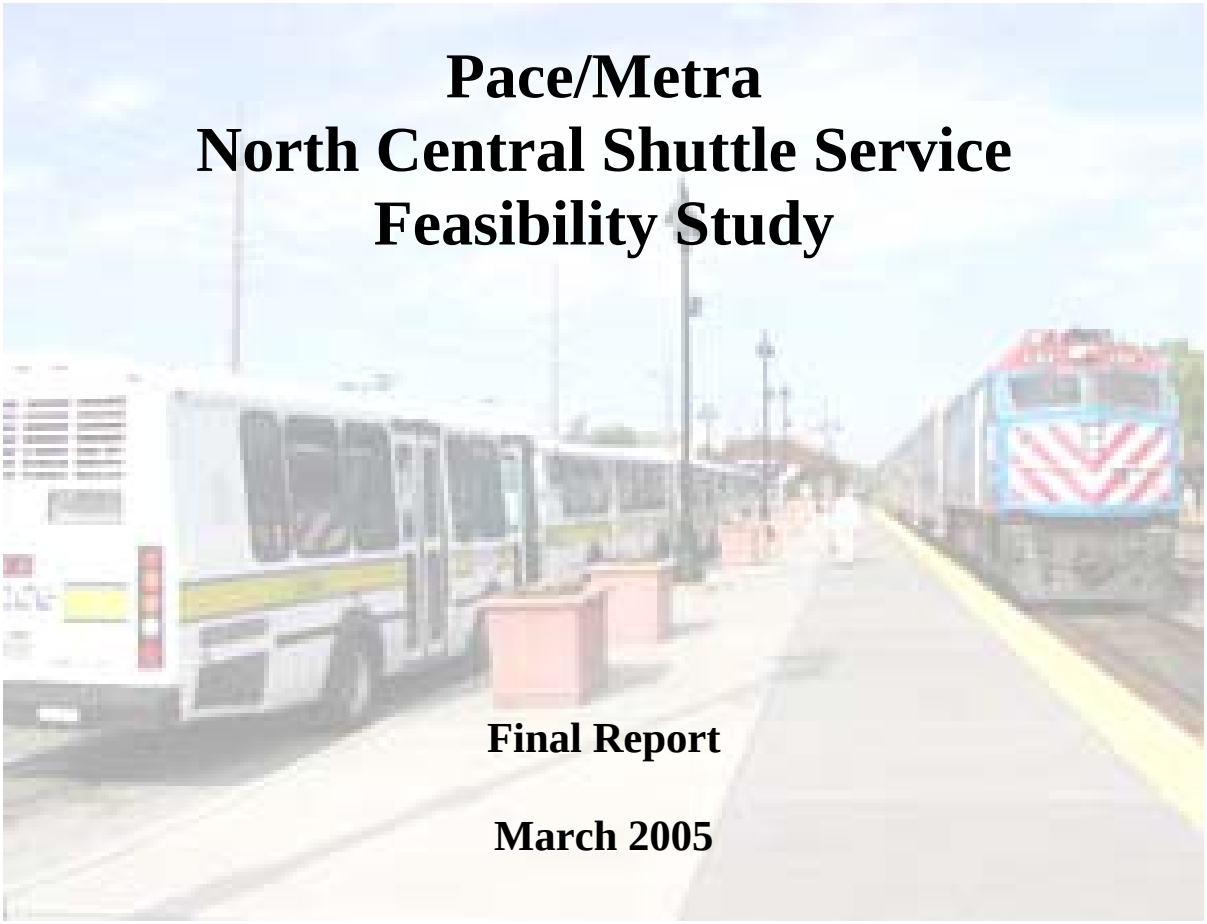
Pace/Metra
North Central Shuttle Service
Feasibility Study



Final Report

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Metra
Transportation Management Association of Lake Cook
Illinois DOT/Division of Public Transportation

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Executive Summary

The improvement of the Metra North Central Service (NCS) from a single-track one-directional weekday peak period service to double-track inbound and outbound trains in 2006, will provide an opportunity to concomitantly add connecting shuttle bus service from the outlying NCS stations to various suburban employer locations. The NCS Shuttle Feasibility Study examined the potential for employer subsidized shuttle bus service between major employers along the North Central Line and Metra NCS stations from Rosemont to Antioch. This study identified major employers in the NCS corridor, surveyed employees at 85 of these companies to determine their potential ridership interest, and studied thirteen shuttle bus routes regarding their feasibility in comparison to the relatively successful Shuttle Bug private/public partnership currently provided by Pace, Metra and the Transportation Management Association of Lake-Cook.

The NCS Shuttle Feasibility Study measured the level of interest among employees who responded to an electronic survey, and ridership projections were developed based on the respondents' understanding of the survey parameters, their veracity, and the full participation of their employers. Latent demand was projected to indicate the universe of employees who could potentially use employer shuttles, if they were considered a desirable alternative to other mobility options.

Based on the responding surveys, levels of interest and compatibility of work schedules with both inbound and outbound Metra train schedules, cost analyses of the thirteen route candidates were completed. This analysis resulted in three routes being identified for initial implementation, beginning with solicitation of both the responding companies and non-responding anchor companies along these routes. However, since employer participation is critically important to the success of this shuttle service, some lesser-ranked routes in this study may become more feasible if only one or two anchor employers choose to participate in the program.

The next steps in developing a final NCS Shuttle Service will be the outreach to the identified companies along the suggested routes, modifying any of these routes as necessary to match the participating companies, and determining the appropriate size of shuttle vehicles and type of initial service, such as fixed route, pre-approved discretionary and dial-up route deviations, or Pace VIP service. Finally, in order to benefit from the Metra service expansion marketing program, the Pace shuttle bus service should be timed to be coincident with the full two-way operation of the Metra NCS.

Section 1
Introduction

Traffic congestion in Lake and northern Cook Counties is already a major problem for both residents and business, and is getting worse day by day. The North Central Shuttle Service Feasibility Study was designed to look at one possible partial solution to this problem. This study examines the potential for employer subscription shuttle bus service to provide the local commuter connection between participating major employers in the North Central Service corridor and the outlying Metra commuter rail stations along the North Central Line. It analyzes the feasibility of providing a variety of local transit services to complement the expansion of commuter rail service on the North Central Line. The potential effectiveness of employer-based shuttle buses can be gauged be a recent study of users of the current Lake-Cook Shuttle Bug service, which found that 76% had a car available and most had previously driven alone before the shuttle service was instituted.

Metra, the commuter rail division of the Regional Transportation Authority (RTA), currently provides commuter rail service to six counties surrounding the City of Chicago in northeast Illinois. The North Central Line begins at Chicago's Union Station and extends radially along a northwest corridor through northern Cook and Lake Counties, connecting the City of Chicago with the City of Antioch and the Wisconsin state line as illustrated in **Figure 1-1**. Stations in the study area are currently located at Antioch, Lake Villa, Round Lake Beach, Prairie Crossing/Libertyville, Mundelein, Vernon Hills, Prairie View, Buffalo Grove, Wheeling, Prospect Heights, and O'Hare Airport. The study area extends along the North Central Line between O'Hare Airport and the City of Antioch, and includes a five-mile corridor east and west of the rail line.

Metra currently provides one-directional weekday rush period service along the North Central Line. Metra commuter rail service along the North Central Line will be improved as a result of the installation of a second track for most of the line. This improvement will include additional station construction at Grayslake, Rosemont, Schiller Park and Franklin Park, and will enable the flexibility to operate both inbound and outbound trains in the morning and evening rush periods. When completed in 2006, service with roughly double the service provided by the existing ten trains would operate according to the preliminary working draft schedule shown in **Table 1-1**.

The absence of existing transit links to employment centers from the North Central Stations, limits both the ability of Metra to attract new ridership and the ability of companies to attract employees from adjacent communities that are conveniently served by Metra. Pace, the suburban bus division of the RTA, recognizes that the improvement in Metra service in this corridor provides an opportunity to provide public transit links to employment centers. Further, the development of employer shuttles in the area should benefit from the popular successful shuttle bug program already in existence along the Lake-Cook corridor, which services many of the same employers as those in this study. This cooperative effort between the RTA, Metra, Pace and the Transportation Management Association (TMA) of Lake-Cook has already proven successful in providing similar services.

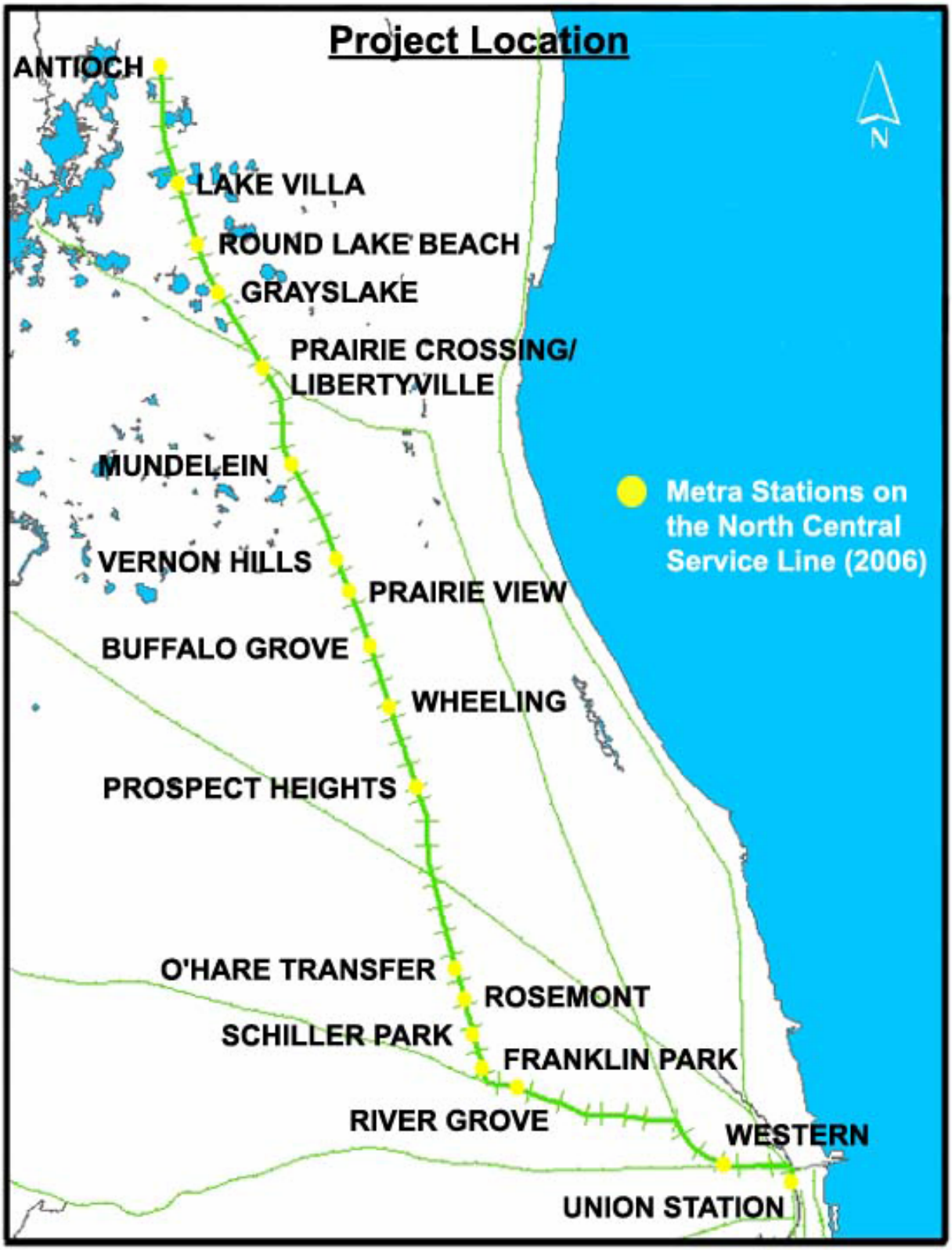

Project Location
ANTIOCH
LAKE VILLA
ROUND LAKE BEACH
GRAYSLAKE
PRAIRIE CROSSING/
LIBERTYVILLE
MUNDELEIN
VERNON HILLS
PRAIRIE VIEW
BUFFALO GROVE
WHEELING
PROSPECT HEIGHTS
O'HARE TRANSFER
ROSEMONT
SCHILLER PARK
FRANKLIN PARK
RIVER GROVE
WESTERN
UNION STATION
N
Metra Stations on
the North Central
Service Line (2006)

Table 1-1 **Preliminary Working Draft of Proposed Metra North Central Service**										
Inbound	AM	AM	AM	AM	AM	AM	AM	PM	PM	
Antioch	5:20	5:48	6:12	6:34	7:02	9:00	11:00	3:00	5:07	
Lake Villa	5:26	5:54	6:18	6:40	7:08	9:06	11:06	3:06	5:13	
Round Lake Beach	5:30	5:58	6:22	6:44	7:12	9:10	11:10	3:10	5:17	
Grayslake										
Prairie Crossing	5:38	6:04	6:28	6:50	7:18	9:16	11:16	3:16	5:23	
Mundelein	5:42	6:10	6:34	6:58	7:24	9:22	11:22	3:22	5:29	
Vernon Hills	5:48	6:16	6:40	7:02	7:30	9:28	11:28	3:28	5:35	
Prairie View	5:51	6:19	6:43	7:05	7:33	9:31	11:31	3:31	5:38	
Buffalo Grove	5:55	6:24	6:48	7:10	7:38	9:35	11:35	3:35	5:42	
Wheeling	6:00	6:29	6:53	7:15	7:43	9:40	11:40	3:40	5:47	
Prospect Heights	6:04	6:33	6:57	7:19	7:47	9:44	11:44	3:44	5:51	
O'Hare Transfer	6:15	6:44	7:08	7:30	7:58	9:55	11:55	3:58	6:02	
Rosemont										
Schiller Park										
Franklin Park										
River Grove	6:25	6:54	7:18	7:40	8:08	10:05	12:05	4:05	6:12	
Western Avenue	6:35	7:06	7:30	7:52	8:20	10:16	12:16	4:16	6:23	
Chicago	6:47	7:17	7:41	8:03	8:31	10:27	12:27	4:27	6:34	
Outbound	AM	AM	PM	PM	PM	PM	PM	PM	PM	PM
Chicago	7:00	9:00	1:00	3:00	4:25	5:00	5:29	6:02	6:49	8:30
Western Avenue	7:09	9:09	1:09	3:09	4:35	5:10	5:38	6:12	6:59	8:40
River Grove	7:21	9:21	1:21	3:21	4:48	5:23	5:52	6:25	7:11	8:52
Franklin Park										
Schiller Park										
Rosemont										
O'Hare Transfer	7:31	9:31	1:31	3:31	4:59	5:34	6:03	6:36	7:21	9:02
Prospect Heights	7:40	9:40	1:40	3:40	5:09	5:44	6:13	6:46	7:30	9:11
Wheeling	7:45	9:45	1:45	3:45	5:14	5:49	6:18	6:51	7:35	9:16
Buffalo Grove	7:49	9:49	1:49	3:49	5:18	5:53	6:22	6:55	7:38	9:20
Prairie View	7:53	9:53	1:53	3:53	5:22	5:57	6:26	6:59	7:43	9:24
Vernon Hills	7:56	9:58	1:58	3:58	5:25	6:00	6:29	7:02	7:48	9:27
Mundelein	8:02	10:02	2:02	4:02	5:31	6:06	6:35	7:08	7:52	9:33
Prairie Crossing	8:08	10:08	2:08	4:08	5:37	6:12	6:41	7:14	7:58	9:39
Grayslake										
Round Lake Beach	8:15	10:15	2:15	4:15	5:44	6:19	6:48	7:21	8:05	9:46
Lake Villa	8:19	10:19	2:19	4:19	5:47	6:22	6:51	7:24	8:09	9:50
Antioch	8:28	10:28	2:28	4:28	5:55	6:30	6:59	7:32	8:18	9:59

This North Central Feasibility Study identifies significant employment clusters and defines potential shuttle services that could be provided in conjunction with the Metra service expansion. The Study has four components: (1) Identify major employers within a 3-mile radius of each of eleven Metra stations along the North Central Line; (2) survey their employees regarding their mobility requirements; (3) identify potential markets for subscription service; and (4) analyze the feasibility of providing that service. To accomplish the study objectives, a database of employers was assembled, employees surveyed, employment clusters identified, and routes developed. Ridership estimates were prepared and relevant costs analyzed, as described in the following sections.

Section 2
Existing Conditions

In order to understand the potential transit links along the North Central corridor, it was necessary to identify major employers whose employees may benefit from the existence of a shuttle bus. It was also necessary to identify existing transit services in the study area, which would indicate the service gaps and potential for service efficiencies.

2.1 Employer Database

An employment database was assembled using a Manufacturers News listing of service and manufacturing businesses in the relevant zip codes in communities along the NCS line and within 5 miles of each of the outlying stations. Employers with 50 or more employees in zip codes within 3 miles of the stations and employers with 250 or more employees in zip codes between 3 and 5 miles of the stations were identified. This database was supplemented with a Dun and Bradstreet database of employers in the same zip codes in a wider range of industries that included all but agriculture, fishing and forestry, retail trade and some personal services.

From the original lists, companies were contacted by phone to confirm their address, number of employees, hours of operation and contact for mailing information about the upcoming survey. In many cases, companies were found to have fewer than 50 employees or were no longer at that physical address. In some cases, employers were unreachable by phone, and voice messages were not returned. Follow-up calls were made to large companies, but there were instances where the requested information was not available.

Appendix A – Employer Database has the information that was available for each firm including the company name, address, phone number, hours of operation, web site, number of employees, and Standard Industry Classification (SIC) or North American Industrial Classification System (NAICS) code. The database includes approximately 700 companies located within the study area.

2.2 Transit Services

Existing transit services were identified from the 2003 RTA system map. This information was compared with the Pace website to determine which Pace routes penetrate the study corridor, as well as those that provide direct connections with the Metra North Central Line. Service changes resulting from the Pace North Shore Initiative, which went into effect on March 20, 2005, are included here, as well. Private shuttles were identified from previous studies and survey responses. Employers and/or service providers were then polled to determine operating characteristics of the private services. Only those service providers who were verifiable are included in this study. Existing Metra and Chicago Transit Authority (CTA) services were identified from the 2003 RTA system map, Metra timetables and the CTA system map. Vanpool services were provided by Pace and are included to indicate the extent of the vanpool program in the study area.

2.2.1 Metra

Metra provides one-directional weekday rush period service on the North Central Line in the study corridor. Ten trains operate daily with five trains inbound and five trains outbound (see **Exhibit 1 – Existing Metra North Central Schedule**). Metra also operates the Milwaukee District North Line that provides service between Union Station and Fox Lake and intersects with the North Central Line at Prairie Crossing in Libertyville, and the Union Pacific Northwest Line that provides service between the Ogilvie Transportation Center and Harvard and intersects the North Central Line in Des Plaines.

2.2.2 Pace Fixed Route

Pace provides public mass transit bus service throughout the study area. In addition to traditional fixed route services, they also provide subscription services to participating employers in the Shuttle Bug Program. These services that penetrate the study area are identified by station and described in **Appendix B – Pace Existing Service**.

2.2.3 Pace Vanpools

In addition to its fixed route service, Pace provides a vanpool program that allows participating employees to pool together for a variety of flexible employment trips. Vanpool services in the study area are identified by station and described in **Appendix C – Pace Vanpools**.

2.2.4 Employer Shuttles

There are several employers located in the study corridor who currently provide shuttle service links between their facilities and various Metra and CTA lines. These services are identified by station location and described in **Appendix D – Employer Private Shuttle Service**.

2.2.5 Chicago Transit Authority

The Chicago Transit Authority operates 24-hour rapid transit service on the Blue Line between O'Hare Airport, Downtown Chicago and the western suburbs. The Blue Line serves both the O'Hare Station and the Rosemont Station in the project area. The CTA makes connections with Pace Routes 221, 223, 230, 325, 326, 332, 600, 606, 610, 616 and 637 at the Rosemont Station at River Road.

Section 3
Data Collection and Analysis

3.1 Participating Employers

In late August 2004, a postcard was sent to all employers in the Manufacturers News database, advising them of the upcoming survey. In mid-September 2004, Pace mailed a letter informing firms of the proposed NCS expanded service and shuttle service, along with a copy of the survey, and a flyer that included the link to the on-line survey web site. A second mailing was sent to the additional firms in the Dun and Bradstreet database (also adjusted for the telephone calls made to employers) in early October 2004. Copies of the letter, flyer and survey are provided in **Appendix E**.

Over the next few months, follow-up telephone calls were made to the large employers with over 250 employees that had not participated in the survey, to encourage their participation. The letter from Pace, the survey forms and the flyer with the web site link were e-mailed to these employers. For some companies, new contacts were identified when it was learned that the original contacts were no longer at the company, or if the original contact was not directly responsible for this type of project.

3.2 Methodology

On-line survey sites were researched, and based on the ease of use, flexibility in survey design, ability to readily access the results and the length of time the site could remain up, **Freeonlinesurveys.com** was selected. A first draft of the survey was prepared and distributed to Pace, Metra and TMA staff for review. After extensive internal committee reviews and edits, a pre-test of the survey was conducted by selected employees at Pace and other firms. The survey was then edited to address some early concerns.

Respondents were first asked for their zip code. A list of 66 zip codes was provided based on proximity to the NCS stations, including Union Station. Only people who lived in one of the specified zip codes were allowed to complete the survey. In a few situations, the consultant received phone calls from employees interested in the shuttle service who lived in a zip code not included in this list. The zip code was then added to the list. (These additional zip codes were all located in the City of Chicago).

Employers were asked to post the letter with the web site link at a prominent location in the workplace such as cafeteria, break room, etc., or to distribute it directly to employees. Many employers sent it via e-mail or through company mail. Since this was voluntary on the part of the employer, some employees who might be interested in the proposed shuttle service may not have found out about the survey if their employer did not post the notice.

Employees were also given the alternative to complete a paper survey and send it back to the consultant. Approximately 40 paper surveys were sent in and coded into the system. A Spanish version was also available, though few respondents used it.

The survey took approximately 5-7 minutes to complete and respondents were asked to provide their e-mail addresses if they wanted to be kept informed of the progress of the project. The on-line surveys were automatically tabulated and the consultant received weekly results making it easy to monitor the progress of the survey.

3.3 Data Analysis

The results of the on-line survey were automatically tabulated into a readable format. The survey results are provided in **Appendix F**. The data collected was also downloaded into a spreadsheet, from which a new data subset was created containing only information that was needed to calculate ridership for each station. The use of this dataset is further described in **Section 4.2.1 – Methodology**.

Section 4
Route Alternatives and Ridership Estimates

4.1 Route Alternatives

A market analysis was undertaken that included identifying the specific locations of employers whose employees were represented by survey responses. The employers were plotted on aerial photographs to indicate their relationship to each other, as well as the Metra stations. These employers were grouped by proximity to North Central Station (see **Exhibit 2 – Responding Employees by Station**). Total employment, number of responses and survey results were used to determine the potential ridership.

A series of route alternatives was then developed. Thirteen alternatives were identified as potential routes based on the survey results and geographic location of the employers. These were plotted on aerial photographs and posted on a web page for analysis. Major employers whose employees had not responded to the survey were added to each service area for future consideration (see **Appendix G – Alternative Route Descriptions**). The alternative routes by Metra Station and employers served are summarized in **Table 4-1** and illustrated on the aerials at the back of this section.

4.2 Ridership Estimates

4.2.1 Methodology

The first step in determining ridership estimates was to calculate a level of interest (LOI) among the employees responding to the survey. This was accomplished by using the response to the ridership preference question. Ridership preference dealt with how frequently the respondents would consider using the Metra/Pace shuttle service. A 2.0 LOI was used for those who desire to use the service for both morning and evening rides five days per week. A 1.4 LOI corresponded to desire to use morning and evening rides 3 to 4 days per week, and so forth to LOI 0, which represented no interest in using the shuttle service. The LOI factors are illustrated in **Table 4-2**.

The next step was to determine a level of interest for each route. This was done by dividing the number of responses in each preference category by the number of usable responses in each service area, multiplying by the preference factor for that category and adding the results. The result was the number of riders that could be expected to ride if all those indicating a preference could be accommodated by employer participation, as well as compatible Metra and Pace schedules. **Table 4-3** shows the resultant LOI factor for each route. Various route statistics are also provided in **Table 4-3**.

Table 4-1
Route Alternatives and Employers Served

Station	Route	Employer
Grayslake	1	College of Lake County
Prairie Crossing	2	Volkswagen Credit Corporation and Lake County Winchester House
Vernon Hills	3	Drummond American Corporation, STS Consultants, ZF Industries, American Hotel Register, CDW Computer Center, Allstate Life Insurance Company, Rust-oleum Corporation and Medline Industries
Prairie View	4	Automated Technologies, Baer Supply Company, Hewitt Associates, Caremark, Reynolds Food Packaging, Walgreen's Corporate Headquarters, and Moore-Wallace
Buffalo Grove	5	International Profit Associates, Crosscom National, Midwest Air Technologies, Tiger Accessory Group, Bio-Imaging Research, LG/Zenith Electronics Corporation, Nichols Aluminum and Charmilles Technologies
Buffalo Grove	6	Hewitt Associates and ACCO Brands
Buffalo Grove	7	CCH Incorporated, Discover Financial Services, Morgan Stanley Credit Corporation, Citi Commerce Solutions, Fujisawa Healthcare and Dade Behring
Buffalo Grove	8	Walgreen's Corporate Headquarters, Illinois Student Assistance Commission, Deloitte & Touche, Tax Technologies and Walgreen's Corporate Headquarters
Buffalo Grove	9	Allstate, Angus/Dow Chemical Company and Federal Express
Wheeling	10	Underwriter's Laboratories
Wheeling	11	Fluid Management, Valspar Corporation, Rexnord Seal Operation, Engis Corporation and U.S. Tsubaki
Prospect Heights	12	Caremark, Spherion and Allstate Insurance
O'Hare Transfer	13	Lawson Products, Abbott Labs (future site), Blyth Home Scents, Burke Engineering, Spaceco, Cole Taylor Bank, EGS Electrical Group, Sprint, Sofitel Hotel Chicago O'Hare, Crowne Plaza Chicago O'Hare, Xerox Capital Services and Rosemont Station.

Table 4-2
Level of Interest (LOI)

Use			Frequency of Use	Days	LOI Factor*
Frequency	**Period**	**Trips**			
5 Days	Week	Two Way	10.0	5.0	2.0
3-4 Days	Week	Two Way	7.0	5.0	1.4
1-2 days	Week	Two Way	3.0	5.0	0.6
Few days	Month	Two Way	1.5	5.0	0.3
Never		Two Way	0.0	5.0	0.0
5 Days	Week	One Way	5.0	5.0	1.0
3-4 days	Week	One Way	3.5	5.0	0.7
1-2 days	Week	One Way	1.5	5.0	0.3
Few days	Month	One Way	0.8	5.0	0.15
Never		One Way	0.0	5.0	0.0
*LOI Factor = Frequency of Use/Days					

Table 4-3
Route Statistics

Route	Station	Total Employees	Responding Employees	Response Ratio	Level of Interest	Ridership Ratio	Employees at Non-Responding Locations
1	Grayslake	2,000	51	2.6%	0.978	2.5%	550
2	Prairie Crossing	900	46	5.1%	1.376	7.0%	6,629
3	Vernon Hills	3,395	73	2.2%	1.407	3.0%	4,200
4	Prairie View	2,535	114	4.5%	1.555	7.0%	0
5	Buffalo Grove	1,248	42	3.4%	1.487	5.0%	4,775
6	Buffalo Grove	7,865	179	2.3%	1.499	3.4%	1,250
7	Buffalo Grove	4,664	95	2.0%	1.681	3.4%	2,950
8	Buffalo Grove	3,780	265	7.0%	1.361	9.5%	535
9	Buffalo Grove	1,513	25	1.7%	1.546	2.6%	600
10	Wheeling	1,600	79	4.9%	1.470	7.3%	5,450
11	Wheeling	725	17	2.3%	1.628	3.8%	3,859
12	Prospect Heights	7,965	280	3.5%	1.268	4.5%	4,115
13	O'Hare Transfer	2,197	59	2.7%	1.543	4.1%	5,585
	Totals/Average:	40,387	1,325	3.3%	1.446	4.9%	40,498

Shuttle route schedules were developed based on the proposed Metra North Central schedule (see **Table 1-1**) and shuttle times based on route distance and a 3 minutes per mile average running time. This schedule was matched with both inbound and outbound service and compared with responding employee's arrival and departure times, to determine the potential ridership that could be expected with total employer participation, the proposed Metra train service, and a similar Pace schedule. In order to accurately predict potential ridership of the compatible respondents, a new LOI was calculated for this grouping. This analysis excluded those riders who did not give adequate Zip Code information to identify their direction of travel. This calculation is based solely on the stated preference of those employees

responding to the survey and represents the base ridership that would be accommodated with full employer participation and the proposed Metra service levels and sample Pace schedules above. The results of this calculation are provided in Scenario 1 of **Exhibit 4 – Ridership Scenarios** and **Table 4-4**.

Table 4-4
Daily Ridership Comparison

Route	Scenario				
	Station	**1**	**2**	**3**	**4**
1	Grayslake	10	51	73	87
2	Prairie Crossing	13	50	71	436
3	Vernon Hills	46	104	149	278
4	Buffalo Grove	85	174	249	249
5	Buffalo Grove	28	68	98	359
6	Buffalo Grove	170	270	385	428
7	Buffalo Grove	81	158	226	326
8	Buffalo Grove	180	367	525	577
9	Buffalo Grove	16	37	53	68
10	Wheeling	69	115	164	554
11	Wheeling	8	26	37	176
12	Prospect Heights	201	346	495	674
13	O'Hare Transfer	54	90	128	355

To take into account the remaining survey respondents, a second scenario is provided that eliminates Metra schedules and employee work times as constraints, which then represents a maximum ridership potential from the respondents. This assumes either a change in Metra schedules or use of flextime to allow everyone who wants to use the service to do so. (See Scenario 2 in **Exhibit 5 – Ridership Scenarios** and **Table 4-4)**.

It was recognized that there are additional potential riders at responding companies that may want to ride, but did not participate in the survey for a variety of reasons. To account for these riders it was assumed that the survey captured 70 percent of the potential respondents at those companies. It was further assumed that these riders would respond with the same level of interest as those who filled out the survey. The Scenario 2 ridership was divided by 0.7 to estimate the Scenario 3 ridership. The result of this calculation identifies the potential ridership with all employees accommodated by employer participation, as well as compatible Metra and Pace schedules. The results of this calculation are provided in Scenario 3 of **Exhibit 4 – Ridership Scenarios** and **Table 4-4**.

Finally, a list of non-responding employers who have more than 250 employees and are located in the affected service areas was compiled (see **Exhibit 5 – Non-Responding Employers by Route**). It was assumed that their employees would be potential riders if they were given the opportunity, and that they would express the same levels of interest as those from nearby companies who did respond to the survey. Multiplying the total number of employees by the response ratio and LOI from Scenario 2, and adding that number to the base ridership calculated in Scenario 3 provided a maximum potential ridership. The result of this calculation identifies the potential ridership in each service area, with all employees

that could be accommodated with full employer participation and compatible Metra and Pace schedules. This is Scenario 4 in **Exhibit 4 – Ridership Scenarios** and **Table 4-4**.

4.2.2 Results

As can be seen by comparing columns 1-4 in **Table 4-4**, Scenario 1 represents the prospective ridership based on the actual response to the surveys, which would be accommodated by the proposed North Central schedule that is weighted in the inbound direction in the morning and the outbound direction in the evening. This is the base ridership that can be expected if all employers with responding employees participate in the shuttle program. By comparing ridership estimates in the table and the current ridership levels in the existing TMA of Lake Cook Shuttle Bug services, it is apparent that there is sufficient interest to develop some fixed route and/or flexible services between the North Central Line and employers in the study corridor.

Scenario 2 reflects potential ridership if all employees who responded to the survey could be accommodated by enhanced Metra and compatible Pace schedules. Scenario 2 is based on the stated preferences of employees responding to the surveys. Scenarios 3 and 4 reflect various projections that are intended to identify additional employees in the study area who may be candidates for employer shuttle services, but were not responsive to this survey. They are included to identify the universe of employees whose participation could be solicited as the employer shuttles are developed further.

Finally, the survey results were examined to determine the morning ridership direction based on residential and employment zip codes provided with the survey. **Table 4-5** shows the ridership direction under both Scenarios 1 and 2. It should be kept in mind that Scenario 1 did not include the respondents that had the same work and home zip codes or work schedules that conflicted with the proposed shuttle service schedule. Scenario 2 included all the survey respondents. The table helps to illustrate that the shuttle users would be primarily a suburb-to-suburb commute. The table also helps to illustrate that additional outbound service has the potential to attract reverse commuters.

Table 4-5
Ridership Direction

Direction	Scenario	
	1	2
Inbound (to Chicago)	82%	53%
Outbound (from Chicago)	18%	37%
Same Zip Codes	0%	10%

Section 5
Cost Analysis and Service Recommendations

5.1 Route Recommendations

Based on the results of the ridership analysis, the routes have been ranked and service type recommendations provided, as illustrated in **Table 5-1**. Service could start as soon as funding is in place and employer agreements executed. Service types primarily based on ridership levels have been recommended in order to perform the cost analysis. However, the actual service that is implemented will depend on other factors discussed below. **Table 5-1** is broken into four separate groupings reflecting likely prioritization efforts.

Table 5-1 also shows anchor tenants for each route. Each of these anchor tenants has a high number of responding employees and potential ridership and is considered critical to the success of the route.

Table 5-1
Route Rankings

Route	Station	Anchor Employers	Service Type Recommendation
12	Prospect Heights	Allstate Life Insurance	Fixed
6	Buffalo Grove	Hewitt Associates	Fixed
8	Buffalo Grove	Walgreen's Corporate Hdqtrs	Fixed
7	Buffalo Grove	Discover Financial Services	Fixed
4	Buffalo Grove	Hewitt Associates	Fixed
10	Wheeling	Underwriters Laboratory	Fixed
13	O'Hare Transfer	Lawson Products Xerox Capital Services	Flexible
3	Vernon Hills	American Hotel Register	Flexible
5	Buffalo Grove	International Profit Associates	Flexible
9	Buffalo Grove	Allstate Life Insurance	Flexible
1	Grayslake	College of Lake County	Vanpool
2	Prairie Crossing	Volkswagen Credit, Inc	Vanpool
11	Wheeling	None	Vanpool

Six fixed route services and four route deviation or flexible service alternatives have been recommended. These fixed routes could be started with either a full sized transit bus or a passenger van, and the four flexible routes could be started with a company sponsored vanpool, dial-up or route deviation service, and advanced to fixed route service as ridership patterns are identified. In the case of Vernon Hills, depending on employer response and the

interest of non-responsive employers, this route could be combined with companies on Route 4.

The remaining three alternatives that were studied do not show potential for development as either fixed route or route deviation service. They may be developed as vanpool services, or combined with other companies in the service area. This would require extended outreach to companies that did not respond to the survey.

5.2 Cost Estimates

Cost estimates were developed for the six fixed route alternatives and the four flexible service alternatives recommended. Cost estimates were prepared using capital and operating costs calculated by Pace through the fourth quarter of 2004. These costs included capital costs of $350,000 for a fixed route mass transit bus and $40,000 for a flexible service van. Capital costs were developed for each fixed route to include the purchase of one mass transit bus, amortized over a 12-year lifespan. Each flexible service included the purchase of one passenger van, amortized over a lifespan of 4 years. These are the only capital costs, since no new facilities are anticipated. Annual capital costs were calculated by dividing the purchase price of the vehicle by its life expectancy.

Operating costs were attributed to each service area based on the proximity to the garage from which each route would originate. All of the services could be served from the Northwest Division, and operating costs were developed using a rounded figure of $59 per hour.

Operating costs for each fixed route and flexible route were calculated by first determining the number of service hours included in schedules that were developed as a result of the ridership analysis to coincide with the proposed Metra schedule (see **Table 4-1**). These were added to the hours required to pull into and out of the Pace garage facility, and the total hours were then multiplied by the operating cost per hour as noted above. An annualized service period of 260 days was used.

The annual capital costs were added to the annual operating costs to determine the total annual cost for each fixed and flexible route service. The results of the cost analysis are provided in **Table 5-2**.

Since there is no way to predict the degree of subsidization for the vanpool services in the last grouping in **Table 5-1**, they are not included in this cost estimating process.

Table 5-2
Cost Calculations

Route	AM Service	PM Service	AM Pull-Out	AM Pull-In	PM Pull-Out	PM Pull-In	Total	Annual Costs		
	Minutes							Operating	Capital	Total
Fixed										
12	112	96	7	12	12	7	246	62,894	29,166	92,060
6	98	75	20	20	20	20	253	64,683	29,166	93,850
8	112	106	20	16	16	20	290	74,143	29,166	103,310
7	112	107	20	20	20	20	299	76,444	29,166	105,611
4	117	168	23	21	21	23	373	95,363	29,166	124,530
10	97	145	14	20	20	14	310	79,256	29,166	108,423
							Subtotal:	**$373,529**	**$175,000**	**$627,785**
Flexible										
13	73	110	10	20	20	10	243	62,127	10,000	72,127
3	116	145	25	25	25	25	361	92,295	10,000	102,295
5	62	90	20	20	20	20	232	59,314	10,000	69,314
9	84	59	20	20	20	20	223	57,013	10,000	67,013
							Subtotal:	**$270,751**	**$40,000**	**$310,751**
							Total:	**$644,280**	**$215,000**	**$938,536**

5.3 Cost Analysis

The estimated ridership from Scenario 1 was compared to the cost estimate for each route to develop a cost per ride as shown in **Table 5-3**. As would be expected, the routes with the greater ridership show a lower cost per ride. The ranking of the routes based on cost per ride follows the recommended ranking fairly closely except for Route 13. Route 13 has a lower operating cost due to the reduced service and garage deadhead distances involved.

5.4 Non-Responding Companies

As previously discussed, there are numerous companies along the routes that did not respond to the survey. (These companies are illustrated on the route maps.) As the shuttle service develops, these companies may be more inclined to utilize the service. Some of these companies could have a dramatic impact on the ridership levels, or drive the establishment of additional routes. **Table 5-4** shows the potential ridership gains that could be achieved by these companies. The additional ridership is based on the difference between Scenarios 4 and 2.

Table 5-3 Estimated Cost per Ride				
Route	**Daily Rides**	**Annual Rides**	**Annual Costs**	**Cost per Ride**
12	201	52,260	$92,060	$1.76
6	170	44,200	$93,850	$2.12
8	180	46,800	$103,310	$2.21
7	81	21,060	$105,611	$5.01
4	85	22,100	$124,530	$5.63
10	69	17,940	$108,423	$6.04
13	64	16,640	$72,127	$4.33
3	46	11,960	$102,295	$8.55
5	28	7,280	$69,314	$9.52
9	16	4,160	$67,013	$16.11

Table 5-4 Potential Ridership Gains from Non-Responding Companies			
Route	Station	Gain	Percent Increase
12	Prospect Heights	397	115%
6	Buffalo Grove	155	57%
8	Buffalo Grove	208	57%
7	Buffalo Grove	143	90%
4	Buffalo Grove	75	45%
10	Wheeling	382	332%
13	O'Hare Transfer	301	334%
3	Vernon Hills	244	235%
5	Buffalo Grove	122	179%
9	Buffalo Grove	31	84%

5.5 Responding Companies with No Service

There were several companies whose employees expressed interest in using Pace shuttle services, but the routes developed above could not efficiently accommodate them. Most of these companies were too far removed from the NCS station and/or the proposed route to be practically serviced by a shuttle bus. They are listed in **Exhibit 6 – Responding Companies with No Identified Service**. There were 76 respondents from 34 companies in this category. These companies represented a total employment of 9,375, which represent 23% of the employees at responding locations, but only 5% of the overall responses to the survey.

While interest in the shuttle service is weak at these locations, they may be worthy of attention after the shuttle service is initiated.

5.6 Service Recommendations

Based on the potential ridership and the above cost analysis, the top three routes warrant primary attention for implementation. However, the success of the shuttle program is dependent on the participation of major employers on each route. It is recommended that the solicitation of employers identified in this study begin with those anchor employers identified in **Table 5-1** deemed most likely to participate, and then implement those routes with the greatest participation. It is also recommended that Pace examine its vehicle availability, and expedite any equipment purchase that may be required to implement shuttle service in the study area.

It should be noted that peak period connecting shuttle services are costly to operate. Vehicles need to be dedicated to the service, and there may be long periods between service runs. The start up of this service may be eligible for federal funding under a Congestion Mitigation Air Quality (CMAQ) grant. Under this grant, employers would be expected to pick up a 20% share of the operating costs of the program. Eventually, employer participation would be closer to 50%. Pace may also choose to consider alternative methods of providing the shuttle service and reducing costs. For example, privatization of the shuttle service is one idea that is being used on existing Shuttle Bug routes, and could be considered for this corridor.

The survey results also indicate that the availability of Metra commuter train options would impact shuttle ridership. Irregular and unpredictable work schedules require flexible commuter patterns. To accommodate this need, Metra should continue to investigate their ability to provide additional trains in the reverse peak direction.

Depending on employer participation and vehicle availability, it is recommended that detailed plans for service be initiated with a view toward implementation coincident with the inauguration of full two-way operations on the North Central Line. This strategy will enable Metra and Pace to benefit from a joint marketing campaign, as well as the outreach generated by employer solicitation.

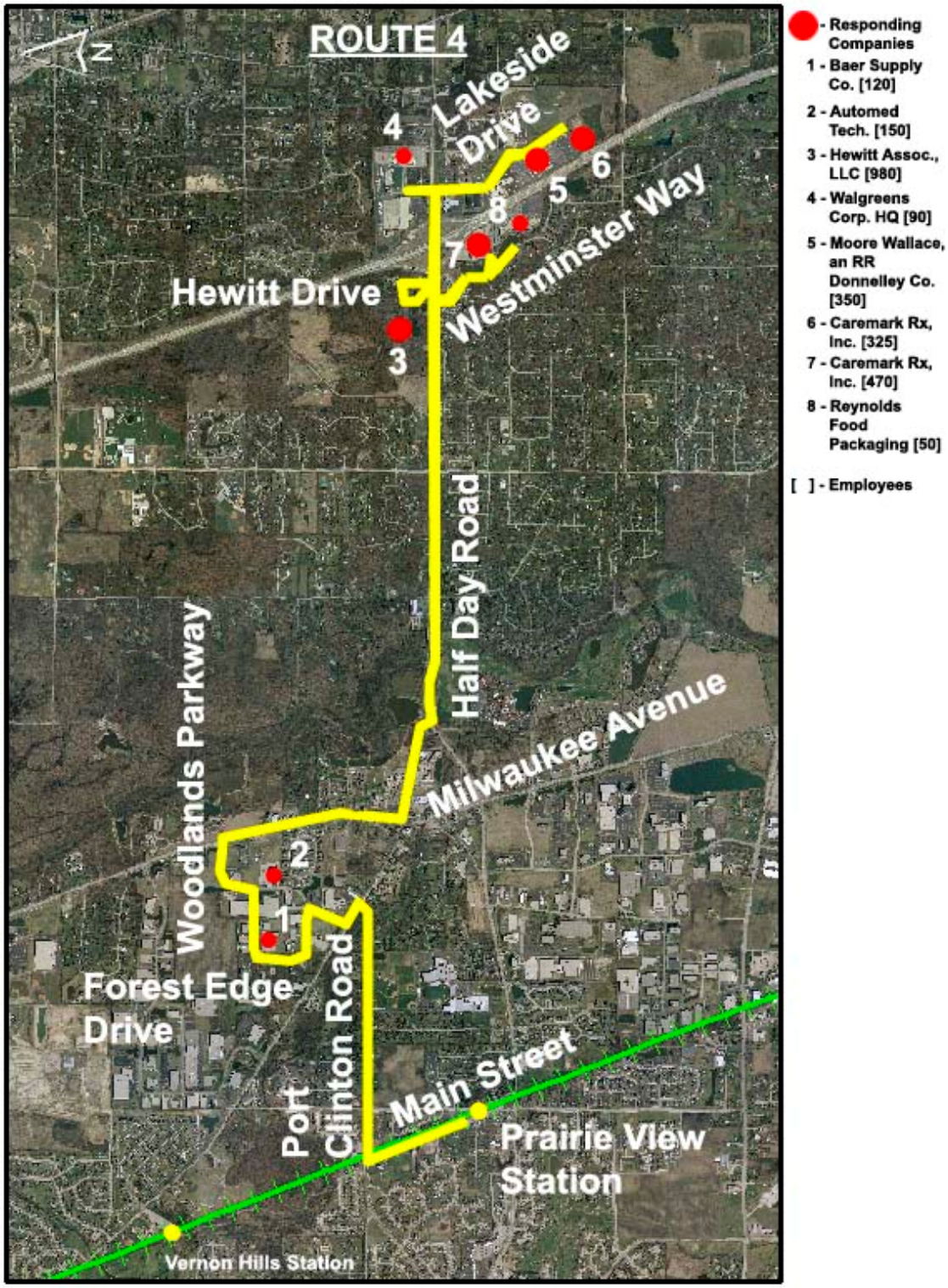
It is worth noting that the original Lake-Cook Shuttle Bug service began with vans. Similarly, service on the NCS routes may be initiated with a small bus or passenger van operated by Pace, with pre-approved discretionary and dial-up route deviation, or through a variety of employer options currently available in the Pace Vanpool Incentive Program (VIP). The major advantages of the VIP program are the ability to adjust operating costs and shuttle schedules to accommodate shift fluctuations.

List of Route Maps

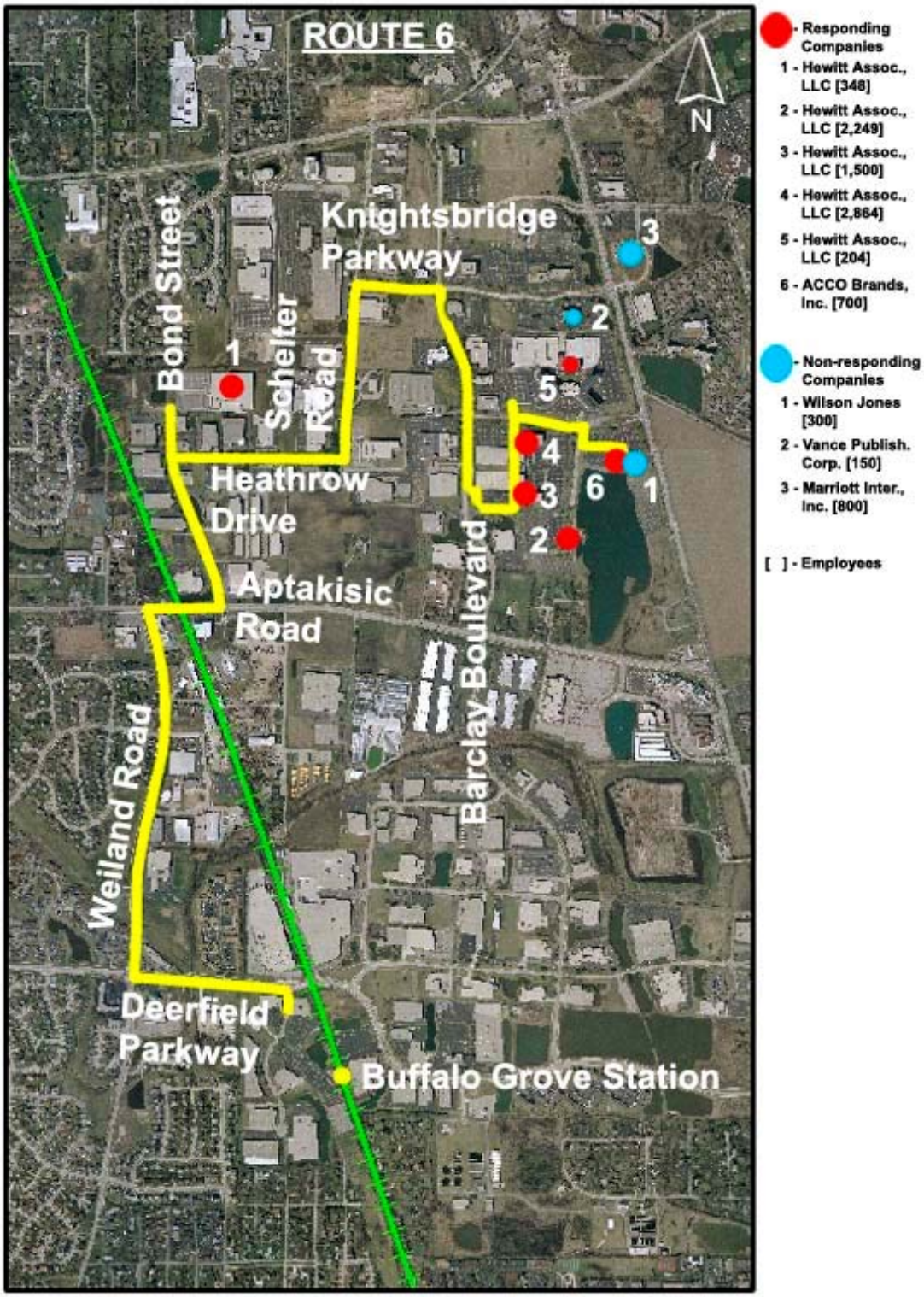

ROUTE 1
N
Lancer Lane
Washington Street
Grayslake Station
1
1
2
- Responding Company
1 - College of Lake County [2,000]
- Non-responding Companies
1 - Lift Parts Mfg. Co., Inc. [250]
2 - Intrupa Mfg. Co., Inc. [300]
[ ] - Employees

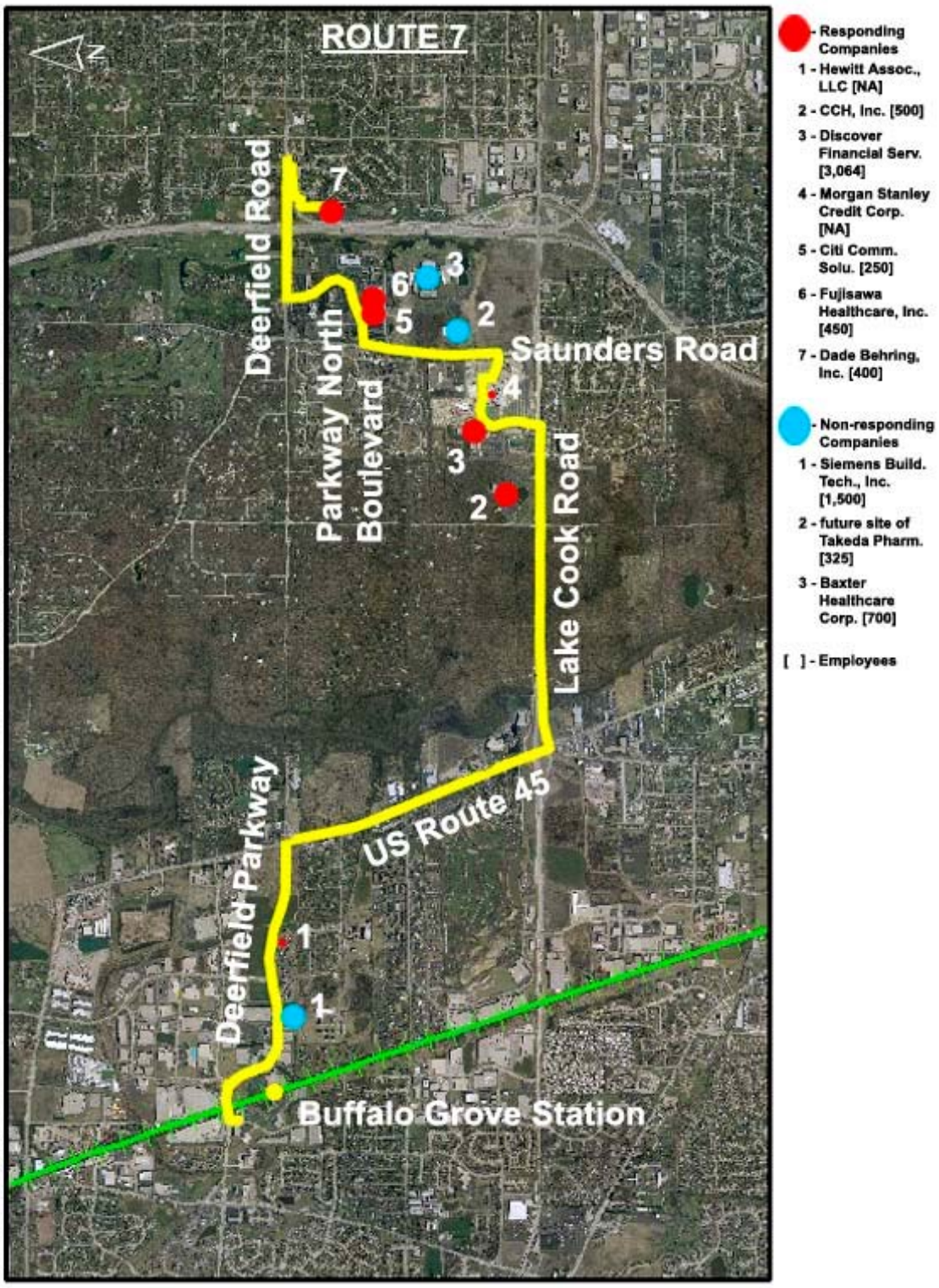

ROUTE 2
N
Milwaukee Avenue
Winchester Road
Illinois State Route 137
Franklin Boulevard
Harris Road
Peterson Road
Prairie Crossing/
Libertyville Station
1
2
3
4
5
- Responding Companies
1 - Lake County Winchester House [400]
2 - Volkswagen Credit, Inc. [500]
- Non-responding Companies
1 - Allscripts Healthcare Solutions [304]
2 - Tempel Steel, Co. Transformer Div. [75]
3 - Motorola, Inc. Cellular Subscriber Sector [4,000]
4 - Condell Hospital [2,000]
5 - Ombudsman Educational Services [250]
[ ] - Employees


ROUTE 3
N
Milwaukee Avenue
Lakeview Parkway
Continental Drive
Hawthorne Parkway
Corporate Woods Parkway
Woodlands Parkway
Corporate Woods Parkway
Aspen Drive
Vernon Hills Station
US Route 60
US Route 45
Lake Street
- Responding Companies
1 - Drummond American, Co. [100]
2 - STS Consultants, Ltd. [130]
3 - ZF Industries, Inc. [250]
4 - American Hotel Register, Co. [665]
5 - CDW [350]
6 - Allstate Life Ins. Co. [500]
7 - Rust-Oleum Corp. [200]
8 - Medline Indst. [1,200]
- Non-responding Companies
1 - Zebra Tech, Inter., LLC [1,700]
2 - Mitsubishi Electric Automation, Inc. [350]
3 - Baxter Credit Union [250]
4 - Cole-Parmer Instrument Co. [420]
5 - Learning Resources Inc. [60]
6 - Komatsu America Corp. [350]
7 - Washington Mutual [20]
8 - Saia-Burgess USA, Inc. [400]
9 - Amcor Flexibles Healthcare [350]
10 - Deringer-Ney Inc. [300]
[ ] - Employees

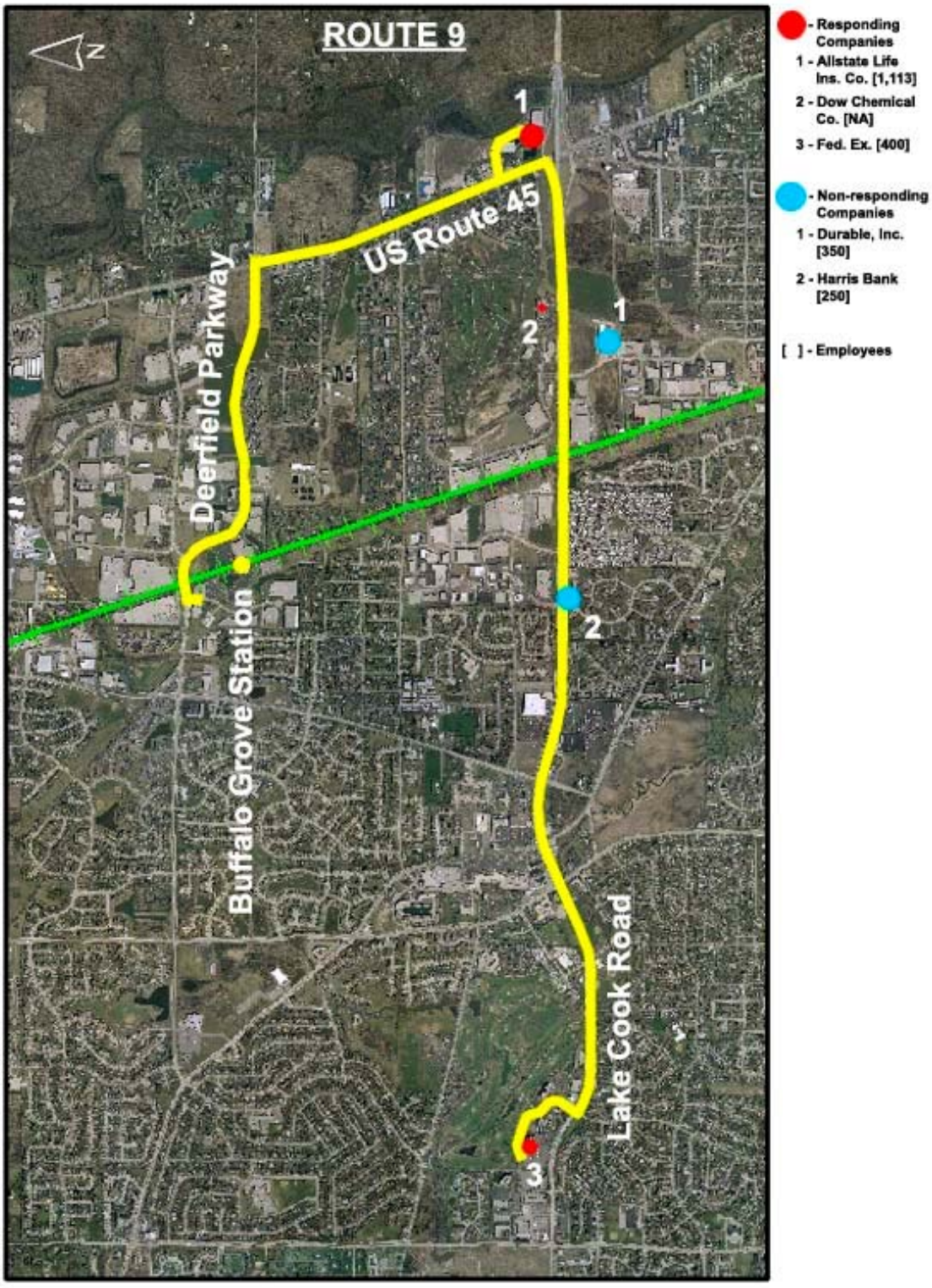

ROUTE 4
N
Lakeside Drive
Westminster Way
Hewitt Drive
Half Day Road
Milwaukee Avenue
Woodlands Parkway
Forest Edge Drive
Port Clinton Road
Main Street
Prairie View Station
Vernon Hills Station
1
2
3
4
5
6
7
8
- Responding Companies
1 - Baer Supply Co. [120]
2 - Automed Tech. [150]
3 - Hewitt Assoc., LLC [980]
4 - Walgreens Corp. HQ [90]
5 - Moore Wallace, an RR Donnelley Co. [350]
6 - Caremark Rx, Inc. [325]
7 - Caremark Rx, Inc. [470]
8 - Reynolds Food Packaging [50]
[ ] - Employees

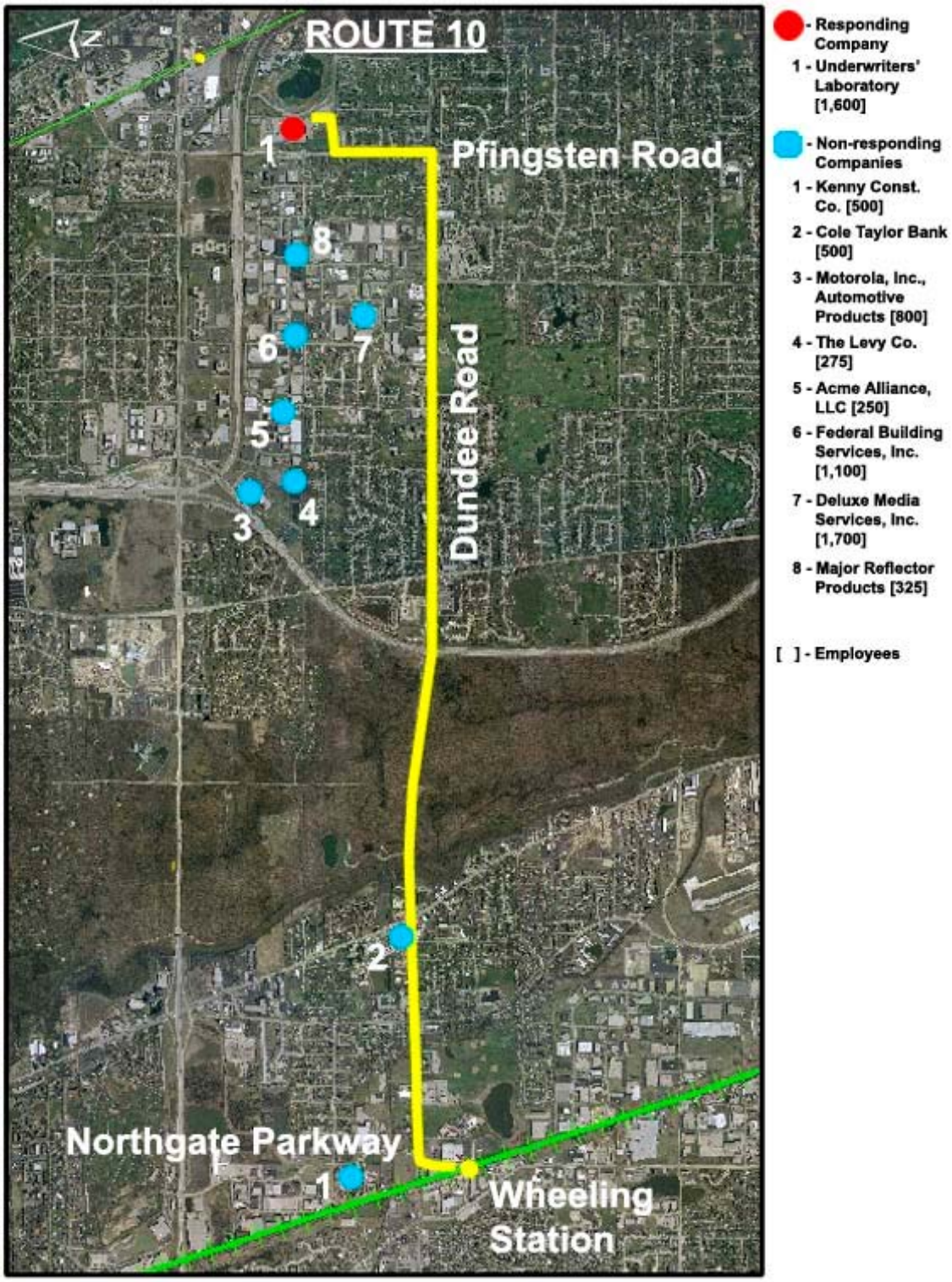

ROUTE 5
N
Prairie View Station
Millbrook Drive
Half Day Road
Barclay Boulevard
Heathrow Drive
Schelter Road
Aptakisic Road
Bond Street
Weiland Road
Asbury Drive
Corporate Grove Dr.
Deerfield Parkway
Busch Parkway
Buffalo Grove Station
- Responding Companies
1 - Inter. Profit Assoc. [500]
2 - Crosscom Nat. Inc. [200]
3 - Midwest Air Tech. [100]
4 - Tiger Acces. Group [30]
5 - Bio-Imaging Research, Inc. [100]
6 - Nichols Aluminum [120]
7 - LG/Zenith Electronics Co. [125]
8 - Charmilles Tech. Co. [73]
- Non-responding Companies
1 - RG Ray Corp. [350]
2 - DT Indust., Prec. Assm. Div. [500]
3 - Precision Tech. Co. [800]
4 - HydraForce, Inc. [325]
5 - Grainger.com [400]
6 - Quill Corp. [1,200]
7 - Corp. Building Sys. [500]
8 - Lifewatch, Inc. [300]
9 - Precise Tech. Corp. [400]
[ ] - Employees


ROUTE 6
N
Knightsbridge Parkway
Bond Street
Schelter Road
Heathrow Drive
Aptakisic Road
Barclay Boulevard
Weiland Road
Deerfield Parkway
Buffalo Grove Station
- Responding Companies
1 - Hewitt Assoc., LLC [348]
2 - Hewitt Assoc., LLC [2,249]
3 - Hewitt Assoc., LLC [1,500]
4 - Hewitt Assoc., LLC [2,864]
5 - Hewitt Assoc., LLC [204]
6 - ACCO Brands, Inc. [700]
- Non-responding Companies
1 - Wilson Jones [300]
2 - Vance Publish. Corp. [150]
3 - Marriott Inter., Inc. [800]
[ ] - Employees

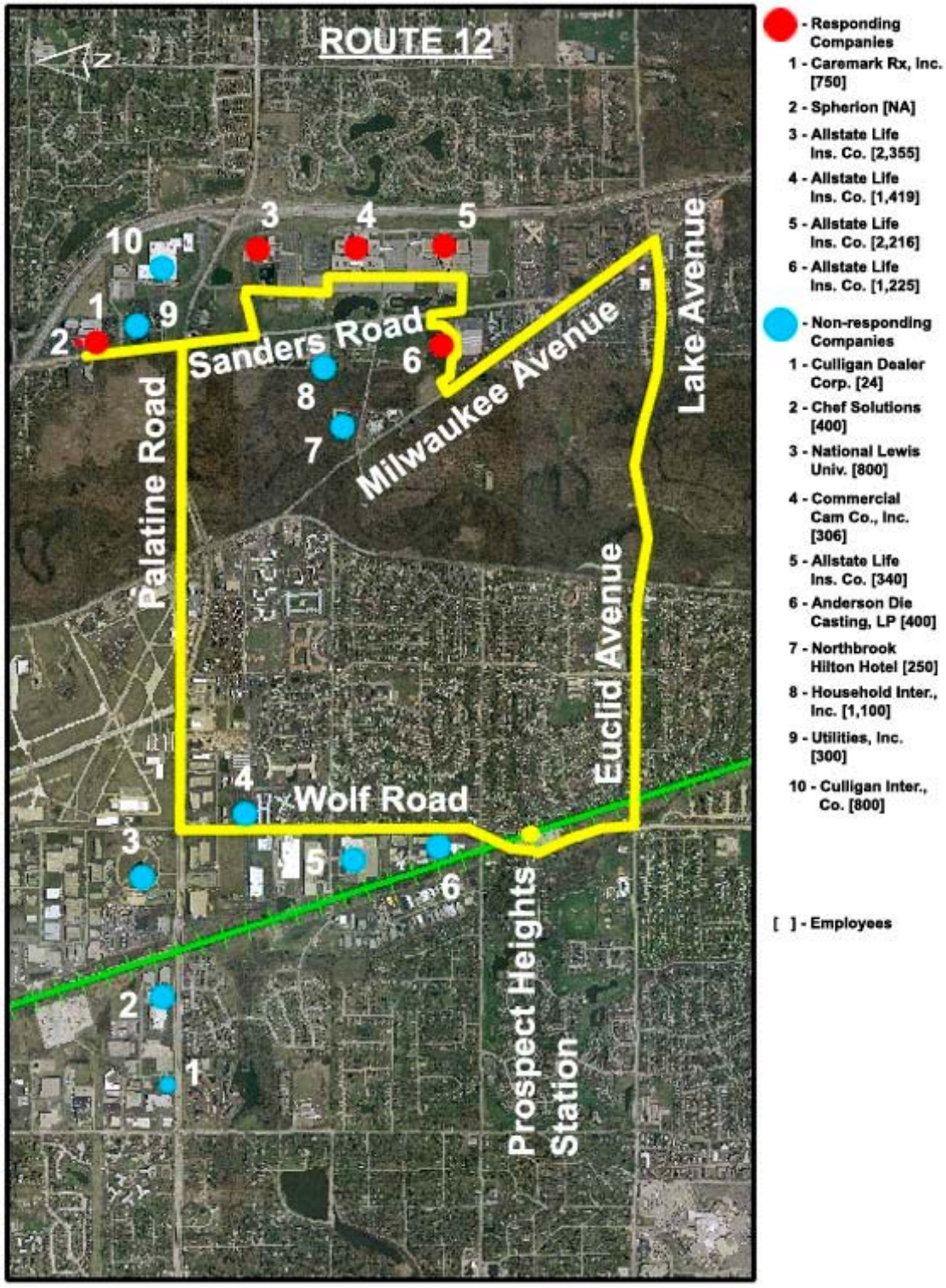

ROUTE 7
N
Deerfield Road
Parkway North Boulevard
Saunders Road
Lake Cook Road
US Route 45
Deerfield Parkway
Buffalo Grove Station
7
6
5
3
2
4
3
2
1
1
- Responding Companies
1 - Hewitt Assoc., LLC [NA]
2 - CCH, Inc. [500]
3 - Discover Financial Serv. [3,064]
4 - Morgan Stanley Credit Corp. [NA]
5 - Citi Comm. Solu. [250]
6 - Fujisawa Healthcare, Inc. [450]
7 - Dade Behring, Inc. [400]
- Non-responding Companies
1 - Siemens Build. Tech., Inc. [1,500]
2 - future site of Takeda Pharm. [325]
3 - Baxter Healthcare Corp. [700]
[ ] - Employees

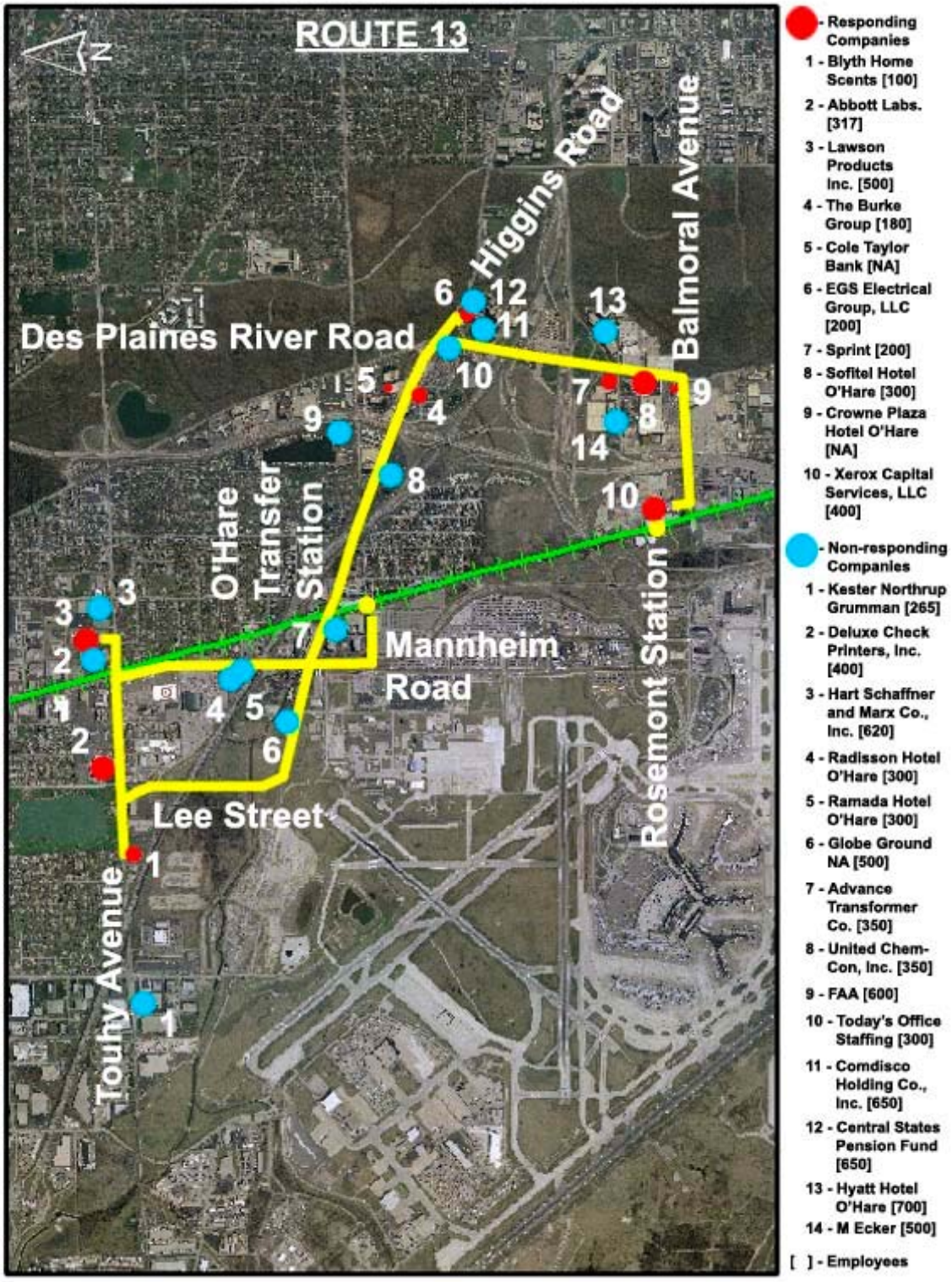

ROUTE 8
Wilmot Road
Deerfield Road
Lake Cook Road
Deerfield Parkway
Buffalo Grove Station
1
2
1
2
3
4
5
- Responding Companies
1 - Walgreens Corp. HQ [1,020]
2 - Walgreens Corp. HQ [1,230]
3 - ISAC [500]
4 - Deloitte and Touche Tax Tech. [400]
5 - Walgreens Corp. HQ [630]
- Non-responding Companies
1 - Revere Group [265]
2 - Baxter Healthcare Corp., Bioscience Div. [270]
[ ] - Employees


ROUTE 9
N
US Route 45
Deerfield Parkway
Buffalo Grove Station
Lake Cook Road
1
2
3
- Responding Companies
1 - Allstate Life Ins. Co. [1,113]
2 - Dow Chemical Co. [NA]
3 - Fed. Ex. [400]
- Non-responding Companies
1 - Durable, Inc. [350]
2 - Harris Bank [250]
[ ] - Employees


ROUTE 10
Pfingsten Road
Dundee Road
Northgate Parkway
Wheeling Station
1
2
3
4
5
6
7
8
- Responding Company
1 - Underwriters' Laboratory [1,600]
- Non-responding Companies
1 - Kenny Const. Co. [500]
2 - Cole Taylor Bank [500]
3 - Motorola, Inc., Automotive Products [800]
4 - The Levy Co. [275]
5 - Acme Alliance, LLC [250]
6 - Federal Building Services, Inc. [1,100]
7 - Deluxe Media Services, Inc. [1,700]
8 - Major Reflector Products [325]
[ ] - Employees


ROUTE 11
N
Hintz Road
Marquardt Drive
Chaddick Drive
Glenn Avenue
Wheeling Road
Wheeling Station
11
5
10
9
7
8
3
2
4
1
3
1
4
6
2
5
- Responding Companies
1 - Fluid Mgmnt. [200]
2 - The Valspar Corp. [200]
3 - Engis Corp. [100]
4 - Rexnord Seal Operation [125]
5 - US Tsubaki, Inc. [100]
- Non-responding Companies
1 - Pactiv Corp. [400]
2 - Inland Die Casting Co. [400]
3 - RRD Direct [258]
4 - MMF Indust. [306]
5 - Block and Co., Inc. [350]
6 - Solo Cup Co. [400]
7 - Hospital Laundry Services [400]
8 - US Freightways [400]
9 - Shure, Inc. [500]
10 - Handi-Foil Corp. [400]
11 - Motorola, Inc., Aviation Dept. [400]
[ ] - Employees


ROUTE 12
Sanders Road
Milwaukee Avenue
Lake Avenue
Palatine Road
Euclid Avenue
Wolf Road
Prospect Heights Station
- Responding Companies
1 - Caremark Rx, Inc. [750]
2 - Spherion [NA]
3 - Allstate Life Ins. Co. [2,355]
4 - Allstate Life Ins. Co. [1,419]
5 - Allstate Life Ins. Co. [2,216]
6 - Allstate Life Ins. Co. [1,225]
- Non-responding Companies
1 - Culligan Dealer Corp. [24]
2 - Chef Solutions [400]
3 - National Lewis Univ. [800]
4 - Commercial Cam Co., Inc. [306]
5 - Allstate Life Ins. Co. [340]
6 - Anderson Die Casting, LP [400]
7 - Northbrook Hilton Hotel [250]
8 - Household Inter., Inc. [1,100]
9 - Utilities, Inc. [300]
10 - Culligan Inter., Co. [800]
[ ] - Employees


ROUTE 13
N
Des Plaines River Road
Higgins Road
Balmoral Avenue
O'Hare Transfer Station
Mannheim Road
Rosemont Station
Lee Street
Touhy Avenue
- Responding Companies
1 - Blyth Home Scents [100]
2 - Abbott Labs. [317]
3 - Lawson Products Inc. [500]
4 - The Burke Group [180]
5 - Cole Taylor Bank [NA]
6 - EGS Electrical Group, LLC [200]
7 - Sprint [200]
8 - Sofitel Hotel O'Hare [300]
9 - Crowne Plaza Hotel O'Hare [NA]
10 - Xerox Capital Services, LLC [400]
- Non-responding Companies
1 - Kester Northrup Grumman [265]
2 - Deluxe Check Printers, Inc. [400]
3 - Hart Schaffner and Marx Co., Inc. [620]
4 - Radisson Hotel O'Hare [300]
5 - Ramada Hotel O'Hare [300]
6 - Globe Ground NA [500]
7 - Advance Transformer Co. [350]
8 - United Chem-Con, Inc. [350]
9 - FAA [600]
10 - Today's Office Staffing [300]
11 - Comdisco Holding Co., Inc. [650]
12 - Central States Pension Fund [650]
13 - Hyatt Hotel O'Hare [700]
14 - M Ecker [500]
[ ] - Employees

List of Exhibits

Exhibit 1

Existing Metra North Central Service

Inbound	AM	AM	AM	AM	PM
Antioch	5:27	5:59	6:33	7:02	3:29
Lake Villa	5:33	6:05	6:39	7:08	3:35
Round Lake Beach	5:37	6:09	6:43	7:12	3:39
Grayslake					
Prairie Crossing	5:43	6:15	6:49	7:18	3:45
Mundelein	5:49	6:21	6:55	7:24	3:51
Vernon Hills	5:55	6:27	7:01	7:30	3:57
Prairie View	5:58	6:30	7:04	7:33	4:00
Buffalo Grove	6:02	6:35	7:09	7:38	4:04
Wheeling	6:07	6:40	7:14	7:43	4:09
Prospect Heights	6:11	6:44	7:18	7:47	4:13
O'Hare Transfer	6:22	6:55	7:29	7:58	4:24
Rosemont					
Schiller Park					
Franklin Park					
River Grove	6:32	7:05	7:40	8:09	4:33
Western Avenue	6:43	7:17	7:52	8:21	4:49
Chicago	6:54	7:28	8:05	8:33	5:00
Outbound	PM	PM	PM	PM	PM
Chicago	1:25	4:25	5:00	5:45	6:17
Western Avenue	1:34	4:35	5:10	5:55	6:27
River Grove	1:46	4:48	5:23	6:07	6:39
Franklin Park					
Schiller Park					
Rosemont					
O'Hare Transfer	1:56	4:59	5:34	6:17	6:48
Prospect Heights	2:06	5:09	5:44	6:27	6:58
Wheeling	2:11	5:14	5:49	6:32	7:03
Buffalo Grove	2:16	5:18	5:53	6:37	7:07
Prairie View	2:20	5:22	5:57	6:41	7:11
Vernon Hills	2:23	5:25	6:00	6:44	7:14
Mundelein	2:29	5:31	6:06	6:50	7:20
Prairie Crossing	2:35	5:37	6:12	6:56	7:26
Grayslake					
Round Lake Beach	2:41	5:43	6:18	7:02	7:32
Lake Villa	2:45	5:47	6:22	7:06	7:36
Antioch	2:54	5:55	6:30	7:14	7.44

Exhibit 2
Responding Employers by Station

Company Name	Street Address	City	Zip	Employees	Responses
Antioch					
Village of Antioch	874 Main Street	Antioch	60002	-	1
Lake Villa					
Round Lake Beach					
Grayslake					
College of Lake County	19351 West Washington Street	Grayslake	60030	2,000	51
General Motors Sign	704 Sunset Avenue	Round Lake	60073	50	1
Lake County Winchester House	33928 North Route 45	Grayslake	60030	61	1
Prairie Crossing					
Volkswagen Credit, Incorporated	1401 Franklin Boulevard	Libertyville	60060	500	22
Mundelein					
Hanna/TJ Brooks Corporation	804 East Park Avenue	Libertyville	60048	130	2
Lake County Winchester House	1125 North Milwaukee Avenue	Libertyville	60048	400	24
Onsrud Cutter, LP	800 Liberty Drive	Libertyville	60048	100	4
Spring Meadows	901 Florsheim Drive	Libertyville	60048	55	1
Vernon Hills					
Allstate Life Insurance Comany	544 Lakeview Parkway	Vernon Hills	60061	500	3
American Hotel Register Company	100 South Milwaukee Avenue	Vernon Hills	60061	665	29
Automed Technologies	875 Woodlands Parkway	Vernon Hills	60061	150	4
Baer Supply Company	909 Forest Edge Drive	Vernon Hills	60061	120	6
CDW	200 North Milwaukee Avenue	Vernon Hills	60061	350	2
CNH America, LLC	100 South Saunders Road	Lake Forest	60045	-	8
College of Lake County Southlake Educational Center	1120 South Milwaukee Avenue	Vernon Hills	60061	-	2
Drummond American Corporation	600 Corporate Woods Parkway	Vernon Hills	60061	100	8
Rust-Oleum Corporation	11 Hawthorn Parkway	Vernon Hills	60061	200	12
STS Consultants, Limited	750 Corporate Woods Parkway	Vernon Hills	60061	130	4
The Wealshire	150 Jamestown Lane	Lincolnshire	60069	150	1
WW Grainger, Incorporated	100 Grainger Parkway	Lake Forest	60045	1,200	1
ZF Industries, Incorporated	777 Hickory Hill Drive	Vernon Hills	60061	250	15

Company Name	Street Address	City	Zip	Employees	Responses
Prairie View					
ACCO Brands, Incorporated	300 Tower Parkway	Lincolnshire	60069	700	5
Bio-Imaging Research, Incorporated	425 Barclay Boulevard	Lincolnshire	60069	100	4
Caremark Rx, Incorporated	1000 Lakeside Drive	Bannockburn	60015	325	4
Caremark Rx, Incorporated	75 Tristate International Drive	Lincolnshire	60069	470	24
Charmilles Technologies Corporation	560 Bond Street	Lincolnshire	60089	73	2
Hewitt Associates, LLC	475 Bond Street	Lincolnshire	60069	348	8
Hewitt Associates, LLC	1 Overlook Point	Lincolnshire	60069	613	15
Hewitt Associates, LLC	2 Overlook Point	Lincolnshire	60069	1,636	40
Hewitt Associates, LLC	3 Overlook Point	Lincolnshire	60069	1,500	36
Hewitt Associates, LLC	4 Overlook Point	Lincolnshire	60069	2,864	70
Hewitt Associates, LLC	4 Tower Parkway	Lincolnshire	60069	204	5
Hewitt Associates, LLC	100 Half Day Road	Lincolnshire	60069	980	67
Leica Microsystems, Incorporated	2345 Waukegan Road	Bannockburn	60015	150	5
LG/Zenith Electronics Corporation	2000 Millbrook Drive	Lincolnshire	60069	125	10
Midwest Air Technologies	625 Barclay Boulevard	Lincolnshire	60069	100	2
Moore Wallace, an RR Donnelley Company	1200 Lakeside Drive	Bannockburn	60015	350	1
Nichols Aluminum	200 Schelter Road	Lincolnshire	60069	120	9
Reynolds Food Packaging - Alcoa	100 Tristate International Drive, Suite 200	Lincolnshire	60069	50	1
Tiger Accessory Group	625 Barclay Boulevard	Lincolnshire	60069	30	1
Vernon Area Public Library	300 Old Half Day Road	Lincolnshire	60069	115	1
Walgreens Corporate Headquaters	2275 Half Day Road	Deerfield	60015	90	7
Buffalo Grove					
Allstate Life Insurance Company	2150 East Lake Cook Road	Buffalo Grove	60089	1,113	15
CCH Incorporated	2700 Lake Cook Road	Riverwoods	60015	500	2
Citi Commerce Solutions	4 Parkway North Boulevard	Deerfield	60015	250	12
Crosscom National, Incorporated	1001 Asbury Drive	Buffalo Grove	60089	200	7
Dade Behring, Incorporated	1717 Deerfield Road	Deerfield	60015	400	7
Deloitte and Touche Tax Technologies	1751 Lake Cook Road	Deerfield	60015	400	19
Discover Financial Services	2500 Lake Cook Road	Riverwoods	60015	3,064	53
Dow Chemical Company	1500 East Lake Cook Road	Buffalo Grove	60089	-	3
Federal Express	1100 Lake Cook Road	Buffalo Grove	60089	400	7
Fujisawa Healthcare, Incorporated	3 Parkway North Center Drive	Deerfield	60015	450	16
Hewitt Associates, LLC	1261 Deerfield Parkway	Buffalo Grove	60089	-	1
Illinois Student Assistance Commission	1755 Lake Cook Road	Deerfield	60015	500	45
International Profit Associates, Incorporated	1275 Barclay Boulevard	Buffalo Grove	60089	500	7
Morgan Stanley Credit Corporation	2500 Lake Cook Road	Riverwoods	60015	-	4

Company Name	Street Address	City	Zip	Employees	Responses
Buffalo Grove					
Underwriters Laboratories, Incorporated	333 Pfingsen Road	Northbrook	60041	1,600	79
Walgreens Corporate Headquarters	102 Wilmot Road	Deerfield	60015	90	6
Walgreens Corporate Headquarters	106 Wilmot Road	Deerfield	60015	210	15
Walgreens Corporate Headquarters	160 Wilmot Road	Deerfield	60015	30	1
Walgreens Corporate Headquarters	200 Wilmot Road	Deerfield	60015	900	63
Walgreens Corporate Headquarters	300 Wilmot Road	Deerfield	60015	480	34
Walgreens Corporate Headquarters	302 Wilmot Road	Deerfield	60015	120	9
Walgreens Corporate Headquarters	304 Wilmot Road	Deerfield	60015	420	29
Walgreens Corporate Headquarters	1417 Lake Cook Road	Deerfield	60015	630	44
Wheeling					
Engis Corporation	105 West Hintz Road	Wheeling	60090	100	1
Fluid Management	1023 Wheeling Road	Wheeling	60090	200	1
Manan Medical Products	241 W Palatine Road	Wheeling	60090	250	2
Rexnord Seal Operation	634 Glenn Avenue	Wheeling	60090	125	1
The Valspar Corporation	1191 Wheeling Road	Wheeling	60090	200	13
US Tsubaki, Incorporated	301 East Marquardt Drive	Wheeling	60090	100	1
Village of Wheeling	255 West Dundee Road	Wheeling	60090	275	1
Prospect Heights					
Allstate Life Insurance Company	2675 Sanders Road	Northbrook	60062	2,355	29
Allstate Life Insurance Company	2775 Sanders Road	Northbrook	60062	1,419	108
Allstate Life Insurance Company	3075 Sanders Road	Northbrook	60062	2,216	58
Allstate Life Insurance Company	3100 Sanders Road	Northbrook	60062	1,225	49
Avery Dennison Corporation	902 Feehanville Drive	Mount Prospect	60056	50	1
Caremark Rx, Incorporated	800 Biermann Court	Mount Prospect	60056	750	1
Caremark Rx, Incorporated	2211 Sanders Road	Northbrook	60062	750	34
Gas Technology Institute	1700 South Mount Prospect Road	Des Plaines	60018	300	9
Northwest Community Hospital	800 West Central Road	Arlington Heights	60005	3,300	1
Pace Suburban Bus	550 West Algonquin Road	Arlington Heights	60005	1,400	6
Spherion	2211 Sanders Road	Northbrook	60062	-	2
Walgreens Corporate Headquaters	1084 Mount Prospect Plaza	Mount Prospect	60056	-	6
O'Hare Transfer					
American Society of Safety Engineers	1800 East Oakton Street	Des Plaines	60018	70	1
Amm's Limousine Service	5509 North Cumberland Avenue	Chicago	60656	150	1
BAX Global	513 Express Center Drive	Chicago	60666	200	1
Blyth Home Scents	999 East Touhy Avenue	Des Plaines	60018	100	3

Company Name	Street Address	City	Zip	Employees	Responses
O'Hare Transfer					
EA Langenfeld Associates Limited	1645 South River Road	Des Plaines	60018	70	1
Illinois Auto Truck	1669 Marshall Drive	Des Plaines	60018	200	1
LaMarche Manufacturing Company	106 Bradrock Drive	Des Plaines	60018	100	1
Lawson Products, Incorporated	1666 East Touhy Avenue	Des Plaines	60018	500	6
VNU/SRDS	1700 Higgins Road	Des Plaines	60018	50	1
Rosemont					
Cole Taylor Bank	9550 West Higgins Road	Rosemont	60018	-	1
Crowne Plaza Chicago O'Hare International Airport	5440 North River Road	Rosemont	60018	-	1
EGS Electrical Group, LLC	9377 West Higgins Road	Rosemont	60018	200	11
Sofitel Hotel Chicago O'Hare International Airport	5550 North River Road	Rosemont	60018	300	1
Sprint	5600 North River Road	Rosemont	60018	200	2
The Burke Group	9575 West Higgins Road	Rosemont	60018	180	6
Xerox Capital Services, LLC	5500 Pearl Street	Rosemont	60018	400	28
Schiller Park					
EJ Basler Company	9511 West Ainslie Street	Schiller Park	60176	100	4
Mohawk Spring Corporation	9505 Winona Avenue	Schiller Park	60176	75	1
Western Printing Machinery Company	9229 Ivanhoe Street	Schiller Park	60176	50	5
Westwood College of Technology	4825 North Scott Street	Schiller Park	60176	65	1
Franklin Park					
Gemini Tool & Manufacturing	3541 Martens Street	Franklin Park	60131	24	1
River Grove					

Exhibit 3
Shuttle Route Schedules

Route 1					
Grayslake Station to College of Lake County Schedule					
Inbound Train	**Outbound Train**	**Depart CLC**	**Arrive CLC**	**Depart Terminal**	**Arrive Metra**
					6:47 AM
6:47 AM		6:50 AM	7:00 AM	7:00 AM	7:10 AM
7:15 AM		7:15 AM	7:25 AM	7:25 AM	7:35 AM
	8:12 AM	8:15 AM	8:25 AM		
Inbound Train	**Outbound Train**	**Depart CLC**	**Arrive CLC**	**Depart Terminal**	**Arrive Metra**
				4:00 PM	4:10 PM
	4:12 PM	4:13 PM	4:23 PM	5:00 PM	5:10 PM
5:20 PM		5:15 PM	5:25 PM	5:25 PM	5:35 PM
	5:41PM				

Route 2					
Prairie Crossing Station to Volkswagen and Lake County Winchester House Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive LCWH**	**Depart LCWH**	**Arrive Metra**
					6:28 AM
6:28 AM		6:31 AM	6:46 AM	6:46 AM	7:01 AM
6:50 AM					
7:18 AM		7:21 AM	7:36 AM	7:36 AM	7:51 AM
	8:08 AM	8:11 AM	8:26 AM		
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive LCWH**	**Depart LCWH**	**Arrive Metra**
				2:58 PM	3:13 PM
3:16 PM		3:16 PM	3:31 PM	3:45 PM	4:00 PM
	4:08 PM	4:05 PM	4:20 PM	5:05 PM	5:20 PM
5:23 PM					
	5:37 PM				

Route 3					
Vernon Hills Station to American Hotel Register, et al Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**			**Arrive Metra**
					6:40 AM
6:40 AM		6:43 AM			7:13 AM
7:02 AM					
7:30 AM		7:33 AM			8:03 AM
	7:56 AM	8:06 AM			8:36 AM
Inbound Train	**Outbound Train**	**Depart Metra**			**Arrive Metra**
		3:25 PM			3:55 PM
	3:58 PM	4:45 PM			5:15 PM
	5:25 PM				
5:35 PM		5:20 PM			5:50 PM
	6:00 PM				

Route 4					
North Central Prairie View Station to Hewitt, Caremark, et al Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Caremark**	**Depart Caremark**	**Arrive Metra**
					6:19 AM
6:19 AM		6:22 AM	6:42 AM	6:42 AM	7:02 AM
6:43 AM					
7:05 AM		7:08 AM	7:28 AM	7:28 AM	7:48 AM
7:33 AM					
	7:53 AM	7:56 AM	8:16 AM		
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Caremark**	**Depart Caremark**	**Arrive Metra**
				3:30 PM	3:50 PM
	3:53 PM	3:50 PM	4:10 PM	4:32 PM	4:52 PM
	5:22 PM	4:55 PM	5:15 PM	5:15 PM	5:35 PM
5:38 PM		5:38 PM	5:58 PM	5:58 PM	6:18 PM
	5:57 PM				
	6:26 PM				

Route 5					
Buffalo Grove Station to International Profits, et al Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**			**Arrive Metra**
					7:10 AM
7:10 AM		7:13 AM			7:33 AM
7:38 AM					
	7:49 AM	7:52 AM			8:12 AM
Inbound Train	**Outbound Train**	**Depart Metra**			**Arrive Metra**
		4:45 PM			5:05 PM
	5:18 PM	5:15 PM			5:35 PM
5:42 PM					
	5:53 PM	5:55 PM			6:15 PM
	6:22 PM				

Route 6					
Buffalo Grove North Central Station to Hewitt Associates Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive ACCO**	**Depart ACCO**	**Arrive Metra**
					6:24 AM
6:24 AM		6:27 AM	6:37 AM	6:37 AM	6:47 AM
6:48 AM		6:51 AM	7:01 PM	7:01 PM	7:11 AM
7:10 AM		7:14 AM	7:24 AM	7:24 AM	7:34 AM
7:38 AM					
	7:49 AM	7:52 AM	8:02 AM		
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive ACCO**	**Depart ACCO**	**Arrive Metra**
				5:00 PM	5:10 PM
	5:18 PM	5:15 PM	5:25 PM	5:25 PM	5:35 PM
5:42 PM					
	5:53 PM	5:50 PM	6:00 PM	6:05 PM	6:15 PM
	6:22 PM				

Route 7					
North Central Buffalo Grove Station to Discover Financial Services, et al Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Dade Behring**	**Depart Dade Behring**	**Arrive Metra**
					6:24 AM
6:24 AM		6:27 AM	6:47 AM	6:47 AM	7:07 AM
6:48 AM					
7:10 AM		7:13 AM	7:33 AM	7:33 AM	7:53 AM
7:38 AM					
	7:49 AM	7:56 AM	8:16 AM		
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Dade Behring**	**Depart Dade Behring**	**Arrive Metra**
				4:33 PM	4:53 PM
	5:18 PM	4:57 PM	5:17 PM	5:17 PM	5:37 PM
5:42 PM					
	5:53 PM	5:40 PM	6:00 PM	6:00 PM	6:20 PM
	6:22 PM				

Route 8					
Buffalo Grove North Central Metra Station to Walgreen's Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Walgreen's**	**Depart Walgreen's**	**Arrive Metra**
					6:24 AM
6:24 AM		6:27 AM	6:47 AM	6:47 AM	7:07 AM
6:48 AM					
7:10 AM		7:13 AM	7:33 AM	7:33 AM	7:53 AM
7:38 AM					
	7:49 AM	7:56 AM	8:16 AM		
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Walgreen's**	**Depart Walgreen's**	**Arrive Metra**
				4:34 PM	4:54 PM
	5:18 PM	4:57 PM	5:17 PM	5:17 PM	5:37 PM
5:42 PM		5:40 PM	6:00 PM	6:00 PM	6:20 PM
	5:53 PM				
	6:22 PM				

Route 9					
Buffalo Grove Station to Allstate, Angus, Harris and Federal Express Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Fed Ex**	**Depart Fed Ex**	**Arrive Metra**
					6:48 AM
6:48 AM		6:51 AM	7:11 AM	7:11 AM	7:31 AM
7:10 AM					
7:38 AM					
	7:49 AM	7:52 AM	8:12 AM		
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Fed Ex**	**Depart Fed Ex**	**Arrive Metra**
				4:40 PM	5:00 PM
	5:18 PM	5:03 PM	5:18 PM	5:19 PM	5:39 PM
5:42 PM					
	5:53 PM				

Route 10					
North Central Wheeling Station to Underwriter's Laboratories Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Underwriter's**	**Depart Underwriter's**	**Arrive Metra**
					6:29 AM
6:29 AM		6:32 AM	6:47 AM	6:47 AM	7:02 AM
6:53 AM					
7:15 AM		7:18 AM	7:33 AM	7:33 AM	7:48 AM
7:43 AM					
	7:45 AM	7:51 AM	8:06 AM		
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Underwriter's**	**Depart Underwriter's**	**Arrive Metra**
				3:20 PM	3:35 PM
3:40 PM					
	3:45 PM	4:40 PM	4:55 PM	4:55 PM	5:10 PM
	5:14 PM	5:15 PM	5:30 PM	5:30 PM	5:45 PM
5:47 PM					
	5:49 PM				

Route 11					
Wheeling Station to the Valspar Corporation, et al Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive US Tsubaki**	**Depart US Tsubaki**	**Arrive Metra**
					6:30 AM
6:29 AM		6:33 AM	6:48 AM	6:48 AM	7:03 AM
6:53 AM					
7:15 AM		7:18 AM	7:33 AM		
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive US Tsubaki**	**Depart US Tsubaki**	**Arrive Metra**
				4:55 PM	5:10 PM
	5:14 PM	5:15 PM	5:25 PM	5:25 PM	5:40 PM
5:47 PM					
	5:49 PM				

Route 12					
Prospect Heights Metra Station to Caremark and Allstate Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Allstate**	**Depart Allstate**	**Arrive Metra**
					6:33 AM
6:33 AM		6:36 AM	6:56 AM	7:01 AM	7:16 AM
6:57 AM					
7:19 AM		7:22 AM	7:42 AM	7:42 AM	8:02 AM
	7:40 AM				
7:47 AM		8:05 AM	8:25 AM		
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Caremark**	**Depart Caremark**	**Arrive Metra**
				4:34 PM	4:52 PM
	5:09 PM	4:55 PM	5:13 PM	5:13 PM	5:31 PM
	5:44 PM	5:34 PM	5:52 PM	5:52 PM	6:10 PM
5:51 PM					
	6:13 PM				

Route 13					
O'Hare Transfer Station to Abbott Labs and Lawson Products Schedule					
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Rosemont**	**Depart Rosemont**	**Arrive Metra**
					6:44 AM
6:44 AM		6:47 AM	7:07 AM	7:14 AM	7:34 AM
7:08 AM					
7:30 AM					
	7:31 AM	7:37 AM	7:57 AM		
Inbound Train	**Outbound Train**	**Depart Metra**	**Arrive Rosemont**	**Depart Rosemont**	**Arrive Metra**
				4:10 PM	4:30 PM
	4:59 PM	4:33 PM	4:53 PM	4:55 PM	5:15 PM
	5:34 PM	5:18 PM	5:38 PM	5:40 PM	6:00 PM
6:02 PM					
	6:03 PM				

Exhibit 4
Ridership Scenarios

SCENARIO 1 LEVEL OF INTEREST DATA SUMMARY
Assumes Only Respondents at Responding Employers with Compatible Work Schedules Accommodated by Metra

Route		2-way					1-way					Total	Total	Scenario	Total
												Resp	LOI	1	Empl
		5	3 or 4	1 or 2	Few	Never	5	3 or 4	1 or 2	Few	Never		Factor	Daily	Resp
		Days	Days	Days	Days		Days	Days	Days	Days				Rides	Firms
1	Resp	4	1	0	0	1	0	1	0	0	0	7			2,000
	%	57.1%	14.3%	0.0%	0.0%	14.3%	0.0%	14.3%	0.0%	0.0%	0.0%				
	LOI	1.143	0.200	0.000	0.000	0.000	0.000	0.100	0.000	0.000	0.000		**1.443**	**10**	
2	Resp	2	4	0	0	0	3	0	0	0	0	9			900
	%	22.2%	44.4%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%				
	LOI	0.444	0.622	0.000	0.000	0.000	0.333	0.000	0.000	0.000	0.000		**1.400**	**13**	
3	Resp	12	12	1	5	1	2	1	0	0	0	34			3,395
	%	35.3%	35.3%	2.9%	14.7%	2.9%	5.9%	2.9%	0.0%	0.0%	0.0%				
	LOI	0.706	0.494	0.018	0.044	0.000	0.059	0.021	0.000	0.000	0.000		**1.341**	**46**	
4	Resp	32	11	4	3	0	1	1	0	1	0	53			2,535
	%	60.4%	20.8%	7.5%	5.7%	0.0%	1.9%	1.9%	0.0%	1.9%	0.0%				
	LOI	1.208	0.291	0.045	0.017	0.000	0.019	0.013	0.000	0.003	0.000		**1.595**	**85**	
5	Resp	9	5	2	1	0	1	0	0	0	0	18			1,248
	%	50.0%	27.8%	11.1%	5.6%	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%				
	LOI	1.000	0.389	0.067	0.017	0.000	0.056	0.000	0.000	0.000	0.000		**1.528**	**28**	
6	Resp	64	23	6	2	1	3	2	3	0	0	104			7,865
	%	61.5%	22.1%	5.8%	1.9%	1.0%	2.9%	1.9%	2.9%	0.0%	0.0%				
	LOI	1.231	0.310	0.035	0.006	0.000	0.029	0.013	0.009	0.000	0.000		**1.632**	**170**	
7	Resp	28	17	1	0	0	1	0	0	0	0	47			4,664
	%	59.6%	36.2%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%				
	LOI	1.191	0.506	0.013	0.000	0.000	0.021	0.000	0.000	0.000	0.000		**1.732**	**81**	
8	Resp	58	29	12	11	3	5	10	1	2	0	131			3,780
	%	44.3%	22.1%	9.2%	8.4%	2.3%	3.8%	7.6%	0.8%	1.5%	0.0%				
	LOI	0.885	0.310	0.055	0.025	0.000	0.038	0.053	0.002	0.002	0.000		**1.372**	**180**	
9	Resp	2	7	2	0	0	1	0	0	0	0	12			1,513
	%	16.7%	58.3%	16.7%	0.0%	0.0%	8.3%	0.0%	0.0%	0.0%	0.0%				
	LOI	0.333	0.817	0.100	0.000	0.000	0.083	0.000	0.000	0.000	0.000		**1.333**	**16**	
10	Resp	25	10	3	4	0	1	1	1	1	0	46			1,600
	%	54.3%	21.7%	6.5%	8.7%	0.0%	2.2%	2.2%	2.2%	2.2%	0.0%				
	LOI	1.087	0.304	0.039	0.026	0.000	0.022	0.015	0.007	0.003	0.000		**1.503**	**69**	
11	Resp	3	1	0	1	0	0	0	0	0	0	5			725
	%	60.0%	20.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
	LOI	1.200	0.280	0.000	0.060	0.000	0.000	0.000	0.000	0.000	0.000		**1.540**	**8**	
12	Resp	52	55	16	15	2	3	2	3	1	0	148			7,965
	%	35.1%	37.2%	10.8%	10.1%	1.4%	2.0%	1.4%	2.0%	0.7%	0.0%				
	LOI	0.703	0.520	0.065	0.030	0.000	0.020	0.009	0.006	0.001	0.000		**1.355**	**201**	
13	Resp	20	6	3	0	0	3	1	1	0	0	34			2,197
	%	58.8%	17.6%	8.8%	0.0%	0.0%	8.8%	2.9%	2.9%	0.0%	0.0%				
	LOI	1.176	0.247	0.053	0.000	0.000	0.088	0.021	0.009	0.000	0.000		**1.594**	**54**	
Preference Factor		2.00	1.40	0.60	0.30	0.00	1.00	0.70	0.30	0.15	0.00				

SCENARIOS 2, 3 AND 4 LEVEL OF INTEREST DATA SUMMARY
Assumes All Respondents at Responding Employers Can Be Accommodated by Metra

Route		2-way					1-way					Total	Total	Scenario	Total	Scenario	Total	Scenario
		5	3 or 4	1 or 2	Few	Never	5	3 or 4	1 or 2	Few	Never	Resp	LOI	2	Empl	3	Empl	4
		Days	Days	Days	Days		Days	Days	Days	Days			Factor	Daily	Resp	Daily	non Resp	Daily
														Rides	Firms	Rides	Firms	Rides
1	Resp	12	9	5	6	1	2	7	7	3	0	52			2,000		550	
	%	23.1%	17.3%	9.6%	11.5%	1.9%	3.8%	13.5%	13.5%	5.8%	0.0%							
	LOI	0.462	0.242	0.058	0.035	0.000	0.038	0.094	0.040	0.009	0.000		**0.978**	**51**		**73**		**87**
2	Resp	15	8	1	3	0	6	1	0	1	1	36			900		6,629	
	%	41.7%	22.2%	2.8%	8.3%	0.0%	16.7%	2.8%	0.0%	2.8%	2.8%							
	LOI	0.833	0.311	0.017	0.025	0.000	0.167	0.019	0.000	0.004	0.000		**1.376**	**50**		**71**		**436**
3	Resp	32	22	4	8	1	3	2	0	1	1	74			3,395		4,200	
	%	43.2%	29.7%	5.4%	10.8%	1.4%	4.1%	2.7%	0.0%	1.4%	1.4%							
	LOI	0.865	0.416	0.032	0.032	0.000	0.041	0.019	0.000	0.002	0.000		**1.407**	**104**		**149**		**278**
4	Resp	63	23	11	5	1	7	1	0	1	0	112			2,535		0	
	%	56.3%	20.5%	9.8%	4.5%	0.9%	6.3%	0.9%	0.0%	0.9%	0.0%							
	LOI	1.125	0.288	0.059	0.013	0.000	0.063	0.006	0.000	0.001	0.000		**1.555**	**174**		**249**		**249**
5	Resp	21	16	4	2	2	1	0	0	0	0	46			1,248		4,775	
	%	45.7%	34.8%	8.7%	4.3%	4.3%	2.2%	0.0%	0.0%	0.0%	0.0%							
	LOI	0.913	0.487	0.052	0.013	0.000	0.022	0.000	0.000	0.000	0.000		**1.487**	**68**		**98**		**359**
6	Resp	92	44	16	11	2	8	3	4	0	0	180			7,865		1,250	
	%	51.1%	24.4%	8.9%	6.1%	1.1%	4.4%	1.7%	2.2%	0.0%	0.0%							
	LOI	1.022	0.342	0.053	0.018	0.000	0.044	0.012	0.007	0.000	0.000		**1.499**	**270**		**385**		**428**
7	Resp	56	29	3	2	0	2	1	1	0	0	94			4,664		2,950	
	%	59.6%	30.9%	3.2%	2.1%	0.0%	2.1%	1.1%	1.1%	0.0%	0.0%							
	LOI	1.191	0.432	0.019	0.006	0.000	0.021	0.007	0.003	0.000	0.000		**1.681**	**158**		**226**		**326**
8	Resp	125	51	23	27	9	13	14	2	5	1	270			3,780		535	
	%	46.3%	18.9%	8.5%	10.0%	3.3%	4.8%	5.2%	0.7%	1.9%	0.4%							
	LOI	0.926	0.264	0.051	0.030	0.000	0.048	0.036	0.002	0.003	0.000		**1.361**	**367**		**525**		**577**
9	Resp	11	9	2	1	0	1	0	0	0	0	24			1,513		600	
	%	45.8%	37.5%	8.3%	4.2%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%							
	LOI	0.917	0.525	0.050	0.013	0.000	0.042	0.000	0.000	0.000	0.000		**1.546**	**37**		**53**		**68**
10	Resp	40	17	6	8	0	3	2	1	1	0	78			1,600		5,450	
	%	51.3%	21.8%	7.7%	10.3%	0.0%	3.8%	2.6%	1.3%	1.3%	0.0%							
	LOI	1.026	0.305	0.046	0.031	0.000	0.038	0.018	0.004	0.002	0.000		**1.470**	**115**		**164**		**554**
11	Resp	9	4	0	1	0	2	0	0	1	0	16			725		3,859	
	%	56.3%	25.0%	0.0%	6.3%	0.0%	12.5%	0.0%	0.0%	6.3%	0.0%							
	LOI	1.125	0.350	0.000	0.019	0.000	0.125	0.000	0.000	0.009	0.000		**1.628**	**26**		**37**		**176**
12	Resp	87	90	35	30	5	9	7	6	4	0	273			7,965		4,115	
	%	31.9%	33.0%	12.8%	11.0%	1.8%	3.3%	2.6%	2.2%	1.5%	0.0%							
	LOI	0.637	0.462	0.077	0.033	0.000	0.033	0.018	0.007	0.002	0.000		**1.268**	**346**		**495**		**674**
13	Resp	32	12	4	1	2	5	1	1	0	0	58			2,197		5,585	
	%	55.2%	20.7%	6.9%	1.7%	3.4%	8.6%	1.7%	1.7%	0.0%	0.0%							
	LOI	1.103	0.290	0.041	0.005	0.000	0.086	0.012	0.005	0.000	0.000		**1.543**	**90**		**128**		**355**
Preference Factor		2.00	1.40	0.60	0.30	0.00	1.00	0.70	0.30	0.15	0.00							

Exhibit 5
Non-Responding Employers By Route

Business Name	Address	City	Zip	Phone	Employees	Route
Intrupa Manufacturing Company, Incorporated	95 South Route 83	Grayslake	60030	847-223-1000	300	Grayslake
Lift Parts Manufacturing Company, Incorporated	99 South Route 83	Grayslake	60030	847-223-8989	250	Grayslake
					550	
Allscripts Healthcare Solutions	2401 Commerce Drive	Libertyville	60048	847-680-3515	304	Prairie Crossing/Libertyville
Condell Hospital	801 South Milwaukee Avenue	Libertyville	60048	847-362-2900	2,000	Prairie Crossing/Libertyville
Motorola, Incorporated, Cellular Subscriber Sector	600 North Highway 45	Libertyville	60048	847-523-5000	4,000	Prairie Crossing/Libertyville
Ombudsman Education Services	1585 North Milwaukee Avenue	Libertyville	60048	847-367-6383	250	Prairie Crossing/Libertyville
Tempel Steel Company, Transformer Division	2200 Tempel Drive	Libertyville	60048	773-250-8000	75	Prairie Crossing/Libertyville
					6,629	
Amcor Flexibles Healthcare	1919 South Butterfield Road	Mundelein	60060	847-362-9000	350	Vernon Hills
Baxter Credit Union	400 Lakeview Parkway	Vernon Hills	60061	847-522-8600	250	Vernon Hills
Cole-Parmer Instrument Company	625 East Bunker Court	Vernon Hills	60061	847-549-7600	420	Vernon Hills
Deringer-Ney, Incorporated	1250 Town Line Road, Suite 60	Mundelein	60060	847-566-4100	300	Vernon Hills
Komatsu America Corporation	440 North Fairway Drive	Vernon Hills	60061	847-970-4100	350	Vernon Hills
Learning Resources, Incorporated	380 North Fairway Drive	Vernon Hills	60061	847-573-8400	60	Vernon Hills
Mitsubishi Electric Automation, Incorporated	500 Corporate Woods Parkway	Vernon Hills	60061	847-478-2100	350	Vernon Hills
Saia-Burgess USA, Incorporated	616 Atrium Drive	Vernon Hills	60061	847-549-9630	400	Vernon Hills
Washington Mutual	555 Townline Road	Vernon Hills	60061	847-573-3360	20	Vernon Hills
Zebra Technologies International, LLC	333 Corporate Woods Parkway	Vernon Hills	60061	847-634-6700	1,700	Vernon Hills
					4,200	
Corporate Building Systems	1380 Abbott Court	Buffalo Grove	60089	847-913-0085	500	Buffalo Grove - 5
DT Industries, Precision Assembly Division	1400 Busch Parkway	Buffalo Grove	60089	847-541-3570	500	Buffalo Grove - 5
Grainger.com	455 Knightsbridge Parkway	Lincolnshire	60069	847-793-6600	400	Buffalo Grove - 5
HydraForce, Incorporated	500 Barclay Boulevard	Lincolnshire	60069	847-793-2300	325	Buffalo Grove - 5
Lifewatch, Incorporated	1351 Abbott Court	Buffalo Grove	60089	847-720-2100	300	Buffalo Grove - 5
Precise Technology Corporation	800 Corporate Grove Drive	Buffalo Grove	60089	847-541-7900	800	Buffalo Grove - 5
Precise Technology Corporation	600 Deerfield Parkway	Buffalo Grove	60089	847-541-9700	400	Buffalo Grove - 5
Quill Corporation	100 Schelter Road	Lincolnshire	60069	847-634-6690	1,200	Buffalo Grove - 5
RG Ray Corporation	900 Busch Parkway	Buffalo Grove	60089	847-459-5900	350	Buffalo Grove - 5
					3,875	
Marriott International, Incorporated	10 Marriott Drive	Lincolnshire	60069	847-634-0100	800	Buffalo Grove - 6
Vance Publishing Corportion	400 Knightsbridge Parkway	Lincolnshire	60069	847-634-2600	150	Buffalo Grove - 6
Wilson Jones	300 Tower Parkway	Lincolnshire	60069	800-989-4923	300	Buffalo Grove - 6
					450	

Business Name	Address	City	Zip	Phone	Employees	Route
Baxter Healthcare Corporation	1 Baxter Parkway	Deerfield	60015	847-948-2000	700	Buffalo Grove - 7
future site of Takeda Pharmaceutical	Lake Cook Road and Saunders Road	Deerfield	60018	847-383-3111	750	Buffalo Grove - 7
Siemens Building Technologies, Incorporated	1000 Deerfield Parkway	Buffalo Grove	60089	847-215-1000	1,500	Buffalo Grove - 7
					2,200	
Baxter Healthcare Corporation., Bioscience Division	1627 Lake Cook Road	Deerfield	60015	847-948-2000	270	Buffalo Grove - 8
Revere Group	1751 Lake Cook Road, Suite 600	Deerfield	60015	847-790-9800	265	Buffalo Grove - 8
					535	
Durable, Incorporated	750 Northgate Parkway	Wheeling	60090	847-541-4400	350	Buffalo Grove - 9
Harris Bank	700 East Lake Cook Road	Buffalo Grove	60089	847-229-3081	250	Buffalo Grove - 9
					250	
Acme Alliance, LLC	3610 Commercial Avenue	Northbrook	60062	847-418-3605	250	Wheeling - 10
Cole Taylor Bank	350 East Dundee Road	Wheeling	60090	773-927-7000	500	Wheeling - 10
Deluxe Media Services, Incorporated	555 Huehl Road	Northbrook	60062	847-291-1150	1,700	Wheeling - 10
Federal Building Services, Incorporated	3375 Commercial Avenue	Northbrook	60062	847-714-0022	1,100	Wheeling - 10
Kenny Construction Company	250 Northgate Parkway	Wheeling	60090	847-541-8200	500	Wheeling - 10
Major Reflector Products	455 Academy Drive	Northbrook	60062	847-564-4550	325	Wheeling - 10
Motorola, Incorporated, Automotive Products	4000 Commercial Avenue	Northbrook	60062	847-480-3637	800	Wheeling - 10
The Levy Company	3925 Commercial Avenue	Northbrook	60062	847-564-8950	275	Wheeling - 10
					11,420	
Block and Company, Incorporated	1111 South Wheeling Road	Wheeling	60090	800-323-7556	350	Wheeling -11
Handi-Foil Corporation	135 East Hintz Road	Wheeling	60090	847-520-1001	400	Wheeling -11
Hospital Laundry Services	45 West Hintz Road	Wheeling	60090	847-229-0900	400	Wheeling -11
Inland Die Casting Company	161 Carpenter Avenue	Wheeling	60090	847-541-2700	400	Wheeling -11
MMF Industries	370 Alice Street	Wheeling	60090	847-537-7890	306	Wheeling -11
Motorola, Incorporated, Aviation Department	743 Sumac Road	Wheeling	60090	847-541-1014	45	Wheeling -11
Pactiv Corporation	777 Wheeling Road	Wheeling	60090	847-459-1500	400	Wheeling -11
RRD Direct	301 Alice Street	Wheeling	60090	847-481-3100	258	Wheeling -11
Shure, Incorporated	995 Chaddick Drive	Wheeling	60090	847-520-4404	500	Wheeling -11
Solo Cup Company	1175 South Wheeling Road	Wheeling	60090	847-541-2900	400	Wheeling -11
US Freightways	1100 Chaddick Drive	Wheeling	60090	847-465-8600	400	Wheeling -11
					3,859	

Exhibit 6
Responding Employers With No Identified

Business Name	Address	City	Zip	Phone	Employees	Responses
American Society of Safety Engineers	1800 East Oakton Street	Des Plaines	60018	847-699-2929	70	1
Amm's Limousine Service	5509 North Cumberland Avenue, Suite 509	Chicago	60656	847-446-5148	150	1
Avery Dennison Corporation	902 Feehanville Drive	Mount Prospect	60056	847-824-7450	50	1
BAX Global	513 Express Center Drive	Chicago	60666	773-601-2900	200	1
Caremark Rx, Incorporated	800 Biermann Court	Mount Prospect	60056	847-634-7900	750	1
CNH America, LLC	100 Saunders Road	Lake Forest	60045	847-955-3939	-	8
College of Lake County - Southlake Educational Center	1120 South Milwaukee Avenue	Vernon Hills	60061	847-478-1833	-	2
EA Langenfeld Associates Limited	1645 Des Plaines Avenue, Suite 15	Des Plaines	60018	773-694-1200	70	1
EJ Basler Company	9511 West Ainslie Street	Schiller Park	60176	847-678-8880	100	4
Gas Technology Institute	1700 South Mount Prospect Road	Des Plaines	60018	847-768-0500	300	9
Gemini Tool & Manufacturing	3541 Martens Street	Franklin Park	60131	847-678-5000	24	1
General Motors Sign, Incorporated	704 Sunset Avenue	Round Lake	60073	847-546-0424	50	1
Hanna/TJ Brooks Company	804 East Park Avenue, Suite 104	Libertyville	60048	847-680-6760	130	2
Illinois Auto Truck	1669 Marshall Drive	Des Plaines	60018	847-299-1100	200	1
Lake County Winchester House	33928 North US Highway 45	Grayslake	60030	847-223-1170	61	1
LaMarche Manufacturing Company	106 Bradrock Drive	Des Plaines	60018	847-299-1188	100	1
Leica Microsystems, Incorporated	2345 Waukegan Road	Bannockburn	60015	847-405-0123	150	5
Manan Medical Products	241 West Palatine Road	Wheeling	60090	847-637-3333	250	2
Mohawk Spring Corporation	9505 West Winona Avenue	Schiller Park	60176	847-671-6767	75	1
Northwest Community Hospital	800 West Central Road	Arlington Heights	60005	847-618-5110	3300	1
Onsrud Cutter LP	800 Liberty Drive	Libertyville	60048	847-362-1560	100	4
Pace-Suburban Bus Service	550 West Algonquin Road	Arlington Heights	60005	847-364-8130	1400	6
Park Ridge Public Library	20 South Prospect Avenue	Park Ridge	60068	847-825-3123	-	2
Spring Meadows	901 Florsheim Drive	Libertyville	60048	847-816-9990	55	1
The Wealshire	150 Jamestown Lane	Lincolnshire	60069	847-883-9000	150	1
Vernon Area Public Library	300 Olde Half Day Road	Lincolnshire	60069	847-634-3650	115	1
Village of Antioch	874 Main Street	Antioch	60002	847-395-1000	-	1
Village of Wheeling	255 West Dundee Road	Wheeling	60090	847-459-2600	275	1
VNU/SRDS	1700 West Higgins Road	Des Plaines	60018	847-375-5000	50	1
Walgreens Corporate Headquarters	1084 Mount Prospect Plaza	Mount Prospect	60056		-	6
Western Printing Machinery Company	9229 Ivanhoe Street	Schiller Park	60176	847-678-1740	50	5
Westwood College of Technology	4825 Scott Street, Suite 100	Schiller Park	60176	847-928-0200	65	1
WW Grainger, Incorporated	100 Grainger Parkway	Lake Forest	60045	888-361-8649	1200	1
					9490	76