

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.

I. 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

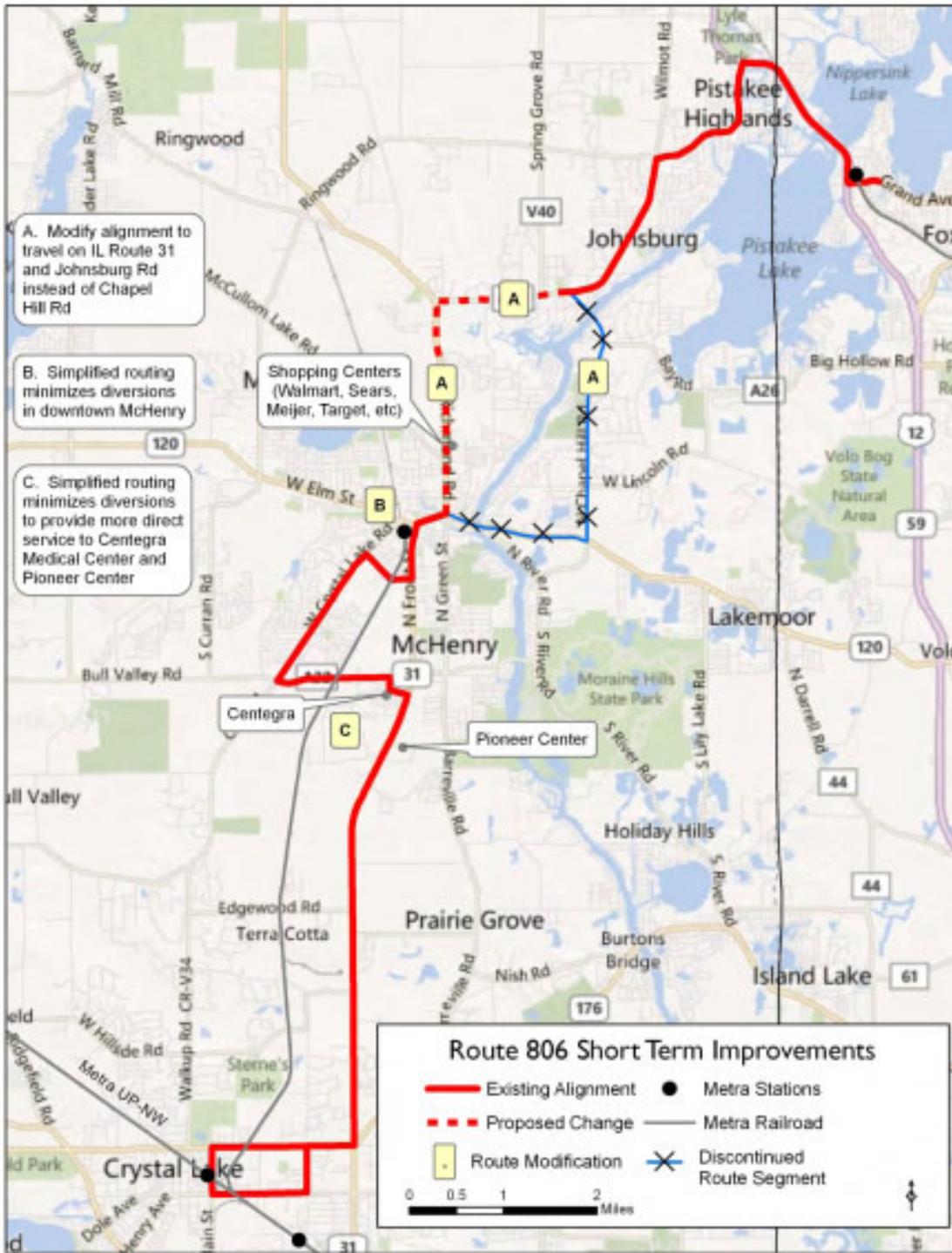


Figure 4

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

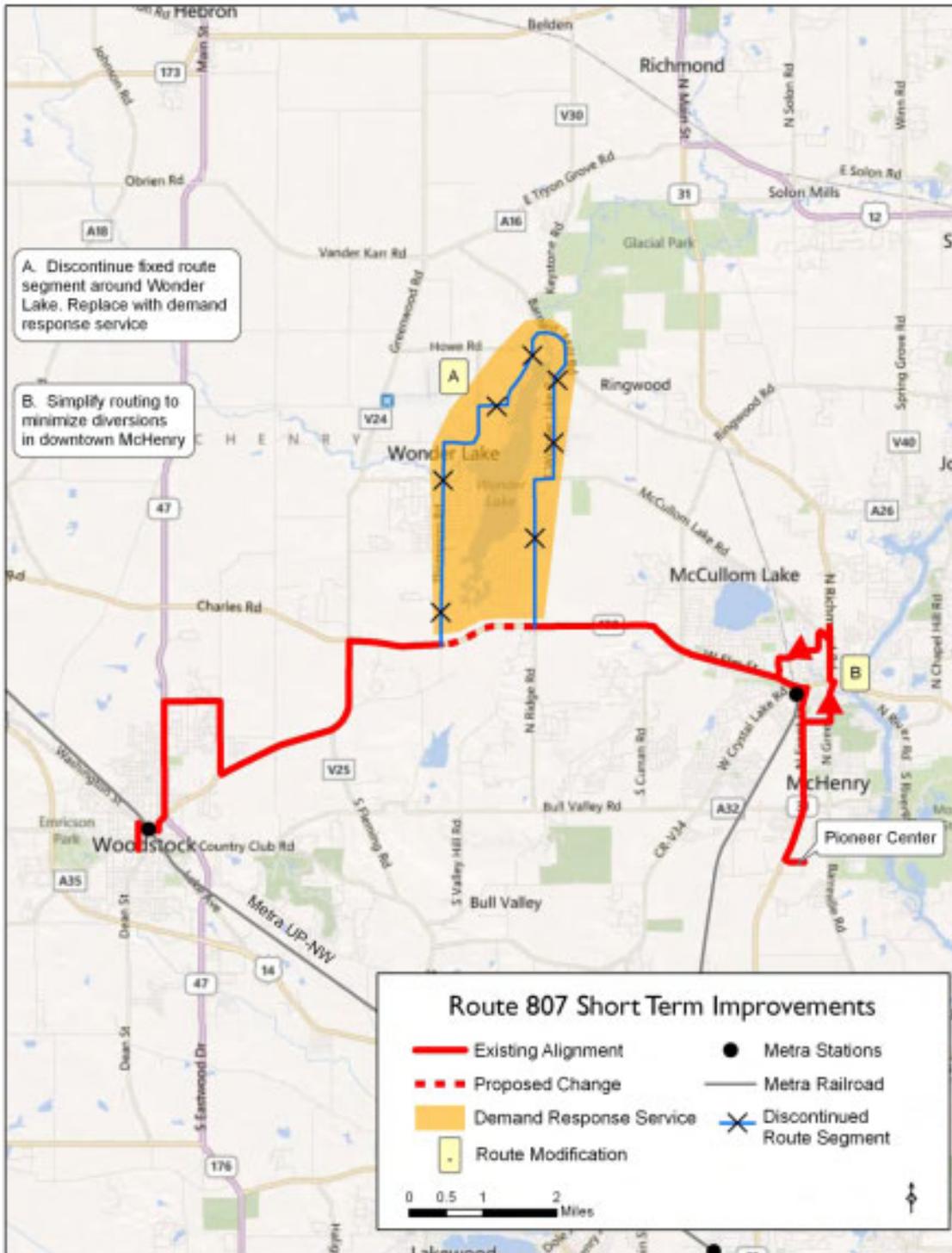


Figure 5

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.

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

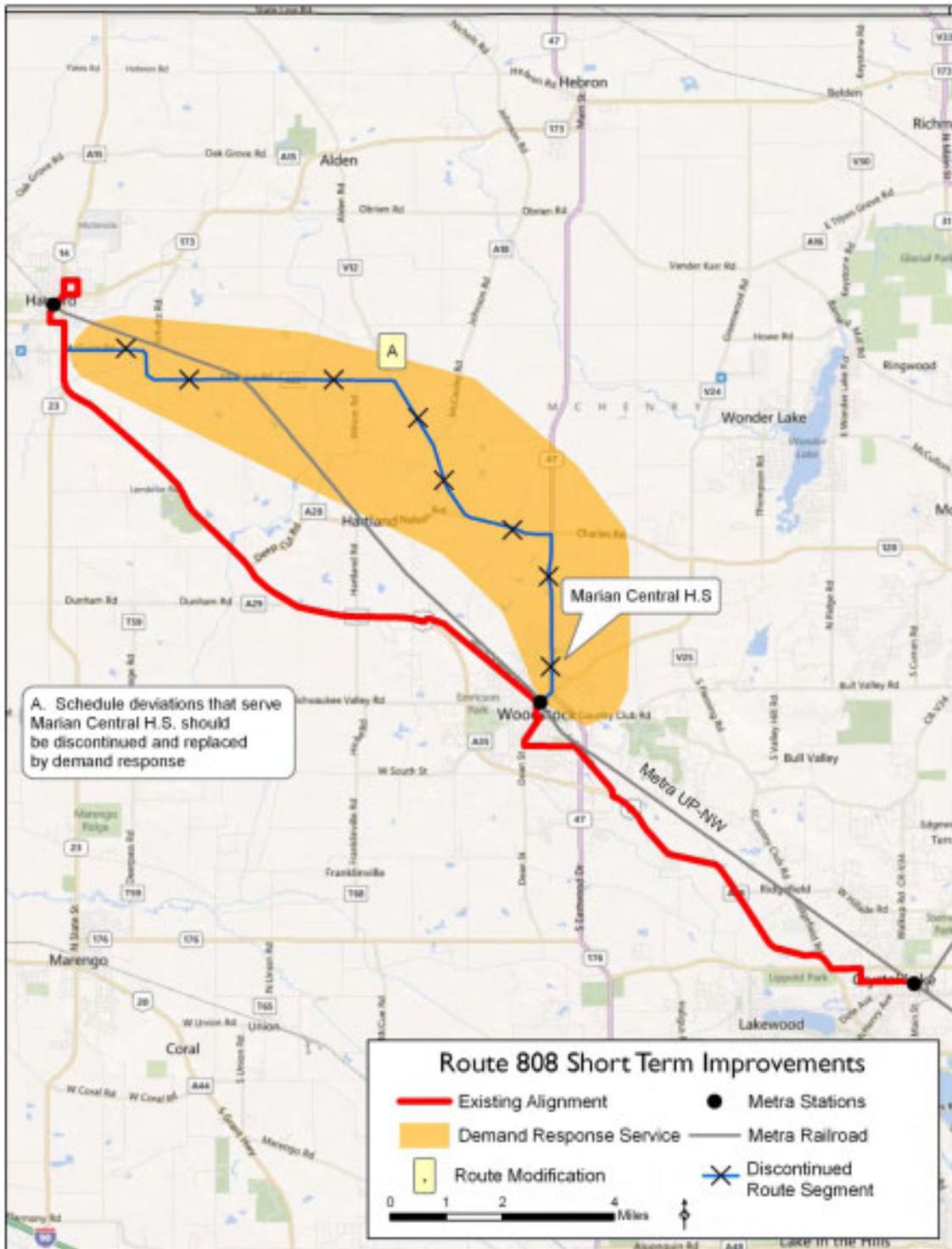


Figure 6

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.

I. 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.

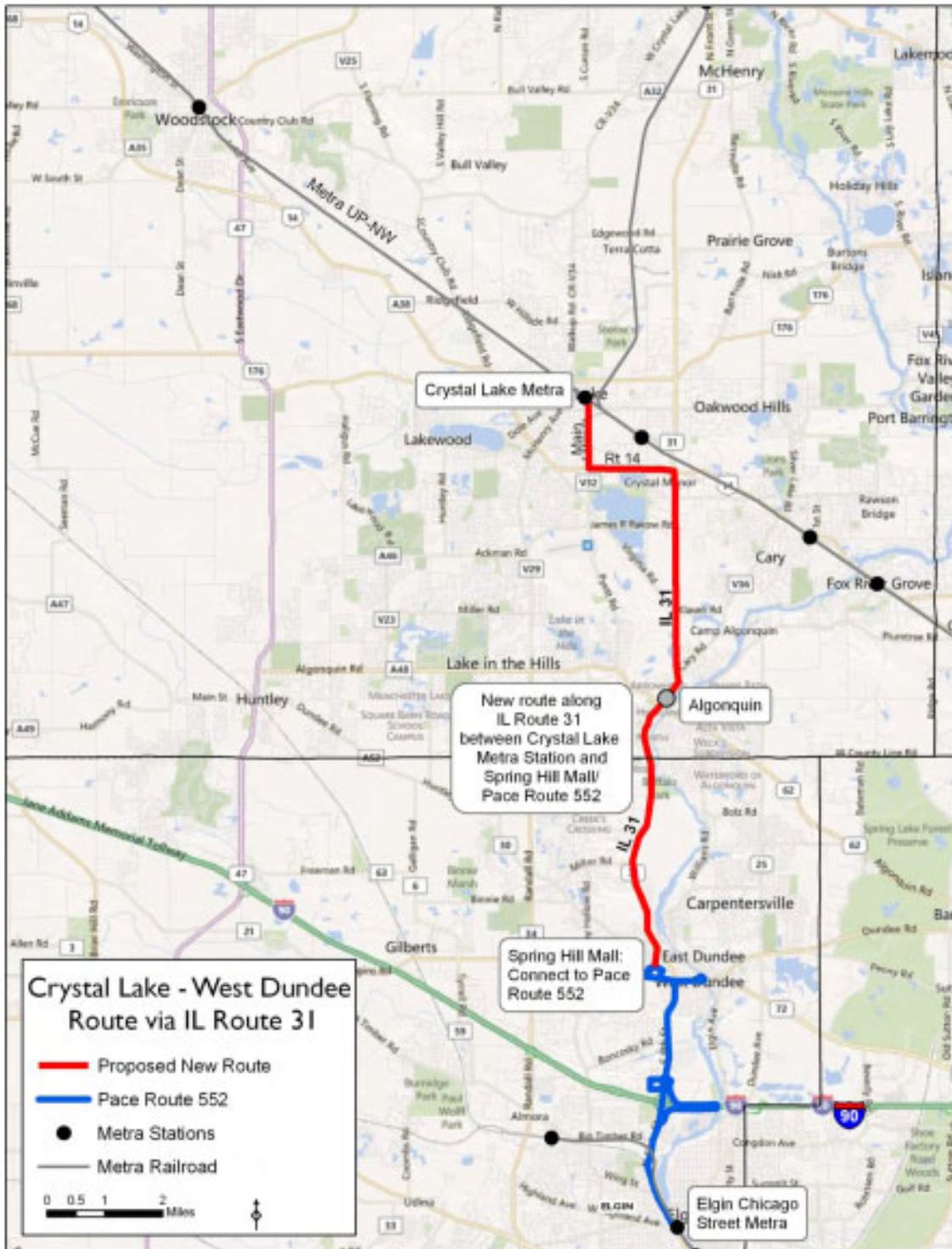


Figure 7



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	\$1,600-2,000
Estimated Operating Cost Annually	\$400,000-500,000
Estimated Capital Cost	\$600,000
Estimated Ridership Daily	100-170
Estimated Ridership Annually	27,000-43,000
Estimated Fare Revenue Increase Daily	\$125-210
Estimated Fare Revenue Increase Annually	\$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			
<i>Pace 552</i>				<i>UP-NW NB</i>	<i>Pace 806</i>	<i>Pace 808</i>
<i>6:00</i>						
<i>6:51</i>	6:55	7:05	7:20		<i>7:30</i>	<i>7:30</i>
<i>7:21</i>	7:40	7:50	8:05		<i>8:15</i>	
<i>7:56</i>	8:10	8:20	8:35	<i>8:51</i>		<i>8:40</i>
<i>8:31</i>	8:40	8:50	9:05			
<i>9:06</i>	9:10	9:20	9:35			
<i>10:06</i>	10:10	10:20	10:35			
<i>11:06</i>	11:10	11:20	11:35			
<i>12:06</i>	12:10	12:20	12:35	<i>12:51</i>		
<i>1:06</i>	1:10	1:20	1:35			<i>2:00</i>
<i>2:06</i>	2:10	2:20	2:35	<i>2:51</i>		<i>3:05</i>
<i>2:36</i>						
<i>3:06</i>	3:10	3:20	3:35			
<i>3:36</i>	3:40	3:50	4:05		<i>4:10</i>	<i>4:10</i>
<i>4:06</i>	4:10	4:20	4:35	<i>4:58</i>		
<i>4:36</i>	4:40	4:50	5:05		<i>5:05</i>	<i>5:05</i>
<i>5:06</i>	5:10	5:20	5:35	<i>5:36</i>		
<i>5:36</i>	5:40	5:50	6:05	<i>6:16</i>		
<i>6:06</i>				<i>6:49</i>		
<i>6:36</i>	6:40	6:50	7:05	<i>7:48</i>		
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	
<i>Pace 806</i>	<i>Pace 808</i>	<i>UP-NW SB</i>				<i>Pace 552</i>
		<i>6:13</i>	6:25	6:40	6:50	<i>6:59</i>
		<i>6:50</i>	7:00	7:15	7:25	<i>7:42</i>
<i>7:23</i>	<i>7:23</i>	<i>7:35</i>	7:40	7:55	8:05	<i>8:12</i>
		<i>8:00</i>	8:10	8:25	8:35	<i>8:42</i>
<i>8:12</i>	<i>8:23</i>		8:40	8:55	9:05	<i>9:12</i>
						<i>9:42</i>
			9:40	9:55	10:05	<i>10:12</i>
		<i>10:00</i>	10:40	10:55	11:05	<i>11:12</i>
			11:40	11:55	12:05	<i>12:12</i>
			12:40	12:55	1:05	<i>1:12</i>
			1:40	1:55	2:05	<i>2:12</i>
		<i>2:00</i>	2:40	2:55	3:05	<i>3:12</i>
	<i>2:54</i>		3:10	3:25	3:35	<i>3:42</i>
			3:40	3:55	4:05	<i>4:12</i>
<i>4:05</i>	<i>3:50</i>		4:10	4:25	4:35	<i>4:42</i>
			4:40	4:55	5:05	<i>5:12</i>
<i>4:59</i>	<i>4:55</i>	<i>5:00</i>	5:10	5:25	5:35	<i>5:42</i>
						<i>6:12</i>
		<i>6:00</i>	6:10	6:25	6:35	<i>6:42</i>
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)	\$2600-3500
Estimated Operating Cost Annually	\$660,000-890,000
Estimated Capital Cost (for added vehicles)	\$600,000
Estimated Ridership Daily (net increase)	160-260
Estimated Ridership Annually	40,000-67,000
Estimated Fare Revenue Daily (net increase)	\$200-325
Estimated Fare Revenue Annually	\$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



Figure 8

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 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	\$300-\$400
Estimated Operating Cost Annually	\$75,000-\$100,000
Estimated Capital Cost	\$50,000
Estimated Ridership Daily	25-40
Estimated Ridership Annually	6,500-10,000
Estimated Fare Revenue Daily	\$38-60
Estimated Fare Revenue Annually	\$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.

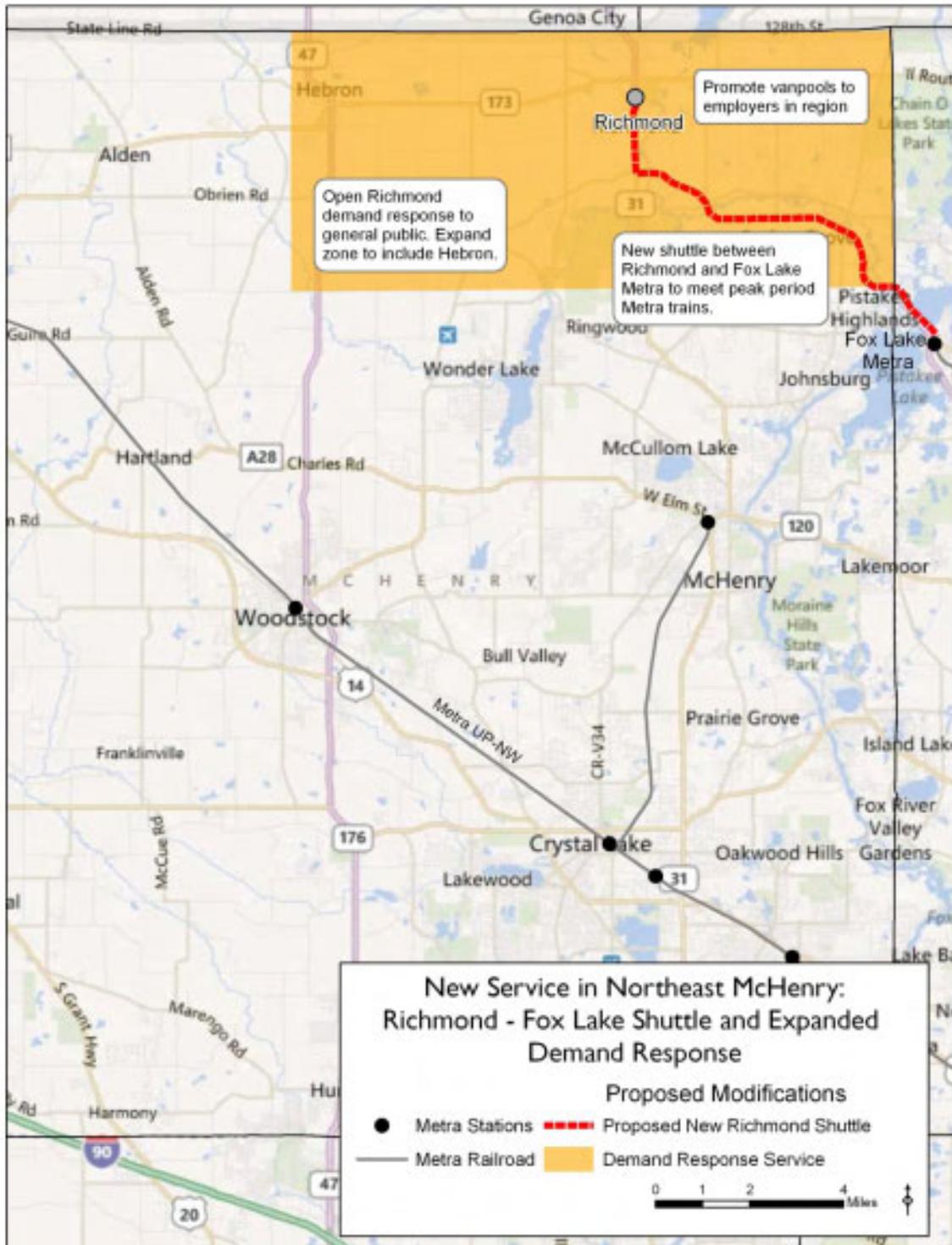


Figure 9

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 I 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 1/2 mile of service
- Employment density within 1/2 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

I. 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.

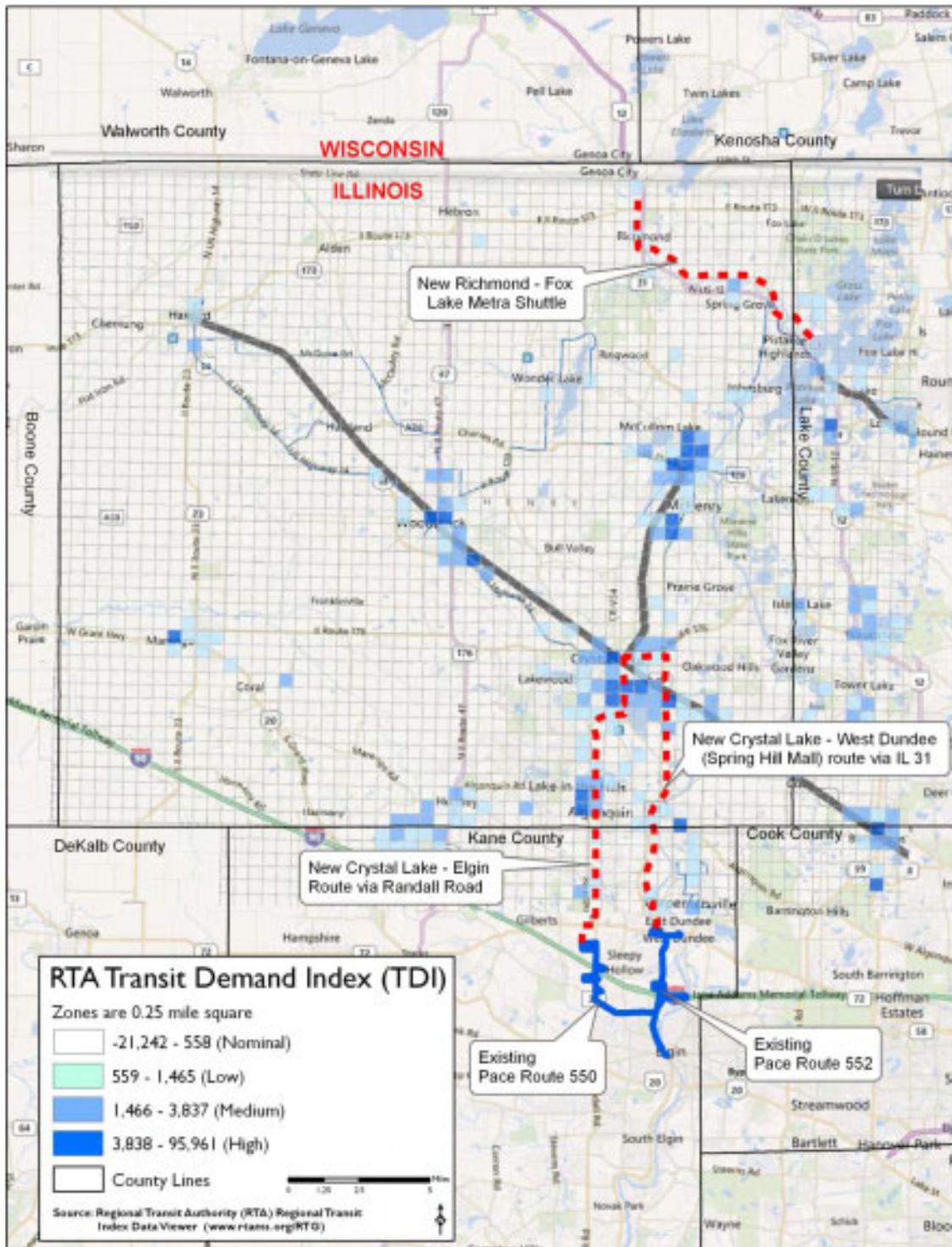


Figure 10



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.

I. 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 31 Route 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

I. 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.

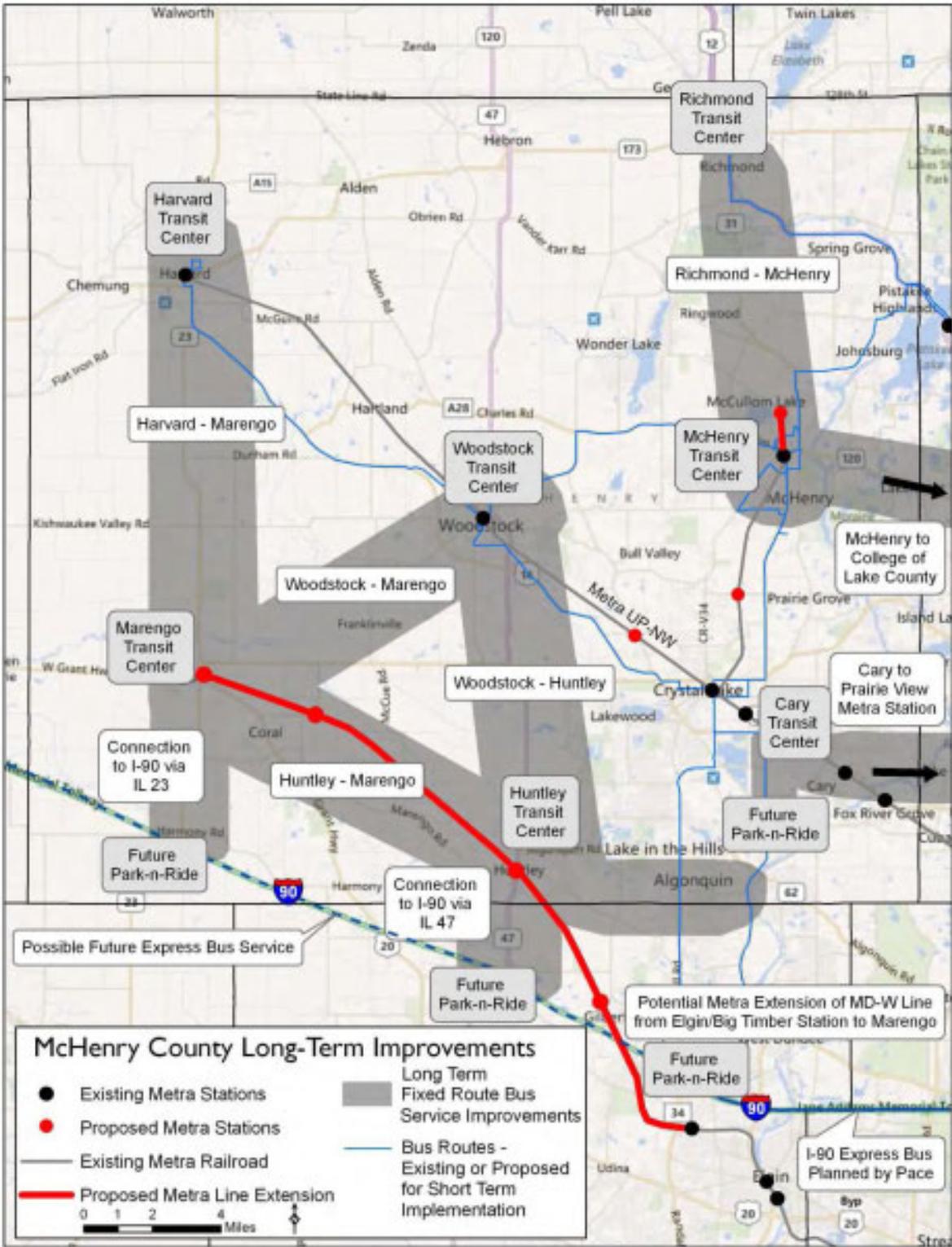


Figure 11



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 Section I 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 Route 12 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.