely and efficiently serve current and future land uses, considering travel by road, rail, public transportation, bicycle and foot:
 - ▶ Promote the City's two Metra stations including the development of increase residential density and commercial opportunities adjacent to them.
 - ▶ Create and implement an integrated city-wide multi-modal transportation system.
 - ▶ Continue to work with Pace to offer bus service to City residents. Encourage site designs that help increase ridership and facilitate bus movement.

Village of Huntley Comprehensive Plan (2012)

- Transportation Goal: Facilitate the movement of vehicular traffic, persons and goods within the Village in a safe and environmentally acceptable manner. Serve a broad range of social environmental, aesthetic, and transportation objectives in order to create comfortable environments for people and not just automobiles.
 - ▶ Encourage Metra to construct a commuter rail line extension and at least one passenger station in the Village to provide public transportation options for Village residents and reduce automobile traffic and associated negative environmental consequences.
 - ▶ Encourage businesses to partake in employee ride-sharing in order to reduce the number of vehicles on the road and to reduce atmospheric pollution.

Village of Lake in the Hills Comprehensive Plan (2002)

- Transportation Goal: To enhance the movement of people and goods through the Village of Lake in the Hills and to adjacent communities through new street connections, roadway and intersection improvements, landscape design, and expansion of the public transportation system.
 - ▶ Work with Metra to encourage carpooling to nearby stations to reduce reliance on the automobile as one way to address growing concerns over traffic within and adjacent to Lake in the Hills.
 - ▶ Work with Pace to provide service along main thoroughfares such as Algonquin and Randall Roads and encourage resident use to maintain on-going service, which is particularly important for seniors, families with one car, and students traveling to and from work.

City of McHenry Comprehensive Plan and Development Policies (2008)

- Transportation Goals and Objectives include:
 - ▶ Promote additional public transportation throughout the City and the region.
 - ▶ Work with Metra on their expansion goals to the Northwest Commuter Line.
 - ▶ Increase the number of routes and scheduling of Pace buses throughout the City and the surrounding areas.
- Metra rail service is the most critical element in establishing the City of McHenry as a viable living option for people working in Chicago.
- In addition to increased frequency of Metra rail service, it would also be desirable to increase bus service to the area; should additional rail service be added, complementary feeder bus service should be added to serve those additional trains.

Village of Prairie Grove Comprehensive Plan (2006)

- Transportation Goal: Provide a coordinated system of roadways, pedestrian facilities, recreational pathways, and public transportation services that provides for the safe and efficient movement of vehicles, bicycles, and pedestrians, reinforces surrounding land development patterns, and compliments the rural character of the Village.
 - ▶ Work with Metra to develop a future station, related facilities and parking along the Chicago and Northwester Railroad west of Illinois Route 31, north of Cobblestone, in the proposed Town Center area.
 - ▶ If establishing this line is not a short-term objective of Metra, the Village of Prairie Grove should work with the RTA, including Metra and Pace Bus Service to establish Park-and-Ride on this site. A parking lot could be constructed and commuters could park and be bussed via Pace Bus service to the Crystal Lake Metra Station.

City of Woodstock Comprehensive Plan (2008)

- An effective circulation network is vital to the City's economy, the functioning of City neighborhoods and the delivery of public and private services.
- Inconvenient public transit schedules require persons to make sacrifices in order to use the service. Poor service results in travelers choosing more effective means of travel, such as the automobile.
- Woodstock's land use pattern, for the most part, is characterized by low density rural and suburban-like development. This is reinforced by recent growth trends in the City and neighboring communities. Low density makes public transportation less viable and automobile usage more attractive.
- Transportation Goal: Maximize the efficiency, pleasure, methods, and safety of travel in and through the City, while minimizing the negative environmental impacts of travel:
 - ▶ Support and facilitate convenient scheduling of public transportation opportunities.
 - ▶ Provide adequate parking and incentives for commuters to use public transportation in the City.
 - ▶ Maximize use of available regional public transportation opportunities through effective land use, design, and linkages.
- Implementation Strategies:
 - ▶ Explore ways to determine how rail service to Woodstock could be revised to increase ridership, in general, and use of the Woodstock commuter station in particular.
 - ▶ Encourage transportation services and programs, such as paratransit, between residential sites and major commercial/service areas.
 - ▶ Involve Pace and Metra in land use decisions to develop opportunities for public transportation features in new development.

- ▶ Apply Pace transit development design guidelines to new development and roadway improvements in order to facilitate bus service.
- ▶ Work with sponsoring organizations to establish tourist bus routes, bus parking areas, and remote visitor parking and bus shuttle systems.
- ▶ Monitor parking at the commuter rail station to respond to changes in parking demand

Village of Wonder Lake Comprehensive Plan (2010 Revision)

- Consideration of alternatives, within the transportation network, to the automobile as the principal mode of transportation.
- Transportation Goal: Strive to create and maintain a transportation system which has the capability to support safe, efficient and reliable movement of goods and people in the Village of
- Wonder Lake, the Greater Wonder Lake Area and which also complements the transportation system of McHenry County as a whole.
 - ▶ Be aware of the interrelationship between land use and transportation activities and coordinate both so that various land development activities are compatible with the transportation system.
 - ▶ Promote the development of a diversified, integrated, economically feasible, efficient and attainable multi-modal transportation network which is sensitive to the needs of the area and McHenry County as a whole.

4. Demographics

A demographic analysis consisted of identify existing and future population and employment characteristics, including a density analysis. In addition to total population, it is important to study certain demographic groups. These demographic groups were selected for analysis as “best practices” indicate they are more likely to use transit than the population as a whole.

- Persons age 65 and older
- Minority Population
- Persons with a Disability
- Low Income Population
- Persons with No Vehicle Available

TABLE 1: McHenry County High Density Neighborhoods

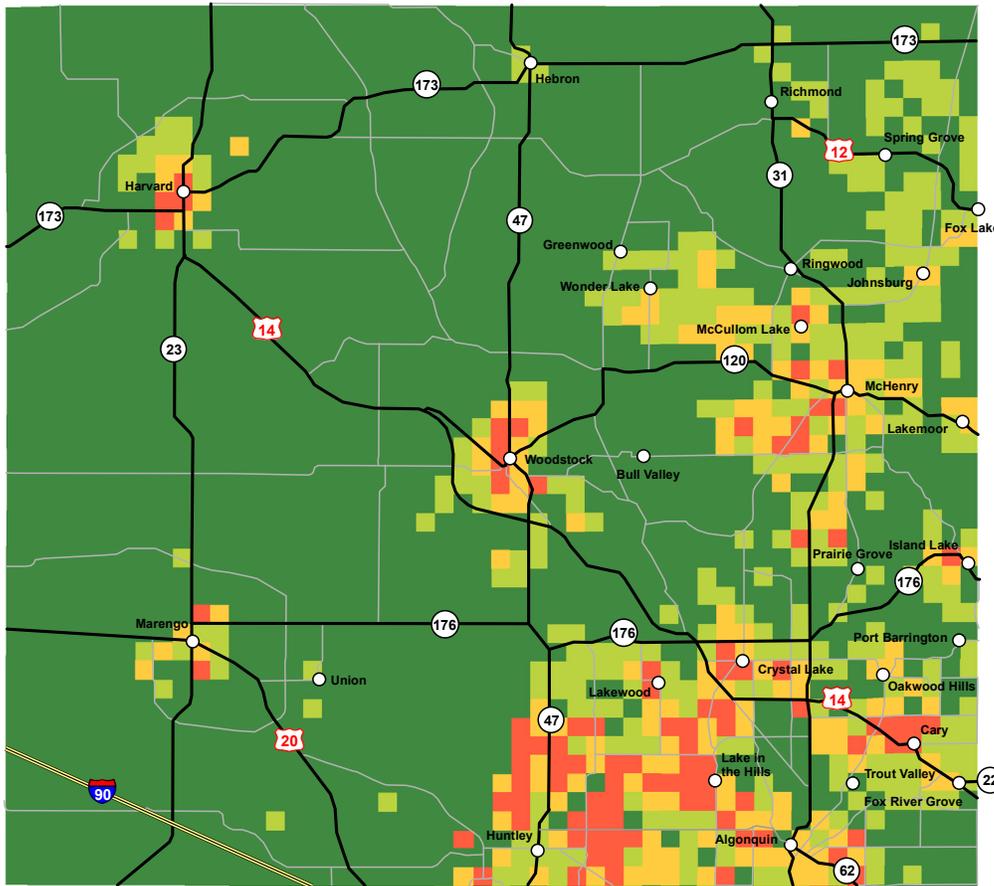
Tract	Block Group	Population per Acre	Community	Description
870301	3	10.7	Harvard	Neighborhood just northeast of the Metra Station.
870402	2	9.6	Woodstock	Neighborhood just south of Northwoods Middle School
870603	2	8.6	McCullom Lake	Neighborhood south of the community's namesake lake
870903	3	8.8	Woodstock	Two neighborhoods surrounding the Metra Station
870904	1	8.8	Woodstock	Two neighborhoods surrounding the Metra Station
871104	2	10.2	Huntley	Neighborhood south of Sunset Park
871105	3	11.7	Lakewood	Neighborhood at the west end of Crystal Lake
871109	1	9.0	Huntley	Neighborhood south of Sunset Park
871202	2	11.4	Crystal Lake	Neighborhood straddling Berkshire Drive
871202	3	11.2	Crystal Lake	Neighborhood straddling Berkshire Drive
871202	4	8.6	Crystal Lake	Neighborhood straddling Berkshire Drive
871207	3	15.1	Lake in the Hills	Three neighborhoods near Essex Village
871208	2	9.7	Lake in the Hills	Three neighborhoods near Essex Village
871208	1	8.6	Lake in the Hills	Three neighborhoods near Essex Village
871306	2	8.2	Cary	Neighborhood north of Hoffman Park
871307	3	9.7	Cary	The Cary Junior High School neighborhood

High density neighborhoods are shown in red on Figure 1. One thing that is noticeable about these neighborhoods is that they generally consist of small single family houses built before 1960 on small lots; there are few neighborhoods in McHenry County that have large numbers of multifamily housing, and few large apartment complexes exist in the county.

B. Future Population Projections in McHenry County

Chicago Metropolitan Agency for Planning (CMAP) has projected population throughout the six county Chicago region for 2040. Population projections are by Traffic Analysis Zones (TAZ)². At the time the Plan was written, McHenry County’s population was projected to increase overall by 71 percent in the next 20 year³. However, the recent update to the county’s Comprehensive Plan calls this into question⁴. Recent census data, in fact, shows the population has dropped since 2010. At any rate, whatever population growth there is projected to be in the more urbanized areas on the eastern half of the county, with the rural areas continuing their long-term population decline. In general, areas with the highest population densities will continue to get denser and new dense pockets of development will occur along Illinois Route 120 (near Wonder Lake) and Illinois Route 47 north of Huntley (see Figures 2 and 3).

FIGURE 2: Future Population Density



Source: CMAP Population and Employment Projections: 2040

Population Density

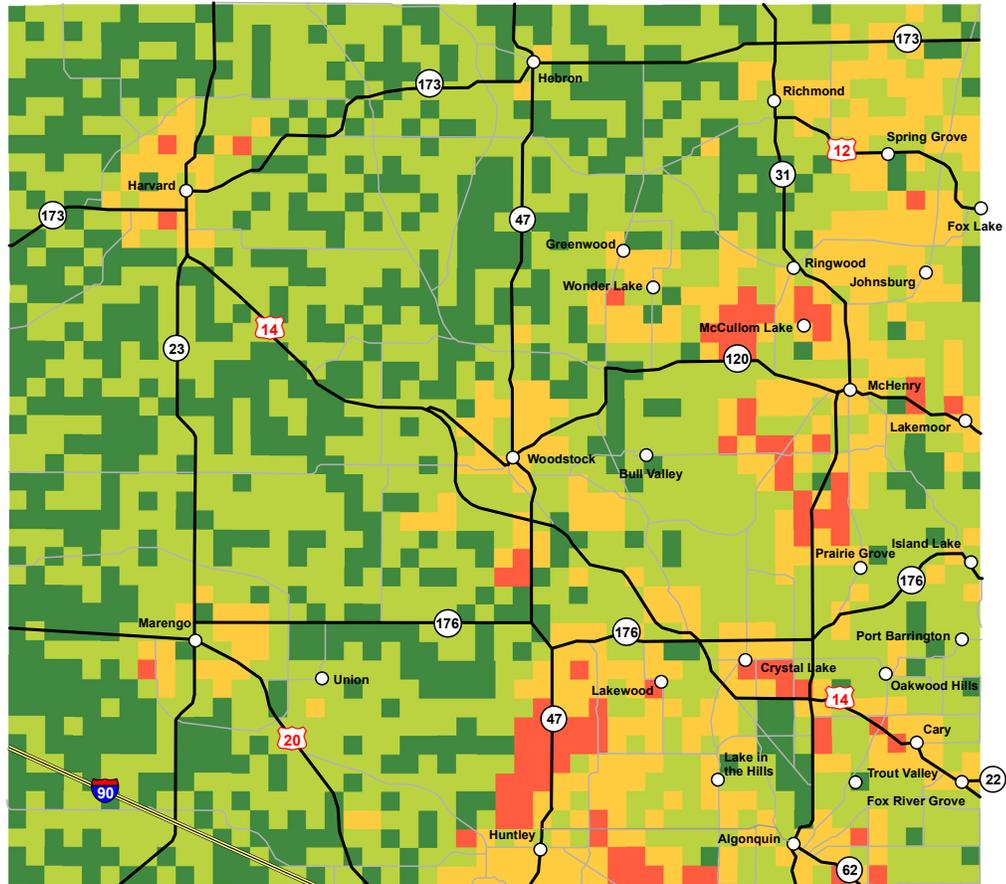
- Below 1.8 persons per acre
- 1.8 to 4.5 persons per acre
- 5.5 to 7.5 persons per acre
- Above 7.5 persons per acre

² A TAZ is the unit of geography most commonly used in conventional transportation planning models.

³ CMAP Population and Employment Projections: 2040

⁴ <https://www.co.mchenry.il.us/home/showdocument?id=68315>

FIGURE 3: Future Population Gain/Loss in the County



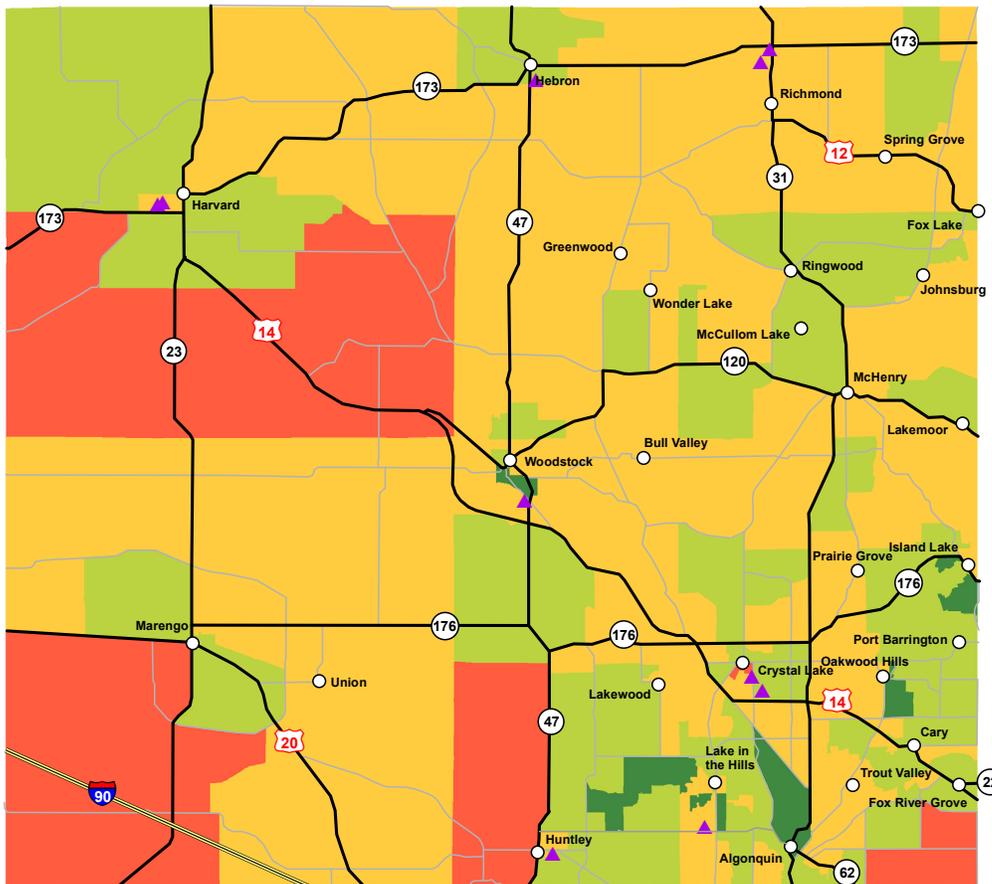
Source: CMAP Population and Employment Projections: 2040

Population Change by 2040

- Population Loss
- Less than 100 additional persons
- 100 to 500 additional persons
- Above 500 additional persons

The percentage of residents over 65 in the county is about 12 percent of the population⁵. Most of those over 65 live in the more rural parts of the county, with the highest percentage living in the block group surrounding the retirement community of Sun City Huntley (see Figure 4). Most block groups support between 12 and 25 percent of this population. Two senior independent living facilities in the county are designated for low-income seniors and are owned by McHenry County Housing Authority—the GreenTrees and SilverTrees Apartments in Huntley and Richmond, respectively. Eight other subsidized senior independent living facilities (some of which are also open to the non-senior disabled populations) are present in the county, generally within walking distance of a community’s central business district.

FIGURE 4: Percent of Residents Over 65



Source: 2012-2016 American Community Survey 5-year estimates

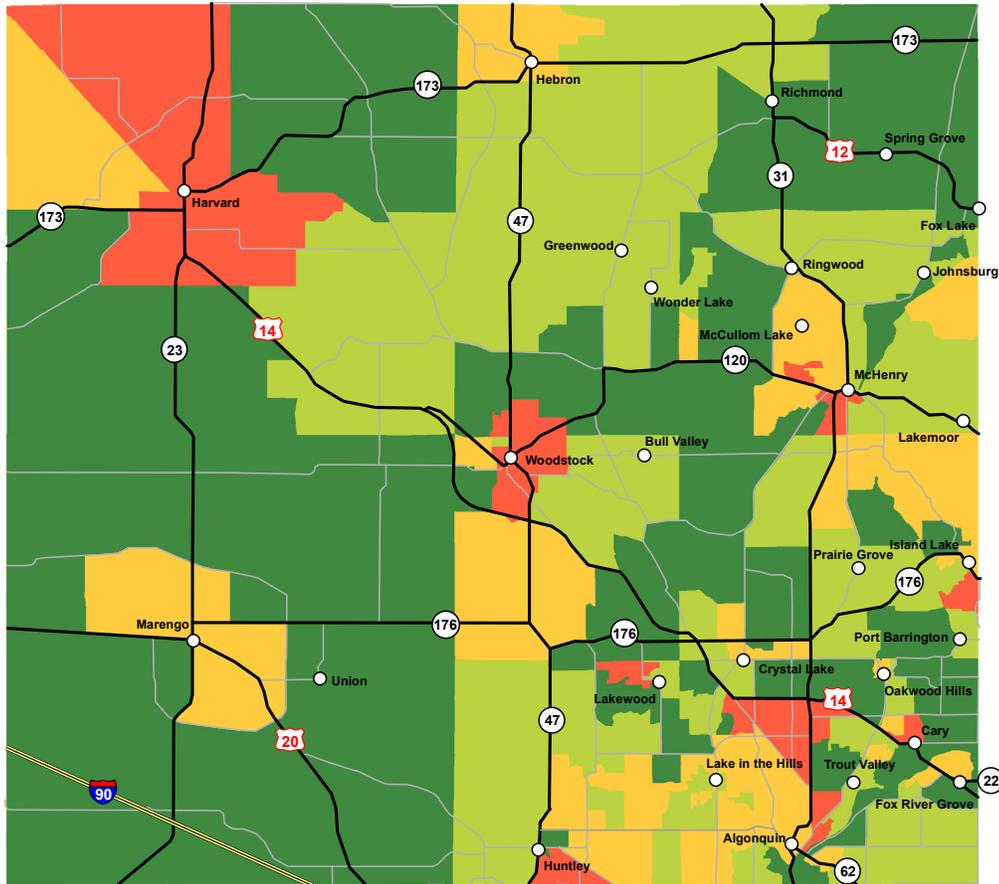
Percent of Residents Over 65

- Below 5%
- 5 to 12%
- 12 to 25%
- Above 25%
- Subsidized Senior Independent Living Facility

⁵ 2016 American Community Survey 5-year estimates

The percentage of minorities in the county is about 18 percent of the population⁶. The predominant minority group is Hispanic (12.3 percent), followed by Asian (2.6 percent) and African-American (1.3 percent). The minority population in McHenry County generally lives along the Union Pacific Northwest Metra corridor, especially near the town centers of Harvard, Woodstock, Cary and Crystal Lake (see Figure 5).

FIGURE 5: Percent of Residents That Are Minority



Source: 2012-2016 American Community Survey 5-year estimates

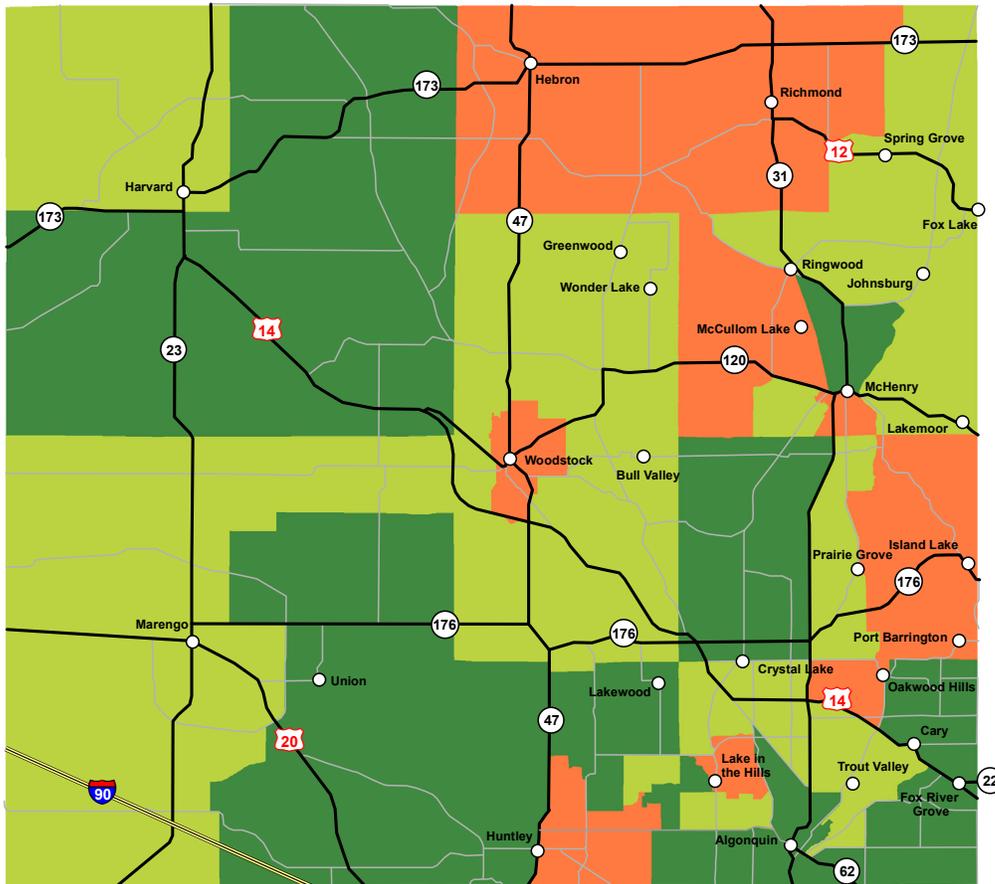
Percentage of Residents Who Are Minority

- Below 10%
- 10 to 20%
- 20 to 35%
- Above 35%

6 2016 American Community Survey 5-year estimates

The percentage of people with a disability between the ages of 18 and 64 in the county is about four percent of the population⁷. The highest percentage of people with a disability in the county are living just south of downtown McHenry (8.6 percent) (see Figure 6); the highest concentration of persons with a disability (about 0.7 per acre) resides in the neighborhood just south of Northwood Middle School in Woodstock.

FIGURE 6: Percentage of Population 18 to 64 with a Disability



Source: 2012-2016 American Community Survey 5-year estimates (those with a vision, cognitive, ambulatory, independent living, or self-care difficulty)

Percent with a Disability (18-64)

- Below 3%
- 3 to 5%
- Above 5%

⁷ 2016 American Community Survey 5-year estimates (those with a vision, cognitive, ambulatory, independent living, or self-care difficulty)

C. Household Income

McHenry County shows the second lowest level of income inequality in the RTA service area, with a Gini coefficient⁸ of 0.3934 (a coefficient value of one is the maximum level of inequality)⁹. The ten highest Gini coefficients among Illinois cities are above 0.5 (Evanston tops the list at 0.6), showing that the county has a comparatively reasonable level of income inequality. Among the counties that make up the RTA service area, McHenry County has a 7.8 percent poverty rate¹⁰, slightly above DuPage County (which has the lowest poverty rate in the six-county RTA service area), and at the level of adjacent Lake County. Although the overall poverty rate is fairly low, there are some pockets of poverty within the county.

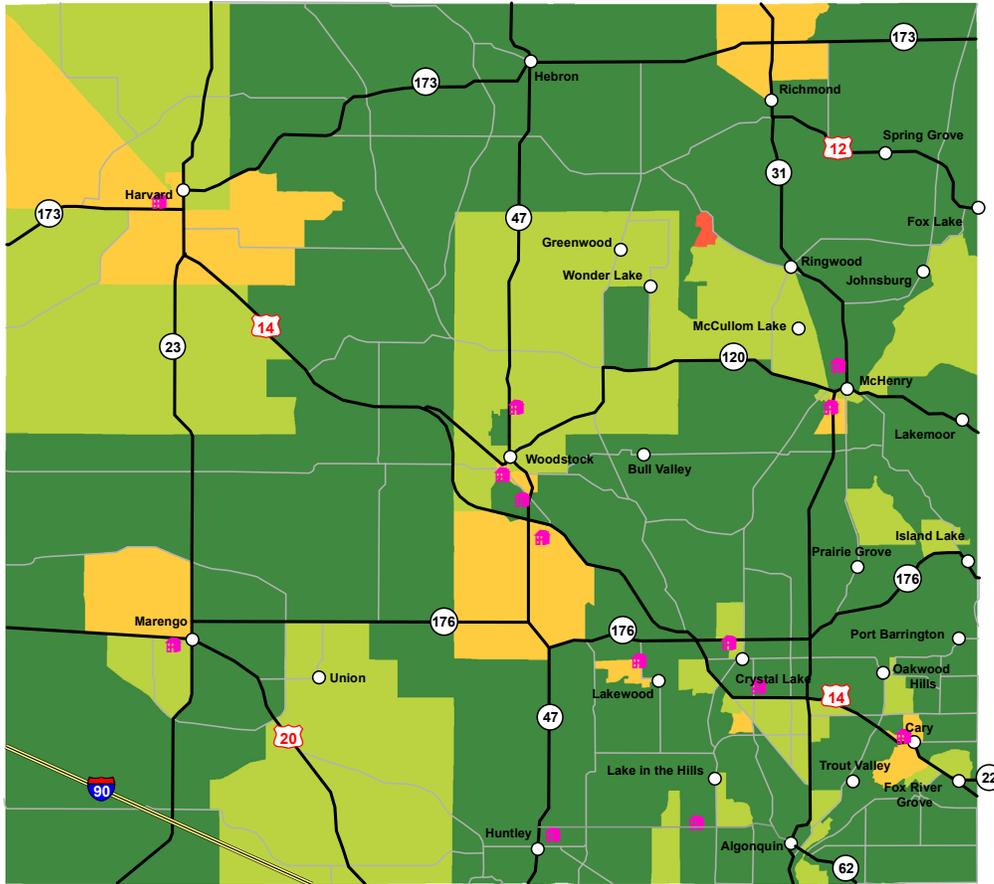
Most of the highest poverty block groups are in the more rural areas of the county, but one block group stands out as a particularly high poverty area. The neighborhood at the northern end of Wonder Lake has a 70 percent poverty rate, the highest in the county (see Figure 7). The highest concentrations of poverty are in Cary, Harvard, Woodstock, and Crystal Lake.

8 The Gini coefficient is a measure of statistical dispersion intended to represent the income or wealth distribution of a nation's residents, and is the most commonly used measurement of inequality.

9 2011-2016 American Community Survey 5-year estimates (Table B19083)

10 2011-2016 American Community Survey 5-year estimates (Table B17021)

FIGURE 7: Population Living in Poverty¹¹



Source: 2012-2016 American Community Survey 5-year estimates (Table B17021)

Percent Living in Poverty

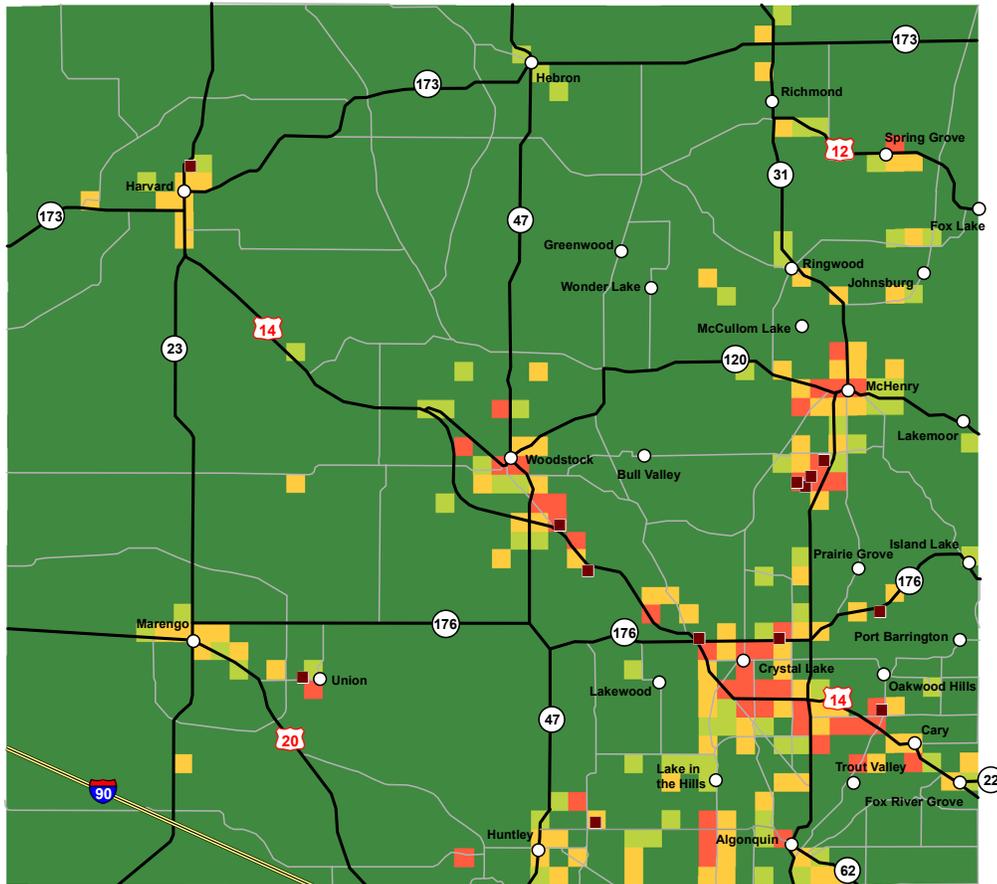
- Below 10%
- 10 to 20%
- 20 to 45%
- Above 45%
- Low Income (Subsidized) Apartment Complexes

¹¹ Low income housing shown on the map does not include subsidized senior housing (shown on Figure 4)

D. Existing Employment

With about 93,000 jobs countywide, and about 192,839 residents of prime working age (between 18 and 64), there about 0.5 jobs per person in the county¹². The flow of commuters working standard “9 to 5” shifts is therefore generally *out of the county* in the morning and *into the county* in the evening. With few large office or industrial parks, jobs are generally dispersed, rather than concentrated, in the county. The densest employment area is in central Crystal Lake bounded by Terra Cotta Avenue to the north; Walkup Road and Main Street to the west; Lake Avenue to the south; and Illinois Route 31 to the east (see Figure 8).

FIGURE 8: Current Employment Density



Source: CMAP

Current Employment Density

- Below 0.5 jobs per acre
- 0.5 to 1.0 jobs per acre
- 1.0 to 3.0 jobs per acre
- Above 3.0 jobs per acre
- Large Employers

¹² 2015 Longitudinal Employer-Household Dynamics Origin-Destination Statistics (LODES)

The highest number of jobs (about 6,000), however, is in the block group that includes the McHenry Corporate Center and Centegra Hospital-McHenry that is between Illinois Route 31 and the McHenry Metra branch line south of McHenry. Manufacturing (16 percent), followed by retail jobs (13 percent) and education (11 percent) make up the largest job categories in the county.

The table below shows the largest private employers in the county by number of jobs¹³. The health care industry dominates the large private employers, followed by manufacturing. The list excludes public employers such as school districts and government offices; although these entities tend to have large number of employees, their facilities and employees are dispersed throughout the county, rather than concentrated in one area.¹⁴

TABLE 2: Largest Private Employers

Employer	Business	Location (Community)	Jobs
Centegra Health System	Health Care (hospital, medical offices)	McHenry, Huntley, Woodstock	5000+
Follett Library Resources, Inc.	Warehousing and distribution	McHenry	1378
Catalent Pharma Solutions	Health Care (manufacturing)	Woodstock	830
Mercy Health System	Health Care (hospital)	Harvard	732
Snap-On Tools Co.	Warehousing and distribution	Prairie Grove	583
Medela	Health care (manufacturing)	McHenry	540
Knaack Manufacturing Co.	Manufacturing	Crystal Lake	500
InTren	Construction	Union	490
Aptar Group, Inc.	Manufacturing	Cary, Crystal Lake, McHenry	475
Charter Dura-Bar	Manufacturing	Woodstock	290

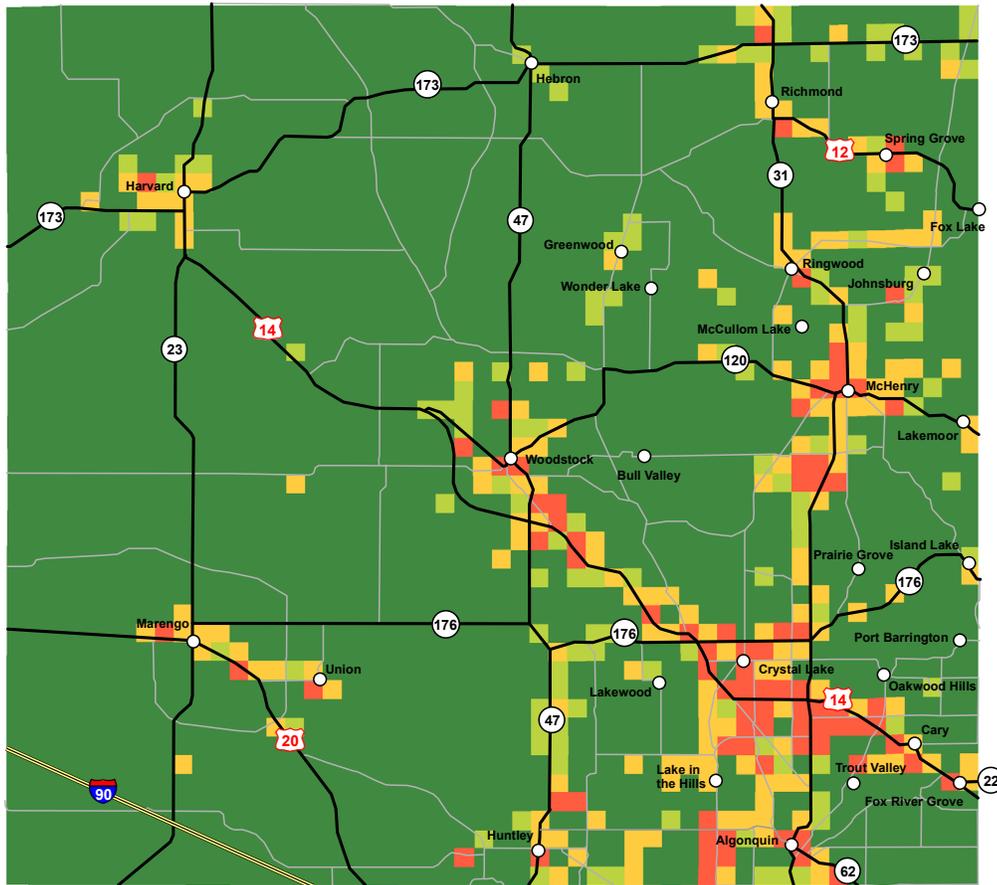
¹³ McHenry County EDC, 2016 numbers (<https://www.mchenrycountyedc.com/profile/employers>)

¹⁴ The importance of identifying large number of employees at one location is to determine the need for transit to that location.

E. Future Employment

Future job growth in the county is projected to keep pace with the population growth.¹⁵ In general, employment growth will likely follow US Route 14 between Fox River Grove and Woodstock; Illinois Route 47 between Woodstock to Huntley; the new interchange at Illinois Route 23 and I-90 south of Marengo; and Illinois Route 31 between Richmond to Algonquin. A report compiled by the McHenry County Economic Development Council shows that 900 to 3,594 jobs could be created after the interchange was constructed (this is not reflected in the CMAP projections shown in Figures 9 and 10 below)¹⁶. The area surrounding Centegra Hospital-McHenry shows the highest concentration of job growth in the county.

FIGURE 9: Future Employment Density



Source: CMAP Population and Employment Projections: 2040

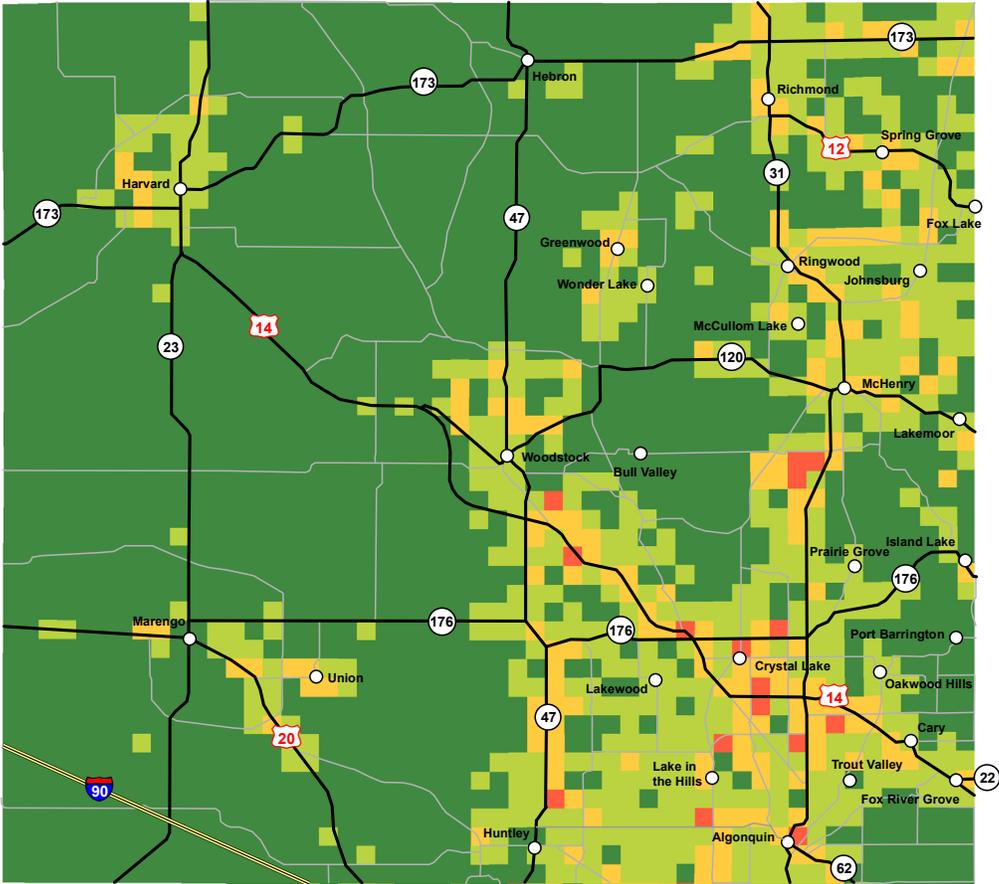
Future Employment Density

- Below 0.5 jobs per acre
- 0.5 to 1.0 jobs per acre
- 1.0 to 3.0 jobs per acre
- Above 3.0 jobs per acre

¹⁵ CMAP Population and Employment Projections: 2040

¹⁶ Economic Impact Analysis: Illinois Route 23/I-90 Project (2016)

FIGURE 10: Future Employment Change



Source: CMAP Population and Employment Projections: 2040

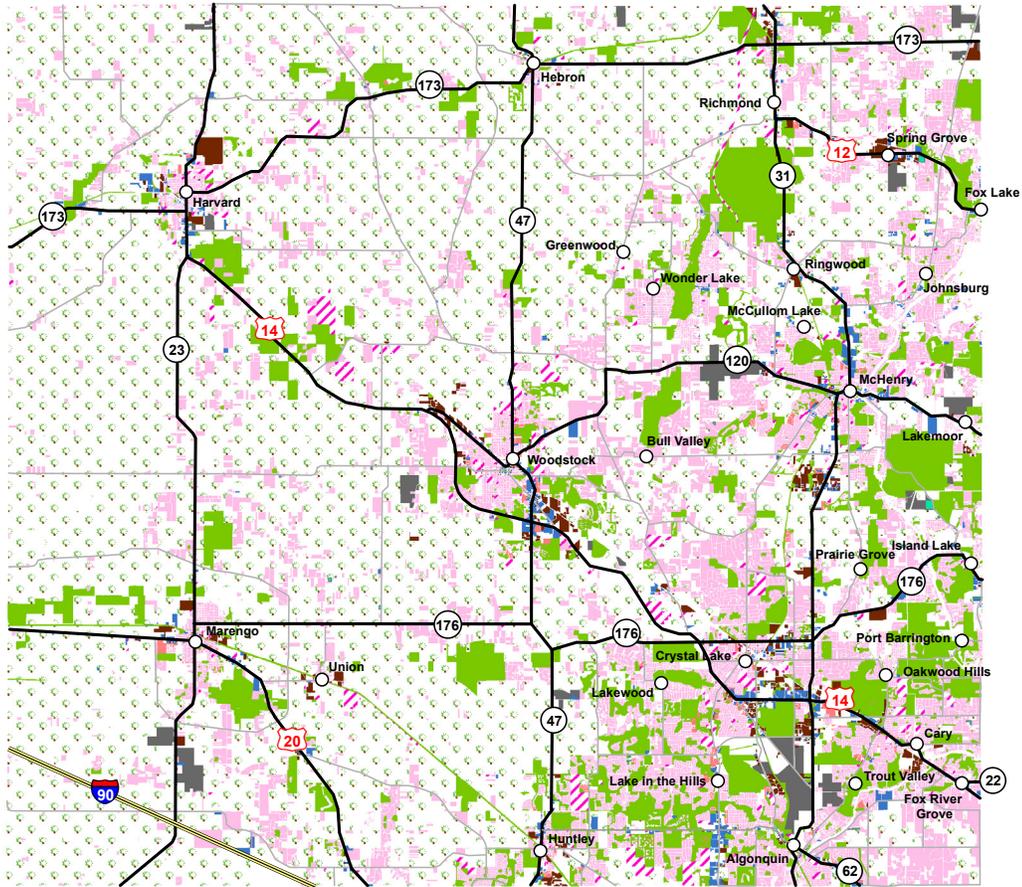
Employment Change by 2040

- No job growth
- Below 100 additional jobs
- 100 to 500 additional jobs
- Above 500 additional jobs

5. Land Use

Current conditions show that more than two-thirds of the land area in the county is either agricultural or open space, most of which is the western part of the county (see Figure 11)¹⁷. After agriculture, which is 59 percent of total land area, single-family residential and commercial (retail) are the most predominant land uses. This type of land use dominates the southeastern corner of the county, the most “suburban” area of the county.

FIGURE 11: Existing Land Use



Source: McHenry County Planning Zoning and Land Use Division

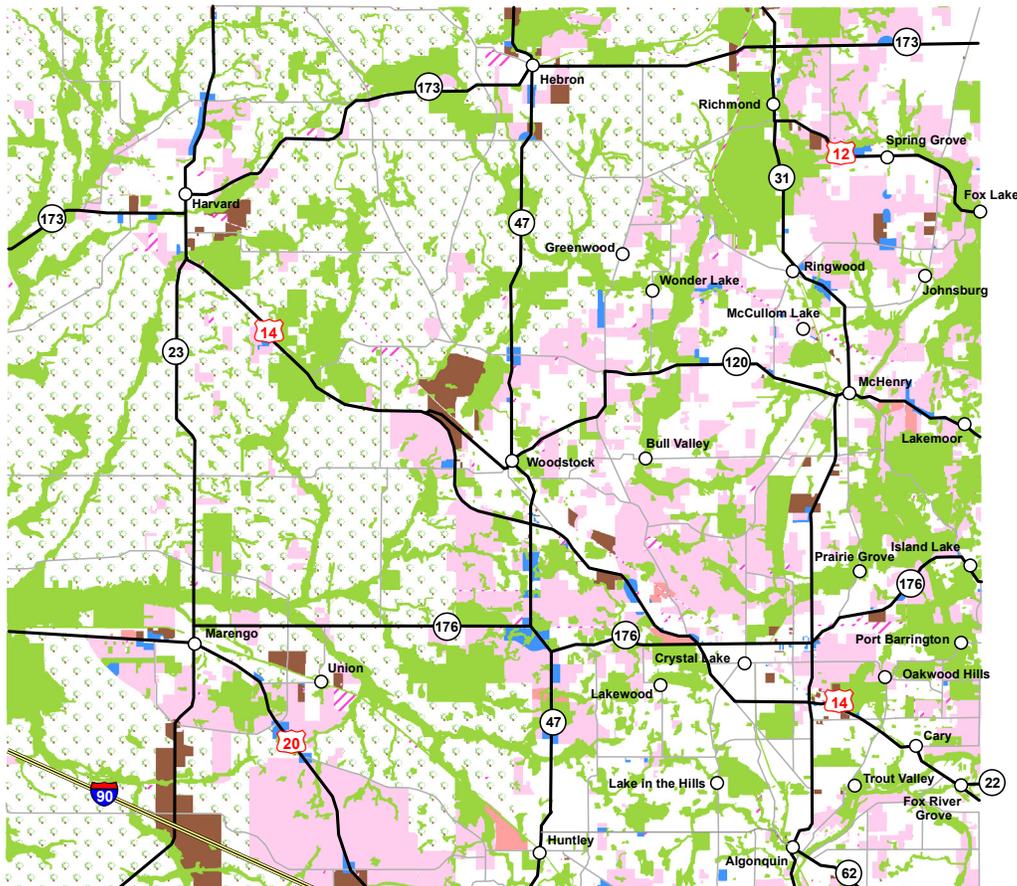
Existing Land Use

 Agricultural	 Mixed Use
 Commercial (Retail)	 Residential (Single Family)
 Earth Extraction (Mining)	 Residential (Multi Family)
 Government/Institution	 Office
 Industrial	 Open Space

¹⁷ McHenry County Planning Zoning and Land Use Division

Denser residential development is proposed as being contiguous with the existing larger communities in the county; with “estate” development (large lot homes) proposed to take up most of the new residential development in the county (by area). The one large new retail concentration is envisioned at the junction of Illinois Routes 47 and 176. Note that no additional industrial land use is planned outside current municipal boundaries (see Figure 12).

FIGURE 12: Future Land Use (in Unincorporated McHenry County)



Source: McHenry County Planning Zoning and Land Use Division

Future Land Use

- | | |
|--|--|
|  Agricultural |  Open Space |
|  Commercial (Retail) |  Residential (Single Family) |
|  Government/Institution |  Residential (Multi Family/Mixed Use) |
|  Office or Industrial | |

6. Travel Patterns

A. Work Locations of Residents

Two out of three county residents work outside the county (see Table 3). Almost as many county residents work in Cook and Lake Counties as in McHenry County. While many of the Cook County work trips can be made by public transit (mostly Metra), there are few public transit links to employment in Lake County. Most workers traveling outside the county go to Chicago (13,880) followed by Elgin (6,228) and Schaumburg (5,005). Within the county, top work destinations include Crystal Lake, McHenry, and Woodstock.

TABLE 3: Top Work Locations of McHenry County Residents (by County)¹⁸

	Count	Share
<i>Total All Job Locations</i>	156,952	100.0%
Top Job Locations		
McHenry County	51,355	32.7%
Cook County	45,049	28.7%
Lake County	20,766	13.2%
Kane County	13,816	8.8%
DuPage County	11,124	7.1%
Will County	2,531	1.6%
Winnebago County	2,282	1.5%
Walworth County	980	0.6%
DeKalb County	850	0.5%
Boone County	623	0.4%
All Other Locations	7,576	4.8%

¹⁸ 2015 Longitudinal Employer-Household Dynamics Origin-Destination Statistics (LODES)

B. Residence Locations of Workers

About half of employees who work in McHenry County live in the county (see Table 4). Lake and Cook Counties are the second and third highest counties, respectively, where workers who work in McHenry County reside. Workers from outside the county primarily come from Chicago (2,628), Elgin (1,767) and Carpentersville (1,553).

TABLE 4: Top 10 Home Locations of McHenry County Workers (by County)¹⁹

	Count	Share
Total All McHenry County Workers	93,571	100.0%
Top Home Counties		
McHenry County	51,355	54.9%
Cook County	8,895	9.5%
Lake County	8,062	8.6%
Kane County	6,936	7.4%
Winnebago County	2,399	2.6%
DuPage County	2,279	2.4%
Boone County	1,609	1.7%
Will County	1,475	1.6%
Walworth County	1,442	1.5%
Kenosha County	1,416	1.5%
All Other Locations	7,703	8.2%

C. Transportation Choices

According to the United States Census data, seven percent of McHenry County residents carpool to work²⁰, about the same percentage of all counties in the six-county RTA service area. The highest concentration of carpoolers lives just west of downtown Harvard (about 58 percent). Carpoolers represent a potential transit market.

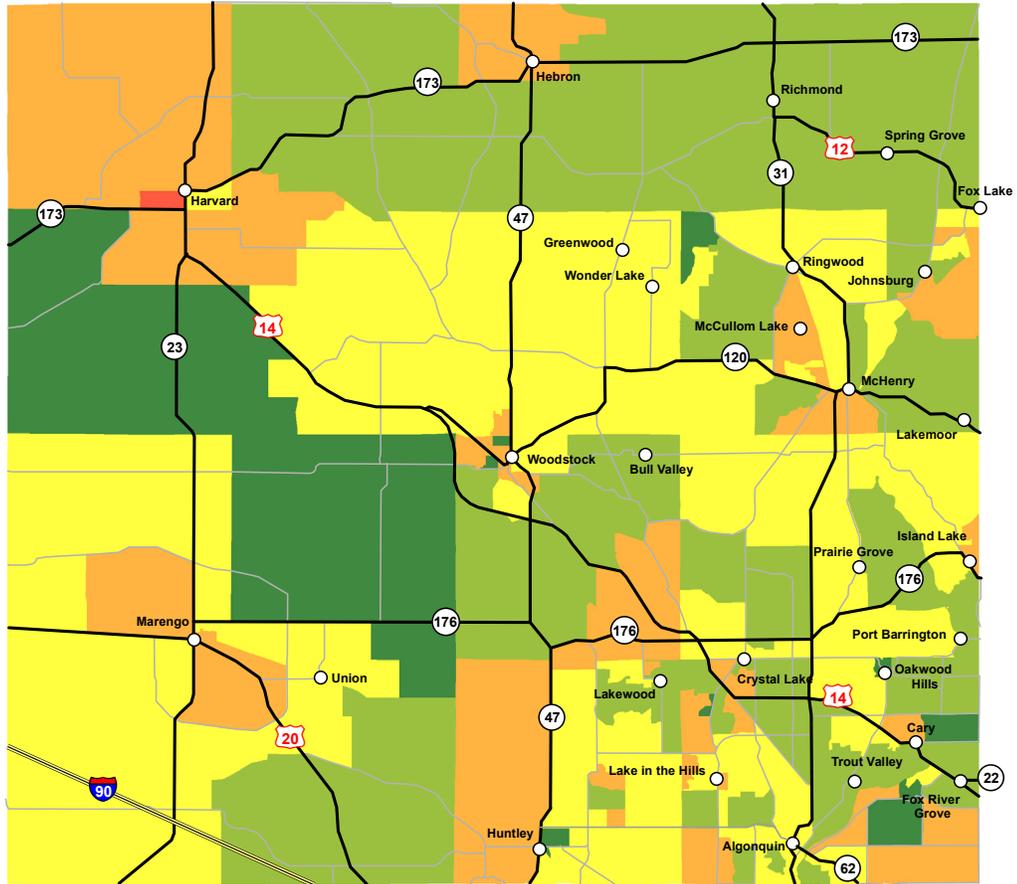
Residents who commute by public transportation are much rarer (see Figure 13); this fact is reflective of the sparse public transportation network in McHenry County. In fact, about a quarter of block groups in the county have no workers that use public transportation for commuting purposes. Overall, only about three percent of the county’s residents use public transportation for this purpose, the second lowest in the RTA service area. The highest percentage of transit riders are in downtown Crystal Lake, next to the northern-most Metra station in the county with a high frequency of service. Of interest is the fact that the block group immediately east of this Metra station has the fourth highest percentage of transit riders in the county, while the one immediately to the west favors carpooling [and only has two percent of its population commuting by transit (see Figure 14)].

Those walking or biking to work in the county is statistically insignificant (only about 1,000 people). Thirty-two percent of county residents spend more than 45 minutes commuting to work, with five percent of those being “super commuters” (more than 90 minutes commuting).

¹⁹ 2015 Longitudinal Employer-Household Dynamics Origin-Destination Statistics (LODES)

²⁰ 2011-2016 American Community Survey 5-year estimates (Table B08302)

FIGURE 13: Percentage of County Residents who Carpool



Source: 2012-2016 American Community Survey 5-year estimates (Table B08302)

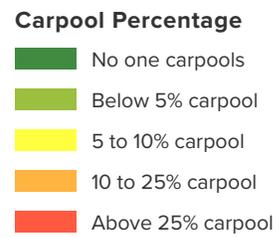
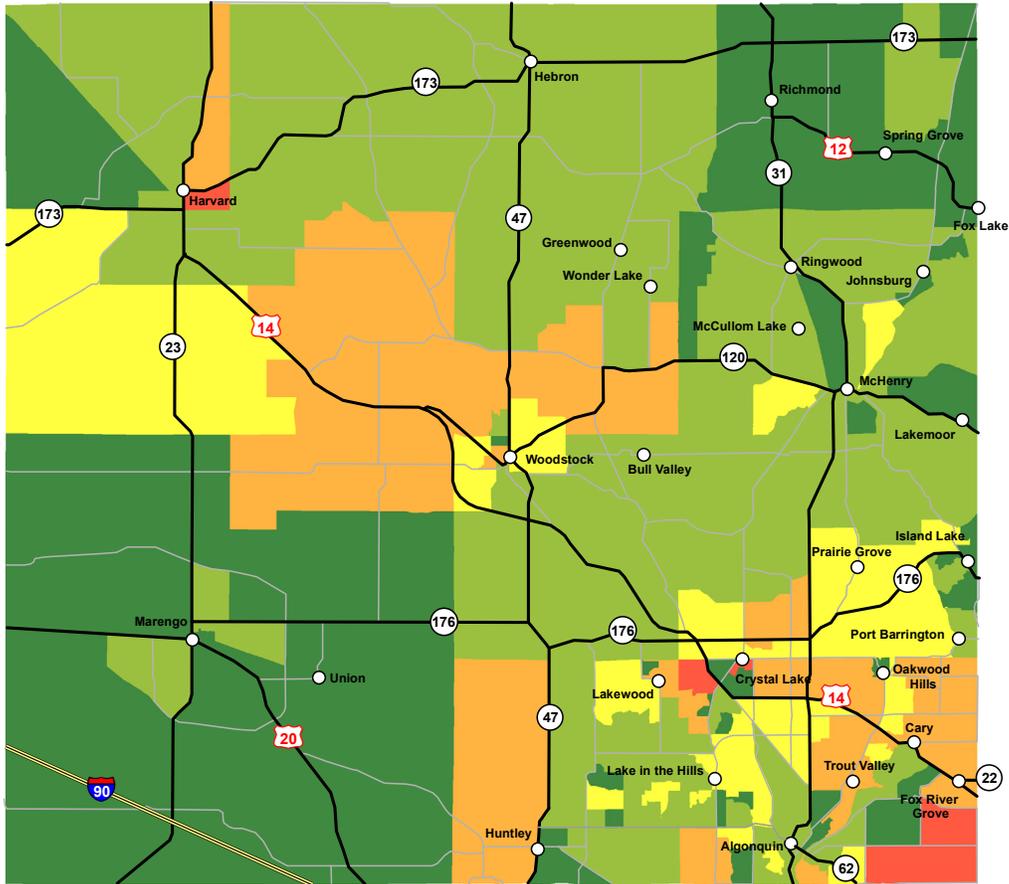


FIGURE 14: Percentage of County Residents Who Use Public Transit to Commute



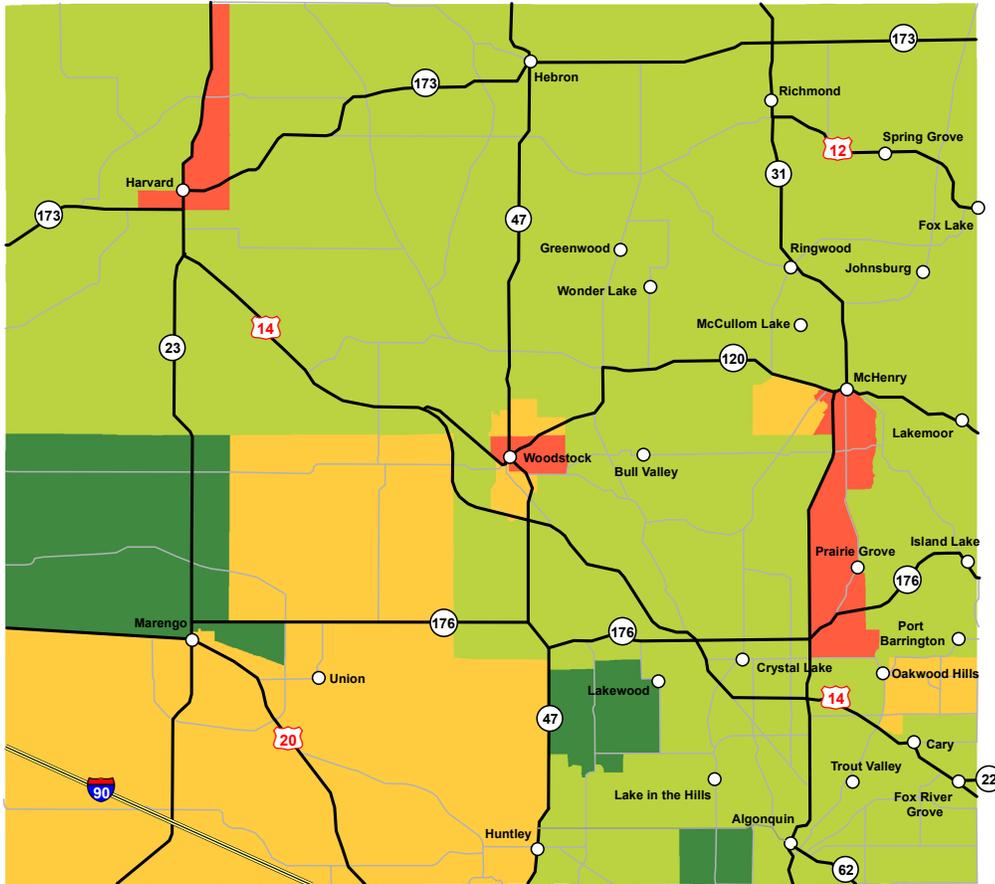
Source: 2012-2016 American Community Survey 5-year estimates

Percentage Taking Public Transit

- No one takes public transit
- Below 3% take public transit
- 3 to 5% take public transit
- 5 to 10% take public transit
- Above 10% take public transit

The percentage of county residents without access to a vehicle in their household in the county is about two percent of the population²¹. Woodstock, Harvard, and the area between Barreville Road and Illinois Route 31 near McHenry and Prairie Grove show a high percentage of people without access to a car. The highest percentage of people in the county without vehicle access lives in three block groups near the center of McHenry (about 10 percent). McHenry also shows up as a comparatively dense vehicle-free household community (see Figure 15). Having no vehicle, or having an unreliable vehicle, is a good indicator of a transit-dependent person.

FIGURE 15: Percentage of County Population without Vehicle Access



Source: 2012-2016 American Community Survey 5-year estimates (Table B08302)

Percentage without Vehicle Access

- Everyone has access to a vehicle
- Below 3% have no access
- 3 to 5% have no access
- Above 5% have no access

21 2011-2016 American Community Survey 5-year estimates (Table S08201)

7. Transit Demand Index

The previous demographic and employment information was combined into a Transit Demand Index to capture in a numerical summary to identify where the greatest current demand is the county. The index uses the work of Dr. Steve Polzin of the Center for Urban Transportation Research (CUTR) at the University of South Florida as a starting point. He suggests using the following equation to determine transit demand:

$$\text{Population} + (\text{Jobs} \times 0.50) + (\text{Service Jobs} \times 0.75) + (\text{Carless} \times 1.75)$$

For McHenry County, this rough equation was built on breaking out the population into the following subgroups:

- Minority Population
- Individuals with a Disability
- Persons Over 65
- Persons Living Below the Federal Poverty Line

Studies have shown the following in metropolitan areas between 200,000 and 500,000 people (the population of McHenry County is around 300,000):²²

- Minority populations are a little more than twice as likely to use transit;
- Persons with disabilities are five and a half times more likely more likely to use transit;
- Those without a car are almost eight times more likely;
- Low Income (below \$15,000 annual income) residents are about one and a half times more likely;
- People over 65 years old are a little over one and a half times more likely to use transit.

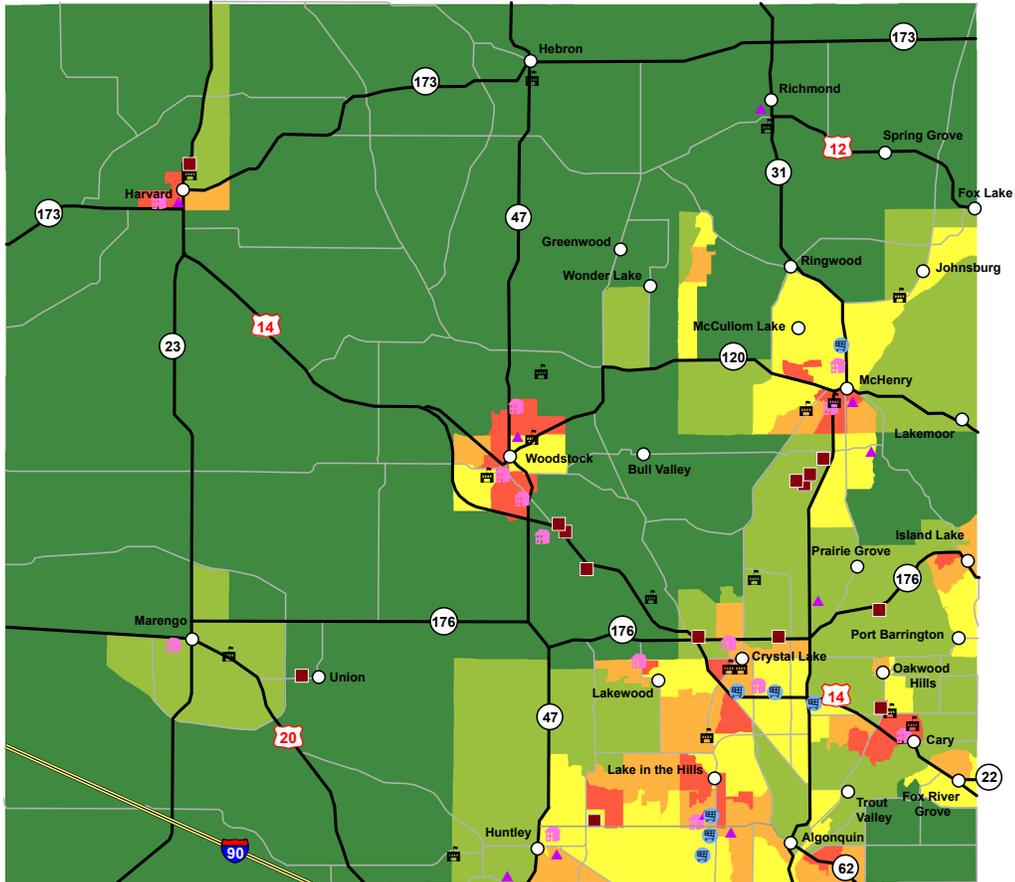
Since these subgroups have different propensities to use transit, multiplying the population of the groups by these factors will provide a more accurate picture of transit demand rather than just using total population. The equation also takes into account the density of the block group surveyed²³. Where information was only available for the tract level (as in the case of individuals with a disability), percentage of individuals with a disability within a tract was assumed to remain constant across all block groups within that census tract. Note that the transit demand index will tend to favor denser areas and areas that have a good mix of jobs and housing.

22 "TCRP Report 28: Transit Markets of the Future: The Challenge of Change" Table 4 (Work trip data).

23 $\text{Population} + (\text{Minority} \times 2.3) + (\text{With Disability} \times 5.5) + (\text{Over 65} \times 1.6) + (\text{Below Poverty Level} \times 1.4) + (\text{Carless} \times 8) + (\text{Jobs} \times 0.50) + (\text{Service Jobs} \times 0.75) \div (\text{Acres in Block Group})$

Figure 16 shows the area bounded by Illinois Route 47, Illinois Route 31, the southern county line, and Illinois Route 176 (an area encompassing the communities of Crystal Lake, Lakewood, Huntley, Lake in the Hills, and Algonquin) as the largest contiguous area of above average transit demand. There are also high demand pockets near the McHenry, Cary, Woodstock, and Harvard central business districts.

FIGURE 16: Transit Demand Index



Source: 2012 - 2016 American Community Survey 5-year estimates

Ridership Generators

-  Big Box
-  Schools (High School and Junior College)
-  Large Employers
-  Low Income (Subsidized) Housing Complexes
-  Subsidized Senior Independent Living

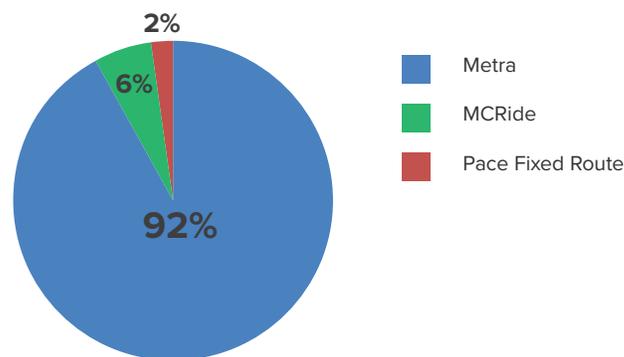
Transit Demand Index

-  Little to No Transit Demand
-  Poor Transit Demand
-  Average Transit Demand
-  Good Transit Demand
-  Highest Transit Demand

8. Existing Transit Services

There are three types of public transportation services operating in McHenry County under the umbrella authority of the Regional Transportation Authority (RTA): Metra, the commuter railroad; Pace, the suburban bus agency; and MCRide, a demand response (dial-a-ride) service operated by Pace. The following provides information on each of these services. As shown in Figure 17, the vast majority of transit riders in the county use Metra. Of those not using the train, MCRide carries most of those riders (six percent).

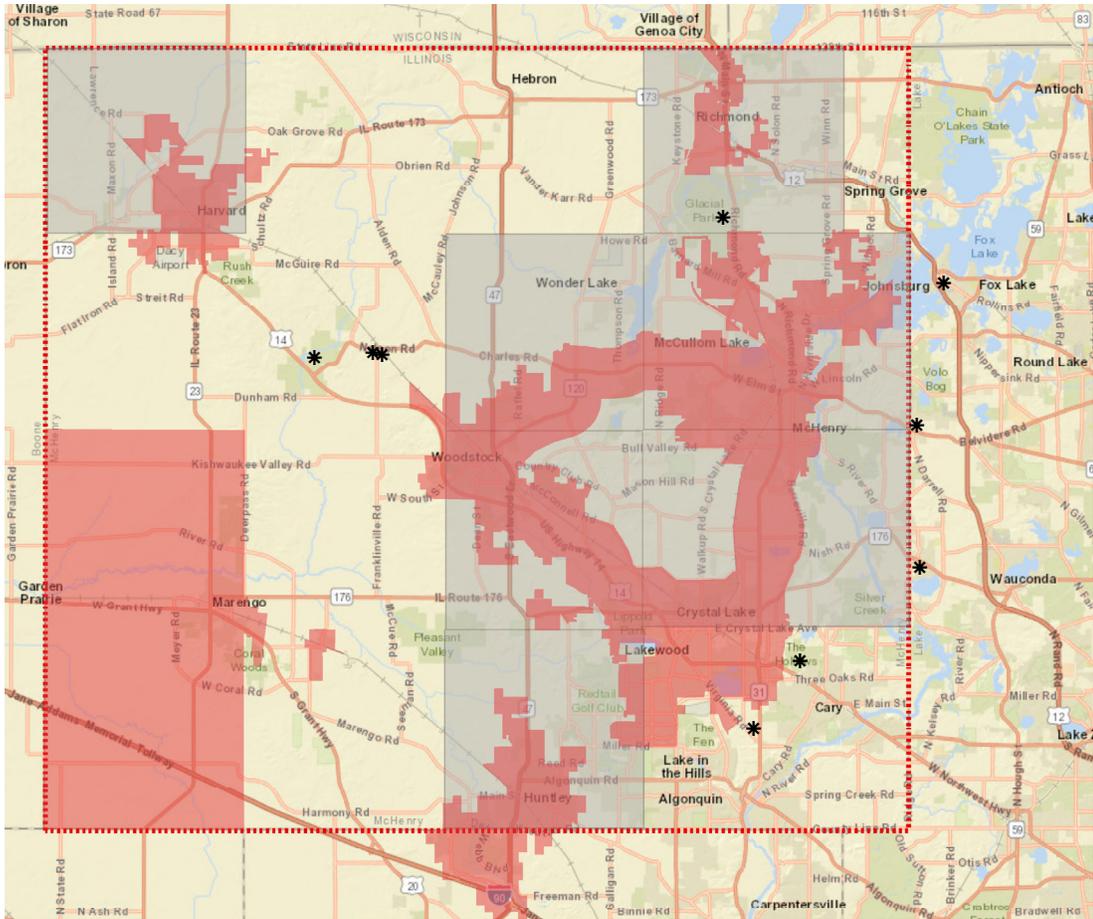
FIGURE 17: Percentage of Daily Transit Riders by Mode



A. MCRide

MCRide is the name of the demand response service that operates throughout McHenry County. MCRide is also provided within $\frac{3}{4}$ mile of portions of Route 806, 807, or 808 to provide midday service when the fixed routes are not running. MCRide will also take riders to nine other point destinations outside the service area: Fox Lake Metra Station; Brookdale Conservation Area; Glacial Park; Island Foods (in Island Lake); Walgreens (in Lakemoor); the Hollows Conservation Area; Valley Hi Nursing Home; McHenry County DOT; and the park and ride at Virginia Road and Illinois Route 31. Twenty townships and municipalities partner with the MCRide program to provide service to their communities (see Figure 18 and Table 5).

FIGURE 18: MCRide Service Area



Source: 2012-2016 American Community Survey 5-year estimates (Table B08302)

Legend

- MCRide (All Riders)
- MCRide (Seniors and Disabled Only)
- * MCRide Point Destination

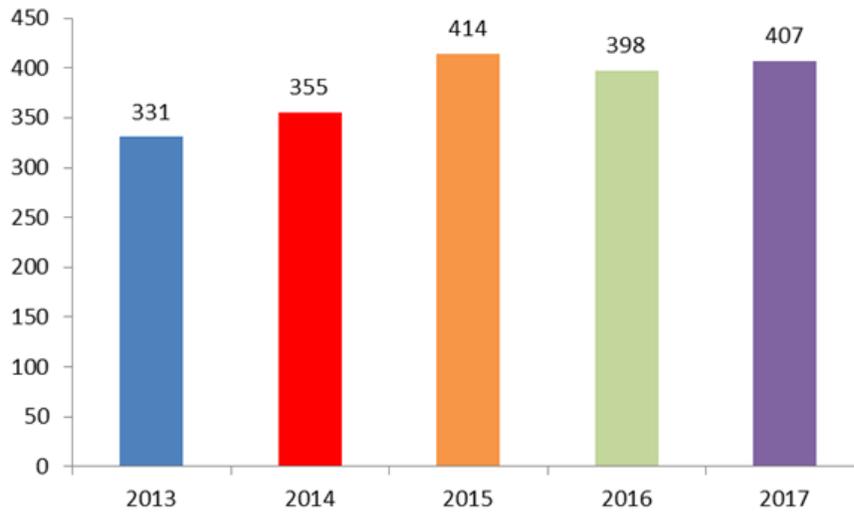
TABLE 5: MCRide Service Characteristics

Municipality	Type	Allowed Users
Chemung	Township	Seniors/Disabled
Crystal Lake	Municipality	General Public (All Riders)
Dorr	Township	Seniors/Disabled
Grafton	Township	Seniors/Disabled
Greenwood	Township	Seniors/Disabled
Harvard	Municipality	General Public (All Riders)
Huntley	Municipality	General Public (All Riders)
Johnsburg	Municipality	General Public (All Riders)
Marengo	Municipality	General Public (All Riders)
Marengo	Township	General Public (All Riders)
McHenry	Municipality	General Public (All Riders)
McHenry	Township	Seniors/Disabled
Nunda	Township	Seniors/Disabled
Richmond	Municipality	General Public (All Riders)
Richmond	Township	Seniors/Disabled
Riley	Township	General Public (All Riders)
Ringwood	Municipality	General Public (All Riders)
Union	Municipality	General Public (All Riders)
Woodstock	Municipality	General Public (All Riders)

MCRide operates Monday through Saturday; weekday service is from 6:00 AM to 7:00 PM and Saturday service is from 9:00 AM to 5:00 PM. General public riders can reserve a trip up to 24 hours in advance; same day requests are honored based on availability. Riders over 60 years old or with a disability can reserve their trips up to seven days in advance; same day requests are honored based on availability. MCRide fares are distance based. The base fare for the first five miles of travel is \$2.50 for general public riders and \$1.25 for seniors and individuals with disabilities. Each additional mile, after the first five, is \$0.25. All fares must be paid in cash with exact change; Pace does not accept fare payment by Ventra on MCRide.

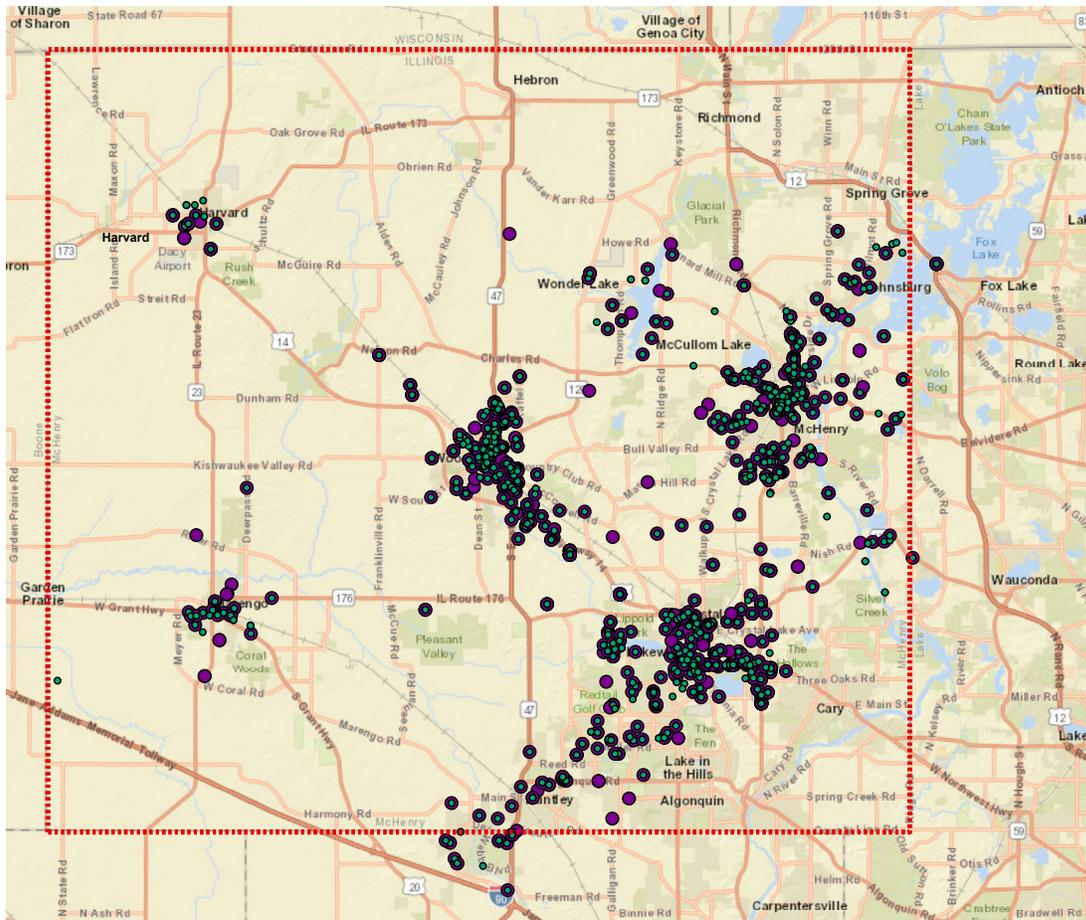
McHenry County is the lead agency for MCRide and Pace Suburban Bus coordinates all services. Pace contracts the operation of the vehicles and call center to outside agencies (currently First Transit and 303 Taxi). Service is funded by McHenry County, Pace, Federal Section 5310 grant funds, and participating townships and municipalities (listed in Table 5). Ridership has increased since the last Transit Plan Update in 2013 (see Figure 19).

FIGURE 19: Average Daily MCRide Ridership in the County



Approximately 30 percent of distinct riders are disabled, 13 percent are both disabled and seniors, and 25 percent are seniors. For trips taken on MCRide, 45 percent of those trips are taken by someone with a disability, eight percent are seniors with a disability, and 16 percent are seniors.

FIGURE 20: Sample MCRide Trip Origins and Destinations²⁴



Source: McHenry County Division of Transportation

General Public (Non ADA) MCRide Trips

- Origins
- Destinations

Crystal Lake, Woodstock and McHenry show the densest concentration of MCRide trips (see Figure 20 and Table 6). Fifty-eight percent of MCRide trips originate or end within a quarter mile of fixed route service (considered “walking distance”). This does not take into account, however, if those trips could be made on a fixed route due to the more limited hours of this type of service in the county.

²⁴ Sample weekday in August 2017

TABLE 6: Sample MCRide Origins and Destinations by Community²⁵

ORIGINS	Trips	Percent of Total	DESTINATIONS	Trips	Percent of Total
ALGONQUIN	2	0.02%	ALGONQUIN	0	0.00%
BURTONS BRIDGE	2	0.08%	BURTONS BRIGE	5	0.19%
CRYSTAL LAKE	2512	26.44%	CRYSTAL LAKE	2640	27.78%
FOX LAKE	50	0.53%	FOX LAKE	35	0.37%
HARVARD	260	2.74%	HARVARD	248	2.61%
HUNTLEY	389	4.09%	HUNTLEY	357	3.76%
ISLAND LAKE	40	0.42%	ISLAND LAKE	35	0.37%
JOHNSBURG	285	3.00%	JOHNSBURG	300	3.16%
LAKE IN THE HILLS	77	0.81%	LAKE IN THE HILLS	68	0.72%
LAKEMOOR	24	0.25%	LAKEMOOR	25	0.26%
LAKESWOOD	2	0.02%	LAKESWOOD	0	0.00%
MARENGO	208	2.19%	MARENGO	208	2.19%
MCCULLOM LAKE	2	0.02%	MCCULLOM LAKE	0	0.00%
MCHEMRY	2656	27.95%	MCHEMRY	2480	26.10%
PORT BARRINGTON	1	0.01%	PORT BARRINGTON	0	0.00%
RICHMOND	66	0.69%	RICHMOND	88	0.93%
RINGWOOD	18	0.19%	RINGWOOD	30	0.32%
SPRING GROVE	18	0.19%	SPRING GROVE	20	0.21%
UNION	19	0.20%	UNION	19	0.20%
WONDER LAKE	140	1.47%	WONDER LAKE	151	1.59%
WOODSTOCK	2730	28.73%	WOODSTOCK	2792	29.38%
Unknown	1	0.01%	Unknown	1	0.01%
Grand Total	9502		Grand Total	9502	

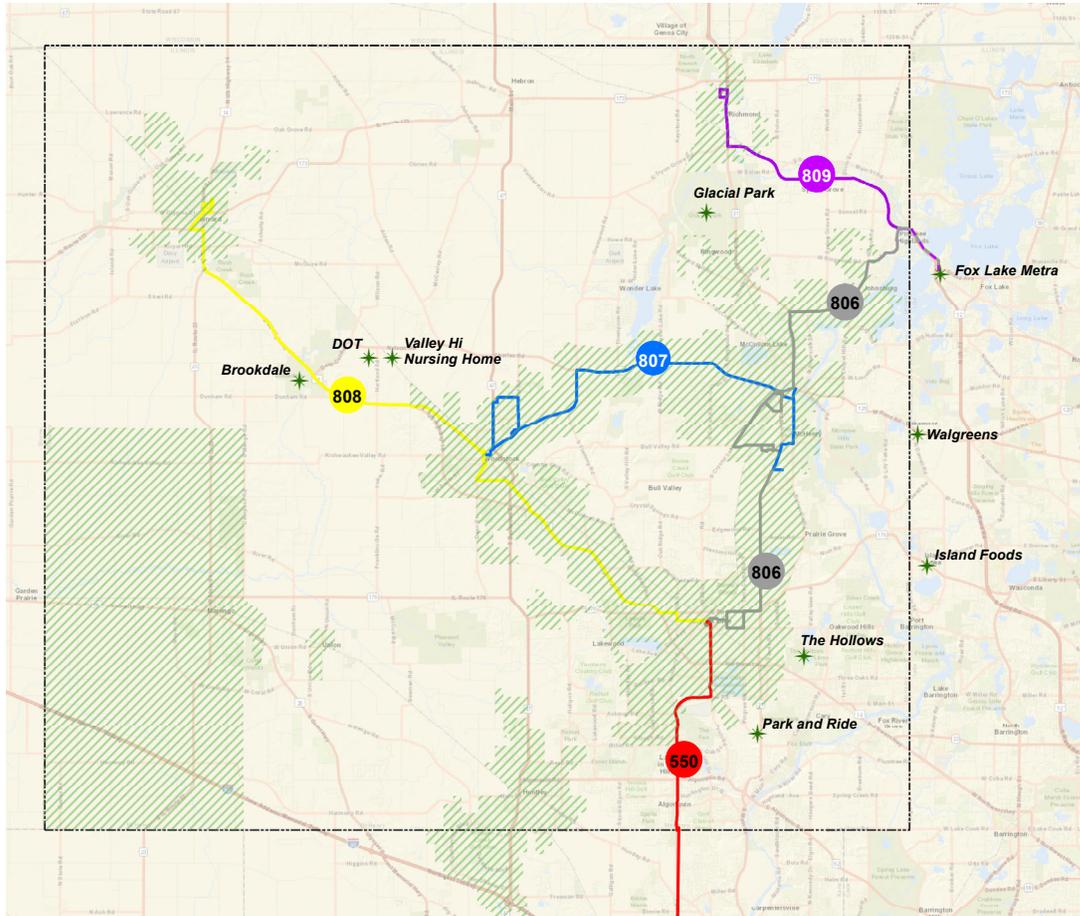
While the most common trips in the bigger communities (Woodstock, Crystal Lake, and McHenry) are within the same community, there are some significant MCRide inter-community travel flows. In April 2018, trips between Woodstock, Crystal Lake, and McHenry all carried well above 100 passengers. The highest inter-community flow was between McHenry to Crystal Lake at 421 trips. Johnsburg to McHenry (228 trips) also showed significant MCRide demand.

²⁵ Monthly ridership numbers, April 2018

B. Pace Fixed Route²⁶

Pace operates five fixed routes in McHenry County—four of these routes are contracted out to First Transit for operation, and the other is directly operated by Pace out of their garage in Elgin (River Division) (see Figure 21). One route, 550, runs all day; the other four routes (806, 807, 808, and 809) run during rush hours only (see Table 7). There is no Saturday or Sunday fixed route bus service in the county. Full fare is \$2.25, with a 25-cent reduction if a Ventra Card is used. Unlike many other Pace fixed routes, Routes 806, 807, 808 and 809 use cutaway vehicles and do not have electronic destination signs or bike racks on the buses.

FIGURE 21: General Public Bus (Fixed Route and Demand Response) Transit Map



Source: McHenry County Division of Transportation, Pace

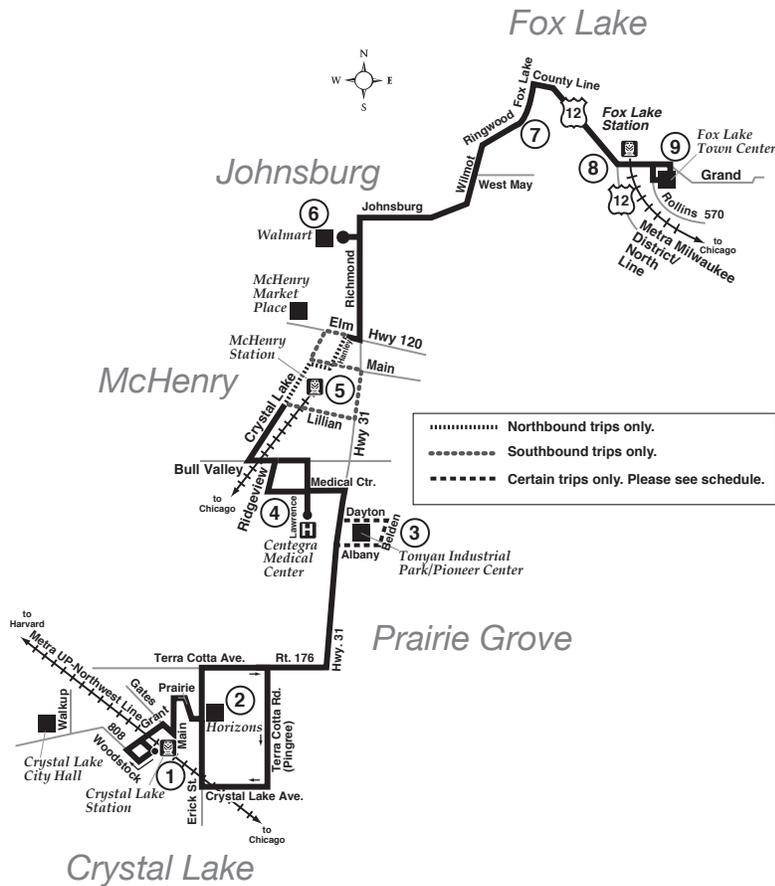
Fixed Routes

- | | | | |
|---|-----|---|--------------------------|
|  | 550 |  | General Public MCRide |
|  | 806 |  | MCRide Point Destination |
|  | 807 | | |
|  | 808 | | |
|  | 809 | | |

²⁶ Route descriptions in this section pulled directly from the Pace Bus Website (<http://pacebus.com/sub/schedules/default.asp?type=pace>)

FIGURE 23: Route 806

Route 806 Effective Date April 14, 2014

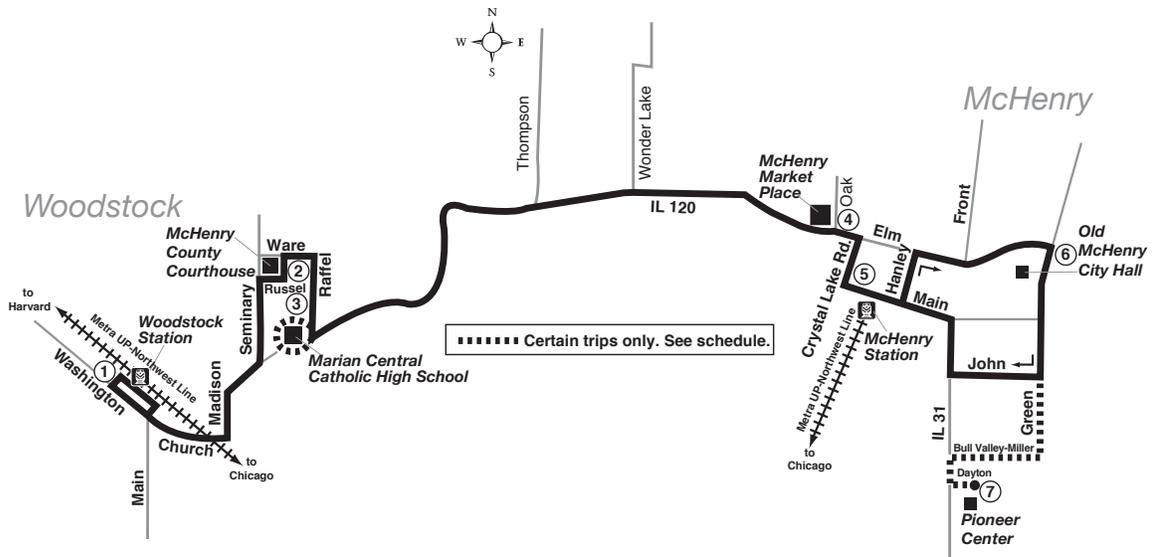


Route 806: Crystal Lake—Fox Lake

This route provides weekday rush hour service between Crystal Lake and Fox Lake via McHenry and Johnsburg. Service is provided to Horizons for the Blind, Pioneer Center, Centegra Hospital-McHenry, McHenry High School West Campus, and Fox Lake Town Center (see Figure 23). The Metra stations in Crystal Lake, McHenry, and Fox Lake are also served by this route. Twenty-nine rides are taken on this route each day.

FIGURE 24: Route 807

Route 807 Effective Date
January 29, 2018

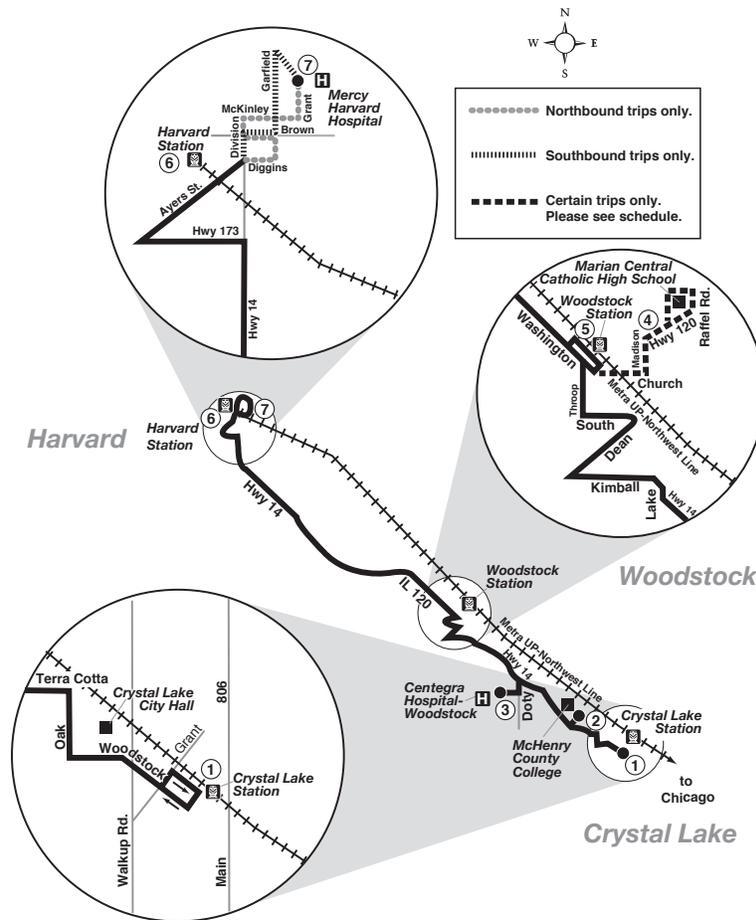


Route 807: Woodstock—McHenry

This route provides weekday rush hour service between McHenry and Woodstock (see Figure 24). Service is provided to McHenry City Hall, Metra McHenry Station, McHenry Market Place, Marian Central Catholic High School, McHenry County Courthouse, and Metra Woodstock Station. Twenty-seven is the typical daily ridership on the route.

FIGURE 25: Route 808

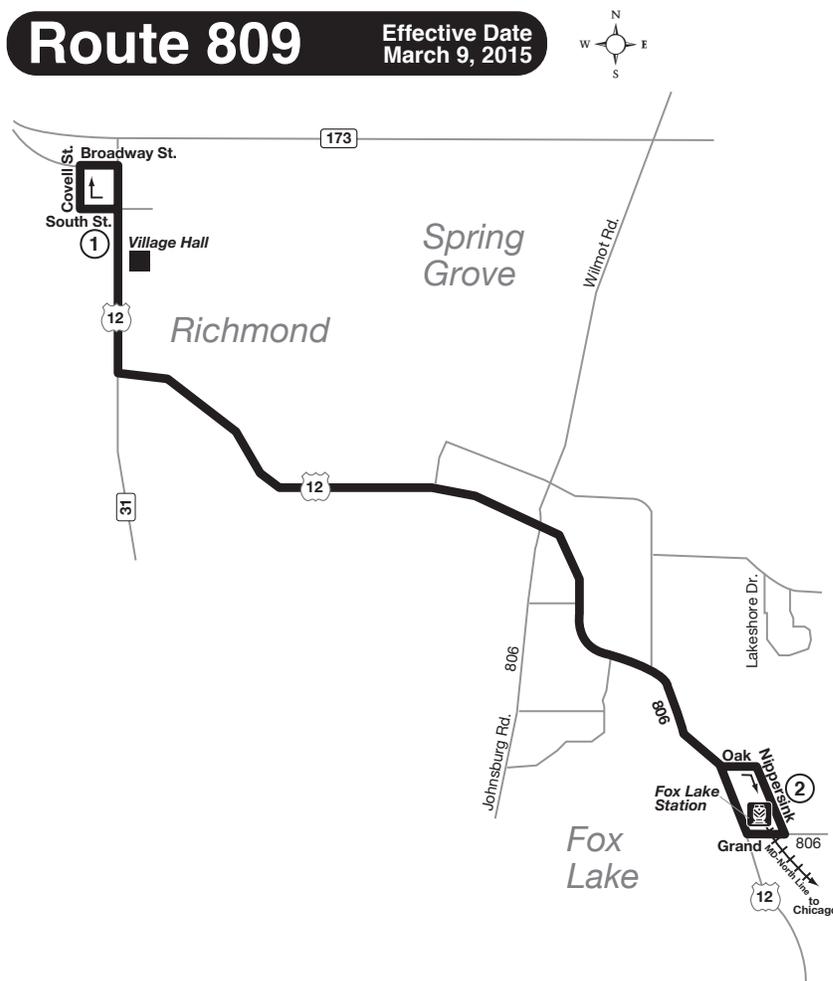
Route 808 Effective Date January 29, 2018



Route 808: Crystal Lake—Harvard

The route provides weekday rush hour service between Crystal Lake and Harvard via Woodstock. Service is provided to Metra Crystal Lake Station, McHenry County College, Centegra Hospital-Woodstock, Metra Woodstock Station, Metra Harvard Station and Mercy Harvard Hospital (see Figure 25). Fifty-eight rides are taken on this route daily.

FIGURE 26: Route 809

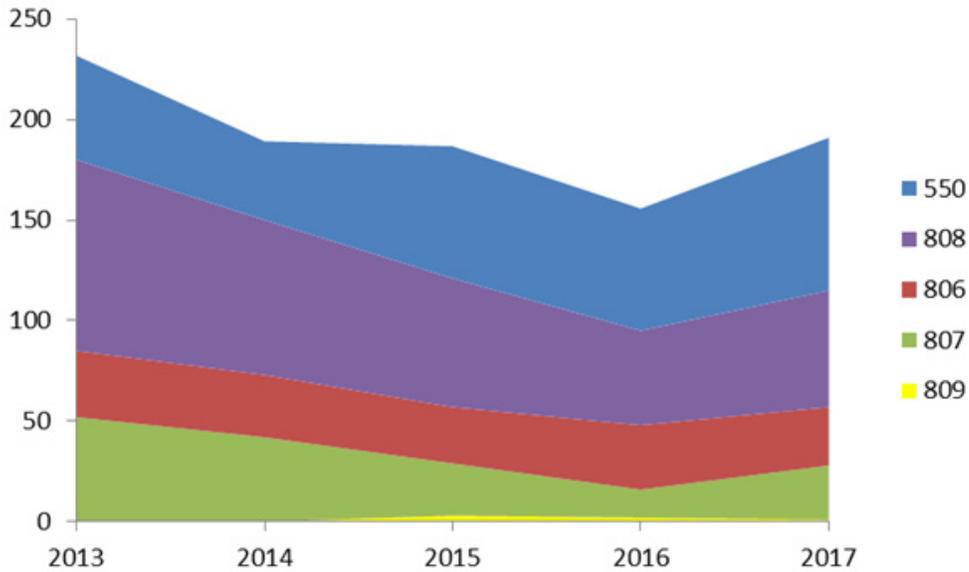


Route 809: Richmond–Fox Lake Metra Station

This route provides weekday rush hour service between the Village of Richmond and the Fox Lake Metra Station (see Figure 26). This route has minimal ridership.

The overall daily fixed route ridership in the county in 2017 is 191; this is down 18 percent since five years ago (2013) (see Figure 27). Most transit systems in the country have lost ridership in the same period of time, partly due to competition from ridesharing companies such as Uber and Lyft. The rise in telecommuting particularly impacts transit ridership exurban counties like McHenry, due to the longer than average commute times to employment centers in the region. The aging of the population also will impact fixed route ridership. Riders over 65 are less likely to take regular transit trips (as they are less likely to work) and more likely to use MCRide or similar services.

FIGURE 27: Daily Fixed Route Bus Ridership in the County



C. Metra

Metra operates one line in McHenry County (Union Pacific-Northwest (UP-NW)). The Metra UP-NW Line has two branches- the Harvard (main line) branch and the McHenry branch. Stations on the main line branch are located in Fox River Grove, Cary, Crystal Lake (Pingree Road and Crystal Lake), Woodstock, and Harvard (see Table 8). The McHenry station is located on the McHenry branch. Service is provided between these stations and the City of Chicago, terminating in the Ogilvie Transportation Center in downtown Chicago.

Metra also operates the Milwaukee North Line (MD-N) which serves Lake County. The Fox Lake station is located just over the McHenry County line. McHenry County residents use this station and MCRide serves the station. The Metra MD-N line operates to Union Station in downtown Chicago.

TABLE 8: Metra Average Daily Ridership²⁹

	Ridership	Weekday Stops	Saturday Stops	Sunday Stops
Harvard	221	18	18	6
Woodstock	317	18	18	6
McHenry	96	6	0	0
Crystal Lake	1199	47	24	14
Pingree Road	751	45	24	14
Cary	941	48	24	14
Fox River Grove	451	46	24	14
Total	3976	228	132	68

29 RTAMS 2016 daily weekday ridership

In the past decade, five out of seven of the stations have experienced ridership losses. The stations northwest of Crystal Lake have seen the biggest ridership declines. Some of this ridership has shifted to the relatively new Pingree Road station. However, reductions in gas prices along with several fare increases during this time period (which can make commuting from outlying stations prohibitively expensive) are also contributing factors. Overall ridership for all McHenry County stations is down just five percent (see Table 9).

TABLE 9: Metra Average Daily Ridership Change³⁰

	2016	2014	2006	Ridership Change
Harvard	221	275	274	-19%
Woodstock	317	437	456	-30%
McHenry	96	114	101	-5%
Crystal Lake	1,199	1,238	1,370	-12%
Pingree Road	751	744	581	29%
Cary	941	873	988	-5%
Fox River Grove	451	410	422	7%
Total	3,976	4,091	4,192	-5%

Few riders transfer to Metra using Pace—the survey showed that just one percent of Metra riders at only one station (Crystal Lake) transferred between these transit modes (see Table 10). Other than driving alone, the next greatest way to access Metra was to be dropped off (at 16 percent). Biking to stations is low as well; this can be attributed to few bike lanes or routes in the county that directly access Metra stations.

TABLE 10: Metra Access Mode³¹

Station	Walk	Drive Alone	Carpool	Dropped Off	Pace Bus	Bike	Other
Fox River Grove	13%	67%	2%	17%	0%	1%	0%
Cary	10%	67%	3%	18%	0%	3%	0%
Pingree Road	8%	78%	3%	11%	0%	0%	0%
Crystal Lake	5%	72%	3%	16%	1%	2%	1%
Woodstock	11%	67%	2%	14%	0%	3%	1%
Harvard	6%	67%	7%	19%	0%	1%	0%
McHenry	2%	77%	3%	17%	0%	0%	0%
Total	8%	71%	3%	16%	0%	2%	0%

30 RTAMS 2006, 2014, 2016 ridership

31 2016 Metra Origin and Destination Survey (weekday)

There is not a parking shortage at McHenry County Metra stations. A lack of parking has traditionally been one of the main reasons why there would be a high amount of Pace to Metra transfers at stations. Cary has the biggest parking crunch, with only 11 percent of spaces available while Woodstock has the most spaces available, with less than 50 percent of spaces used (see Table 11).

TABLE 11: Parking Utilization³²

Station	Total Spaces	Used Spaces	Utilization
Fox River Grove	298	244	82%
Cary	596	531	89%
Pingree Road	709	479	68%
Crystal Lake	1096	742	68%
Woodstock	452	201	44%
Harvard	221	153	69%
McHenry	106	55	52%
Total	3478	2405	69%

D. Vanpools

Pace manages the vanpool program for the RTA throughout the six-county region. The agency provides the equipment (a 12 to 15 person passenger van), insurance, maintenance and repairs, and license and registration. One person becomes the primary driver, and another is the alternate driver in case the primary driver is unavailable. Pace also provides a matching service for riders who wish to form a vanpool, but do not have a group already formed. There is one park and ride in the county that can be used to assemble for vanpools at the intersection of Virginia Road and Illinois Route 31.

Twelve vanpools operate to or from the county. Origin communities include McHenry, Lake in the Hills, and Cary. Destinations include Horizons for the Blind (two vanpools) and McHenry County Veterans Affairs Outpatient Clinic (three vanpools).

E. ADA Paratransit

ADA paratransit service is required by the federal Americans with Disabilities Act. Only persons who are certified by the Regional Transportation Authority as a person with a disability are eligible to ride this service. Trips are only provided at the same times and within the same geographic areas as fixed route bus service. Pace operates the ADA paratransit service within a ¾ mile corridor around each fixed route, and is available during the same days and hours as bus service is. ADA fares are \$3.00. Pace has reported that there is minimal ridership on the ADA service (less than 4 riders a day); many riders choose to ride the MCRide service instead.

³² Metra Systemwide 2015 parking data

F. Specialized Transportation Services

In addition to the MCRide program and the fixed route services provided by Pace, there are a few township, non-profit, or social service agencies that also provide paratransit services for their clients. These specialized services are shown in Table 12. They provide service during various hours and locations. Two of the services—Senior Services Associates (SSA) and Senior Care Volunteer Network—rely on volunteer drivers.

The most extensive of these services is the Algonquin County Senior Bus which operates from 7:00 AM and runs until 4:00 PM, Monday through Friday mostly within the township.

TABLE 12: Specialized Transportation Service

Service Name	Service Area	Eligibility
Advocate Good Shepherd Courtesy Van	Zip codes 60012, 60013, 60014, 60042, 60050, 60051, 60156 and 60102.	Patients of Advocate Good Shepherd Hospital outpatient locations
Algonquin Township Senior Bus	Algonquin Township	Seniors and disabled township residents
Centegra Patient Express	countywide	Centegra Health Systems patients.
Family Alliance Transportation	countywide	Clients of day health services
Northern Illinois Special Recreation Association	countywide	Participants in NISRA programs
Pioneer Center and PADS Transportation	varies	Clients
Richmond Township Senior Bus	varies	Residents over 50 in Richmond and Burton Townships
Senior Care Volunteer Network	countywide	Over 60
Senior Services Associates	McHenry Township	Over 60
Veterans Assistance Commission	countywide	Honorably discharged veterans going to Captain James A. Lovell Federal Health Care Center (North Chicago)

G. Nearby Demand Response Transportation Services

Besides the ability to connect to other fixed routes in Lake County (via Route 806 and 809) and Kane County (via Route 550), there are six demand response service systems that border McHenry County, five of which serve all riders (general public). These systems are mentioned in this report because they could serve as potential connections at a county border to allow for McHenry County residents to make transfers from MCRide to these systems to continue their trip outside McHenry County.

Ride Lake County West is operated by Pace and serves those in the six northwestern-most Lake County townships. Service operates from 5:30 AM to 6:45 PM weekdays only and costs between \$3.00 and \$6.00, depending on the type of rider and distance traveled. MCRide makes timed connections with Ride Lake County West in Island Lake, Lakemoor, and Fox Lake.

Ride in Kane operates in one adjacent township (Dundee). Riders must live in Kane County and be registered with a local sponsor to use the service. The service is a curb to curb bus or taxi service for seniors and disabled individuals. Ride in Kane operates 24 hours a day, 365 days a year. The current cash fare is \$4.00 for the first 10 miles of a trip and \$1.50 per each additional mile over 10 miles.

Wal-to-Wal Dial-a-Ride serves riders over the state line in Walworth County, WI, north of McHenry County. Service operates weekdays 6:00 AM to 7:00 PM and on Saturdays from 7:00 AM to 5:30 PM. This service does not cross county boundaries.

Boone County Council on Aging runs a general public demand response service in its namesake county. Fares are \$1.00 to \$2.00 and service is available from 7:45 AM to 4:30 PM on weekdays. They will take their residents across county boundaries, making many daily trips into Rockford. The Council has indicated that their ridership has expressed an interest in connecting to Metra in Harvard.

TransVAC operates a general public demand response service in DeKalb County and will cross county lines to take their riders as far as Chicago for medical appointments only. Their fare is \$1.50 and they operate from 7:00 AM to 11:00 PM Monday through Thursday and 7:00 AM to 9:00 PM on Fridays.

9. Key Takeaways

The information in the *Existing and Future Conditions Report* will be used to formulate service recommendations. The following are some key takeaways from this report:

- With the exception of a couple of Metra stations, fixed route transit ridership in the county (Metra and Pace) has declined in the last six years, while MCRide ridership has increased
- Less than 10 percent of riders in the county use the bus as a transit mode (only two percent of those use fixed route)
- The strongest commuting flows are out of county in the morning and into the county in the evening (i.e. the “traditional commute”)
- There are few transfers between modes (Metra, Pace, MCRide) in the county
- Of the demographic groups with the highest propensity to use transit, minorities are the most numerous in the county
- The county is somewhat diverse with Hispanics making up the highest percentage of minorities (about 12 percent); this population lives throughout the county
- There are only a few block groups with a high transit demand index; these block groups tend to be concentrated in the southeast part of the county, although there are pockets of high demand in Woodstock and Harvard
- Most of McHenry County’s land area remains agricultural and those areas are expected to remain the same in the in the future
- The highest population growth by 2040 will be along the Illinois Route 47 corridor north of Huntley, and near Wonder Lake and McCullom Lake along Illinois Route 120
- The county’s demographic trend has changed since the last Transit Plan Update, with declines in the age 25 to 40 population and large increases in the 65 and older population
- The challenge going forward is introduce more innovative transit solutions that better match McHenry’s unique land use, demographic, and employment profile