McHenry County, Illinois

TRANSIT COMPONENT

MCHENRY COUNTY 2040 TRANSPORTATION PLAN

SERVICE RECOMMENDATIONS AND IMPLEMENTATION REPORT

June 2013

Acknowledgements

The success of this Transit Component of the McHenry County 2040 Transportation Plan is made possible only through the concerted and sustained efforts, input and insights of the residents, business and property owners, representatives of the RTA, Pace, Metra, IDOT and representatives of McHenry County. Their effort in the process is appreciated.

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Table of Contents

I. Introduction 4
II. Analysis of Existing Fixed Route Bus Service 5
A. Introduction 5
B. Route 806 6
C. Route 807 10
D. Route 808 12
E. Midday Services 14
III. Short Term Service Strategies 16
A. Strategies for Restructuring Existing Service 16
B. Alternatives for New Service 23
IV. Evaluation of Service Alternatives 37
A. Existing Services 37
B. Short Term Service Strategies 38
C. Evaluation of Alternatives 40
V. Long Term Service Strategies 43
A. Metra Services 43
B. Proposed Fixed Route Bus Services 44
C. Proposed Transit Centers 47
VI. Transit Friendly Infrastructure 50
VII. Transit Access Along Randall Road 52
A. Existing Conditions 52
B. Phase I Improvements 52
C. Pedestrian/Bicycle Infrastructure 53
D. Existing Deficiencies 53
E. Transit Stop Criteria for Randall Road 54
F. Proposed Transit Stop Locations 55
VIII. Access Improvements for Existing Routes 68
A. Route 806 Access Improvements 68
B. Route 807 Access Improvements 76
C. Route 808 Access Improvements 78

IX. Implementation and Funding 80
A. Implementation Tasks 80
B. Descriptions of Potential Funding Sources 85
C. Conclusion 88
Appendix A - Route Schedules 89

I. Introduction

This report details the Short Term and Long Term Service Strategies and the Implementation Plan for the McHenry County 2040 Transit Plan. The service strategies are based on previous information that has been developed for this study. Background data can be found in the *Existing Conditions Report (January 2012),* the *Fixed Route Service Demand Memo (June 2012)* and the *Service Strategies Report (July 2012).*

The *Existing Conditions Report* detailed important data on socio-economic conditions, existing and proposed land use, travel patterns, major employers, housing forecasts, information on transit dependent populations, and roadway conditions. It also provided information on existing Pace fixed route bus service, Metra commuter rail service and the various dial-a-ride services offered throughout the County. This information provided the background to help identify the challenges of past and future changes in the County that can be addressed through transportation improvements.

The *Fixed Route Service Demand Memo* started identifying the way additional transit services could address the County's needs in the future. The information that was presented in the *Fixed Route Service Demand Memo* identified transit needs by reviewing the RTA's Transit Demand Index (TDI), public input received to date, and ridership and operating characteristics of Pace fixed routes 806, 807, and 808. This information was used to identify where there are possible inefficiencies in service, determined areas of potential new service and provided an approach and strategy in achieving better transit services, as reflected in the *Service Strategies Report.*

This report, *Service Recommendations and Implementation Report,* identifies the short term and long term service recommendations and provides implementation strategies. The Short Term Service Strategies are concentrated on service improvements for the next 7 years (i.e. 2012 to 2019). The recommendations include service changes to Pace Routes 806-807-808, as well as new services in areas of the County that has experienced significant growth and development. The Long Term Service Strategies discuss transit corridors in the long term (2019 to 2040), reflecting the findings in the previous *McHenry County Transit Plan,* adopted in 2004, and updating recommendations as appropriate.

II. Analysis of Existing Fixed Route Bus Service

A. Introduction

As described in the *Existing Conditions Report,* McHenry County is a large and diverse county. While there are areas with some concentration of residential, commercial, or institutional activity (especially in the town centers), both the population and built environment are relatively dispersed. Land uses are range from agricultural to more densely suburban characteristics. Fixed route bus transit service is provided by Pace Routes 806, 807, and 808. These are relatively long routes, operating between the larger communities in the County, providing service to the Metra Union Pacific North West (UP-NW) Line and the Metra Milwaukee District North (MD-N) Line stations. Service on the fixed routes is only operated on weekdays, in peak hours. These routes have been in operation since the 1970s and have had no significant modifications to their routing or service since that time.

There are major portions of McHenry County that have no access to fixed route bus service, Metra commuter rail service, or even general public dial-a-ride service. These underserved areas are places where there was very little activity even fifteen years ago but are continuing to grow and becoming centers of activity, such as in the Algonquin, Crystal Lake, and Lake in the Hills areas. However, there are challenges for providing fixed route bus service in McHenry County. While there are pockets of concentration and areas of high activity, there are still long stretches of roads through farmland with few residential uses or other types of activity along them.

Additionally, the auto-oriented pattern of development most commonly followed over the years is one where new construction is most often located away from established community centers. This pattern, the opposite of transit-oriented development (TOD), causes various issues. Density is reduced, making it harder to serve by transit. Even if a building is located along a major route, new buildings are typically set very far back from the street with large surface parking lots between the roadway and the front door of the building. If the bus stays on the main arterial roadway, passengers must walk across the full length of the parking lot to get to their destination. If the bus deviates through the parking lot to the front door of the building, it often adds significant time delay to the schedule, discouraging through riders and increasing operating costs.

In McHenry County, the areas served by fixed route bus service, are not generating significant ridership. Performance statistics for each route is displayed in Table 1. Performance statistics for an average Pace route classified as "suburban link" services (the McHenry routes are considered "suburban link" services), also shown in Table 1, show that average daily ridership is 533 and there are approximately 20 passengers per revenue hours. Given the dispersed origins and destinations in McHenry County, it is not surprising that performance of Routes 808,807 and 808 is lower than is typical for fixed route transit in other parts of Pace's service area.

The results of a McHenry County Transit Survey show that transit service is providing mobility for a great number of people. The vast majority of riders would not be able to get to their jobs, schools, medical appointments, or social engagements because they are unable to drive because they are too old, too young, have a disability, or cannot afford a car. Passenger surveys indicate that they generally prefer buses operating with fixed routes and schedules over dial-a-ride. Fixed route service also has the potential to be more efficient, carrying more passengers per vehicle hour than dial-a-ride.

Table 1
Performance Statistics for McHenry County Fixed Route Service -Typical Performance Per Weekday[1]

ROUTE	NAME	Typical Daily Ridership	Revenue Hours*	Passengers Per Rev. Hr.	Vehicle Hours	Passengers Per Veh. Hr.	Revenue Miles	Passengers per Rev. Mile	Vehicle Miles	Passengers per Veh. Mile
806	Crystal Lake-Fox Lake	62	12.01	5.16	15.22	4.07	292.4	0.21	366.00	0.17
807	Woodstock-McHenry	52	10.10	5.15	13.12	3.96	224.6	0.23	278.20	0.19
808	Crystal Lake-Harvard	80	13.13	6.09	17.82	4.49	295.0	0.27	413.40	0.19
n/a	System Average for "Suburban Link" Route**	533	u/k	19.8	u/k	u/k	u/k	u/k	u/k	u/k
	Overall	**194**	**35.24**	**5.51**	**46.16**	**4.20**	**812**	**0.24**	**1057.6**	**0.18**

*Including scheduled layover
**Statistics shown are from an average of 30 Pace routes classified as suburban link routes; routes vary in terms of length and population of service area. Some statistics are not available.

Sections B, C and D describe the profile of each of the existing routes. Average weekday ridership from 1998-2011 is presented for each route in order to see ridership patterns over the years. In order to determine what part of the route is most productive, September 2011 counts of boarding passengers on each route at each scheduled stop were analyzed. It is assumed that the ridership pattern during this reporting period is the typical ridership pattern along the route for other months during the year. Route maps for each route are provided in each section. Schedule information is provided in the Appendix.

B. Route 806

1. Route Description

Pace Route 806 travels between the Crystal Lake Metra Station on the Union Pacific Northwest (UP-NW) Line to Fox Lake (the Metra MD-N Line Station and the Town Centre) as shown in the route map in Figure 1. There are three northbound trips in the morning and two in the afternoon. There are four southbound trips in the morning (one only to the old McHenry City Hall) and four in the afternoon (one of these originates at McHenry). These trips vary in their destinations as well. Major destinations along the route include the three cities (Crystal Lake, McHenry, and Fox Lake), Pioneer Center (a sheltered workshop located south of McHenry), and Centegra Medical Center. There are three route variations that take certain trips to points not on the regular route and one variation used by two southbound trips that bypass part of the regular route to save travel time. During the midday, customers may request service through the McHenry County Dial-a-Ride program (MCRide). Average daily ridership has been quite stable but is the lowest of the three fixed routes; see Table 2 below.

[1] Typical daily ridership for the McHenry County fixed route service is derived from the boarding counts taken in September, 2011. Performance statistics are calculated based on hours and miles data provided by Pace.

Table 2: Route 806 Average Daily Ridership 1998-2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Average Daily Ridership	55	59	59	57	49	65	57	58	60	59	58	52	53	60

Source: Pace

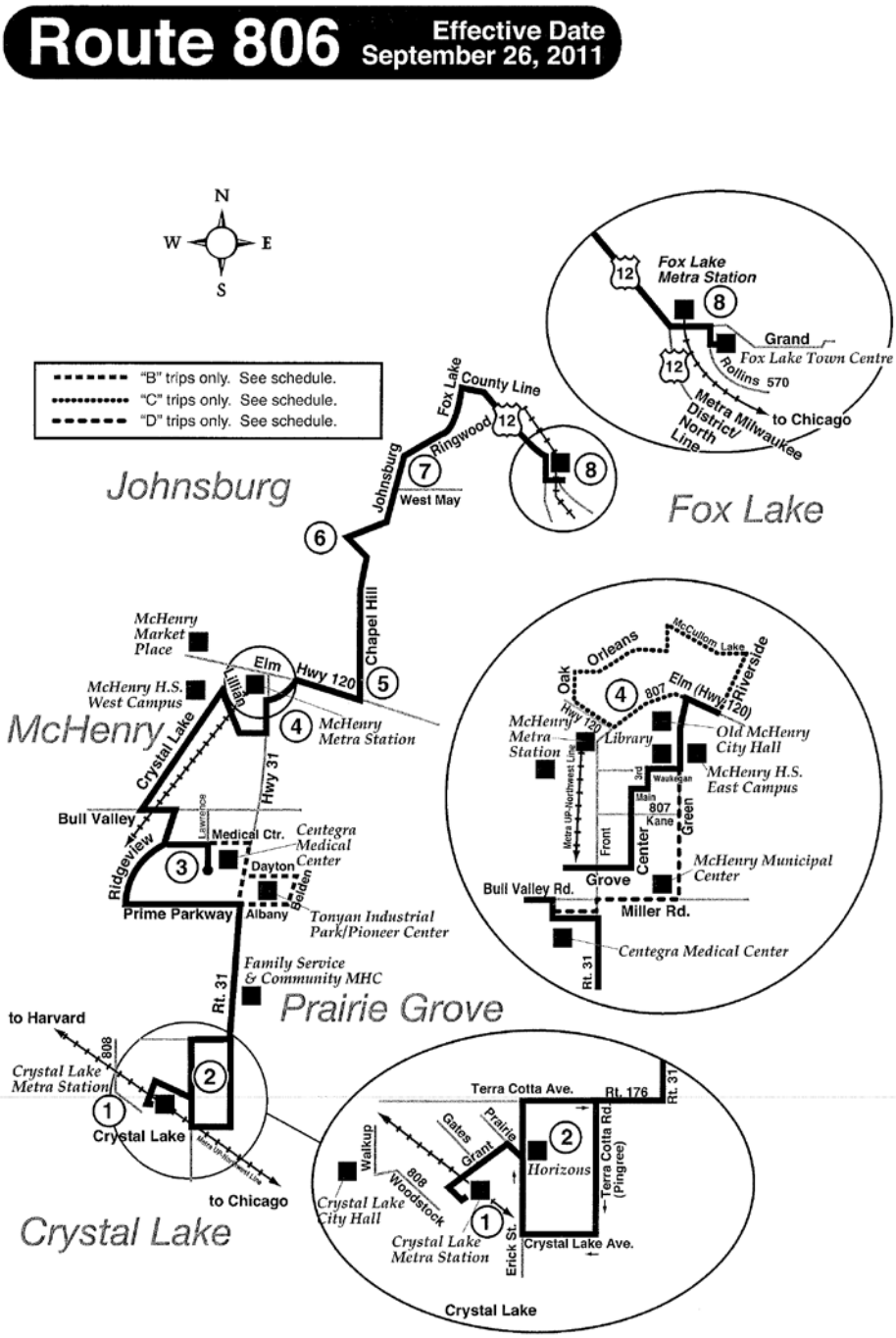

Route 806
Effective Date
September 26, 2011
N
W
E
S
"B" trips only. See schedule.
"C" trips only. See schedule.
"D" trips only. See schedule.
Johnsburg
Fox Lake
McHenry
Prairie Grove
Crystal Lake
Fox Lake Metra Station
Grand
Fox Lake Town Centre
Rollins
570
Metra Milwaukee District/ North Line
to Chicago
Fox Lake
County Line
Ringwood
Johnsburg
West May
Chapel Hill
McHenry Market Place
McHenry H.S. West Campus
Elm
Hwy 120
Lillian
McHenry Metra Station
Crystal Lake
Hwy 31
Bull Valley
Ridgeview
Medical Ctr.
Centegra Medical Center
Dayton
Prime Parkway
Albany
Belden
Tonyan Industrial Park/Pioneer Center
Family Service & Community MHC
Rt. 31
to Harvard
808
Crystal Lake Metra Station
Crystal Lake
to Chicago
Orleans
McCullom Lake
Riverside
Oak
807
Elm (Hwy 120)
McHenry Metra Station
Library
Old McHenry City Hall
McHenry H.S. East Campus
Waukegan
Main
Kane
Green
Front
Center
Grove
McHenry Municipal Center
Bull Valley Rd.
Miller Rd.
Centegra Medical Center
Rt. 31
Terra Cotta Ave.
Rt. 176
Rt. 31
Gates
Prairie
Grant
Horizons
Terra Cotta Rd (Pingree)
Walkup
808
Woodstock
Crystal Lake City Hall
Crystal Lake Metra Station
Erick St.
Crystal Lake Ave.
Crystal Lake

Figure 1

The number of riders boarding in each route segment for both AM and PM services for the month of September 2011 was collected and analyzed. Total monthly boardings for each stop are listed in Table 3. Locations where passengers alighted from the bus are not recorded by the driver.

Table 3: Average Daily Boardings by Trip and Segment for Route 806 (September 2011)

Weekday Northbound

Departure Time	CL Metra	Pioneer Center	Centegra Med. Ctr.	Old McHenry City Hall	Hwy 120/Chapel Hill	Johnsburg/ Chapel Hill	Johnsburg/ West May	**Trip Total**
5:55 AM	0	-	0	0.3	0.65	0	0	**0.9**
7:30	12.1	0	0	0.3	0.15	0.1	0.2	**12.8**
8:15	10.7	0	0.1	0.3	0	0	0.1	**11.0**
4:10 PM	5.1	0	0.5	0.9	0	0	0.1	**6.6**
5:05	1.2	-	0	0.7	0.1	0	0	**2.0**

Weekday Southbound

Departure Time	Fox Lake Town Centre	Johnsburg/ West May	Johnsburg/Chapel Hill	Hwy 120/Chapel Hill	Old McHenry City Hall	Centegra Med. Ctr.	Pioneer Center	**Trip Total**
6:20 AM	1.6	0.4	0.6	0.15	0.5	0.1	0.1	**3.5**
6:55	0.4	2.9	8.9	3.4	1.1	0.85	0	**17.4**
8:30	0.7	0.7	0.8	0.8	2.3	0.1	-	**5.2**
9:15	0.8	0	0	0	0	0	0	**0.8**
3:30	-	-	-	-	0.4	0	2.1	**2.4**
4:00 PM	0.9	0	0.1	0.3	0.2	1.1	-	**2.0**
5:29	0.3	0	0.1	0	0	0	-	**0.4**

*See Northbound trips 3 for boardings at this location

C. Ridership Analysis

The most heavily used trips are in the morning peak. One trip (the 6:55 AM Southbound) carries over 17 passengers on an average day, productivity much higher than could be achieved by dial-a-ride. All trips carry some riders, although there are a couple that carry less than one person for a daily average; these are mainly at the beginning or end of service and are, essentially, positioning trips, getting the bus to/from the garage. The stop that has the greatest amount of ridership is at/near the Crystal Lake Metra Station.

A few points to supplement the counts came out of discussion with Pace:

- There are more riders getting on at the Crystal Lake Metra Station in the morning than are returning in the afternoon; these are Pioneer Center clients who return at varying times of day, utilizing dial-a-ride or obtain other rides
- The segment of the regular route along Ridgeview and Prime Parkway portion, already skipped on two southbound trips, does not have significant ridership.
- The route has a lengthy deviation via Elm-Oak-Orleans-McCullom Lake-Riverside. It is not clear whether there are any riders on this loop although it serves McHenry Commons, a shopping center.

- There has recently been extensive retail development along the section of Riverside (IL Route 31) north of McHenry, including a new Walmart. A senior center and family mental health center is also located along this section of IL Route 31.

D. Route 807

1. Route Description

Route 807 provides service from Woodstock to McHenry serving destinations such as Woodstock Metra Station, the McHenry County Government Center, and on one trip respectively to the Pioneer Center and Marian Central High School. It operates between the Woodstock Metra UP-NW Line Station and McHenry, terminating at the old McHenry City Hall, as shown in Figure 2. There are two eastbound trips in the morning and two eastbound trips in the afternoon. In the morning, there are three westbound trips, but only one of those trips stops at McHenry Commons. In the afternoon, there are two westbound trips. Route 807 primarily operates via IL Route 120, although it makes a lengthy deviation around Wonder Lake. One trip also stops at the Pioneer Center. Average daily ridership from 1998 to 2011 is reflected in Table 4 below. Ridership on the fixed route portion of the route was collected at each stop for the month of September 2011. Total monthly boardings for each stop are listed in Table 5.

Table 4: Route 807 Average Daily Ridership 1998-2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Average Daily Ridership	87	83	95	89	79	78	68	64	64	69	73	77	67	75

Source: Pace

Table 5: Average Daily Boardings by Timepoint and Run for Route 807 (September 2011)

Weekday Eastbound

Departure Time	Woodstock Metra	McHenry Co. Courthouse	Marian Central HS	Sunrise Ridge/Thompson/ Wondermere	Wonder Lake PO	McHenry Market Place	McHenry HWY 120/CL Road	McHenry Commons	**Trip Totals**
5:45 AM	0.5	0	0	0.9	0	0	0	-	**1.4**
7:25	18.7	1.2	0	1.9	0.7	0	-	2	**22.5**
2:30 PM	3.4	0.1	3.1	0.3	0.1	0.6	0	-	**7.5**
3:30	1.8	0.5	-	0	0	0.1	0	-	**2.4**

Weekday Westbound

Departure Time	Old McHenry City Hall	Pioneer Center	McHenry Commons	McHenry HWY 120/CL Road	McHenry Market Place	Wonder Lake PO	Sunrise Ridge/Thompson/ Wondermere	McHenry Co. Courthouse	**Trip Totals**
6:00 AM	0.1	-	-	0	0.1	0	0.4	0.2	**0.7**
7:00	5.2	-	-	0.4	0	0.1	0.8	0	**6.4**
8:41	0.6	-	0.2	-	0.5	0.2	0.4	0.1	**1.4**
3:40 PM	1.1	5.8	1.3	0.2	0.5	0.1	0.1	0	**8.9**
4:34	0.3	-	0.3	0	0.4	0	0	0	**1.1**

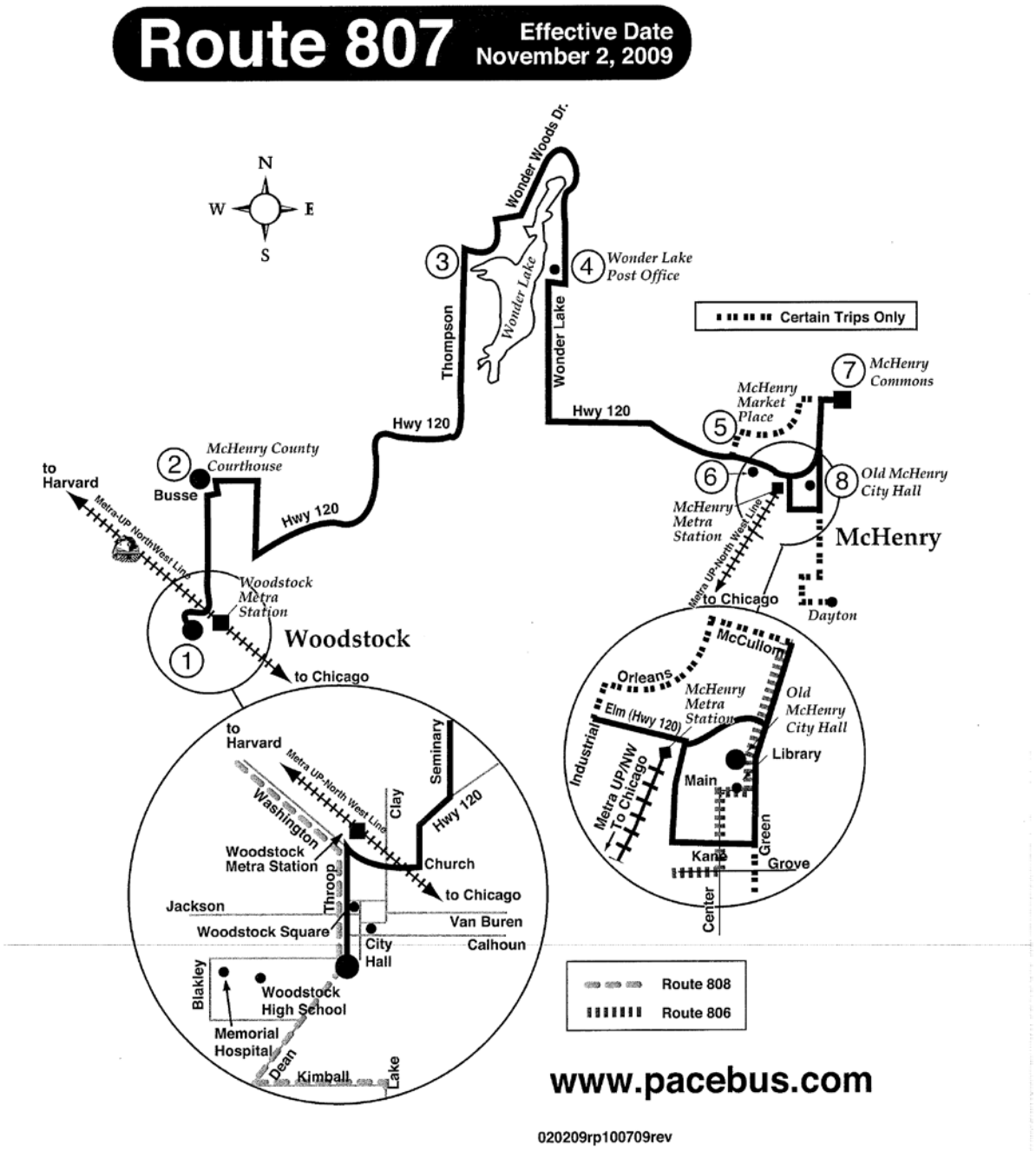

Route 807
Effective Date
November 2, 2009
N
W
E
S
Wonder Woods Dr.
Wonder Lake
Wonder Lake Post Office
Thompson
Wonder Lake
Hwy 120
Hwy 120
Hwy 120
Certain Trips Only
McHenry Commons
McHenry Market Place
McHenry County Courthouse
Busse
to Harvard
Metra-UP NorthWest Line
Old McHenry City Hall
McHenry Metra Station
McHenry
Woodstock Metra Station
Woodstock
to Chicago
to Chicago
Dayton
McCullom
Orleans
McHenry Metra Station
Old McHenry City Hall
Elm (Hwy 120)
Industrial
Library
Metra UP/NW To Chicago
Main
Kane
Green
Grove
Center
to Harvard
Metra UP-North West Line
Seminary
Clay
Hwy 120
Washington
Woodstock Metra Station
Church
to Chicago
Throop
Jackson
Van Buren
Woodstock Square
Calhoun
City Hall
Blakley
Woodstock High School
Memorial Hospital
Dean
Kimball
Lake
Route 808
Route 806
www.pacebus.com
020209rp100709rev

Figure 2

2. Ridership Analysis

Route 807 is designed to provide service between Woodstock, Wonder Lake and McHenry. These areas have some concentrations of residences, commercial, institutional, and offices locations, however, the distance between these areas is relatively long. There do not appear to be any significant portions of the route or stops that generate concentrations of ridership. There is negligible boarding activity on the lengthy deviation via Wonder Lake. The most heavily used trip is one eastbound trip in the morning peak which averages over 22 passengers. This trip is extended to the Pioneer Center and it is understood that most of the riders on this trip are going there. All trips carry some riders, although there are several that carry an average of about one passenger per day. The stop that has the greatest amount of boardings is at/near the Woodstock Metra Station, followed by the downtown McHenry area. The routing in downtown McHenry is complex and difficult for a passenger to understand. It is also suspected that there is limited ridership on the trips via the long loop via Orleans.

E. Route 808

1. Route Description

Route 808 operates between Harvard (originating at the Harvard Community Hospital), the Woodstock Metra Station and the Crystal Lake Metra Station (see Figure 3). The route parallels the UP-NW Metra line and serves McHenry County College. There are three eastbound trips in the morning with one only to Woodstock. There are four eastbound trips in the afternoon, one originating in Woodstock. Westbound, there are three morning trips with the last one terminating in Woodstock. In the afternoon there are four complete westbound trips. There are route and schedule variations in both morning and afternoon, both westbound and eastbound, based on serving Marian Central High School, about a mile off the regular route. In addition, the schedule has a note on the timetable saying that the bus will deviate to Centegra Memorial Medical Center, (set back about 0.1 mile from IL Route 14) in response to a request by phone call to the Pace dispatcher (and, presumably on request from a passenger to the driver to be dropped off there). The major destinations along the route are the downtown stops in the three cities, McHenry County College, and the Hospital. Average daily ridership from 1998 to 2011 is reflected in Table 6 below.

Boarding rider counts were collected by route segment for each day for the month of September 2011. Total monthly boardings for each stop are listed in Table 7.

Table 6: Route 808 Average Daily Ridership 1998-2011

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Average Daily Ridership	93	94	83	79	71	80	62	62	67	61	69	62	66	74

Source: Pace

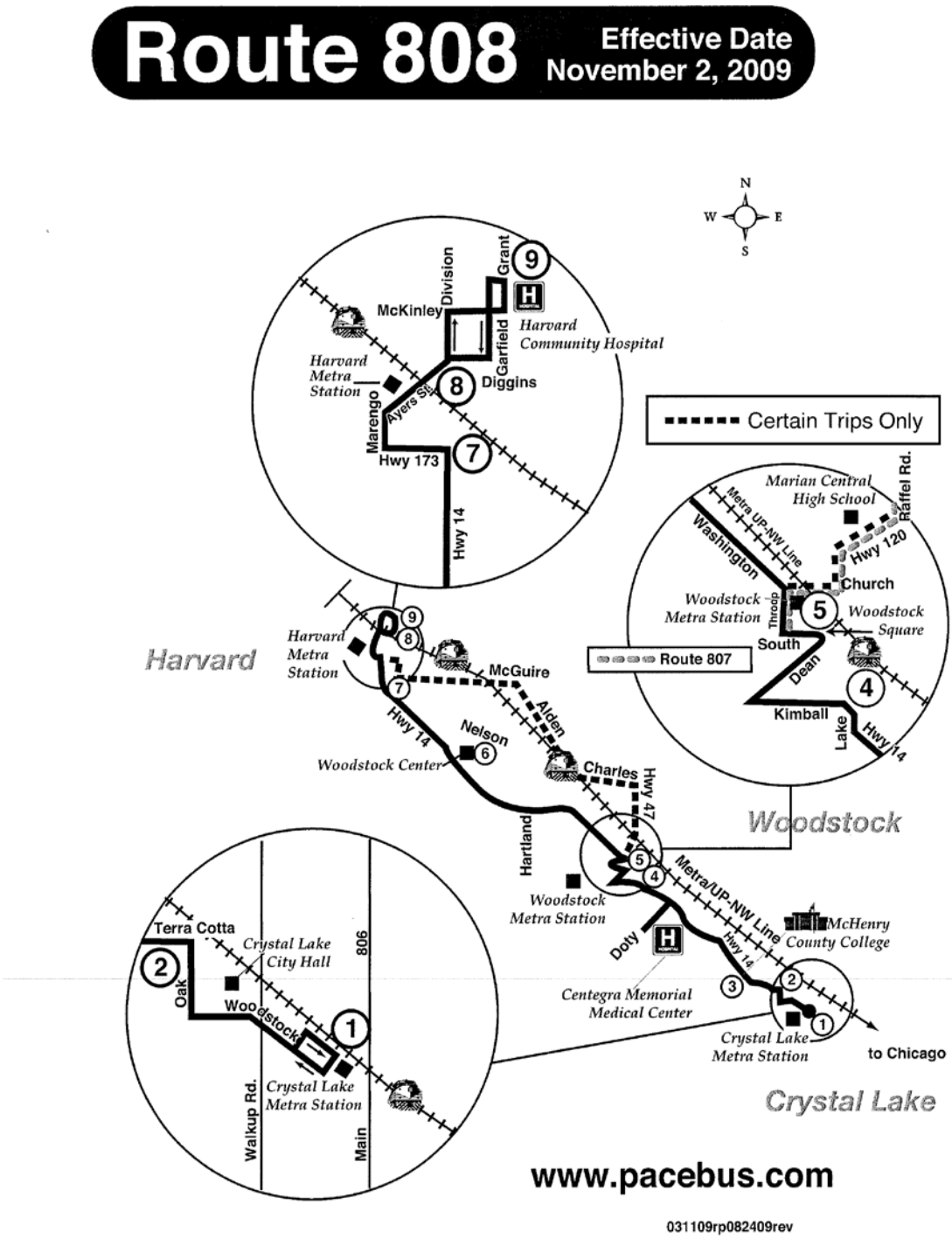

Route 808
Effective Date
November 2, 2009
N
W
E
S
Certain Trips Only
Route 807
Harvard
Woodstock
Crystal Lake
McKinley
Division
Grant
Garfield
Harvard Community Hospital
Harvard Metra Station
Ayers St
Diggins
Marengo
Hwy 173
Hwy 14
Harvard Metra Station
McGuire
Alden
Nelson
Woodstock Center
Charles
Hwy 47
Hartland
Woodstock Metra Station
Doty
Centegra Memorial Medical Center
Metra/UP-NW Line
McHenry County College
Crystal Lake Metra Station
to Chicago
Marian Central High School
Raffel Rd.
Metra UP-NW Line
Washington
Hwy 120
Church
Woodstock Metra Station
Throop
Woodstock Square
South
Dean
Kimball
Lake
Terra Cotta
Crystal Lake City Hall
806
Oak
Woodstock
Crystal Lake Metra Station
Walkup Rd.
Main
www.pacebus.com
031109rp082409rev

Figure 3

Table 7: Average Daily Boardings by Segment and Trip for Route 808 (September 2011)

Weekday Eastbound

Departure Time	Harvard Comm. Hospital	Harvard Ayer/Diggins	Harvard Hwy 173/14	Harvard Woodstock Center	Woodstock Metra Station	Marian Central HS	Woodstock Lake/Hwy 14	McHenry Co. College	CL Terra Cotta/Oak	**Trip Totals**
6:22 AM	3	0.2	0	0	4.8	-	2.4	0.1	0.6	**11**
7:23	1.9	7.9	0	0	6.7	0	0.6	0.1	0	**17.3**
8:57	0.2	1.5	0.1	0	0	-	-	-	-	**2**
2:30PM	-	-	-	-	3.1	0.2	0	1.8	0	**5.1**
3:00	2.3	0	0	0	1.3	-	0	0.7		**4.3**
4:08	0.2	0.8	0	0	1.3	-	0	0.6	0	**3.2**
5:20	1.7	0	0	0	0.3	-	0	0.5	0.1	**2.5**

Weekday Westbound

Departure Time	Metra CL Station	CL Terra Cotta/ Oak	McHenry Co. College	Woodstock Lake/Hwy 14	Woodstock Metra Station	Marian Central HS	Harvard Woodstock Center	Harvard Hwy 173/14	Harvard Ayer/Diggins	**Trip Totals**
6:30AM	1.6	0.1	0	1.7	2.1	-	0.2	0	1.5	**7.2**
7:30	1.1	0.9	0.1	0	0.7	0	0	0	0.1	**3**
8:40	2.3	0.4	0.1	0.2	-	-	-	-	-	**2.9**
2:00PM	2.8	0	3.2	0.4	0.7	2.3	0	0	0	**9.4**
3:03	1.3	0	2.1	0	1	-	0	0	0	**4.4**
4:10	3.2	0	2.2	0	2	-	0	0.1	0	**7.5**
5:05	1.2	0	2.4	0.3	0.8	-	0	0	0	**4.6**

2. Route 808 Ridership Analysis

The only trips that carry more than 10 passengers are the first two morning trips out of Harvard, with boardings split between Harvard and Woodstock. These trips are paralleled by Metra service which is much faster, and more frequent, but has distance-based fares that are higher than the Pace flat fixed route fares (i.e. $5.25 for Metra between Crystal Lake and McHenry versus $1.75 for Pace for a full adult fare; reduced fare for Metra is $2.50 and Pace $.85). The westbound morning service does not have as many riders as the a.m. east bound service; the bus leaving Crystal Lake Station at 6:30 a.m. has the most ridership along the rout, i.e. 7 riders. The stop which has the most significant boardings in the eastbound direction is downtown Woodstock. Westbound in the afternoon, McHenry County College is the most heavily used single stop. The diversions to serve Marian Central High School do not attract many riders; in the afternoon only an average of 0.2 riders per day board the southbound trip and 2.3 riders board the northbound trip. There is no record of anyone taking advantage of the diversion to Centegra Memorial Medical Center.

F. Midday Services

In the off-peak commuting times, Pace substitutes general public dial-a-ride service for the fixed routes in the area with a service called Midday Intercommunity Service. This type of service helps meet some of the unmet demand for transit service in the County. The service area is similar to the area served by the fixed route buses. The Midday Intercommunity Service area is: between Crystal Lake and Spring Hill Mall, including Algonquin and Lake in the Hills (east of Frank Road only); between Crystal Lake and McHenry; between Woodstock, McHenry, Wonder Lake and Crystal Lake; and between Woodstock and Crystal Lake.

Ridership statistics for this service were reflected in the *Existing Conditions Report.* Monthly ridership was relatively low in 2010 ranging from 675 riders in May to 979 in January. Ridership in 2011 was higher, ranging from 946 in February to 2047 in August.

In addition to the Midday Intercommunity Service, McHenry County, on February 1, 2012 established MCRide dial-a-ride service. MCRide created a coordinated dial-a-ride service for the general public with a service area that eliminated many of the geographic barriers to existing services. It also extended service hours (6 AM to 7 PM on weekdays) and the County's first Saturday transit service, from 9 AM to 5PM. MCRide service is in operation in the areas where the peak period fixed route service operates. The County and Pace are currently in discussions to incorporate the Midday Intercommunity with MCRide.

McRide ridership information is located in the *Existing Conditions Report.*

III. Short Term Service Strategies

A. Strategies for Restructuring Existing Service

Over time, the McHenry County fixed route service has developed a number of route deviations. The timetable for each of the three routes has numerous footnotes explaining variations. Nearly every trip has at least one deviation from the basic route. Most of them cause the bus to be off a portion of the basic route and as a result it is very difficult for a passenger to determine whether or not a particular variation will affect where they need to stand to board a bus. The deviations also tend to slow the trip for riders traveling on more of a through route. With the establishment of MCRide, the all-day general public dial-a-ride service providing a backup, it is recommended that each of the route deviations in the schedule be studied to determine whether there is sufficient use to continue the deviation. Some deviations may have attracted enough riders to justify being made a formal part of the route, with their own timepoint in the timetable. The September 2011 counts are not detailed enough to allow this determination to be made with certainty until additional ridership counts can be made.

Preliminary recommendations are presented below and based on the information detailed in Chapter II of this report. A table follows each recommendation detailing service hours, potential ridership, costs of service and revenue estimates.

Any cost estimate for operating expenses on either revisions to the existing routes or new services proposed in part B in this chapter are based on the daily operating costs shown in Pace's Quarterly Operating report. Routes 806, 807, and 808 in McHenry County are classified by Pace as "Suburban Link" services according to information provided on the Regional Transportation Authority Mapping and Statistics (RTAMS) website. Average costs for Suburban Link services were used to estimate financial impacts of proposed new recommendations.

1. Route 806

Except for the number of riders getting on at the Crystal Lake Metra Station, the route picks up very few people. In order to capture additional ridership a few options to restructure the route are proposed as follows and shown on Figure 4:

- The amount of retail on IL Route 31 north of McHenry has greatly expanded in recent years and the route should be shifted from IL Route 120 and Chapel Hill, where ridership is very low, to IL Route 31/Richmond Road (starting at Elm Street on the south) and Johnsburg Road. The large new Walmart store along this route is set significantly back from the main road and may require routing onto the site to properly serve it. This revised routing would also serve the township senior center, other Big Box stores, and a social service center serving families. This section of IL Route 31 is significantly more populated than the existing Chapel Hill corridor.
- The lengthy deviations on one northbound morning and southbound afternoon trip via Elm-Oak-Orleans-McCullom Lake-Riverside should be discontinued and be served by dial-a-ride service.
- The segment of the regular route along Ridgeview and Prime Parkway portion, already skipped on two southbound trips, does not have significant ridership and should be shifted to IL Route 31.
- The counts do not reflect the significant ridership to/from the Pioneer Center. The Pioneer Center should be added as a timepoint on the schedule.

The primary change from Chapel Hill Road to IL Route 31 will save approximately 0.5 mile of travel. As stated above, the average cost for Pace "Suburban Link" services was used to estimate financial impacts of the proposed recommendation; the average cost per vehicle mile of similar Suburban Link peak period Pace routes is $3.52. Across all daily trips, vehicle miles will be reduced by 5.5 miles per day. Thus this change will reduce operating costs by approximately $20 per day and $5,000 per year as shown in Table 8. No additional vehicles will be needed for this route modification. It is anticipated that the more direct service to new retail areas along Route 31 will lead to an increase in ridership on the route of about 10%; about 7 riders per day or 1,800 per year.

Table 8: Route 806 Modified Service Characteristics

Service Area	Crystal Lake, Prairie Grove, McHenry, Johnsburg, Spring Grove, Fox Lake Recommendations for some routing changes
Days of Service	No change in days of service
Service Span	No change in service span
Frequency	No change in frequency
Vehicles	No change in number of vehicles
Estimated Operating Cost Savings Annually	$5,000/year
Estimated Capital Cost	No change
Estimated Ridership Increase Annually	1,800/year
Estimated Fare Revenue Increase Annually	$2,000/year
Strengths	Provides service to additional key destinations on IL Route 31(i.e. Walmart, Big Box stores,senior center) Cost savings of $5,000/year
Weaknesses	Routing and schedule changes are not significant enough to greatly increase ridership

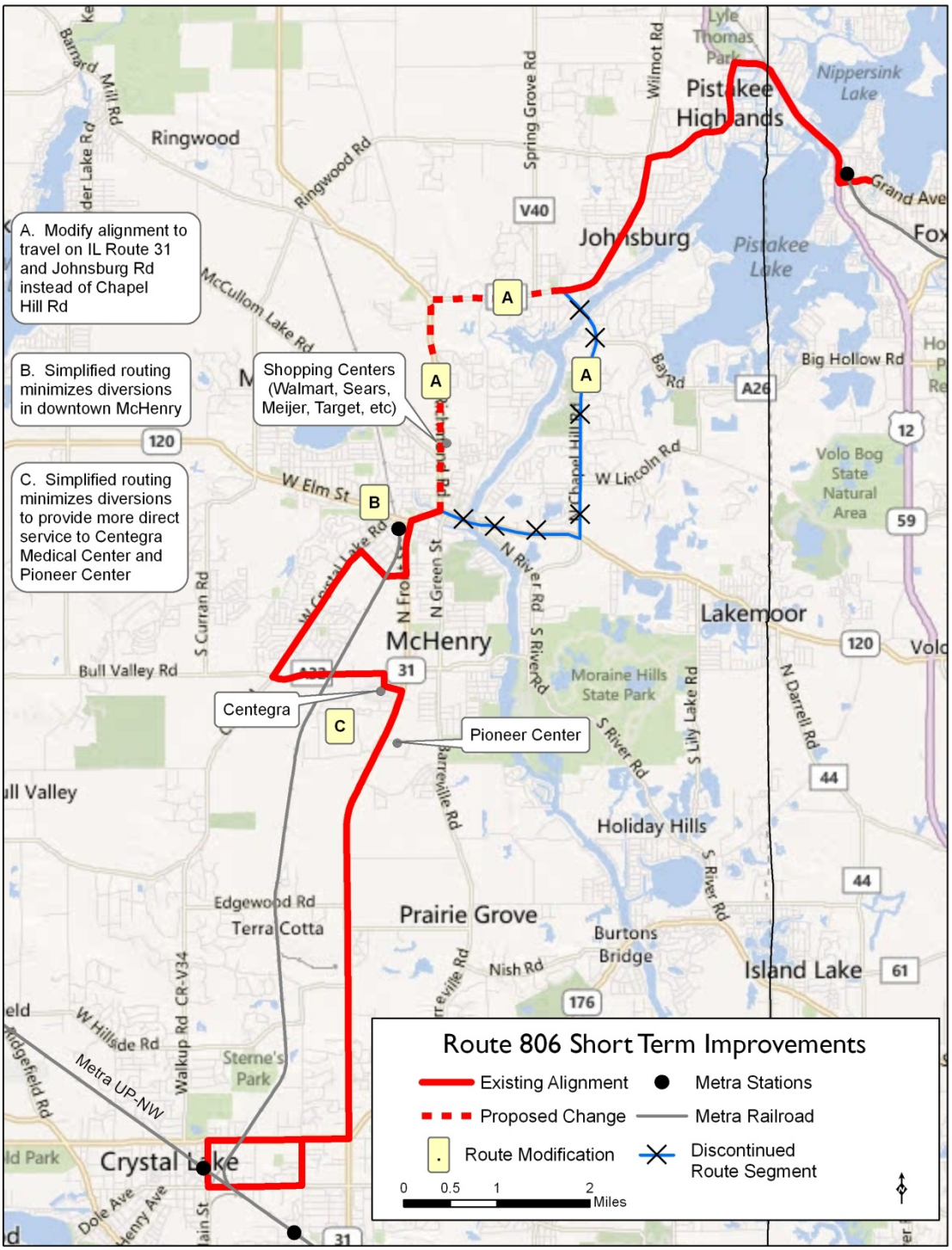

A. Modify alignment to travel on IL Route 31 and Johnsburg Rd instead of Chapel Hill Rd
B. Simplified routing minimizes diversions in downtown McHenry
C. Simplified routing minimizes diversions to provide more direct service to Centegra Medical Center and Pioneer Center
Shopping Centers (Walmart, Sears, Meijer, Target, etc)
Centegra
Pioneer Center
Route 806 Short Term Improvements
Existing Alignment
Proposed Change
Route Modification
Metra Stations
Metra Railroad
Discontinued Route Segment
0 0.5 1 2 Miles
Ringwood
Johnsburg
McHenry
Lakemoor
Prairie Grove
Holiday Hills
Island Lake
Crystal Lake
Pistakee Highlands
Pistakee Lake
Nippersink Lake
Volo Bog State Natural Area
Moraine Hills State Park
Sterne's Park
Terra Cotta
Burtons Bridge
Metra UP-NW
Lyle Thomas Park
Grand Ave
Big Hollow Rd
W Elm St
W Lincoln Rd
Bull Valley Rd
Ringwood Rd
Spring Grove Rd
Wilmot Rd
McCullom Lake Rd
Barnard Mill Rd
S Curran Rd
N Green St
N River Rd
S River Rd
S Lily Lake Rd
N Darrell Rd
Barreville Rd
Nish Rd
Edgewood Rd
W Hillside Rd
Walkup Rd
CR-V34
Dole Ave
Henry Ave
Bay Rd
Chapel Hill Rd
V40
A26
120
12
59
44
61
176
31

Figure 4

2. Route 807

Route 807 makes an approximately 10 mile loop around Wonder Lake, an area of lower density single family homes. It also serves the City of McHenry with route deviations which are different on virtually every trip. Recommendations for restructuring Route 807 as shown on Figure 5 include:

- The long diversion via Wonder Lake has very little ridership and it is recommended that it be replaced by Midday Intercommunity dial-a-ride service. The route would operate between Thompson Road and East Wonder Lake Road via IL Route 120 instead of diverting around the lake.
- The routing within the City of McHenry needs to be clarified, simplified, and made more uniform to make the system easier to use. Ridership counts should be analyzed carefully to pick a standard routing which incorporates the best parts of the downtown loop, the Orleans loop, and service to McHenry Commons. Bus stop signs should be installed on the new route. The Pioneer Center will need to continue being served on at least one morning and afternoon trip.

The change in Route 807 to discontinue service around Wonder Lake will save approximately 8.3 miles per trip or 75 miles per day. Travel time for through riders will be reduced by almost 20 minutes and it should be possible to improve connections with Metra trains in Woodstock. Using average cost for similar Pace Suburban Link services, this change will reduce costs of the fixed route service by approximately $260 per day and $65,000 per year. It is not known however, what additional costs will occur on the dial-a-ride service. No vehicles will be saved by this route modification. The faster travel times (resulting from eliminating the Wonder Lake routing), better train connections, and the simplification of the routing within McHenry are expected to result in a net increase in ridership of about 5% (about 727 riders per year, yielding approximately $1,000 in added fare revenue) as shown in Table 9.

Table 9: Route 807 Modified Service Characteristics

Service Area	McHenry, Bull Valley, Woodstock Discontinue service around Wonder Lake
Days of Service	No change in days of service
Service Span	No change in service span
Frequency	No change in frequency
Vehicles	No change in number of vehicles
Estimated Operating Cost Savings Annually	$65,000/year
Estimated Capital Cost	No change
Estimated Ridership Increase Annually	1,000/year
Estimated Fare Revenue Increase Annually	$1,000/year
Strengths	Cost savings of $65,000/year
Weaknesses	Potential loss of fixed route service to existing riders Dial-a-ride resources needed for Wonder Lake area

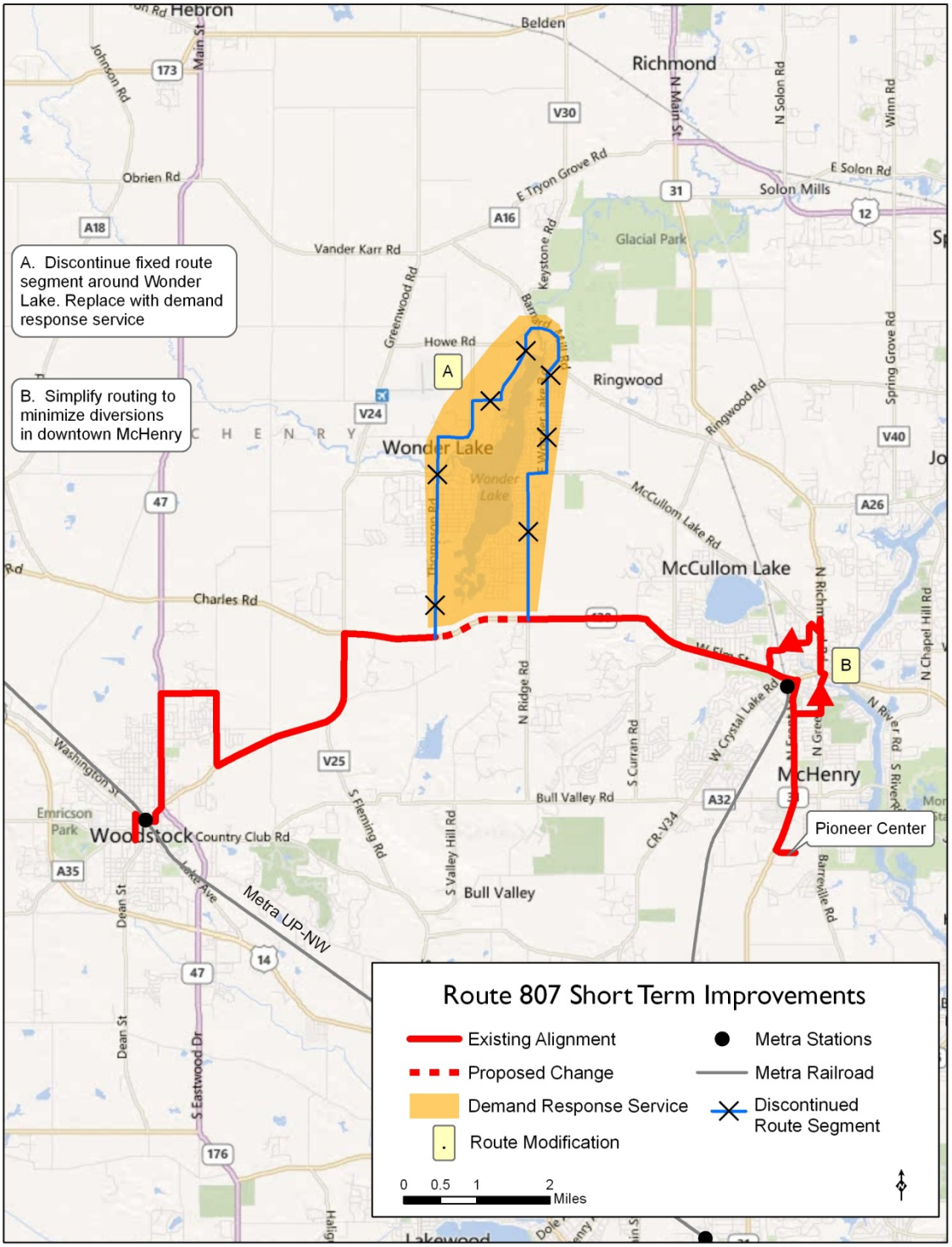

A. Discontinue fixed route segment around Wonder Lake. Replace with demand response service
B. Simplify routing to minimize diversions in downtown McHenry
Hebron
Belden
Richmond
Solon Mills
Glacial Park
Ringwood
Wonder Lake
McCullom Lake
McHenry
Woodstock
Bull Valley
Pioneer Center
Metra UP-NW
Route 807 Short Term Improvements
Existing Alignment
Proposed Change
Demand Response Service
Route Modification
Metra Stations
Metra Railroad
Discontinued Route Segment
0 0.5 1 2 Miles

Figure 5

3. Route 808

Route 808 provides service between Crystal Lake, Woodstock and Harvard. The route travels mainly via US Route 14 to link the three cities. Modifications to Route 808 are below:

- Based on apparent low ridership, it is recommended that the route variations that serve Marian Central High School be discontinued and replaced by Midday Intercommunity dial-a-ride for the occasional users, allowing the timetable to be greatly simplified.
- The mid route layover times at Woodstock in the timetable, some of which are quite long, should be reviewed and reduced or eliminated if appropriate. It is not clear what connections, or other purposes these are now required to serve.
- Diverting all trips via Centegra Medical Center, at least on a trial basis (at least 6 months), should be considered. As an alternative, perhaps a light on the highway activated by the Medical Center, could notify bus drivers of a request to be picked up to travel either via eastbound or westbound.

As modifications to Route 808 are minimal, service characteristics or costs will not change significantly. The greatest impact of these changes will be improved customer friendliness and understanding of the route. There will be no change in the number of vehicles needed. Refer to Figure 6 and Table 10. No specific changes in ridership are projected.

Table 10: Route 808 Modified Service Characteristics

Service Area	Crystal Lake, Harvard, Woodstock Recommendations for some routing changes
Days of Service	No change in days of service
Service Span	No change in service span
Frequency	No change in frequency
Vehicles	No change in number of vehicles
Cost Savings	Negligible
Estimated Ridership Increase Annually	Negligible
Estimated Fare Revenue Increase Annually	Negligible
Strengths	No costs for updating schedule and minor routing changes Routing and schedule changes will benefit existing riders
Weaknesses	Routing and schedule changes are not enough to significantly increase ridership

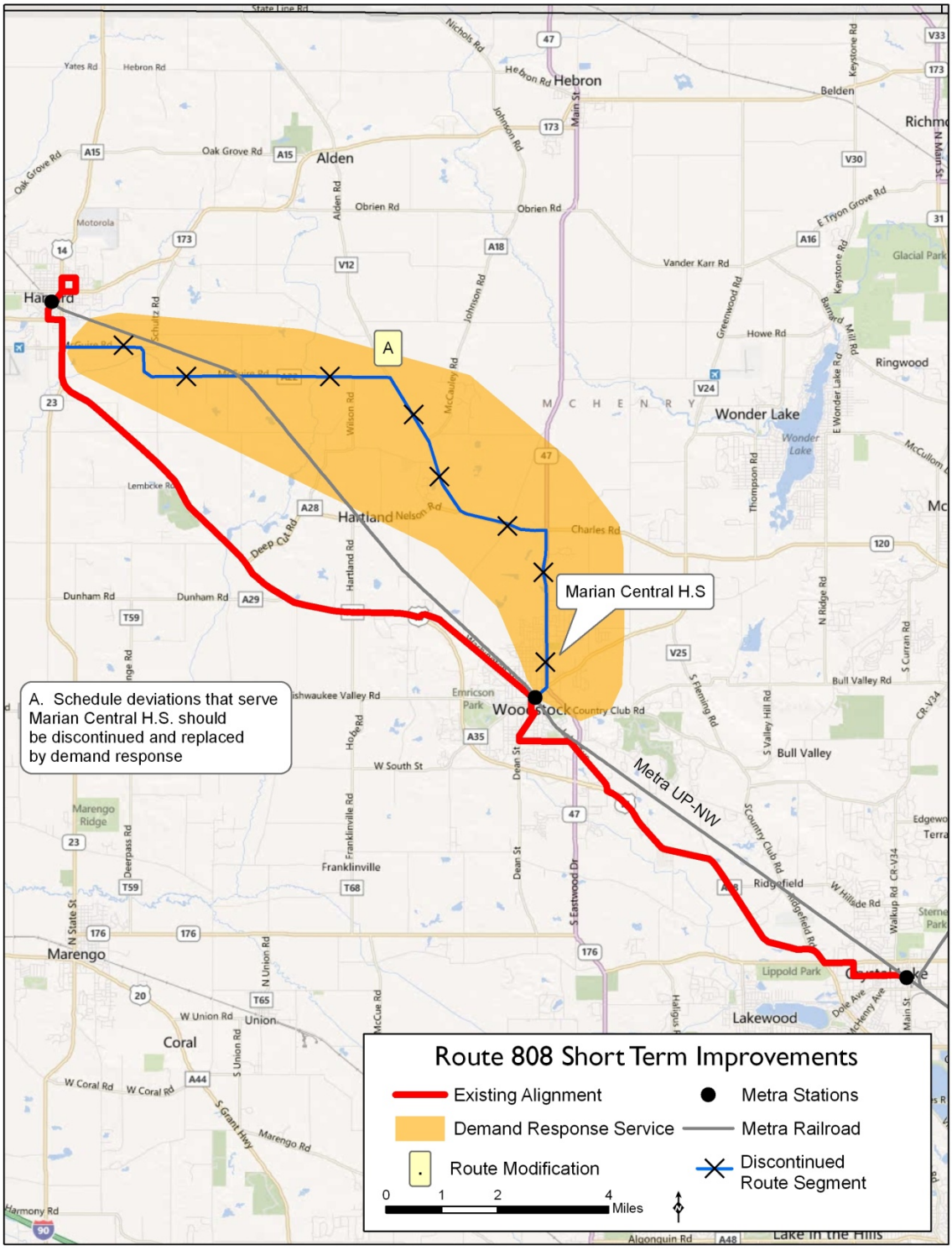

A
Marian Central H.S
A. Schedule deviations that serve Marian Central H.S. should be discontinued and replaced by demand response
Metra UP-NW
Route 808 Short Term Improvements
Existing Alignment
Demand Response Service
Route Modification
Metra Stations
Metra Railroad
Discontinued Route Segment
0 1 2 4 Miles
Hebron
Alden
Wonder Lake
Ringwood
Hartland
Woodstock
Bull Valley
Marengo
Coral
Lakewood
Franklinville
Ridgefield
Emricson Park
Lippold Park
Glacial Park
Marengo Ridge
Motorola
Belden
Richmond
Harmony Rd
Algonquin Rd
Lake in the Hills

Figure 6

B. Alternatives for New Service

Recommendations for enhancements to McHenry County's transit service have been developed. The first two involve the addition of fixed route bus service to link the more densely-populated southeast corner of the County to nearby destinations in adjoining Kane County. The area south of Crystal Lake (i.e. Algonquin and Lake in the Hills) has experienced significant development in recent years. Virtually all of this area is now developed. However, the only public transportation available to the general public in this area is the SE McHenry County Dial-A-Ride, which operates Monday-Friday, approximately 9 AM to 3 PM and requires 24 hour notice to request a ride. It operates over the County Line to Spring Hill Mall in West Dundee in Kane County. The recent online transit survey has confirmed that McHenry County transit riders have a preference for service with fixed routes and schedules.

The Crystal Lake Metra Station is the most important transit service hub in McHenry County, being the terminus of most trains on the Metra UP-NW Line, as well as two of the County's existing peak period only fixed route bus lines (Routes 806 and 808), which radiate to the north and northwest, connecting Crystal Lake with the other cities in the County. Two new fixed routes are proposed to operate south from Crystal Lake and are described below.

1. Crystal Lake-West Dundee (Spring Hill Mall) Route via IL Route 31

This new fixed route service would operate Monday-Friday all day serving many of the retail and employment destinations along IL Route 31. It would travel between Crystal Lake and the Spring Hill Mall Shopping Center on IL Route 31 in West Dundee. The portion of the proposed route within Crystal Lake would operate via Main Street- Northwest Highway/IL Route 14 – IL Route 31 providing new fixed route service for the many businesses in this area. This would open transit service to workers, students, shoppers, and others that need to travel during these periods. A route map for this new service is shown in Figure 7.

The alternative of extending the new route directly to the Elgin Transit Center in downtown Elgin at Chicago Street and IL Route 31, across the street from the Metra Milwaukee West station, was considered, with the intent of merging the route with the existing Pace Route 552. This would allow a connection to other Pace Elgin bus routes which all stop at the Transit Center. Unfortunately, this is not feasible because most Route 552 trips are already through-routed, with Pace Route 803, which provides a circulator route within the Dundee area.

A conceptual schedule has been developed for operation every 30 minutes during the peak hours and hourly during the midday to allow good connections with Pace Route 552 at Spring Hill Mall, Pace Routes 806 and 808, and Metra trains at Crystal Lake (see Table 12). As an alternative to all day service, midday service could be provided by dial-a-ride. If operated as a dial-a-ride, this service could be enhanced (essentially becoming route deviation service) by providing scheduled hourly departures from the two terminals (i.e. Crystal Lake and Spring Hill Mall), effectively eliminating the 24 hour notice requirement for many riders who are boarding at either terminal.

The primary capital cost would be the cost of two additional vehicles to operate the service. Pace typically uses 30-foot transit coaches on Suburban Link routes. These low-floor vehicles are wheelchair-accessible. These types of vehicles cost Pace approximately $300,000 and have a useful life of twelve years.

Crystal Lake - West Dundee
Route via IL Route 31
Proposed New Route
Pace Route 552
Metra Stations
Metra Railroad
0 0.5 1 2 Miles
Crystal Lake Metra
New route along IL Route 31 between Crystal Lake Metra Station and Spring Hill Mall/ Pace Route 552
Spring Hill Mall: Connect to Pace Route 552
Algonquin
Elgin Chicago Street Metra
IL 31
Rt 14
Metra UP-NW
Woodstock
McHenry
Bull Valley
Prairie Grove
Oakwood Hills
Lakewood
Cary
Lake in the Hills
Huntley
Carpentersville
East Dundee
Gilberts
Almora
Udina
Jane Addams Memorial Tollway

Figure 7

Table 11: Crystal Lake – West Dundee (Spring Hill Mall) Route via IL Route 31 Service Characteristics	
Service Area	Crystal Lake, Algonquin, Lake in the Hills, West Dundee
Days of Service	Monday-Friday
Service Span	6:25 a.m. to 7:05 p.m.
Frequency	30 minutes peak; 60 minutes midday
Vehicles	2
Estimated Operating Cost Daily Estimated Operating Cost Annually	$1,600-2,000 $400,000-500,000
Estimated Capital Cost	$600,000
Estimated Ridership Daily Estimated Ridership Annually	100-170 27,000-43,000
Estimated Fare Revenue Increase Daily Estimated Fare Revenue Increase Annually	$125-210 $32,000-53,000
Strengths	New service to the more densely populated southeastern McHenry County New service connections to Elgin and key destinations along IL Route 31
Weaknesses	High operating and capital costs

Table 12
Proposed Schedule for Crystal Lake – West Dundee (Spring Hill Mall) Route via IL Route 31

Northbound						
Spring Hill Mall		Rt. 31/Algonquin	CL Metra			
Pace 552				*UP-NW NB*	*Pace 806*	*Pace 808*
6:00						
6:51	6:55	7:05	7:20		*7:30*	*7:30*
7:21	7:40	7:50	8:05		*8:15*	
7:56	8:10	8:20	8:35	*8:51*		*8:40*
8:31	8:40	8:50	9:05			
9:06	9:10	9:20	9:35			
10:06	10:10	10:20	10:35			
11:06	11:10	11:20	11:35			
12:06	12:10	12:20	12:35	*12:51*		
1:06	1:10	1:20	1:35			*2:00*
2:06	2:10	2:20	2:35	*2:51*		*3:05*
2:36						
3:06	3:10	3:20	3:35			
3:36	3:40	3:50	4:05		*4:10*	*4:10*
4:06	4:10	4:20	4:35	*4:58*		
4:36	4:40	4:50	5:05		*5:05*	*5:05*
5:06	5:10	5:20	5:35	*5:36*		
5:36	5:40	5:50	6:05	*6:16*		
6:06				*6:49*		
6:36	6:40	6:50	7:05	*7:48*		
Black represents scheduled times of new fixed route services						
Blue represents scheduled times of connecting Pace bus routes						
Green represents scheduled times of Metra trains						

Table 12 (Continued)
Proposed Schedule for Crystal Lake – West Dundee (Spring Hill Mall) Route via IL Route 31

Southbound						
CL Metra				Rt. 31/Algo	Spring Hill Mall	
Pace 806	Pace 808	UP-NW SB				Pace 552
		6:13	6:25	6:40	6:50	6:59
		6:50	7:00	7:15	7:25	7:42
7:23	7:23	7:35	7:40	7:55	8:05	8:12
		8:00	8:10	8:25	8:35	8:42
8:12	8:23		8:40	8:55	9:05	9:12
						9:42
			9:40	9:55	10:05	10:12
		10:00	10:40	10:55	11:05	11:12
			11:40	11:55	12:05	12:12
			12:40	12:55	1:05	1:12
			1:40	1:55	2:05	2:12
		2:00	2:40	2:55	3:05	3:12
	2:54		3:10	3:25	3:35	3:42
			3:40	3:55	4:05	4:12
4:05	3:50		4:10	4:25	4:35	4:42
			4:40	4:55	5:05	5:12
4:59	4:55	5:00	5:10	5:25	5:35	5:42
						6:12
		6:00	6:10	6:25	6:35	6:42
Black represents scheduled times of new fixed route services						
Blue represents scheduled times of connecting Pace bus routes						
Green represents scheduled times of Metra trains						

2. Crystal Lake-Elgin Route via Randall Road (Extension of Route 550)

The proposed Crystal Lake to Elgin fixed route service would be an extension of existing Pace Route 550 which serves Sherman Hospital and the industrial area north of I-90. Key destinations would include the Hospital, Galvin Technology, the Metra Milwaukee District West (MD-W) Line terminal at Big Timber Road, and downtown Elgin (at the Transit Center) and connections with other transit services at Crystal Lake. By extending an existing fixed route service for new service in Southeast McHenry, it will be more efficient, reducing the number of additional buses and operating costs of the service.

Refer to Figure 8 and Table 13 for the proposed route map for this new service. It is assumed that by 2015/16 the route would serve a new Pace station and park and ride lot that is anticipated to be constructed at I-90 and Randall Road as the terminal of the planned I-90 express bus service to connect major destinations along I-90 to the Rosemont Station on CTA's Blue Line (with connections to downtown and to O'Hare).

While Pace Route 550 has operated all day in the past, it now only operates during peak periods, with approximately 30 minute frequencies. A conceptual schedule for all day service, Monday-Friday, has been developed for this new service and is shown in Table 14. In order to make convenient connections with all of the other transit services, it is proposed that the route operate out of Crystal Lake as the first trips and last trips of the day should be oriented for taking riders to early morning departures and from early evening arrivals of Metra express trains at Big Timber. Currently, the route schedule is focused on reverse commuters traveling from Elgin and the Metra Big Timber Station to jobs on the outer end of the route; these riders would still have essentially the same schedule as they now have. Presumably, with an extension to Crystal Lake, the route will be more balanced, with McHenry County residents traveling to jobs in the area around I-90, including Sherman Hospital, as well as the Metra trains and downtown Elgin. Major employers in this area are shown in the *Existing Conditions Report.*

In order to provide connections to this new fixed route service, it also could be appropriate to expand dial-a-ride service along Algonquin Road to provide a connection between dial-a-ride service and the fixed route service. This proposed service is also shown in Figure 8.

In order to estimate costs, typical costs for a Suburban Link service were used. Although Route 550 is considered an Intra-Community route it was assumed that costs more typical of a Suburban Link service would be appropriate for estimating purposes for this proposed extension of service to McHenry County. The primary capital cost will be the cost of four additional vehicles to operate the service. Pace typically uses 30-foot transit coaches on Suburban Link routes. These low-floor vehicles are wheelchair-accessible. These types of vehicles cost Pace approximately $300,000 and have a useful life of twelve years.

Table 13: Crystal Lake-Elgin Route via Randall Road (extension of existing Pace 550) Service Characteristics	
Service Area	Crystal Lake, Lake in the Hills, Algonquin, Carpentersville, Sleepy Hollow, Elgin
Days of Service	Monday-Friday
Service Span	6:30 a.m. to 8:00 p.m.
Frequency	30-90 minutes
Vehicles (net increase)	2
Estimated Operating Cost Daily (net increase) Estimated Operating Cost Annually	$2600-3500 $660,000-890,000
Estimated Capital Cost (for added vehicles)	$600,000
Estimated Ridership Daily (net increase) Estimated Ridership Annually	160-260 40,000-67,000
Estimated Fare Revenue Daily (net increase) Estimated Fare Revenue Annually	$200-325 $50,000-$83,000
Strengths	Integrating service with existing Route 550 would result in more cost-effective service, with greater ridership Route serves key destinations along Randall Road New service to the more densely populated southeastern McHenry County
Weaknesses	High operating and capital costs

New demand response service would serve Algonquin Road corridor
Shopping Center
Algonquin Commons and Galleria Shopping Centers
Del Webb Retirement Community
A. New route would extend Pace Route 550 north to Crystal Lake via Randall Road.
Sherman Hospital
Crystal Lake - Elgin Route via Randall Road
Existing Pace Route 550
Proposed Route 550 Extension
Demand Response Service
Metra Stations
Metra Railroad
Route Modification
0 0.5 1 2 Miles

Figure 8

Table 14
Proposed Schedule for Crystal Lake-Elgin Route via Randall Road

Northbound													
Pace 548	Elgin TC	Big Timber Metra		Sherman Hospital	Chase	Country Inn	Galvin Tech	Randall/ Algonquin	Main/ Rt. 14	CL Metra	UP-NW	Pace 806	Pace 808
6:22	6:30		6:39	6.43	6:48	6:53	7:00	7:12	7:20	7:23		7:30	7:30
6:52	7:00	7:05	7:10	7:14	7:20	7:25	7:32	7:44	7:52	7:55		8:15	
7:22	7:40		7:50	7:54	8:02	-	8:12	8:24	8:32	8:25	8:51		8:40
8:02	8:24	8:29	8:34	8:38	8:44	-	8:54	9:06	9:14	9:17			
9:07	9:15	9:23	9:25	9:29	-	-	9:38	9:50	9:58	10:01			
9:37	9:45	9:50	9:55	9:59	-	-	10:08	10:20	10:28	10:31			
	10:45	10:50	10:55	10:59	-	-	11:08	11:20	11:28	11:31			
	11:45	11:50	11:55	11:59	-	-	12:08	12:20	12:28	12:31	12:51		
	12:45	12:50	12:55	12:59			1:08	1:20	1:28	1:31			
1:37	1:45	1:50	1:55	1:57	-	-	2:06	2:18	2:26	2:29	2:51		2:00
2:07													3:05
2:37	2:50	3:00	3:03	3:08			3:17	3:29	3:37	3:40			
3:07												4:10	4:10
3:37	3:45	3:50	3:55	4:00	-	-	4:07	4:19	4:27	4:30	4:58		
4:07	4:15		4:25	4:30	-	-	4:37	4:49	4:57	5:00		5:05	5:05
4:37	4:55	4:58	5:05	5:10	-	-	5:17	5:29	5:37	5:40	5:36		
5:07	5:15		5:25	5:30	-	-	5:37	5:49	5:57	6:00	6:16		
5:37	5:40	5:43	5:50	5:55	-	-	6:02	6:14	6:22	6:25	6:49		
6:07	6:10	6:01	6:20	6:25	-	-	6:32	6:44	6:52	6:55			
		6:29											
6:37	6:45	6:39	6:55	6:59	-	-	7:06	7:18	7:26	7:29	7:38		
7:07	7:15	7:07	7:25	7:29	-	-	7:35	7:47	7:55	7:58	9:51		
Black represents scheduled times of new fixed route services													
Blue represents scheduled times of connecting Pace bus routes													
Green and red represent scheduled times of Metra trains, with red indicating express trains													

Table 14 (Continued)
Proposed Schedule for Crystal Lake-Elgin Route via Randall Road

Southbound													
Pace 806	Pace 808	UP-NW	CL Metra	Main/Rt. 14	Randall/ Algonquin	Galvin Tech	Country Inn	Chase	Sherman Hospital	Big Timber Metra		Elgin TC	Pace 548
			5:32	5:35	5:43	5:55			6:03	6:07	6:12	6:17	6:30
		6:00	6:09	6:12	6:20	6:32	-	-	6:40	6:45	6:51	6:55	7:00
		6:13	6:41	6:44	6:52	7:04	-	-	7:13	7:18	7:24	7:28	7:40
7:23	7:23	6:50	7:31	7:34	7:42	7:54	-	-	8:04	8:09	8:36	8:19	8:45
		7:35											
		8:00	8:10	8:13	8:21	8:33	-	-	8:43	8:48		8:58	9:15
8:12	8:23		8:40	8:43	8:51	9:13	-	-	9:23	9:26	9:36	9:36	9:45
			9:40	9:43	9:51	10:02	-	-	10:11	10:15	10:22	10:25	10:45
		10:00	10:40	10:43	10:51	11:02	-	-	11:11	11:15	11:22	11:25	11:45
			11:40	11:43	11:51	12:02			12:11	12:15	12:22	12:25	12:45
			12:40	12:43	12:51	1:02	-	-	1:11	1:15	1:22	1:25	1:45
			1:40	1:43	1:51	2:02			2:11	2:15	2:22	2:25	2:45
		2:00	2:30	2:33	2:41	2:53	2:58	3:03	3:10	3:15	3:22	3:25	3:45
	2:54		3:18	3:21	3:29	3:41	-	3:48	3:55	4:00	4:07	4:10	4:15
			3:48	3:51	3:59	4:11	-	4:18	4:25	4:30		4:40	4:45
4:05	3:50		4:18	4:21	4:29	4:41	-	4:48	4:55	5:00	5:07	5:10	5:15
			4:48	4:51	4:59	5:11	-	5:18	5:25	5:30		5:40	5:45
4:59	4:55	5:00	5:18	5:21	5:29	5:41	-	5:48	5:55	6:00	6:07	6:10	6:15
			5:48	5:51	5:59	6:11	-	6:18	6:25	6:30		6:40	6:45
6:19	6:14	6:00	6:23	6:26	6:34	6:46	-	6:53	7:00	7:05	7:10	7:15	7:15
Black represents scheduled times of new fixed route services													
Blue represents scheduled times of connecting Pace bus routes													
Green and red represent scheduled times of Metra trains, with red indicating express trains													

3. Service in Northeast McHenry

Richmond Township and Pace are in the in the process of exploring public transportation options to serve the Richmond-Hebron-Spring Grove communities. Presently, the only public transportation in Richmond is the Richmond Township Senior Bus. Richmond Township has received limited funding to initiate some type of transit service. Pace developed and distributed a transportation survey throughout Burton and Richmond Townships and the Village of Hebron to identify transportation needs in the County. The survey generated 133 responses from residents. Results of the transportation survey are summarized below.

Of those responding:

- 74% travel mainly to McHenry; 11% to Woodstock
- Primary purpose of trips are: medical (34%), necessities (33%), work (23%), other (5%), pleasure (4%), school (1%)
- 44% of the respondents used their car mainly from 9:00 AM to 3:00 PM; 20% used their car before 9:00 AM and the rest used their car after 3:00 PM.

- 1/3 of the respondents were not currently employed; 11% were employed in Richmond; 7% were employed in McHenry; 5% in Woodstock. Less than 1% was employed in Chicago.
- 35% would use a Pace dial-a-ride service for shopping and 27% would use it for medical appointments. 21 people responded they would take a service to the Metra Fox Lake Station.
- 25% responded that it would be "somewhat likely" to using a Pace service for their travel needs: 10% said "very likely" , 6% said "somewhat unlikely" and 21% said "very unlikely"

In order to help identify types of services that may be appropriate to address the lack of transportation in this part of the County, this report suggests a three step approach:

a. Richmond-Fox Lake Shuttle

This report suggests a shuttle service to take Richmond residents to and from the Fox Lake Station on the Metra Milwaukee District North (MD-N) Line. Serving the Fox Lake Station rather than the McHenry Station on the UP-NW Line is more appropriate as the Fox Lake Station is closer to Richmond and has more frequent, and all-day train service. Trains only stop three times a day in each direction at the McHenry Station.

Twenty-one survey respondents indicated that they would be interested in service to Fox Lake. This service could be operated with the same vehicles now used for the Senior Bus before and after the vehicles are needed for that service. This route could be operated via US Route 12 and is shown in Figure 9. Besides serving Metra it could provide connections to Pace Route 806 and 570 at the Fox Lake Station. A conceptual schedule has been developed for a shuttle that would meet two of the four peak period express trains at Fox Lake and is shown in Table 16. The service could be expanded in the future to meet additional trains.

For the Richmond-Fox Lake Shuttle service, average costs for similar Pace Shuttles were used to estimate financial impacts of the proposed recommendation. The primary capital cost will be the cost of one vehicle to operate the service if the use of the Senior Bus vehicle is not feasible. A 13-passenger shuttle van typically costs approximately $50,000. Refer to Table 15.

Table 15: Richmond-Fox Lake Shuttle Service Characteristics

Service Area	Richmond, Fox Lake
Days of Service	Monday-Friday
Service Span	Peak
Frequency	2 trips morning 2 trips afternoon
Vehicles	1
Estimated Operating Cost Daily Estimated Operating Cost Annually	$300-$400 $75,000-$100,000
Estimated Capital Cost	$50,000
Estimated Ridership Daily Estimated Ridership Annually	25-40 6,500-10,000
Estimated Fare Revenue Daily Estimated Fare Revenue Annually	$38-60 $10,000-15,000
Strengths	Provides key connection to Metra
Weaknesses	Feeder bus services to Metra have lower ridership; lack of integrated fares is an impediment.

Table 16
Proposed Schedule for Richmond-Fox Lake Shuttle

Southbound					Northbound			
Richmond	Fox Lake Metra		Chicago		Chicago	Fox Lake Metra		Richmond
Morning					Afternoon/Evening			
6:00	6:25	*6:30*	*7:54*					
6:58	7:23	*7:28*	*8:56*					
Evening					*4:40*	*6:04*	6:07	6:32
6:32	6:57	**7:25**	**9:02**		*5:25*	*6:55*	6:58	7:23
Black represents scheduled times of new fixed route services								
Green and red represents scheduled times of Metra trains, with red representing express trains								

b. Pace Van Pool Program

An alternative approach to providing a shuttle bus service to the Metra Fox Lake Station would be to initiate service via Pace's Metra Feeder Van Pool Program. The typical Metra Feeder program allows for the Pace van to be parked at a Metra station near the worksite, so that 5-13 participants can take the train and then use the van to complete the commute. In this case, however, the van would be used to pick up riders at their homes in the morning, and shuttle them to the Fox Lake Station where the van would be left for the day. The reverse trip would occur in the evening. To qualify for the program, at least half of the participants must purchase a Metra monthly pass or 10-ride ticket.

Each participant pays $58 per month which covers all costs associated with the van including fuel, maintenance, insurance, tolls, roadside assistance, and van washes. Metra fares and parking are not included in this rate.

The use of vanpools for such service is complex and may not be feasible because, as the program is normally set up, riders must travel together as a group. They would not have the flexibility to go to Fox Lake on one van and return on another one.

c. Richmond-Hebron-Spring Grove Dial-A-Ride Service for the General Public

The Richmond Township Senior Bus is open to seniors in Richmond and Spring Grove but not Hebron. This recommendation would open the existing dial-a-ride service to the general public and expand service to Hebron. It would allow connections to McHenry, a key destination reported in the survey results, via a connection to MCRide. Figure 9 shows what an expanded service area for the general public could look like. An additional suggestion would be to explore integrating this service area with MCRide.

4. Expansion of MCRide Service Area and Integration with Midday Intercommunity

Pace and McHenry County are currently exploring the possibility of integrating the Midday Intercommunity service with the MCRide Service as the service areas are similar. Pace would support MCRide with the resources currently dedicated to the Midday Intercommunity. By integrating both

services into one, it would eliminate the duplication of service and streamline the dial-a-ride service in the County.

McHenry County has also received requests to expand MCRide to areas currently outside the MCRide service area, including the areas of Cary, Algonquin, Lake in the Hills and Lakewood. Those requests are currently being studied.

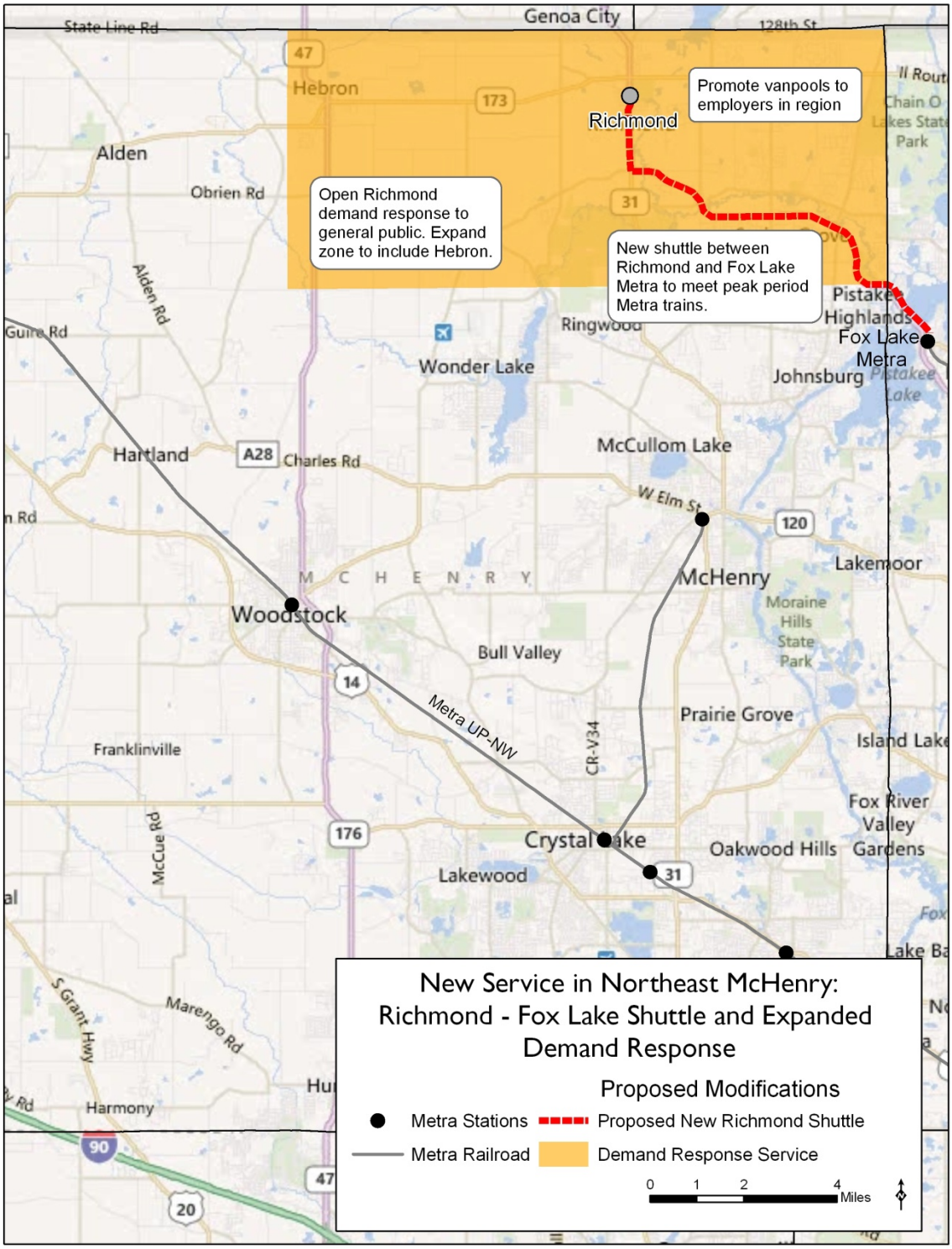

Promote vanpools to employers in region
Open Richmond demand response to general public. Expand zone to include Hebron.
New shuttle between Richmond and Fox Lake Metra to meet peak period Metra trains.
Richmond
Hebron
Alden
Genoa City
Wonder Lake
Ringwood
Fox Lake
Metra
Johnsburg
Hartland
McCullom Lake
McHenry
Lakemoor
Woodstock
Bull Valley
Prairie Grove
Franklinville
Crystal Lake
Lakewood
Oakwood Hills
Fox River Valley Gardens
Harmony
Metra UP-NW
New Service in Northeast McHenry: Richmond - Fox Lake Shuttle and Expanded Demand Response
Proposed Modifications
Metra Stations
Proposed New Richmond Shuttle
Metra Railroad
Demand Response Service
0 1 2 4 Miles

Figure 9

IV. Evaluation of Service Alternatives

A. Existing Services

The performance of existing services and changes to existing services as proposed to Routes 806, 807, and 808, is typically evaluated in terms of productivity. The statistics most commonly used are passengers/vehicle mile, passengers/vehicle hour, and cost recovery. These statistics are shown in Table 1 at the beginning of the report.

Given the development patterns of McHenry County it is not surprising that the three existing fixed routes score below average on these statistics as compared to other Pace routes throughout the Chicago region. The long stretches of rural highways between the cities of the County have two effects on the statistics. Average passengers/vehicle mile is lower than average based on the fact that so much of the routes traverse open countryside, serving a lower number of residents or employers, or other sources of ridership.

Rather than comparing the existing routes' performance to other routes in more dense suburban areas in the Pace service area, it is perhaps more appropriate to consider how important these routes are in providing service to McHenry County residents, businesses, and other institutions/agencies. The routes do a good job of connecting areas in the County identified as high potential for transit ridership based on transit "supportive" factors, mainly population and employment density. Also of significance is that a major group of users are the clients/employees of the Pioneer Center sheltered workshop.

Another key issue is whether it is more efficient/effective to have service for a significant portion of the riders served by fixed routes during peak periods because it relieves pressure on dial-a-ride service that is being provided in these corridors today. While the productivity of the fixed routes is low, it is much higher than typical dial-a-ride service. It is also worth noting that surveys consistently show that riders prefer transit service with fixed routes and schedules over dial-a-ride, principally because it provides more personal flexibility and because it does not require the 24 hours notice which dial-a-ride users must provide.

The proposed modifications to the existing fixed route services are generally relatively minor changes intended to simplify the service, or increase ridership by rerouting or streamlining parts of the route to better serve changes in land uses that have occurred over the years. Elimination of route variations will simplify the schedule and the routing. There has not been a comprehensive review of the route variations for many years to determine which are effective and should be made part of the basic routes, or those that are rarely used and should be eliminated. Any riders no longer served due to these changes can be served by the dial-a-ride services.

B. Short Term Service Strategies

In order to evaluate the proposed new services, evaluation criteria were developed. The evaluation criteria are based on industry standards and can be used to assess the potential for successful transit services in any community.

The criteria are listed below:

- RTA's Transit Demand Index (TDI)
- Connection to other transit services
- Residential density within ½ mile of service
- Employment density within ½ mile of service
- Number of major employers near route
- Service to healthcare facilities
- Service to major commercial activities/shopping centers
- Suitable pedestrian environment to support transit
- Frequency /service span of proposed service
- Capital cost of proposed service
- Operating cost of proposed service

1. RTA Transit Demand Index (TDI)

The Regional Transportation Authority (RTA) developed a Transit Demand Index (TDI) that is intended to predict the likely level of transit service that a given geographic area will support. This is based on analysis of the ridership levels of existing service in the RTA service area. These have been correlated with a number of demographic characteristics and the ones with the most direct relationships identified. Factors in the TDI, in their order of significance, are:

Demographic
Number of adults (18 to 64)
Number of seniors (65 and older)
Number of children (17 and under) – negatively correlated
Number of vehicles in household – negatively correlated

Employment
Retail employment
Non-retail employment

In essence, increased potential for transit ridership is based on adult population and senior population. People in households with children are less likely to ride transit and more cars in a household will reduce transit demand. Employment often drives transit ridership, and retail workers have a higher likelihood of riding transit.

The RTA has created an online map of the region (http://www.rtams.org/RTG/), showing areas of high, medium, low, and nominal transit demand based on these factors. The TDI map divides each Chicago Metropolitan Agency for Planning (CMAP) Transportation Analysis Zone (TAZ) into nine subzones (about one quarter mile squares). The TDI, as well as other resources, was used to develop the transit service recommendations for this report. The new short term service recommendations have been overlaid onto the TDI and are shown in Figure 10.

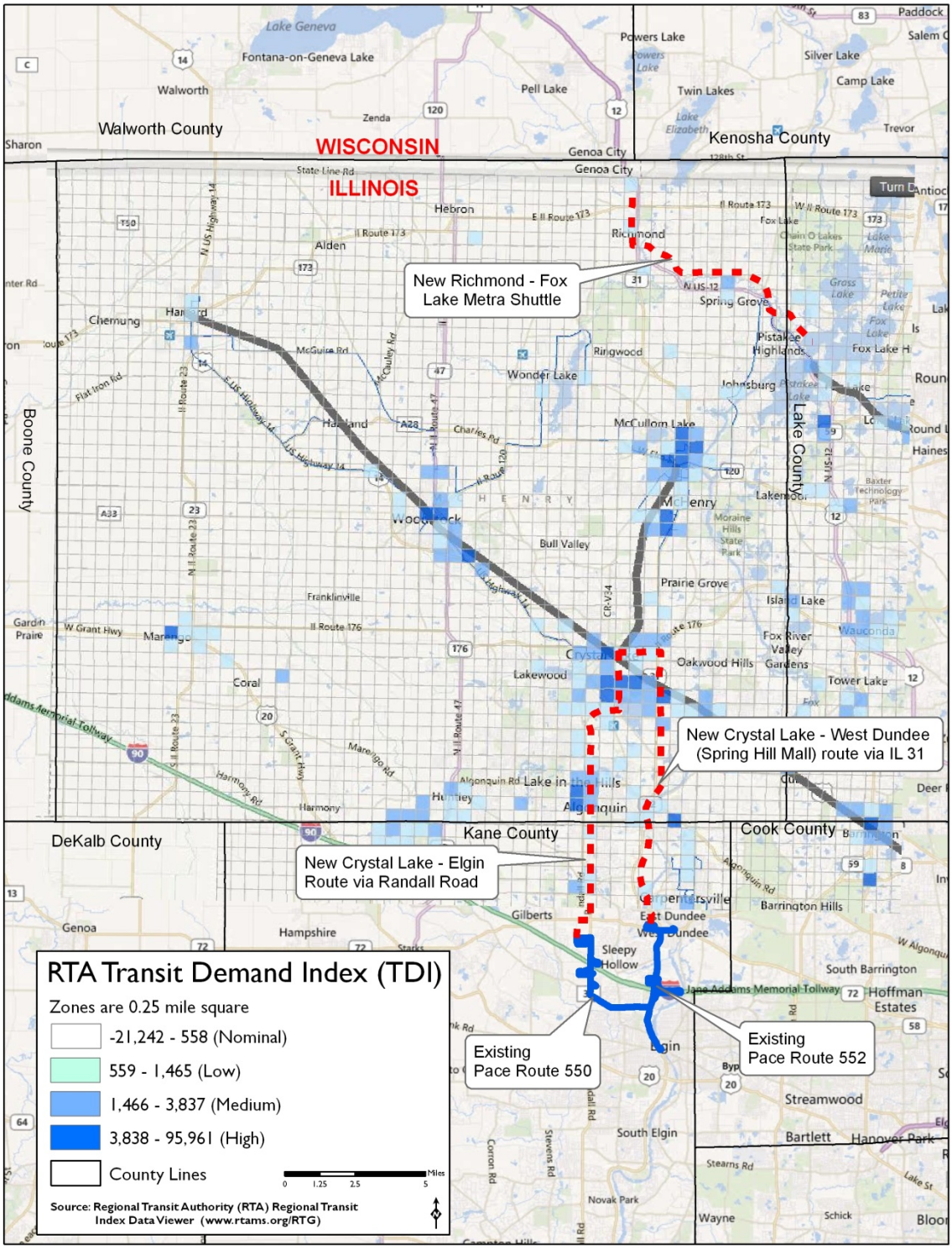

WISCONSIN
ILLINOIS
Walworth County
Kenosha County
Boone County
Lake County
DeKalb County
Kane County
Cook County
New Richmond - Fox Lake Metra Shuttle
New Crystal Lake - West Dundee (Spring Hill Mall) route via IL 31
New Crystal Lake - Elgin Route via Randall Road
Existing Pace Route 550
Existing Pace Route 552
RTA Transit Demand Index (TDI)
Zones are 0.25 mile square
-21,242 - 558 (Nominal)
559 - 1,465 (Low)
1,466 - 3,837 (Medium)
3,838 - 95,961 (High)
County Lines
Source: Regional Transit Authority (RTA) Regional Transit Index Data Viewer (www.rtams.org/RTG)

Figure 10

C. Evaluation of Alternatives

The data tables for each alternative are listed below in Table 17 and Table 18. Table 17 lists the evaluation criteria and provides a quantitative assessment for each alternative. In Table 18, the quantitative assessment was converted to a qualitative assessment by using Harvey balls as a means to make an overall assessment of how the alternative best meets the evaluation criteria. A full ball (●) means that that alternative best meets the criteria as compared to the other alternatives, a half ball (◒) indicates that it partially meets that criteria as compared to the other alternatives, an empty ball (○) means that it least meets the criteria compared to the other alternatives. A narrative description of how each alternative meets the evaluation criteria is below.

1. Crystal Lake-Elgin Route via Randall Road (Extension of Route 550)

The proposed Randall Road route serves the most TDI subzones with high potential ridership. It also shows the most residential and employment density as compared to the IL Route 31 route alternative. The Randall Road corridor has become almost completely developed and now has extensive amounts of housing and retail development, both identified by RTA as the primary factors in establishing the likelihood of creating successful bus service. It serves two significant new malls, Algonquin Commons and Galleria as well as a variety of Big Box stores and strip shopping centers. The new service is proposed to be through-routed with the existing Pace Route 550 service which serves the portion of the Randall Road corridor on the northwest side of Elgin, including the Big Timber Metra station, Sherman Hospital, and numerous other employment sites, increasing the service's cost-effectiveness. It would also provide a connection with the Crystal Lake Metra Station on the UP-NW Line on the north end. As part of the proposed Tollway expansion program and Pace express bus service on I-90, Pace plans to construct a park-n'-ride lot at the Randall Road interchange on I-90 which would serve as a regional connection point for riders. From this parking lot, riders could transfer to the proposed Route 607 Randall Road Elgin-Schaumburg, an all day Monday to Saturday. The Route 607 would be a branch of Route 605 and would operate from the Randall Road/I-90 park n ride and serve various park n rides along I-90 and then operate to the Northwest transit Center in Schaumburg for connections to other Pace routes including a demand-responsive service. Additionally from the Randall Road/I-90 park' n ride lot, riders could transfer to the proposed Route 605 Randall Road Elgin –Rosemont Blue Line Station Express, an all-day Monday to Saturday an express route that would operate to and from the Rosemont Blue line Station with stops at various park n rides along I-90 as well as at the Tollway's Des Plaines Oasis for connections to a new distributor service that will operate between the Oasis stop and the greater O'Hare industrial corridor.

To the south, in Kane County, Randall Road is classified as a "Strategic Regional Arterial" by the Illinois Department of Transportation (IDOT). IDOT defines Strategic Regional Arterials as part of a "network of highways designed to accommodate long distance regional traffic, to complement a region's major transit and highway facilities," differentiated by urban, suburban, or rural environments. IDOT emphasizes the "need for cooperation among local governments and regional transportation agencies in coordinating land development" along SRAs and that "land use planning techniques can also encourage use of alternative modes of transportation, with policies favorable to mixed-use development." In response to this designation and the rapid growth along the Randall Road corridor, the Kane County Department of Transportation has begun exploring the feasibility of Bus Rapid Transit (BRT) service along this corridor. This can be an important consideration when evaluating the proposed Randall Road service as part of this study.

Many parts of the corridor are not pedestrian friendly and infrastructure improvements are required before transit can be successful along Randall Road. As indicated in Chapter VI, this study is identifying the infrastructure improvements required for proposed transit stops. The McHenry County Department of Transportation is interested in making transit friendly infrastructure improvements.

2. Crystal Lake - West Dundee (Spring Hill Mall) Route via IL Route 31

The IL Route 31Route would traverse areas that the TDI map shows have potential ridership although not as many zones as the Randall Road Route. Spring Hill Mall is the terminal of frequent service to/from the Elgin Transportation Center which is located across the street from the Metra Elgin Chicago Street Station. Additional connections to Pace routes could occur there, allowing transportation linkages throughout the Elgin region. The Mall is also served by the existing Southeast McHenry Dial-A-Ride service. Population and employment density within ½ mile of the route is significant, although not as dense as along Randall Road.

Of the two alternatives, the Crystal Lake-Elgin Route via Randall Road (Extension of Route 550) is considered a priority as it best meets the evaluation criteria and therefore, this alternative is recommended for short term implementation. As the County continues to develop, and more residential and employment density is developed along the IL Route 31 corridor, it is the recommendation that the corridor is re-evaluated for fixed bus route service. Therefore, this alternative is listed in the implementation schedule for implementation beyond the 5 year time frame.

3. Richmond – Fox Lake Shuttle

While this route does not have great density of population and employment, it is believed that it is feasible to operate the proposed two peak period trips (operated with one vehicle) which would feed Metra express trains at Fox Lake. This would also supplement the existing Richmond Township Dial-A-Ride service, which is currently only open to seniors. This proposal also recommends that the dial-a-ride service area be expanded and opened to the general population. Implementation of these services would help to fulfill the transit needs of the population in the northeast corner of the County at a low start up and annual operating cost.

Table 17: Evaluation Factors for Service Alternatives

Proposed Routes	Other Transit Connections	Residential Density w/in .5 miles	Employment Density w/in .5 miles	Major Employers	Healthcare Facilities	Major Retail	Pedestrian Friendly Environment	RTA Transit Demand Index	Frequency of Service	Capital Costs	Operating Cost
Randall Road	Metra/Pace fixed routes	48,000	25,000	5	Sherman Hospital	Algonquin Commons Galleria	No	5 high 6 med 6 low	All Day	$600,000	$500,00- $900,000
Route 31	Metra/Pace fixed routes	37,000	19,300	7	N/A	Spring Hill Mall	No	5 high 7 med 1 low	All Day	$600,000	$500,000- $900,000
Richmond	Metra	13,000	6,000	0	N/A	N/A	Yes	0 high 1 med 4 low	Peak	$50,000	$60,000- $100,000

Table 18: Qualitative Ranking of Short Term Service Alternatives

Proposed Routes	Connections to Other Transit	Residential Density w/in .5 miles	Employment Density w/in .5 miles	Major Employers	Healthcare Facilities	Major Retail	Pedestrian Friendly Environment	RTA Transit Demand Index	Frequency of Service	Capital Costs	Operating Cost
Randall Road	●	●	●	◒	●	●	○	●	●	◒	◒
Route 31	●	◒	◒	●	○	◒	○	●	●	◒	◒
Richmond	◒	○	○	○	○	○	●	○	○	●	●

V. Long Term Service Strategies

The Long Term Service Strategies represent the future vision for transit in McHenry County beyond the next seven years to the year 2040. The basis for this vision is threefold based on recommendations made in:

1) The 2004 McHenry County Transit Plan
2) The Pace Vision 2020 Plan, and
3) Analysis and public input received as part of this study.

The Long Term Service Strategies primarily makes recommendations for fixed route bus service making connections between growth areas, with these services supplanting existing or proposed dial-a-ride service to address the mobility needs of the County. In addition, the establishment of Transit Centers, which were recommended in the 2004 Transit Plan, remain in this Plan.

The proposed Metra improvements complete the picture, offering service to additional parts of the County along with anticipated increased frequency on the Metra UP-NW Line due to the proposed improvements.

A. Metra Services

1. Metra UP-NW Line Alternatives Analysis

In 2007, Metra completed a Locally Preferred Alternative Report as part of the Federal Transit Administration's Alternatives Analysis process. The report detailed analysis of the Union Pacific Northwest (UP-NW) Line due to the need for additional capacity. The study included extensive public input from county mayors, technical committees, and the general public. Goals of the study included:

- Increase capacity to central Chicago
- Increase transit ridership
- Decrease travel times and increase frequency of service, including reverse commutes
- Avoid or minimize negative impacts to environment
- Provide compatibility with transit-supportive development
- Increase operating efficiency
- Be constructed, maintained, and operated within the local financial capacity

Infrastructure improvements of the preferred alternative include:

- Upgrading of 1.6 miles of freight rail track to north of McCullom Lake Road in Johnsburg to accommodate commuter rail service
- New stations at Woodstock, Prairie Grove, and Johnsburg
- Signal upgrades on McHenry branch and main line
- New yards at Woodstock, Johnsburg; upgraded yard at Harvard
- Additional crossovers
- Additional parking capacity at several stations

The project is currently undergoing an Environmental Assessment. Funding is currently being sought for these improvements and no timetable for construction has been set.

2. 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 Union Pacific Railroad's Belvidere Subdivision between Elgin (with a new track connection to/from Metra constructed at Big Timber) and the McHenry-Boone County line, with stations proposed at Gilberts, Huntley, Union, and Marengo.

The study determined that there would be significant capital costs involved with providing new commuter rail service to Marengo. Metra assumed that construction of two segments of a new second main line would be required to handle the additional train traffic on the 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. In addition, the study states that ridership will need to be analyzed to evaluate capacity.

Development of commuter rail service on this UP Belvidere Subdivision has also been studied by the Northern Illinois Commuter Transportation Initiative (NICTI), with service proposed to extend as far west as Rockford, serving Boone and Winnebago Counties.

The Union Pacific Railroad, as the owners of this portion of railroad, would have to approve any capital improvements and any commuter rail service on its right-of-way. Additional discussions with the railroad would have to take place. The analyses conducted to date have been feasibility studies; much additional analysis and stakeholder involvement is needed.

Independent of these studies, both the communities of Marengo and Huntley received a Regional Transit Assistance Program (RTAP) grant from the RTA to prepare transit oriented development (TOD) plans around proposed Metra stations. Both communities prepared and adopted a preferred plan for their community.

3. Improvements to the Metra Milwaukee District North (MD-N) Line

In the Chicago Metropolitan Agency for Planning (CMAP) Go To 2040 Plan , the "unconstrained" major capital projects list includes improvements to the Metra MD-N line (which operates to Fox Lake) which would allow for additional service in the future by adding double track, upgrading signals, and making other improvements. It also proposes an extension of the Line to Wadsworth in Lake County. Both of these projects are identified as potential long-term extensions in Metra's Strategic Plan, currently under development. No extension of the MD-N Line to Richmond is proposed in the Go To 2040 Plan.

B. Proposed Fixed Route Bus Services

Figure 11 displays potential corridors for new fixed route bus services in the long term, between 2019 and 2040. Many of these corridors reflect connections depicted in the *McHenry County 2004 Transit Plan*. These potential corridors are described below. No specific operating characteristics or costs are provided.

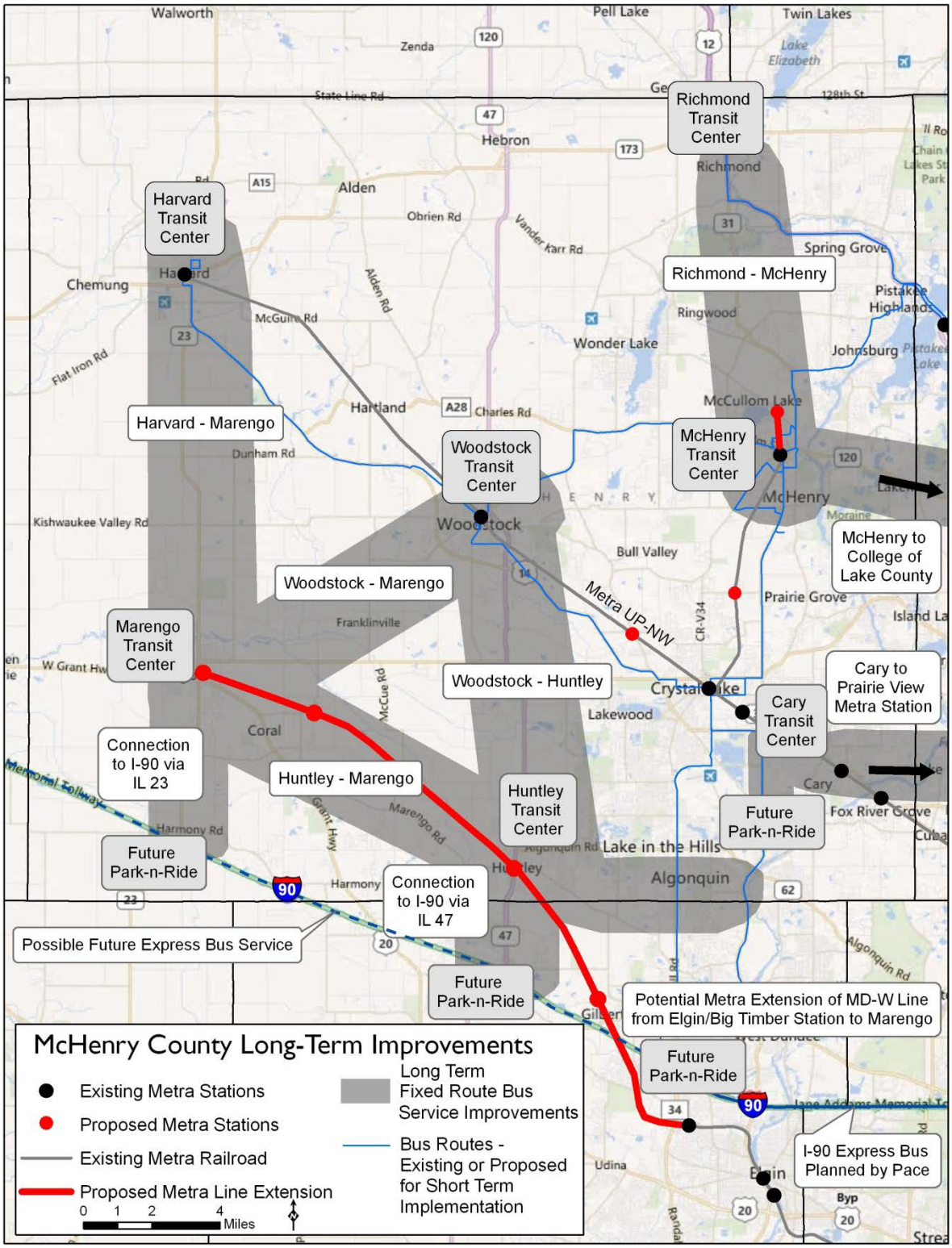

McHenry County Long-Term Improvements
Existing Metra Stations
Proposed Metra Stations
Existing Metra Railroad
Proposed Metra Line Extension
0 1 2 4 Miles
Long Term Fixed Route Bus Service Improvements
Bus Routes - Existing or Proposed for Short Term Implementation
Harvard Transit Center
Harvard - Marengo
Woodstock Transit Center
Woodstock - Marengo
Marengo Transit Center
Woodstock - Huntley
Connection to I-90 via IL 23
Huntley - Marengo
Huntley Transit Center
Future Park-n-Ride
Connection to I-90 via IL 47
Possible Future Express Bus Service
Richmond Transit Center
Richmond - McHenry
McHenry Transit Center
McHenry to College of Lake County
Cary Transit Center
Cary to Prairie View Metra Station
Potential Metra Extension of MD-W Line from Elgin/Big Timber Station to Marengo
I-90 Express Bus Planned by Pace
Metra UP-NW
Memorial Tollway
Walworth
Zenda
Pell Lake
Twin Lakes
Lake Elizabeth
Hebron
Alden
Richmond
Spring Grove
Chemung
Ringwood
Wonder Lake
Johnsburg
Hartland
McCullom Lake
Dunham Rd
Kishwaukee Valley Rd
Woodstock
Bull Valley
McHenry
Prairie Grove
Franklinville
Crystal Lake
Lakewood
Coral
Cary
Fox River Grove
Harmony Rd
Lake in the Hills
Algonquin
Udina
Elgin

Figure 11

1. Huntley to Marengo

A new peak period fixed route bus service is recommended between Huntley and Marengo. 2040 Household and Employment forecasts in the *Existing Conditions Report* indicate that these areas will continue to experience significant growth. Information on Journey to Work data from the Census Bureau provided in the *Fixed Route Service Demand Memo,* shows existing work trips between Marengo and Huntley. The Transit Demand Index map also provided in the *Service Demand Memo* shows some potential for fixed route service in the Huntley area. Potential roadways to use for service include IL Route 23, IL Route 47 and IL Route 176.

The new service should provide a connection to destinations along IL Route 47, including the Huntley Outlet Center at IL Route 47 and Interstate 90 (I-90) as well as to the Del Webb Sun City retirement community located near the Outlet Center. It would also provide a connection to the express bus service Pace is about to implement along I-90. Pace is planning to implement I-90 express bus service from a new park and ride lot at Randall Road within the next two years, with extension of the service to a park and ride lot at IL Route 47 proposed for the future.

This fixed route bus service could also act as a feeder for extension of the Metra MD-W Line to Huntley and Marengo if that expansion is implemented as described in Section A2 above.

2. Woodstock to Marengo

There is currently no connector route between Marengo and Woodstock. As these areas continue to grow, both in employment and population, there could be potential for support of the area with a fixed route bus service connection. This could be part of a fixed route service for Marengo that providing only select trips to Huntley or Woodstock. The new fixed route service would operate in the peak periods. Potential roadways to use for service include IL Route 47 and IL Route 176.

3. Woodstock to Huntley

A new peak period fixed route bus service is proposed to connect Huntley and Woodstock in order to capture the growth that is occurring along the IL Route 47 corridor, including making connections to the proposed Pace express bus service along I-90 to the proposed park and ride lot at IL Route 47, as described in Section1 above. This fixed route service was proposed in the *McHenry County 2004 Transit Plan* and would offer AM and PM peak period trips. It could also be through-routed with the Pace express service, eliminating the need to transfer between buses at the park and ride lot.

Potential roadways to use for this service include IL Route 47 and US Route 14.

4. Huntley /Algonquin/Crystal Lake

Fixed route bus service between Huntley, Algonquin, and Crystal Lake is an alternative to the routing proposed as part of the recommended new service proposed in Southeast McHenry as part of the Short Term Service Strategies. This route might serve the Centegra Hospital recently-approved for construction northeast of Huntley. In the long term, the connections between these cities are proposed to become more prominent as the commercial and residential growth continues along major corridors such as Algonquin Road, Randall Road and IL Route 31. Service to this area was proposed in the 2004 Transit Plan as the Huntley-Algonquin Peak Period Bus Service.

Since Southeast McHenry is the fastest growing area in the County, it may be necessary to initiate all day service on this connector route. All day service is proposed for the new service in Southeast McHenry

in the Short Term Service Strategies section. Potential roadways include Algonquin Road, Randall Road, IL Route 31, IL Route 176 and IL Route 47.

5. Harvard to Marengo

A fixed route bus service connecting Harvard to Marengo is another long term recommendation. Although the corridor between Harvard and Marengo is projected to continue to grow by the year 2040, this service would not be as high a priority as other recommendations because growth is not anticipated to be as significant as other corridors proposed for fixed route bus service. Potential roadways to be used include IL Route 23, and US Route 14.

6. Richmond to McHenry

A fixed route bus connection along this route is important to connect the Richmond area to the communities to the south and will provide a connection to the Metra UP-NW service in McHenry. This connection will also be the "next step" after ridership is built up from the expanded dial-a-ride service that is recommended in the Short Term Service Strategies. It is expected that this service would operate only in AM and PM peak periods. Service would be provided via IL Route 31.

7. Richmond/Hebron/Spring Grove

Service between Hebron, Richmond, and Spring Grove, shown as dial-a-ride service in the Short Term Service Strategies recommendations, would continue in that mode until such time that a fixed route between those communities can be supported. Population and employment projections for 2040 indicate that there will be growth between Spring Grove and Richmond along the US Route12 corridor. Fixed route bus service could be planned for that corridor in the future. A connection to Hebron would probably continue to be made via dial-a-ride service as indicated in the Short Term Service Strategies.

8. McHenry to Grayslake in Lake County

This fixed route bus service would provide opportunities for residents of McHenry and the surrounding area to get to the College of Lake County in the City of Grayslake as well as to make connections to Pace Routes 570 and 572, providing opportunities to travel to Six Flags Great America Amusement Park and Gurnee Mills Shopping Center.

Service would be structured to best meet the College of Lake County class schedule as well as connections with Routes 570 and 572. Potential roadways to operate service include IL Route 120, IL Route 83, and Washington Street in Grayslake.

9. Cary to Prairie View Metra Station in Lake County

This service would operate between the Cary Metra station to Prairie View Metra station, located on IL Route 22 in Vernon Township in Lake County, providing service from both Metra stations to major employers, including Kemper Insurance (in Long Gove), Lake Zurich Industrial Park, and Good Shepherd Hospital (in Barrington). It would also provide service for domestic workers for high income area homes in the Barrington Hills and Long Grove area. This service would be proposed to operate only during AM and PM peaks, meeting scheduled trains at both stations. Service would operate along US Route 14 and IL Route 22.

C. Proposed Transit Centers

The establishment of transit centers is proposed as part of the Long Term Service Strategies recommendations and shown on Figure 11. The transit centers would serve as an intermodal connection point and provide accommodations for passenger comfort while waiting to transfer from

one transit service to the next. In some locations, the Metra Station can be the transit center, allowing passengers a waiting area as they transfer between Metra and either a fixed route bus or a dial-a-ride bus. In locations where transfers would occur where there is not Metra Station, the transit center can be a stand-alone facility, consisting of a shelter or a larger building, probably integrated with retail, parking and other opportunities. It is recommended that the transit centers are staffed to minimize any potential maintenance and security issues and to allow the transit center to remain open for waiting passengers.

Transit centers are recommended in all communities where future fixed route service is recommended, including Huntley, Marengo, Cary, Harvard, Woodstock, McHenry and Richmond and described as follows:

1. Huntley Transit Center

The Huntley Transit Center would be located near the intersection of IL Route 47 and Algonquin Road. This location would serve the proposed new service in Southeast McHenry - Crystal Lake-Elgin Route via Randall Road recommended in the Short Term Service Strategies, and the recommended Long Term Service Strategies between Huntley-Marengo and Woodstock-Huntley. If Metra extends their Milwaukee District West Line service to Marengo as described above, then the transit center would be at the Metra Station proposed at Coyne Station Road.

2. Marengo Transit Center

The Marengo Transit Center would be located at the proposed Metra Station if the Metra MD-W Line is extended to Marengo. The proposed location of this station is at Station Parkway and Washington Streets. The Transit Center would serve the long term fixed route services recommended for Woodstock-Marengo, Harvard-Marengo and Huntley-Marengo.

3. Cary Transit Center

The Cary Transit Center would be located at the Metra Cary Station and would accommodate the existing Long Term Service Strategy recommendation of the fixed route bus service to the Prairie View Metra Station.

4. Harvard Transit Center

The Harvard Transit Center would be located in the Metra Harvard Station and would be a transfer point for riders transferring from Metra to the fixed route services going to Marengo or Woodstock.

5. Woodstock Transit Center

The Woodstock Transit Center would be located in the Metra Woodstock Station and would be a transfer point for riders transferring from Metra to the fixed route services to Huntley, Marengo or Harvard.

6. McHenry Transit Center

The McHenry Transit Center would be located in the Metra McHenry Station and would be a transfer point for riders transferring from Metra to the fixed route services to Richmond or Lake County as proposed in the Long Term Strategies, or for the existing fixed route service connections to Crystal Lake and Woodstock.

7. Richmond Transit Center

The Richmond Transit Center would be established to serve the fixed route shuttle service Richmond to Fox Lake as proposed in the Short Term Service Strategies, as well as the services recommended in the Long Term Strategies of Richmond to McHenry. The Transit Center/park n' ride lot could be located near the intersection of Route 31 and Route 12 as a central location for transferring between modes and services.

VI. Transit Friendly Infrastructure

In order for transit to be successful, transportation investment policies and programs must be paired with land use policies and programs. Land use policies that embrace denser development, a mix of uses, and traditional development maximize access to public transportation, and often incorporate features to encourage transit ridership. Integral to land use policies are design considerations for good pedestrian access. Every transit rider begins and ends their trip as a pedestrian (or bicyclist). The design of paths, sidewalks, and transit stops contribute to a passenger's experience and perception of safety on the transit system. Well-connected sidewalks should be installed so that transit patrons will not be forced to walk in the street while traveling to or from a stop or station. In addition, roadway crossings should be made safer with an appropriate combination of facilities, such as marked crosswalks, crosswalk bump outs, median crossing islands, warning signs, and pedestrian signals. Good pedestrian design should account for the needs of all potential users, including those with physical or mental limitations. When applied appropriately, this design concept known as "universal design" ensures the built environment is usable and can be shared by all people,

IL Route 31 and Randall Road are two arterial roadways in McHenry County in which transit service currently operates and new transit service has been proposed. On Randall Road, sidewalks are lacking throughout most of the corridor, including in the shopping and job centers near Algonquin Commons in the Village of Algonquin. For Illinois Route 31, there are no sidewalks for 1.5 miles between Blake Boulevard and Johnsburg Road north of McHenry; south of Crystal Lake, sidewalks exist in downtown Algonquin but they discontinue for the most part in many other areas. Additionally, safe crossings for bicyclists and pedestrians are vital. Intersections in many locations along IL Route 31 and Randall Road are wide and intimidating to people who are not in a car. High-visibility crosswalks, pedestrian crossing islands, and sufficient street lighting would be valuable additions to help the corridors become more bicycle and pedestrian friendly.

Storefronts along newer arterial corridors are often 600-700 feet set back from the street. Bus routing could divert buses off the road to directly serve storefronts, but too many diversions slow down the transit service and can make the bus a less attractive option for riders. Also, the bus may not be able to detour through the parking lot due to the durability of the pavement, permission from the property owner, or because of physical constraints that preclude it. However, if the bus stays on the main arterial roadway, then the passengers must traverse the parking lot to get to their destination, which is less convenient for customers and adds to their trip. Future development patterns which encourage storefronts brought closer to the sidewalks and parking lots behind the storefront will greatly enhance transit and access along the corridors.

Passenger amenities at bus stops are also very important. Pace currently operates a “flag stop” service. This means that the bus will stop at any intersection where it is safe to do so if someone is requesting the bus to stop, often by waiving at the driver. These flag stops do not have any passenger amenities, such as signs or bus shelters. Pace is beginning to implement a designated stop-only system throughout the metropolitan region. This Plan recommends that there be designated stops with bus route signs throughout the County for fixed bus routes. In addition, bus stops with a significant amount of boardings should have a concrete pad which allows accessible boarding with ease as well as protects riders from muddy waiting conditions and ideally a bus shelter. Pace provides a standardized set of shelter designs. In addition to the shelter, other passenger amenities such as lighting, benches, heating, trash receptacles,

and a display space for a local map with the route displayed, hours of operation, service areas, fares, arrival times for scheduled stops, and advertising purposes may be possible, given local funding. An electronic panel that displays route information and real time next-bus information may also be considered.

To enhance access to transit, the County and local agencies should consider the variety of smaller capital projects that they could implement to support transit riders. Additionally, McHenry County, the municipalities, and Pace should work together on passenger amenities at proposed stops, including installing bus stop signs with a concrete path connecting the sidewalk to the bus stop. Potential capital projects that allow a pedestrian or bicyclist to have a more comfortable experience getting to the transit stop and waiting for the bus and are described in Chapter VII, Transit Access Along Randall Road and Chapter VIII, Access Improvements for Existing Routes.

VII. Transit Access Along Randall Road

In order for the proposed Crystal Lake-Elgin Route via Randall Road to be successful, the condition of Randall Road needs to be converted to a transit friendly environment. The existing conditions and deficiencies of Randall Road are described in this chapter. Transit stop locations are proposed. Infrastructure improvements that would support pedestrian and bicycle access to the proposed transit stops are recommended.

A. Existing Conditions

Randall Road is a primary north-south arterial in southern McHenry County. This roadway extends 3.5 miles from the County Line, through Crystal Lake, Lake in the Hills, and Algonqin. Existing conditions of these 3.5 miles include:

- Four lane undivided highway (some areas with six lanes)
- Lack of sidewalks
- 11 intersections
- Major intersection at Randall Road and Algonquin Road
- Designated as a Strategic Regional Arterial (SRA)
- Average Annual Daily Traffic (AADT) counts of 41,000 vehicles/day (Randall Road, from the County Line to Ackman Road- nearly equivalent to the volumes passing thru McHenry County on I-90)

B. Phase I Improvements

In 2007, McHenry County initiated a Phase I study to develop alternatives to improve Randall Road between County Line Road and Ackman Road. The preferred alternative consists of widening and resurfacing Randall Road to a six-lane roadway. Various access drives will be closed or modified along Randall Road to accommodate 2030 traffic volumes and the preferred alternative.
Intersection improvements along the corridor as part of the preferred alternative include:

- Bunker Hill Drive/Huntington Drive – Add turning lanes and pedestrian crosswalk
- Stonegate Road – Covert to right-in/right-out access
- Algonquin Road – Add pedestrian crosswalk
- Acorn Lane/Polaris Drive – Add turning lanes and pedestrian crosswalk
- Miller Road – Add turning lanes and pedestrian crosswalk
- Village Road – Continuous Green T traffic signal and pedestrian crosswalk
- Alexandra Boulevard– Convert to right-in/right-out

Additionally, pedestrian and bicycle improvements were also included in the Preferred Alternative:

- 10-ft. multiuse path along Randall Road
- Potential future pedestrian overpasses:
  - ✓ Bunker Hill Drive – Overpass across Randall Road
  - ✓ Woods Creek – Underpass across Randall Road to connect Ken Carpenter Park and Richard Taylor Soccer Field
  - ✓ Miller Road – Overpass across Randall Road
  - ✓ Angela Lane – Overpass across Randall Road
- At-grade intersection crosswalks as listed above

C. Pedestrian/Bicycle Infrastructure

The Villages of Algonquin, Lake in the Hills, and Crystal Lake all have on and off-street bike routes. In the Village of Algonquin, two trails cross Randall Road – one at County Line Road and one at Huntington Drive. The trail along Algonquin Road terminates on the west side of Randall Road. In Lake in the Hills, trails along Algonquin Road and Miller Road terminate at Randall Road. The trail along Miller Road is particularly important in connecting to many of the parks, the lake, and the Prairie Trail on the east side of Randall Road. Crystal Lake trails all terminate east of Randall Road. This includes trails along Miller and Ackman Roads.

Future improvements include both new pedestrian/bike trails and grade separations proposed by local agencies along with the Randall Road Phase I study north/south and east/west pedestrian and bicycle options. The complete list of proposed pedestrian/bike grade separated crossings across Randall Road by all agencies includes:

- South of Harnish Drive
- South of Bunker Hill Drive / Huntington Drive
- North of Stonegate Road
- North of Algonquin Road
- Woods Creek (north of Polaris Road / Acorn Lane)
- Miller Road
- North of Angela Lane / Alexandra Boulevard
- North of Ackman Road

D. Existing Deficiencies

Due to traffic conditions, roadway width and lack of sidewalks, pedestrian and bicycle access to and across Randall Road is very difficult. These existing conditions will make accessing future transit service along Randall Road challenging. Existing deficiencies along Randall Road are summarized below.

1. Roadway

Randall Road is a major arterial carrying over 40,000 vehicles per day. While currently consisting of four through lanes, it is proposed to be expanded to six through travel lanes. With a center median in many areas, turn lanes (dual turn lanes at many intersections), and 8 to 10 foot shoulders, the right-of-way is at least 150 feet. Further, the typical cross-section contains large, open drainage ditches adjacent to the travel lanes. For a pedestrian, crossing a corridor as wide as 150 (minimum) feet within the duration of a traffic signal cycle would be challenging. Further, with signalized intersections spaced at up to 0.3 to 0.5 miles apart, and no way to cross between intersections, pedestrian access to land uses between signals is long and generally difficult for pedestrians to cross.

2. Land Use and Development Patterns

Land use patterns that are dense, diverse and reflect traditional development patterns are critical to the success of fixed route transit. When people are able to get to transit stops in a direct, safe, efficient manner, they are more inclined to use transit. Much of the Randall Road corridor can be characterized by larger lot development with limited pedestrian features. Larger lot development typically sets the buildings back from the street, and therefore the entrance to the actual store or office is separated from the roadway by a surface parking lot. This results in transit passengers having to traverse a long distance, sometimes with no sidewalks or pedestrian pathways.

3. Pedestrian Network

Sidewalks generally are nonexistent, are discontinuous, and may be deeply setback from the roadway. While the corridor lacks these pedestrian features, there is generally right-of-way alongside Randall Road that could be used to improve these conditions.

E. Transit Stop Criteria for Randall Road

1. Transit Development Guidelines

In order to identify the location of potential bus tops and recommend infrastructure improvements, two resources were referenced: Pace Development Guidelines and IDOT Bureau of Design and Environment Manual (March 2013)(BDE). The Pace Development Guidelines (1999) present design elements necessary for the development of safe and efficient provision of transit service. Specific guidelines are presented for bus turnouts, bus stop spacing and location, and passenger waiting areas. The IDOT BDE Manual includes design guidelines on bus stop locations and bus turnouts.

2. Bus Stop Locations and Design

Bus stop spacing is based on land use and population densities. Typically bus stops are located every 660 feet (standard city block). In areas of more medium employment and population densities, bus stops should be placed about every 1320 feet (1/4 mile). Both Pace and IDOT prefer far-side stops where possible which allows the bus to travel through the traffic signal prior to stopping at a bus stop. Mid-block stops could be considered in locations where far-side stops are not practical. Also, mid-block stops can be considered in conjunction with major traffic generators. Both Pace and IDOT identify a preferred pavement width of 12 feet for bus stops. Since existing shoulder widths on Randall Road vary from about 8 feet to 10 feet, the existing shoulder width does not allow for buses to safely pull over at stops and get completely out of traffic. Further, the weight of a typical Pace bus can range from about 13 to 19 tons. Existing roadway shoulders are not designed to handle heavy vehicles. Pace Guidelines recommend a pavement design to accommodate vehicle loads of 20,000 pounds per axle. Therefore, shoulder improvements would be required along Randall Road.

Paved waiting areas should extend 25 feet back from the corner tangent point, being completely between the curb and sidewalk. Standard shelter size is 13.5 feet by 6.5 feet and should be set back 5 feet from the street. An on-street far-side bus stop needs about 90 feet in length (40 feet for vehicle and 50 feet for taper). An on-street mid-block stop would require 150 feet.

3. Bus Turnouts

Pace Development Guidelines and the IDOT BDE both provide design recommendations for bus turnouts with deceleration and acceleration tapers for transitioning to and from the travel lanes. Bus turnouts provide buses room to slow down when approaching stops and to speed up to prevailing travel speed when leaving the stop. This need is lessened when the stop is located on the far-side of a signalized intersection. Far-side stops allow buses to decelerate through the intersection where other vehicles are generally more prepared to reduce speed. They also allow the bus an opportunity during red light signal phases to re-enter the travel lane and get up to traffic speed.

For Randall Road, with a posted speed of 45 mph, 150 foot tapers leading both to and from the turnout is recommended by Pace (125 feet required for 40mph; 175 feet required for 50 mph). The actual design will depend on local site conditions, the frequency of bus service and projected number of passengers. If turn lanes are provided, turnout designs and tapers may differ or may be contained within the turn lane if turning movements are not significantly impeded by the bus. When a turnout is located at the far-side of an intersection, then the cross-street area can be assumed to fulfill the need for an entry taper.

IDOT suggest the use of turnouts on arterial streets where speeds are higher than 35mph, when during the peak hour there are at least 250 vehicles per hour in the curb lane, and the potential for vehicular/bus conflicts warrant the separation of vehicles with stopping transit vehicles. Also, if roadway improvements are being considered, as in the case of Randall Road, then it would be appropriate to consider bus turnouts. On Randall Road, a far-side stop would need 200 feet for a bus turnout (50 feet for vehicle plus 150 feet acceleration taper). A mid-block stop would need 350 feet (50 feet for vehicle plus 150 feet for both acceleration and deceleration tapers).

4. Stop Criteria

The following criteria were applied determining stop locations along Randall Road:

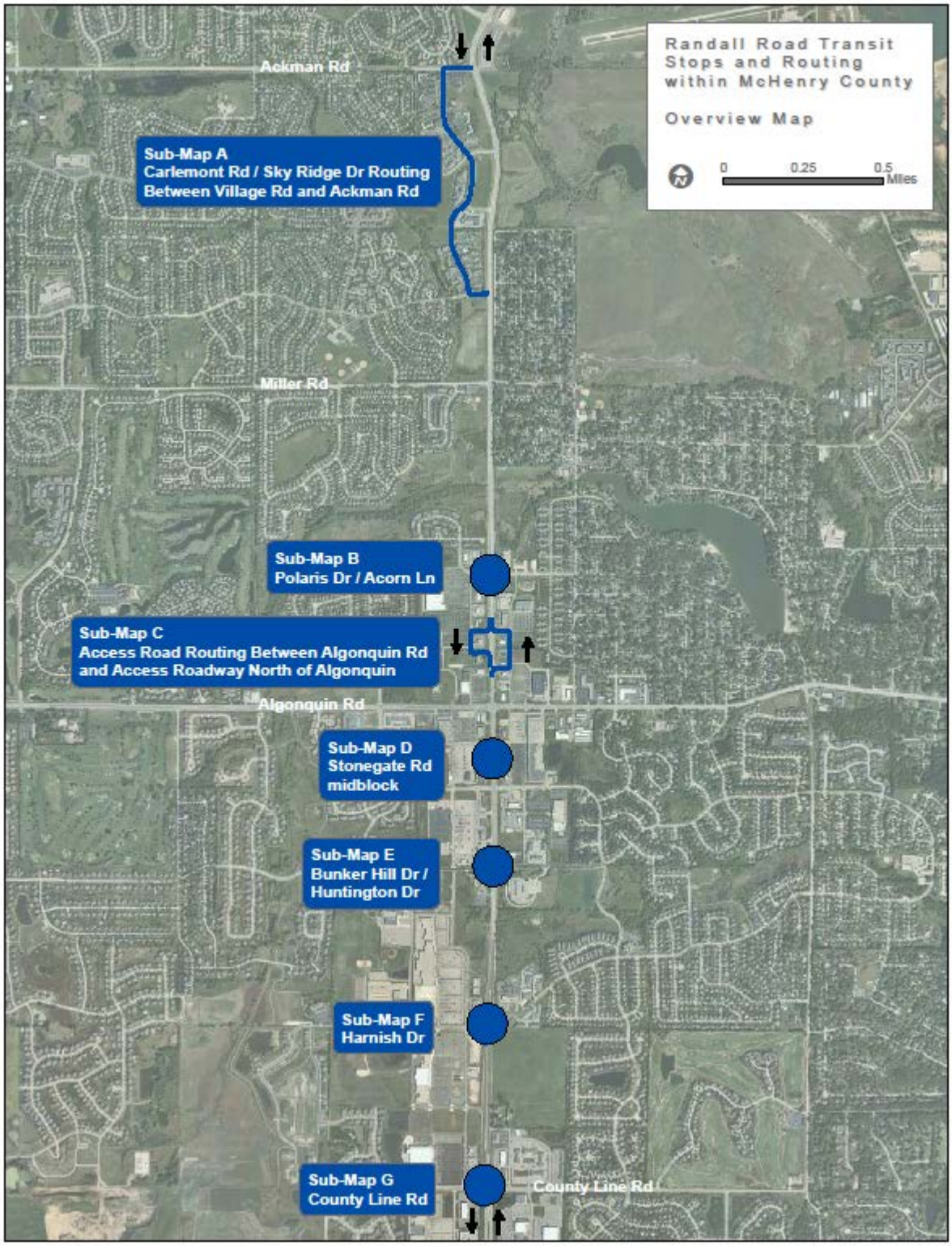
- Per Pace Development Guidelines, a minimum bus stop spacing of 1,320 feet between stops.
- Provide stops in both directions
- Provide far side stops as possible. This allows for easier bus re-entry into traffic due to gaps created by intersection traffic signals.
- Provide stops in locations with higher densities to generate higher passenger volumes
- Provide stops in location that appear to have adequate space for the bus turn-outs, pads, and shelters
- Provide stops at locations where potential exists to link transit service to pedestrian and bicycle facilities
- Avoid areas where potential exists to create adverse environmental impacts (i.e., wetlands, water retention areas)
- Passenger waiting areas would include a physical shelter, bench, and sidewalk connections to adjacent land uses and other pedestrian facilities

a. Mid-Block Stops and Direct Route Alignments

While far side stops using turn-outs along Randall Road is the preferred stop type, there were some special circumstances in which the preferred stop was either mid-block or traveling off of Randall Road. These circumstances included consideration of an adequate stop location along certain areas of Randall Road. For example, the Randall Road / Algonquin Road intersection may require a stop upstream or downstream of the intersection. Subsequently, for the area south of Algonquin Road, a mid-block stop is proposed. For the area north of Algonquin Road, a direct routing into the commercial area is proposed. These stops are described in more detail in the next section.

F. Proposed Transit Stop Locations

Each of the recommended stop locations are described below and shown in Figure 12. The transit stops are proposed to be located near an existing or proposed signalized intersection or grade separated pedestrian/bike crossing in order to provide safe pedestrian linkages to the bus stop from either side of Randall Road. With the heavy traffic volumes, high speeds, and significant width of Randall Road, mid-block crossings from nearby land uses should be discouraged. Currently, existing conditions would generally require riders to cross grassy parkways along the shoulder, exposed to traffic. The grassy parkways would increase risk to riders under wet conditions or where there are steep embankments, and can be virtually impassable when snow is present. Therefore, stops were located near areas where sidewalk connections can be completed and bus turnouts can be added to bridge the distance between the stop and the adjacent land use. Curb ramps and marked crosswalks must be provided at the intersection to expedite pedestrian movements. While pedestrian refuge areas at intersections are also desired, the existence of dual left turn lanes along Randall Road eliminate the space to accommodate pedestrian refuge medians. Proposed improvements are shown on each exhibit map.


Randall Road Transit Stops and Routing within McHenry County
Overview Map
0
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Miles
Ackman Rd
Sub-Map A
Carlemont Rd / Sky Ridge Dr Routing Between Village Rd and Ackman Rd
Miller Rd
Sub-Map B
Polaris Dr / Acorn Ln
Sub-Map C
Access Road Routing Between Algonquin Rd and Access Roadway North of Algonquin
Algonquin Rd
Sub-Map D
Stonegate Rd midblock
Sub-Map E
Bunker Hill Dr / Huntington Dr
Sub-Map F
Harnish Dr
Sub-Map G
County Line Rd
County Line Rd

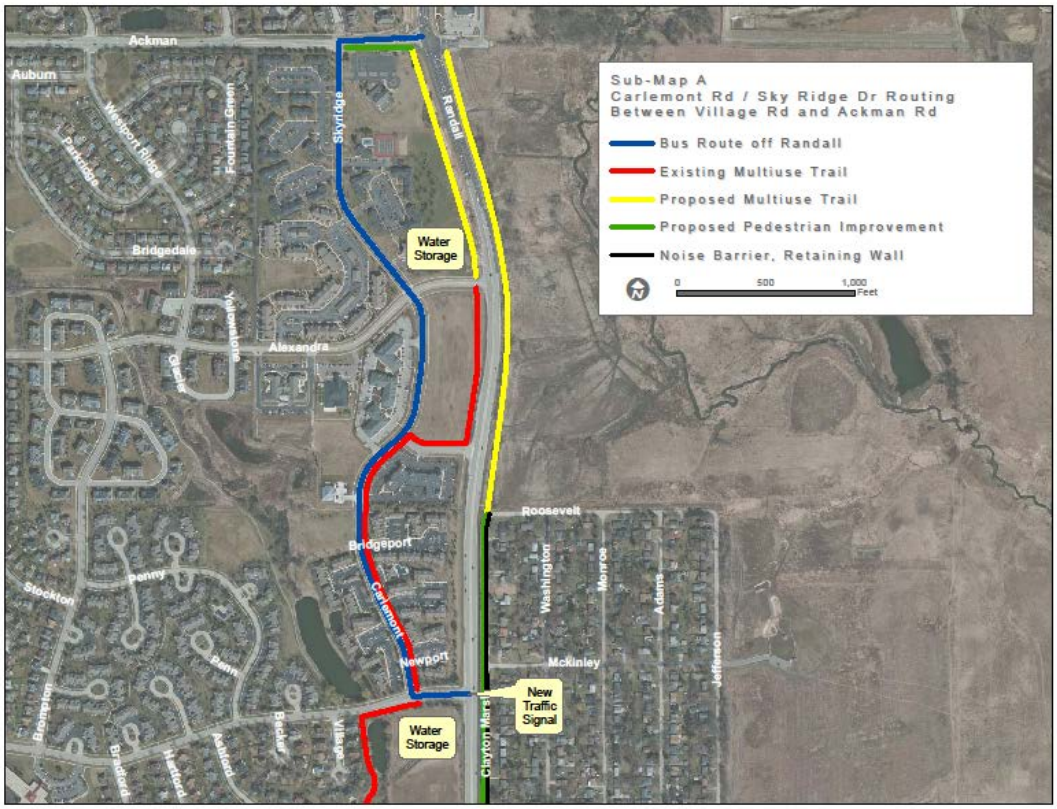
Figure 12

The following transit stop locations are proposed:

- Ackman Road to Village Road (via Carlemont Road/Sky Ridge Drive)
- Polaris Road / Acorn Lane
- Algonquin Road
- Stonegate Road
- Bunker Hill Drive / Huntington Drive
- Harnish Drive
- County Line Road

1. Ackman Road to Village Road

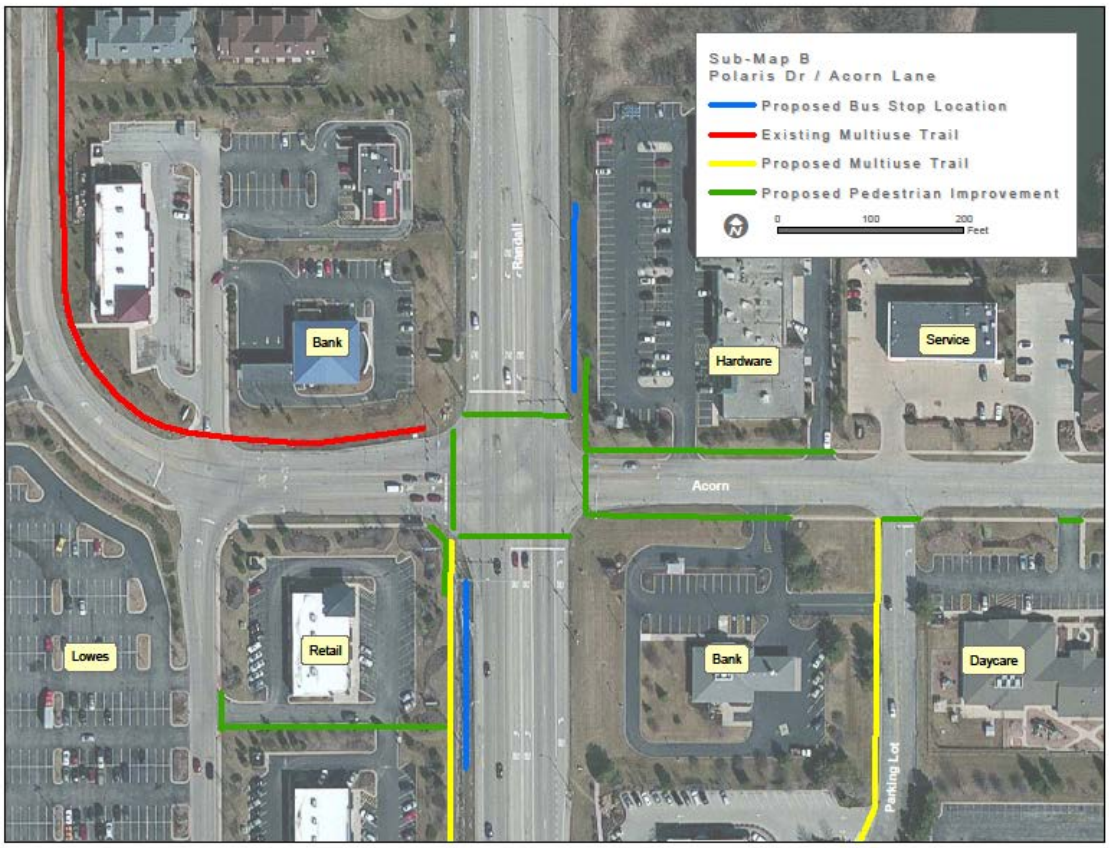
In order to allow for better pedestrian access , transit service in this segment is proposed to deveiate off of Randall Road starting at Ackman Road on the north and travel via Carlemont Drive /Sky Ridge Drive until Village Drive, where the bus would get back on Randall Road. The is based on three considerations: 1) the lack of adequate stop locations along Randall Road in this segment; 2)residential areas are located further west and there is undeveloped land on the east; and, 3) few ridership-generating destinations are located adjacent to Randall Road. A multi-use path exists along Carlemont / Sky Ridge Drives along this segment. The intersection of Ackman Road and Randall Road is currently signalized and the intersection of Randall Road and Village Road is proposed to be signalized. With both intersections signalized, access to/from Randall Road by transit vehicles would not be difficult. Two multi-use grade separations are proposed – north and south of Ackman Road. Bus stops would be located on-street on Carlemont / Sky Ridge Drives, so no turnouts would be required. Signage and shelters should be included.



Standard bus stop spacing would recommend a stop at the next major intersection to the south, i.e. Miller Road, a distance of approximately 3,000 feet. However, a bus stop is not recommended at Miller Road as there does not appear to be an adequate stop location. A large area of water retention is located in the northwest quadrant. The southwest quadrant also appears to have wetlands. Eastern quadrants include residential uses, but none have connections to Randall Road. The Randall Road corridor study calls for retaining walls and noise barriers, which would prohibit any access to transit service. The next intersection, Village Road, is located about 500 feet north of Miller Road. With a new traffic signal proposed for Village Road, this location was determined to be better situated for a transit stop.

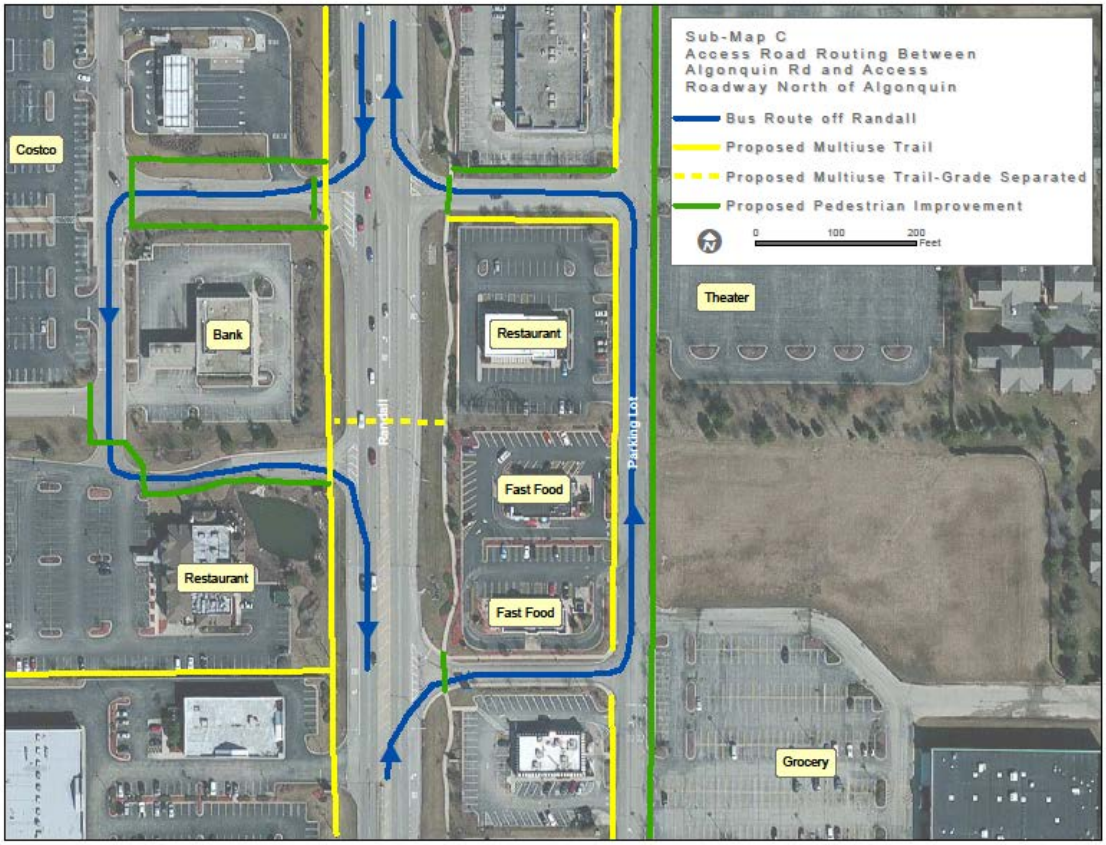
2. Polaris Road / Acorn Lane

This transit stop would be located on the far sides of the intersection. Adjacent land uses include retail, banks, and service land uses. Drainage areas are located along the northwest quadrant and a small area on the southwest quadrant. Sidewalks continue to the intersection from the west, but are discontinuous on the east. An existing multi-use path is located in the northwest quadrant, connecting to the intersection. A multi-use path is proposed for the southwest quadrant along Randall Road and along the access road east of Randall Road. The intersection includes dual left turn lanes and a single right turn lane on three approaches (the east leg only includes a single left turn lane and no right turn lane). The bus stop location would require a 50 foot vehicle pad located 25 feet from the corner, plus a 150 foot acceleration lane. Roadway shoulders would need to be improved to accommodate a 12 foot vehicle width. The right turn lanes could be extended across the intersection to accommodate the bus turn-out and acceleration lane. Crosswalks should be added across all legs of the intersection. A direct sidewalk to land uses in the southwest quadrant from the bus stop is recommended.



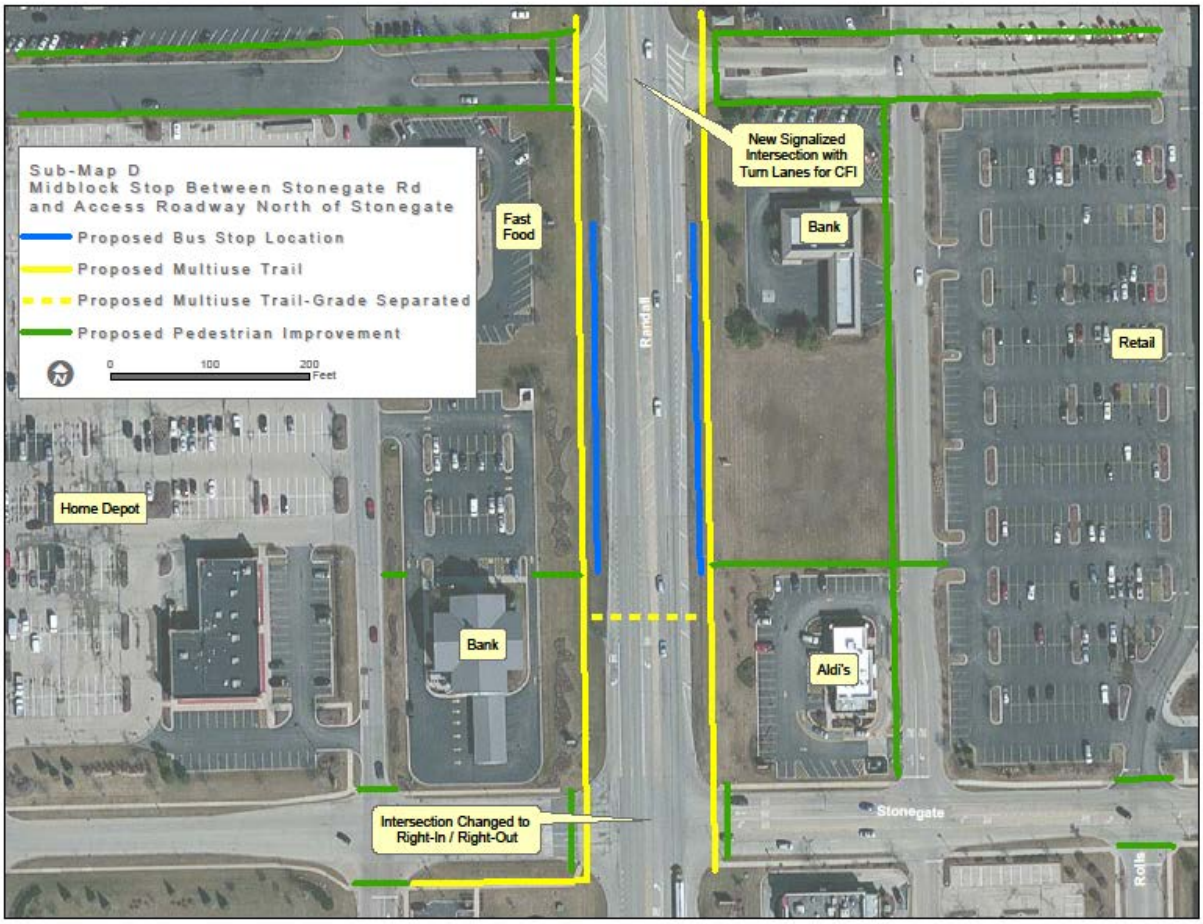
3. Algonquin Road

The future design of the intersection may require that the stop is located either upstream or downstream of the intersection. However, there does not appear to have adequate shoulder space to accommodate a mid-block crossing near Algonquin Road. Also, because of the number of retail and restaurant uses located along both sides of Randall Road, along with the existence of right-in / right-out access drives, there is the opportunity to pull off of Randall Road for a short segment. Vehicles could then pull back onto Randall Road using the existing right turn lane as the acceleration/merge lane. The south access roadway on the east side of Randall Road is proposed to be changed to a right-out only drive as part of the Randall Road Corridor Study. This would need to be modified to allow northbound transit vehicles to enter this access drive. Surrounding land uses includes Costco, Dominick's, Lake in the Hills Theatre, banks, and numerous restaurants. Sidewalks should be added along all access roadways. Direct sidewalk connections are required to the bus stop from the adjacent land uses and to the multi-use paths. Multi-use paths are proposed along the west side of Randall Road and the north-south access road east of Randall Road. A grade separated multi-use path is proposed to travel under Randall Road just north of Algonquin Road. Bus stops would be located on-street on the access roadways, so no turnout would be required. Signage and shelters should be included.



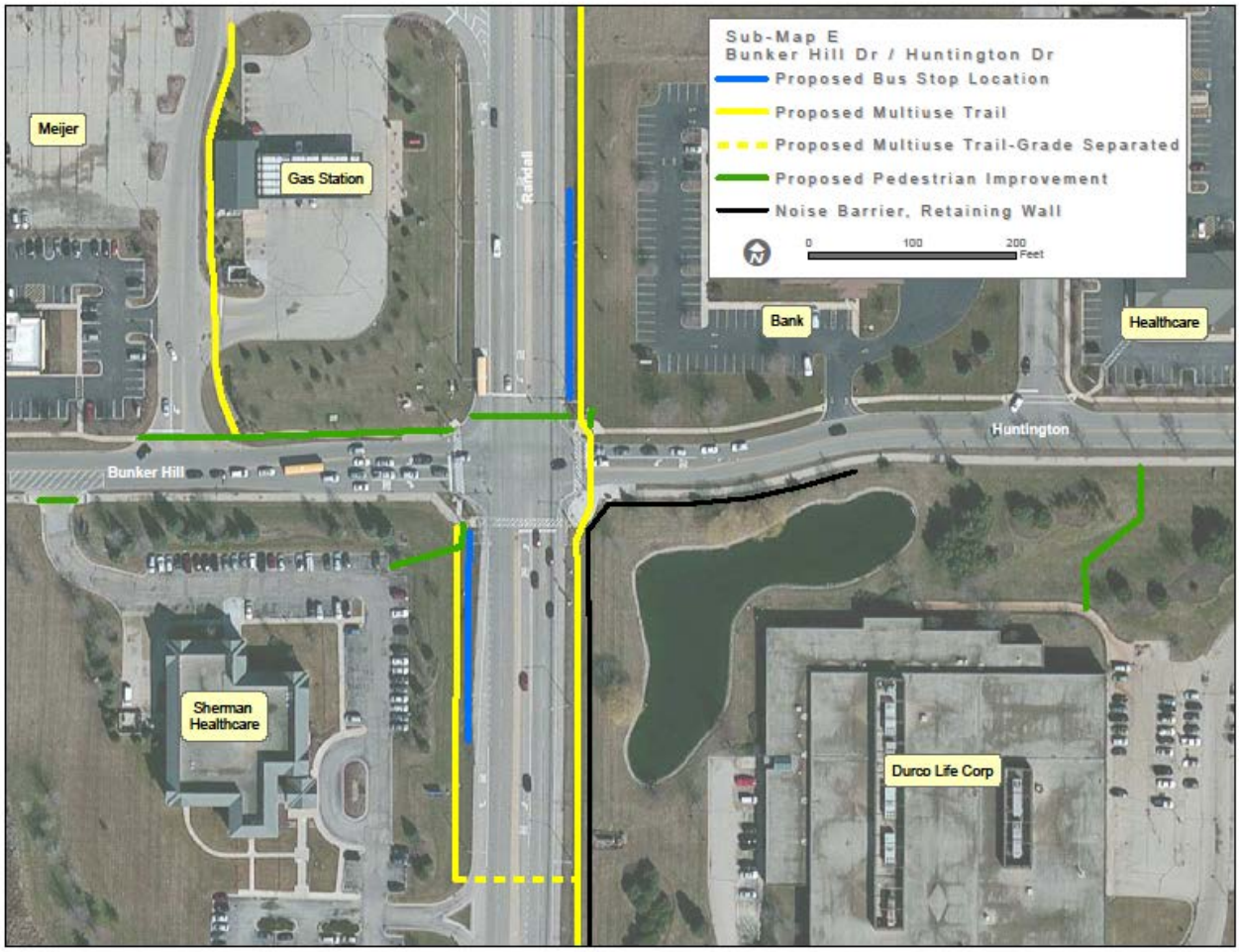
4. Stonegate Road

In this segment, the bus stop would be located mid-block between Stonegate Road and the access roadway north of Stonegate Road. It appears that there is adequate space along the roadway shoulders for a mid-block crossing to be feasible, possibly even using the existing right turn lanes. A multi-use path is proposed along both sides of Randall Road. A grade separated multi-use path is proposed across Randall Road just north of Stonegate Road. The multi-use path and bridge would connect both the east and west sides of Randall Road, eliminating the need for transit riders to walk to the signalized intersections to cross Randall Road. Direct sidewalk connections are required to the bus stop from the adjacent land uses and to the multi-use paths. The bus stop location would require a 50 foot vehicle pad located, plus both a 150 foot acceleration lane and a 150 foot deceleration lane. Roadway shoulders would need to be improved to accommodate a 12 foot vehicle width, possibly using the existing right turn lanes.



5. Bunker Hill Drive / Huntington Drive

This transit stop would be located on the far sides of the intersection. Adjacent land uses include Sherman Healthcare, Meijer, a bank, and Durco Life Corp. Water retention is located in the southeast quadrant. Sidewalks are generally connected to the intersection. Sidewalk extensions are suggested to connect to Durco Life Corp. and Sherman Healthcare. Multi-use paths are proposed for the east side of Randall Road and along the north-south access road in the northwest quadrant. A grade separated multi-use path is proposed over Randall Road south of Bunker Hill / Huntington Drive near Sherman Healthcare. The intersection includes dual left turn lanes and a single right turn lane on three approaches (the east leg only includes a single left turn lane and no right turn lane). The bus stop location would require a 50 foot vehicle pad located 25 feet from the corner, plus a 150 foot acceleration lane. Roadway shoulders would need to be improved to accommodate a 12 foot vehicle width. The right turn lanes could be extended across the intersection to accommodate the bus turn-out and acceleration lane.



6. Harnish Drive

This transit stop would be located on the far sides of the intersection. Retail uses are located in all quadrants except the southeast, which is undeveloped. Landscaping is located in the shoulder of the northwest quadrant. The intersection currently includes dual left turn lanes and a single right turn lane on all approaches. Sidewalks are located up to all corners of the intersection except the southeast quadrant. A multi-use path is proposed along the east side of Randall Road and also along the north-south access drive west of Randall Road. A grade separated multi-use bridge is proposed across Randall Road south of Harnish Drive. Sidewalks should be extended to the bus stop, plus connect to the grade separated crossing. The bus stop location would require a 50 foot vehicle pad located 25 feet from the corner, plus a 150 foot acceleration lane. Roadway shoulders would need to be improved to accommodate a 12 foot vehicle width. The right turn lanes could be extended across the intersection to accommodate the bus turn-out and acceleration lane.

7. County Line Road

This transit stop would be located on the far sides of the intersection. The southwest quadrant (located in Kane County) includes a major shopping center. Retail uses are also located in the other quadrants. Water retention is located in the southeast quadrant. The intersection currently has dual left turn lanes and a single right turn lane on all approaches. Sidewalks are located up to the intersection. Sidewalk extensions would be required to connect to the bus stop. A multi-use path is proposed along Randall Road and through the retail area in the northwest quadrant. The bus stop location would require a 50 feet vehicle pad located 25 feet from the corner, plus a 150 foot acceleration lane. Roadway shoulders would need to be improved to accommodate 12 feet vehicle width. The right turn lanes could be extended across the intersection to accommodate the bus turn-out and acceleration lane.

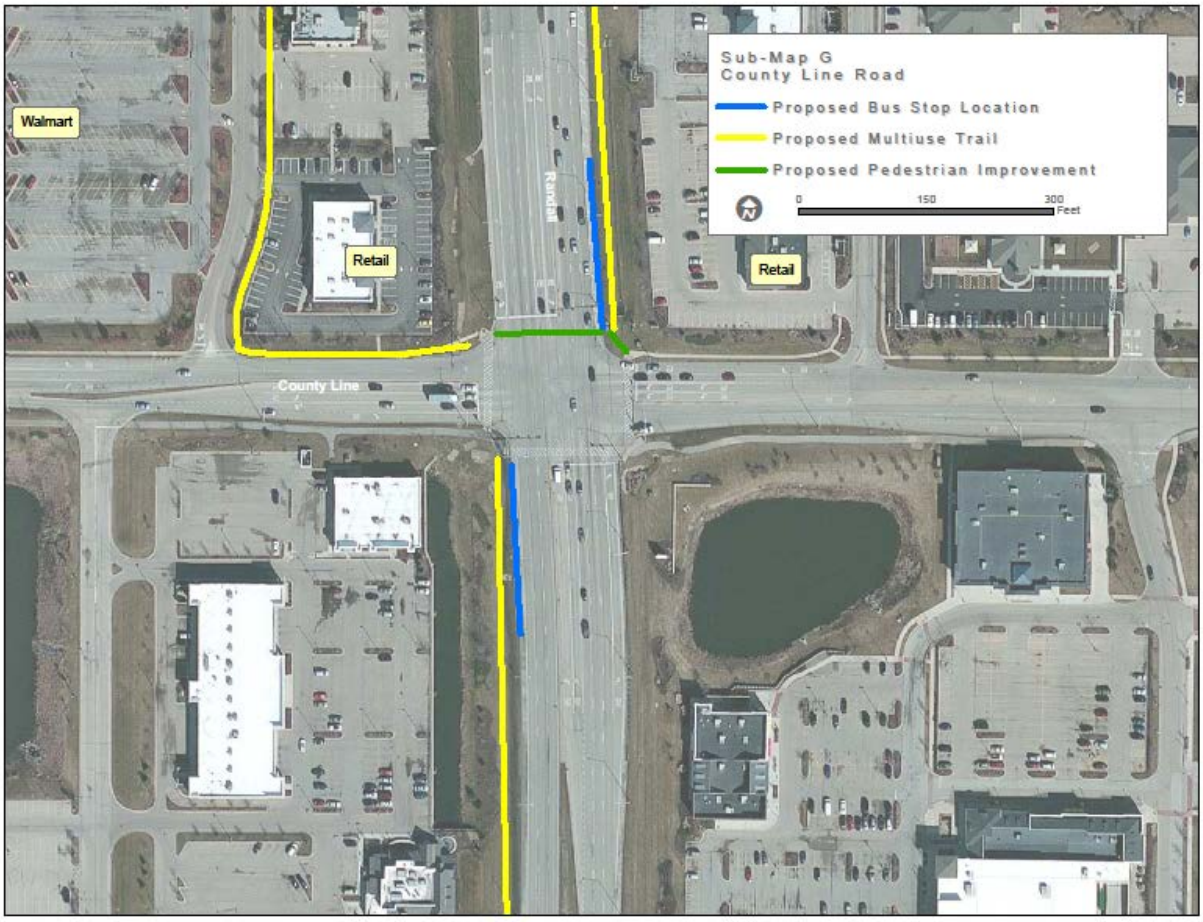


Table 19 presents a summary of existing and proposed conditions along with required infrastructure changes for each stop.

Table 19 - Summary of Proposed Bus Stop Locations

STOP LOCATION	EXISTING CONDITIONS/ PLANNED ROADWAY IMPROVEMENTS	NEEDED INFRSTRUCTURE IMPROVEMENTS TO ACCOMMODATE TRANIST
Village Road to Ackman Road – Access Road (Carlemont Drive) routing and stop	• Adjacent land uses: residential, services, retail, undeveloped land • Randall Road Corridor Study proposal: new traffic signal at Village Road with turn lanes; noise barrier along east side of Randall Road from Miller Road to Roosevelt • Existing sidewalks on Carlemont and Sky Ridge Drives. • Multi-use path proposed for both east and west sides of Randall Road and north-south access road east of Randall Road between Roosevelt and Ackman Road • Existing multi-use trail along Carlemont Dr. between Village Road and Alexandra Blvd. • Proposed grade separation overpasses across Randall Road north of Alexandra Blvd., and north of Ackman Road • Water retention along east side of Randall Road at Alexandra Blvd. and Village Road	• Transit vehicles would enter at Village Road (signalized intersection) and Ackman Road (signalized intersection) • Bus stops would be on-street along Carlemont and Sky Ridge Drives • Sidewalks/ADA ramps connecting bus stop/shelter to existing sidewalks • New sidewalks on Village Road and Angela Lane between Randall Road and Carlemont/Sky Ridge Drives. • Add crosswalks at all intersections • Possible for this area to be designated as Flexible service / Call-in-Ride service
Polaris Road / Acorn Lane – Far Side Stop	• Adjacent land uses: Lowes, banks, retail, service, daycare • Randall Road Corridor Study proposal: dual left turn lanes and right turn lanes on Randall Road, Polaris Dr., and Acorn Lane • Sidewalks on all legs except east side of Randall Road • Existing multi-use path along north side of Polaris Drive, continuing into residential subdivision • Multi-use path proposed for east and west sides of Randall Road connecting to access drives east and west of Randall Road • Water retention/wetlands on	• Improve roadway shoulder for bus pad and shelter • 50' bus pad located 25' from corner • 150' accel lane • Sidewalks/ADA ramps connecting bus stop/shelter to sidewalks on Bunker Hill Dr. and Huntington Drive • Add crosswalks on north leg of Randall Road and Polaris Dr. / Acorn Lane and at all access roadways

STOP LOCATION	EXISTING CONDITIONS/ PLANNED ROADWAY IMPROVEMENTS	NEEDED INFRSTRUCTURE IMPROVEMENTS TO ACCOMMODATE TRANIST
	west side of Randall Road	
Algonquin Road Access Road routing and stops	• Adjacent land uses: Costco, Lake in the Hill theatre, retail, restaurants, bank, Dominick's • Randall Road Corridor Study proposal: new signalized intersection to be located between Algonquin Road and Access Road north of Algonquin Rd; some access driveway closures on Randall Road and Algonquin Road • Existing sidewalks on west side of Randall Road • Multi-use path proposed for both east and west sides of Randall Road and north-south access road east of Randall Road • Proposed grade separation underpass across Randall Road north of Algonquin Road • Water retention along east side of Randall Road	• Transit vehicles would enter right-in / right-out access roads. • Bus stops would be on-street along access roads • Sidewalks/ADA ramps connecting bus stop/shelter to existing sidewalks • new sidewalks on Access Road, and adjacent land uses • Add crosswalks on all legs of both Access Roads with Randall
Stonegate Road Midblock Stop	• Adjacent land uses: Home Depot, Meijer, retail, restaurants, bank • Randall Road Corridor Study proposal: intersection at Stonegate changed to right-in / right-out and new signalized intersection to be located south of Access Road (north of Stonegate Road); some access driveway closures near Algonquin Road • Sidewalks on Stonegate • Multi-use path proposed for both east and west sides of Randall Road and access drive west of Randall Road • Proposed grade separation overpass across Randall Road north of Stonegate	• Improve roadway shoulder for bus pad and shelter • 50' bus pad • 150' accel and decel lanes • Sidewalks/ADA ramps connecting bus stop/shelter to existing sidewalks on Stonegate • Add crosswalks on all legs of both Access Roads with Randall • New sidewalks along north-south Access roads
Bunker Hill Drive / Huntington Drive –	• Adjacent land uses: Sherman Family Healthcare, Meijer,	• Improve roadway shoulder for bus pad and shelter

STOP LOCATION	EXISTING CONDITIONS/ PLANNED ROADWAY IMPROVEMENTS	NEEDED INFRSTRUCTURE IMPROVEMENTS TO ACCOMMODATE TRANIST
Far Side Stop	restaurant, bank, Durco Life Corp. • Randall Road Corridor Study proposal: dual left turn lanes and right turn lanes on Bunker Hill Dr and Huntington Dr.; retaining wall along southeast quadrant • Sidewalks on all legs except south leg • Multi-use path proposed for east side of Randall Road and access drive west of Randall Road • Proposed grade separation overpass across Randall Road south of Bunker Hill Dr. / Huntington Dr. (connecting near Sherman Healthcare and Durco Life Corp.) • Water retention on southeast quadrant	• 50' bus pad located 25' from corner • 150' accel lane • Sidewalks/ADA ramps connecting bus stop/shelter to sidewalks on Bunker Hill Dr. and Huntington Drive • Add crosswalks on north leg of Randall Road and at access roadways
Harnish Drive – Far Side Stop	• Adjacent land uses: retail, Target, restaurants, banks, service, proposed retail center • Existing dual left turn lanes; right turn lanes on Harnish Drive • Sidewalks on all legs except south leg • No proposed intersection improvements • Multi-use path proposed for east side of Randall Road and access drive west of Randall Road • Proposed grade separation overpass across Randall Road south of Harnish Drive	• Improve roadway shoulder for bus pad and shelter • 50' bus pad located 25' from corner • 150' accel lane • Sidewalks/ADA ramps connecting bus stop/shelter to sidewalks on Harnish Drive • Complete sidewalk along south side of Harnish Drive east of Randall Road • Add crosswalks on all intersection approaches at Harnish Drive with Randall Road and at Harnish Road with west access road.
County Line Road – Far Side Stop	• Drainage in southwest and southeast quadrants • Adjacent land uses: retail, Walmart, restaurants • Dual left turn lanes; right turn lanes • Sidewalks on all legs except south leg	• Improve roadway shoulder for bus pad and shelter • 50' bus pad, located 25' from corner • 150' accel lane • Sidewalks/ADA ramps connecting bus stop/shelter to sidewalks on County Line Road

STOP LOCATION	EXISTING CONDITIONS/ PLANNED ROADWAY IMPROVEMENTS	NEEDED INFRSTRUCTURE IMPROVEMENTS TO ACCOMMODATE TRANIST
	• No proposed intersection improvements with Randall Road Corridor Study • Multi-use path proposed for east side of Randall Road and access drive west of Randall Road	• Add crosswalk on north approach of intersection

VIII. Access Improvements for Existing Routes

The study examined access to each of the existing fixed route services, Route 806, 807 and 808. Existing conditions and recommendations on how to improve the pedestrian environment to each of these routes is identified below.

A. Route 806 Access Improvements

The existing Route 806 travels on IL Route 31, between IL Route 176 on the south end of the route in the City of Crystal Lake to Bull Valley Road in the City of McHenry. In addition, recommended changes to Route 806 has the route operating on IL Route 31 between Elm Street and Johnsburg Road on the north side of the City of McHenry in order to serve the many newer retail stores, senior center and community center.

The Illinois Department of Transportation (IDOT) is in the process of an Illinois Route 31 Phase I Study. The project corridor is located just north of IL Route 176 in Crystal Lake and extends north to IL Route120 in downtown McHenry. Highway improvements are proposed to accommodate existing and projected 2040 traffic demands. Proposed improvement options for the northern and southern sections are described below. Additionally, improvements are also proposed for the IL Route 120 intersection including a minimum and maximum build alternatives. Both options include additional lanes and remove on-street parking. The northern section option (north of Bull Valley/Charles Miller Road to John Street) is proposed to include two travel lanes in each direction separated by an 18 foot raised curb median. It would also include a shared use path and sidewalk. See Figure 13.

Figure 13

The southern section option (IL Route 176 to south of Bull Valley Road/Charles Miller Road) would include two travel lanes in each direction separated by a 30 foot raised curb median and would also include a shared use path and sidewalk. There is also an alternative option for the section between Drake Drive and Veterans Parkway to provide a 30 foot depressed median with 10 foot paved shoulders which would allow for speed limits higher than 45 mph. See Figure 14.

Figure 14

A change to the footprint of IL Route 31 is expected to increase access to bus stops due to the installation of shared use paths/sidewalks along the corridor. Although the roadway will be wider, the installation of a raised median could provide a pedestrian refuge island for transit riders needing to cross the street. The County and IDOT should work together to ensure that IL Route 31 is a transit friendly corridor and that pedestrian accommodations be integrated into the design plans.

A review of pedestrian access from Route 806 to adjacent land uses along IL Route 31 is presented below by segment. Recommended infrastructure improvements to enhance pedestrian access are described.

1. IL Route 176 to North of Ray Street

This segment is a more dense area of the corridor in downtown Crystal Lake. It is primarily auto-oriented with one travel lane per direction. The IL Route 31 Phase I Study calls for two travel lanes per direction along with a multiuse path and sidewalks.

Sidewalks currently exist for one mile of IL Route 31 north of IL Route 120, but there are no sidewalks for 1.5 miles between Blake Boulevard and Johnsburg Road. On IL Route 31 south of Crystal Lake, sidewalks exist in downtown Algonquin and on the site of Walmart, but they discontinue for the most part in many other areas. Existing conditions include:

- Commercial land uses set back from roadway
- Numerous curb cuts
- Two lanes per direction with open drainage areas

- Limited signalized intersections for protected crossings
- Discontinuous sidewalks
- Sidewalks currently exist at Ray Street, west of IL Route 31 for access to Columbia College

Potential improvements could include:
- Improved shoulders for bus turn out
- Continuous sidewalks along IL Route 31 and cross streets
- Marked crosswalks
- Traffic signal at IL Route 31 and Ray Street or pedestrian bridge near this intersection for protected crossing to Columbia College

IL Route 31, from IL Route 176 to Ray Street

2. North of Ray Street to Veterans Parkway

This segment is more rural with some industrial uses. Currently one travel lane per direction. The IL Route 31 Phase I Study calls for two travel lanes per direction along with a multiuse path and sidewalks. Existing conditions include:
- A few industrial land uses set back from roadway. TC Industries is located at Half Mile Trail.
- Two lanes per direction with open drainage areas
- Few signalized intersections
- No sidewalks
- Residential area located in southeast quadrant of IL Route 31 and Ames Road

Potential improvements could include:
- Improved shoulders for bus turn out near TC Industries
- Pedestrian bridge near Ames Road

3. Veterans Parkway to Bull Valley Road/Charles J. Miller Road

This segment transitions from rural to commercial developments. Currently one travel lane per direction. The IL Route 31 Phase I Study calls for two travel lanes per direction along with a multiuse path and sidewalks. Existing conditions include:

- A few industrial land uses set back from roadway at Veterans Parkway. This intersection is not signalized. North-south marked cross walk on the east side of IL Route 31 crossing Veterans Parkway with sidewalks in the southeast corner.
- Pioneer Center and retail area at Prime Parkway. Intersection of IL Route 31 and Prime Parkway is signalized. No sidewalks or marked crosswalks. Land uses set back from Roadway.
- Residential land uses with access via Veterans Parkway
- Centegra Medical Center located between Shamrock Lane and Bull Valley Road. Shamrock Lane / IL Route 31 intersection is signalized
- Two lanes per direction with open drainage areas

Centegra Medical Center

Pioneer Center/Prime Parkway

Potential improvements could include:

- Improved shoulders for bus turn out near Prime Parkway and Shamrock Lane. Could use right turn lane for acceleration/deceleration lane.
- Far side stop would provide direct access to Pioneer Center
- Marked crosswalks at intersections
- Continuous sidewalks along IL Route 31 and Prime Parkway
- Direct access to Centegra Medical Center

4. Bull Valley Road/Charles J. Miller Road to downtown McHenry (IL Route120)

This segment travels along West Crystal Lake Road, returning back to IL Route 31 at Lillian Street and then traveling to the intersection at IL Route 120. Existing conditions include:

- One travel lane per direction, shoulders, striped median along Bull Valley Road
- Bull Valley Road signalized at Ridgeview and Crystal Lake Road
- Surrounding land uses mostly rural with residential subdivision at Kesswood Drive. Large church east of Crystal Lake Road.
- Prairie Trail Path located along UP Railroad
- Sidewalks located only directly in front of adjacent land uses; not continuous
- Along Crystal Lake Road land uses are residential. McHenry High School – West Campus and a post office located near Royal Drive.
- Route travels into downtown McHenry with much more dense development, sidewalks, and signalized intersections

Potential improvements could include:

- Bus turnout on Bull Valley Road at Kesswood to connect to residential area
- Continuous multiuse path along Bull Valley and Crystal Lake Road to connect to Prairie Trail. This would connect the high school to the path.
- Bus turnout at high school with shelter

- Sidewalk connections from roadways to land use

McHenry High School / Post Office

5. Downtown McHenry (IL Route 120) to north of McCullom Lake Road

This segment travels along IL Route 120 to the north segment of IL Route 31. The IL Route 31 Phase I Study calls for two travel lanes per direction along with a multiuse path and sidewalks. The intersection of (south) IL Route 31 and IL Route 120 is proposed to be improved. Existing conditions include:

- Along IL Route 31 (south) - one travel lane per direction, shoulders, center turn lanes and on-street parking. Along IL Route 120, two travel lanes per direction, center turn lanes, on-street parking. Along IL Route 31 (north), two travel lanes per direction, center turn lanes
- Numerous driveways/curb cuts
- On-street parking
- Sidewalks
- Downtown McHenry is suburban with denser development, sidewalks, and signalized intersections
- Major retail center at IL Route 31 (north) and McCullom Lake Road, continuing to Running Brook Farm Boulevard

Potential Improvements could include:

- Driveway consolidations
- Consistent marked crosswalks at intersections
- Improved pedestrian connection from IL Route 31 (south) to McHenry Metra station
- For the area along IL Route 31 (north) from McCullom Lake Road to Blake Boulevard, pedestrian connections should be improved to better access transit service. Bus turnouts should be located at far side locations. Improved pedestrian paths through parking areas to businesses.
- Should consider improvement at the commercial access roadway between McCullom Lake Road and Blake Boulevard. This could be a signalized intersection with bus turn outs or possibly a pedestrian bridge across IL Route 31, also with bus turnouts.

Commercial Center at McCullom Lake Road

6. North of McCullom Lake Road to Ringwood Road

This segment travels from Running Brook Farm Boulevard along IL Route 31 and connecting to Johnsburg Road. Existing conditions include:

- IL Route 31 transitions to one travel lane per direction with striped median
- Intersection at IL Route 31 and Johnsburg Road is signalized
- McHenry Township Offices and Senior Center at IL Route 31 and Johnsburg Road
- Area along Johnsburg Road is rural. Roadway is one lane per direction with shoulders
- Sidewalks generally along north side of Johnsburg Road, east of Chapel Hill Road
- East of Spring Grove (along Wilmot Road section), area is more residential with sidewalks

Potential improvements could include:

- Continuous sidewalks along both sides of Johnsburg/Wilmot Road
- Striped crosswalks at intersections
- Pedestrian connections to adjacent land uses
- Bus turnouts, depending on ridership demand
- A new driveway access to Alexander Road to better serve Senior Center and eliminate northbound/southbound turn movements onto IL Route 31

Alexander Road at Senior Center

7. Ringwood Road to Grand Avenue

This segment travels along Ringwood Road through Johnsburg to Grand Avenue in Fox Lake via US 12. Existing conditions include:

- One travel lane per direction. Limited signalized intersections.
- Suburban residential
- Intersection at Fox Lake Road and US 12 is signalized
- US 12 has two travel lanes per direction
- Generally no sidewalks until downtown Fox Lake
- Route ends at Fox Lake Metra station

Potential improvements could include:

- More sidewalk continuity
- Improved pedestrian connection to Fox Lake Metra depot station
- Improved crosswalks

Downtown Fox Lake / Metra

B. Route 807 Access Improvements

A review of pedestrian access from Route 807 to adjacent land uses is presented below by segment. Recommended infrastructure improvements to enhance pedestrian access are described.

1. Prime Parkway to Bull Valley Road/Charles J. Miller Road

This segment transitions from rural to commercial developments. Currently there is one travel lane per direction. The IL Route 31 Phase I Study calls for two travel lanes per direction along with a multiuse path and sidewalks. Existing conditions include:

- Pioneer Center and retail area at Prime Parkway. Intersection of IL Route 31 and Prime Parkway is signalized. No sidewalks or marked crosswalks. Land uses set back from roadway.
- Centegra Medical Center located between Shamrock Lane and Bull Valley Road. Shamrock Lane / IL Route 31 intersection is signalized
- Two lanes per direction with shoulders and open drainage areas
- Sidewalk along south side of Shamrock, but ends prior to intersection
- Mercy Drive is a cul-de-sac roadway with sidewalks along both sides. Intersection is not signalized.

Potential improvements could include:

- Improved shoulders for bus turn out near Prime Parkway and Shamrock Lane. Could use right turn lane for acceleration/deceleration lane
- Far side stop would provide direct access to Pioneer Center
- Marked crosswalks at intersections
- Continuous sidewalks along IL Route 31 and Prime Parkway
- Direct access to Centegra Medical Center

2. Bull Valley Road/Charles J. Miller Road to downtown McHenry (IL120)

This segment travels along IL Route 31 to the intersection at IL Route 120. The IL Route 31 Phase I Study calls for two travel lanes per direction along with a multiuse path and sidewalks. The intersection of IL Route 31 and IL Route 120 is proposed to be improved. Existing conditions include:

- Along IL Route 31 - one travel lane per direction, shoulders, center turn lanes and on-street parking. Along IL Route 120, two travel lanes per direction, center turn lanes, on-street parking. Sidewalks in from of commercial uses, but not continuous
- Numerous curb cuts
- Area transitions to residential north of Knox Road
- Route travels into downtown McHenry with much more dense development, sidewalks, and signalized intersections

Potential improvements could include:

- Bus turnout on IL Route 31 at Bull Valley Road
- Continuous sidewalks
- Consolidation of driveways
- Consistent marked crosswalks at intersections
- Improved pedestrian connection from IL Route 31 to McHenry Metra station

3. IL Route 120, from downtown McHenry to South Curran/Ringwood Road

This segment travels through downtown McHenry to Curran Road, where the land uses once again become more rural. Existing conditions include:

- No improvements planned for upgrading IL Route 120
- Two travel lanes per direction plus center turn lanes
- Signalized intersections at Curran, Meadow, Oak, Crystal Lake Road and IL Route 31
- Sidewalks along both sides of IL Route 120, although south side ends east of Curran
- Prairie Trail path crosses IL Route 120 at Oak Drive
- Numerous curb cuts
- Land uses more residential west of Ramble Drive

Potential improvements could include:

- Improved pedestrian path to McHenry Metra station
- Bus turnout on west side of UP Railroad for direct access to Metra station
- Driveway consolidation
- Improved pedestrian paths to adjacent land uses

4. Curran/Ringwood Road to Greenwood Road

This segment transitions from the dense downtown area to a more rural area. Existing conditions include:

- Two travel lanes per direction with painted median, transitioning to one lane per direction with no center median at Elm Road
- Large warehousing/industrial use between Dot Road and Elm Road
- No sidewalks along IL Route120 west of Curran.
- Valley View Elementary School located west of Martin Street. Sidewalks connect the school to IL Route 120
- Rural between Martin Street and Greenwood Road
- Cement plant east of Wonder Lake Road

- Signalized intersections located at Curran, Wonder Lake, Thompson, and Greenwood
- Residential uses west of Wonder Lake and north of IL Route 120

Potential improvements could include:
- Improved shoulders for bus turn out near elementary school
- Improved shoulders for bus turn out at Wonder Lake Road

5. Greenwood Road to Raffel Road

This segment turns south along Greenwood Road (IL Route 120 designation follows Greenwood)

Existing conditions include:
- One travel lane per direction with narrow shoulders, no walking paths.
- Predominantly rural
- No signalized intersections until Raffel Road

Potential improvements could include:
- Due to rural nature and limited land uses, there is limited need for transit access improvements.

6. Raffel Road to downtown Woodstock

This segment transitions from a rural area to more suburban residential and downtown Woodstock.

Existing conditions include:
- Marian Central Catholic High School at IL Route 120 and Raffel Road. Sidewalks exist from IL Route 120 to the high school.
- IL Route 120 and Raffel Road intersection signalized
- McHenry County Courthouse located at Ware Road, just east of Seminary Avenue (IL Route 47). Sidewalks along north side of Ware and east side of Seminary.
- Elementary and middle schools at Ware and Seminary. Large park with ball fields also located off of Seminary.
- Intersection of Ware and Seminary not signalized. Ware ends at Seminary.
- Seminary and IL Route 120 intersection signalized
- Woodstock Metra Station located off of Church Street
- Outside of downtown Woodstock, area is predominantly residential.

Potential improvements could include:
- Continuous sidewalks along both sides of Ware and Seminary
- Bus turnout on Raffel Road just north of IL Route 120 to better serve Marian Central Catholic High School

C. Route 808 Access Improvements

Route 808 travels along US 14 for a substantial part of the route. US 14 is programmed to be widened from its current rural cross-section of one travel lane in each direction, painted median, and shoulders to a five-lane urban cross-section. This will include two travel lanes per direction and center turn lanes. There is no known time frame as to when improvements will begin.

A review of pedestrian access from Route 808 to adjacent land uses is presented below by segment. Recommended infrastructure improvements to enhance pedestrian access are described.

1. Crystal Lake Metra station to Harvard Metra station via downtown Woodstock

This segment travels along IL Route 176 to US Route 14.

Existing conditions include:

- Few sidewalks except near the Metra station
- Outside of downtown Crystal Lake, area is predominantly rural
- McHenry County College located at Lucas Road /Tartan Drive; entrance from US 14 is signalized
- Bike path runs from McHenry County College to Oak Street in Crystal Lake
- Centegra Medical Center located at Doty Road; intersection of Doty and US 14 is not signalized
- Government offices at Lake Shore Drive /Rolling Hills Drive and US 14
- US 14 widens out to two lanes per direction with center (grass) median at West Lake Shore Drive
- A number of large businesses located near US 14 and Lake Ave (IL Route 47). This intersection is signalized. Businesses are located away from US 14 with no sidewalk connections.
- Route diverts from US 14 to travel to downtown Woodstock and Woodstock Metra station
- IL 120 ends at US 14. This intersection is not signalized. West of IL 120, US 14 transitions back to a two-lane roadway.
- Intersection of Hwy. 23 and US 14 is signalized. North of this intersection transitions to downtown Harvard and the Harvard Metra station. Large businesses are located near this intersection with large setbacks and no sidewalks.

Outside of the three downtown areas, the route travels through areas that are more rural in nature with limited land uses, resulting is a limited need for transit access improvements. Depending on demand, improvements could include:

- Continuous sidewalks in Crystal Lake along both sides of IL Route 176 up to Virginia Street
- Marked crosswalks at intersections in Crystal Lake and Woodstock
- Bus turnouts at US 14 and IL Route 47
- Sidewalk connections to adjacent land uses

IX. Implementation and Funding

This chapter is intended to outline the steps involved in implementing the improvements which have been described. Two strategies in achieving better transit services were identified as part of the *Service Strategies Report (July 2012).* The first strategy is to work with the current resource levels and develop cost/revenue neutral service changes. This strategy was used when making service recommendations to the existing routes. Those recommendations are basically cost neutral, albeit with some savings achieved by the restructuring of Route 807. The second strategy is to increase the total amount of transit service in McHenry County by adding resources. Adding new services, both in the short term and the long term requires additional funding. Sources for new transit funding are identified in this chapter.

Key to implementation is coordination between McHenry County and Pace to work together in the implementation of these services. As of the date of this part of the Plan, it is important to note that Pace has implemented the changes to Routes 806, 807 and 808 as recommended in this report. The County will continue to work with Pace to monitor the changes to the routes, and to implement the changes recommended in the medium and long term time frames.

A. Implementation Tasks

Table 20 shows the implementation tasks for the recommendations in this report. The table summarizes:

- Name of proposed alternative
- Description of the alternative
- Stakeholders involved in implementation
- List of implementation tasks
- Potential funding sources (see description of the various programs after the table)
- Priority ranking: high, medium or low
- Likely timeline for implementation
    - Less than 1 year (high priority)
    - 1 – 3 years (high priority)
    - 3 – 7 years (medium priority)
    - Over 7 years to 2040 (low priority)

Table 20: Implementation Table

Name	Description	Stakeholders	Tasks	Funding	Priority	Implementation Timeline
Modify Existing Fixed Routes 806, 807, & 808	Reduce deviations, streamline schedules, realign routes for efficiency and simplicity	Pace, existing riders, general public, municipalities, schools, other agencies now served	1. Pace and County need to agree on details of changes 2. Coordinate with contractor; set implementation date 3. Coordination with any municipalities, schools or other agencies now served 4. Determine exact running time changes 5. Consider installation of additional bus stop signs 6. Notify riders 7. Implement new schedules (print/distribute timetables) 8. Measure any changes in ridership	None required. Potential for savings.	High: Ridership growth is inhibited by lengthy routes and somewhat confusing timetables	Less than 1 year
Richmond – Fox Lake Shuttle and Expanded Demand Response	Peak period trips which would feed Metra express trains at Fox Lake	Pace, general public, municipalities	1. Identify funding available (see below; primary costs will be startup and ongoing operating costs) 2. Coordinate with municipalities 3. County and townships need to commit to implementation 4. Pace and County need to agree on details of changes 5. Implement new schedules (print/distribute	Potential sources: • RTA sales tax • 5307 – Generally limited to capital funds • 5311 • ICE – (RTA) • CMAQ	High: Implementation would help to fulfill the transit needs in the northeast corner of the County at a low start up and annual operating cost.	1 – 3 yrs

Table 20: Implementation Table

Name	Description	Stakeholders	Tasks	Funding	Priority	Implementation Timeline
			timetables) 6. Measure any changes in ridership			
Crystal Lake-Elgin Route via Randall Road (Extension of Route 550)	New fixed route bus service in southeast portion of McHenry County where land development has occurred in recent decades	Pace, general public, municipalities	1. Identify funding available (see below; primary costs will be startup and ongoing operating costs) 2. Coordinate with municipalities 3. County needs to commit to implementation 4. Pace and County need to agree on details of changes 5. Implement new schedules (print/distribute timetables) 6. Measure any changes in ridership	Potential sources: • RTA sales tax • 5307 – Generally limited to capital funds • 5311 • ICE • CMAQ	High: The southeast area has developed into the most densely populated portion of the County, but it has no bus service. It can be served most efficiently with fixed route service making closely coordinated connections with Metra rail and other Pace bus routes.	1 – 3 years
Crystal Lake-West Dundee (Spring Hill Mall) Route via IL Route 31	New fixed route bus service in southeast portion of McHenry County where land development has occurred in recent decades	Pace, general public, municipalities	1. Identify funding available (see below; primary costs will be startup and ongoing operating costs) 2. Coordinate with municipalities 3. County needs to commit to implementation 4. Pace and County need to agree on details of changes 5. Implement new schedules (print/distribute timetables)	Potential sources: • RTA sales tax • 5307 – Generally limited to capital funds • 5311 • ICE • CMAQ	Medium: The southeast area has developed into the most densely populated portion of the County, but it currently has no bus service. Implementation of Crystal Lake-Elgin Route via Randall Road is the highest priority to serve area.	3 – 7 years

Table 20: Implementation Table

Name	Description	Stakeholders	Tasks	Funding	Priority	Implementation Timeline
			6. Measure any changes in ridership			
Randall Road Pedestrian/Bike Infrastructure Improvements	Randall Road Corridor from I-90 to US 14	IDOT, County municipalities	County and municipalities to work with IDOT	Potential sources: • STP • CMAQ • MFT • Highway Safety Improvement Program	High to Medium: Pedestrian/Bike infrastructure improvements should be ongoing	1 – 7 years
Access Improvements for Existing Routes	IL Route 31 and local roads utilized by Routes 806-807-808	IDOT, County, municipalities	County and municipalities to work with IDOT when applicable; municipalities to incorporate pedestrian infrastructure in capital programs	Potential sources: • STP • CMAQ • MFT • Highway Safety Improvement Program	High to Medium: Pedestrian/Bike infrastructure improvements should be ongoing	1 – 7 years
Metra-UP NW Line Extension, Increases in Service Frequency, and Infrastructure Improvements	Metra has completed an Alternatives Analysis of various improvements on the route, including a 1.6 mile extension to north of McCullom Lake Road in Johnsburg, new stations at Prairie Grove and Ridgefield, more frequent service, increases in yard capacity, and various crossing and track upgrades.	Metra (lead agency), County, municipalities, general public	County maintains coordination with Metra	Potential sources for capital funds: • New Starts • 5307	Low: Current service is limited to 3 trains per day (peak only)	Over 7 years
Long Term Fixed Route Bus Service Improvements	The establishment of service that would perform both a feeder function for possible rail and/or express bus service and provide local transportation is proposed for several corridors within the County: Harvard-Marengo; Huntley-	Pace, County, municipalities, general public	County maintains coordination with Pace	Potential sources: • 5311 • 5307	Low: Current population density does not permit cost-effective fixed route bus implementation in these corridors	Over 7 years

Table 20: Implementation Table

Name	Description	Stakeholders	Tasks	Funding	Priority	Implementation Timeline
	Marengo; Woodstock-Marengo; Woodstock-Huntley; Connection to I-90 via IL-23; Connection to I-90 via IL 47; Richmond-McHenry; McHenry - College of Lake County; Cary - Prairie View Metra Station					
Long Term Transit Centers and Park-n-Ride Lots to Support Future Service	Transit centers are proposed at: Harvard; Marengo; Woodstock; Huntley; Cary; Richmond; McHenry	Pace, County, Metra, municipalities, general public	County maintains coordination with Pace	Potential sources: • 5311 • 5307 • CMAQ	Low: Facilities warranted once demand grows	Over 7 years

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B. Descriptions of Potential Funding Sources

1. Federal Funds

Federal transit funds are administered by the Federal Transit Administration (FTA).

a. Section 5307

This is the most prevalent Federal program for transit funding. With limited exceptions, it may only be used for capital expenditures (with a 20% local share requirement). This is a formula-based program, with the distribution of funds between the RTA services boards also controlled by formula. With the tremendous unmet needs for bringing the region's transit infrastructure into a state of good repair (SOGR) these funds are very difficult to access.

b. 5307/5311 Program (Job Access Reverse Commute (JARC))

The 5307/5311 program provides operating and capital assistance for transportation services planned, designed, and carried out to meet the transportation needs of eligible low-income individuals and of reverse commuters regardless of income. The RTA is the designated recipient of 5307/5311funds and is responsible for overseeing and administering the program in northeastern Illinois. Types of projects may include:

- Fixed-route service oriented to reverse commuters and/or at times specific to access lower wage jobs.
- Shuttle service to and from rail stations.

The program was formerly a stand- alone program called Job Access Reverse Commute or JARC. Under the federal transportation legislative funding package, MAP 21, the JARC program has been rolled into 5307/5311, although 50% operating assistance is still a permissible expense. Prior to the passage of the federal legislation, Moving Ahead for Progress in the 21st Century (MAP 21) private non-profit organizations, state or local government authorities, and public and private operators (including Pace) applied to RTA for JARC funds. It is not clear how this process will work under the new Act. Access may be highly competitive with projects competing for funds that are also available for regular Section 5307 capital projects, which are greatly underfunded.

In pursuing JARC funding is it may be challenging to prove that the users of the new or expanded bus services are low income individuals. Funds may also be allocated for only one year. If new bus service was put into place, a permanent funding source to fund future operations would need to be identified.

c. CMAQ - Congestion Mitigation and Air Quality Program

The CMAQ Improvement Program is a federally funded program of surface transportation improvements authorized by the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in 2005 and continues under the Moving Ahead for Progress in the 21st Century Act (MAP-21). CMAQ funds may fund up to 80% of projects that increase the use of public transportation systems. Generally, there are four broad categories of transit service-related projects or programs:

1. Transit System Startup – These projects are new rail systems, bus service or vanpools. Operating expenses for new systems can be reimbursed for up to three years.
2. Transit Transfer Facilities – These projects increase the convenience of transferring between transit services.

3. Transit Facility Improvements – These projects enhance the existing transit systems through adding or improving facilities such as stations, pedestrian, and bicycle accommodations.
4. Transit Service and Equipment – These projects enhance the existing transit system through improvements such as increasing the frequency or operating speed or service on bus routes or rail lines. Operating expenses can be reimbursed for up to three years.

CMAQ applications are submitted to the planning liaison of the Mayors and Managers Councils for review and then submitted to the Chicago Metropolitan Agency for Planning (CMAP). CMAP's CMAQ Project Selection Committee selects projects in northeastern Illinois, with subsequent approval by the Transportation Committee, Programming Coordination Committee, CMAP Board and MPO Policy Committee. The CMAP staff performs technical analysis of all projects. The Illinois Department of Transportation administers the project. Projects are evaluated based on ability to reduce auto trips and the resulting vehicle emissions.

There are several disadvantages of the CMAQ program that may limit its applicability in McHenry County. First, projects must be able to demonstrate significant reductions in emissions, which limited local bus service does not have a large impact on. Secondly, although the CMAQ program can support new transit services as stated above, the CMAQ program for northeastern Illinois has historically consisted primarily of capital projects associated with vehicle procurement, and construction of installation of new transportation systems. Thirdly, CMAQ funds are limited to three years of start up operations. If a new bus service was put into place, a permanent funding source to fund future operations would need to be identified. It may be difficult to prove a reduction in emissions in the region, a main objective of this funding program, since the proposed new bus services are local, not regional, services.

The proposed I-90 Express bus program which has been referenced in this report, has received an especially large CMAQ grant (approximately $32M) to pay for buses and park n ride lots, as well as the first two years of operating costs. Pace is providing the 20% local share.

d. New Starts

The discretionary New Starts and Small Starts program is the federal government's primary financial resource for supporting locally planned, implemented, and operated transit "guideway" capital investments. Eligible fixed-guideway projects include, but are not limited to, rapid rail, light rail, commuter rail, automated guideway transit, people movers, and exclusive facilities for buses (such as bus rapid transit) and other high occupancy vehicles. Non-guideway bus-based projects that include a defined set of low-cost features may also qualify for support under the Small Starts and Very Small Starts project categories. As a discretionary program, this is a very competitive program, requiring comprehensive analysis of proposed projects.

Metra has used the New Starts program to support systemic improvements on designated routes, including the North Central Service, Union Pacific-West Line, and SouthWest Service.

e. Surface Transportation Funds (STP)

The STP provides flexible funding that may be used by States and localities for projects on any Federal-aid highway, including the NHS, bridge projects on any public road, transit capital projects, and intracity and intercity bus terminals and facilities. A portion of funds reserved for rural areas may be spent on rural minor collectors.

f. Highway Safety Improvement Program

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was signed into law on August 10, 2005, established the Highway Safety Improvement Program (HSIP) as a core Federal-aid program. The overall purpose of this program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads through the implementation of infrastructure-related highway safety improvements. There is a very formalized process to access these funds. To ensure that the HSIP is carried out in an organized, systematic manner where the greatest benefits are achieved, a formalized HSIP process has been established that consists of three major components: planning, implementation and evaluation.

2. State, Regional, and Local Funds

a. Sales Tax Revenues

An RTA sales tax, increased to 0.75% as part of the 2008 Mass Transit Reform Legislation, is collected in the collar counties, with one third (1/3) of that available to the counties for transportation or public safety purposes (about $8.4 million in McHenry County). The County devotes about $1 million to transit projects.

b. RTA Innovation, Coordination, and Enhancement (ICE) Program

The ICE program is a competitive funding program, established as part of the 2008 Mass Transit Reform Legislation. The program provides operating and capital assistance to enhance the coordination and integration of public transportation and to develop and implement innovations to improve the quality and delivery of public transportation. Projects funded through this program advance the vision and goals of the RTA by providing reliable and convenient transit services and enhancing efficiencies through effective management, innovation and technology. Grants are typically less than $1million. Currently only the service boards (Pace, Metra, and CTA) are eligible to apply for ICE grants.

c. Motor Fuel Tax (MFT)

The Motor Fuel Tax Funds are distributed to local municipalities by the State of Illinois from taxes on gasoline and diesel fuel. A municipality's share of the total MFT municipal allocation is based on the ratio of that municipality's population to the total population of all incorporated areas in the State. The allotment of each municipality is not based on the total fuel tax collected within that municipality's boundary. It is based on State wide sales.

Uses of Motor Fuel Tax Funds are restricted to the following uses:

- Construction and Maintenance of Municipal Streets and Extensions, Municipal Alleys, County Highways and Extensions, State Highways, and Federal-aid Routes within the municipality
- Bicycle Signs, Paths, Lanes, or Bicycle Parking Facilities
- Storm Sewers
- Traffic Control and School Crossing Signals
- Grade Separations and Approaches
- Off-Street Parking Facilities
- Street Lighting Systems
- Pedestrian Subway or Overhead Crossings
- Sidewalks and Pedestrian Paths

C. Conclusion

Although many funding sources have been identified, there is significant competition for limited dollars. It is imperative that McHenry County puts a strategy in place to most effectively and efficiently pursue the limited dollars. Teaming with other entities, such as Kane County for service along the Randall Road corridor for example, exploring public private partnerships for the development of park n' ride lots and infrastructure improvements like sidewalks and transit stop amenities, and continuing to meet with Pace on service strategies is critical to the implementation of this Plan.

Appendix A - Route Schedules

ROUTE 806 CRYSTAL LAKE - FOX LAKE

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WEEKDAY NORTHBOUND

1 CRYSTAL LAKE METRA STATION	2 HORIZONS ERICK/PRAIRIE	3 CENTEGRA MEDICAL CENTER	4 OLD MCHENRY CITY HALL	5 HWY 120/ CHAPEL HILL	6 JOHNSBURG/ CHAPEL HILL	7 JOHNSBURG/ WEST MAY	8 FOX LAKE TOWN CENTRE
5:55AM	6:01AM	6:18AM	6:28AM	6:33AM	6:36AM	6:39AM	6:51AM
7:30	7:36 B	7:53	8:03	8:08	8:11	8:14	8:26
8:15	8:21 B	8:38	8:48	8:53	8:56	9:00	9:11
4:10PM	**4:16PM B**	**4:33PM**	**4:45PM C**	**4:51PM**	**5:06PM**	**5:10PM**	**5:22PM**
5:05	**5:11**	**5:28**	**5:38**	**5:43**	**5:48**	**5:51**	**6:03**

WEEKDAY SOUTHBOUND

8 FOX LAKE TOWN CENTRE	7 JOHNSBURG/ WEST MAY	6 JOHNSBURG/ CHAPEL HILL	5 HWY 120/ CHAPEL HILL	4 OLD MCHENRY CITY HALL	3 CENTEGRA MEDICAL CENTER	2 HORIZONS ERICK/PRAIRIE	1 CRYSTAL LAKE METRA STATION
6:20AM	6:32AM	6:34AM	6:37AM	6:45AM	6:55AM B	7:17AM	7:22AM
6:55	7:08	7:15	7:23	7:30	7:40 B	8:07	8:12
8:30	8:38	8:43	8:58 C	9:19	9:28 #	9:38	9:43
9:15	9:26	9:29	9:34	9:41	-	-	-
-	**-**	**-**	**-**	**3:30 PM**	**3:40 PM B**	**4:00PM**	**4:05 PM**
4:00 PM	**4:11 PM**	**4:14 PM**	**4:19 PM**	**4:26**	**4:36 PM #**	**4:54**	**4:59**
5:29	**5:40**	**5:43**	**5:48**	**5:58 D**	**6:08**	**6:14**	**6:19**

 # - Trip does not serve Prime Parkway.
B - Bus serves Tonyan Industrial Park Pioneer Center via Dayton, Belden and Albany.
C - Bus operates via Elm (Hwy 120) ⇆ Oak ⇆ Orleans ⇆ McCullom Lake ⇆ Riverside.
D - Bus operates via Green Street, Miller Road, IL 31 and Medical Center.

No Saturday, Sunday or holiday service.

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Route 807 WOODSTOCK-MCHENRY via WONDER LAKE

WEEKDAY- EASTBOUND

1 WOODSTOCK METRA STATION	2 MCHENRY COUNTY COURTHOUSE	3 SUNRISE RIDGE/ THOMPSON/ WONDERMERE	4 WONDER LAKE POST OFFICE	5 MCHENRY MARKET PLACE	6 MCHENRY HWY 120/ CRYSTAL LAKE RD	7 MCHENRY COMMONS	8 OLD MCHENRY CITY HALL
5:45am	5:51am	6:06am	6:18am	6:28am	6:35am	-	6:40am
7:25	7:31	7:46	7:58	8:10	-	8:14am C	8:21 E
For midday service between Woodstock, McHenry, Crystal Lake, Spring Hill Mall and nearby communities, call 1-800-451-4599 (within Crystal Lake call 455-5900). To reserve a ride, call 24 hours in advance.							
2:30pm	**2:38pm B**	**2:54pm**	**3:06pm**	**3:16pm**	**3:19pm**	**-**	**3:30pm E**
3:30	**3:38**	**3:50**	**4:02**	**4:12**	**4:16**	**-**	**4:25**

WEEKDAY- WESTBOUND

8 OLD MCHENRY CITY HALL	7 MCHENRY COMMONS	6 MCHENRY HWY 120/ CRYSTAL LAKE RD	5 MCHENRY MARKET PLACE	4 WONDER LAKE POST OFFICE	3 SUNRISE RIDGE/ THOMPSON/ WONDERMERE	2 MCHENRY COUNTY COURTHOUSE	1 WOODSTOCK METRA STATION
6:00am	-	6:05am	6:07am A	6:17am	6:29am	6:44am	6:50am
7:00	-	7:05	7:08 A	7:19	7:32 B	7:51	7:57
8:41	8:46am D	-	8:50	9:01	9:09	9:22	9:30
For midday service between Woodstock, McHenry, Crystal Lake, Spring Hill Mall and nearby communities, call 1-800-451-4599 (within Crystal Lake call 455-5900). To reserve a ride, call 24 hours in advance.							
3:50pm	**3:55pm**	**4:00pm**	**4:02pm**	**4:13pm**	**4:25pm**	**4:38pm**	**4:46pm**
4:34	**4:39**	**4:44**	**4:50**	**5:00**	**5:12**	**5:27**	**5:38**

A - Bus does not enter the Market Place. Please board the bus on Hwy. 120.
B - Arrives Marian Central at 7:45 a.m. Departs Marian Central at 2:41pm.
C - Proceeds to McHenry Commons via Industrial, Orleans and McCullom.
D- Proceeds to Highway 120 via McCullom, Orleans and Industrial.
E - Proceeds to Pioneer Center via Green St., Bull Valley Rd., Rt 31 and Dayton and returns to old McHenry City Hall.

- Connections to Route 806 at Old McHenry City Hall.
- Connections to Route 808 at Metra UP-NW Line Woodstock Station.

No Saturday, Sunday or holiday service.

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ROUTE 808 CRYSTAL LAKE TO HARVARD

WEEKDAY - EASTBOUND

9 HARVARD COMMUNITY HOSPITAL	8 HARVARD AYER/ DIGGINS	7 HARVARD HWY 173/ HWY 14	6 HARVARD WOODSTOCK CENTER *	5 WOODSTOCK METRA STATION ARRIVE	5 WOODSTOCK METRA STATION LEAVE	4 WOODSTOCK LAKE/ HWY 14	3 MCHENRY COUNTY COLLEGE	2 CRYSTAL LAKE TERRA COTTA/ OAK	1 CRYSTAL LAKE UP-NW/METRA STATION
6:22am	6:25am	6:28am	6:35am	6:52am	6:58am	7:03am	7:13am	7:19am	7:22am
7:23	7:26	7:29	7:36 B	7:46	8:00	8:05	8:15	8:20	8:23
8:57	9:00	9:03	9:10	9:20	-	-	-	-	-

For midday service between Woodstock, McHenry, Crystal Lake, Spring Hill Mall and nearby communities, call 1-800-451-4599. To reserve a ride, call 24 hours in advance.

-	-	-	-	-	2:30pm D	2:35pm	2:45pm	2:51pm	2:54pm
3:00pm	3:03pm	3:06pm	3:13pm	3:23pm	3:26	3:31	3:41	3:47	3:50
4:08	4:11	4:14	4:21	4:31	4:31	4:36	4:46	4:52	4:55
5:20	5:23	5:26	5:33	5:43	5:50	5:55	6:05	6:11	6:14

WEEKDAY - WESTBOUND

1 CRYSTAL LAKE UP-NW/METRA STATION	2 CRYSTAL LAKE TERRA COTTA OAK	3 MCHENRY COUNTY COLLEGE	4 WOODSTOCK LAKE HWY 14	5 WOODSTOCK METRA STATION ARRIVE	5 WOODSTOCK METRA STATION LEAVE	6 HARVARD WOODSTOCK CENTER *	7 HARVARD HWY 173/ HWY 14	8 HARVARD AYER/ DIGGINS	9 HARVARD COMMUNITY HOSPITAL
6:30am	6:33am	6:38am E	6:47am	6:57am	6:58am	7:08am	7:15am	7:20am	7:23am
7:30	7:33	7:38	7:47 A	8:10	8:27	8:37	8:44	8:49	8:52
8:40	8:43	8:48	8:57	9:03	-	-	-	-	-

For midday service between Woodstock, McHenry, Crystal Lake, Spring Hill Mall and nearby communities, call 1-800-451-4599. To reserve a ride, call 24 hours in advance.

2:00pm	2:03pm	2:08pm	2:17pm	2:23pm	2:26pm C	2:36pm	2:43pm	2:48pm	2:51pm
3:03	3:06	3:11	3:20	3:26	3:33	3:48	3:55	4:00	4:03
4:10	4:13	4:18	4:25	4:40	4:50	4:55	5:05	5:11	5:14
5:05	5:08	5:13	5:22	5:28	5:33	5:43	5:50	5:55	5:58

ROUTE 808 CRYSTAL LAKE TO HARVARD

A - During the school year, this trip goes to Marian Central via Highway 14 to Highway 47 to McHenry Avenue, arriving at 7:55am. This trip then goes to the Woodstock Metra Station via McHenry Avenue to Madison Street to Church Street to Washington Street.

B - During the school year, this trip goes to Marian Central via McGuire Road to Alden Road to Charles Road to Raffel Road to McHenry Avenue, arriving at 7:50am. This trip then goes to the Woodstock Metra Station via McHenry Avenue to Madison Street to Church Street to Washington Street, arriving at 7:57am.

C - During the school year, this trip goes to Marian Central via Washington Street to Church Street to Madison Street to McHenry Avenue, arriving at 2:35pm. This trip then goes to Harvard via McHenry Avenue to Highway 47 to Charles Road to Alden Road to McGuire Road.

D - During the school year, this trip departs from Marian Central at 2:35pm. This trip then goes to the Woodstock Metra Station via McHenry Avenue to Madison Street to Church Street to Washington Street, departing from Woodstock Metra Station 2:40pm and arriving at the Crystal Lake Metra train station at 3:05pm.

E - Bus does not enter McHenry County College Complex.

No Saturday, Sunday or holiday service.

Note: Trips to/from Centegra Memorial Medical Center in Woodstock can be arranged by calling 1 (800) 671-6717, 24 hours in advance.

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