

Downtown Buffalo 2018 Transportation Mode Survey

Survey Distribution:

A survey of downtown employees was developed to better understand transportation habits and trends. A Downtown Buffalo Transportation Mode Survey was created on Survey Monkey and rolled out on Wednesday February 28, 2018. The survey was sent to Buffalo Place Board of Directors, Friends of the Board, and Retailers lists. Recipients were asked to forward to colleagues and interested parties. It was posted on the Buffalo Place Website and in our weekly newsletter from March 1 until April 19.

Articles were published in Buffalo News, Buffalo Business First, Buffalo Rising, WBFO, and WKBW-Channel 7. Posts were placed on Buffalo Reddit page and on the NextDoor App.

Posts were placed on Buffalo Place social media channels and by many of our partners, including GBNRTC, Invest Buffalo Niagara, GoBike Buffalo, Buffalo News, Business First, Working for Downtown, BUDC, NFTA, 500 Block of Main Street, CRTC, and others. Email invitations were forwarded to BCAR's list of parkers and Buffalo Library's patrons.

The Buffalo Place database was used to reach out via phone or email to downtown employers to ask them to forward along to their employees. More than 600 individual businesses and agencies were contacted.

A flyer was developed to hang throughout the community. Approximately 100 flyers were distributed to two dozen locations, such as coffee shops, Expo, the library, and popular lunchtime spots. Flyers were also distributed to the hotels and to larger restaurants, where employees are not desk-oriented, to request staff to place flyers near their timeclock to encourage their employees to take the survey as well.

An A-frame sign was placed on the street at several high pedestrian intersections, such as Lafayette Square, Main and Seneca, and Fountain Plaza.

The survey was closed on Monday May 7, 2018.

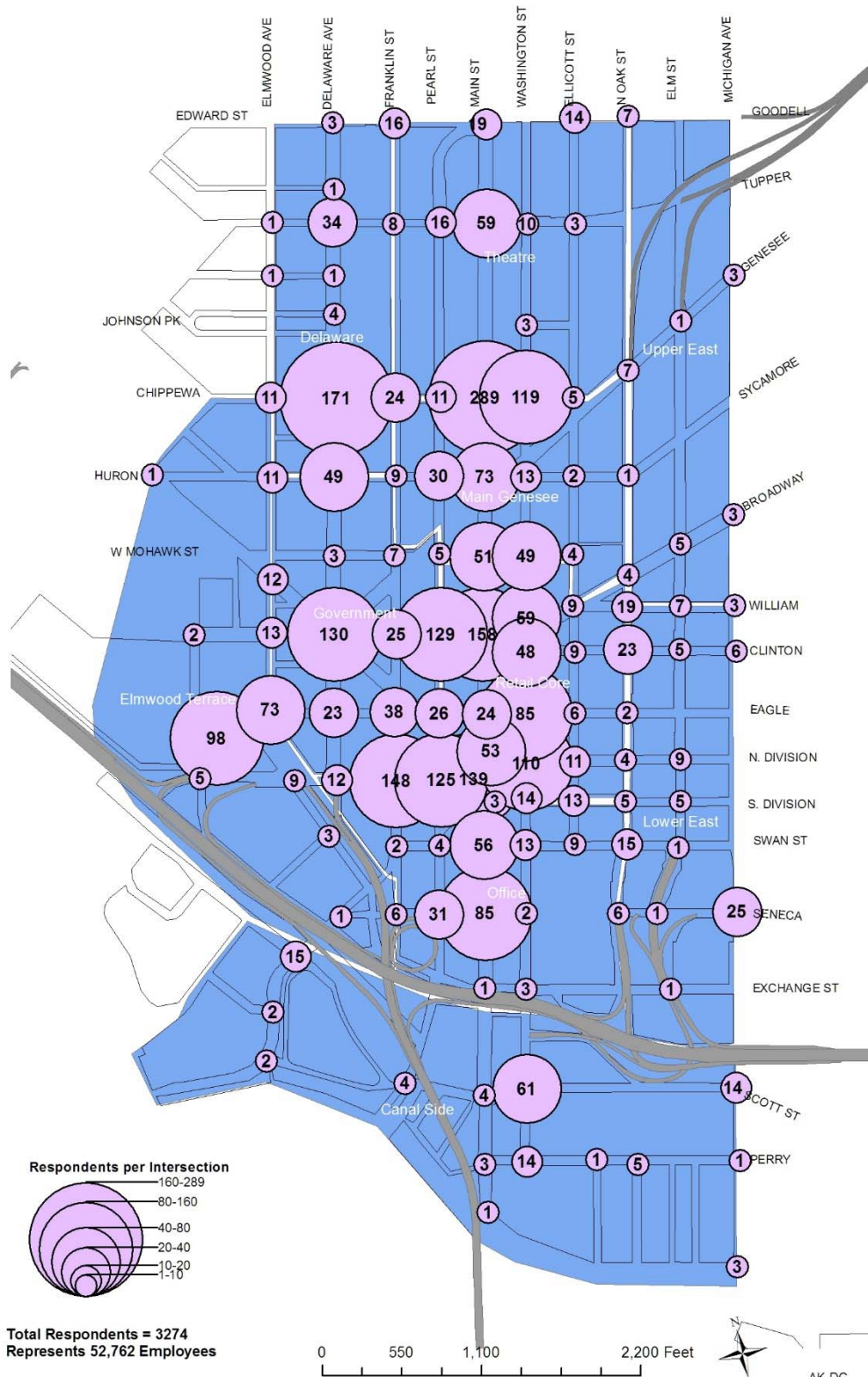
Survey Analysis:

Survey boundary area was same as our Access Study – Goodell/Edward to the north, South Elmwood to west, the water to the south, and Michigan to the east. Each intersection within the district was assigned a number. Responses were assigned an intersection number as they came in to determine if the individual worked within the study area. We had 4,044 total responses. Of those responses, 3,273 worked at a downtown intersection. Our current Buffalo Place estimate for employees is 55,362. This means we had responses from approximately 6% of downtown employees. Each survey result represents 16 employees. Of the other respondents, we had 349 who worked in Allentown/BNMC, 160 who worked in Larkin and 261 who either worked outside of Downtown or left employment location blank. Responses from those who did not work within our study area have not been tabulated.

Where Do Employees Work?

There were responses for employees who work at 120 out of 150 downtown intersections. The following map shows the number of people who responded at each intersection.

Downtown Employee Survey Respondents Work Location



May 7, 2018

Where do Downtown Employees Live?

Of those who worked Downtown, 74 responses were from those who also live Downtown. An additional 85 Downtown employees live in areas around Downtown (i.e. Larkin, Lower West Side, Allentown). Responses were tabulated from Downtown employees from 93 zip codes, 9 New York State Counties and Canada.

Table: Number of Employees per Zip Code (3,250 responses):

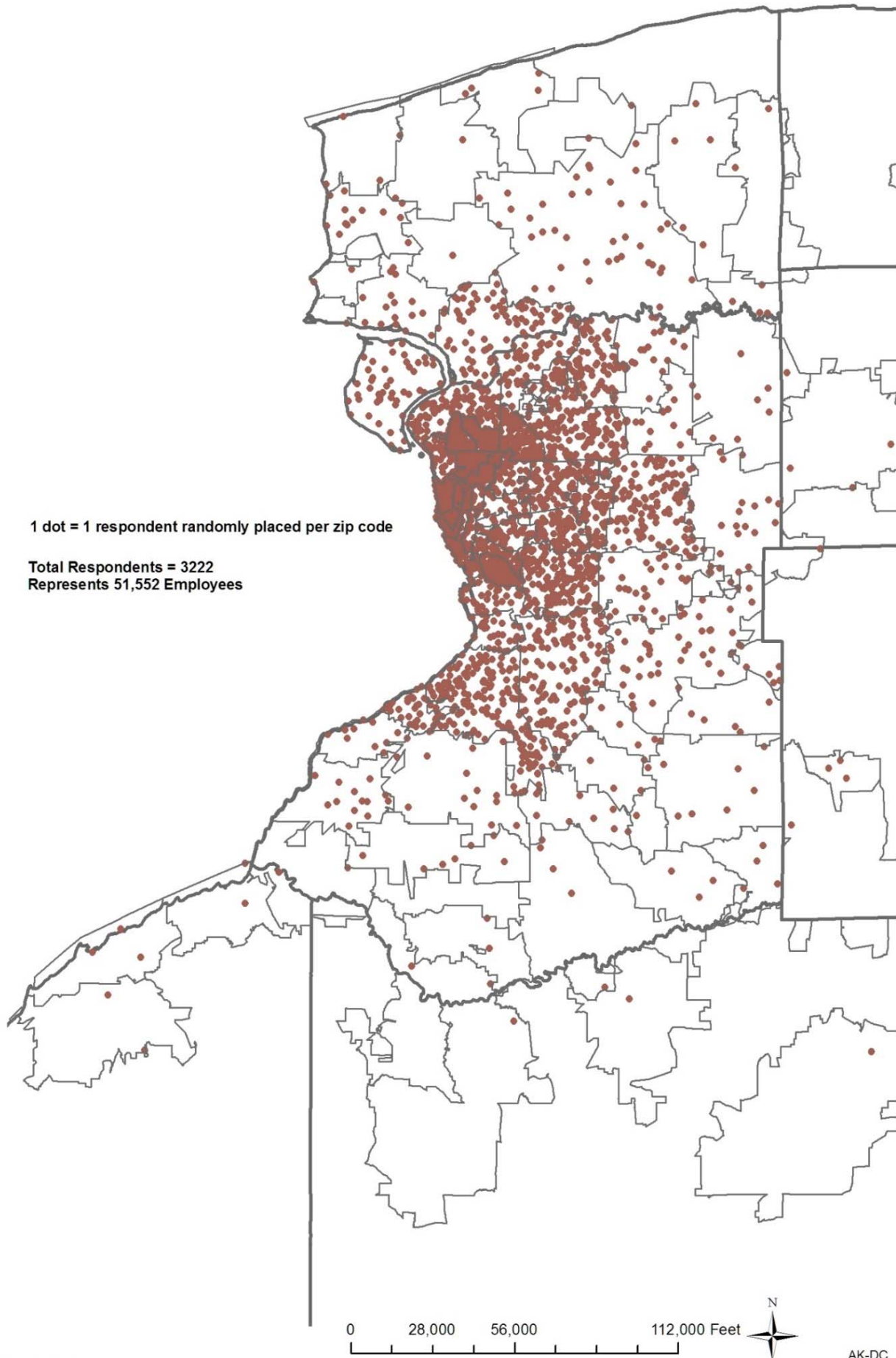
| County | Number | Percent |
|-------------|--------|---------|
| Erie | 3038 | 94% |
| Niagara | 174 | 5% |
| Chautauqua | 8 | 0.25% |
| Genesee | 7 | 0.22% |
| Monroe | 6 | 0.18% |
| Wyoming | 5 | 0.15% |
| Cattaraugus | 4 | 0.12% |
| Orleans | 1 | 0.03% |
| Yates | 1 | 0.03% |
| Canada | 6 | 0.18% |

The highest responses were from the following zip codes:

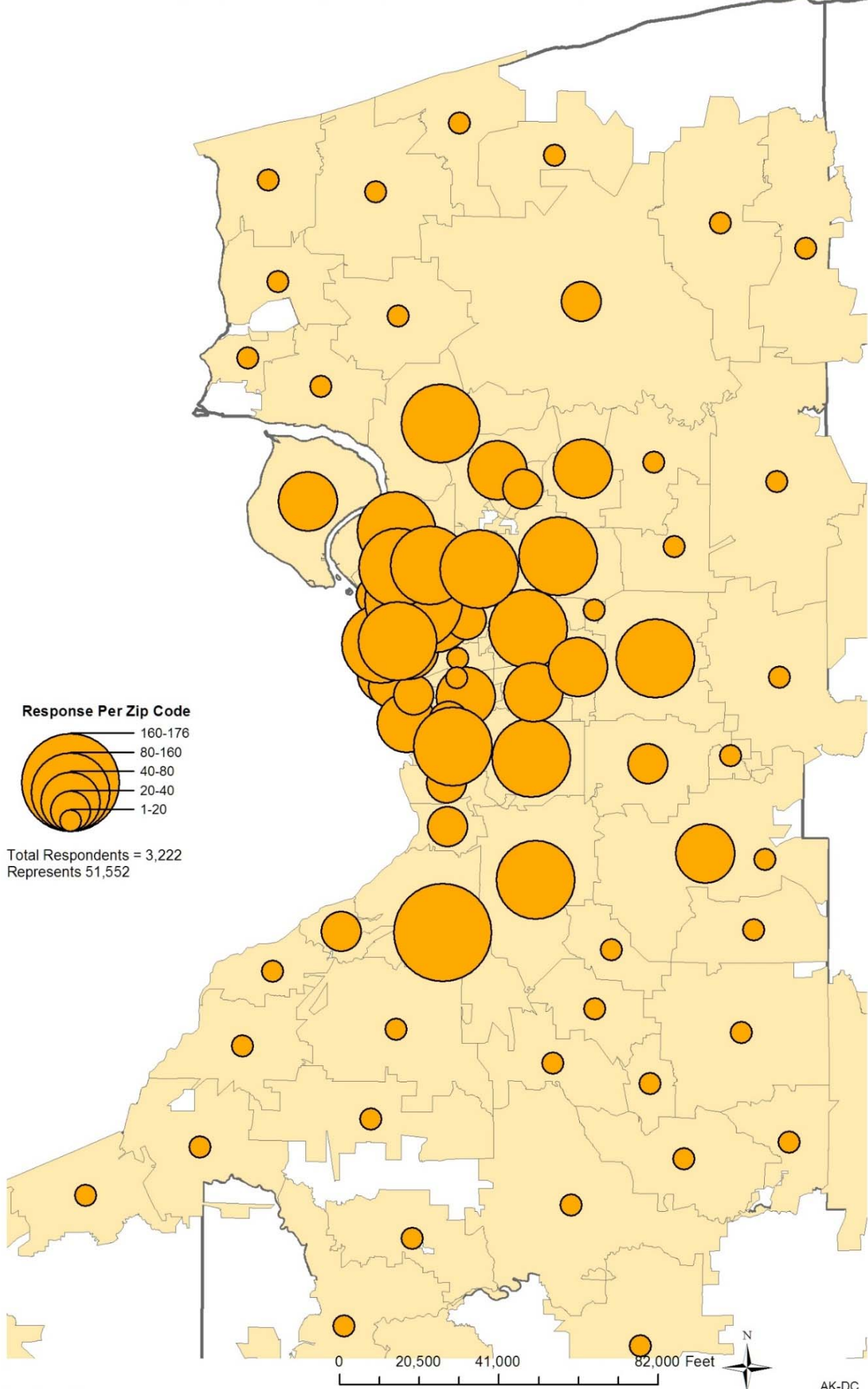
- 14216 – North Buffalo(175 responses)
- 14075 – Hamburg(172 responses)
- 14224 – West Seneca(149 responses)
- 14221 – Williamsville (148 responses)
- 14226 – Amherst (142 responses)

The following maps show the distribution of respondent's home addresses by home intersection and by zip code.

Downtown Employee Survey Respondents Home Location

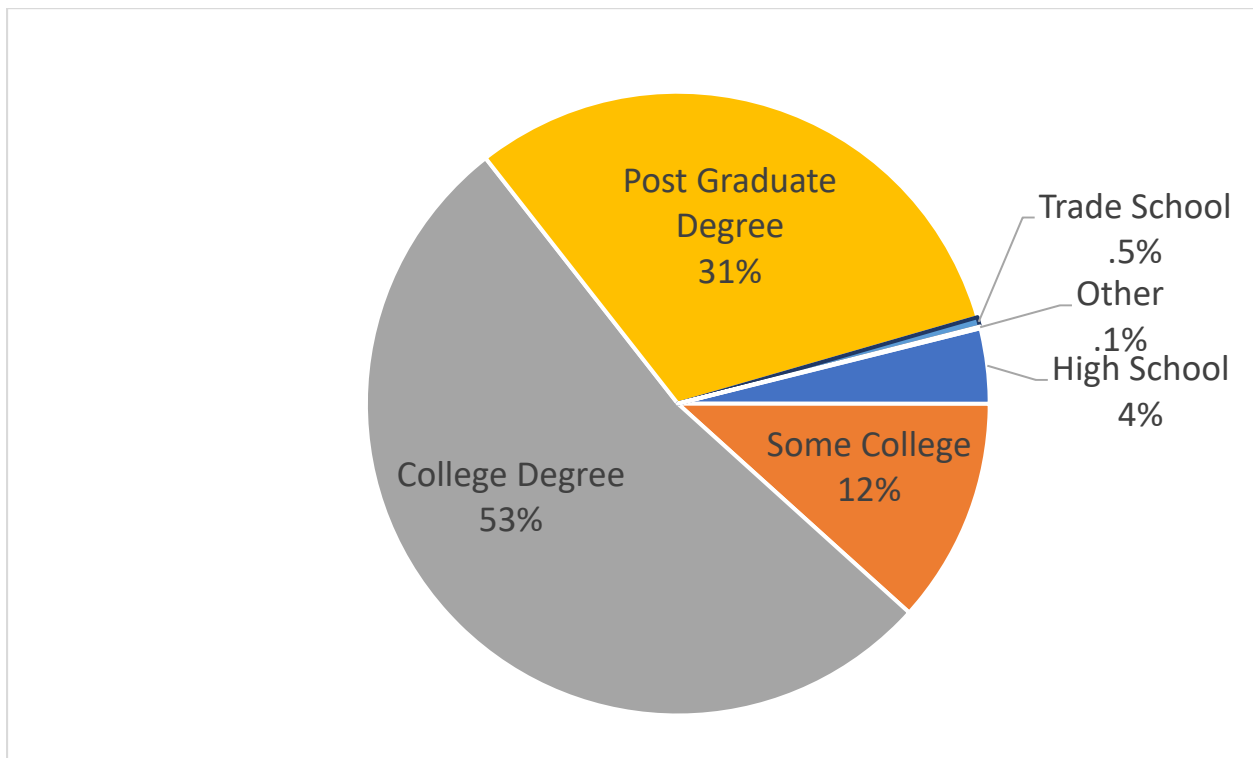
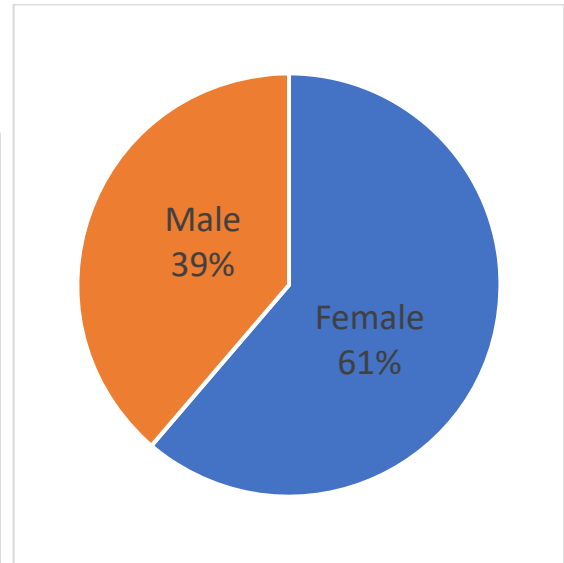
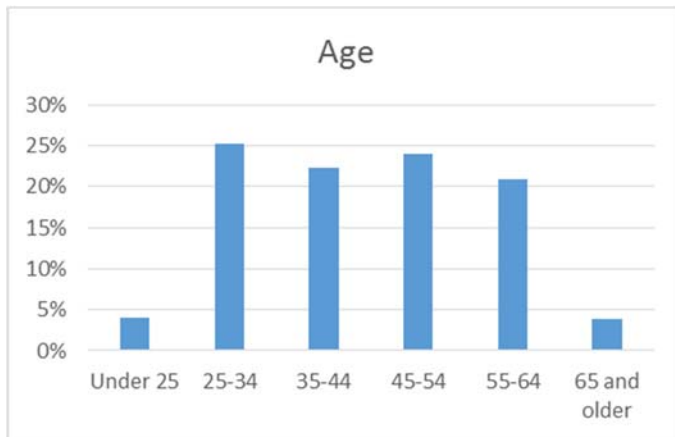


Downtown Employee Survey Respondents Home Zip Code



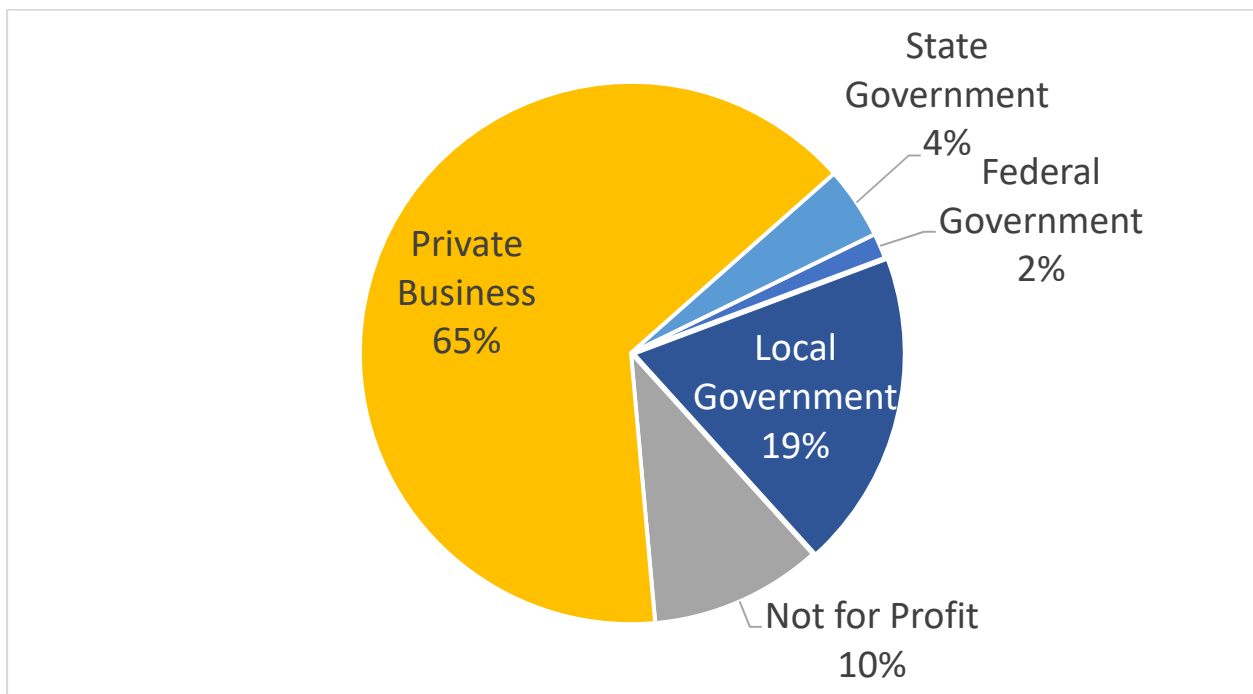
Who are Downtown Employees?

As the following charts show, respondents were relatively evenly distributed for age. More females took the survey than males. Downtown employees are highly educated, with 84% having a college degree or higher.

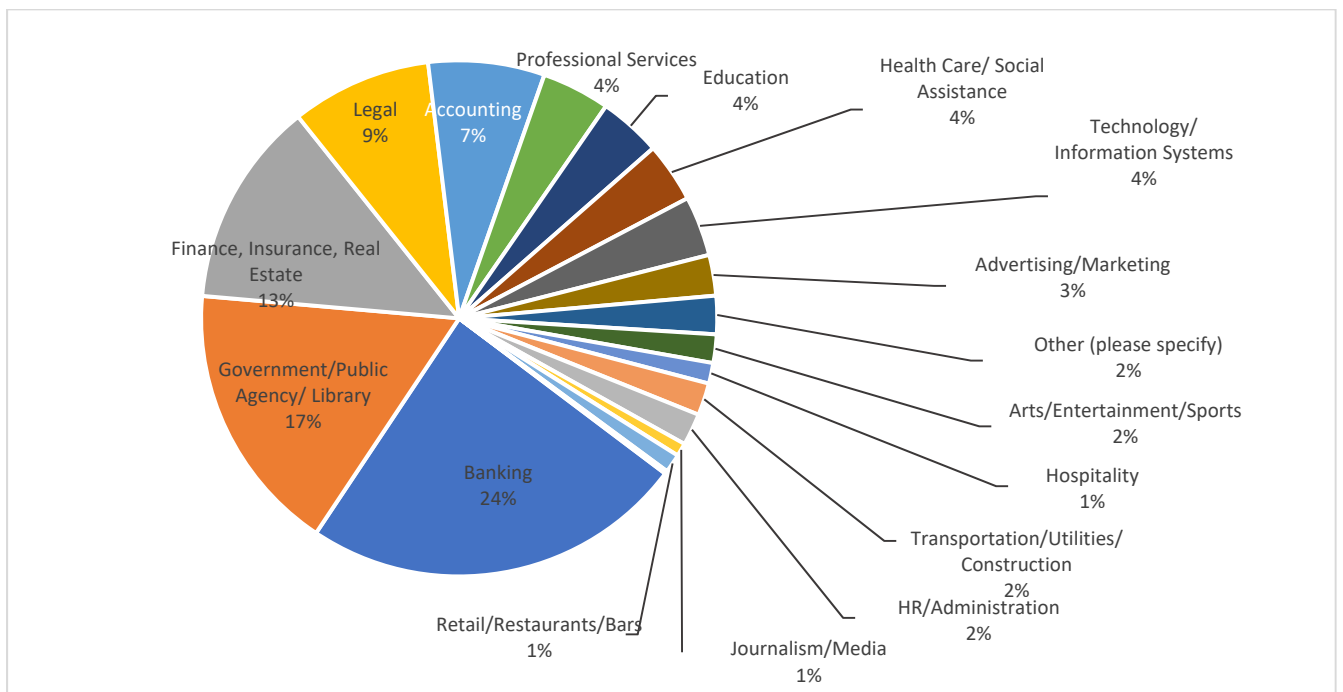


Where do Downtown Employees Work?

Most employees (65%) work for private businesses. Ten percent work in the nonprofit sector. The remaining 25% work for the public sector, with a mix of federal, state, and local government employees.

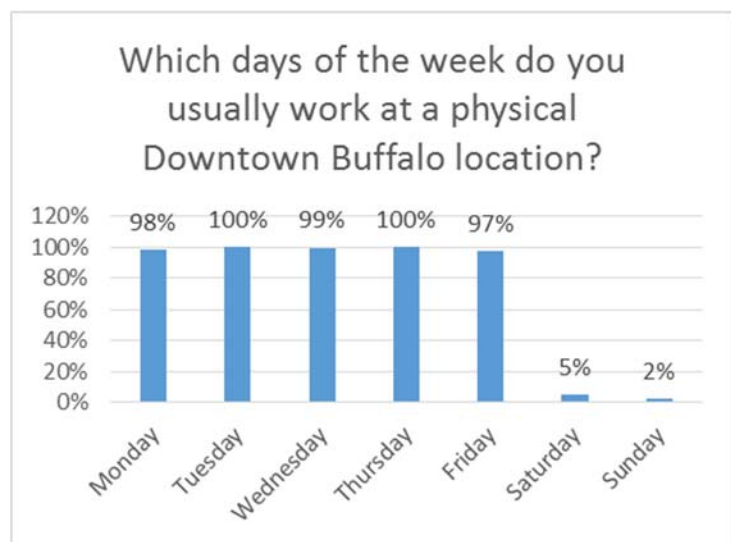
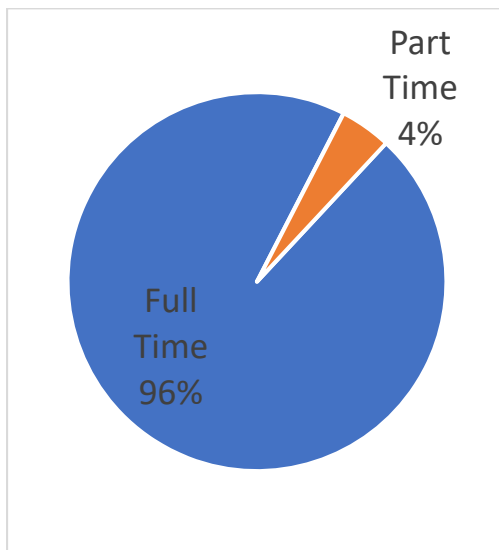


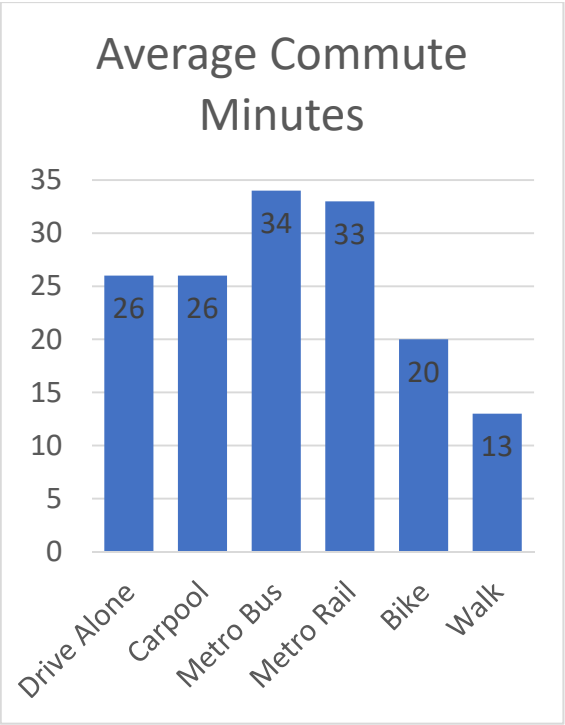
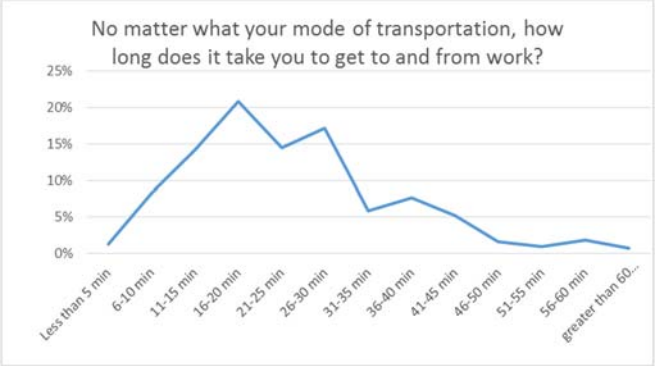
The following chart shows common occupations for Downtown employees.



When are employees commuting to Downtown?

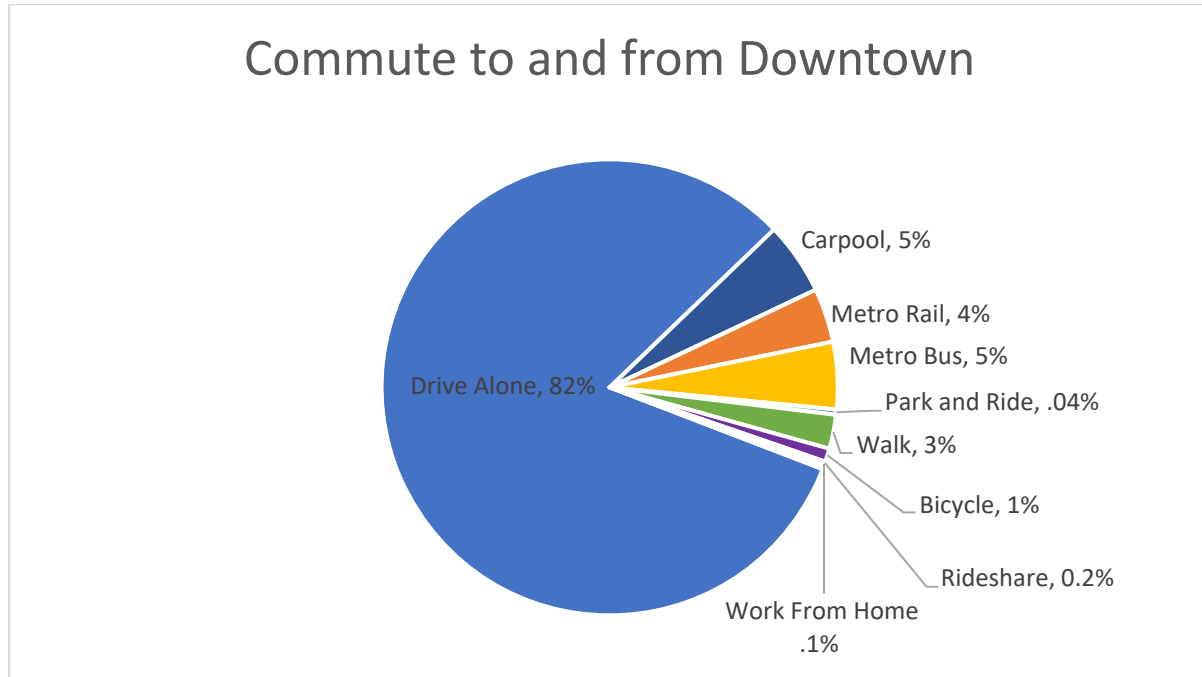
Flextime appears to have increased over the last 19 years. This has particularly affected morning commute times. Currently, 85% of Downtown employees arrive between 7 am and 9 am. On previous survey, the response was 95% during the same time. For evening commute, 90% leave between 3pm and 6pm. On previous survey, 93% left work during that time. The majority of respondents are full time employees, with only 4% working part time. People are mostly still working a five-day workweek, with the majority (100%) of people working on Tuesdays and Thursdays. Commute times on average range from 13 minutes for walkers to 34 minutes for bus riders. Average commute times for those in personal vehicles average 26 minutes. The following charts show survey responses.





How Do Employees Get to Downtown?

Most employees (87%) drive to work, with 82% driving alone and 5% carpooling. This number appears to be growing. The 1998 Buffalo Place survey had only 80% of respondents driving to work. While a greater percentage are now walking (3%) and biking (1%), it appears that fewer people are taking Metro Rail and Bus to get to work. Responses in 2018 indicate that 9% currently use transit, while in 1998, 19% used transit.



As the table below shows, when the mode split was calculated by gender, it appears that women tended to be more likely to use a private vehicle to arrive at work, while men were slightly more likely to walk or bicycle.

| | Everyone who answered question (3238 Responses) | Men (1248 Responses) | Women (1984 Responses) |
|----------------|---|----------------------|------------------------|
| Drive Alone | 82% | 80% | 83% |
| Carpool | 5% | 4% | 6% |
| Metro Rail | 4% | 4% | 3% |
| Metro Bus | 5% | 5% | 5% |
| Park and Ride | 0.3% | 1% | 0.2% |
| Walk | 2% | 3% | 2% |
| Bicycle | 1% | 2% | 0.4% |
| Rideshare | 0.2% | 0.2% | 0.2% |
| Work from Home | 0.1% | 0 | 0.1% |
| Other | 0.3% | 0.3% | 0.3% |

Note: Highlighted cell shows where number is higher than the general population's response.

When mode split was divided by age, it appeared that those who are under 25 or between 35 and 54 are more likely to use a private vehicle to commute to work. Those 55 and over appear to be more likely to carpool or use public transportation. Younger people, under the age of 44, and those over 65 appear to be more likely to walk to work. Those between 25 and 35 seem slightly more likely to ride a bike to work.

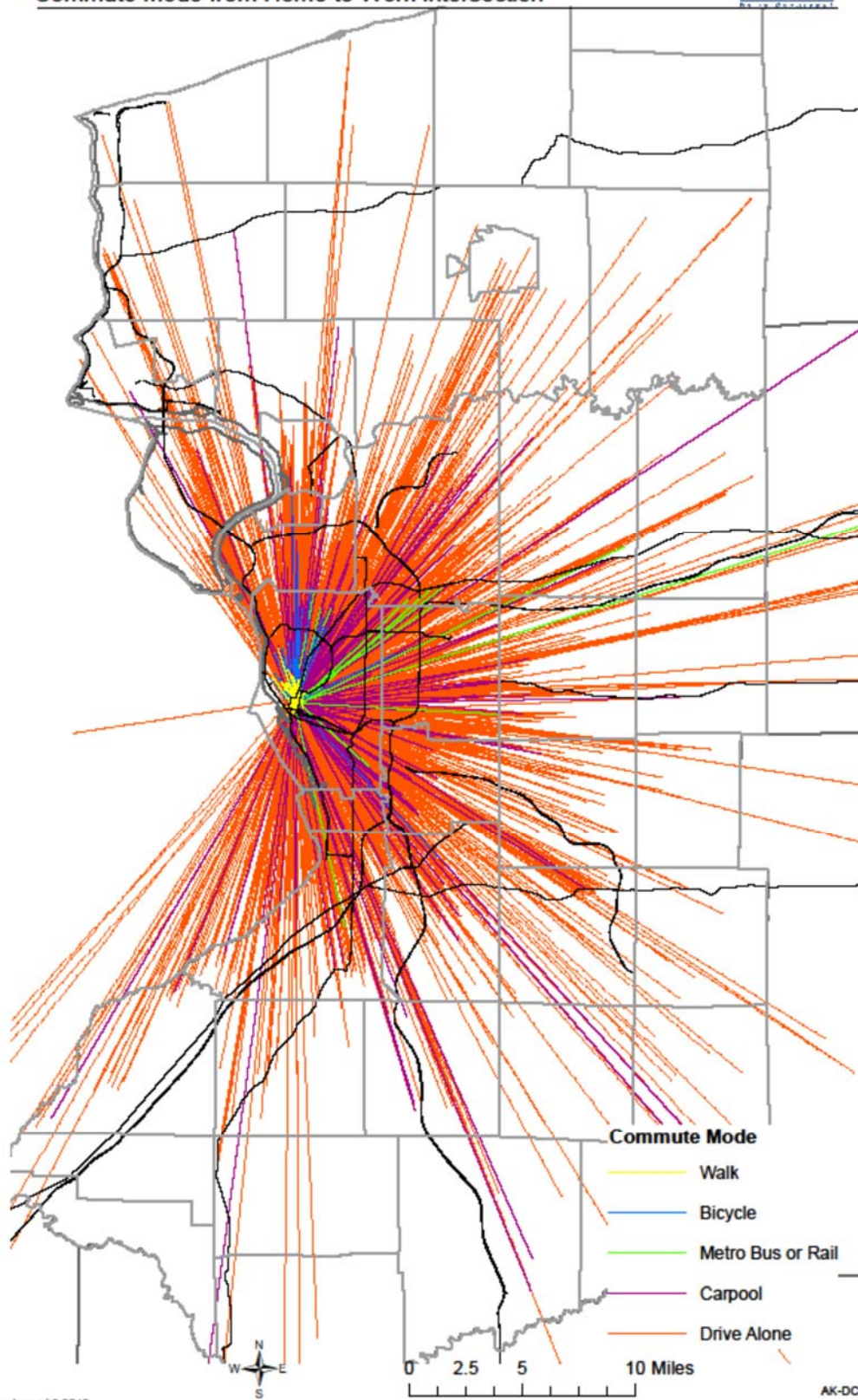
The table below shows the mode split by age.

| | Everyone who answered question (3256 responses) | Under 25 (119 responses) | 25-34 (821 responses) | 35-44 (727 responses) | 45-54 (781 responses) | 55-64 (681 responses) | 65 and older (127 responses) |
|----------------|---|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| Drive Alone | 82% | 84% | 79% | 83% | 87% | 79% | 80% |
| Carpool | 5% | 5% | 5% | 4% | 5% | 6% | 6% |
| Metro Rail | 4% | 3% | 5% | 4% | 2% | 5% | 6% |
| Metro Bus | 5% | 3% | 4% | 5% | 4% | 6% | 10% |
| Park and Ride | 0.3% | 1% | 0.5% | 0.1% | 0.3% | 0.3% | 1% |
| Walk | 2% | 4% | 4% | 3% | 1% | 1% | 3% |
| Bicycle | 1% | 0% | 2% | 1% | 1% | 1% | 0% |
| Rideshare | 0.2% | 0% | 0% | 0.4% | 0.1% | 0.1% | 1% |
| Work from Home | 0.1% | 0% | 0% | 0% | 0% | 0% | 0% |
| Other | 0.3% | 0% | 0% | 0% | 0% | 1% | 0% |

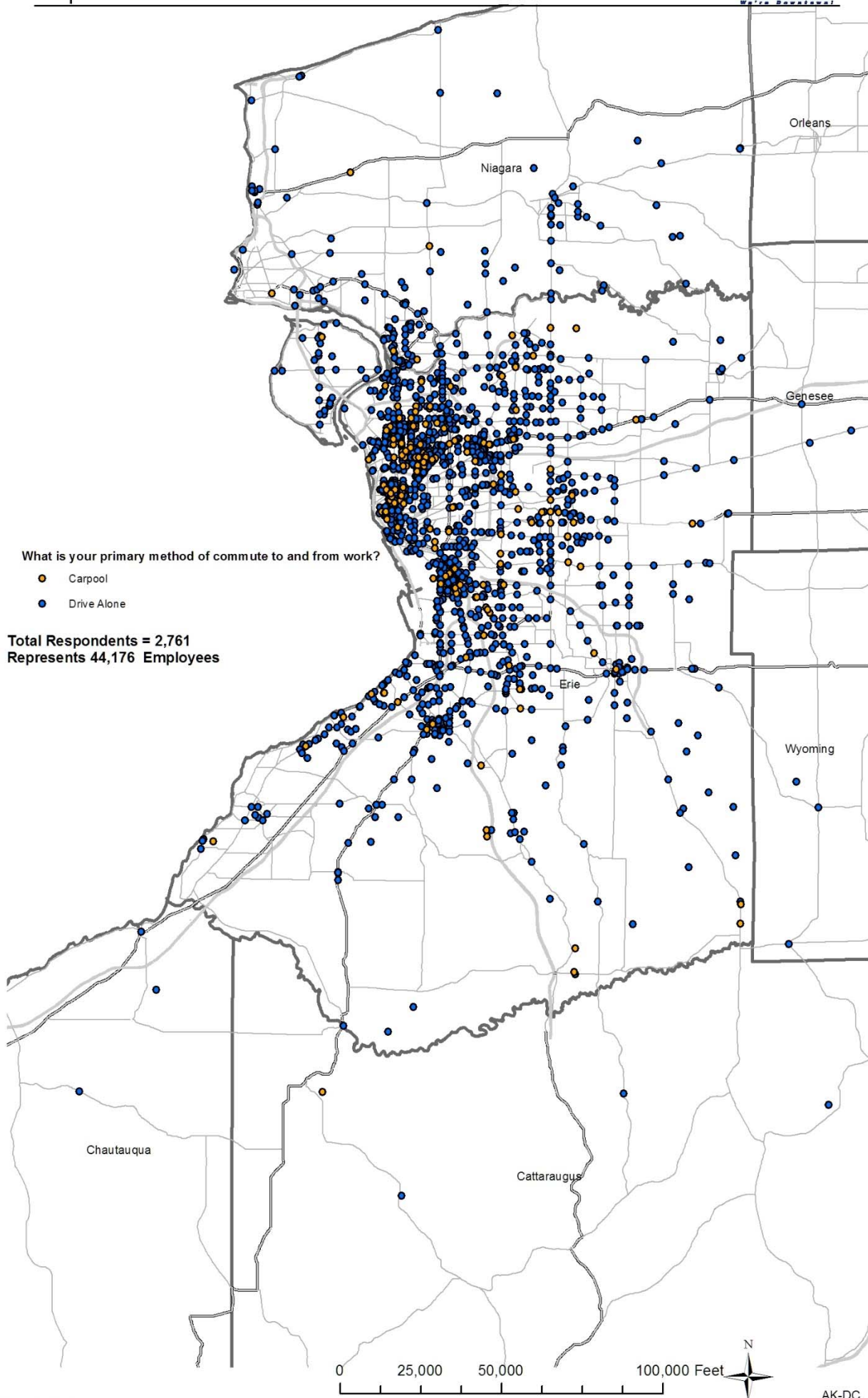
Note: Highlighted cell shows where number is higher than the general population's response.

The next three maps show the following:

1. A line between the work and home intersections of all respondents
2. Home intersections of respondents who Drive Alone and Carpool,
3. Home intersections of respondents who Ride Metro Rail or Bus, and
4. Home intersections of respondents who Bicycle, Walk or Work from Home.

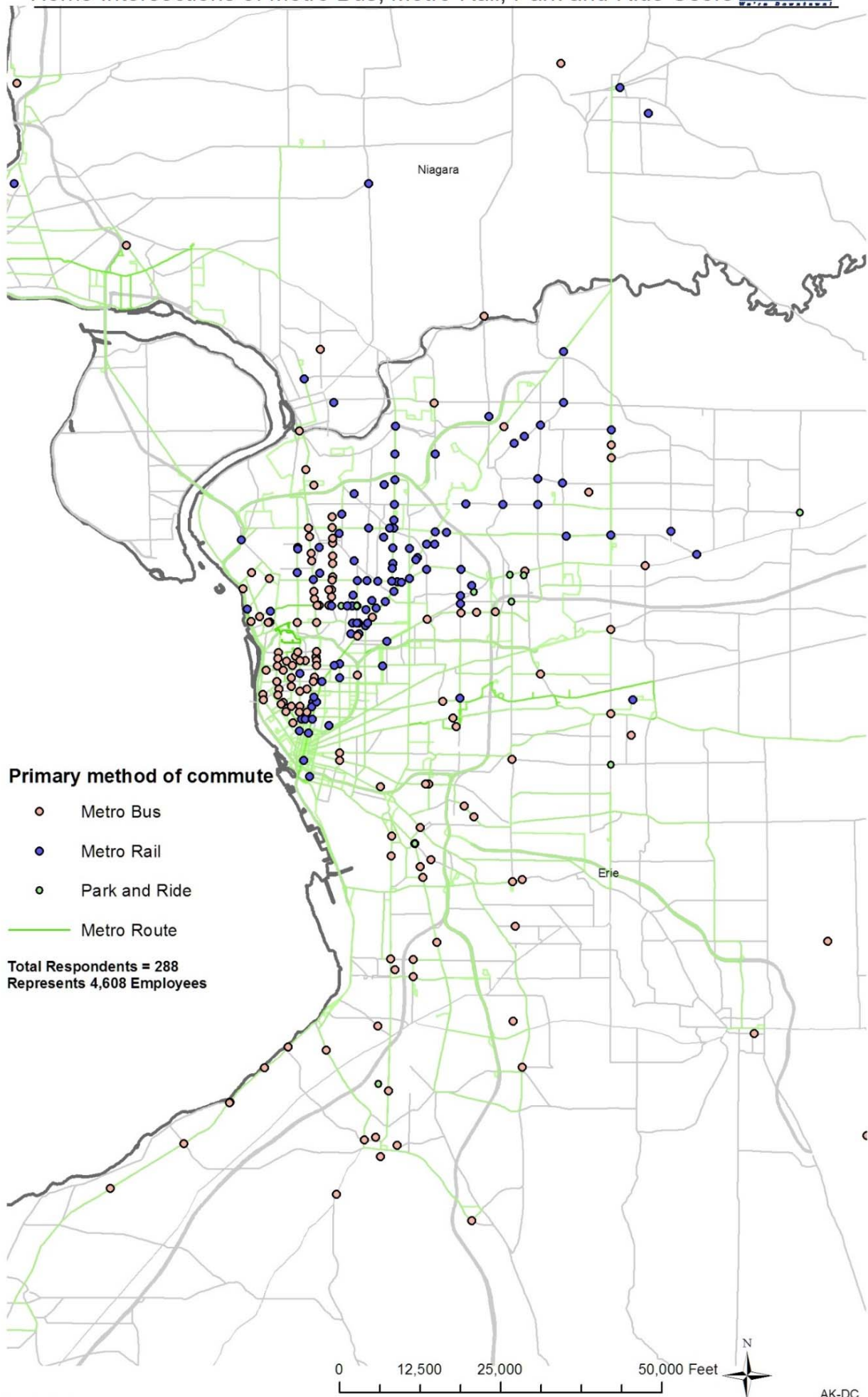


Downtown Employee Survey Responses Carpool and Drive Alone Intersections



Downtown Employee Survey Respondents

Home Intersections of Metro Bus, Metro Rail, Park and Ride Users

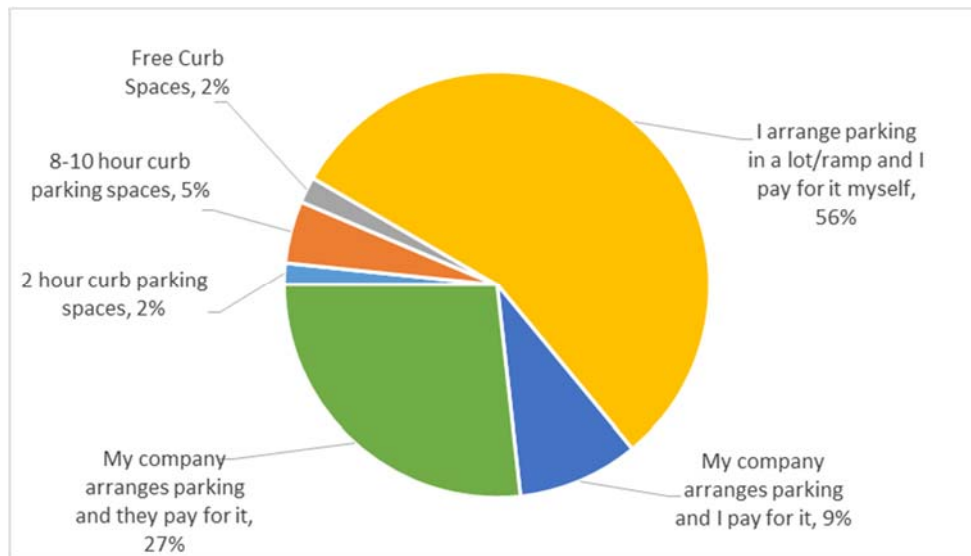


Downtown Employee Survey Responses Walk, Bike and Work from Home Intersection



Where Do Downtown Employees Park?

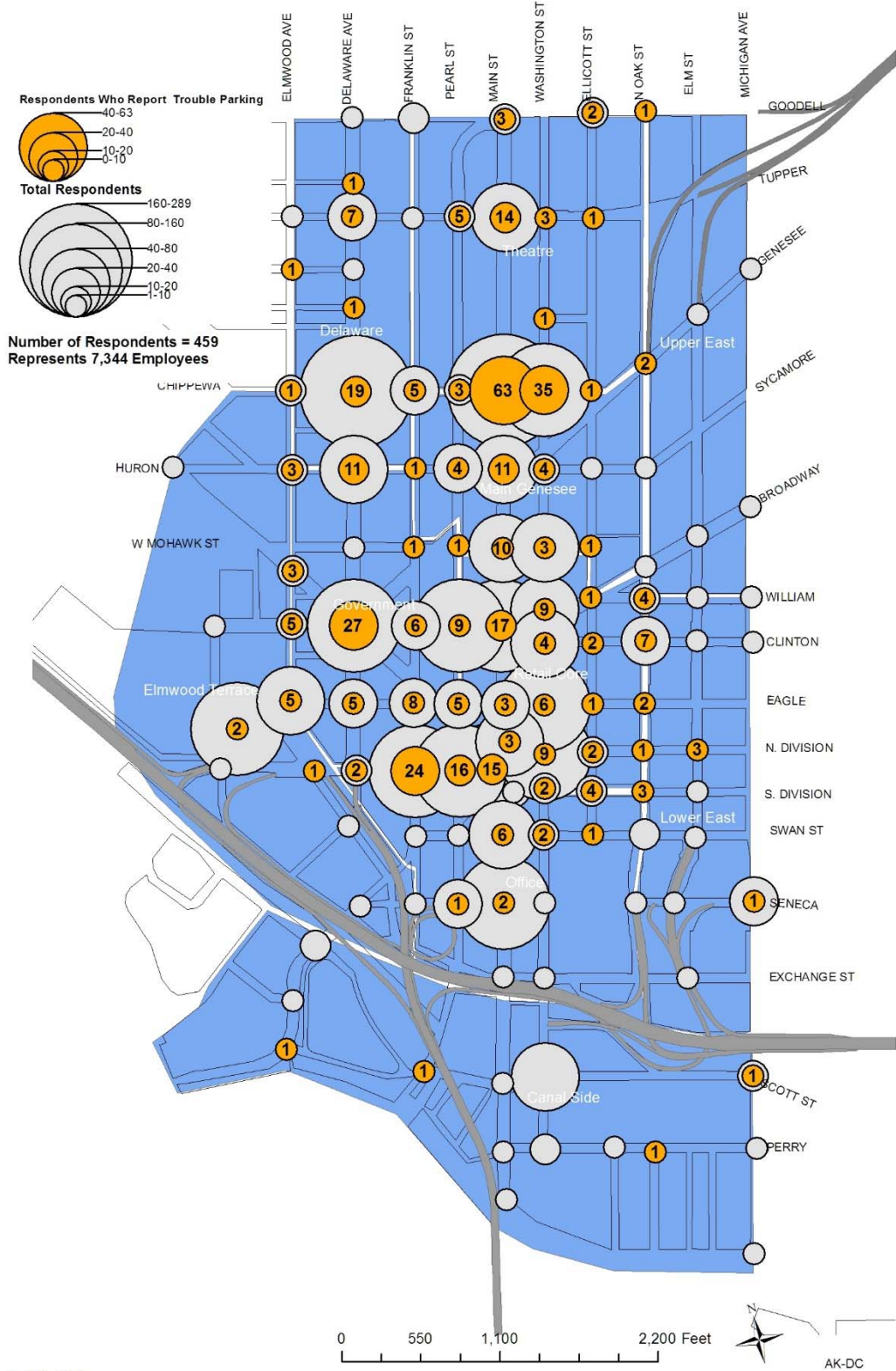
The majority of Downtown employees (65%) pay for parking that they or their company arranges. For 27% of employees, their employer pays for parking, either in a lot the company owns or the company arranges for the space in a shared facility. Five percent of employees find all day parking at the curb, which may include government restricted curb parking and free spaces on periphery, in addition to the all-day meters on the street. Two percent, or 47 respondents, are parking at 2-hour meters. This equates to between 752 and 886 people in Downtown. While this may not seem like a lot, there are only 1,284 2-hour meters in Downtown Buffalo, therefore 59% to 69% are being used by employees, illegally for long duration parking. If they were left open for short-term users, as they are designed, 3,008 to 3,544 vehicles could park each day for the average 2-hour duration. It would cost those visitors only \$4, as opposed to the higher rates in off-street facilities. Research regarding the value of a prime parking space outside of a retail business is approximately \$150-300/day. When business owners and retail employees park in these spaces, it can equate of a yearly loss of \$45,000-\$90,000 a year for those businesses.



How Far Away Do Downtown Employees Park?

Employees were asked if they have trouble finding parking for work. While 84% said no, 16% said yes. This translates to between 7,344 and 8,858 Downtown employees who have trouble finding parking for work. The first map below identifies locations where people indicated trouble finding parking. The greatest percentages were located within the Downtown Core and the northern section of Downtown. Almost half (48%) of Downtown employees are parking a 0-2 minute walk from their office. Research indicates that employees prefer no more than a 1/4 to 1/3 mile walk from their car to the office. This equates to a 4-5 minute walk, as people tend to walk about 300 feet per minute. Currently, 19% of Downtown employee survey-respondents walk further than this comfortable distance from their car to their office. This equates to more than 8,300 people who currently park further from work than desired, or is found optimal in our downtown. The second map below shows the number of people at downtown intersections who currently park further than a 5 minute walk from their office. They are generally located in the Downtown Core, where parking supply is tightest. A table showing the travel time between work and parking follows.

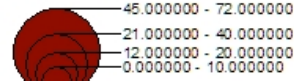
Downtown Employee Survey
Respondents Who Have Trouble Finding Parking



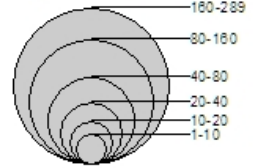
Downtown Employee Survey Work Location Respondents Who Park Further than 5 min From Work



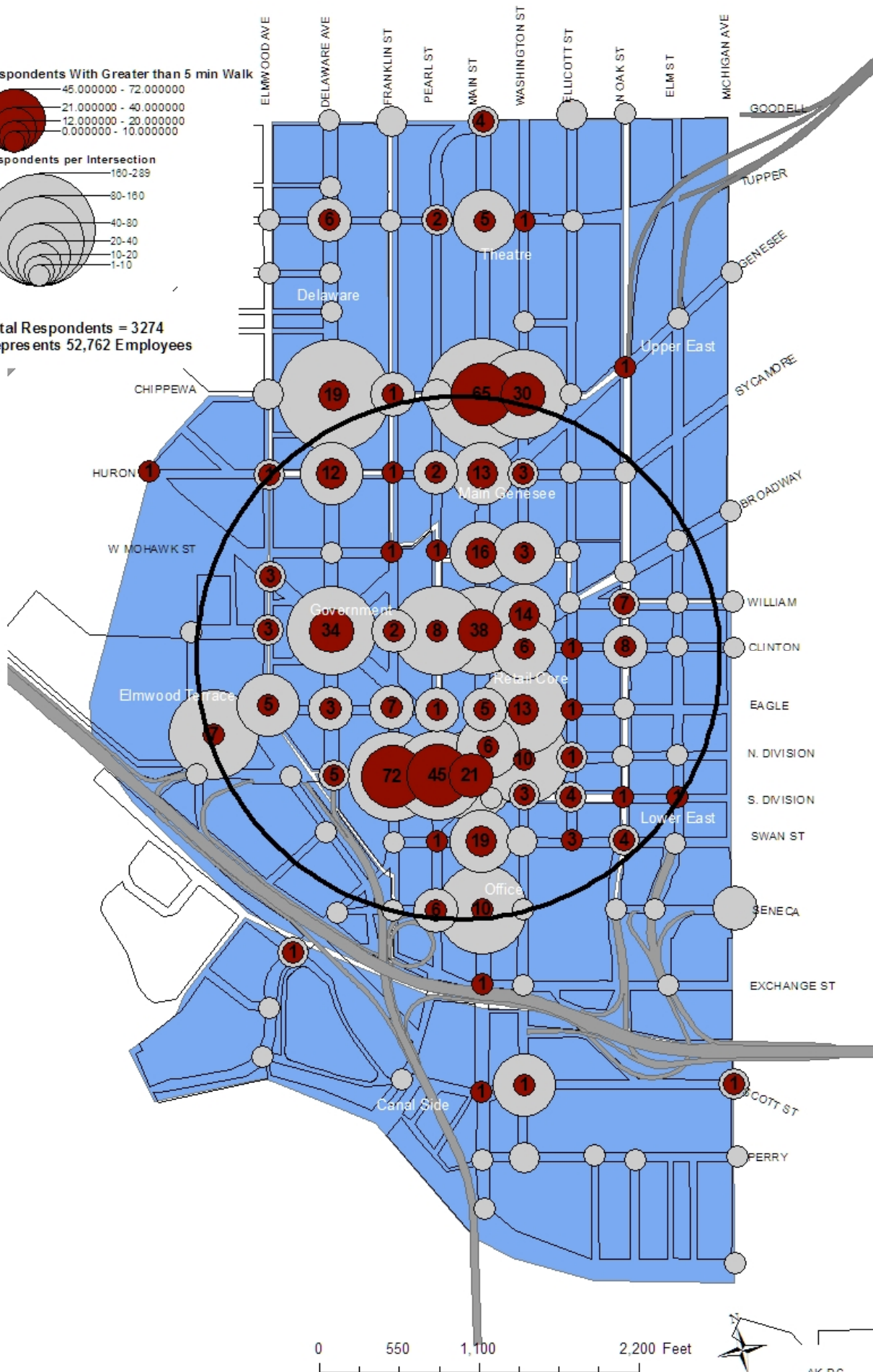
Respondents With Greater than 5 min Walk



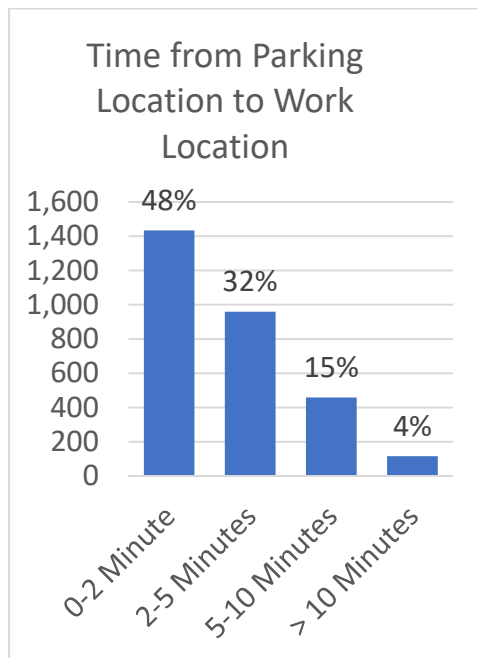
Respondents per Intersection



Total Respondents = 3274
Represents 52,762 Employees



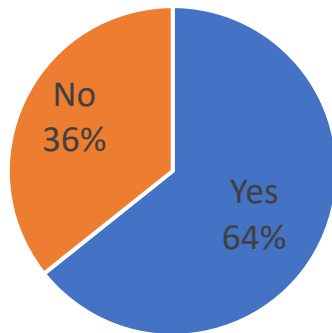
The following chart shows the amount of time respondents said that it took them to walk from their parking facility to their office.



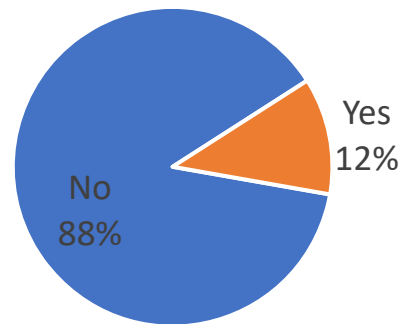
Could You Travel to Work By Bicycle?

64% of employees said that they own a bicycle and 12% said that they have ridden their bicycle to work. This equals 4,464 employees who have ever ridden their bicycle to work. This is the target group for increased bicycle commuting. Of those who ride to work, 1% ride daily and 2% ride often (1-2 times a week), equaling 1872 committed bicyclists. This is equal to the number of commuters utilizing a large parking ramp. At a development cost of \$30,000 per space, it represents a savings of \$56 million not spent to provide downtown parking.

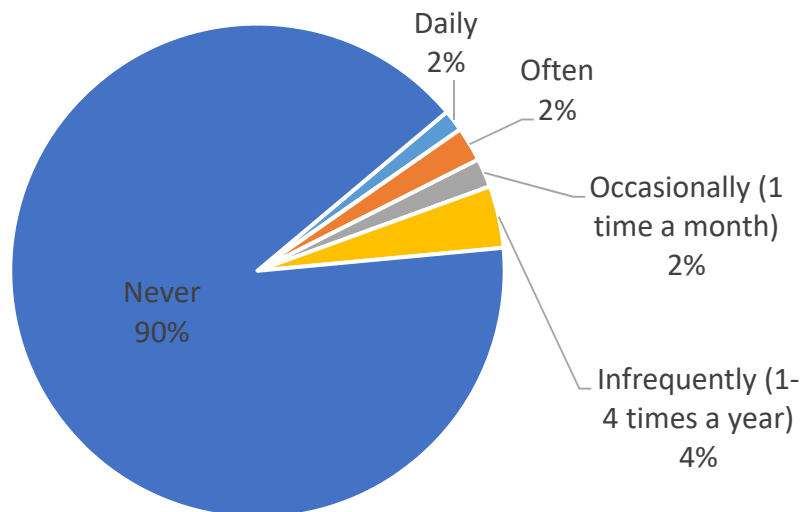
Do you own or have access to a bike?



Have you ridden your bike to work?

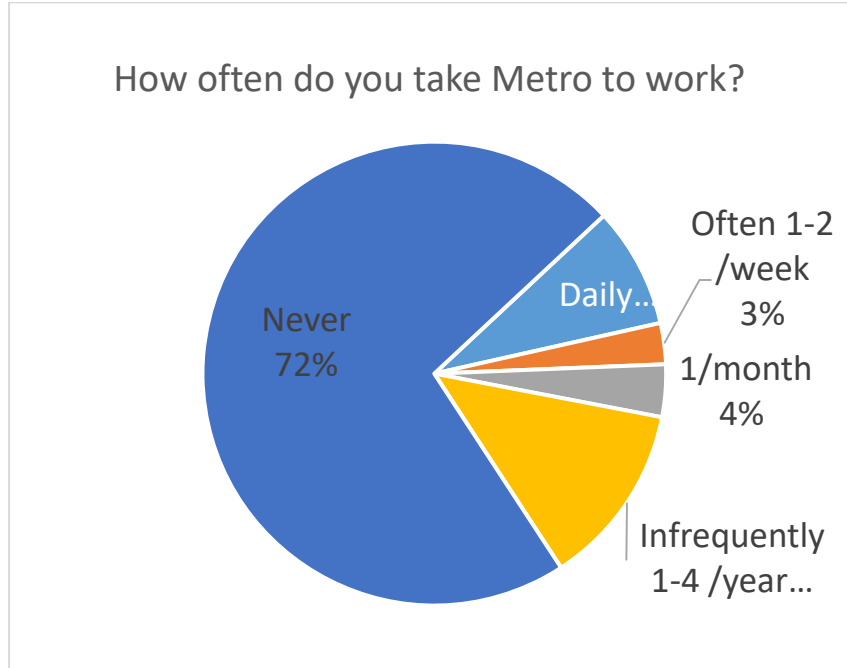


How Often do you ride to work?

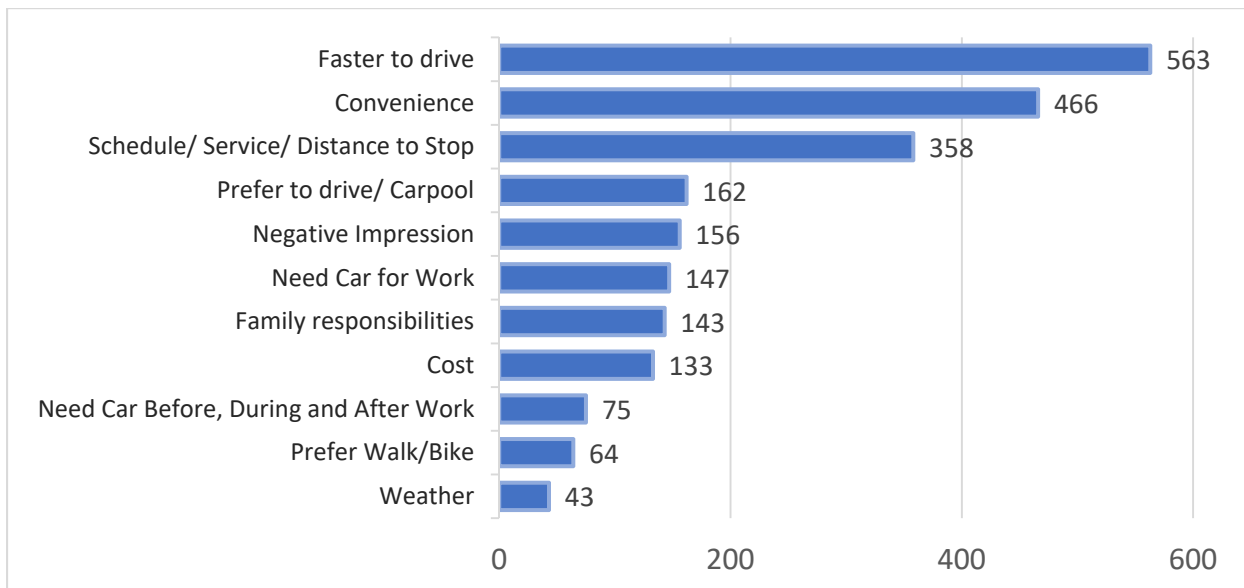


Could You Travel to Work Via Transit?

64% of Downtown employees said that they could use Metro Bus or Rail to get to work. This equates to 28,800 people. Currently 8% of respondents use public transit daily and 20% use transit from time to time. 20% equates to 10,032 employees who use transit from time to time. They are the potential target group for conversion from parking to become regular transit users.



When asked why they do not ride Metro Rail or Bus to get to work, the following answers were given:



Could you Travel to Work by Carpool?

Based on survey responses, there are approximately 2,768 employees who currently carpool. 945 survey respondents indicated that they would be interested in Carpooling if they had someone to carpool with, or if they had assistance in finding partners with whom, to carpool, or priority parking spaces when arriving to Downtown by carpool. This could equal 15,120 potential downtown employees.

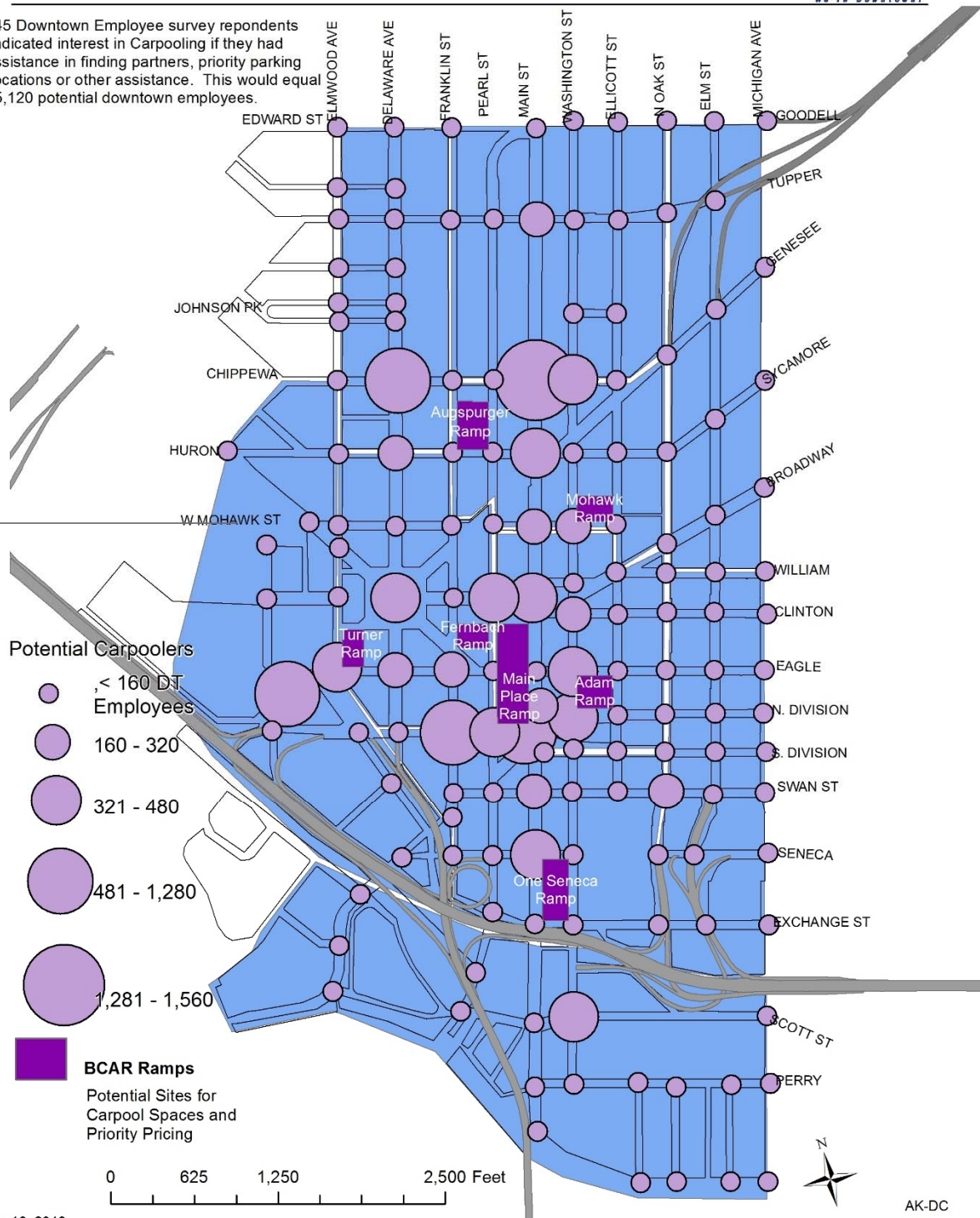
The following two maps show the work locations of those interested in carpooling and the home intersections of those same people.

Downtown Employee Survey Work Location Respondents Who Would Carpool with Support

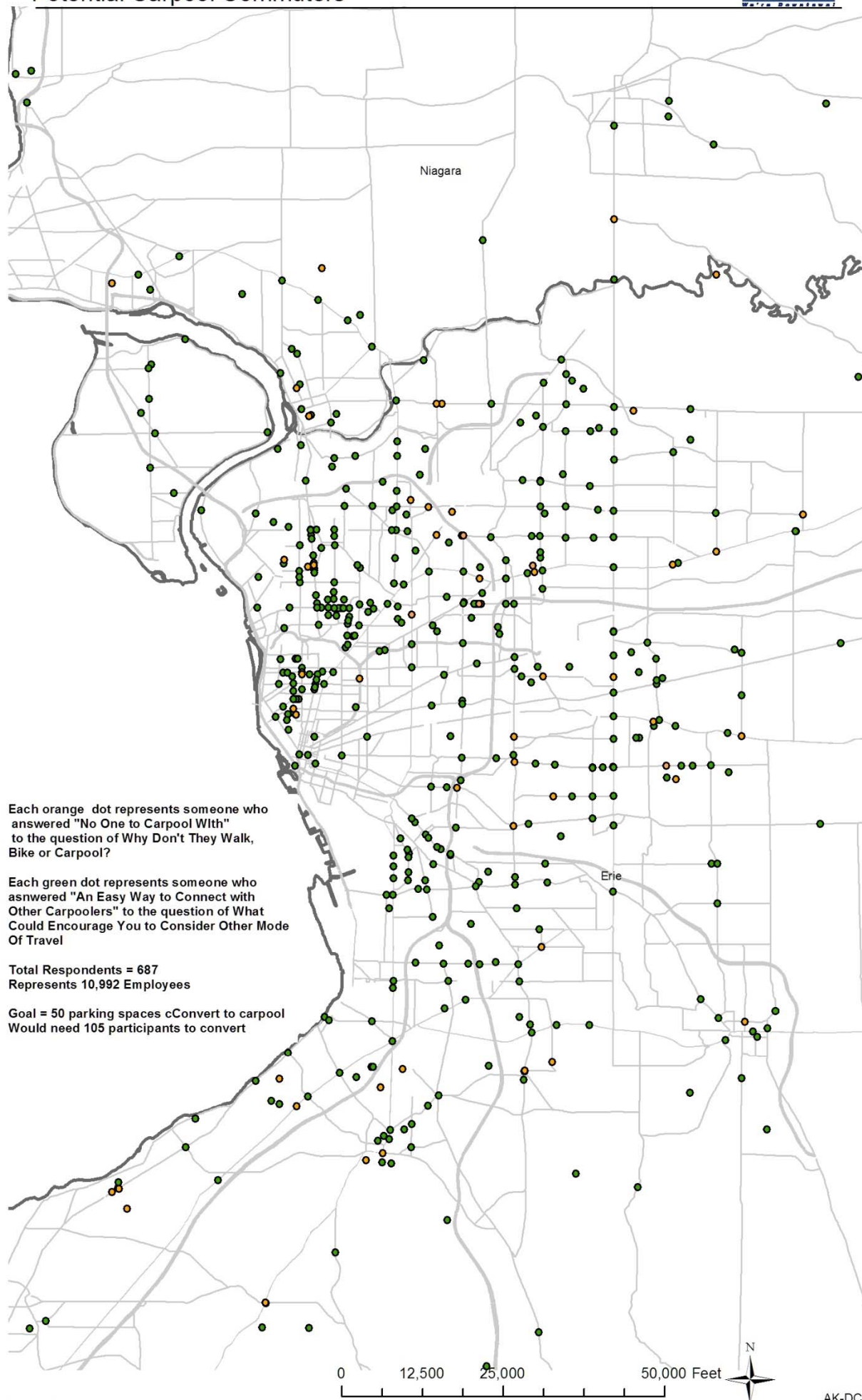


945 Downtown Employee survey respondents indicated interest in Carpooling if they had assistance in finding partners, priority parking locations or other assistance. This would equal 15,120 potential downtown employees.

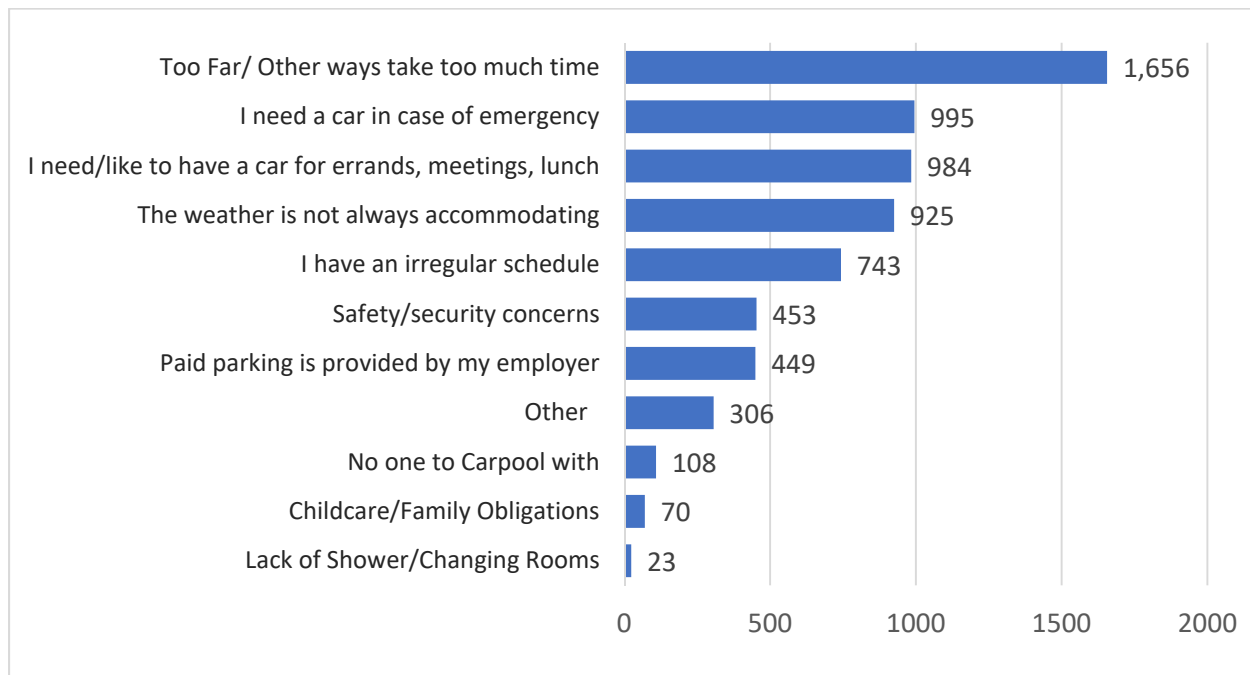
Support



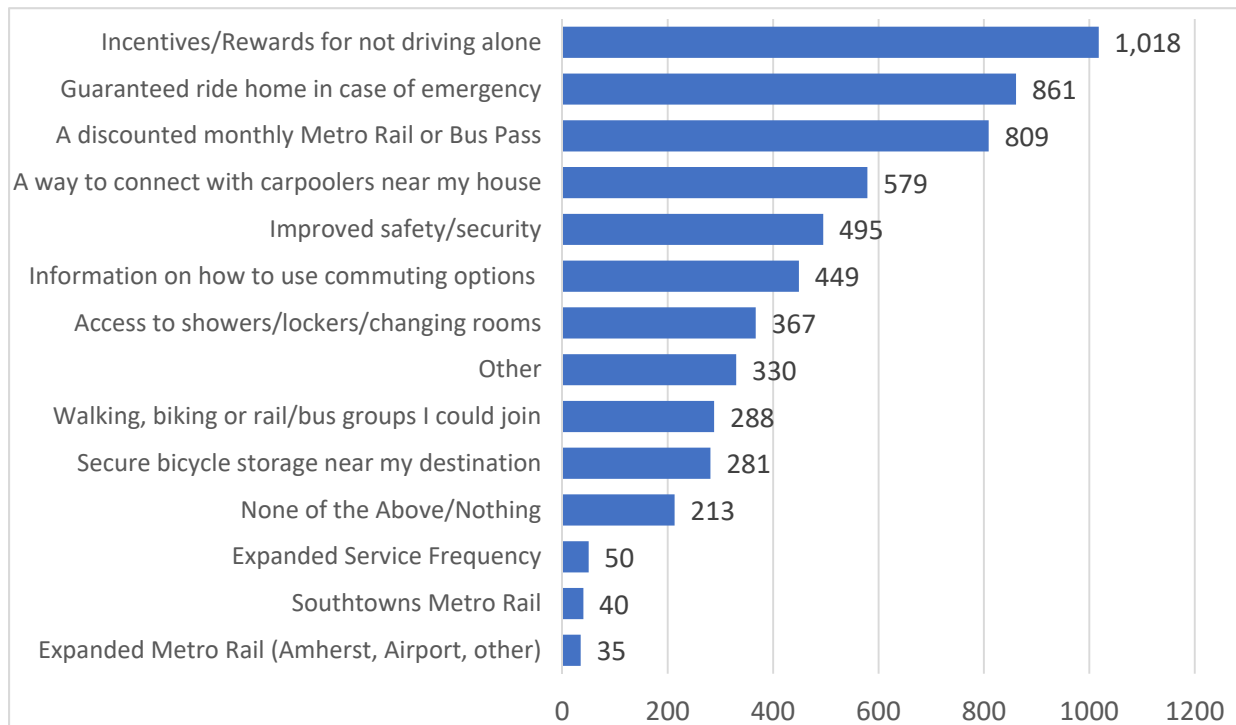
Downtown Employee Survey Respondents Potential Carpool Commuters



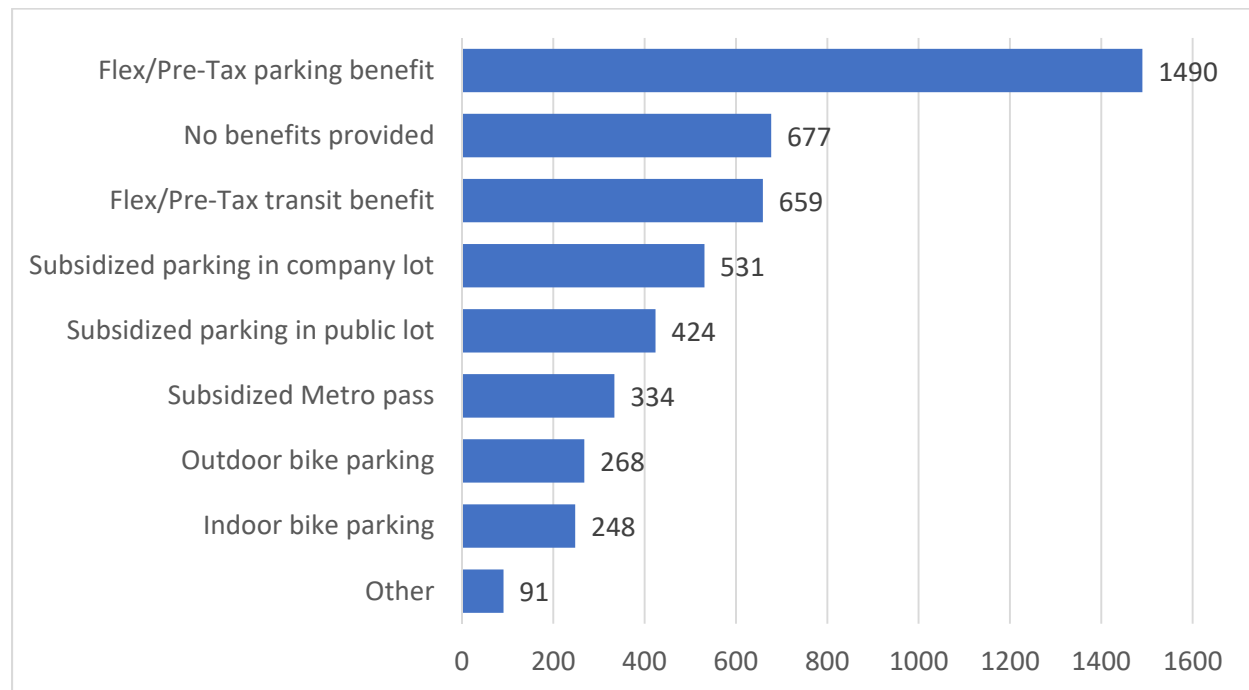
When asked why people do not walk, bike or carpool the following answers were given:



When asked what would encourage people to consider other modes of travel, the following answers were given:



When asked what transportation benefits were provided by employers, the following answers were given:



The mode split of those with parking and transit benefits was calculated. The availability of subsidized or pre-tax parking increased the likelihood of employees driving alone. For example, when subsidized parking was provided, 90% to 95% of the respondents drove alone to get to work, as opposed to 83% of the general population who answered this question. Similarly, when Metro passes are subsidized or available pre-tax to employees, the employees were more likely to use the bus or rail. The following tables show the mode split for selected transportation benefits.

| Mode | Everyone Who Answered Question – 3172 Responses | No Benefits Received - 666 Responses | Subsidized Parking in Public Lot (may have other answers) 434 Responses | Subsidized Parking in Public Lot as Only Benefit – 203 Responses | Subsidized Parking in Company Lot (may have other answers) 531 Responses | Subsidized parking in Company Lot as only benefit – 273 Responses | Flex/Pre Tax Parking Benefit (may have other answers) – 1490 Responses | Flex/Pre Tax Parking as Only Benefit- 763 Responses |
|-------------|---|--------------------------------------|---|--|--|---|--|---|
| Carpool | 5% | 6% | 4% | 2% | 4% | 3% | 6% | 5% |
| Drive Alone | 83% | 81% | 83% | 89% | 90% | 95% | 86% | 90% |
| Metro Bus | 5% | 5% | 5% | 3% | 1% | 0% | 3% | 1% |
| Metro Rail | 4% | 3% | 3% | 1% | 2% | 1% | 3% | 2% |

Note: Highlighted cell shows where number is higher than the general population's response.

| Mode | Everyone Who Answered Question – 3172 Responses | Subsidized Metro Pass (may have other answers) 334 Responses | Subsidized Metro Pass is only benefit – 67 Responses | Flex/Pre Tax Transit Benefit (May have other answers) -659 Responses | Flex/Pre Tax Transit only benefit --55 Responses |
|-------------|---|--|--|--|--|
| Bicycle | 1% | 0% | 0% | 1% | 0% |
| Carpool | 5% | 4% | 1% | 7% | 4% |
| Drive Alone | 83% | 65% | 46% | 73% | 33% |
| Metro Bus | 5% | 16% | 25% | 8% | 29% |
| Metro Rail | 4% | 11% | 24% | 7% | 27% |

Note: Highlighted cell shows where number is higher than the general population's response.

What asked what transportation benefits they would like their employer to provide, the following answers were given:

