

***North Central Texas
Council of Governments***

**Dallas Area Rapid Transit
Red and Blue Line Corridors
Transit-Oriented Development Survey**

Report of Results

June 2020

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Executive Summary

According to the Federal Transit Authority (FTA), transit-oriented development (TOD) “includes a mix of commercial, residential, office and entertainment centered around or located near a transit station. Dense walkable, mixed-use development near transit attracts people and adds to vibrant, connected communities.”

The purpose of the North Central Texas Council of Governments (NCTCOG) Dallas Area Rapid Transit (DART) Red and Blue Line Corridors Survey was to get a general sense of travel behavior, demographics, and location choice preferences of those living, working, or owning/operating a business near DART Red Line and Blue Line rail stations. The study results will help NCTCOG and its planning partners from the cities of Dallas, Garland, Plano and Richardson as well as DART better address real-world needs and develop improved TOD policies for the region. National Research Center, Inc. (NRC) was contracted by NCTCOG to conduct the study.

The study area boundaries were defined as the one-mile radius around the 28 DART stations along the Red and Blue Line Corridors. Three target populations were surveyed for this study:

- 1) residents who lived within the study boundaries,
- 2) employers/businesses located within the study boundaries, and
- 3) employees who worked for employers located within the study boundaries.

Residents and employers were contacted by mail and by phone, while employees were contacted through the employers who participated in the study. A total of 1,548 residents were surveyed, with a margin of error of plus or minus 2.5 percentage points; completed surveys were obtained from 1,043 employers for a margin of error of plus or minus 3.0 percentage points; and 550 employees were surveyed (no margin of error was calculated as responses were clustered within employer and were from only 64 employers). Data collection was conducted from September 2019 to February 2020.

Each of the three populations – residents, businesses, and employees – offer unique insights around their different perspective and preferences on living and working near DART. Confirmed by each population and consistent with larger regional data is the limited use of transit by most North Texans who are dependent on their cars for daily activities. However, this survey provides detailed insight into the destinations to which people are most willing to walk, what is most likely to encourage transit use and the importance of affordability to different demographic subgroups. While this survey indicates much should be done to improve TOD outcomes for transit on the DART Red and Blue lines, it provides a data driven starting point for conversation on future policies.

Resident Survey Highlights

Some neighborhood amenities in the study area were supportive of a TOD lifestyle

- Residents living in the study area often chose their homes because of price and low crime rate; however, walkability and access to transit was an important feature to many. Relatively high importance was placed on having certain amenities such as restaurants, coffee shops, bars, and grocery stores within walking distance.
- About 7 in 10 residents identified restaurants, bars, and coffee shops as being within a half-mile of their home, and two-thirds reported that a grocery store was within walking distance.
- About one-quarter of residents reported that their place of employment was within walking distance of their home and about half of residents said that their home was an easy walk to a DART station. An additional one-quarter of respondents said a DART station was a little far but walkable.

However, most residents live an auto-dominant lifestyle

- In the week prior to completing the survey, 81% of employed study area residents made at least one of their commute trips in a single-occupancy vehicle, while 9% made at least one commute trip using train/light rail, and 4% made at least one commute trip on the bus.
- About 88% of residents drive to work and most reported having free parking near their employer. Only 5% of the residents pay to park their cars at their worksites.
- While one-quarter (23%) of residents noted that their place of employment was within walking distance of their home, only 6% of employed survey participants had made at least one work commute trip by foot.
- The majority of other trips and errands (e.g., eating out/recreation, grocery shopping and other shopping or personal business) were also made by driving, even though many of the amenities sought were close in location to home.
- Parking is free and abundant. The majority of respondents reported having access to free parking at home. Only 8% do not have access to free parking.

While residents recognize and appreciate their access to transit, DART use could increase

- A great many respondents could identify the location of a bus stop (89%) or of a rail station (69%) near their home (within a half-mile or 10-minute walk); and for most, one or both were within a half-mile of their home.
- Almost all respondents (93%) felt that their expectations for their home being within easy access to DART service was at least somewhat met, with about 7 in 10 considering it very well met.
- However, only about 13% of residents reporting using transit at least once to get to work or school in the week prior to the survey.
- Greater ridership was observed among those living closer to a rail station: 23% of those who live within a quarter-mile radius of DART station reported using transit for work commutes, whereas transit use decreased to 17% for those between one-quarter-mile and a

half-mile radius. Ridership dropped to 7% for those living outside the half-mile radius but inside the one-mile radius.

- Those who identified themselves as living within an easy walk to a rail station were more likely to have used transit to get to work (15%) compared to those who felt it was far but could be walked and those who deemed it too far to walk to a rail station (10%).
- The most common barrier to more frequent DART use was the need to make stops on the way to or from work, or a need to run errands while at work. Other common barriers to use included DART trips taking too long or requiring too many transfers, or too long of a distance from their work to the DART station.
- Fewer than 25% of residents reported using DART as their primary mode of travel to entertainment and errands. Reasons for non-use included the fact that it was faster to drive than to use transit, that the transit stop/station was too far away, or the DART schedule was inconvenient.
- The respondent subgroup with the highest use of transit were those whose annual household incomes were less than \$20,000. These are likely transit-dependent individuals and thus there is potential for increasing transit ridership among higher income residents.
- Residents showed a willingness to at least consider using DART, or walking or biking, for various trip purposes. For nearly all 19 trip types listed, the proportion who would prefer to use a non-driving mode for each trip was greater than the proportion of respondents who reported currently using DART or walking or biking.

Employer Survey Highlights

The businesses who responded were...

- Mostly small firms in office buildings: 81% of employers reported having 25 employees or less; 33% are in 1 or 2 story office buildings while 31% are in a 2 story or larger office building.
- A mix of business types: One-quarter of the companies classified themselves as an office business (professional, administrative support, etc.), while about 2 in 10 were service/restaurant/delivery businesses, 15% in retail/sales, 12% medical/dental, 8% construction/trades/laborer, 7% manufacturing/production/"high-tech" and the remaining 17% were other types of businesses.
- Monday through Friday workday dominant: About two-thirds of businesses said all their employees work on weekdays during the day. Only 1 in 10 employers reported at least 50% of their workforce worked weekday evenings or at night and one in six reported at least 50% of employees working on the weekends.
- No strangers to their neighborhoods: 7 in 10 employers had been at their current location more than 6 years. Most businesses (86%) said they plan to stay at their current location for the next few years.

Businesses surveyed have a strong focus on automobile accessibility

- The largest factors influencing business location selection were the availability of parking for customers and employees and easy car access (7 in 10 companies said these were at least somewhat of an influence in the choice of the current business location).
- When asked how well their expectations were met for the availability of parking and access for cars for both customers and employees, 8 in 10 companies reported their expectations were fully or somewhat met.
- Free parking for employees and customers was widely available, with 85% of employers saying free parking was on the same property or right next to their building. Nearly 9 in 10 employers said there was enough or more than enough parking near their place of business.

Access to DART was less influential in the location choice for many businesses and expectations of benefits to employees and customers have not been fully realized

- While about 4 in 10 employers knew about the DART station when they moved to their current location, it was much less influential than automobile access in their choice of business location.
- About a third of employers said having their employees see a DART commute option as a benefit was at least somewhat of an influence on the location choice, and about one-quarter thought having access to a larger workforce through DART would be a benefit of the location.
- About one-third of respondents (35%) who had said their company was likely to move in the next few years said that having a DART station or stop near their next location was very or somewhat important, but close to half (46%) said it was not important. (The

remaining 20% did not know whether it would be important or refused to answer the question.)

- Companies indicating that a DART station nearby would be important were more often near stations in Dallas or Garland and reported too few parking spaces for employees.

Providing travel demand management (TDM) programs or strategies is not a current focus for most of the companies in the study area

- Flexible work schedules was the only travel demand management (TDM) strategy frequently used, with slightly more than half (55%) of businesses reporting that they currently have this program. About 2 in 10 (21%) reported offering a teleworking option to employees. The remaining 15 potential TDM programs were each only being made available by 4% to 15% of employers.
- About three-quarters or more of the organizations surveyed reported they would not consider implementing any of the other TDM programs and a similar number reported no interest in learning more about transportation management strategies.
- Companies that were more likely to have TDM programs in place tended to be in Dallas, areas with mixed+ residential land use, and have access to more transit options. These companies also tended to be larger, to be in the restaurants/retail/services sectors, and to report too few parking spots for employees.

DART passes are offered by few companies, but more are interested

- Only about 6% of the companies surveyed reported currently offering free or subsidized DART passes but another 24% would consider providing them.
- For about 6 in 10 employers, their hours of operation coincide with peak DART transit service, meaning that DART could be a viable alternative for their employees.
- Employers offering DART passes tended to be in Dallas, have access to more transit lines and be closer to transit stations. They also tended to be larger, have a larger percentage of higher wage employees and have too little parking on site.

Employee Survey Highlights

Most employees drive alone to work and few use transit

- The proportion of employees who had used each mode at least once in the week prior to the survey showed similar trends as had been observed in the resident survey: over 9 in 10 had driven alone, while 3% had used a trail or light rail, 1% had used a bus, and 2% had walked.
- Employees most likely to drive alone tended to be female, Non-Hispanic White, more educated (bachelor's degree or higher), lived in households with higher ratios of vehicles to drivers, and had higher household incomes.
- Employees most likely to use transit worked at businesses with 11-25 employees and that were located near transit stations with average lower ridership. They tended to be younger (35 years or less), earn less than \$10 per hour, and lived in households making less than \$40,000 per year.

Parking is free and convenient for most employees in the Blue and Red Line TOD study area

- More than 70% of the employees surveyed reported that they had free parking right next to their building. Only about 1 in 10 reported that the nearest free parking was 3 blocks away or farther. Of the employees who drive to work, more than 9 in 10 reported that they park for free.
- Employees most likely to drive alone worked for employers who offered parking right next to the building.
- Employees working at companies with free parking right next to the building were significantly more likely to drive alone compared to employers without free adjacent parking (96% vs 88%).

Common barriers to the use of DART for the work commute include a need to run errands, distance to DART stops and stations, the ready availability of free parking and work schedules

- The most common reasons employees gave for not using DART was the need for a car before or after work. The most common stops made on the work commute were to run errands or do shopping, or participate in other activities such as the gym, social activities, or eating out.
- A need to run errands during the workday was also a common barrier to DART use. About three-quarters of the employees surveyed reported making at least one trip per week and most of the trips were made in single-occupancy vehicles.
- Other frequently cited barriers included that home or place of employment is too far from DART, or feeling that DART takes too long or too many transfers are needed.
- More than one-third of employees cited free parking as a reason they chose not to use DART or did not feel a need to use it.
- Analyses of employee work schedules revealed that about 6 in 10 employees worked a schedule that would allow them to use DART during its peak operating hours of 6:00am to 6:00pm Monday through Friday, while about 4 in 10 either started work earlier or left later, or had schedules that included weekends.

While most employees who typically drive are not currently interested in transit, there are opportunities to make incremental change

- When employees who typically drove to work were asked what might lead them to switch their commute to DART, more than half reported they were *highly unlikely to ever use DART for their work commutes*.
- For those more interested in using DART, living closer to DART was the most commonly cited factor that might induce employees to start using it, indicated by roughly one-quarter of respondents, followed by more frequent service, improvements to the quality of the trains (higher quality/more comfortable/safer) and shuttle service between the workplace and a DART station. About 14% noted that they would be likely to switch their commute to DART if gas prices greatly increased.
- Employees most likely to switch from driving alone to DART tended to work in buildings closer to transit stations (half-mile or less) and earn less per hour. They also tended to be younger and from racial groups other than Non-Hispanic White.

Teleworking and compressed/flex schedules are the TDM programs most offered and of most interest

- Employees reported a low offering of transportation management demand (TDM) programs from their employers. The most common programs they reported their employers provided were flexible work schedules (29%), free subsidized DART passes (26%), and bike storage (23%).
- However, among those who were offered TDM benefits and services, a high proportion reported taking advantage of them, with the most frequently used including teleworking, flex schedules, and compressed work weeks.
- Among employees who were not offered various TDM programs, interest was not very high except for teleworking and compressed work week schedules.
- While one-quarter of survey respondents reported that their employer offered a free or subsidized DART pass, only 4% of employees surveyed reported using their pass in the past 6 months. More than 3 in 10 employees whose employers did not offer a DART pass indicated they would use one if offered.

Introduction and Background

Study Purpose

A stated goal of the Metropolitan Transportation Plan Mobility 2045 is to support Transit-oriented development (TOD) in the North Texas Region. This is reflected by the long-range plans of the partnering cities/agencies including the City of Dallas, City of Richardson, City of Plano, City of Garland and Dallas Area Rapid Transit (DART). TOD projects have been completed at many DART Red and Blue Line stations in these jurisdictions with ongoing efforts to complete more. While the buildings and supportive infrastructure are incrementally advancing TOD, questions remain as to the transit outcomes and attitudes of those who occupy these TOD and transit-adjacent places.

The purpose of the North Central Texas Council of Governments (NCTCOG) DART Red and Blue Line Corridors Survey is to get a general sense of travel behavior, demographics, and location choice preferences of those living, working, or owning/operating a business near DART Red Line and Blue Line rail stations. The specific 28 station area geographies used in this survey are tied a grant NCTCOG received from the Federal Transit Administration (FTA) for its Pilot Program for TOD planning related to DART's FTA funded extension of the platforms at those stations.

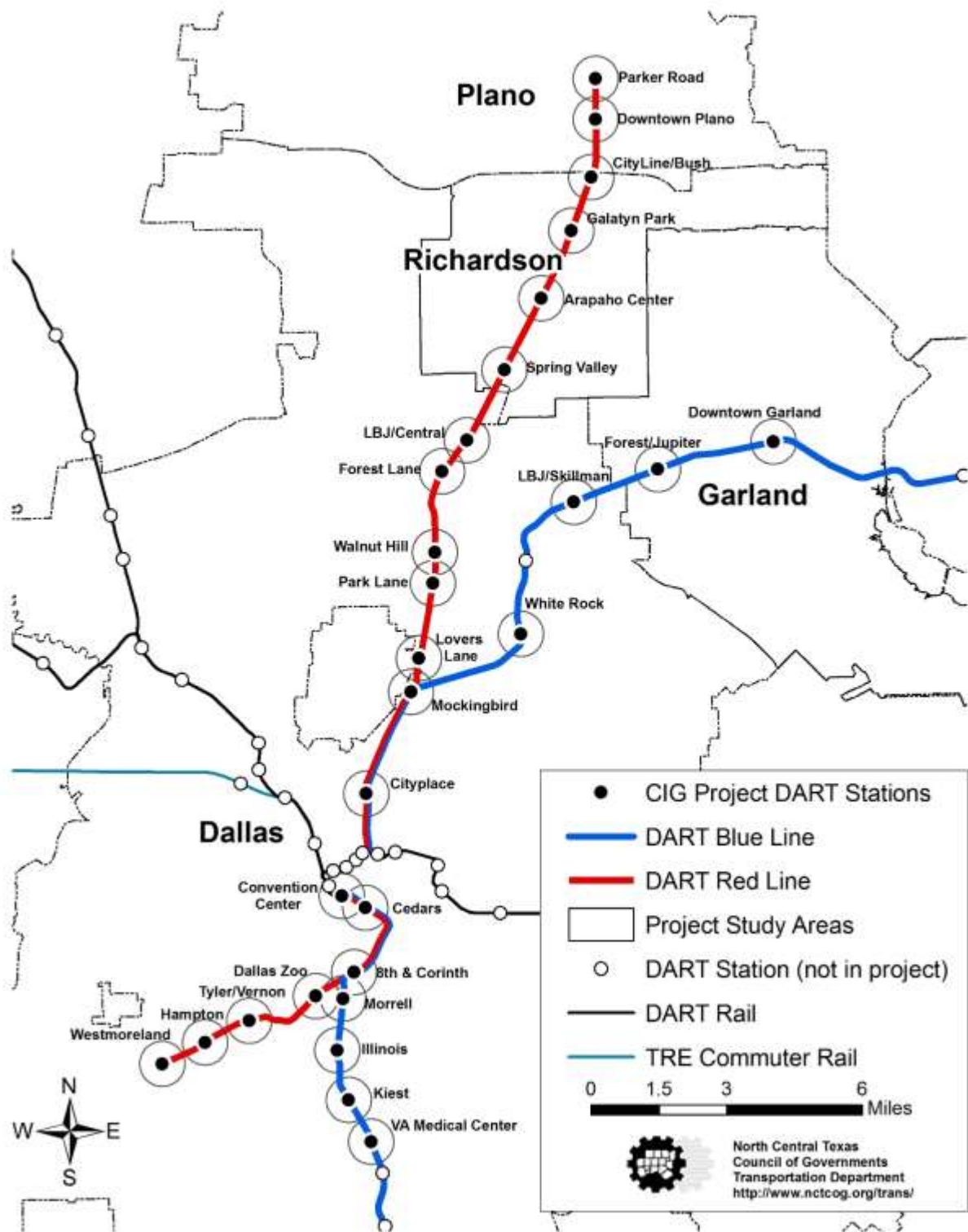
The survey results will be used to understand how people feel about and interact with TOD; whether it was a factor in their location decision, whether it influences their travel modes and car use and ownership, and what barriers exist to fully realizing the potential benefits of TOD. The study results will help NCTCOG and its planning partners from the cities of Dallas, Garland, Plano and Richardson as well as Dallas Area Rapid Transit better evaluate land-use and transportation policies such as TOD for the region. National Research Center, Inc. (NRC) was contracted by NCTCOG to conduct the study. A brief overview of the study methods are provided below; full details can be found in *Appendix D: Survey Methodology*.

Study Area and Target Populations

The study area boundaries were defined as the one-mile radius around the 28 DART stations along the Red and Blue Line Corridors (see the map of these study stations on the next page). A one-mile boundary was used to assist in determining the relative effect of distance from the station beyond the traditional TOD half-mile. Three target populations were surveyed for this study:

- 1) residents who lived within the study boundaries,
- 2) employers/businesses located within the study boundaries, and
- 3) employees who worked for employers located within the study boundaries.

Figure 1: Map of the NCTCOG (DART) Red and Blue Line Corridors TOD Survey



Study Methods Overview

A brief overview of the methodology will explain how this survey utilized random sampling to create as accurate as possible, a point in time picture of public behaviors and opinions on their neighborhoods and travel. Understanding the unique nature of sampling the three distinct populations in the survey is also important to understanding its results.

Resident Survey

Recipients of the resident survey were randomly selected from a list of all households from the United States Postal Service Delivery Sequence File geocoded as being within a one-mile radius of one of the 28 stations. A total of 16,800 households were selected such that 600 addresses were selected within a one-mile radius of each station. Surveys were administered by mail with an option to complete the survey online; each household was contacted four times in August and September 2019. The survey was provided in English, with an option to complete it in Spanish online. A copy of the mailed survey materials, including the questionnaire, can be found in *Appendix E: Survey Materials*.

An additional special survey effort was undertaken to include Hispanic and Spanish-speaking residents in the study. Lists of phone numbers of likely Hispanic households in the study boundaries (the Census block groups) were purchased from a survey sampling research firm. These phone numbers were dialed in September and October 2019. Additional phone surveying was continued in January and February of 2020 to increase responses. Full details on residential survey process and method can be found in *Appendix D: Survey Methodology*.

In total, 1,540 completed surveys or interviews were obtained. The final response rate for the mailed survey was 4.1% and for the phone survey was 2.4%, for an overall response rate of 2.9%. The margin of error for 1,540 completed surveys is plus or minus 2.5 percentage points.

Employer/Business Survey

For the employer survey, a database of all employers in the census block groups intersecting the one-mile study area station radius was purchased from InfoUSA. As with the residential addresses, businesses addresses were geocoded to determine the distance to their nearest station. A total of 12,853 employers were chosen as survey recipients; all 6,085 employers within the quarter-mile and half-mile radii, identified as having 3 or more employees; all 5,246 employers identified as having 5 or more employees or having an unknown number of employees outside the half-mile radius but within the one-mile radius, plus a random sample of 1,449 employers with 3 to 4 employees; and an additional 100 employers from the DART ePass list that were geocoded as being within the study boundaries but could not be matched to the InfoUSA list.

These employers were first contacted by mail, with options of completing the survey online or by completing the hard copy survey and returning it in a postage-paid envelope. Approximately a week after the surveys were mailed, employers that had a telephone number (10,231, about 80% of the total sampled) were called to invite them to the survey. Completed surveys or interviews were obtained from a total of 1,039 employers. Nearly 2,000 of the survey packets sent were returned as undeliverable by the post office (likely the company had moved or gone out of business), so the adjusted final response rate was 9.9% (8.2% of the total original list.) The margin of error for the employer survey results is plus or minus 3.0 percentage points.

Employee Survey

All 1,039 employers that participated in the business survey were asked if they would allow their employees to participate in the employee survey, 389 (40%) agreed to allow their employees to participate. These company representatives were given two options for implementing the survey, they could share an email invitation to complete the survey online and/or request paper surveys, which were mailed to the representative along with postage-paid return envelopes for the employees to return completed surveys directly to NRC. A total of 353 completed employee surveys were received from 63 private employers, 183 from 5 locations/divisions from the City of Richardson and another 14 from employees who did not specify whom their employer was. These 64 specified employers represented 6% of those who agreed to let their employees be surveyed. According to their employer survey results and the InfoUSA database (for the City of Richardson), those 64 employers employed about 4,310 employees, for an approximate response rate of 12%.

Data Analysis and Reporting

While every effort was made to get as many responses from a group as representative as possible of the target population, some individuals or entities were more or less likely to respond to a survey. For the resident and employer surveys, data from the Census or the InfoUSA database could be examined to see if there were certain subgroups that were more or less likely to respond than others.

For the resident survey, the demographic profile from the study area Census block groups compared to the demographic profile of survey respondents. As is usual for such surveys, younger respondents and respondents who were not White or Anglo were underrepresented. Thus, the survey responses were statistically adjusted (“weighted”) to give more weight to those who were underrepresented and less weight to those who were overrepresented.

For the employer survey, a comparison could be made of the characteristics of businesses in the entire InfoUSA database to those employers who completed the survey. Few significant differences were found between the distribution of business characteristics in the InfoUSA data and those of this survey, so the employer survey data were not weighted. The employee survey results were also not weighted, as there were not norms for employee characteristics, and since the method of contacting employees meant that it was difficult to know which employees did and did not respond.

For most results in this report, frequency distributions (the percent of respondents giving each possible response to a particular question) and averages are presented in the body of the report. For some questions, respondents were permitted to select multiple responses. When the total exceeds 100% in a table for a multiple response question, it is because some respondents are counted in multiple categories. When a table for a question that only permitted a single response does not total to 100%, it is due to the routine practice of percentages being rounded to the nearest whole number.

The report first presents results from each group in graphical manner organized by topic. A complete tabular set of responses to each survey question ordered by question number can be found in *Appendices A, B and C*. There were several questions to which respondents could give “other” answers in their own words. These responses were examined and classified into new broad categories or added to existing categories. The categorized and numeric responses are included in the tables of responses, while the verbatim responses themselves are found in their own section in the same appendices.

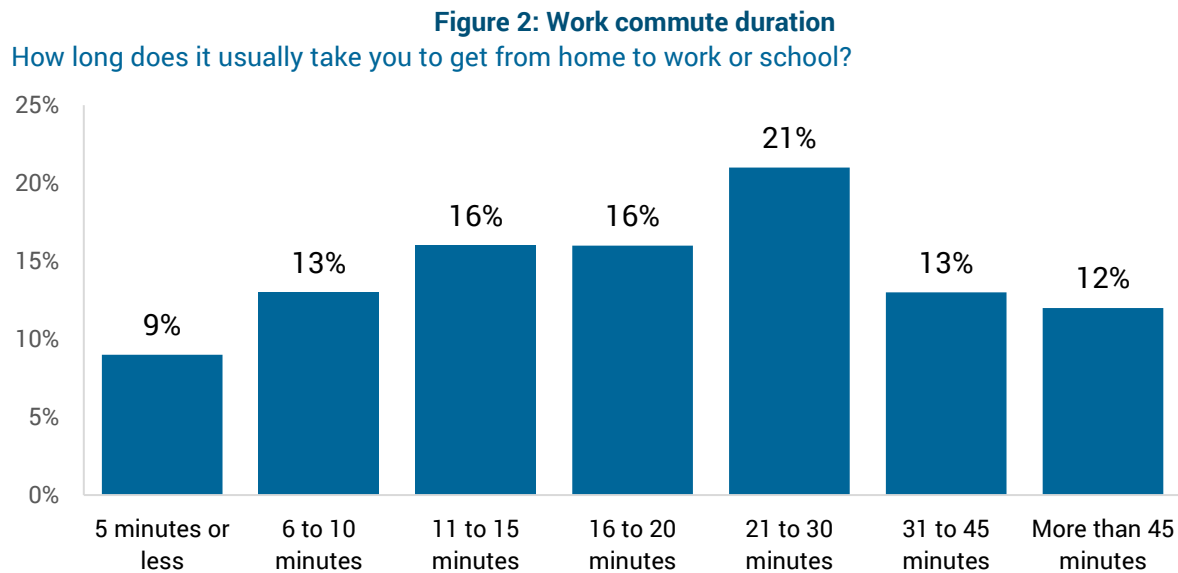
A. Resident Survey Results

A total of 1,540 completed surveys or interviews were obtained from residents within the study area. The survey results provide information about residents’ travel patterns and behaviors, their location preferences, their housing situation and demographic profile. Key findings were examined by respondent and station area characteristics.

A.1. Travel Patterns and Behaviors

Employed residents were asked about how long it usually takes them to get from home to work or school. About one-third of respondents (38%) said it takes them 15 minutes or less to get from home to work or school. At the other extreme, one-quarter of residents said it takes more than 30 minutes to get from home to their work or school.

The average duration of the work commute for employed residents was about 27 minutes (see Table 41 in *Appendix A: Responses to Resident Survey*).



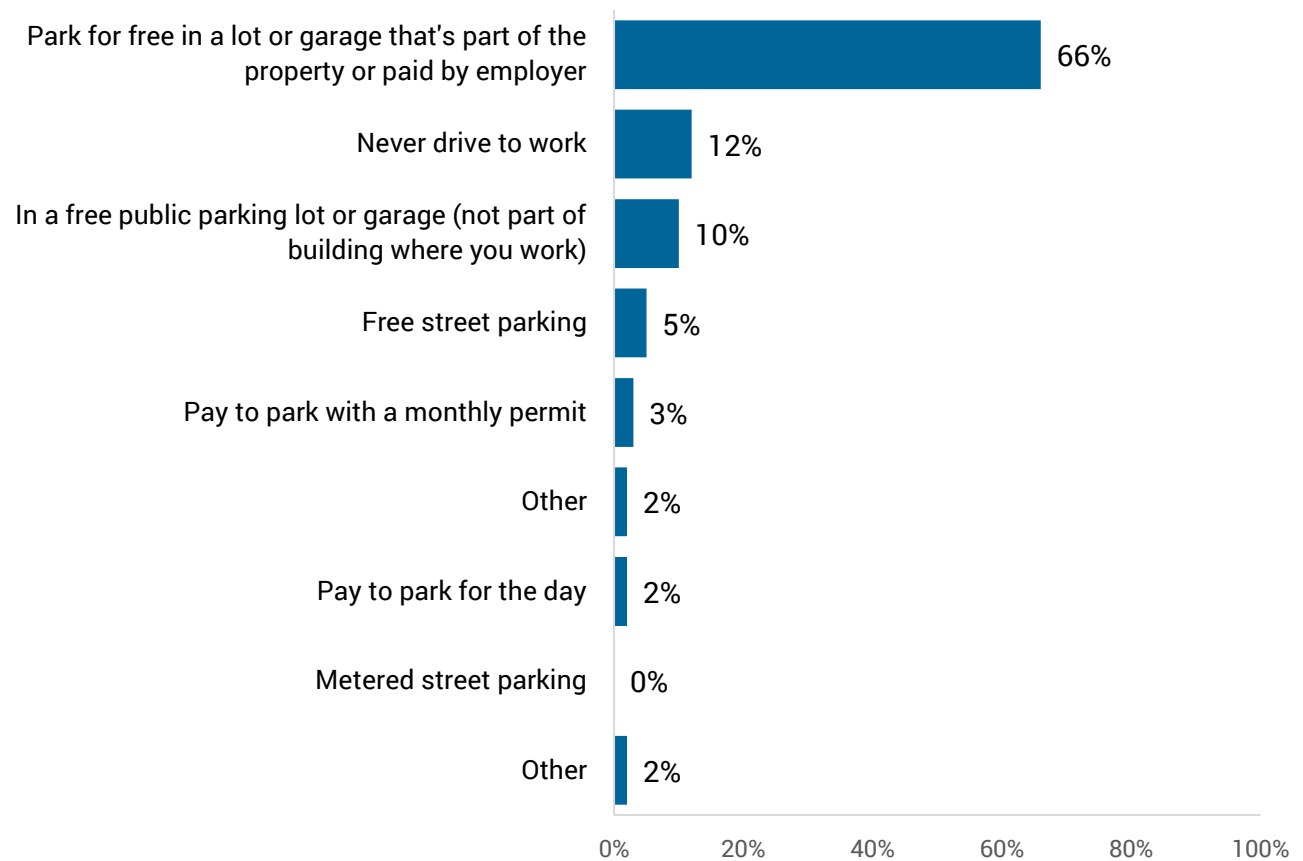
Most respondents reported being able to park for free when they drive to work for their commute; only about 5% indicate they pay to park. About two-thirds of respondents who drive to work generally park for free in a lot or garage that is part of the property or paid by the employee, or that they park in a free public parking lot or garage separate from the building where they work .

One in 10 residents said that they never drive to work (12%)

Those who pay to park for the day pay about \$8 per day on average, while those who pay per month pay about \$71 per month (see Table 56 in *Appendix A: Responses to Resident Survey*).

Figure 3: Type of parking used when drive to work

If you drive to work, where do you typically park?



Employed residents reported the various modes they had used to get to and from work or school each day of the previous week. Most respondents (81%) drove alone at least once in the previous week (Figure 4). Thirteen percent of respondents reported having taken a bus, train or light rail to get to work or school on one or more days of the week prior to the survey (Figure 5).

Figure 4: Modal share of work commute

Thinking about last week, how did you get to and from work or school each day? Please choose all the modes you used each day. Figure shows the percent of respondents who reported using each mode for the work commute at least once.

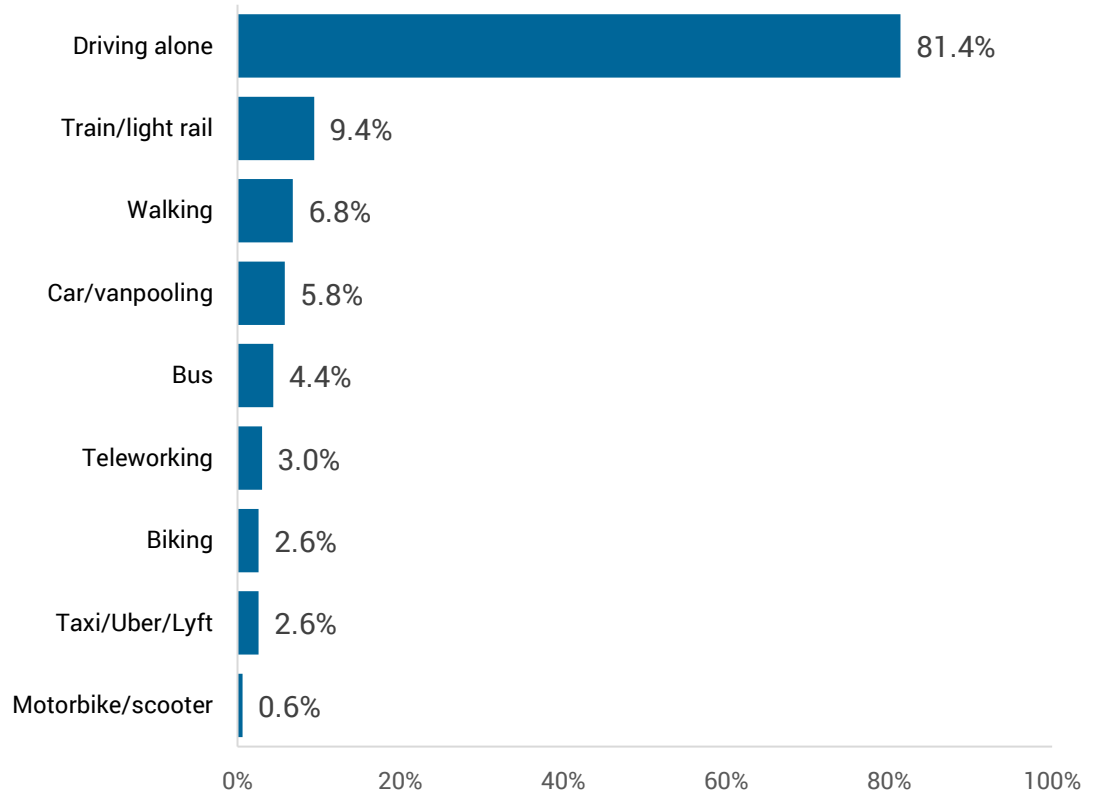
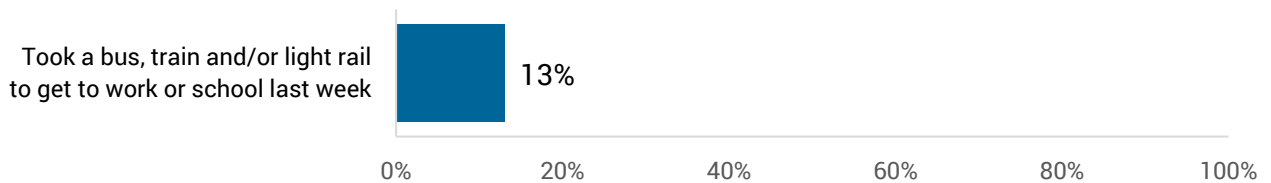


Figure 5: Percent of respondents who said they took a bus, train and/or light rail to get to work or school on any day last week



Survey respondents rated how much of a barrier a list of 19 possible reasons were for not using DART more or at all for their commute to or from work or school (Figure 6 on the next page). They were able to rate each as “not a reason”, “small reason”, “big reason”, or “very big reason”.

The most common reasons cited for not using DART were needing a car; just over half (54%) said needing their car before or after work was a very big or big reason for not using DART more, while nearly half (46%) cited needing their car during the day while at work.

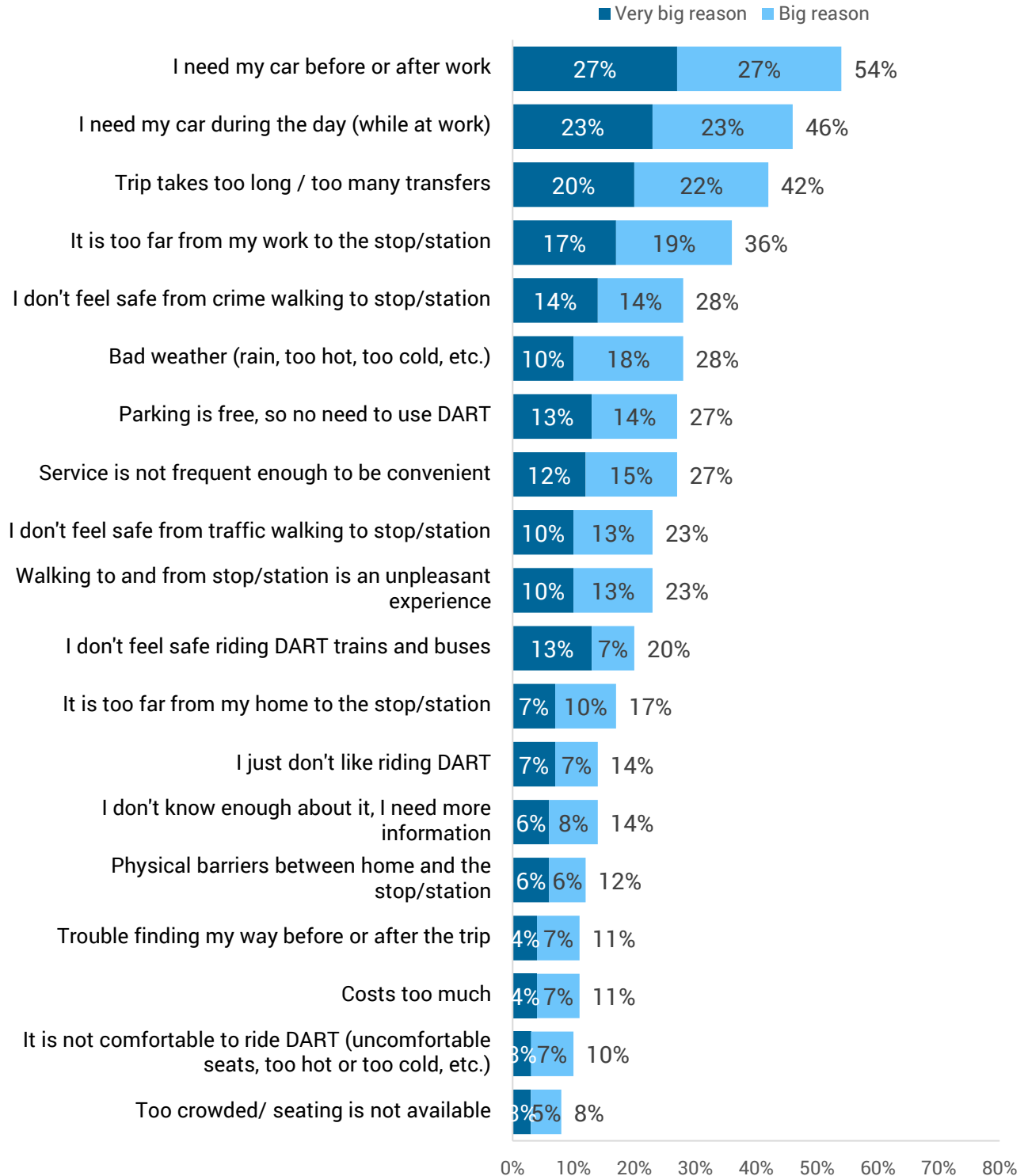
Feeling like DART trips take too long or have too many transfers were seen as barriers to use by about 4 in 10 respondents.

About one-third (36%) felt that the distance from their work to the DART station was too far for them to use DART.

One in 10 respondents indicated that physical barriers between home and the DART stop impacted their DART usage (12%).

Figure 6: Reasons for not using DART or using it more often

How much is each of the following a reason you do not use DART or do not use it more often for your commute to or from work or school?

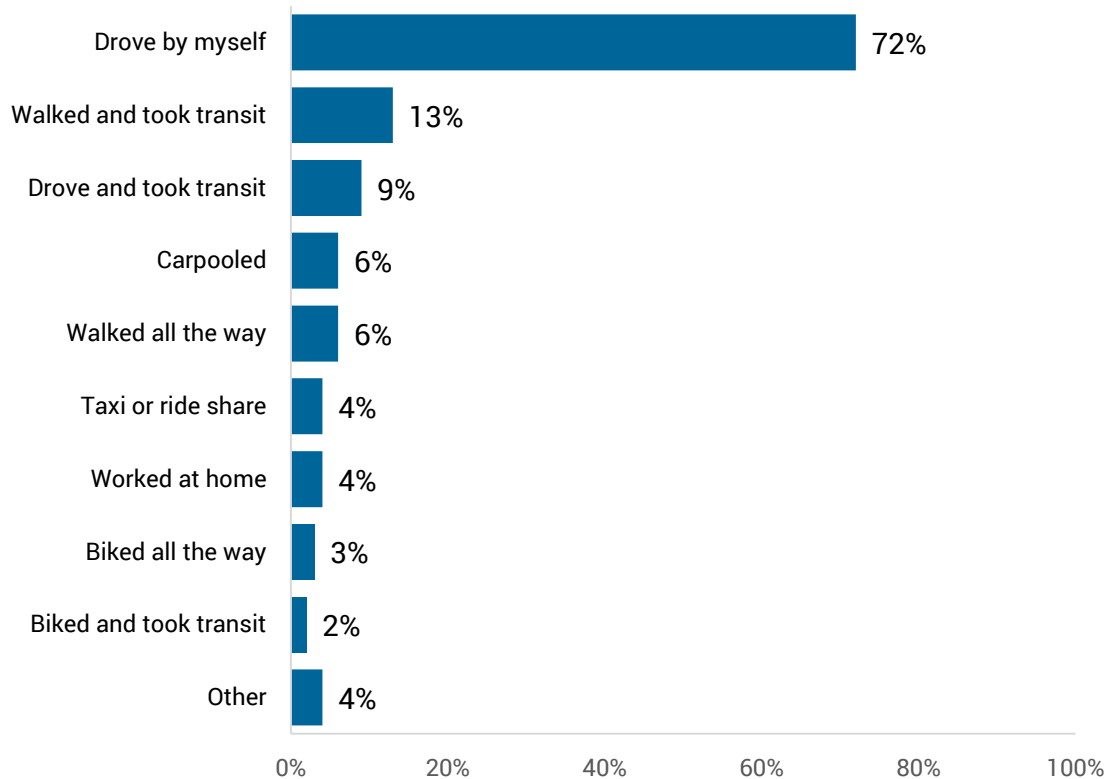


Residents were asked to describe the travel modes they used for their “typical” work commute at their previous place of residence. About 7 in 10 survey respondents reported that they drove by themselves as part of their typical commute. One in 10 walked and took transit (13%) or drove and took transit (9%). Six percent or less reported using any of the other travel modes to get to and from work at their prior residence.

When compared to the reported modal share of the work commute in the week previous to completing the survey, these results seem to indicate that respondents were less likely to have used a private vehicle for the work commute at their previous residence and more likely to use alternate modes, but it is probable that the difference in the way the modal share of the work commute was assessed accounts for the difference. For their current commute, respondents were asked to report their actual behavior the previous week (see Figure 4 on page 16), which likely led to more accurate responses. When asked about “typical” activities, survey participants are likely to overestimate (even subconsciously) behaviors they believe to more “socially desirable” and this may account for the differences seen. In addition, for about two-thirds of respondents who had moved to their current home from another location, their previous residence had been within one of the zip codes of the study area and thus near transit (see Figure 20 on page 35).

Figure 7: Modes used for work commute at previous location

At your most recent previous home, what mode(s) did you use on your typical commute?
 Percentages add to more than 100% as respondents could choose more than one response



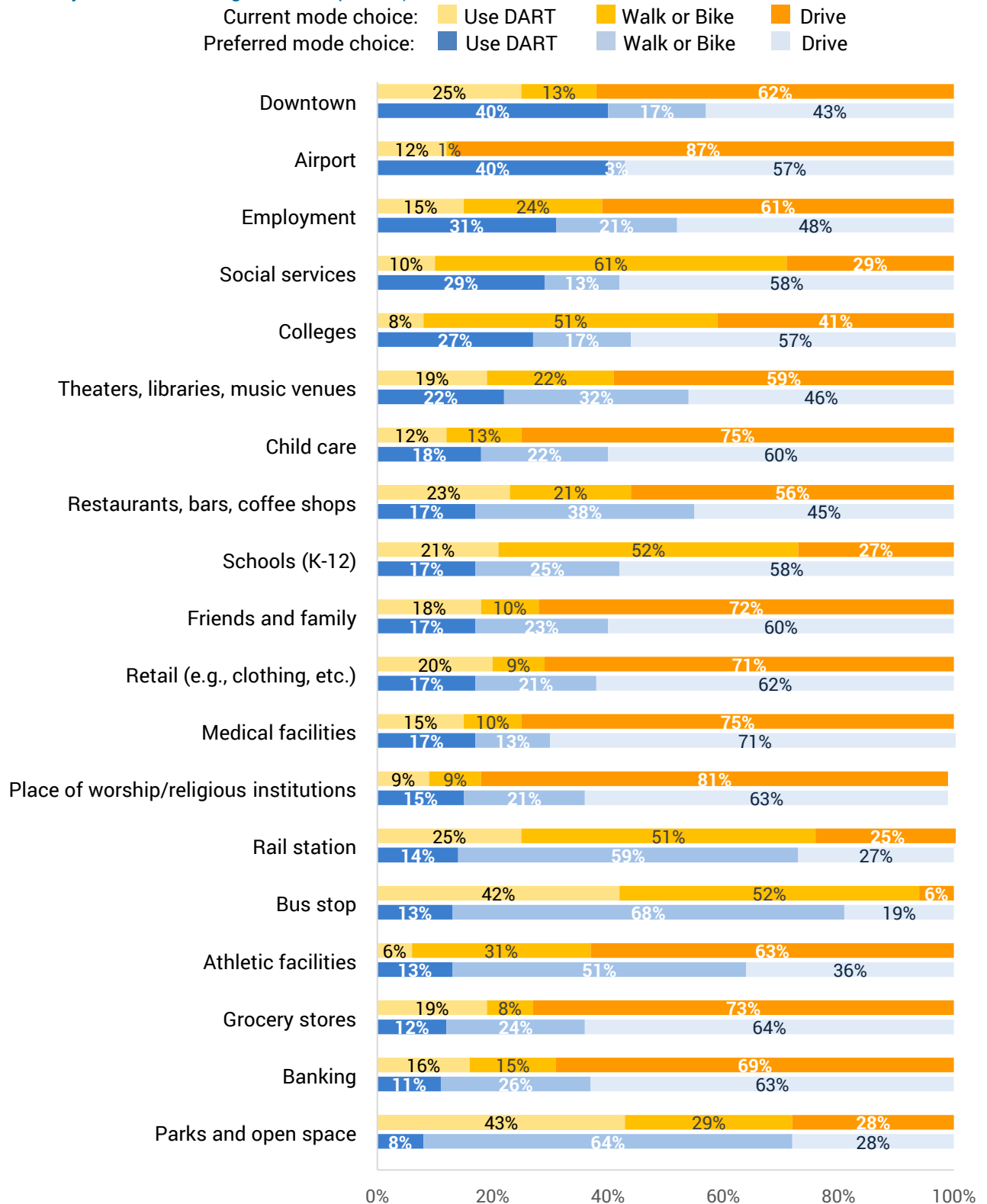
Survey participants were asked several questions about a variety of types of businesses or places they would likely need or want to visit. They were asked whether these amenities were within a half-mile of their home and whether they wanted them to be closer (this is discussed starting on page 32), and also how they get to those places currently and what modes they might prefer to use to visit them. In addition to choosing their current and preferred mode for each type of place (drive, walk or bike, or use DART), they could also indicate if they “never go” to these places (see Table 17 and Table 18 in *Appendix A: Responses to Resident Survey*).

Figure 8 shows the current mode choice and the preferred mode choice of respondents (excluding those indicating that they “never go” to these places). As respondents could choose only one current mode and one preferred mode, the percent choosing each adds to 100%. The yellow and red bars show the current mode choice, while the blue bars show the preferred choice.

For about half of the listed places, the proportion of residents who would prefer to use DART was greater than the proportion who currently do. These places tend to be at the top half of the graph. However, for the other half of destinations (including visiting restaurants, bars and coffee shop; and grocery stores), a smaller proportion desired to use DART. As it turns out, though, this is because a greater proportion desired to be able to walk or bike to these destinations, resulting in fewer respondents currently driving than would prefer to do so.

Figure 8: Actual and preferred travel modes to get to various places

3) When you go to each of these places, how do you currently get there? 4) And, if you had your choice, how would you like to get there? (The “never go” responses were not included; these are of the respondents who currently or would like to go to these places.)



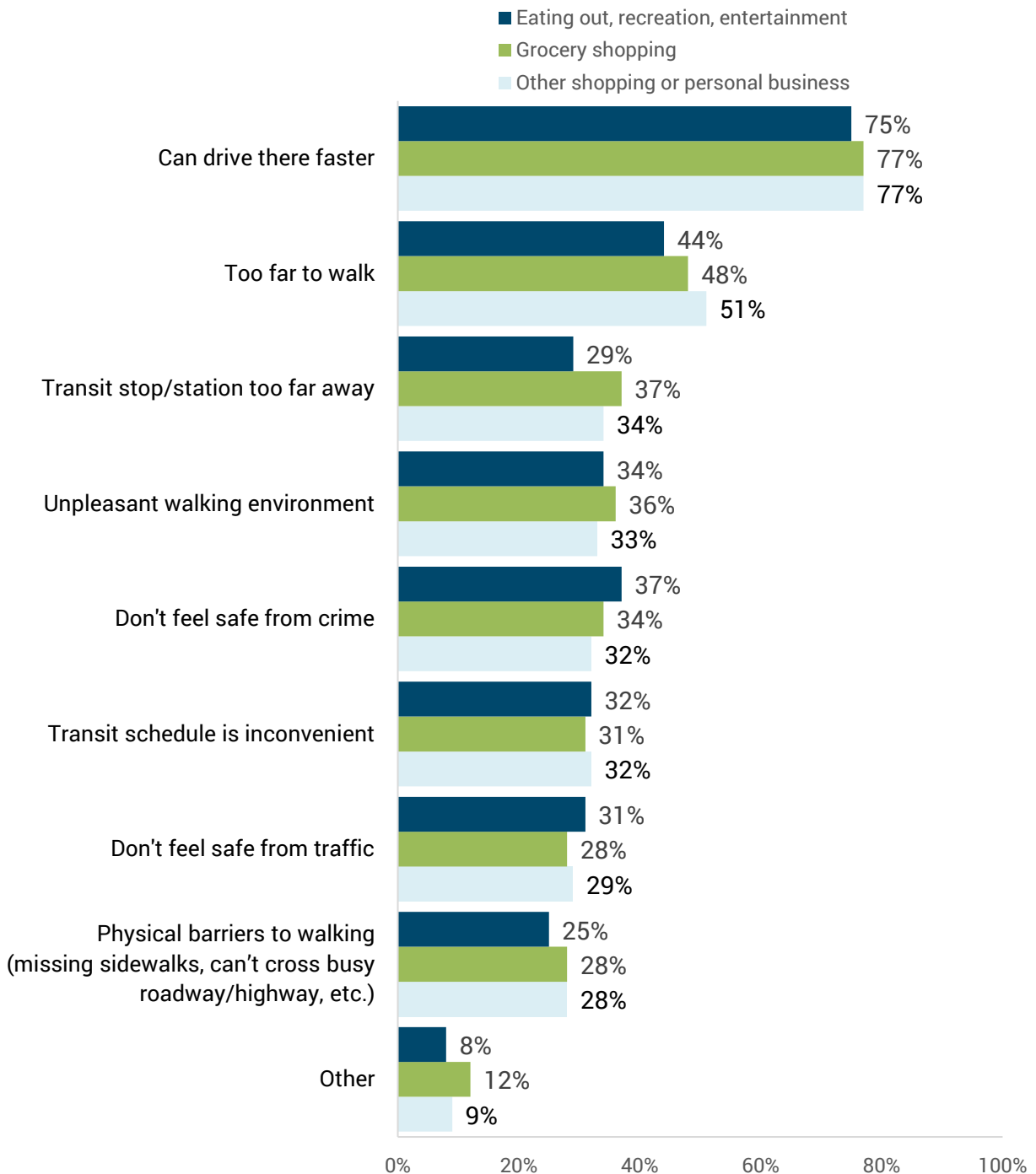
Residents were provided the opportunity to indicate why they did not use DART or walk for various types of trips and errands. Generally, for each type of trip (eating out/recreation, grocery shopping and other shopping or personal business), the proportion of respondents indicating each reason for not walking or using transit was very similar (Figure 9).

The most common response was that it was faster to drive than to walk or use transit; this was the explanation for about three-quarters of respondents. For all three types of trips, about half of respondents said it was too far to walk. The proportion was a little less for eating out, recreation and entertainment (44%), but for other shopping/personal business trips, 51% thought it was too far. About 3 in 10 respondents said the transit stop/station was too far away to use DART for the trips and 3 in 10 considered the transit schedule inconvenient.

Safety from crime, safety from traffic and having an unpleasant walking environment were also each cited by about 3 in 10 respondents. Physical barriers to walking, such as missing sidewalks or being unable to cross busy roads or highways was an obstacle for about one-quarter of respondents.

Figure 9: Reasons do not use DART or walk for various types of trips

For each of the following types of trips, what are reasons you do not use DART or walk, or do not use DART or walk more often? (Check all the reasons that apply for each type of trip)



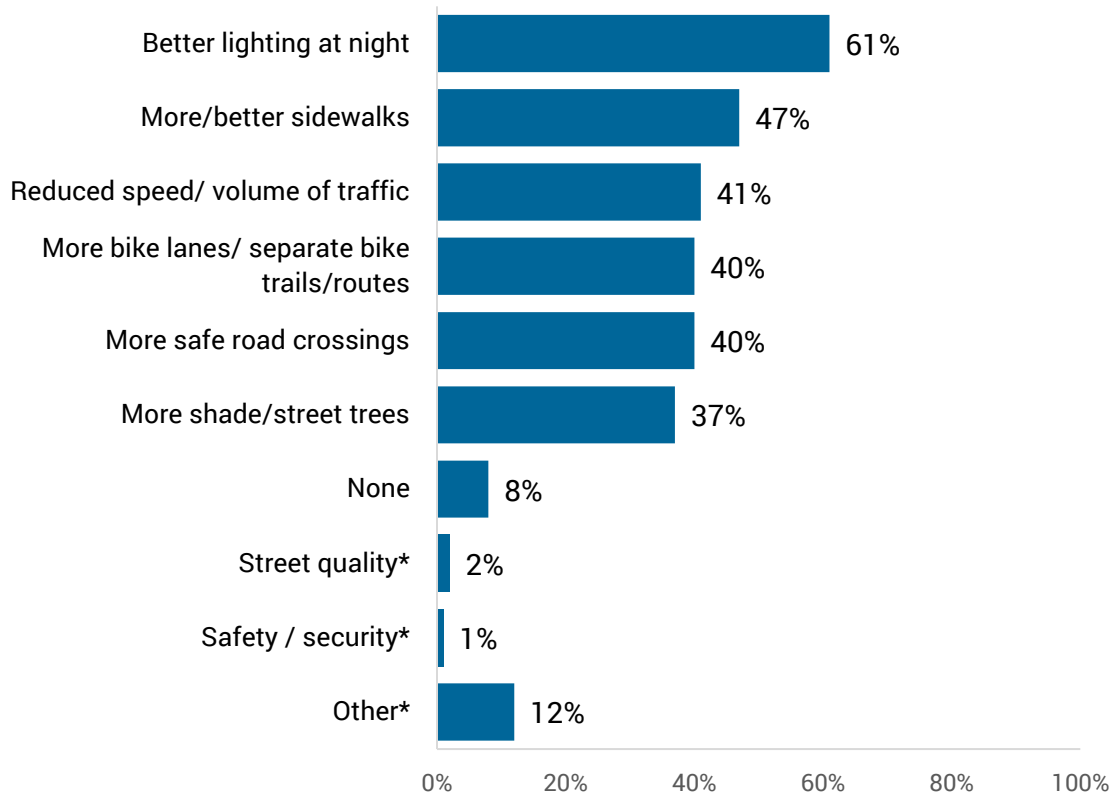
*The other responses to this question are shown as respondents wrote them in the section Verbatim Responses to "Other" Responses starting on page 220 and the categories into which they are classified are provided in Table 38.

Surveyed residents were asked whether the implementation of various street improvements might encourage or enable them to walk or bike more than they currently do. Only about 1 in 10 respondents (8%) said that there no street improvements that might encourage them to bike or walk more often.

About 6 in 10 indicated that better lighting at night might aid them in walking or biking more often. (This survey was conducted September through February, when days are shorter and nights longer.)

All the options were presented would encourage at least some respondents to consider walking or biking more often.

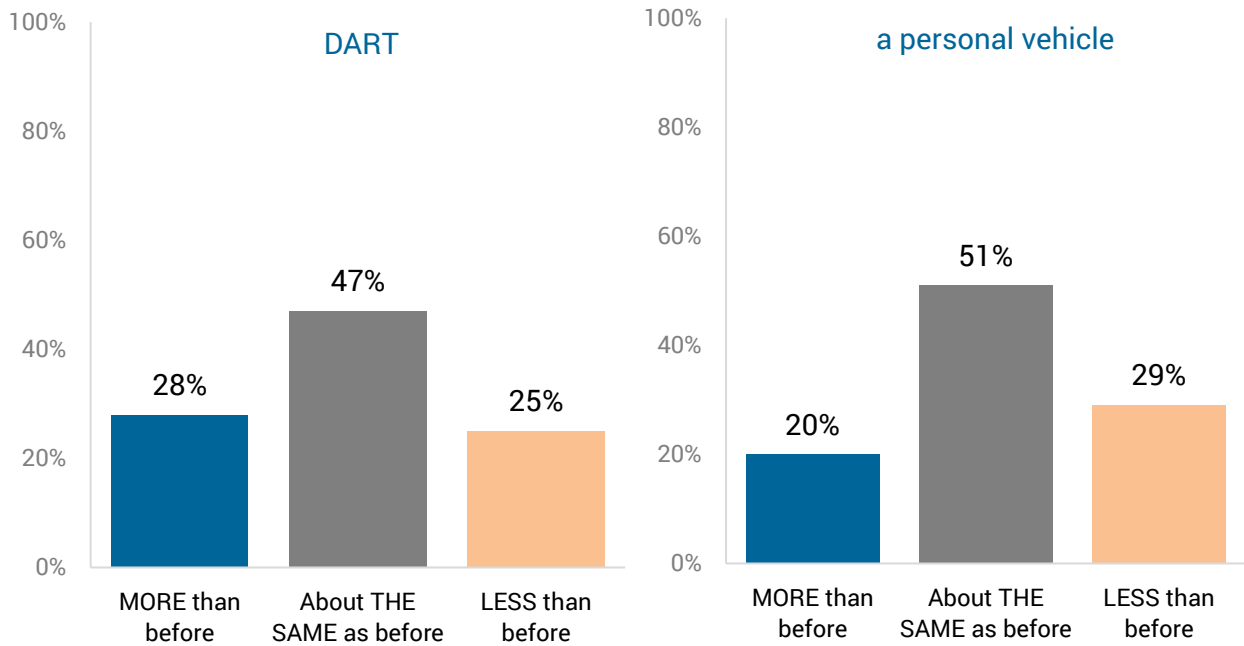
Figure 10: Street improvements that might increase likelihood of walking or biking
 What street improvements in your neighborhood might better encourage or enable you to walk or bike more? Percentages add to more than 100% as respondents could choose more than one response



*The other responses to this question, including those coded into the categories above, are shown as respondents wrote them in the section Verbatim Responses to "Other" Responses starting on page 191.

Survey respondents evaluated their use of DART and their personal vehicle since moving to their current location. A slightly higher proportion reported using DART more often (28%) since moving than reported using it less often (25%). Likewise, a somewhat greater proportion (29%) indicated they now use their personal vehicle less often than reported using it more often (20%).

Figure 11: Increases or decreases in the use of DART and personal vehicle travel
 Since moving to your current location would you say you use



Those who said they use DART or a private vehicle more or less since they have moved to their current location were asked a follow up question about why, which they could answer in their own words. Those verbatim answers can be found in *Appendix A: Responses to Resident Survey*. These answers were examined and classified into common categories of responses. The most common reasons given for why respondents were using DART more than before is that it is close to their school or home, it is convenient or they lack other personal transportation (see Table 29 in *Appendix A: Responses to Resident Survey*). The most common explanations for why they were using DART less was that they prefer to use their own personal transportation, they don't need to use DART any more or a lack of accessibility to DART (see Table 30 in *Appendix A: Responses to Resident Survey*).

The most common reasons respondents said they were using a personal vehicle more is that the location of their job changed or they live far away from work, they moved to or live in an area that is further away from places they want to go, and that they prefer to use their personal vehicle (see Table 32 in *Appendix A: Responses to Resident Survey*). Those who said they were using their personal vehicle less attributed it to living close to things (like grocery stores), that transit is more accessible in their new location or that they now live close to work or the location of the job changed (see Table 33 in *Appendix A: Responses to Resident Survey*).

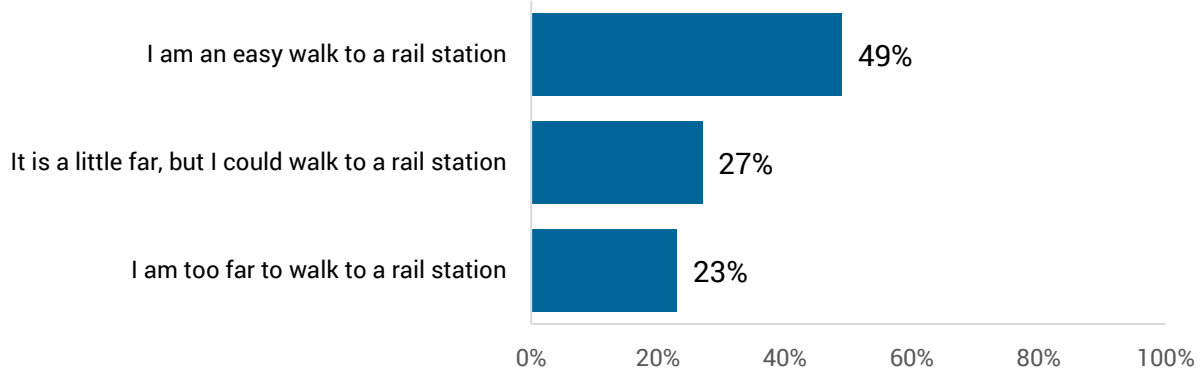
A.2. Travel-related Respondent Characteristics

Shown in Figure 12 below, about half of residents (49%) said that their home was an easy walk to a DART station, one-quarter said it was a little far but they could walk and another one-quarter said that they were too far to walk to a rail station.

When looking at respondents’ perceived distance to a DART station by their actual distance as measured by their address, residents who lived in a quarter or half-mile radius to the nearest station were more likely to report that they had an easy walk to DART compared to those who had homes farther away (see Table 114 in *Appendix A: Responses to Resident Survey*). Similarly, those who lived farthest from a DART station (a one-mile radius) were more likely to report that they were a little too far but could walk or that they were too far to walk to a rail station.

Figure 12: Perceived distance to a DART station

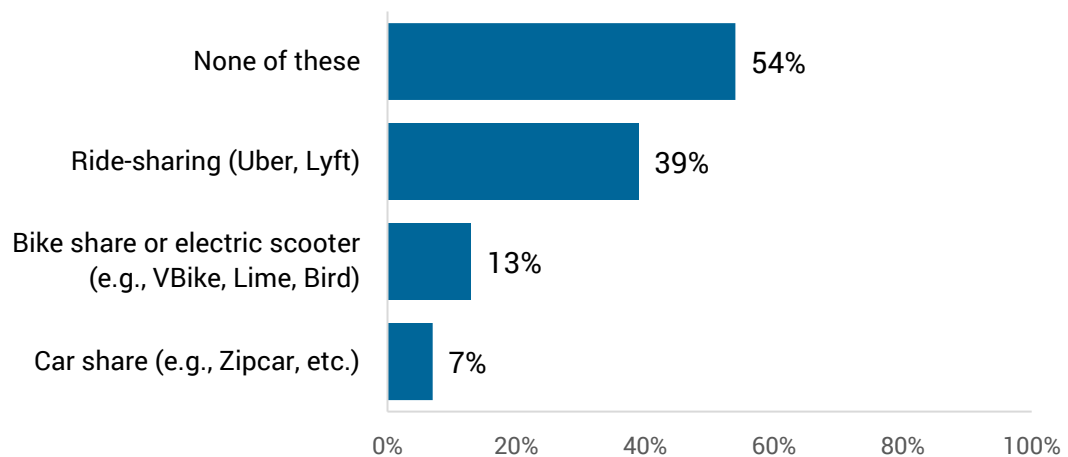
Which best describes how close your home is to a DART station?



About half of residents reported not using any of the on-demand transportation services. It should be noted not all services are available at all DART stations, such as scooters which are primarily found in central Dallas.

Figure 13: Participation in on-demand transportation services

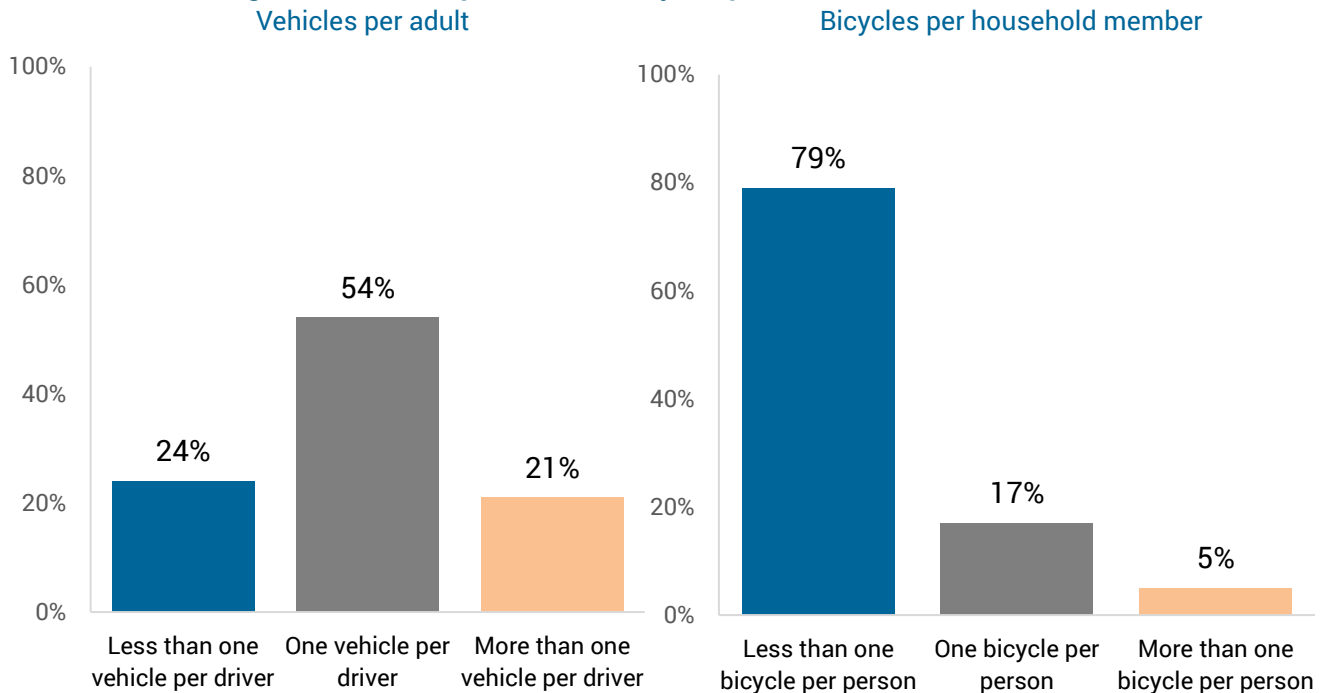
Which of the following on-demand services do you use?



Those completing the survey were asked how many total persons lived in their household, and how many of those were adults and how many were children. They were also asked how many vehicles and how many bicycles their household owned. About 1 in 10 respondent households had no vehicles and about 6 in 10 had no bicycles (see Table 58 in *Appendix A: Responses to Resident Survey*). On average, resident respondents had 0.8 bicycles and 1.7 vehicles per household (see Table 59).

A metric was created comparing the number of adults in the household (with the assumption that all the adults were drivers) to the number of vehicles. Just over half of respondents were in households with exactly one vehicle per adult, with 24% having fewer than one vehicle per driver and 21% having more than one vehicle per driver. A similar metric was created for bicycles, but as children also ride bicycles, the comparison was of all household members to the total number of bicycles. Eight in 10 respondents were in households with less than one bicycle per person, and 2 in 10 had one or more bicycles per person.

Figure 14: Vehicles per adult and bicycles per household member

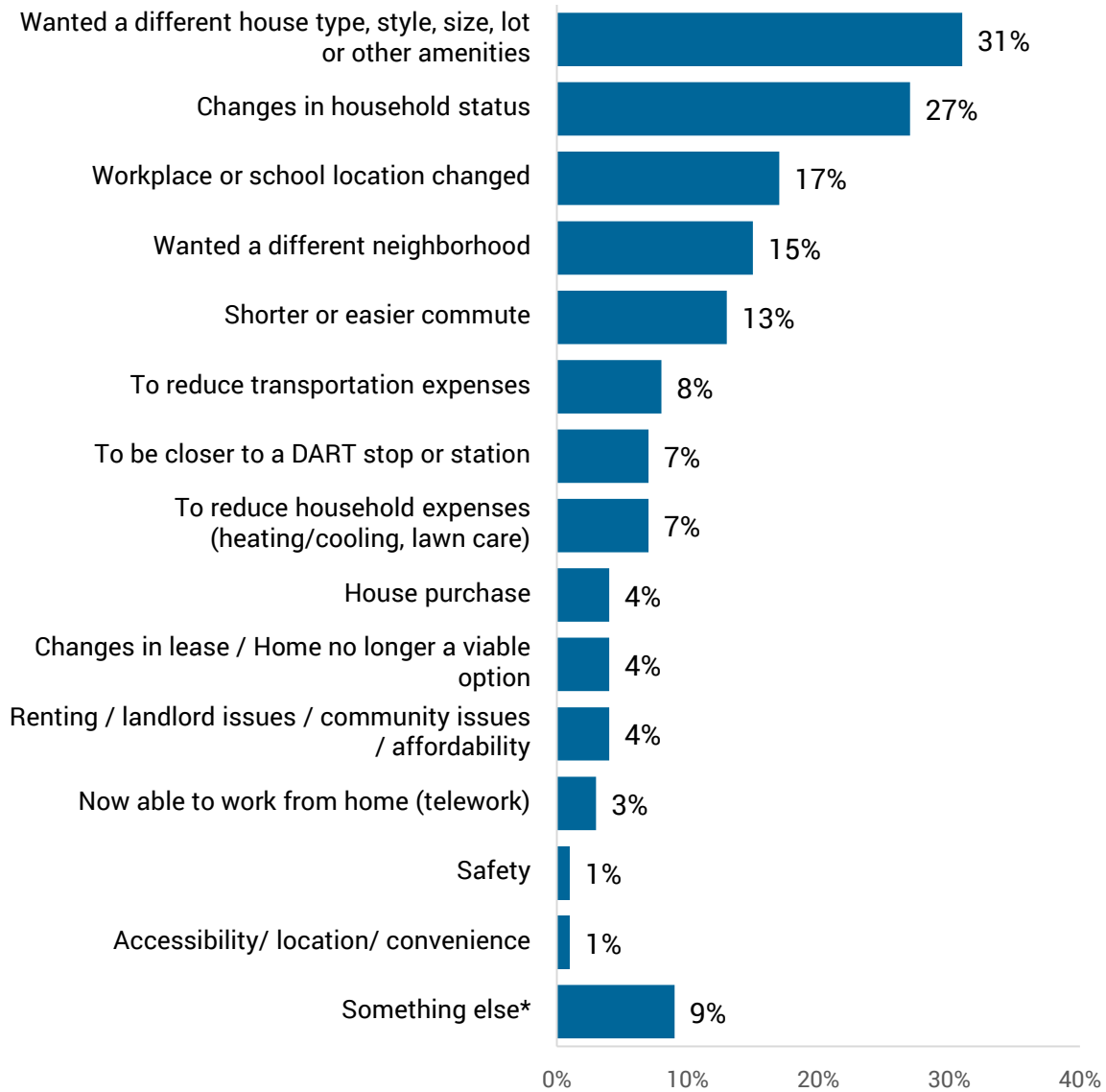


A.3. Location Preferences

Residents were asked about their motivations for moving from their previous home to their current one and could select from a list all that applied to their situation. The most frequently cited reasons for the move were changes in household status (e.g., marriage, divorce, etc.) or desiring a different type of house. Fewer than 1 in 10 respondents indicated that being closer to a DART stop or station was a reason for making their move into the study area. However, this may have been a low priority because about two-thirds of residents had moved from another house in the same area (see Figure 20 on page 35).

Figure 15: Reasons moved from last home to current home

Please check all of the reasons that you moved from your last home to your current home. Percentages add to more than 100% as respondents could choose more than one response



*Other responses to this question, including those coded into the categories above, are shown as respondents wrote them in the section Verbatim Responses to "Other" Responses starting on page 168.

Those participating in the survey were also presented with a longer list of 36 factors that could play an important role in the decision process to move to a specific home. They were asked how important each of these considerations was when they were looking for a place to live. Figure 16 on the next page shows the priority given by residents to this list of factors.

Primacy was given to the cost of housing and a low crime rate, considered essential by 8 in 10 respondents. However, the item of next highest priority was having sidewalks throughout the neighborhood, indicating that walkability of the neighborhood was a key aspect of interest to residents. (This factor was considered essential by over half of respondents and over 9 in 10 felt it was at least somewhat important.) It is not known whether they were thinking more of walking for exercise and recreation rather than transportation, however, respondents did place significant weight on other factors more related to a suburban environment, such as a quiet neighborhood and easy access to the freeway. Relatively high importance was also placed on having certain amenities within walking distance such as restaurants, coffee shops and bars, food or grocery shopping, and other shopping.

About equal emphasis was given to having abundant parking and having easy access to DART service, with about a third of respondents rating each of these as essential and three-quarters considering these items at least somewhat important. While to TOD planners, these seem somewhat contradictory – easy access to parking generally is correlated with less transit use, while easy access to transit is often associated with greater transit use – about half of those who rated one of these items as essential also rated the other as essential. There were some respondents who felt that easy access to parking and to DART were essential (see Table 23 and Table 24 in *Appendix A: Responses to Resident Survey*).

Respondents were then asked how well their current home met the expectations they had for it (Figure 17). Encouragingly, nearly all respondents felt that their expectations for easy access to DART service was at least somewhat met; about 7 in 10 consider it very well met. However, nearly all respondents also considered their expectations for having easy access to the freeway as being met.

About 8 in 10 felt their expectations for having restaurants within walking distance were at least somewhat met. They were a little less likely to feel their expectations for having food or grocery shopping within walking distance, or other types of shopping, but about 4 in 10 did think these expectations were very well met, and about 7 in 10 felt they were at least somewhat met.

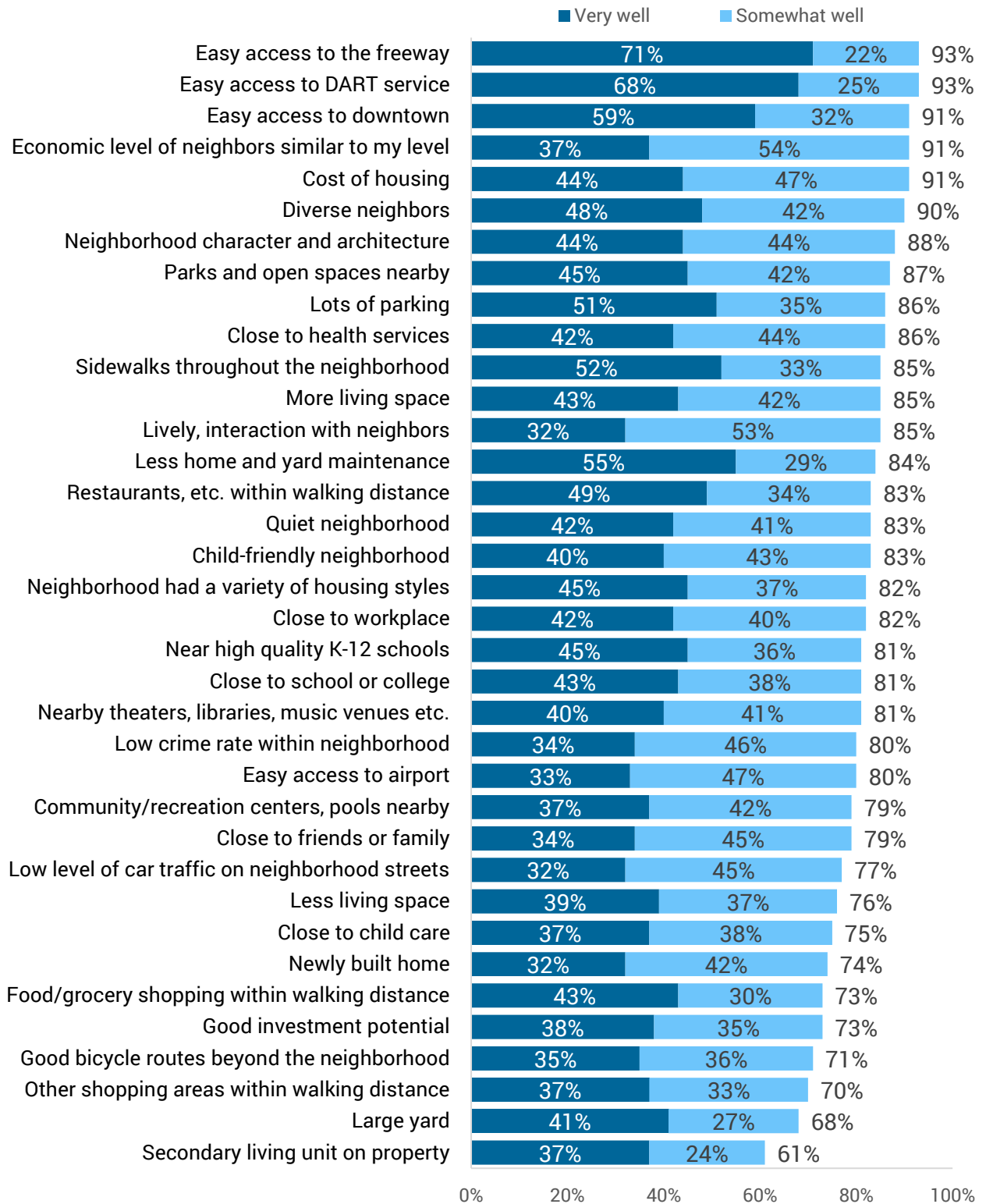
Figure 16: Factors important to decision to purchase current home

What were the factors most important to you when you were looking for a home?



Figure 17: How well current home meets expectations

How well were your expectations met?



In addition to having been asked what importance they placed on having several types of businesses within walking distance of their home, those completing the survey were also asked whether there were various types of businesses and amenities close to their home (within a half-mile or about a 10-minute walk), and whether they would like to have some of those amenities be even closer.

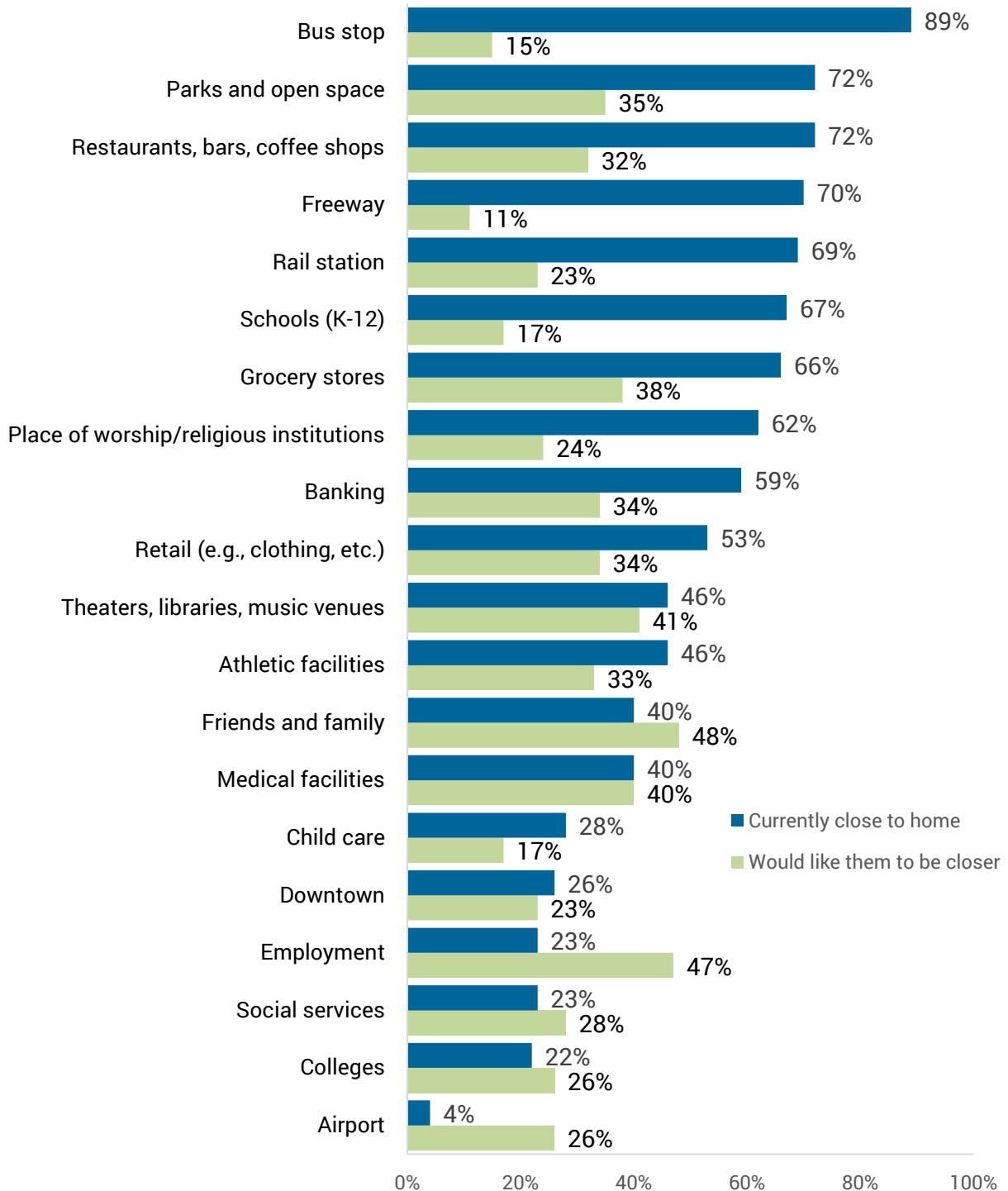
A majority noted that a bus stop (89%) or rail station (69%) was within a half-mile of their home. This indicates that for many residents access to transit, the key component of transit-oriented development, is available even though 25% or fewer use DART to access many of the other amenities and businesses (Figure 8).

About 7 in 10 residents identified restaurants, bars, and coffee shops as being within a half-mile of their home, and two-thirds reported that a grocery store was within walking distance. This likely accounts for the fact that so many respondents felt their expectations were met for being able to be within walking distance of groceries and other shopping from their home.

Only about one-quarter of residents noted that their place of employment was within walking distance of their home, while about half would like their workplace to be closer. As noted in Figure 16, however, being close to employment was 10th most important factor in home choice and as noted in Figure 15 only 13% identified moving for a shorter commute indicating that short commutes are desirable but only after more important criteria are met.

Figure 18: Perceived and desired access to services and amenities near home

We would like to know about some places that might be near your home. For each place listed, please tell us: 1) Are they currently close to your home (within a half-mile or about a 10-minute walk)? 2) Would you like them to be closer?



A.4. Housing Characteristics

The charts in this section provide detailed information on the housing characteristics of respondents. It should be noted that these results are based on the weighted dataset. For more information about the weighting, please see the survey methods appendix beginning on page 340. The bullets below offer a brief description of housing characteristics for those who reside in the study area.

- About one-third of survey respondents had been in their home 2 years or less and one-quarter had been in their current home 2 to 5 years (Figure 19). Thirteen percent had lived in their current home between 5 and 10 years and 29% had lived in their home for more than 10 years. The average length of residency in current home was about 10 years (see Table 2 in *Appendix A: Responses to Resident Survey*).
- A majority of residents had previously lived in the study area (65%, Figure 20). One in six had previously lived near other transit but not in the study area.
- Six in 10 respondents rented their homes and about 4 in 10 owned their home, about half of these with a mortgage and about half without a mortgage (Figure 21). About half of residents (51%, Figure 21) lived in an apartment or condo and roughly one-third lived in a single family house (37%).
- Roughly one-third of residents paid \$500 or less for their monthly rent, mortgage (including taxes and insurance), or for taxes and insurance (if mortgage free, Figure 26). Two in 10 respondents had monthly rent or mortgage payments between \$501 and \$1,250, and another 2 in 10 had monthly rent or mortgage payments of \$1,250 to \$2,000. An additional 2 in 10 had monthly housing payments of more than \$3,000.
- About 40% of respondents lived in a one bedroom home and half had one bathroom (Figure 22). One-third of residents lived in a two-bedroom home and a similar proportion (39%) had two bathrooms. The average number of bedrooms in respondents' homes was 1.9, while the average number of bathrooms was 1.6 (see Table 7 in *Appendix A: Responses to Resident Survey*).
- Most respondents reported having free parking at home (Figure 23). About one-third of residents said they had free unassigned parking in a garage or lot for their building (36%) or a garage attached to their home or in a driveway (33%). Respondents were classified as either having to pay for parking at home (not having checked any free parking options) or as having access to free parking. Over 9 in 10 (92%) had access to free parking, while 8% had to pay to park at home (Figure 24).
- One-quarter of respondents had free assigned spaces in a parking lot or garage, or on-street parking. Equal proportions of residents said they had one (37%) or two (36%) parking spaces in their garage or driveway, or exclusively assigned to them; only 13% reported having no parking spaces (Figure 25).

Figure 19: Length of time in current home

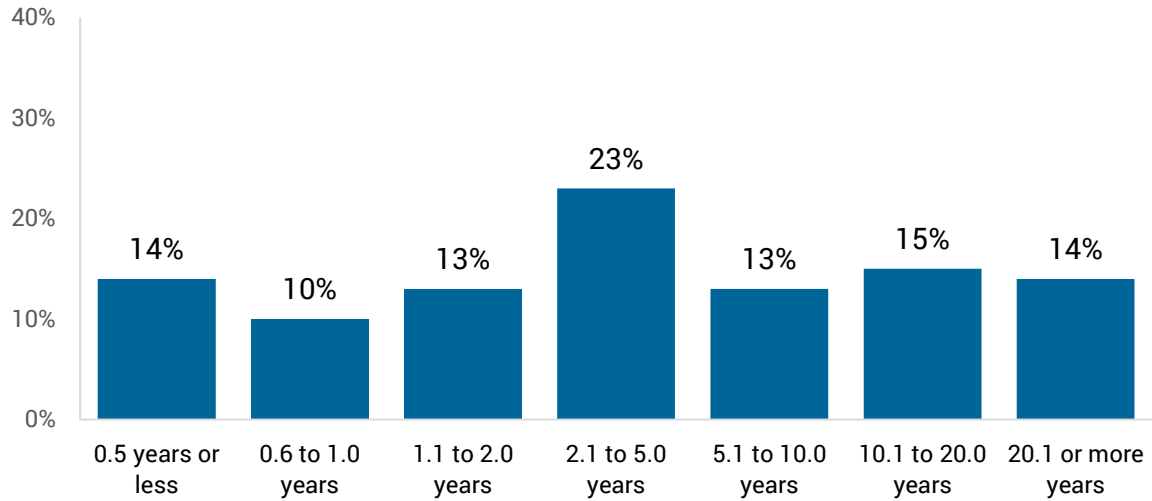


Figure 20: Previous home location

What was the zip code of the last home YOU MOVED FROM?
(Grouped into four areas)

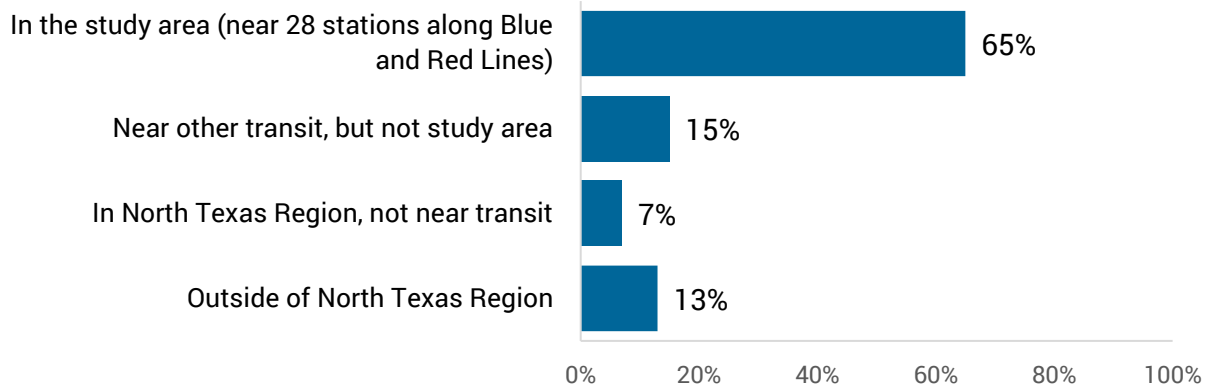


Figure 21: Housing tenure (rent or own) or type of housing unit

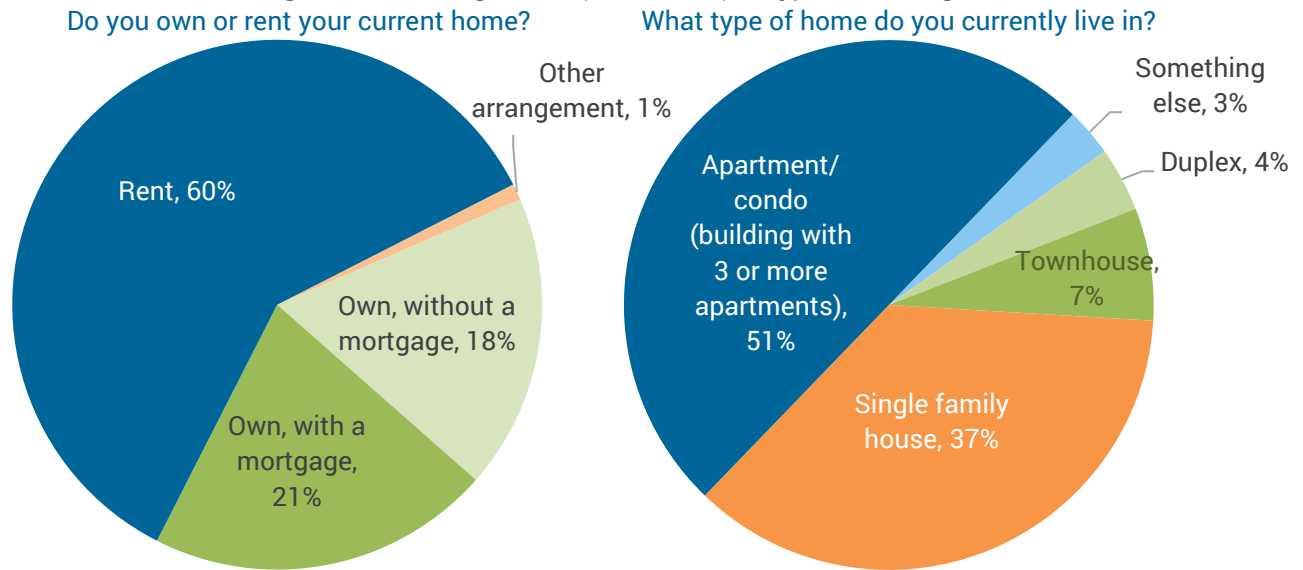


Figure 22: Number of bedrooms and bathrooms in home

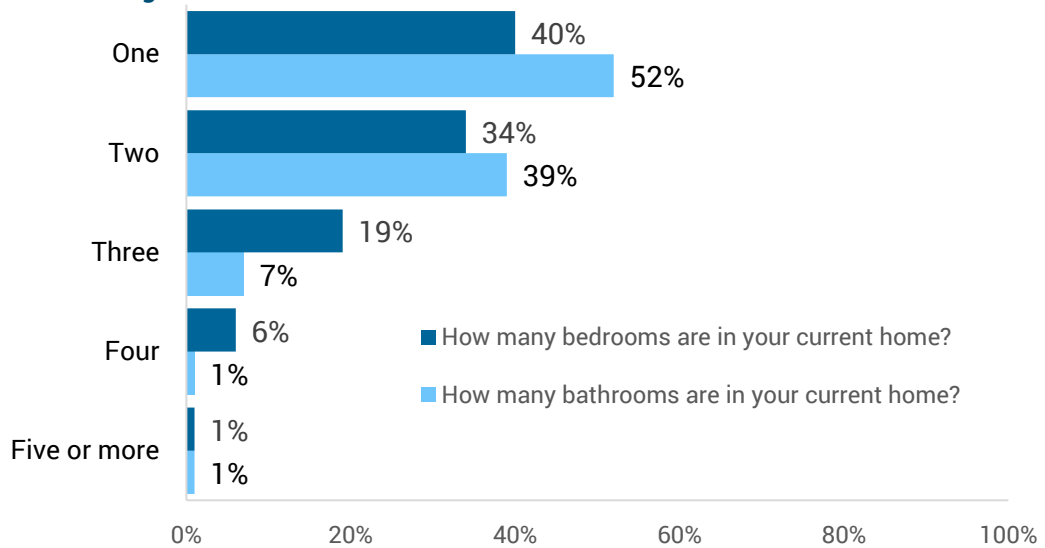


Figure 23: Type of parking in current home

What type of parking do you have for your current home? (Check all that apply.)
 Percentages add to more than 100% as respondents could choose more than one response

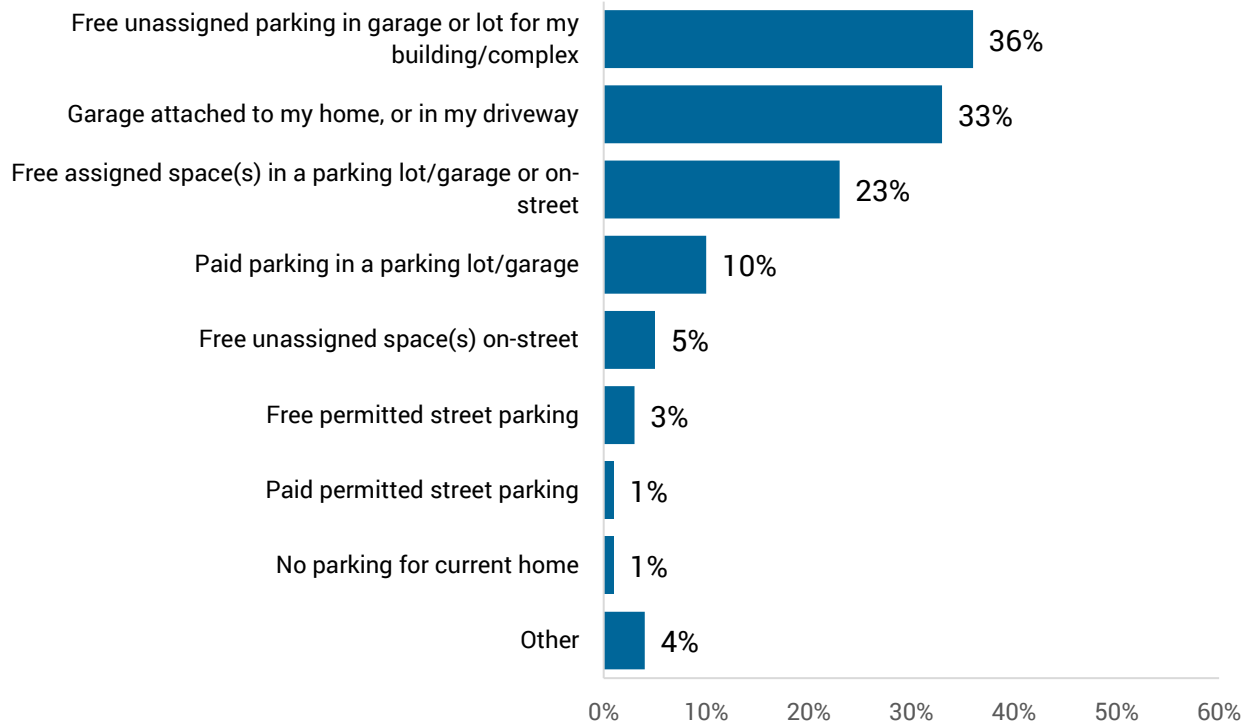


Figure 24: Access to free parking at home

Based on their responses to the question above, respondents were classified as having access to ONLY paid parking or having access to some form of free parking

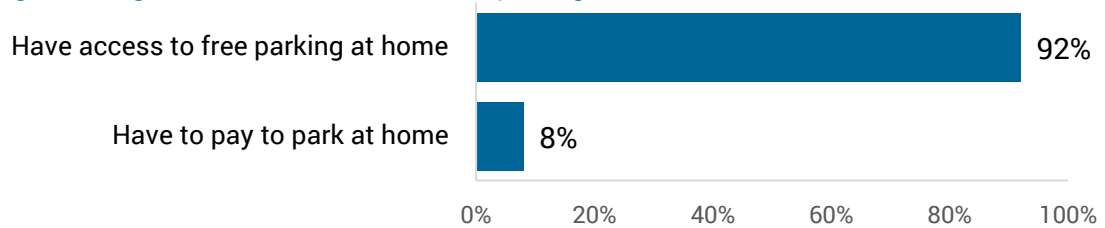


Figure 25: Number of parking spaces

How many parking spaces are in your home's garage/ driveway or assigned exclusively to your housing unit?

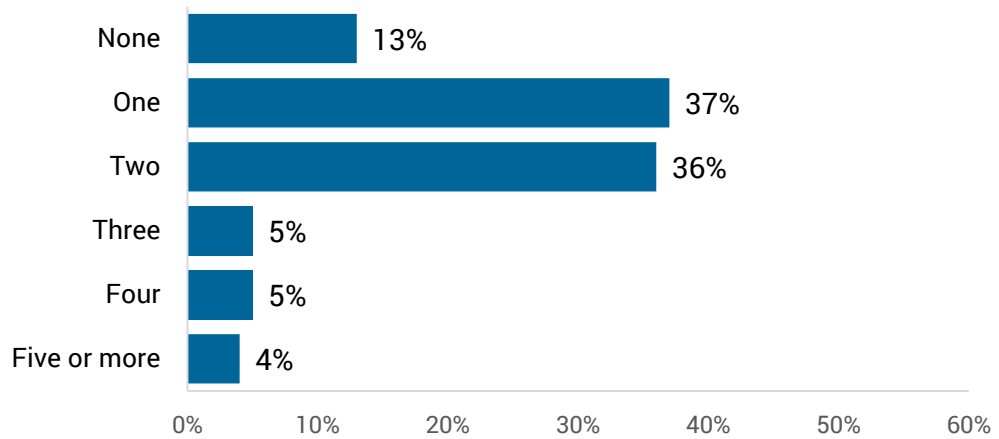
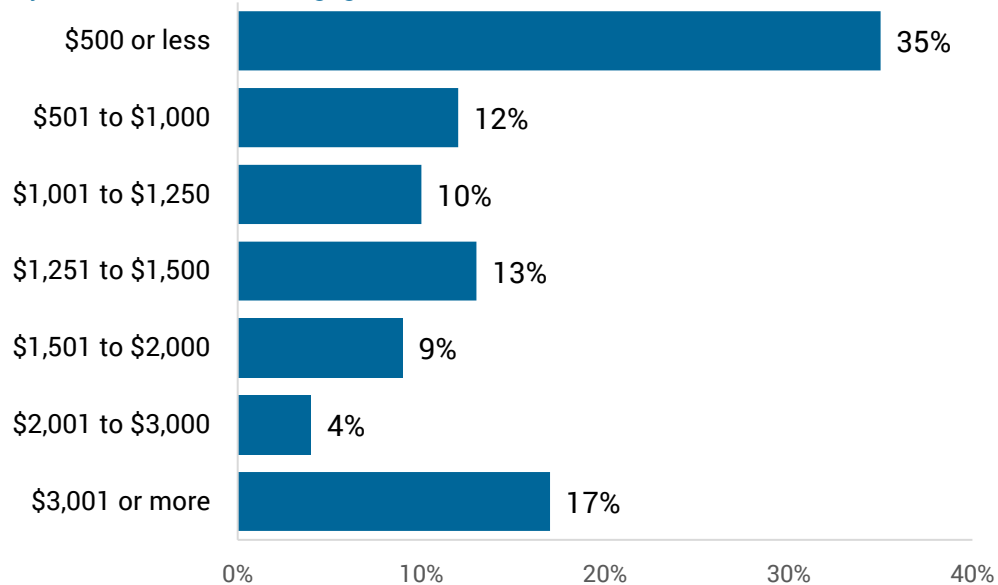


Figure 26: Amount of monthly mortgage or rent payment

About how much is your current monthly rent, mortgage payment (including taxes and insurance), or taxes and insurance if you own without a mortgage?



A.5. Demographics

The charts in this section provide detailed information on the demographic profile of resident survey respondents. It should be noted that these results are based on the weighted dataset. For more information about the weighting, please see the survey methods appendix beginning on page 340. The demographic profile of those who reside in the study area was:

- Employment status: 60% full-time workers, 9% part-time, the remainder unemployed, retired, disabled or on disability status, in college or vocational school, or homemakers (Figure 27).
- Sex and age: 51% female, 49% male
40% age 18 to 34, 31% age 35 to 54; 28% age 55 or older (Figure 29).
- Race/ethnicity: 37% Caucasian/White; 36% Hispanic, 22% African American/Black, 4% Asian/Pacific Islander, 2% Native American and 3% identified another way. (Percents add to more than 100% as respondents could choose more than one race/ethnicity category, Figure 30).
- Educational attainment: 62% had a bachelor's degree or graduate degree (Figure 28).
- Annual household income: 30% had annual household incomes of less than \$30,000; 37% had annual household incomes from \$30,000 to \$74,999 while 32% had incomes of \$75,000 or greater (Figure 32).
- The average household size was 2.2 persons, with an average 1.6 adults and 0.6 children (see Table 68 in *Appendix A: Responses to Resident Survey*). About 40% of respondent households were one-person households (see Table 67 in *Appendix A: Responses to Resident Survey*). About 3 in 10 households included at least one child, and one-quarter of households included at least one member who was age 65 or older. Nearly 2 in 10 (17%) of households included one or more persons with a hearing, sight or mobility disability (Figure 31).

Figure 27: Employment status

Which best describes your employment status? (Check all that apply)

Percentages add to more than 100% as respondents could choose more than one response

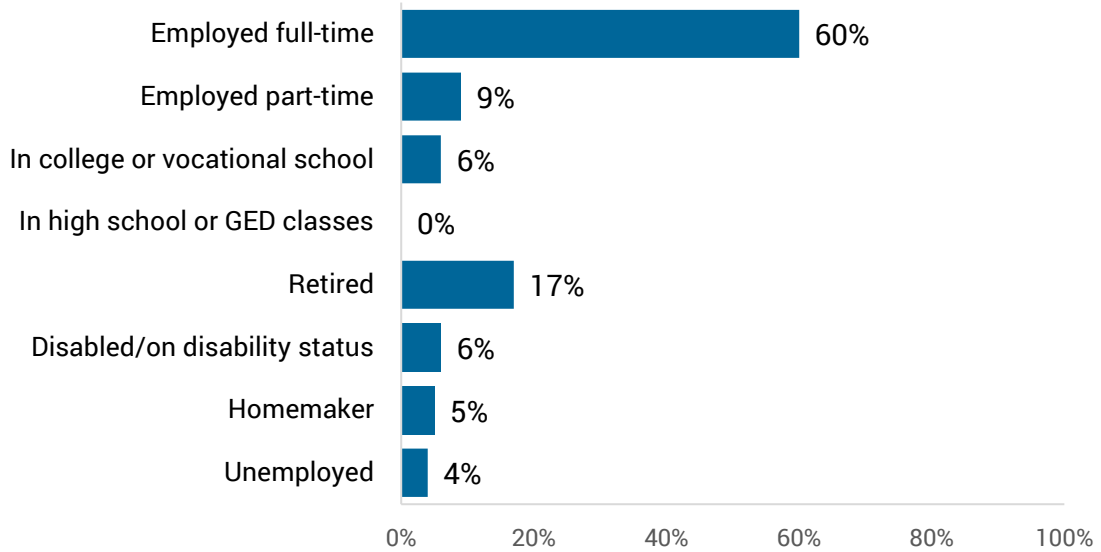


Figure 28: Respondent educational attainment

How much education have you completed?

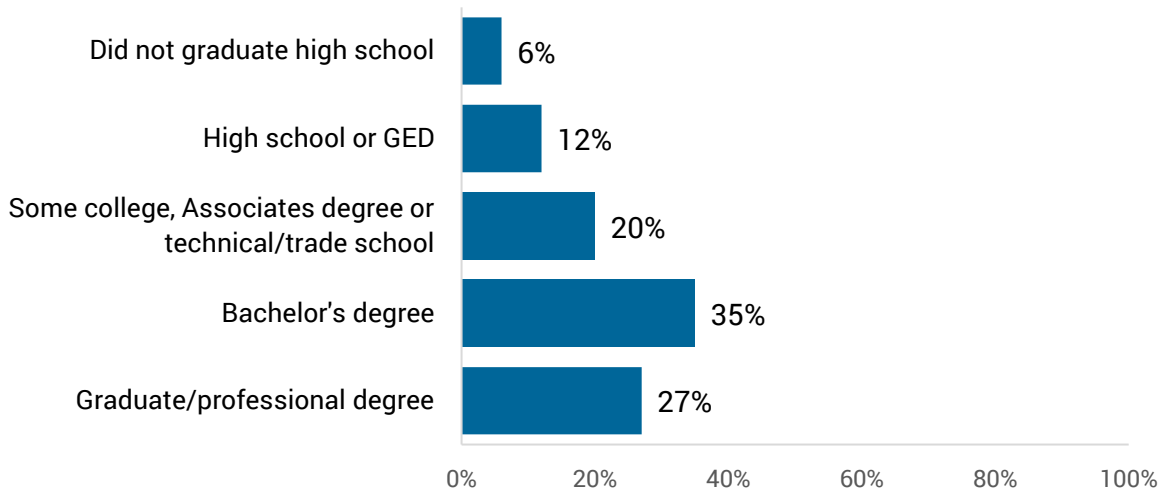


Figure 29: Respondent gender and age

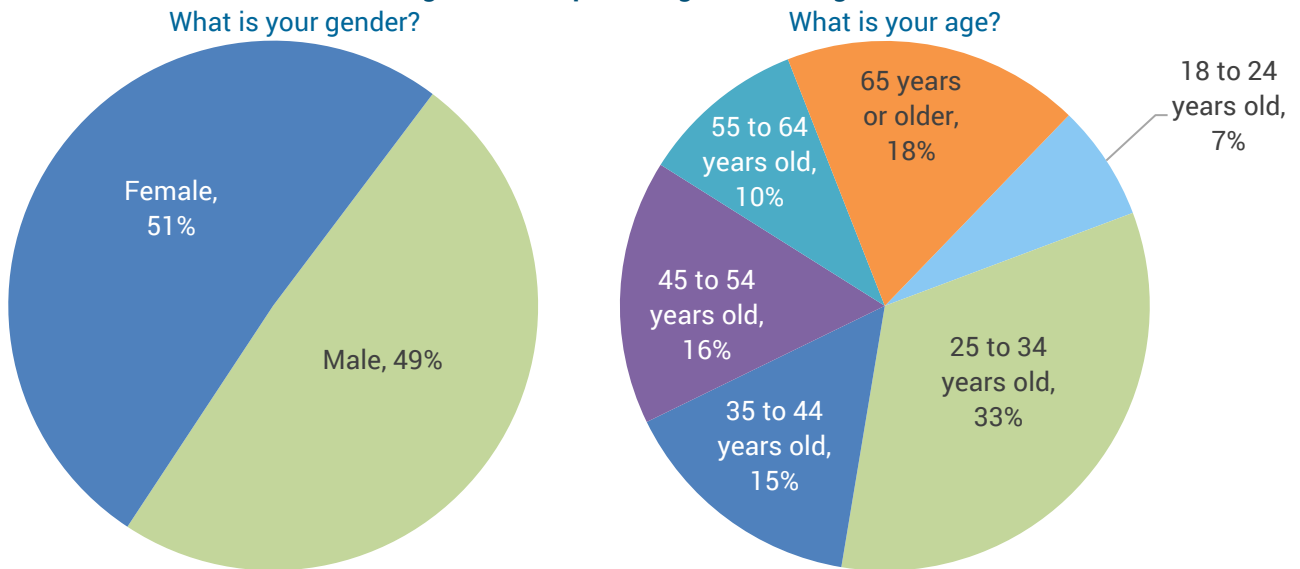


Figure 30: Respondent race/ethnicity

Which category best describes your race? (Check all that apply)

Percents may add to more than 100% as respondents could choose more than one response. If you drive to work, where do you typically park?

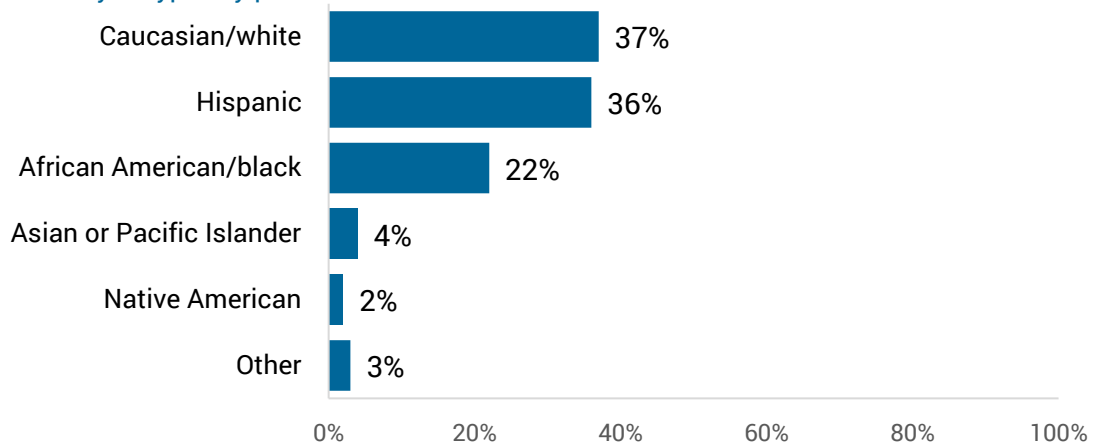


Figure 31: Presence of children, seniors, and people with disability in household

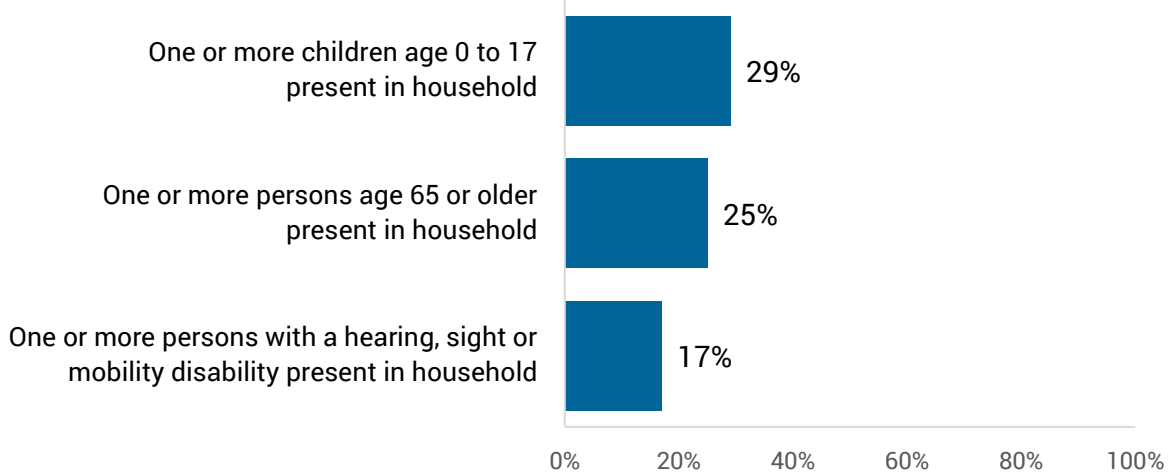
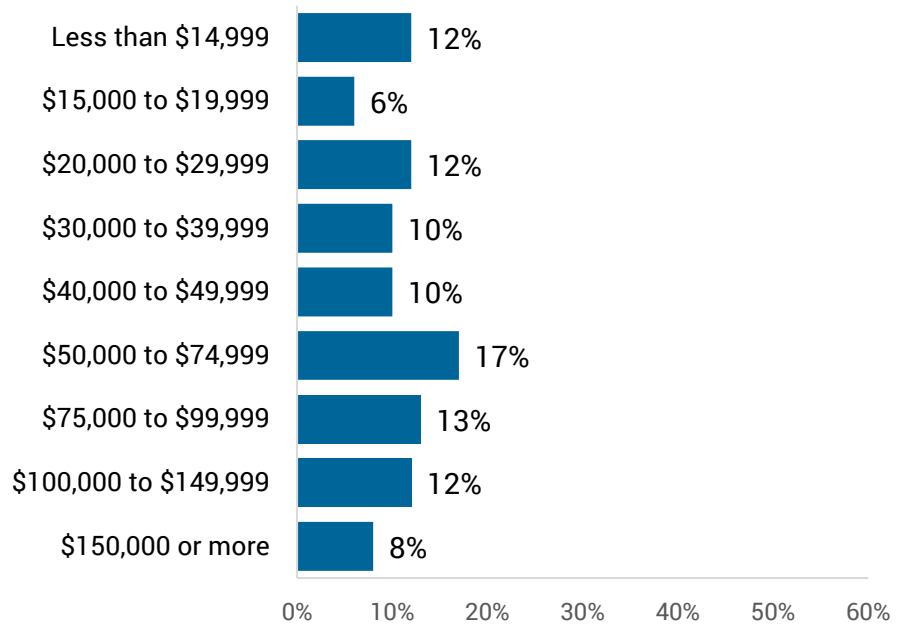


Figure 32: Respondent annual household income

How much was your household's total income before taxes in 2018? Please include income from all sources for all persons living in your household.



A.6. Key Findings by Respondent and Station Area Characteristics

A.6.1 Key Findings by Station Area Typology

The surveys conducted for the NCTCOG DART Red and Blue Line TOD Survey yielded a very rich dataset. NRC has provided NCTCOG with detailed crosstabulations of the resident, employer and employee survey responses by respondent and neighborhood (station area) characteristics in documents separate from this report. These detailed tables and the datasets may provide useful insights to NCTCOG as they continue to mine the data for practical information useful to their many projects.

For this report, a subset of crosstabulation tables are included to illuminate some of the differences or similarities across the various subgroups of those surveyed. For the resident survey, survey responses related to four topics of interest for TOD were chosen as highlights:

- 1) mode choice for the work commute;
- 2) mode choice for a sample of various types of household-related trips residents might take (personal errands such as banking, trips dining and entertainment trips and trips to go downtown);
- 3) a sample of reasons given by respondents for not using DART, particularly related to physical barriers;
- 4) a sample of potential important factors for choosing the current home location, particularly related to TOD and non-TOD items.

These responses were examined by the station area as categorized into the various typologies shown below and in Figure 112 on page 342 in *Appendix D: Survey Methodology*, by a subset of respondent housing and parking characteristics and by a subset of respondent demographics.

Figure 33: Station typologies

Radius Distance from Nearest Station	Station City	Geographic Area/Corridor	Median Income
Age of Neighborhood	Density	Type of Housing (Single Family or Multi-Family)	Presence of Park and Ride
Transit Service Level	Average Ridership	Land Use Focus	Walkability

The survey items being compared across the various subgroups are shown across the top of the tables (Figure 34 through Figure 49), with the respondent subgroups arrayed down the table. Differences should be examined within a column. Statistical tests of significance were performed (ANOVA), and differences that had a less than 5% probability of being due to chance alone ($p < 0.05$) were indicated by shading the block of cells in a column within a subgroup grey.

A summary of some of the findings observed by station typology are summarized below. Not every statistically significant difference is highlighted, but those that are illustrative of patterns that might be of interest are described.

Respondents who lived within a half-mile radius of a DART rail station were about twice as likely to have commuted by transit or by biking or walking than those who were outside the half-mile radius (Figure 34).

Differences in mode choice for the work commute by whether residents lived nearest a station in Dallas, Garland, Plano or Richardson were not statistically significant. However, in looking at the smaller geographic corridors, differences were observed (see Figure 113 on page 345 in *Appendix D: Survey Methodology* for a map of these geographic corridors). Those living in the Central Dallas corridor were the least likely to have driven alone for the work commute (71%), while those in the Blue Line East and Plano/Richardson corridors were most likely to have done so (85%). Those in the Oak Cliff/Lancaster Road corridor were the most likely to have used transit for the work commute, while those in the Central Dallas corridor were the most likely to have walked or biked for the work commute in the week previous to the survey.

Station areas classified as high density had a greater proportion of residents commuting by walking or bicycling (16%) compared to the other areas (6% or less, Figure 47). Likewise, those who lived in station areas considered with a majority multi-family housing were more likely to have walked or biked for their work commute on at least one day of the previous week (12%) compared to those in mixed housing areas (9%) and those in majority single-family housing areas (4%, Figure 35).

There was an odd pattern observed by radius distance from the nearest station in the proportion of residents who used DART for banking¹, eating out or going downtown: those within a half-mile radius or less of a station were less likely to use DART to conduct their banking or go out to each than those further than a half-mile from a station, while those who lived within the quarter-mile radius of a station were more likely to use DART to go downtown than were those further away from a station (Figure 36).

Those whose nearest DART station was in Dallas were least likely to drive to conduct their banking compared to those whose closest stations were in other cities. Those in Dallas and Garland were more likely to use the DART to get to their bank, and were also more likely to use DART to get to restaurants, bars or coffee shops compared to those whose nearest station was in Plano or Richardson.

Those who lived in the Central Dallas corridor were least likely to drive to these household destinations and most likely to walk or bike to them.

Respondents who lived in high-income areas were most likely to drive to these destinations and least likely to use DART. Those who lived in high density areas or in majority multi-family housing areas were the least likely to drive to these destinations and were the most likely to walk or bike compared to those in lower density areas or areas with less multi-family housing (Figure 37).

For the most part, those who lived in areas with high walkability were more likely to walk or bike to these destinations than were those in areas with lower walkability scores. This serves to

¹ Respondents were asked about their use of DART for a large number of types of trips. Banking was chosen for these tables as an example of a personal errand.

highlight the contrast observed in the high proportion of work commute trips made by automobile, as for many respondents workplaces were not close to their home. In more walkable neighborhoods, there are destinations to which respondents can walk, and more did choose to do so.

A higher proportion of those living in the Central Dallas, Oak Cliff/Lancaster Road and West Oak Cliff were more likely to cite physical barriers as an obstacle to using DART or walking for errands than were those in the other station corridors (Figure 38).

Those who lived in high income areas were most likely to cite needing a car before or after work or while at work as a reason they do not use DART for the commute than were those in lower income areas. Those in the North Dallas corridor were the most likely to indicate it was too far from their home and/or workplace to get to a stop/station in order to use DART for the commute.

A larger percent of those living in the quarter-mile and half-mile radii rated easy access to DART service as an essential factor in their decision to choose their current home location than did those living further from a station (Figure 40). More respondents living in the Oak Cliff/Lancaster Road corridor rated easy access to DART service as an essential factor in choosing their home location compared to those in other corridors, while a greater proportion of residents living in the Central Dallas corridor considered having restaurants, coffee shops and bars within walking distance as an essential aspect of choosing their current home location compared to those living in other corridors. Easy access to DART played a greater role in home choice for those living in lower income areas than those living in higher income areas. Having restaurants, coffee shops and bars within walking distance was more likely to be deemed an essential consideration for the current home location for those in high density areas, in majority multi-family housing areas and in areas with a higher walkability score than for those in lower densities, with more single-family housing in their area or in less walkable areas (Figure 41).

Figure 34: Modal share of work commute by station typology

Station Typology	Percent of respondents who commuted using each mode at least once in the previous week		
	Driving alone	Light rail/train and/or bus	Walk or bike
Overall	81%	13%	9%
Radius Distance from Nearest Station			
Unspecified (no address provided)	81%	7%	8%
Quarter-mile radius	76%	23%	10%
Half-mile radius	84%	17%	13%
One-mile radius	83%	7%	5%
Station City			
Dallas	80%	13%	9%
Garland	84%	9%	4%
Plano	83%	12%	11%
Richardson	86%	10%	9%
Station Corridor			
Blue Line East	85%	10%	3%
Central Dallas	71%	12%	20%
North Dallas	86%	12%	9%
Oak Cliff/ Lancaster Road	77%	23%	3%
Plano / Richardson	85%	11%	10%
West Oak Cliff	78%	10%	4%
Median Income in Station Area			
High Income	87%	10%	7%
High Middle Income	78%	13%	15%
Low Middle Income	84%	11%	7%
Low Income	82%	17%	2%
Age of Neighborhood in Station Area			
Older	78%	19%	4%
Older w/ redevelopment	77%	15%	9%
1950 - 1990	90%	6%	5%
1950 - 1990 w/ redevelopment	76%	15%	15%
Mostly new/ greenfield	86%	8%	8%
Density of Station Area			
High Density	78%	13%	16%
Mid-high Density	82%	11%	5%
Mid-low Density	86%	8%	5%
Moderate Density	84%	12%	6%
Low Density	74%	26%	4%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 35: Modal share of work commute by station typology (continued)

Station Typology	Percent of respondents who commuted using each mode at least once in the previous week		
	Driving alone	Light rail/train and/or bus	Walk or bike
Type of Housing in Station Area			
Multi-Family Majority	80%	12%	12%
Mixed Housing	85%	13%	9%
Single-Family Majority	80%	12%	4%
Presence of Park and Ride at Station			
Park and Ride	85%	12%	7%
Without Park and Ride	75%	12%	12%
Amount of Transit Service at Station			
1 line	80%	11%	3%
1 line plus peak	83%	12%	9%
2 lines	81%	13%	14%
3 lines	83%	13%	6%
Average Ridership at Station			
Less than 600	77%	13%	3%
600 to 1,000	74%	11%	16%
1,000 to 1,3000	85%	12%	6%
1,300 to 2,000	85%	14%	10%
2,000 or more	84%	12%	8%
Land Use Type Around Station			
Employment	82%	12%	12%
Mixed	82%	11%	5%
Residential	74%	26%	4%
Walkability of Area Around Station			
Very Car-Dependent	85%	22%	5%
Car- Dependent	83%	9%	7%
Somewhat walkable	77%	12%	11%
Very walkable	84%	13%	11%
Walker's paradise	84%	11%	5%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 36: Mode currently used to get to various places by station typology

Station Typology	Typical mode respondents who travel to these places currently use (within a row, the three modes will add to 100%)								
	Banking			Restaurants, bars, coffee shops			Downtown		
	Drive	Use DART	Walk or bike	Drive	Use DART	Walk or bike	Drive	Use DART	Walk or bike
Overall	69%	16%	15%	56%	23%	21%	62%	25%	13%
Radius Distance from Nearest Station									
Unspecified (no address provided)	35%	44%	22%	22%	60%	18%	49%	51%	0%
Quarter-mile radius	76%	12%	12%	61%	13%	25%	53%	35%	12%
Half-mile radius	78%	6%	16%	68%	9%	23%	66%	19%	15%
One-mile radius	60%	27%	13%	46%	38%	16%	74%	16%	10%
Station City									
Dallas	65%	20%	15%	54%	26%	20%	62%	25%	13%
Garland	72%	21%	7%	48%	37%	15%	61%	23%	16%
Plano	73%	9%	19%	53%	13%	35%	50%	20%	30%
Richardson	87%	3%	10%	71%	9%	19%	71%	28%	1%
Station Corridor									
Blue Line East	74%	17%	9%	66%	25%	9%	68%	23%	9%
Central Dallas	50%	20%	30%	26%	34%	40%	37%	14%	50%
North Dallas	76%	10%	14%	67%	19%	14%	79%	21%	1%
Oak Cliff/ Lancaster Road	61%	31%	8%	57%	31%	12%	47%	51%	1%
Plano / Richardson	82%	5%	13%	65%	11%	24%	64%	25%	11%
West Oak Cliff	59%	34%	7%	57%	29%	14%	72%	27%	1%
Median Income in Station Area									
High Income	83%	6%	11%	71%	11%	18%	81%	18%	1%
High Middle Income	65%	13%	22%	45%	26%	29%	59%	21%	21%
Low Middle Income	74%	16%	10%	66%	17%	17%	64%	24%	13%
Low Income	62%	30%	8%	59%	31%	10%	54%	44%	3%
Age of Neighborhood in Station Area									
Older	62%	30%	9%	58%	30%	12%	50%	48%	2%
Older w/ redevelopment	72%	20%	9%	45%	19%	36%	40%	25%	35%
1950 - 1990	75%	16%	9%	77%	16%	8%	76%	22%	2%
1950 - 1990 w/ redevelopment	71%	8%	21%	54%	22%	25%	68%	16%	16%
Mostly new/ greenfield	58%	17%	24%	48%	31%	20%	67%	30%	3%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 37: Mode currently used to get to various places by station typology (continued)

Station Typology	Typical mode respondents who travel to these places currently use (within a row, the three modes will add to 100%)								
	Banking			Restaurants, bars, coffee shops			Downtown		
	Drive	Use DART	Walk or bike	Drive	Use DART	Walk or bike	Drive	Use DART	Walk or bike
Density of Station Area									
High Density	59%	13%	28%	39%	30%	31%	58%	17%	25%
Mid-high Density	75%	18%	7%	68%	15%	17%	56%	31%	13%
Mid-low Density	71%	17%	12%	68%	22%	10%	81%	14%	5%
Moderate Density	84%	8%	7%	70%	11%	20%	72%	27%	0%
Low Density	60%	33%	6%	55%	34%	10%	49%	49%	2%
Type of Housing in Station Area									
Multi-Family Majority	63%	17%	20%	47%	26%	26%	54%	22%	25%
Mixed Housing	73%	16%	12%	60%	21%	20%	72%	27%	1%
Single-Family Majority	75%	17%	8%	70%	18%	12%	68%	28%	4%
Presence of Park and Ride at Station									
Park and Ride	73%	15%	12%	64%	22%	15%	70%	27%	2%
Without Park and Ride	64%	19%	18%	46%	24%	30%	50%	21%	30%
Amount of Transit Service at Station									
1 line	69%	23%	9%	65%	23%	12%	67%	28%	5%
1 line plus peak	81%	5%	15%	64%	12%	24%	62%	25%	13%
2 lines	69%	16%	15%	55%	23%	22%	59%	23%	18%
3 lines	45%	26%	29%	24%	43%	33%	71%	27%	2%
Average Ridership at Station									
Less than 600	71%	24%	5%	69%	21%	10%	71%	29%	0%
600 to 1,000	70%	14%	17%	44%	21%	35%	45%	15%	40%
1,000 to 1,3000	81%	11%	8%	78%	9%	12%	69%	29%	2%
1,300 to 2,000	67%	22%	11%	54%	30%	16%	58%	37%	6%
2,000 or more	53%	20%	27%	40%	37%	22%	79%	20%	2%
Land Use Type Around Station									
Employment	75%	10%	15%	58%	18%	23%	61%	21%	18%
Mixed	60%	24%	15%	53%	28%	19%	71%	27%	3%
Residential	60%	33%	6%	55%	34%	10%	49%	49%	2%
Walkability of Area Around Station									
Very Car-Dependent	65%	31%	3%	62%	33%	5%	49%	51%	0%
Car- Dependent	75%	15%	10%	68%	16%	16%	71%	27%	1%
Somewhat walkable	70%	13%	17%	58%	21%	21%	63%	17%	20%
Very walkable	74%	11%	15%	53%	19%	28%	62%	21%	17%
Walker's paradise	30%	36%	33%	20%	53%	27%	57%	39%	4%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 38: Reasons for not using DART for the work commute or for errands by station typology

Station Typology	Percent of respondents indicating each was a very big or big reason for not using DART for the work commute			Percent indicating physical barriers to walking were a very big or big reason for not using DART for groceries, shopping and dining
	I need my car before or after work or while at work	It is too far from my home and/or from my work to the stop/station	Physical barriers (missing sidewalks, can't cross busy roadway/ highway, etc.) between home and the stop/station	
Overall	62%	40%	13%	38%
Radius Distance from Nearest Station				
Unspecified (no address provided)	67%	40%	13%	64%
Quarter-mile radius	46%	37%	12%	42%
Half-mile radius	61%	44%	16%	33%
One-mile radius	68%	40%	11%	44%
Station City				
Dallas	65%	40%	13%	39%
Garland	67%	45%	11%	24%
Plano	40%	29%	5%	31%
Richardson	55%	41%	15%	40%
Station Corridor				
Blue Line East	64%	42%	9%	28%
Central Dallas	55%	34%	13%	45%
North Dallas	74%	50%	17%	27%
Oak Cliff/ Lancaster Road	52%	36%	10%	62%
Plano / Richardson	50%	38%	12%	37%
West Oak Cliff	72%	33%	11%	48%
Median Income in Station Area				
High Income	77%	48%	15%	31%
High Middle Income	61%	41%	13%	42%
Low Middle Income	61%	36%	14%	30%
Low Income	56%	39%	8%	47%
Age of Neighborhood in Station Area				
Older	59%	39%	8%	58%
Older w/ redevelopment	53%	36%	17%	50%
1950 - 1990	59%	33%	7%	20%
1950 - 1990 w/ redevelopment	70%	43%	16%	35%
Mostly new/ greenfield	62%	47%	14%	44%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 39: Reasons for not using DART for the work commute or for errands by station typology (continued)

Station Typology	Percent of respondents indicating each was a very big or big reason for not using DART for the work commute			Percent indicating physical barriers to walking were a very big or big reason for not using DART for groceries, shopping and dining
	I need my car before or after work or while at work	It is too far from my home and/or from my work to the stop/station	Physical barriers (missing sidewalks, can't cross busy roadway/ highway, etc.) between home and the stop/station	
Density of Station Area				
High Density	63%	45%	16%	42%
Mid-high Density	66%	41%	14%	33%
Mid-low Density	61%	32%	8%	27%
Moderate Density	57%	37%	9%	39%
Low Density	56%	35%	9%	56%
Type of Housing in Station Area				
Multi-Family Majority	63%	43%	14%	36%
Mixed Housing	55%	33%	10%	36%
Single-Family Majority	68%	42%	15%	45%
Presence of Park and Ride at Station				
Park and Ride	63%	41%	12%	35%
Without Park and Ride	61%	37%	14%	44%
Amount of Transit Service at Station				
1 line	66%	37%	10%	40%
1 line plus peak	50%	38%	12%	40%
2 lines	63%	42%	17%	38%
3 lines	68%	43%	9%	26%
Average Ridership at Station				
Less than 600	73%	43%	24%	46%
600 to 1,000	50%	37%	10%	46%
1,000 to 1,3000	63%	38%	14%	28%
1,300 to 2,000	55%	40%	15%	45%
2,000 or more	72%	43%	10%	31%
Land Use Type Around Station				
Employment	58%	41%	15%	38%
Mixed	70%	39%	10%	32%
Residential	56%	35%	9%	56%
Walkability of Area Around Station				
Very Car-Dependent	53%	39%	10%	44%
Car- Dependent	64%	42%	15%	42%
Somewhat walkable	59%	30%	10%	31%
Very walkable	65%	50%	17%	41%
Walker's paradise	67%	43%	9%	35%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 40: Reasons for choosing current location by station typology

Station Typology	Percent of respondents indicating each was an “essential” factor in choosing current home location			
	Easy access to the freeway	Good bicycle routes beyond the neighborhood	Easy access to DART service	Restaurants, coffee shops, bars within walking distance
Overall	46%	25%	39%	39%
Radius Distance from Nearest Station				
Unspecified (no address provided)	54%	63%	40%	47%
Quarter-mile radius	49%	18%	44%	40%
Half-mile radius	39%	27%	39%	40%
One-mile radius	55%	32%	26%	32%
Station City				
Dallas	45%	27%	41%	43%
Garland	47%	17%	41%	22%
Plano	48%	26%	45%	47%
Richardson	50%	14%	30%	26%
Station Corridor				
Blue Line East	49%	22%	33%	22%
Central Dallas	46%	36%	36%	64%
North Dallas	41%	25%	37%	34%
Oak Cliff/ Lancaster Road	49%	24%	60%	46%
Plano / Richardson	49%	18%	36%	34%
West Oak Cliff	41%	27%	41%	45%
Median Income in Station Area				
High Income	46%	18%	23%	27%
High Middle Income	45%	26%	36%	45%
Low Middle Income	44%	24%	42%	38%
Low Income	52%	25%	56%	38%
Age of Neighborhood in Station Area				
Older	48%	24%	56%	49%
Older w/ redevelopment	48%	28%	43%	51%
1950 - 1990	48%	24%	41%	24%
1950 - 1990 w/ redevelopment	41%	26%	34%	38%
Mostly new/ greenfield	50%	16%	28%	44%
Density of Station Area				
High Density	44%	29%	34%	52%
Mid-high Density	49%	23%	42%	37%
Mid-low Density	49%	30%	42%	31%
Moderate Density	42%	15%	39%	30%
Low Density	48%	14%	45%	34%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 41: Reasons for choosing current location by station typology (continued)

Station Typology	Percent of respondents indicating each was an “essential” factor in choosing current home location			
	Easy access to the freeway	Good bicycle routes beyond the neighborhood	Easy access to DART service	Restaurants, coffee shops, bars within walking distance
Type of Housing in Station Area				
Multi-Family Majority	44%	30%	42%	48%
Mixed Housing	51%	18%	37%	31%
Single-Family Majority	44%	21%	37%	34%
Presence of Park and Ride at Station				
Park and Ride	46%	20%	38%	32%
Without Park and Ride	46%	30%	40%	50%
Amount of Transit Service at Station				
1 line	45%	25%	42%	34%
1 line plus peak	51%	20%	36%	36%
2 lines	43%	28%	41%	42%
3 lines	50%	16%	29%	53%
Average Ridership at Station				
Less than 600	54%	28%	40%	34%
600 to 1,000	46%	29%	40%	50%
1,000 to 1,3000	41%	18%	38%	27%
1,300 to 2,000	54%	20%	43%	39%
2,000 or more	43%	28%	36%	47%
Land Use Type Around Station				
Employment	46%	25%	39%	39%
Mixed	45%	26%	38%	42%
Residential	48%	14%	45%	34%
Walkability of Area Around Station				
Very Car-Dependent	54%	17%	50%	31%
Car- Dependent	48%	20%	36%	34%
Somewhat walkable	47%	28%	39%	35%
Very walkable	41%	26%	37%	46%
Walker’s paradise	39%	18%	42%	78%

Note: grey shading indicates differences are statistically significant p<0.05.

A.6.2. Key Findings by Housing/Parking Characteristics

In addition to the characteristics of the area in which respondents live, housing and parking factors were also examined to see what influence they exerted on resident travel behavior.

Residents who considered their home to be an easy walk to a rail station were less likely to drive alone for the work commute and more likely to use DART (Figure 42). Those living in households with less than one vehicle per adult were much less likely to have driven for the work commute and more likely to have used DART or walked or biked compared to those who lived in households with one or more vehicles per adult. Residents who lived in a single family home were more likely to have driven at least once for their work commute and less likely to have walked or biked for their commute compared to those who lived in a multi-family home. Those who owned their home were less likely to have used DART for the work commute than were those who rented their home.

Generally, those who said they lived an easy walk to a rail station were less likely to drive to a restaurant, bar or coffee shop or to go downtown than those who felt they lived further than an easy walk distance to the rail station (Figure 43).

Respondents who had free parking at their home were more likely to drive to their household destinations than were those who had to pay to park at home, and they were less likely to use alternate modes. Residents in households with less than one vehicle per adult were less likely to drive to these household destinations and more likely to walk or bike or to use DART.

Renters and those who lived in a multi-family building were more likely to use DART or walk or bike to these destinations and less likely to drive.

Those who felt they lived an easy walk to a rail station, who had access to free parking at home or had access to free parking at work were less likely to indicate they experienced obstacles in using DART for the work commute than those who considered that they lived further away from rail stations, who had pay to park at home or had to pay to park at work (Figure 44).

Respondents living in homes with less than one vehicle per adult were less likely to have considered easy access to the freeway an essential factor in deciding where to locate for their current home and more likely to consider easy access to DART services a crucial element compared to respondents living in homes with one or more vehicles per adult (Figure 45).

Figure 42: Modal share of work commute by respondent home characteristics

Home Characteristics	Percent of respondents who commuted using each mode at least once in the previous week		
	Driving alone	Light rail/train and/or bus	Walk or bike
Overall	81%	13%	9%
Self-reported Distance from Nearest Rail Station			
I am an easy walk to a rail station	77%	15%	10%
It is a little far, but I could walk to a rail station	85%	10%	11%
I am too far to walk to a rail station	87%	10%	3%
Free or Paid Parking at Home			
Have to pay to park at home	74%	18%	20%
Free parking at home	84%	17%	11%
Number of dedicated parking spaces for respondent			
None	81%	16%	4%
One or more	83%	17%	13%
Free or Paid Parking at Work			
Have to pay to park at work	92%	5%	4%
Free parking at work	83%	35%	0%
Vehicles per Adults in Household			
Less than one vehicle per driver	53%	32%	21%
One vehicle per driver	87%	8%	7%
More than one vehicle per driver	91%	6%	2%
Housing Tenure			
Own	84%	9%	8%
Rent	80%	14%	9%
Housing Unit Type			
Single-family home	85%	10%	5%
Multi-family building or other	79%	13%	11%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 43: Mode currently used to get to various places by respondent home characteristics

Home Characteristics	Typical mode respondents who travel to these places currently use (within a row, the three modes will add to 100%)								
	Banking			Restaurants, bars, coffee shops			Downtown		
	Drive	Use DART	Walk or bike	Drive	Use DART	Walk or bike	Drive	Use DART	Walk or bike
Overall	69%	16%	15%	56%	23%	21%	62%	25%	13%
Self-reported Distance from Nearest Rail Station									
I am an easy walk to a rail station	67%	18%	15%	51%	22%	26%	51%	32%	18%
It is a little far, but I could walk to a rail station	69%	18%	13%	65%	23%	12%	82%	13%	5%
I am too far to walk to a rail station	76%	9%	16%	64%	21%	16%	76%	22%	2%
Free or Paid Parking at Home									
Have to pay to park at home	64%	10%	26%	50%	10%	39%	53%	14%	33%
Free parking at home	83%	5%	12%	72%	6%	22%	64%	26%	11%
Number of dedicated parking spaces for respondent									
None	77%	4%	19%	58%	4%	38%	51%	36%	12%
One or more	84%	5%	11%	74%	6%	20%	66%	23%	11%
Free or Paid Parking at Work									
Have to pay to park at work	76%	12%	12%	58%	22%	21%	70%	19%	11%
Free parking at work	76%	4%	20%	62%	8%	30%	82%	18%	0%
Vehicles per Adults in Household									
Less than one vehicle per driver	50%	28%	22%	47%	30%	23%	53%	29%	18%
One vehicle per driver	78%	11%	11%	57%	19%	24%	61%	26%	13%
More than one vehicle per driver	79%	9%	12%	65%	24%	11%	81%	15%	4%
Housing Tenure									
Own	77%	10%	13%	63%	18%	18%	70%	19%	12%
Rent	65%	19%	16%	52%	25%	23%	58%	28%	13%
Housing Unit Type									
Single-family home	79%	10%	11%	68%	17%	15%	74%	22%	4%
Multi-family building or other	66%	18%	16%	51%	25%	24%	58%	27%	15%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 44: Reasons for not using DART for the work commute or for errands by respondent home characteristics

Home Characteristics	Percent of respondents indicating each was a very big or big reason for not using DART for the work commute			Percent indicating physical barriers to walking were a very big or big reason for not using DART for groceries, shopping and dining
	I need my car before or after work or while at work	It is too far from my home and/or from my work to the stop/station	Physical barriers between home and the stop/station	
Overall	62%	40%	13%	38%
Self-reported Distance from Nearest Rail Station				
I am an easy walk to a rail station	55%	31%	10%	37%
It is a little far, but I could walk to a rail station	68%	43%	14%	40%
I am too far to walk to a rail station	72%	60%	18%	41%
Free or Paid Parking at Home				
Have to pay to park at home	54%	37%	17%	39%
Free parking at home	53%	38%	14%	37%
Number of dedicated parking spaces for respondent				
None	32%	40%	18%	41%
One or more	58%	38%	14%	37%
Free or Paid Parking at Work				
Have to pay to park at work	69%	43%	14%	32%
Free parking at work	49%	28%	3%	40%
Vehicles per Adults in Household				
Less than one vehicle per driver	55%	42%	15%	53%
One vehicle per driver	59%	39%	12%	32%
More than one vehicle per driver	70%	41%	13%	37%
Housing Tenure				
Own	59%	42%	12%	38%
Rent	63%	39%	13%	39%
Housing Unit Type				
Single-family home	67%	43%	12%	41%
Multi-family building or other	59%	39%	13%	37%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 45: Reasons for choosing current location by respondent home characteristics

Home Characteristics	Percent of respondents indicating each was an “essential” factor in choosing current home location			
	Easy access to the freeway	Good bicycle routes beyond the neighborhood	Easy access to DART service	Restaurants, coffee shops, bars within walking distance
Overall	46%	25%	39%	39%
Self-reported Distance from Nearest Rail Station				
I am an easy walk to a rail station	46%	21%	43%	43%
It is a little far, but I could walk to a rail station	48%	30%	29%	31%
I am too far to walk to a rail station	40%	33%	38%	35%
Free or Paid Parking at Home				
Have to pay to park at home	34%	25%	37%	51%
Free parking at home	47%	25%	39%	38%
Number of dedicated parking spaces for respondent				
None	44%	24%	38%	37%
One or more	45%	23%	39%	39%
Free or Paid Parking at Work				
Have to pay to park at work	51%	26%	36%	40%
Free parking at work	31%	10%	26%	33%
Vehicles per Adults in Household				
Less than one vehicle per driver	29%	30%	57%	41%
One vehicle per driver	48%	23%	34%	39%
More than one vehicle per driver	56%	22%	26%	32%
Bicycles per Household Member				
Less than one bicycle per person	48%	20%	35%	36%
One bicycle per person	39%	33%	48%	48%
More than one bicycle per person	32%	57%	35%	31%
Housing Tenure				
Own	45%	23%	34%	38%
Rent	47%	26%	42%	40%
Housing Unit Type				
Single-family home	47%	23%	37%	36%
Multi-family building or other	46%	25%	40%	40%

Note: grey shading indicates differences are statistically significant p<0.05.

A.6.3. Key Findings by Respondent Demographics

About 6 in 10 respondents with annual household incomes of less than \$20,000 had driven alone to work at least once in the previous week compared with about 8 in 10 respondents with incomes of more than \$20,000 per year.² About a third of respondents with incomes of less than \$20,000 had used transit for the work commute in the week previous to the survey, while about 10% of those with incomes greater than \$20,000 had done so (Figure 46). Those with annual incomes of less than \$20,000 were also much less likely to drive to household destinations such as banks or restaurants, and were somewhat less likely to drive downtown compared to those with incomes of \$20,000 or more (Figure 47). This income level likely includes many residents who are transit-dependent.

Respondents in households that included one or more children were somewhat more likely to have commuted by driving alone on at least one day and were less likely to have commuted using transit or by bicycling or walking than those respondents whose households did not include children.

² Annual household incomes of \$20,000 was used as a cutpoint as it is close to the Federal poverty level for a family of three (<https://aspe.hhs.gov/poverty-guidelines>). This income level may include many residents who are transit-dependent.

Figure 46: Modal share of work commute by respondent demographic characteristics

Demographic Characteristics	Percent of respondents who commuted using each mode at least once in the previous week		
	Driving alone	Light rail/train and/or bus	Walk or bike
Overall	81%	13%	9%
Sex of Respondent			
Male	82%	13%	8%
Female	81%	11%	9%
Age of Respondent			
18-34	84%	11%	8%
35-54	80%	12%	9%
55+	74%	16%	9%
Race/Ethnicity of Respondent			
Non-Hispanic White	82%	10%	10%
Non-Hispanic Black	73%	19%	5%
Non-Hispanic Other	82%	14%	8%
Hispanic	84%	11%	9%
Respondent Annual Household Income			
Less than \$20,000	62%	36%	13%
\$20,000 to \$39,999	86%	12%	3%
\$40,000 to \$74,999	83%	7%	10%
\$75,000 or more	82%	13%	11%
Presence of Children in Household			
No children in household	79%	15%	11%
One or more children in household	86%	8%	5%
Presence of Older Adults in Household			
No member of household is age 65 or older	83%	12%	9%
One or more member is age 65 or older	66%	17%	13%
Presence of Person with a Disability in Household			
No member with a disability in household	82%	12%	8%
One or more member has a hearing, sight or mobility disability	68%	19%	16%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 47: Mode currently used to get to various places by respondent demographic characteristics

Demographic Characteristics	Typical mode respondents who travel to these places currently use (within a row, the three modes will add to 100%)								
	Banking			Restaurants, bars, coffee shops			Downtown		
	Drive	Use DART	Walk or bike	Drive	Use DART	Walk or bike	Drive	Use DART	Walk or bike
Overall	69%	16%	15%	56%	23%	21%	62%	25%	13%
Sex of Respondent									
Male	64%	18%	18%	55%	24%	21%	62%	25%	13%
Female	73%	16%	11%	55%	24%	22%	61%	27%	13%
Age of Respondent									
18-34	70%	14%	16%	50%	22%	27%	57%	28%	15%
35-54	69%	17%	14%	57%	25%	18%	65%	20%	15%
55+	67%	20%	12%	61%	23%	16%	64%	29%	6%
Race/Ethnicity of Respondent									
Non-Hispanic White	75%	10%	15%	54%	17%	29%	60%	24%	16%
Non-Hispanic Black	59%	30%	11%	52%	34%	14%	57%	35%	9%
Non-Hispanic Other	70%	10%	19%	60%	19%	21%	71%	21%	8%
Hispanic	66%	17%	17%	58%	26%	16%	63%	25%	12%
Respondent Annual Household Income									
Less than \$20,000	58%	26%	16%	45%	31%	24%	50%	40%	10%
\$20,000 to \$39,999	73%	18%	9%	69%	25%	6%	67%	33%	0%
\$40,000 to \$74,999	75%	14%	11%	64%	18%	18%	70%	12%	18%
\$75,000 or more	68%	10%	21%	55%	20%	25%	61%	20%	19%
Presence of Children in Household									
No children in household	68%	17%	16%	54%	23%	23%	58%	26%	16%
One or more children in household	72%	18%	11%	58%	27%	15%	71%	26%	3%
Presence of Older Adults in Household									
No member of household is age 65+	67%	16%	16%	54%	23%	23%	60%	25%	15%
One or more member is age 65 or older	71%	19%	10%	60%	28%	12%	71%	26%	4%
Presence of Person with a Disability in Household									
No member with a disability in household	68%	15%	16%	56%	22%	22%	62%	24%	14%
One or more member has a hearing, sight or mobility disability	66%	24%	9%	55%	34%	11%	60%	35%	5%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 48: Reasons for not using DART for the work commute or for errands by respondent demographic characteristics

Demographic Characteristics	Percent of respondents indicating each was a very big or big reason for not using DART for the work commute			Percent indicating physical barriers to walking were a very big or big reason for not using DART for groceries, shopping and dining
	I need my car before or after work or while at work	It is too far from my home and/or from my work to the stop/station	Physical barriers between home and the stop/station	
Overall	62%	40%	13%	38%
Sex of Respondent				
Male	59%	40%	12%	35%
Female	65%	41%	14%	41%
Age of Respondent				
18-34	62%	43%	13%	38%
35-54	60%	38%	11%	34%
55+	64%	35%	18%	47%
Race/Ethnicity of Respondent				
Non-Hispanic White	57%	39%	13%	37%
Non-Hispanic Black	62%	27%	7%	36%
Non-Hispanic Other	65%	69%	28%	40%
Hispanic	64%	40%	12%	42%
Respondent Annual Household Income				
Less than \$20,000	62%	25%	11%	50%
\$20,000 to \$39,999	72%	44%	10%	34%
\$40,000 to \$74,999	58%	39%	13%	43%
\$75,000 or more	59%	42%	12%	34%
Presence of Children in Household				
No children in household	59%	42%	13%	37%
One or more children in hh	65%	36%	12%	43%
Presence of Older Adults in Household				
No member of h is age 65 or older	62%	41%	13%	38%
One or more member is age 65 or older	63%	29%	12%	42%
Presence of Person with a Disability in Household				
No member with a disability in household	62%	40%	12%	37%
One or more member has a hearing, sight or mobility disability	69%	49%	26%	51%

Note: grey shading indicates differences are statistically significant p<0.05.

Figure 49: Reasons for choosing current location by respondent demographic characteristics

Demographic Characteristics	Percent of respondents indicating each was an “essential” factor in choosing current home location			
	Easy access to the freeway	Good bicycle routes beyond the neighborhood	Easy access to DART service	Restaurants, coffee shops, bars within walking distance
Overall	46%	25%	39%	39%
Sex of Respondent				
Male	40%	29%	44%	37%
Female	51%	20%	35%	41%
Age of Respondent				
18-34	49%	22%	37%	43%
35-54	48%	30%	41%	41%
55+	38%	21%	40%	31%
Race/Ethnicity of Respondent				
Non-Hispanic White	39%	19%	33%	44%
Non-Hispanic Black	56%	29%	54%	39%
Non-Hispanic Other	48%	37%	33%	25%
Hispanic	50%	28%	46%	40%
Respondent Annual Household Income				
Less than \$20,000	45%	35%	59%	51%
\$20,000 to \$39,999	38%	25%	49%	26%
\$40,000 to \$74,999	51%	19%	32%	32%
\$75,000 or more	43%	25%	30%	46%
Presence of Children in Household				
No children in household	44%	25%	38%	42%
One or more children in household	51%	23%	42%	33%
Presence of Older Adults in Household				
No member of household is age 65 or older	48%	27%	39%	42%
One or more member is age 65+	36%	15%	37%	30%
Presence of Person with a Disability in Household				
No member with a disability in household	47%	26%	38%	41%
One or more member has a hearing, sight or mobility disability	39%	21%	46%	35%

Note: grey shading indicates differences are statistically significant p<0.05.

B. Employer Survey Results

Completed surveys or interviews were obtained from a total of 1,039 employers. These survey results provide information about businesses' location preferences, availability of parking for employees and customers/clients, travel demand management programs and a profile of business characteristics. Key findings were examined by company and station area characteristics.

B.1. Location Preferences

Employers were asked in which type of building their business was located. About two-thirds of all respondents were in some form of office building while different building types, such as a shopping center, warehouse or a stand-alone retail building were home to less than 1 in 10 respondents each (Figure 50).

The length of time employers had been at their current location varied, with about 30% saying they had been in their location 5 years or less, 25% saying they had been at their current location 11 to 20 years, and 27% saying more than 20 years (Figure 51).

About half of businesses reported having always been at their current location, while about half had moved from another location or were a new branch of another company. Most survey respondents (86%) said they planned on staying at their current location for the next few years (Figure 52).

The 46% of respondents who indicated that they had moved to their current location from somewhere else were asked the zip code of their previous location. Based on zip codes, about 8 in 10 respondents' previous locations were in the study area and about 1 in 10 were near other transit but not in the study area. Only 6% were in the North Texas Region but not near transit, while 2% were outside of the North Texas Region (Figure 53).

About 39% of employers knew a DART station was, or would be built, nearby when they made the decision to move to their current location. However, a similar proportion (37%) said they did not know a DART station would be nearby. About one-third of respondents said that having a DART station or stop near their next location was very or somewhat important, but close to half (46%) said it was not important (Figure 54).

Businesses were given a list of six potential reasons they might move and could select multiple reasons. They also could write in an "other" reason not listed (see *Verbatim Responses to "Other" Responses in Appendix B: Responses to Employer Survey* for a list of other reasons). About one-third of employers said that they might move because they needed more space and a similar proportion would move due to increasing rents (Figure 55). Less than 1 in 10 stated they would move to get additional parking (7%), to own their own space (4%) or because their business was closing down (2%).

Figure 50: Type of building in which employer is located

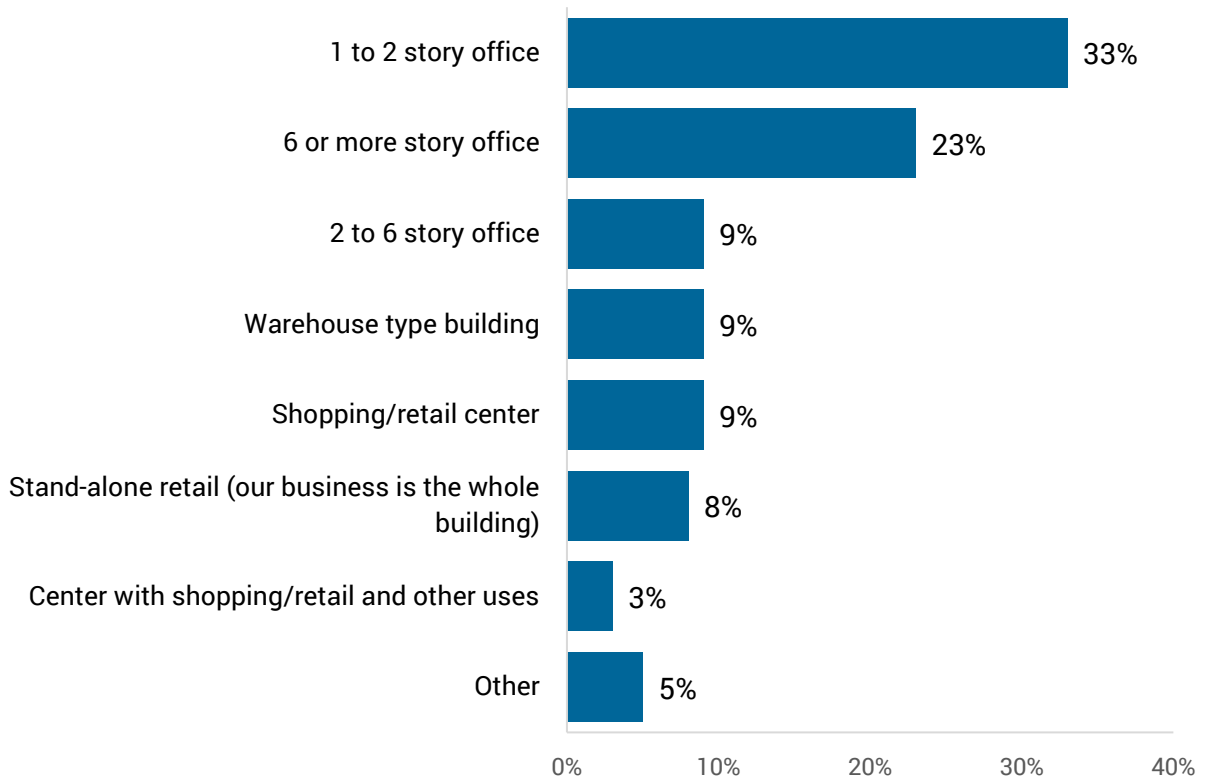


Figure 51: Length of time employer has been in current location

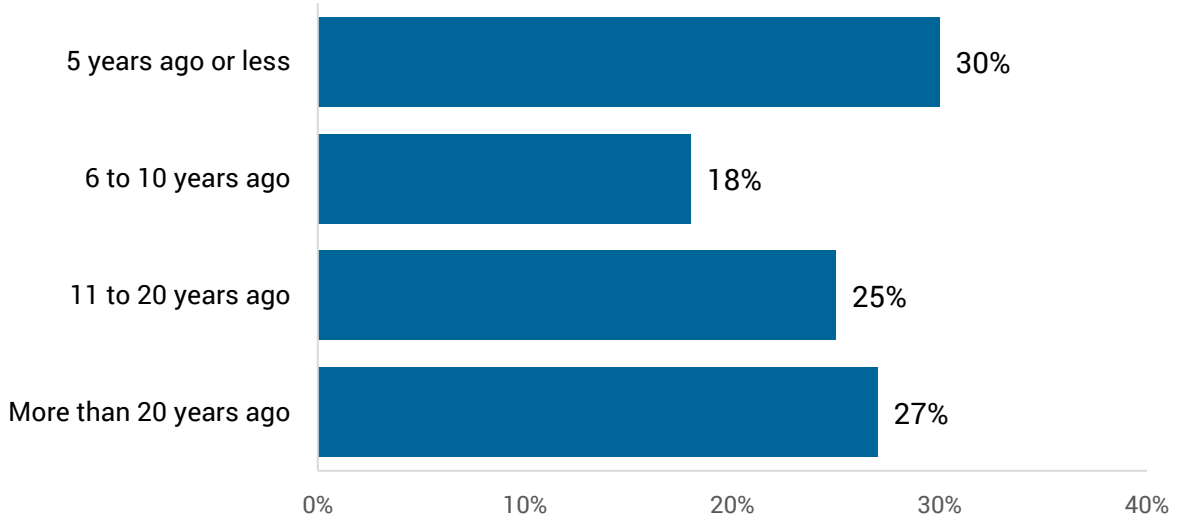


Figure 52: Whether organization relocated to current location and likelihood of staying in current location

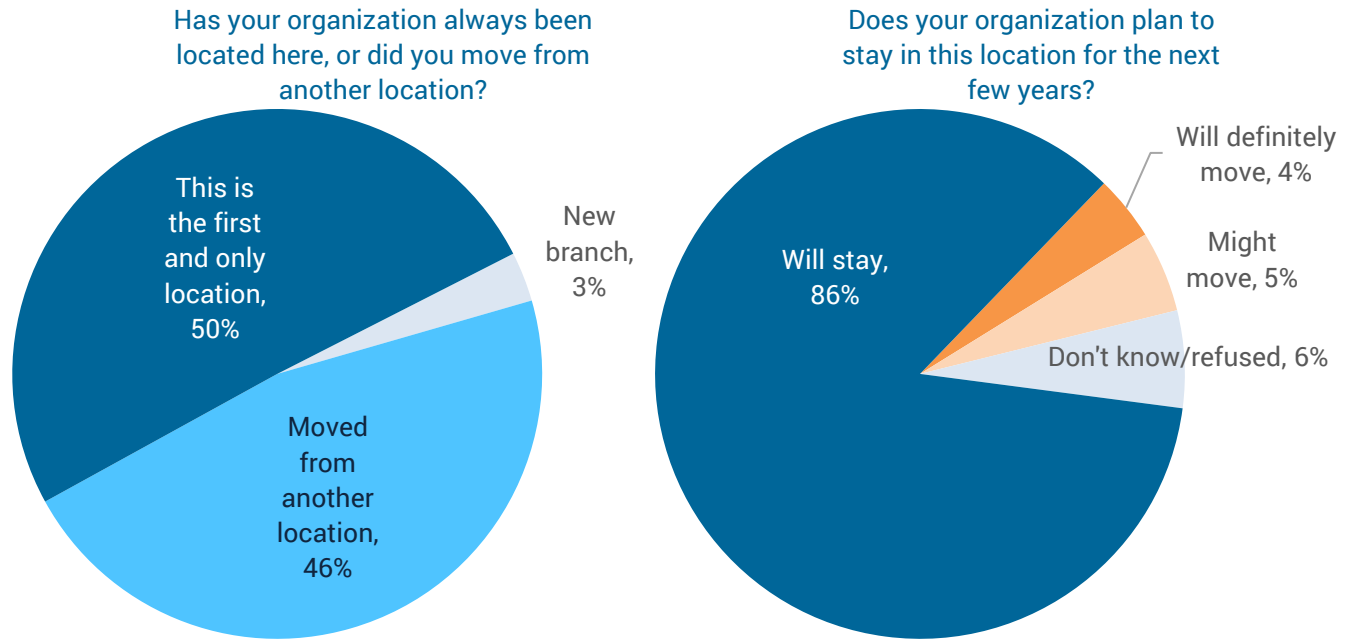


Figure 53: Previous location

What was the zip code of the previous location? (Assigned to areas below.) Percent of employers who had been previously located somewhere else.

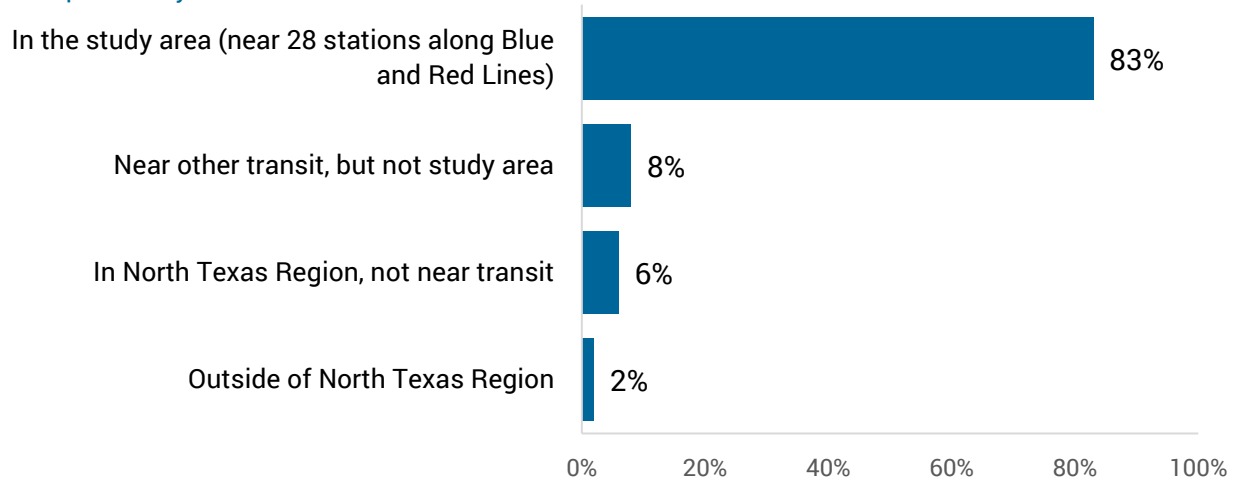
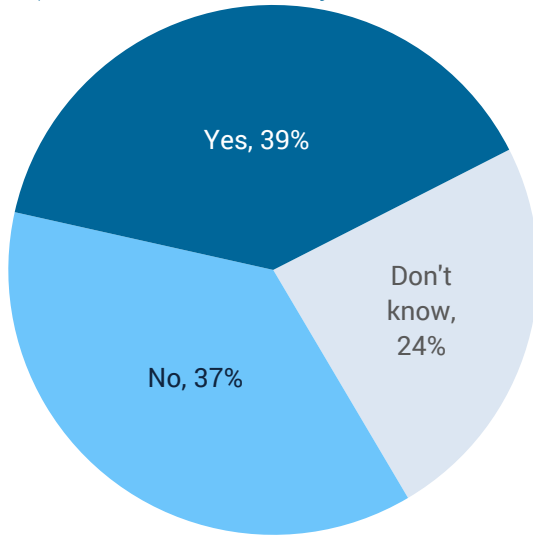


Figure 54: Prior knowledge and importance of DART station near location

When your organization made the decision to locate here did you know a DART station was nearby (or would be built, if not yet built at that time)?



How important is it that your next location is near a DART stop or station?

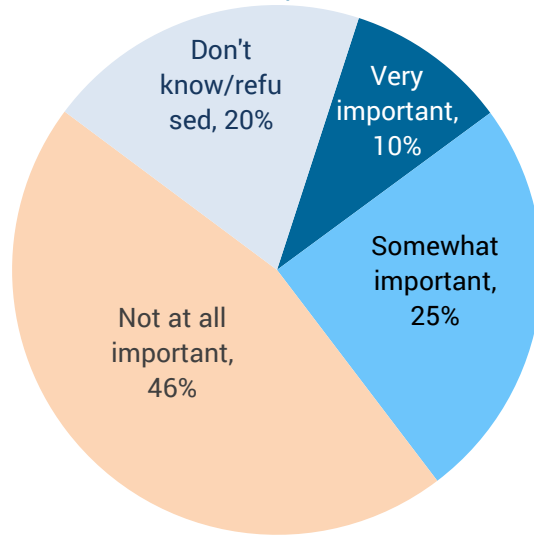
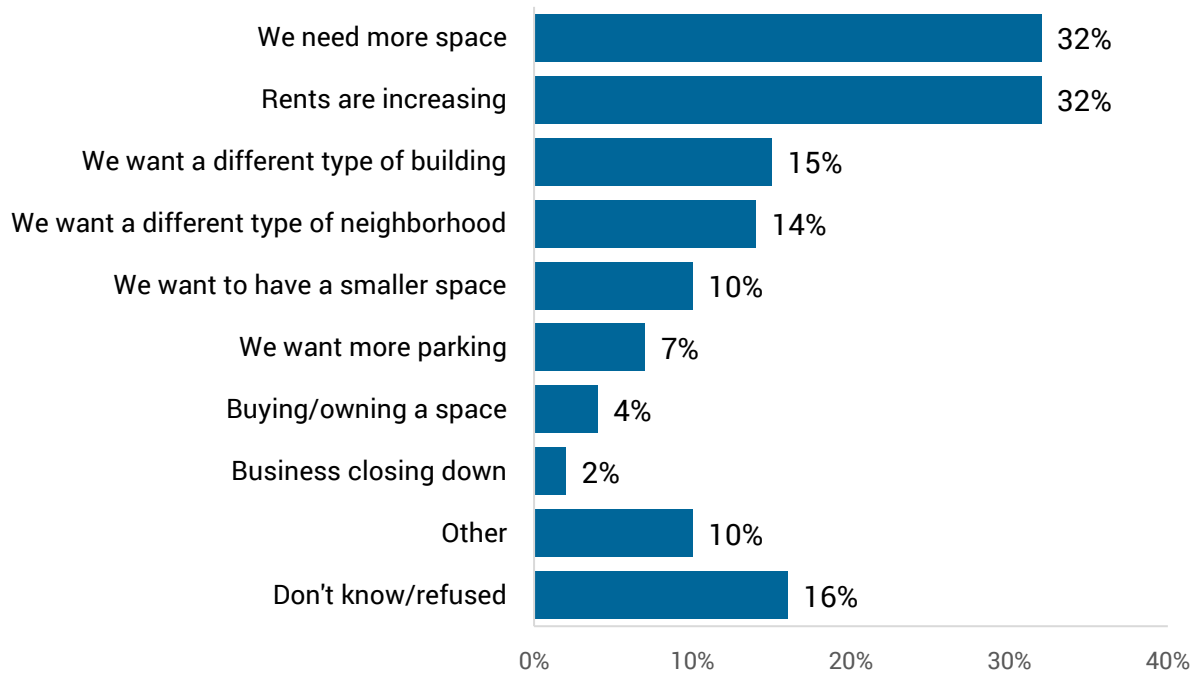


Figure 55: Reasons employer might move

Why would your organization move? (Check all that apply.)

Percents may exceed 100% as respondents could select more than one option.



Employer survey respondents rated how much of an influence 13 different factors were in selecting a location for their business. The availability of parking for customers and employees topped the list with 70% of employers saying this was a strong influence or somewhat of an influence in their location choice, followed closely by easy car access (69%, Figure 56). Roughly 3 in 10 prioritized having nearby stores and a DART commute option, potential employee benefits, in selecting their current location.

Employers also responded as to how well they felt their current location met their expectation for same 13 items. The relative order of influence of items on the business's current location paralleled the order of expectations being met.

Expectations related to cars were more likely to be fully or somewhat met than were expectations related to DART (Figure 57). Parking and access for cars for both customers and employees was said to be fully or somewhat met by about 8 in 10 employers.

About half of the organizations surveyed felt that their expectations of having their employees see a DART commute option as a benefit were fully or somewhat met. Just under half thought their expectations of having access to a larger workforce through DART were met.

Figure 56: Factors that influenced choice of current location

Please think back to when your organization made the decision to locate here and tell us whether each item listed had a strong influence, somewhat of an influence, or was not an influence in choosing this location.

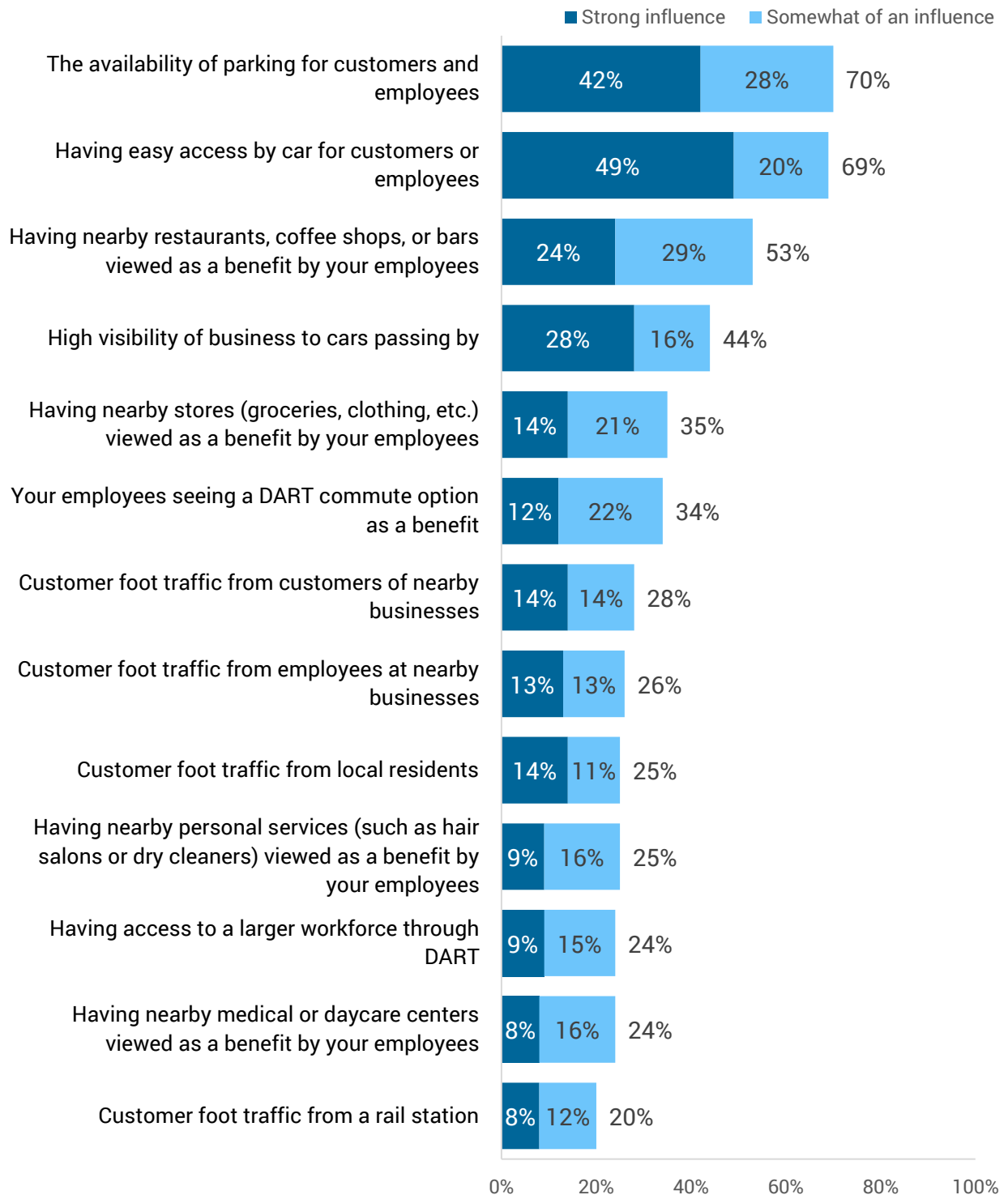
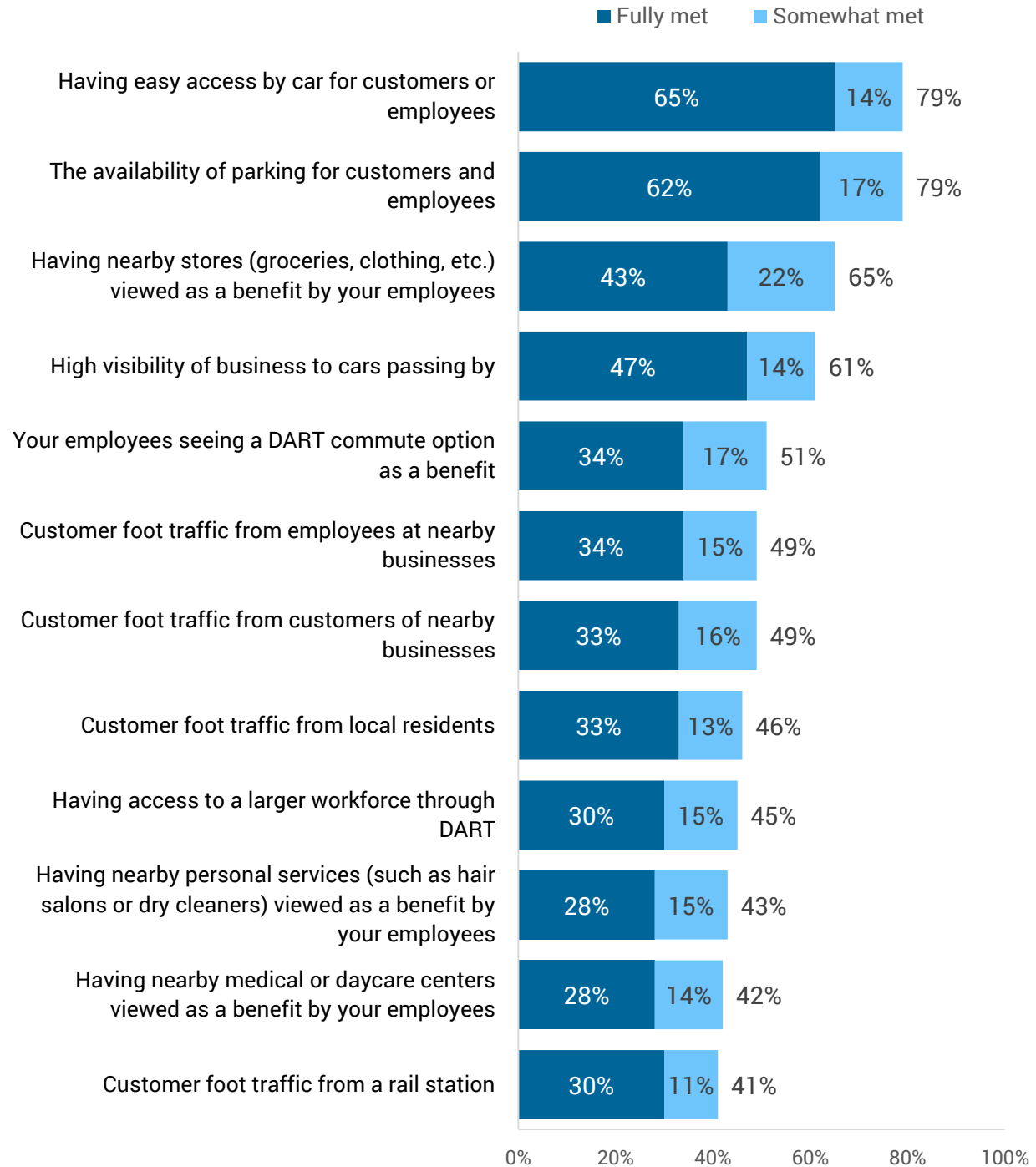


Figure 57: Whether employer expectations for current location were met

Then tell us whether the organization's expectation for each of these items was fully met, somewhat met, or not met at all?



B.2. Parking Availability

Surveyed organizations were asked a number of questions related to the parking available at their business location, including the location of available parking relative to the business, whether the parking was shared or for their exclusive use, the amount of parking available for employees and customers/clients, and whether they felt they had enough parking.

Free parking for employees and customers was widely available, with 85% of employers saying free parking was on the same property or right next to their building (Figure 58). About two-thirds of organizations shared parking with other businesses. For many businesses, shared parking may refer to parking shared by other tenants in the same multi-tenant office, rather than two separate uses or properties.

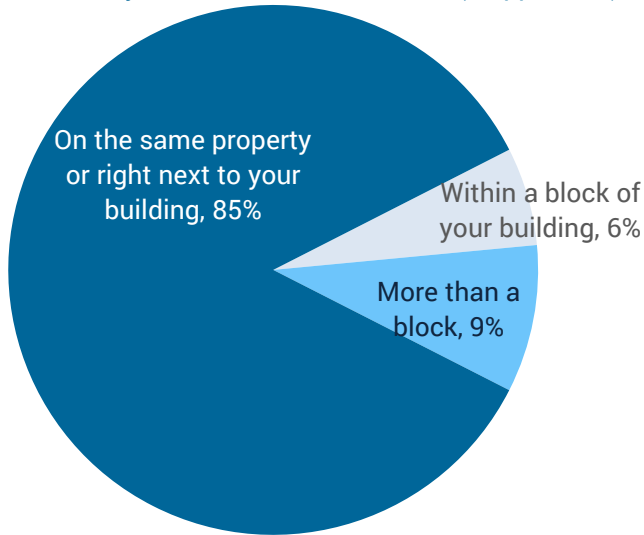
Close to 9 in 10 respondents said free parking was available at their building location for both employees and customers. Less than 17% indicated paid parking was available in various forms for employees and customers. Only 2% said that no parking was provided (Figure 59).

About 4 in 10 businesses said they had no reserved spaces solely for their employees or customers (Figure 60). About 2 in 10 employers reported having 1 to 5 (19%) or 6 to 15 (18%) reserved spaces. Only 8% of businesses surveyed had more than 50 reserved parking spaces. The average number of reserved parking spaces was 32 (see Table 153 in *Appendix B: Responses to Employer Survey*).

Consistent with other responses on parking, nearly 9 in 10 employers said that they had enough or more than enough parking for both employees (87%) and customers (85%, Figure 61).

Figure 58: Type of parking at current location

How close is your business to free parking that is not paid for by your organization, your employees, or your customers and clients (if applicable)?



Does your organization share parking with any other businesses?

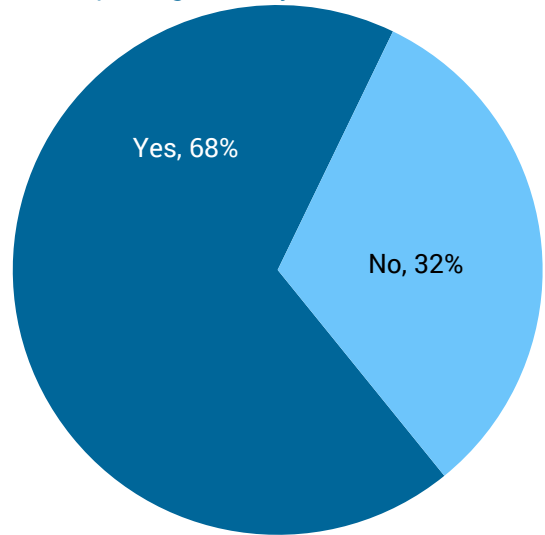


Figure 59: Type of parking at current location

What types of parking are available to your employees and to your customers/clients? (Check all that apply.)

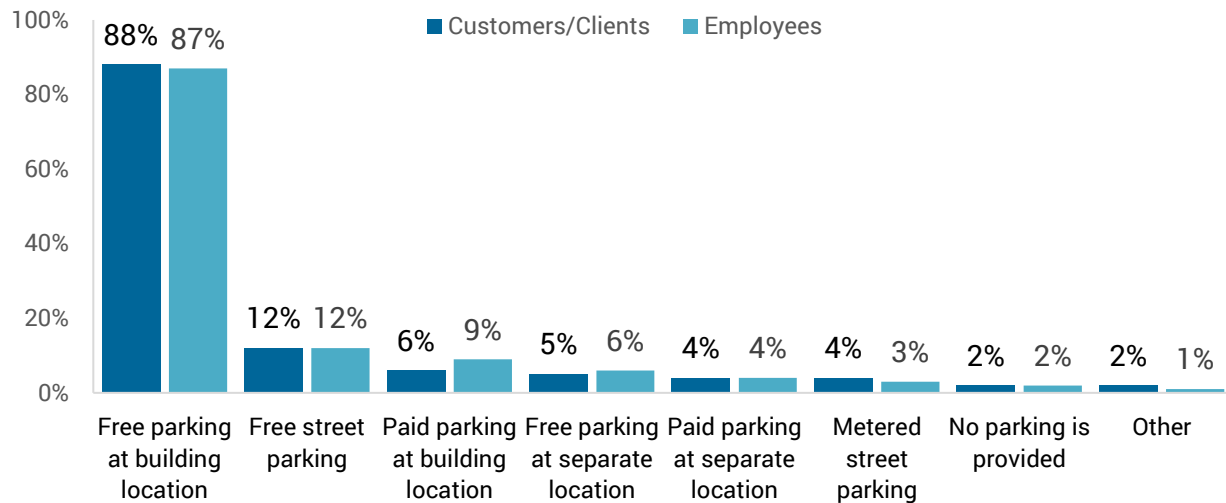


Figure 60: Amount of reserved parking

How many parking spaces does your company have that are reserved exclusively for your employees or customers and clients?

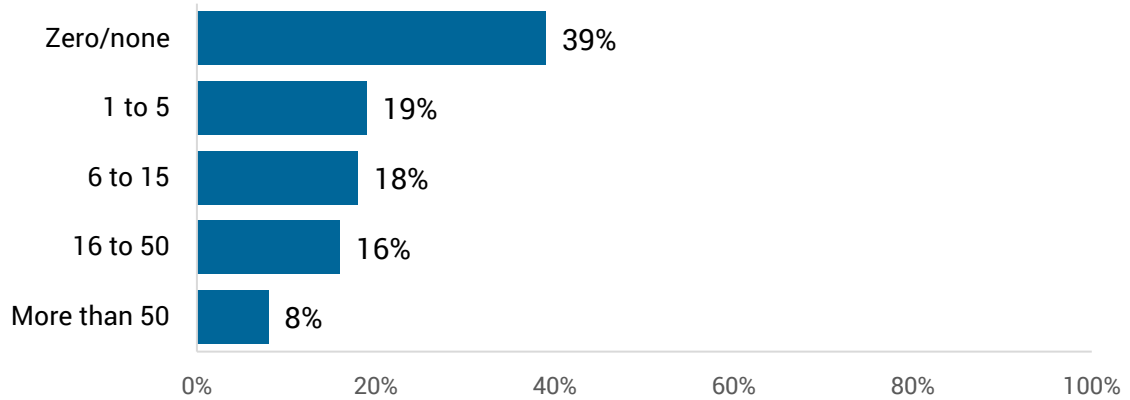
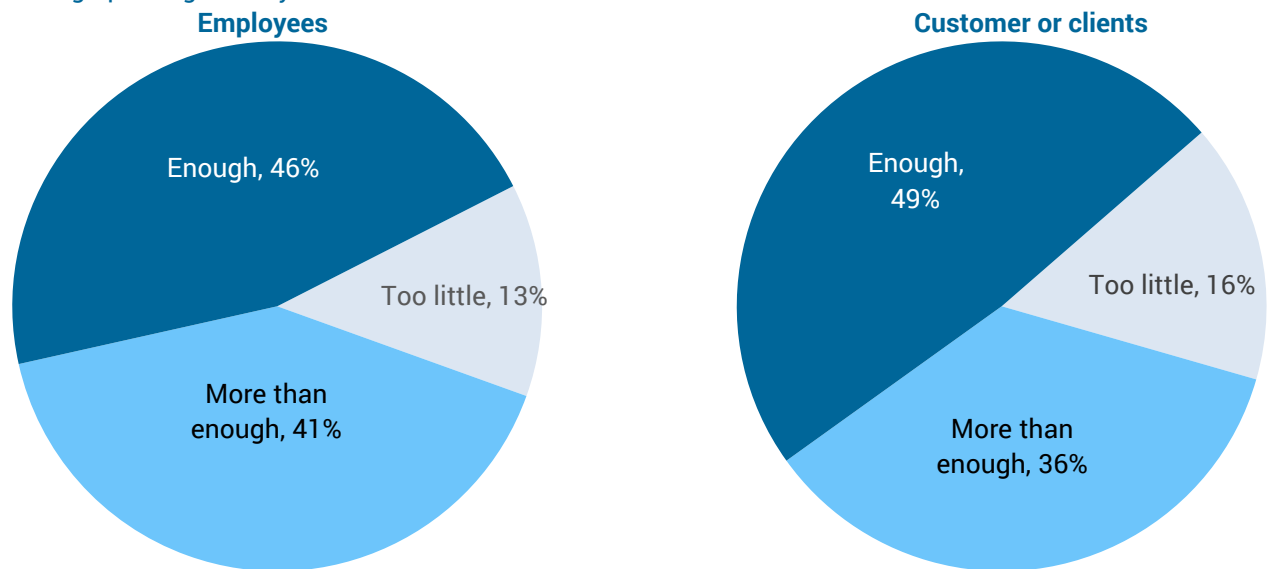


Figure 61: Amount of parking for employees and customers/clients

Overall, would you say your organization has access to too little parking, enough parking, or more than enough parking for all your:



B.3. Travel Demand Management Programs

Survey respondents were given a list of 15 strategies that could influence how employees travel to and from work and were asked whether the program was currently available, was being considered or was not being considered.

The travel demand management (TDM) program that was most likely to be provided was flexible work schedules, with 55% of businesses reporting that they currently have this program and fourteen percent considering introducing this program (Figure 62).

The remaining 14 potential TDM programs were only being made available by 2 in 10 or fewer employers and only fewer than 24% of employers said they were considering implementing any of them. Free or subsidized DART passes would be considered for enactment by about one-quarter of employers surveyed, although only 6% are currently offering them.

The group of employers surveyed generally seemed uninterested in TDM. Between 73% and 94% of respondents would not consider implementing any of the other TDM programs. Furthermore, when asked if they are interested in learning more about any TDM, only 8% were definitely interested (Figure 63).

Figure 62: Employer participation in Travel Demand Management programs

There are many strategies to influencing how employees travel to and from work. For each one listed below, indicate whether this program is currently available at your workplace, you are considering introducing this program, or you would not consider implementing it.

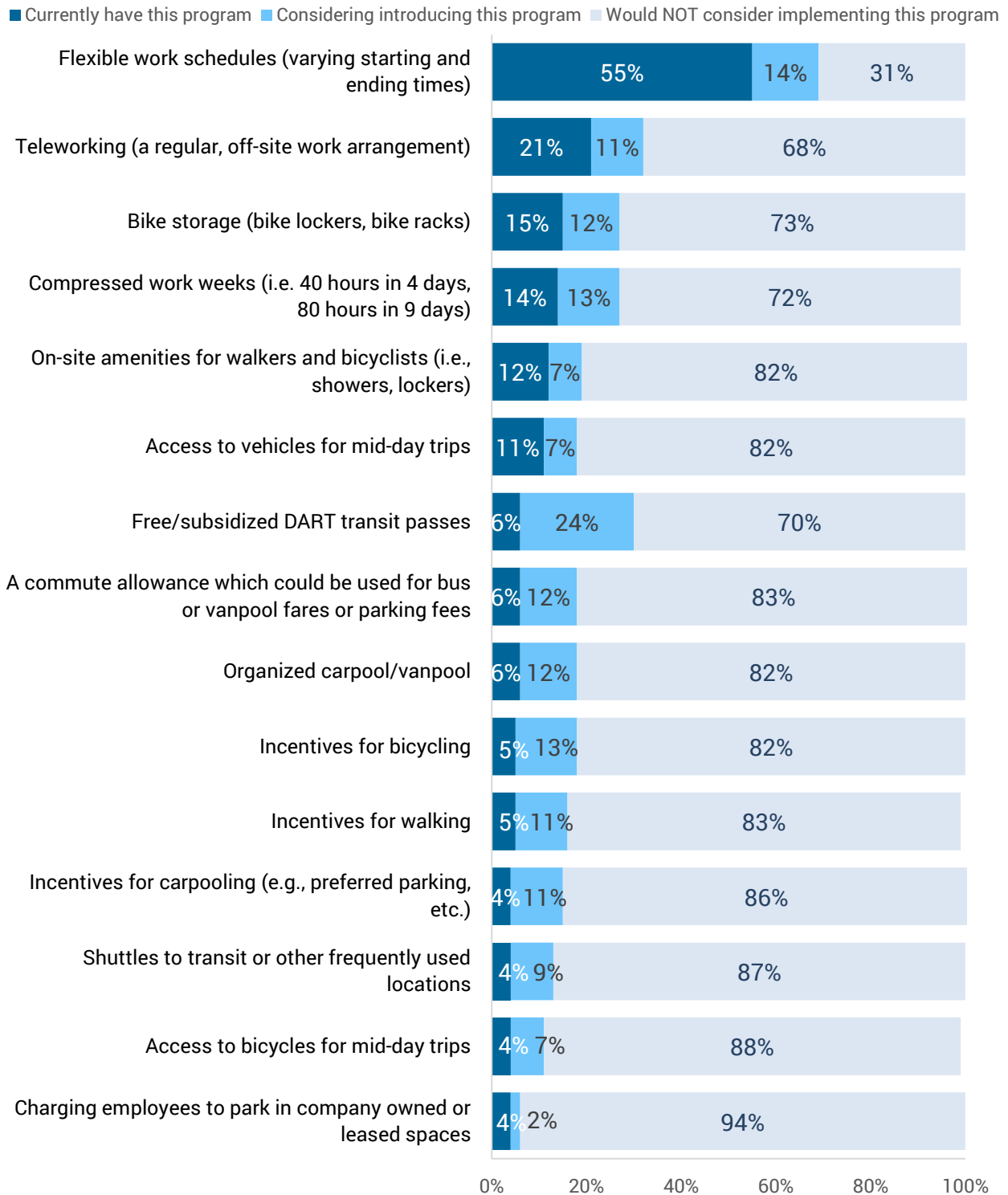
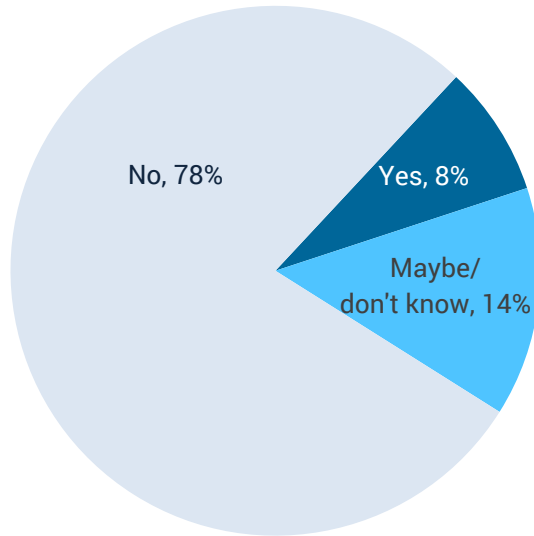


Figure 63: Organizational interest in learning about TDM strategies

Is your organization interested in learning more about any of these transportation management strategies?



B.4. Business Characteristics

The largest proportion of the employers surveyed were in an office-related field (24% professional, business, administrative, support) or in the service, restaurant, or delivery industry (18%, Figure 64). Fifteen percent of survey respondents were in retail and sales and 12% were medical or dental offices. Overall, this distribution was relatively similar to the overall proportions seen for all businesses in the study area.

About half (53%) of employers reported having 10 employees or less, 28% had 11 to 25 employees and 19% had more than 25 employees (Figure 65). The average number of total employees per organization surveyed was about 28, with 20 full-time employees, about four part-time and about four contract employees, on average (Table 129 in *Appendix B: Responses to Employer Survey*).

For about 6 in 10 employers, their regular hours of operation were during the standard weekday, mostly within the DART peak service times, meaning DART service would be a viable option for their employees (Figure 66). Another 17% had standard weekday hours that would make DART an option, but also had Saturday or weekend hours for which transit would be less accessible.

About two-thirds of businesses said all of their employees work on weekdays during the day (Figure 67). Around 1 in 10 employers reported at least 50% of their workforce worked during the week in the evenings or at night and one in six reported at least 50% of employees working on the weekends. On average, across all the employers surveyed, about 81% of their employees worked weekdays, daytime (see Table 131 in *Appendix B: Responses to Employer Survey*). About 15% of employees worked weekdays, 18% on weekends and 14% worked varying or unpredictable schedules.

About 4 in 10 employers reported that about half or more of their employees earned more than \$20 per hour (Figure 68). However, nearly 3 in 10 employers reported that none of their employees earned more than \$20 per hour. About 9 in 10 (87%) companies noted that none of their employees made less than \$10 per hour. Only 3% of employers said that all of their employees made less than \$10 per hour.

On average, across all the employers surveyed, about 45% of their employees earned more than \$20 per hour, while 48% earned between \$10 and \$20 per hour, and 7% earned less than \$10 per hour (see Table 133 in *Appendix B: Responses to Employer Survey*).

Businesses reported that most of their employees were 30 to 49 years old (Figure 69). About two-thirds said that at least some of their employees were 29 years old or younger and a similar proportion said their employees were 50 to 64 years old. About one-quarter of respondents said that anyone in their workforce was 65 years or older. On average, across all the employers surveyed, about 27% of their employees were younger than age 30, while 40% were between 30 and 49 years old, 26% were between 50 and 64 years old, and 6% were age 65 or older (see Table 135 in *Appendix B: Responses to Employer Survey*).

Most employers (71%) did not have any employees who teleworked (from home or offsite, Figure 70). About 2 in 10 said that 25% or fewer of their employees teleworked. On average, surveyed employers reported that about 10% of their employees telework one or more days a week (see Table 137 in *Appendix B: Responses to Employer Survey*).

Figure 64: Type of business

What type of business is this?

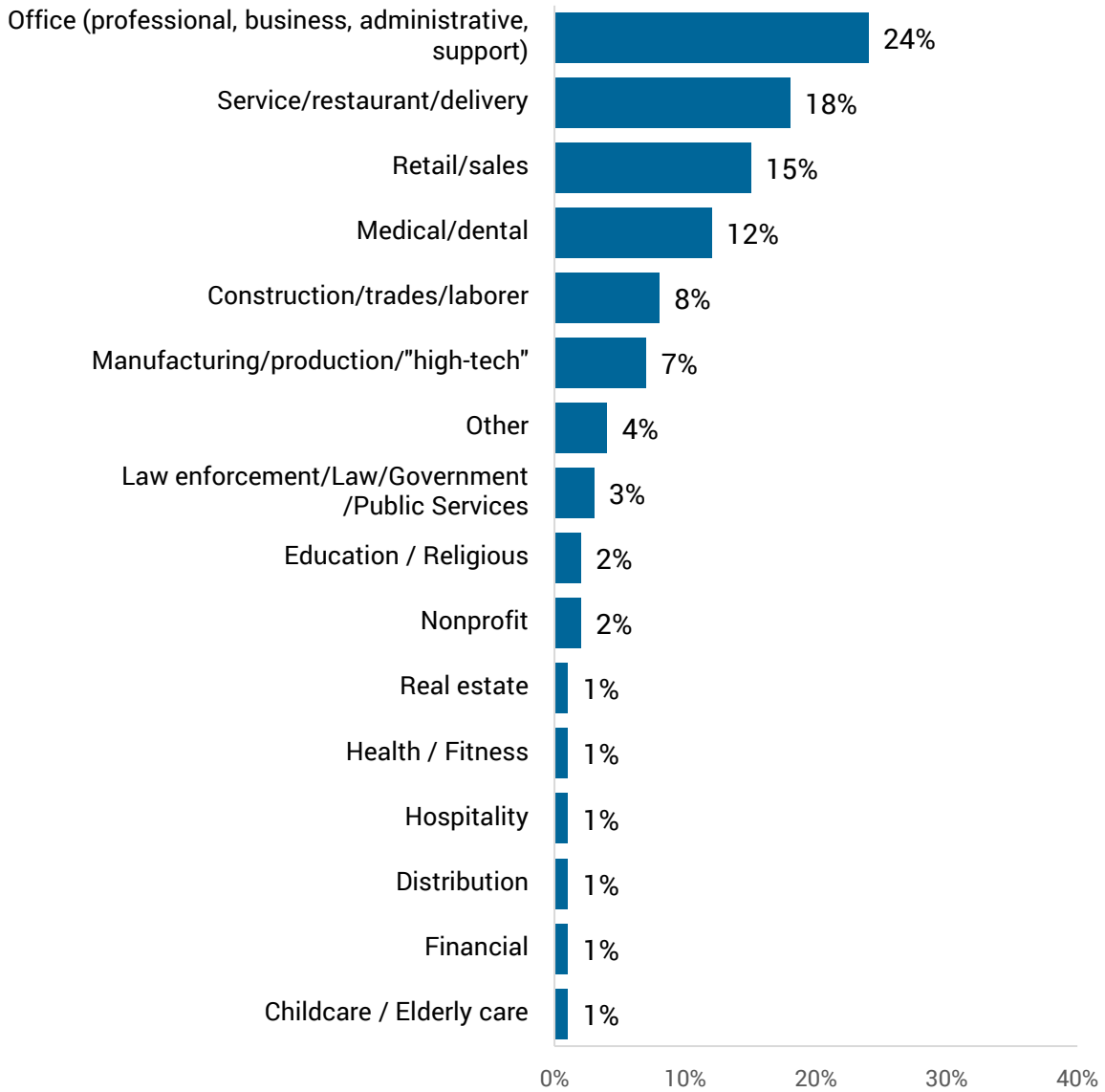


Figure 65: Number of employees

Including yourself, how many full-time, part time and contract employees are at this location?

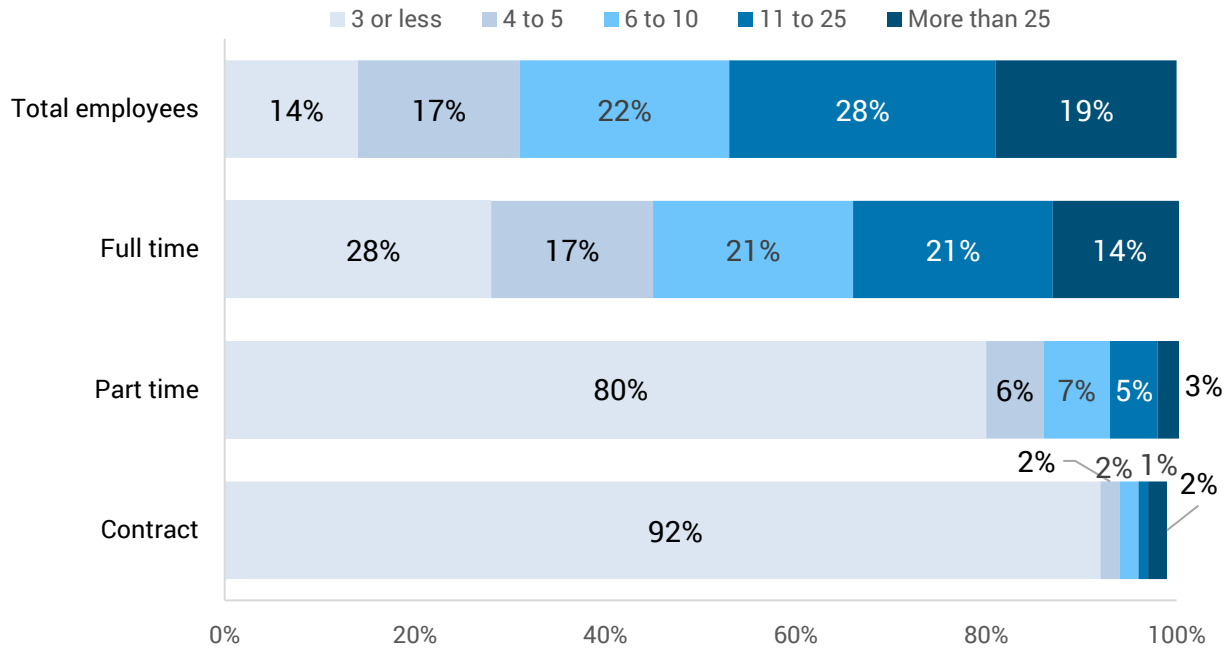


Figure 66: Hours of operation

What are your hours of operation?

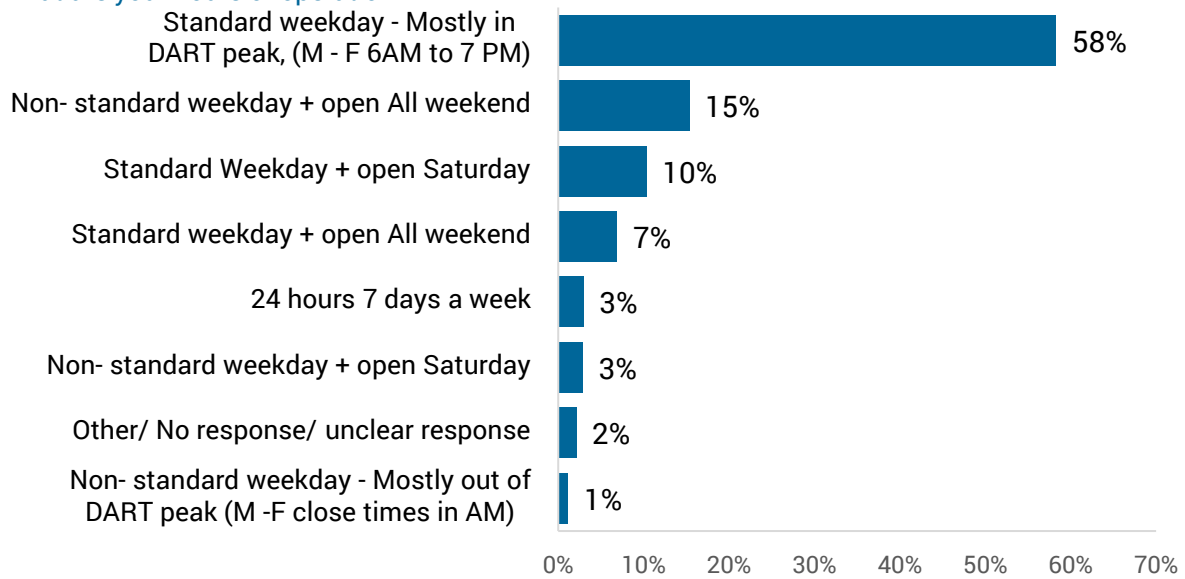


Figure 67: Work schedule of employees

Roughly, what percent of employees at this worksite work the following schedules:

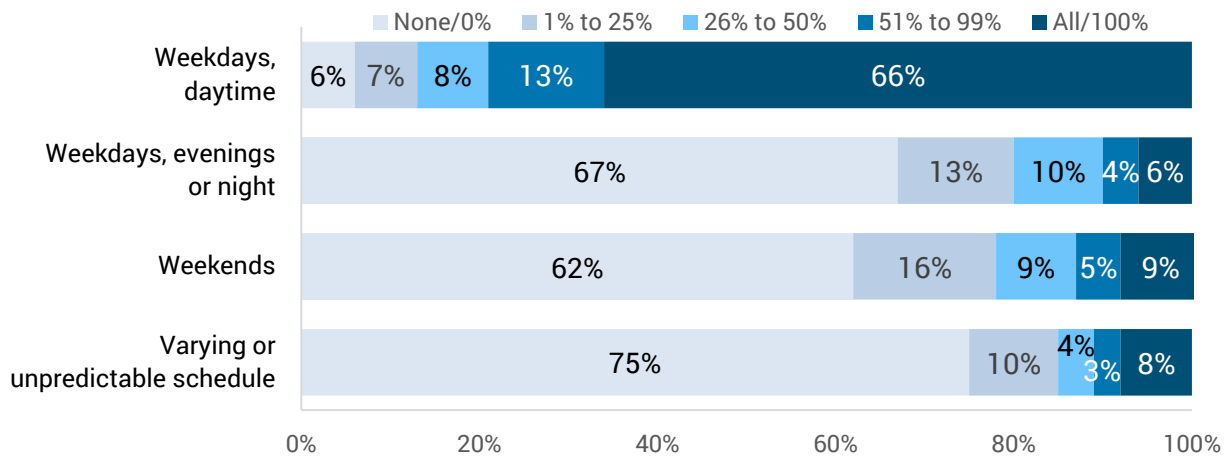


Figure 68: Employee pay

About what proportion of your organization's employees earn:

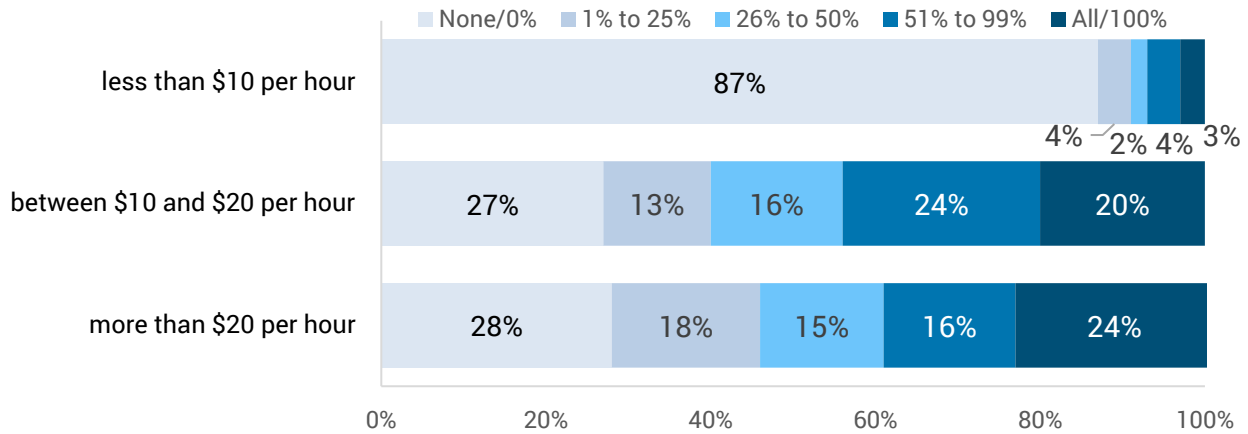


Figure 69: Employee age

About what proportion of your organization's employees are:

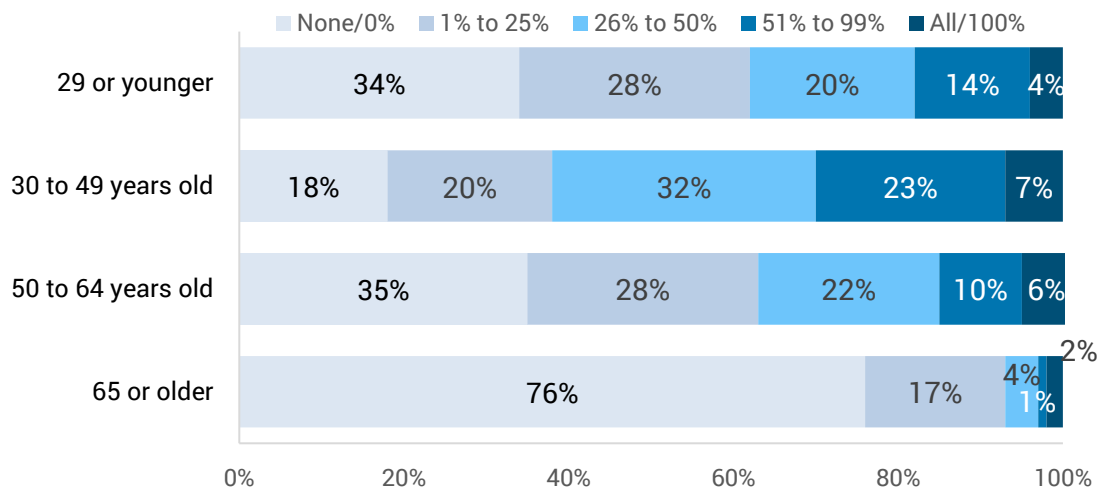
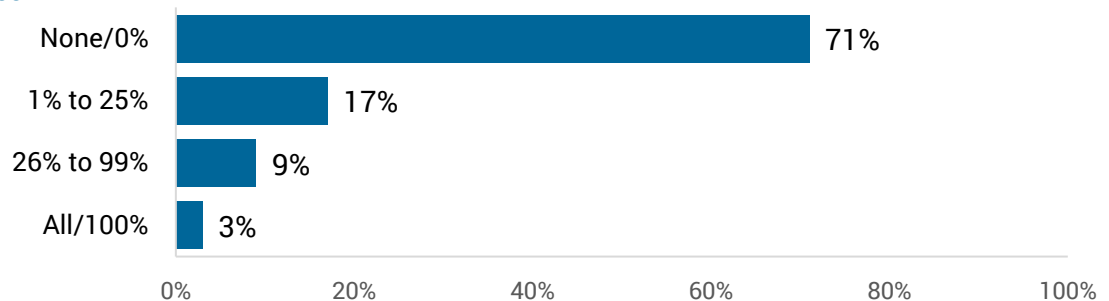


Figure 70: Proportion of employees who telework

About what proportion of your organization's employees telework (i.e., work from home/offsite) one or more days a week?



B.5. Key Findings by Employer and Station Area Characteristics

B.5.1. Key Findings by Transit Station Typology

A number of the key outcomes from the employer survey were examined through the lens of the station typologies based on business characteristics and additional non-survey data. (For a full list of the categories into which the stations were classified into types, see Figure 33 on page 43. More information about the station typologies can be found on Figure 112 on page 342 in Appendix D: Survey Methodology.) The goal was to see if some areas might be considered to display more of the traits of transit-oriented development than others, or whether certain types of businesses were more likely to be influenced by or contributed to a more transit-friendly orientation.

Those businesses that were closer to a rail station were not statistically significantly more likely than those who were further to have implemented a travel demand management (TDM) program or strategy (Figure 71).

Businesses whose closest rail station was in Garland were less likely to report offering TDM strategies than businesses around stations in Dallas, Plano or Richardson. The geographic corridors in which businesses were most likely to implement TDM strategies were the Central Dallas and Oak Cliff/Lancaster Road corridors, with businesses in the West Oak Cliff corridor generally being the least likely to have done so. Businesses in station areas with a mix of residential and employment land uses were more likely to have offered a TDM program than those in the station areas with primarily employment land use.

Those in station areas that were very walkable were more likely to have offered any TDM strategy compared to those in less walkable areas (Figure 72). Employers near stations that served more transit lines were more likely to have offered a TDM strategy than those near stations with fewer lines. While differences by average ridership of the station were mostly not statistically significant, those near stations with lower ridership were actually more likely to offer a free or subsidized transit pass to their employees.

Among employers who were considering moving in the next five years, those who were located near stations in Dallas or Garland, or in geographic corridors of Blue Line East, Central Dallas or Oak Cliff/Lancaster Road, were more likely to consider it very or somewhat important that their next location be near a DART stop or station than those employers whose nearest station was in Plano or Richardson, or who were in other corridors (Figure 73).

Those in the corridors of Oak Cliff/Lancaster Road or West Oak Cliff were the most likely to be interested in learning more about TDM strategies. Businesses in these locations also were more likely to say that having access to a larger workforce through DART and having employees see a DART commute option as a benefit was a greater influence on their location decision compared to those in the other corridors.

Figure 71: Provision of TDM programs by station typology

Station typology	Percent of organizations providing each of the following TDM strategies:			
	Any TDM strategy	Free/subsidized DART transit passes	Charging employees to park in company owned or leased spaces	A commute allowance which could be used for bus or vanpool fares or parking fees
Overall	70%	6%	4%	6%
Radius Distance from Nearest Station				
quarter-mile	73%	7%	2%	3%
half-mile	71%	6%	5%	5%
one-mile	69%	6%	5%	7%
City of Nearest Station				
Dallas	74%	9%	6%	7%
Garland	59%	0%	1%	3%
Plano	69%	1%	1%	5%
Richardson	66%	4%	4%	4%
Geographic Area of Nearest Station				
Blue Line East	62%	1%	2%	5%
Central Dallas	80%	19%	13%	12%
North Dallas	73%	5%	4%	5%
Oak Cliff/ Lancaster Road	78%	11%	0%	0%
Plano / Richardson	67%	3%	3%	4%
West Oak Cliff	58%	7%	0%	0%
Land Use Type of Nearest Station				
Employment	68%	7%	5%	6%
Mixed + Residential	75%	6%	4%	5%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

Figure 72: Provision of TDM programs by station typology (continued)

Station typology	Percent of organizations providing each of the following TDM strategies:			
	Any TDM strategy	Free/subsidized DART transit passes	Charging employees to park in company owned or leased spaces	A commute allowance which could be used for bus or vanpool fares or parking fees
Walkability of Nearest Station Area				
Very car-dependent or car-dependent	66%	5%	2%	2%
Somewhat walkable	66%	9%	7%	8%
Very walkable or walker's paradise	77%	5%	3%	5%
Presence of Park and Ride at Nearest Station				
Park and Ride	66%	4%	3%	4%
Without Park and Ride	79%	11%	8%	8%
Amount of Transit Service at Nearest Station				
1 line	63%	3%	1%	3%
1 line plus peak	68%	2%	4%	5%
2 lines	72%	10%	6%	7%
3 lines	80%	8%	6%	6%
Average Ridership at Nearest Station				
Less than 1,000	70%	13%	7%	8%
1,000 to 1,3000	68%	2%	3%	3%
1,300 to 2,000	66%	4%	4%	2%
2,000 or more	76%	6%	4%	8%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

Figure 73: Business interest in TDM strategies and influence of being near a DART station on location decisions by station typology

Station typology	Percent of organizations:			
	Who are interested in learning about TDM strategies	For whom having access to a larger workforce through DART was a strong or somewhat influence on choosing current location	For whom having employees see a DART commute option as a benefit was a strong or somewhat influence on choosing current location	Who consider it very or somewhat important that next location is near a DART stop or station
Overall	8%	24%	34%	36%
Radius Distance from Nearest Station				
quarter-mile	9%	30%	36%	40%
half-mile	10%	28%	38%	34%
one-mile	8%	20%	31%	36%
City of Nearest Station				
Dallas	9%	25%	36%	46%
Garland	5%	23%	35%	48%
Plano	10%	30%	35%	22%
Richardson	6%	20%	29%	17%
Geographic Area of Nearest Station				
Blue Line East	7%	20%	32%	51%
Central Dallas	7%	26%	42%	70%
North Dallas	8%	23%	31%	32%
Oak Cliff/ Lancaster Road	17%	43%	58%	51%
Plano / Richardson	8%	23%	31%	18%
West Oak Cliff	26%	48%	55%	2%
Land Use Type of Nearest Station				
Employment	8%	24%	35%	35%
Mixed + Residential	9%	26%	32%	39%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

Figure 74: Business interest in TDM strategies and influence of being near a DART station on location decisions by station typology (continued)

Station typology	Percent of organizations:			
	Who are interested in learning about TDM strategies	For whom having access to a larger workforce through DART was a strong or somewhat influence on choosing current location	For whom having employees see a DART commute option as a benefit was a strong or somewhat influence on choosing current location	Who consider it very or somewhat important that next location is near a DART stop or station
Walkability of Nearest Station Area				
Very car-dependent or car-dependent	10%	21%	30%	23%
Somewhat walkable	8%	25%	37%	46%
Very walkable or walker's paradise	8%	26%	34%	34%
Presence of Park and Ride at Nearest Station				
Park and Ride	7%	23%	32%	32%
Without Park and Ride	11%	28%	39%	45%
Amount of Transit Service at Nearest Station				
1 line	12%	28%	38%	49%
1 line plus peak	8%	25%	33%	17%
2 lines	9%	23%	34%	41%
3 lines	3%	24%	28%	35%
Average Ridership at Nearest Station				
Less than 1,000	11%	28%	43%	44%
1,000 to 1,3000	8%	23%	30%	27%
1,300 to 2,000	6%	21%	28%	47%
2,000 or more	8%	25%	35%	30%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

B.5.2. Key Findings by Employer Characteristics

Medical/dental businesses were the least likely to report offering any TDM strategy, while service/restaurant/delivery businesses were the most likely to do so (Figure 75). The service/restaurant/delivery businesses were the most likely to offer flexible work schedules compared to other types of businesses (68% compared to 55% of all companies), and this is what makes them most likely to report offering any TDM strategies (this data is provided in a separate document of detailed crosstabulations of the survey data).

Larger employers were more likely than smaller employers to offer any TDM strategy, and specifically they were more likely to offer free or subsidized DART transit passes and a commute allowance than were smaller employers.

Businesses where a greater proportion of employees made a higher hourly wage (\$20 or more per hour) were more likely to provide a free or subsidized DART transit pass than were businesses where fewer employees made \$20 or more per hour.

Companies where any employee could telework were more likely to offer a TDM program than were those where employees do not telework. In addition to teleworking option as a TDM strategy, these employers were also more likely to offer free or subsidized transit passes, to charge employees to park and to provide a commute allowance than were employers where no employees teleworked.

Employers who might move in the next five years and considered it very or somewhat important that the next location be near a DART stop or station were more likely to offer a free or subsidized DART transit passes and less likely to offer a commute allowance than were companies that did not consider it important for their next location to be near a DART stop or station (Figure 76). Businesses where free parking was on the same property or right next to their building were less likely to offer transit passes or a commute allowance than were those where free parking was further away. They were also less likely to charge employees to park in company owned or leased spaces.

Those employers who felt there was too little parking for employees were more likely to offer TDM programs than those employers who felt there was enough or more than enough parking for employees.

There were no statistical differences noted by employer characteristics in their interest of learning about TDM strategies (Figure 77 and Figure 78).

Service/restaurant/delivery businesses were more likely than other types of businesses to report that having access to a larger workforce through DART was an influence on their decision to choose their current location. Larger employers were more likely to report that having access to a larger workforce through DART and having employees see a DART commute option as a benefit was an influence in their location decision compared to smaller employers. Likewise, employers who had a greater proportion of employees making lower wages were more likely to have been influenced by these factors in choosing their location than were employers with a greater proportion of employees making higher wages. Organizations who did not have free parking right next to their location or who felt there was too little parking for employees at their location were more likely to have considered having employees see a DART commute option as a benefit in their location decision.

Figure 75: Provision of TDM programs by employer characteristics

Employer characteristics	Percent of organizations providing each of the following TDM strategies:			
	Any TDM strategy	Free/subsidized DART transit passes	Charging employees to park in company owned or leased spaces	A commute allowance which could be used for bus or vanpool fares or parking fees
Overall	70%	6%	4%	6%
Type of Business				
Office (professional, business, etc.)	72%	8%	7%	7%
Service/ restaurant/ delivery	77%	5%	3%	4%
Medical/dental	60%	4%	5%	4%
Anything else	69%	6%	4%	6%
Size of Employer				
5 or fewer employees	63%	2%	3%	3%
6 to 10 employees	68%	4%	2%	3%
11 to 25 employees	70%	7%	6%	5%
More than 25 employees	81%	14%	7%	11%
Hourly wage of employees				
25% or fewer of employees make \$20+ per hour	70%	3%	5%	4%
More than 25% of employees make \$20+ per hour	70%	8%	5%	7%
Do any employees telework				
No employees telework	64%	4%	3%	4%
1% or more of employees telework one or more days a week	83%	10%	7%	10%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

Figure 76: Provision of TDM programs by employer characteristics (continued)

Employer characteristics	Percent of organizations providing each of the following TDM strategies:			
	Any TDM strategy	Free/subsidized DART transit passes	Charging employees to park in company owned or leased spaces	A commute allowance which could be used for bus or vanpool fares or parking fees
Importance of next location being near a DART stop or station				
Very or somewhat important next location is near a DART stop or station	72%	18%	7%	17%
Not at all important or don't know how important	66%	3%	3%	3%
Distance to free parking				
Free parking is on same property or right next to building	70%	4%	2%	4%
Free parking is further away	74%	10%	10%	9%
Amount of parking for employees				
Too little parking for employees	80%	14%	10%	9%
Enough or more than enough	69%	5%	4%	5%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

Figure 77: Business interest in TDM strategies and influence of being near a DART station on location decisions by employer characteristics

Business characteristics	Percent of organizations:			
	Who are interested in learning about TDM strategies	For whom having access to a larger workforce through DART was a strong or somewhat influence on choosing current location	For whom having employees see a DART commute option as a benefit was a strong or somewhat influence on choosing current location	Who consider it very or somewhat important that next location is near a DART stop or station
Overall	8%	24%	34%	36%
Type of Business				
Office (professional, business, etc.)	6%	21%	31%	40%
Service/ restaurant/ delivery	10%	35%	42%	23%
Medical/dental	10%	25%	32%	41%
Anything else	9%	22%	33%	35%
Size of Employer				
5 or fewer employees	6%	17%	24%	38%
6 to 10 employees	7%	24%	37%	29%
11 to 25 employees	11%	27%	38%	34%
More than 25 employees	9%	33%	42%	42%
Hourly wage of employees				
25% or fewer of employees make \$20+ per hour	11%	32%	43%	31%
More than 25% of employees make \$20+ per hour	8%	21%	29%	40%
Do any employees telework				
No employees telework	8%	24%	33%	39%
1% or more of employees telework one or more days a week	8%	25%	37%	33%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

Figure 78: Business interest in TDM strategies and influence of being near a DART station on location decisions by employer characteristics (continued)

Business characteristics	Percent of organizations:			
	Who are interested in learning about TDM strategies	For whom having access to a larger workforce through DART was a strong or somewhat influence on choosing current location	For whom having employees see a DART commute option as a benefit was a strong or somewhat influence on choosing current location	Who consider it very or somewhat important that next location is near a DART stop or station
Importance of next location being near a DART stop or station				
Very or somewhat important next location is near a DART stop or station	3%	39%	52%	
Not at all important or don't know how important	1%	11%	24%	
Distance to free parking				
Free parking is on same property or right next to building	8%	24%	33%	29%
Free parking is further away	11%	30%	43%	58%
Amount of parking for employees				
Too little parking for employees	10%	30%	45%	65%
Enough or more than enough	8%	23%	33%	25%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

B.5.3. Key Findings: Items Related to Active Transportation by Station Typology

No significant differences were found in the proportion of employers that provide TDM programs related to active transportation (walking and bicycling) by the distance they were from a DART rail station, the type of land use observed in the area around the nearest station or by the walkability of the nearest station area (Figure 79).

However, there were some differences found in the influence of factors related to foot traffic on employers’ decisions to have chosen their current location. Employers within a half-mile of a DART rail station were more likely to report that customer foot traffic from a rail station or from employees and customers of nearby businesses was an influence on their location decision compared to employers more than a half-mile from a station (Figure 80).

Employers in areas that had a mix of residential in the surrounding area were more likely to have considered customer foot traffic from residents in their location decision than employers in areas with mostly business land use. Businesses in very walkable areas were more likely to have considered foot traffic from employees at nearby businesses in their location decision than businesses in less walkable areas.

Figure 79: Provision of active transportation TDM programs by station typology

Station typology	Percent of organizations providing each of the following TDM strategies:			
	Incentives for walking	Incentives for bicycling	Access to bicycles for mid-day trips	On-site amenities for walkers and bicyclists (i.e., showers, lockers)
Overall	5%	5%	4%	12%
Radius Distance to Nearest Station				
quarter-mile	4%	3%	5%	16%
half-mile	8%	6%	5%	10%
one-mile	4%	4%	4%	12%
Land Use Type of Nearest Station Area				
Employment	6%	5%	4%	12%
Mixed + Residential	3%	4%	5%	11%
Walkability of Nearest Station Area				
Very car-dependent or car-dependent	5%	3%	5%	13%
Somewhat walkable	5%	4%	4%	10%
Very walkable or walker’s paradise	6%	6%	4%	13%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

Figure 80: Influence of foot traffic on choosing current location by station typology

Station typology	Percent of organizations for whom each of the following was a strong or somewhat influence on choosing current location Customer foot traffic from:			
	A rail station	Employees at nearby businesses	Customers of nearby businesses	Local residents
Overall	20%	27%	28%	25%
Radius Distance to Nearest Station				
quarter-mile	23%	31%	33%	25%
half-mile	24%	31%	34%	27%
one-mile	16%	22%	23%	24%
Land Use Type of Nearest Station Area				
Employment	19%	25%	27%	22%
Mixed + Residential	22%	30%	32%	34%
Walkability of Nearest Station Area				
Very car-dependent or car-dependent	16%	22%	26%	23%
Somewhat walkable	21%	24%	26%	23%
Very walkable or walker's paradise	21%	32%	32%	28%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

B.5.4. Key Findings: Employer Consideration of TDM Strategies by Station and Business Characteristics

In general no differences were found in the proportion of employers who would consider implementing TDM strategies by the distance they were from a DART rail station, the type of business and the size of the business (Figure 81 and Figure 82). There was one exception – larger employers were more likely to consider offering free or subsidized DART transit passes than were smaller employers.

Figure 81: Employer consideration of TDM strategies by station and business characteristics

Station typology or business characteristic	Percent of organizations would consider providing each of the following TDM strategies:			
	Any TDM strategy	Free/subsidized DART transit passes	Incentives for walking	Incentives for bicycling
Overall	48%	24%	11%	13%
Radius distance from nearest station				
quarter-mile	52%	28%	15%	19%
half-mile	47%	26%	12%	12%
one-mile	47%	21%	10%	12%
Type of business				
Office (professional, business, etc.)	48%	25%	11%	14%
Service/ restaurant/ delivery	50%	28%	16%	16%
Medical/dental	49%	25%	11%	13%
Anything else	47%	21%	10%	12%
Size of employer				
5 or fewer employees	46%	18%	7%	9%
6 to 10 employees	48%	22%	12%	14%
11 to 25 employees	50%	26%	11%	14%
More than 25 employees	50%	31%	14%	16%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

Figure 82: Employer consideration of TDM strategies by station and business characteristics

Station typology or business characteristic	Percent of organizations would consider providing each of the following TDM strategies:			
	Charging employees to park in company owned or leased spaces	A commute allowance which could be used for bus or vanpool fares or parking fees (instead of just subsidizing employee parking)	Access to bicycles for mid-day trips	On-site amenities for walkers and bicyclists (i.e., showers, lockers)
Overall	2%	12%	7%	7%
Radius distance from nearest station				
quarter-mile	2%	12%	8%	5%
half-mile	1%	12%	8%	6%
one-mile	2%	11%	7%	7%
Type of business				
Office (professional, business, etc.)	2%	10%	9%	8%
Service/ restaurant/ delivery	1%	10%	8%	4%
Medical/dental	1%	12%	9%	5%
Anything else	2%	13%	6%	7%
Size of employer				
5 or fewer employees	3%	10%	8%	7%
6 to 10 employees	2%	12%	7%	7%
11 to 25 employees	1%	14%	6%	7%
More than 25 employees	1%	10%	6%	6%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

C. Employee Survey Results

A total of 550 employee surveys were completed, by employees from 64 different employers. It should be noted this is a small proportion of the employers who completed a survey (6% of the 1,043 employers surveyed). Over a third (37%) of the completed employee surveys came from those employed by just two employers (see Table 178 in *Appendix C: Responses to Employee Survey*).

The survey results provide information about employees' work commute and workday travel patterns and behaviors, their travel preferences, their perception of parking availability and their demographic profile. Key findings were examined by employee and station area characteristics.

C.1. Travel Characteristics

Single-occupancy vehicles were used for a large percentage of workday travel, with 94% of employees having driven alone for the work commute at least once in the week previous to the survey (Figure 83). Carpooling and vanpooling were the most common of alternate mode travel (5%), followed by transit.

The distance traveled to work varied, but a majority (59%) of employees had commutes of less than 15 miles (Figure 84). In terms of time spent in travel, more than half (54%) of employees spent 30 minutes or less. About 18% spent more than one hour commuting to work. The average commute distance was about 35 minutes and the average duration was about 18 minutes (see Table 194 and Table 196 in *Appendix C: Responses to Employee Survey*).

While employees began work at nearly all hours of the day, the peak arrival times were between 7:00 am and 9:00 am, with 33% arriving between 7:00 am and 8:00 am, another 24% arriving between 8:00 am and 8:30 am, and a further 11% arriving between 8:30 am and 9:00 am (Figure 85). Peak work departure times were from 4:00 pm and 6:00 pm, with 32% departing between 4:00 pm and 5:00 pm, 26% departing between 5:00 pm and 5:30 pm and an additional 10% between 5:30pm and 6:00pm (Figure 86).

Among employees surveyed, about 6 in 10 worked a schedule that would allow them to use DART during the hours of 6:00am to 6:00pm Monday through Friday (Figure 87) Among those surveyed, 93% worked full-time (Figure 88), and about 94% reported working seven or more hours in a typical day (see Table 190 in *Appendix C: Responses to Employee Survey*).

Survey respondents reported often making stops on the way to or from work. The most common stops were made to run errands or do shopping--more than half reported stopping for these purposes at least one time per week (Figure 89). About 43% indicated they stopped for other activities such as the gym, social activities, eating out, etc. In all, about 7 in 10 respondents reported making stops on their way to or from work at least once a week.

Employees also reported making trips during the workday for personal errands or work. About three-quarters reported making at least one workday trip per week (Figure 90). Nearly half of employees made workday trips at least three times a week.

Employees making trips during the workday mostly used their single-occupancy vehicles (Figure 91). Carpooling and walking were other common modes used. About 6% of employees reported ever using DART rail and about 2% reported using DART at least weekly for these types of trips.

Among surveyed employees, about 15% lived alone, 36% lived with one other person, and the remainder lived in households with three or more people. About 41% lived in households that included one or more children (see Table 213 in *Appendix C: Responses to Employee Survey*).

Only 5% of households did not own a vehicle, while nearly half (48%) of households did not have any bicycles (Table 213). Overall, 85% of employee households had one or more vehicle per driver, but only 24% had one or more bicycles per household member (Figure 92).

Figure 83: Percent of employees commuting by each mode at least once in last week

Thinking about last week, how did you get to and from work or school each day? Please choose all the modes you used each day. Figure shows percent of employees who used each mode at least once.

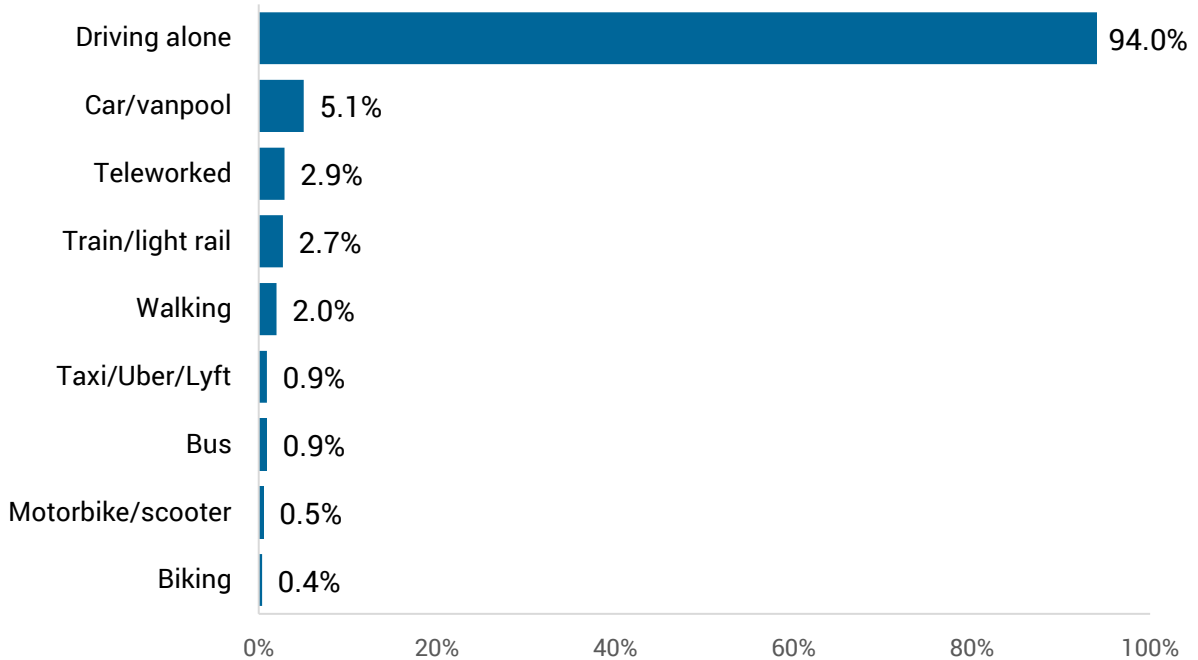


Figure 84: Work commute distance and duration

Approximately how many miles do you travel from home to work by your typical route?

Using your typical travel mode, how long does it usually take you to get from home to work?

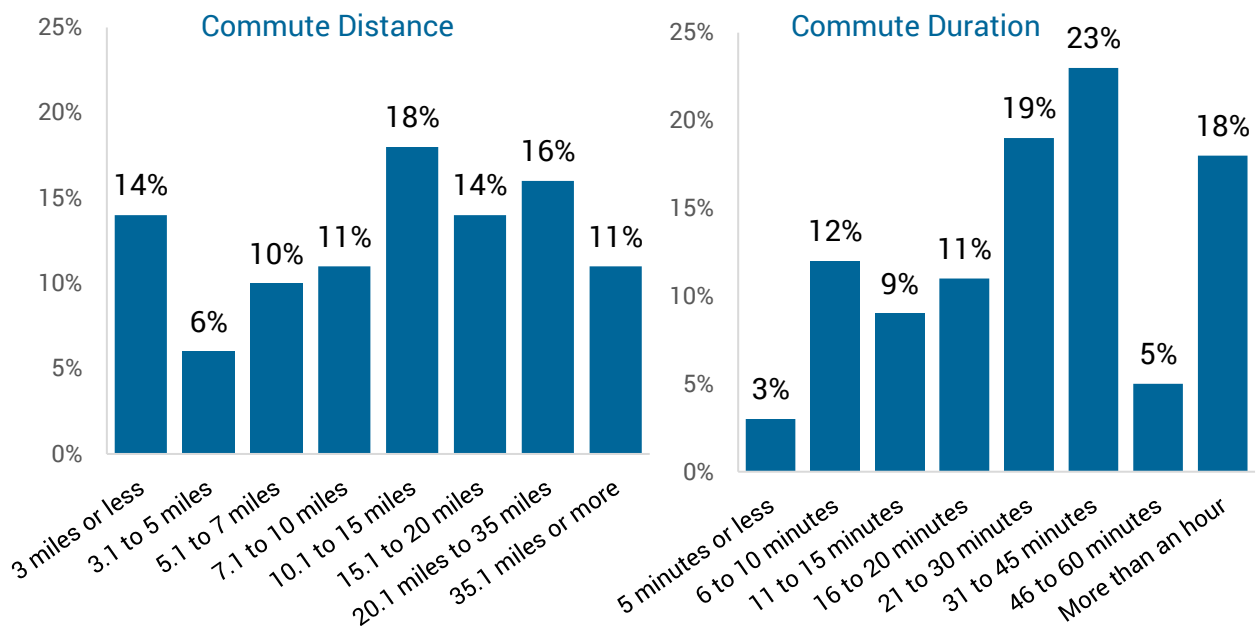


Figure 85: Work arrival times

When do you usually arrive at work?*

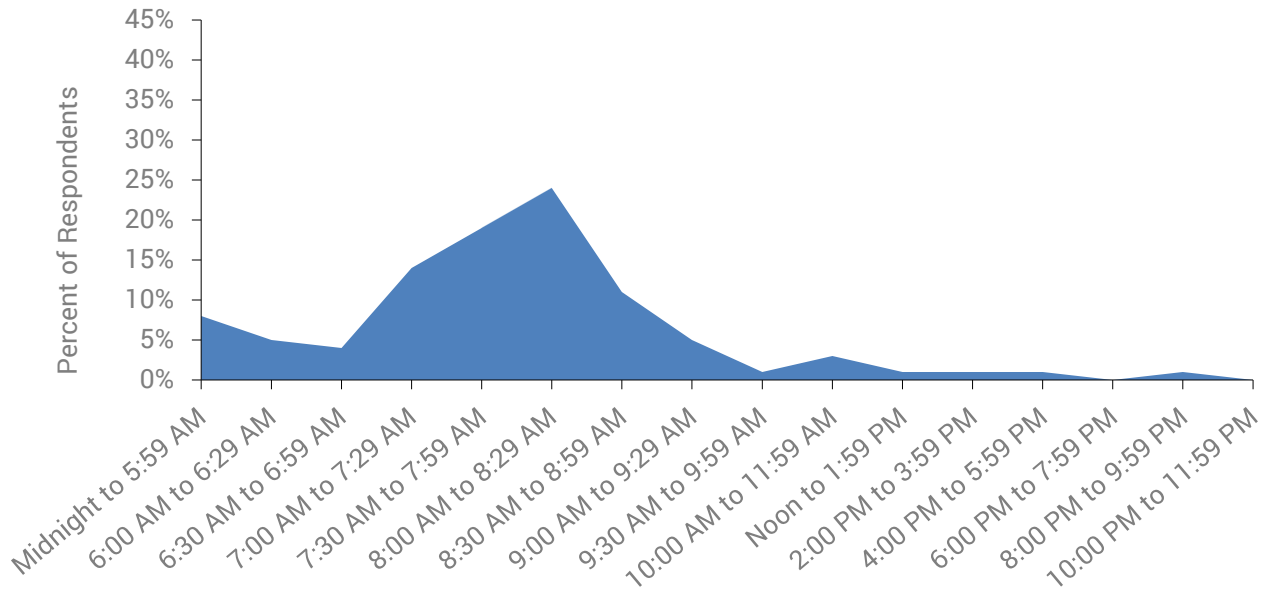
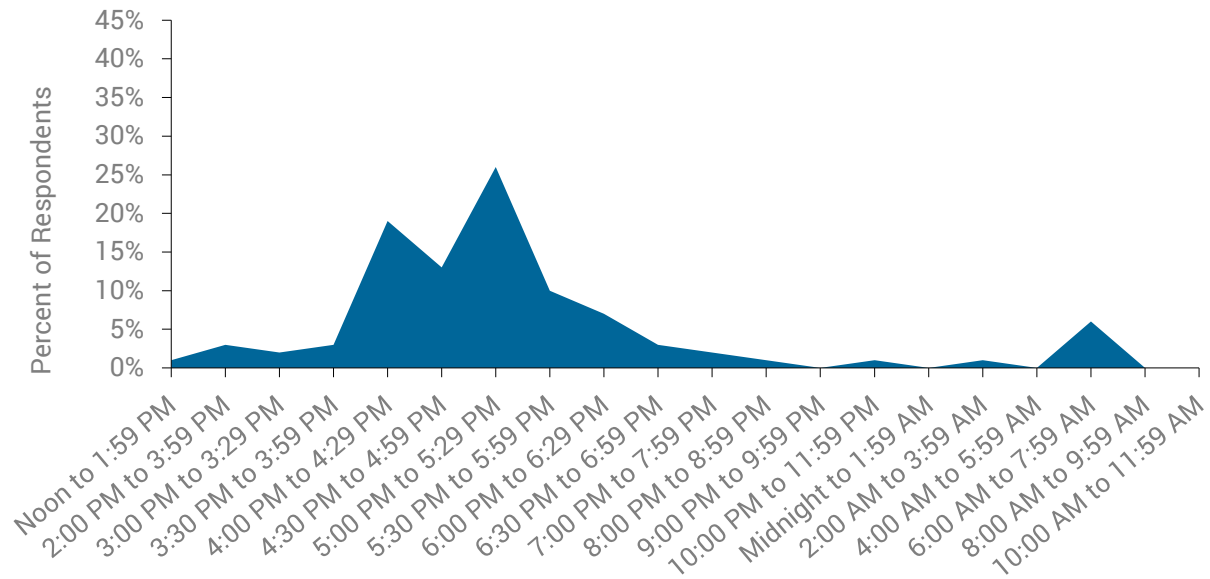


Figure 86: Work departure times

When do you usually leave work?*



* Not shown are the 3% who work different shifts every day/week or work from home

Figure 87: Work schedule

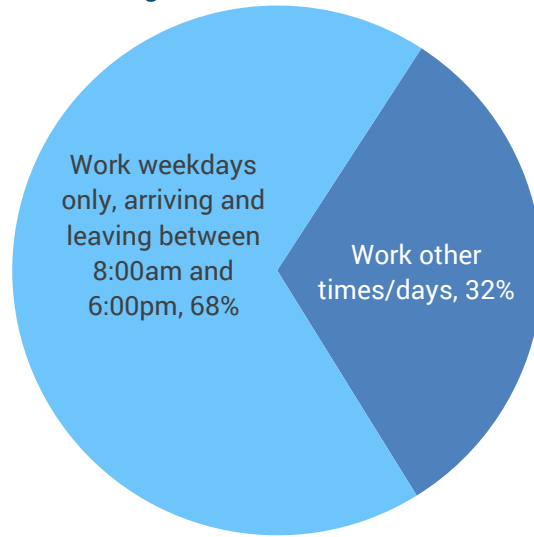


Figure 88: Employee work status

Do you work at this employer full time, part time or on a contract basis?

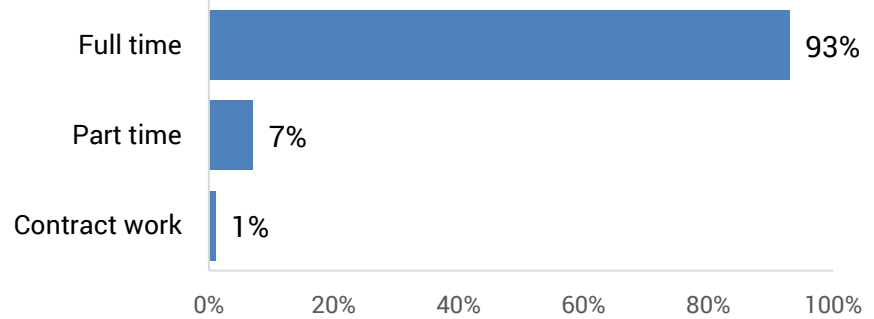


Figure 89: Percent of commuters making a stop on the way to or from work

How often do you make a stop on your way to or from work for the following reasons?
 Percent making this type of stop one or more times a week

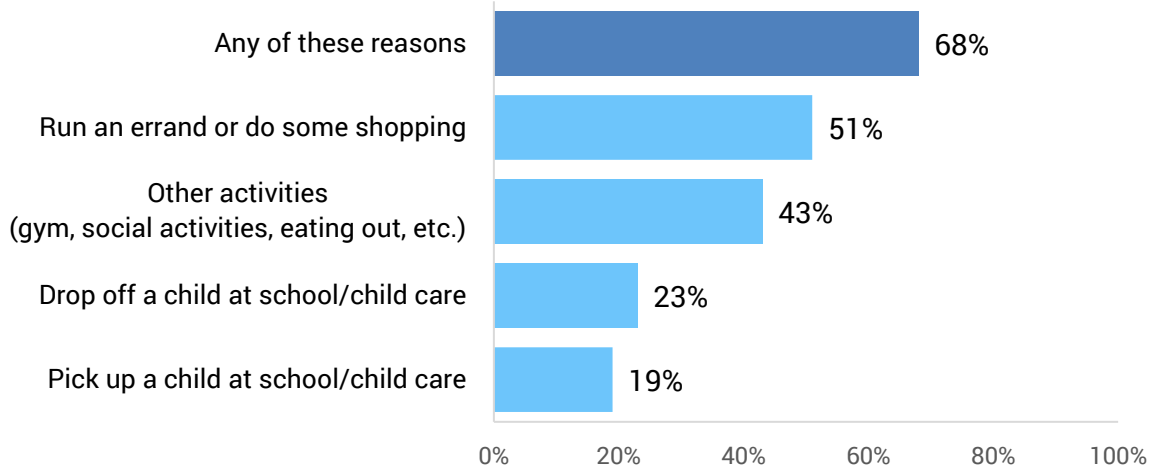


Figure 90: Percent of commuters making trips during the workday

During a typical work week, how many times do you leave work and return during the workday for personal reasons (e.g., go to lunch, shop or run a personal errand) or for work-related reasons (e.g., go to a meeting, make a delivery, visit another work site)?

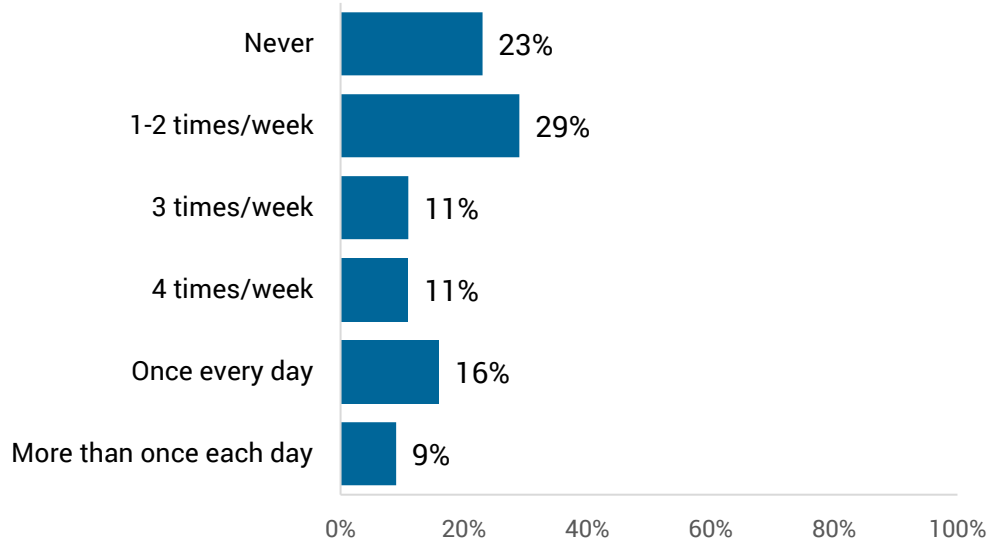


Figure 91: Travel modes used for workday trips

About how often do you use each of the following modes to leave work during the workday for personal reasons (e.g., shop, run an errand) or for work-related reasons (e.g., go to a meeting, make a delivery, visit another work site)? (Please check one box for each mode of transportation: if you never use the mode to leave work for personal reasons, choose "never.")

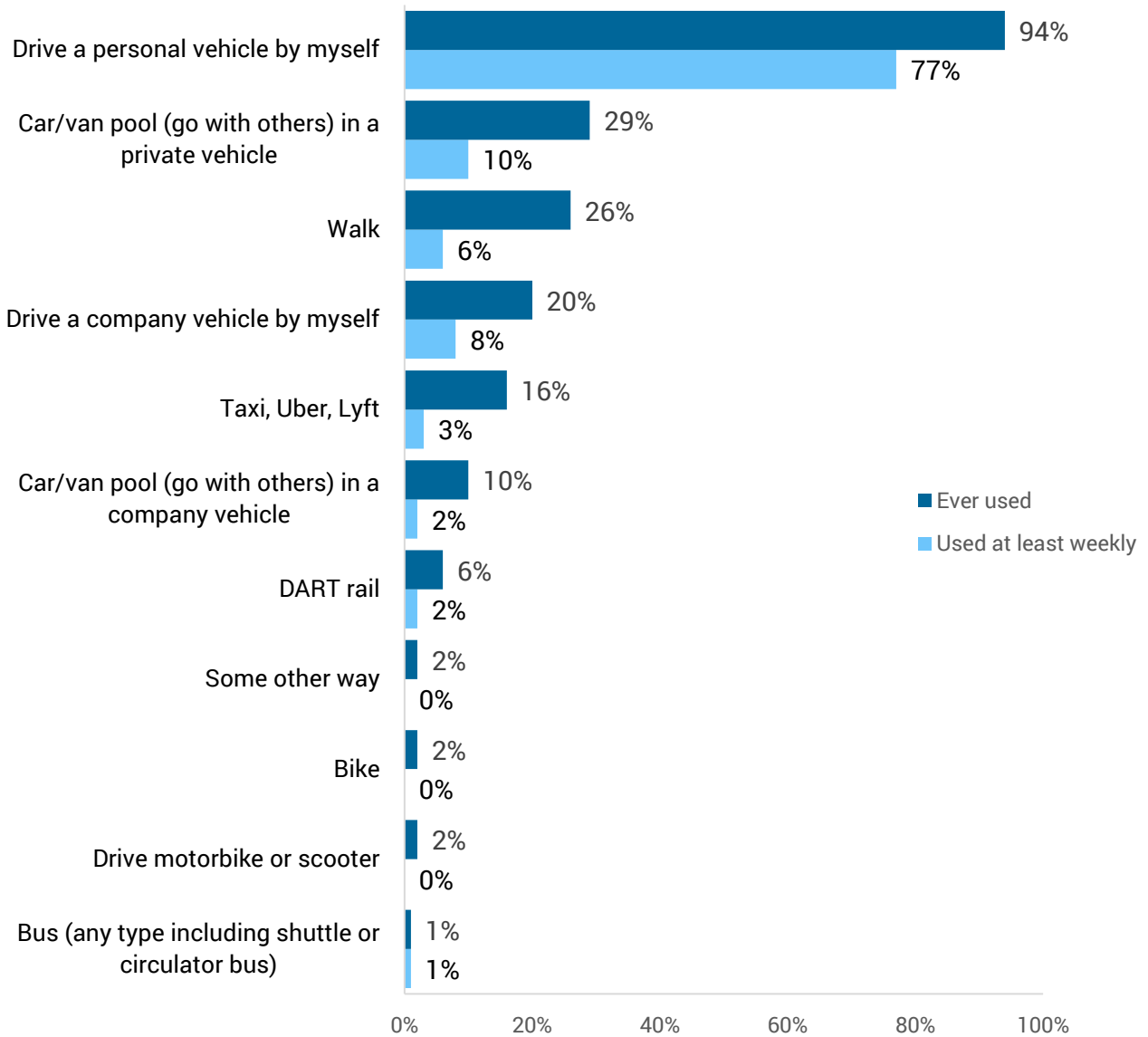
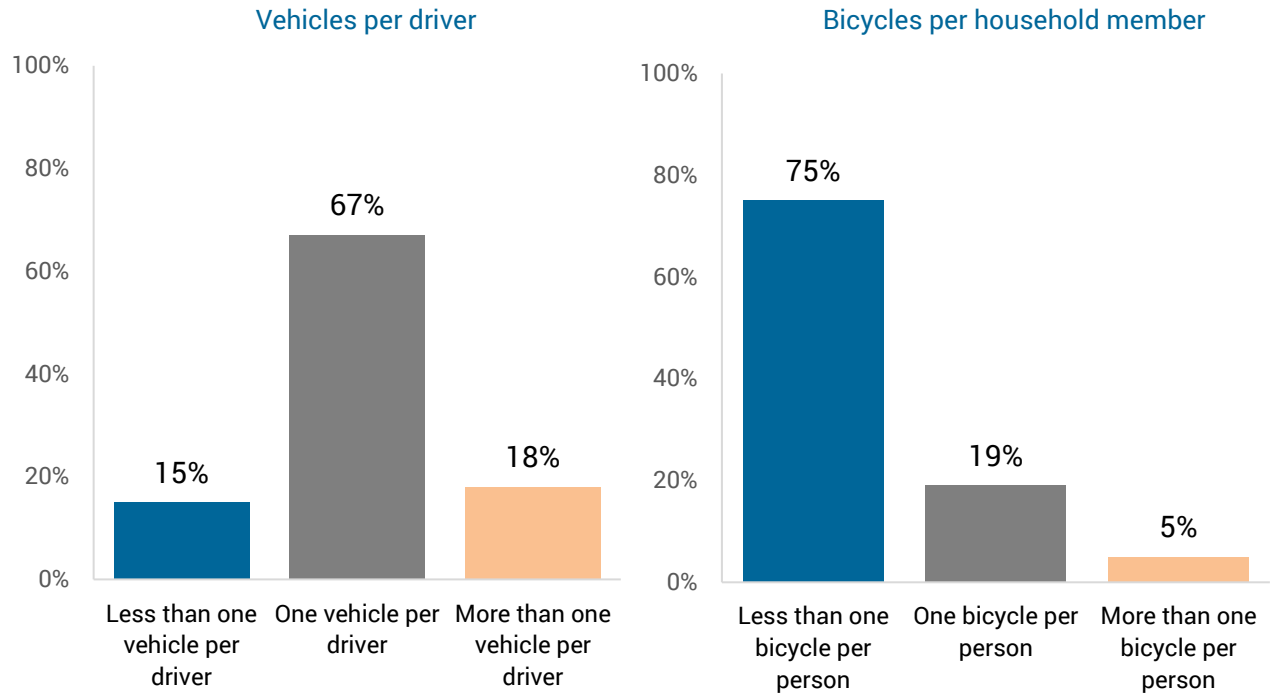


Figure 92: Vehicles per driver and bicycles per household member



C.2. Travel Preferences

When employees who typically drove to work were asked what might lead them to switch their commute to DART, more than half (55%) reported they were highly unlikely to ever use DART for their work commutes (Figure 93). Living closer to DART was listed by about 27% of respondents. About 18% reported they might use DART more if its service was more frequent, and if trains were of higher quality, more comfortable, and safer.

The most common reason employees gave for not using DART was the need for a car before or after work (66%) or during the work day (59%, Figure 94). As was seen previously, about two-thirds of respondents had reported making stops on the way to or from work at least weekly (Figure 89) and three-quarters reported making trips during the workday at least weekly (Figure 90).

Location of the stops was also a reason given for non-use. About 6 in 10 employees reported the DART stop/station was too far from their homes and 36% reported the stops were too far from their workplace. In addition, more than 40% reported DART took too long or there were too many transfers needed. Nearly 4 in 10 reported that parking was free at their employment location, so there was no need to use DART.

Survey respondents reported a fairly low offering of travel demand management (TDM) programs from their employers. The most common programs were flexible work schedules (29%), free subsidized DART passes (26%), and bike storage (23%, Figure 95).

Among those who were offered TDM benefits and services, a fairly high proportion reported taking advantage of them, with the most frequently used including teleworking (74%), flex schedules (73%), and compressed work weeks (48%). Only 4% of employees surveyed reported using their employer-sponsored DART pass in the past 6 months.

Among employees who were not offered various TDM programs, interest was not very high. The greatest interest for TDM programs not currently offered was for teleworking (35%) and compressed work week schedules (34%). More than 3 in 10 employees whose employers did not offer a DART pass indicated they would use one if offered.

When asked to rate the most important influences when accepting a job, the strongest factor related to characteristics of the job (salary/wage, interesting, etc.). Car considerations far outweighed transit or walking considerations (Figure 96). Interestingly, ease of commute and parking was more important to employees than were convenient amenities (e.g., food, shopping) near their employer.

Figure 93: What might lead respondents to switch commute to DART
 If you usually drive to work now, what might lead you to switch your commute to DART?
 Percents may add to more than 100% as respondents could check more than one category

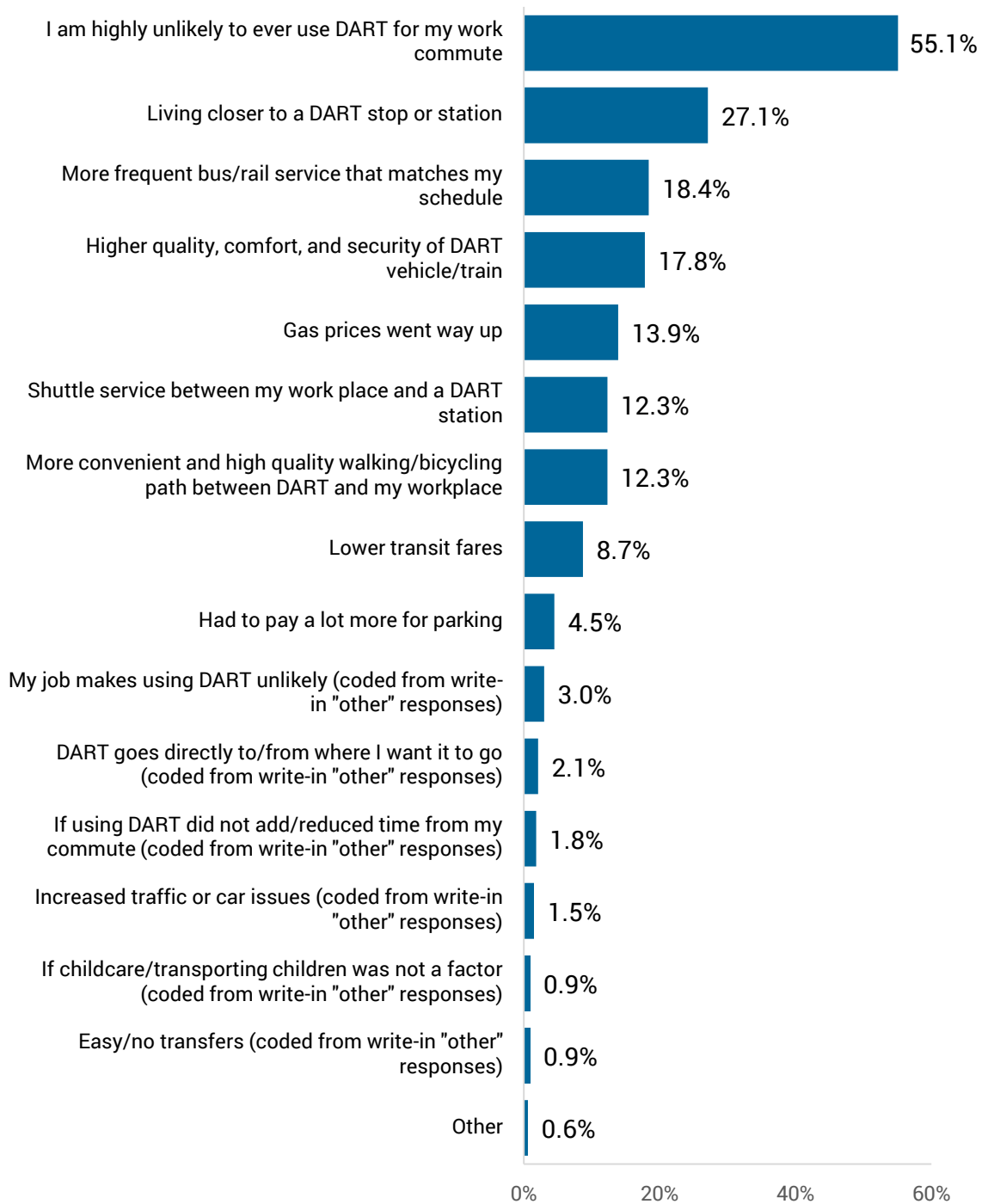


Figure 94: Reasons for not using DART or using it more often

How much is each of the following a reason you do not use DART or do not use it more often for your commute to or from work or school?

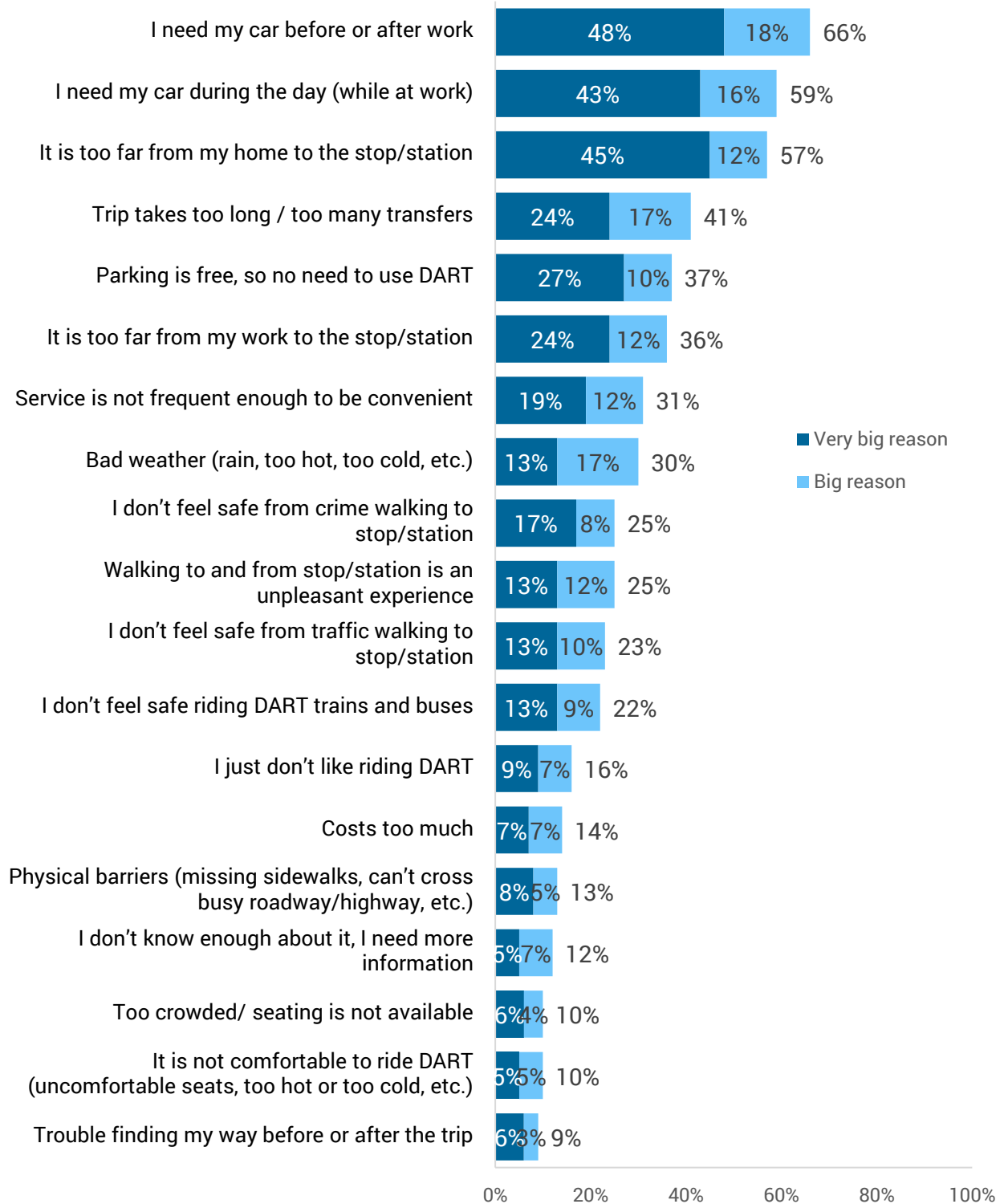


Figure 95: Use of employer-provided transportation benefits or services

Please tell us (1) which of the following benefits or services are available to you from your employer or another organization, (2) whether or not you have used them in the last six months or (3) if you would use them if they were available. The percent using a benefit or service is among those who are offered the benefit or service; while the percent reporting they would use a benefit or service is among those who are not currently offered the benefit or service.

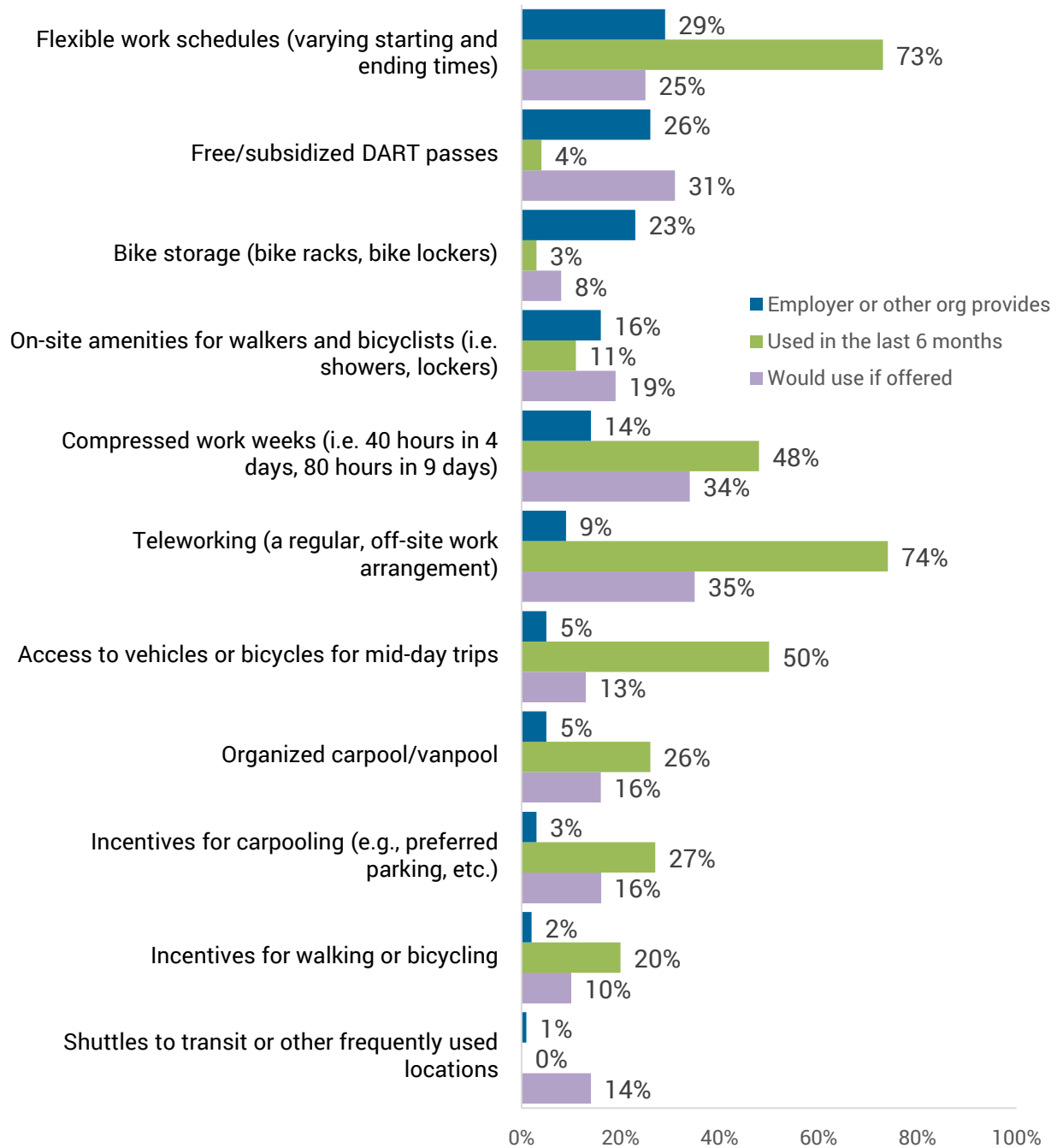
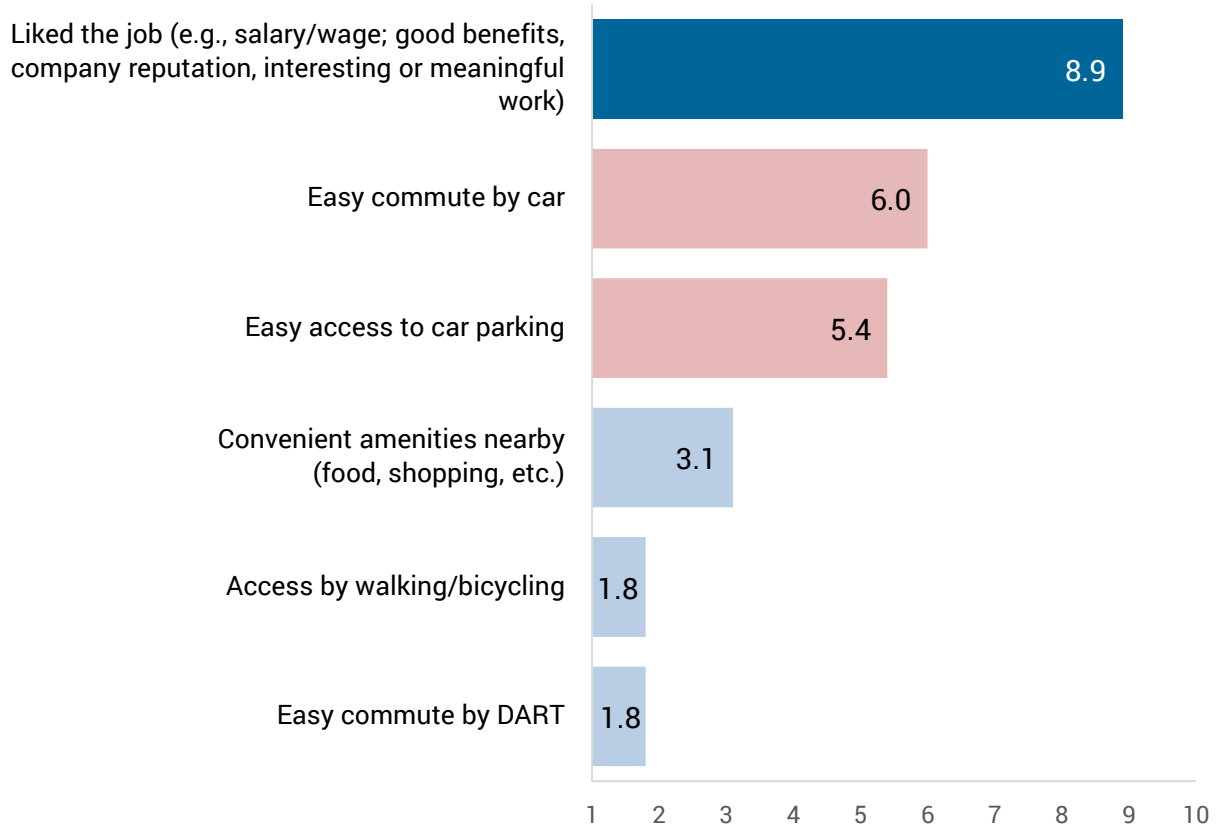


Figure 96: Influence of various factors on accepting position with current employer

When you accepted a position with this company, how much of an influence was each of the following reasons for working there? Note: Your employer will not see these results. Chart displays average rating where where 1= Not an influence and 10= Very strong influence.



C.3. Parking Availability

More than 7 in 10 employees reported they had free parking right next to their building (Figure 97). Only about 1 in 10 reported that the nearest free parking was three blocks away or farther.

On the other hand, for only about 10% of employees was transit available right next to the building and more than 40% would have to walk more than 3 blocks to a station or stop (Figure 98). Approximately 15% did not know where the nearest rail station or bus stop was from their employer.

Most (92%) employees reported they had access to free parking and 84% had free parking in a lot or garage that was part of their work building (Figure 99). About 2% of the survey respondents reported they never drive to work.

Figure 97: Distance to nearest free parking from workplace

Approximately how far is the nearest free parking from your work?

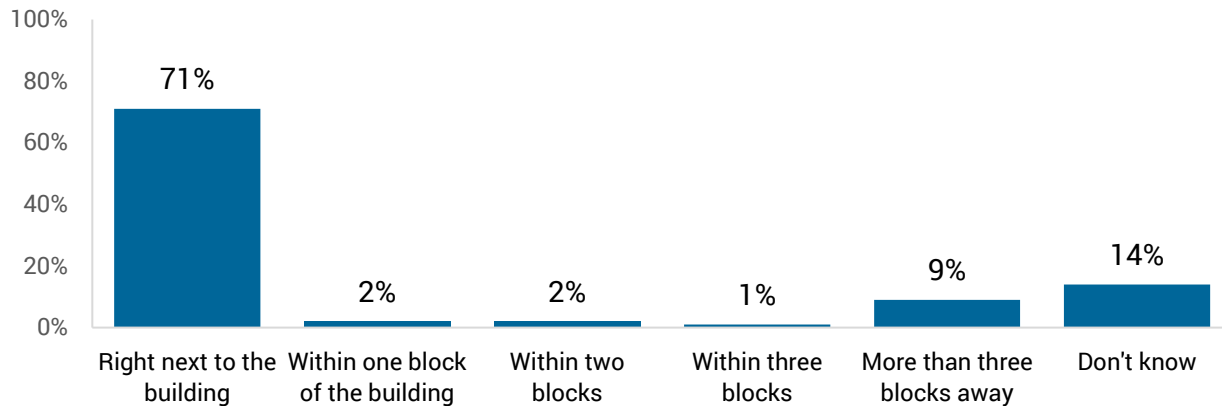


Figure 98: Distance to nearest rail station or bus stop from workplace

Approximately how far is the nearest rail station or bus stop from your work?

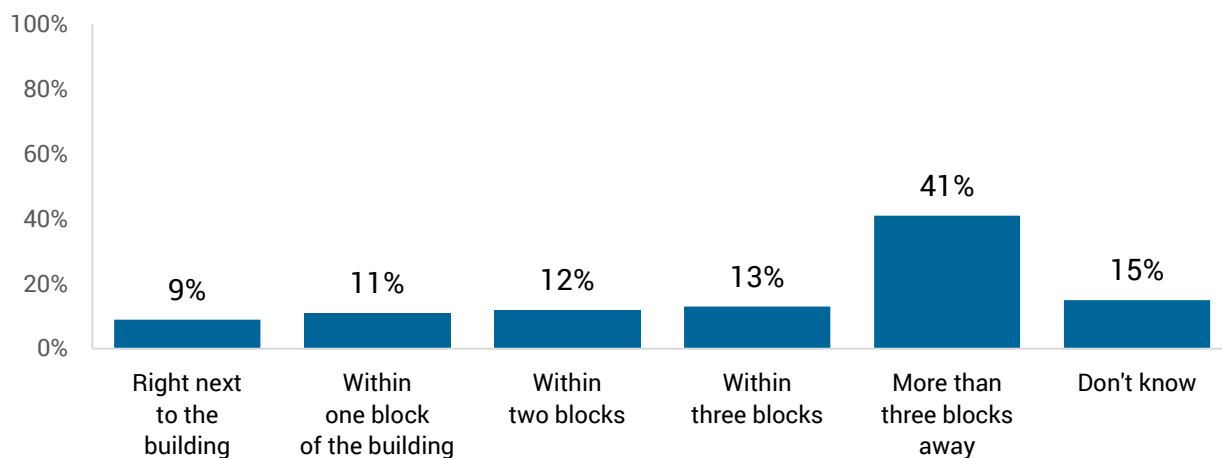
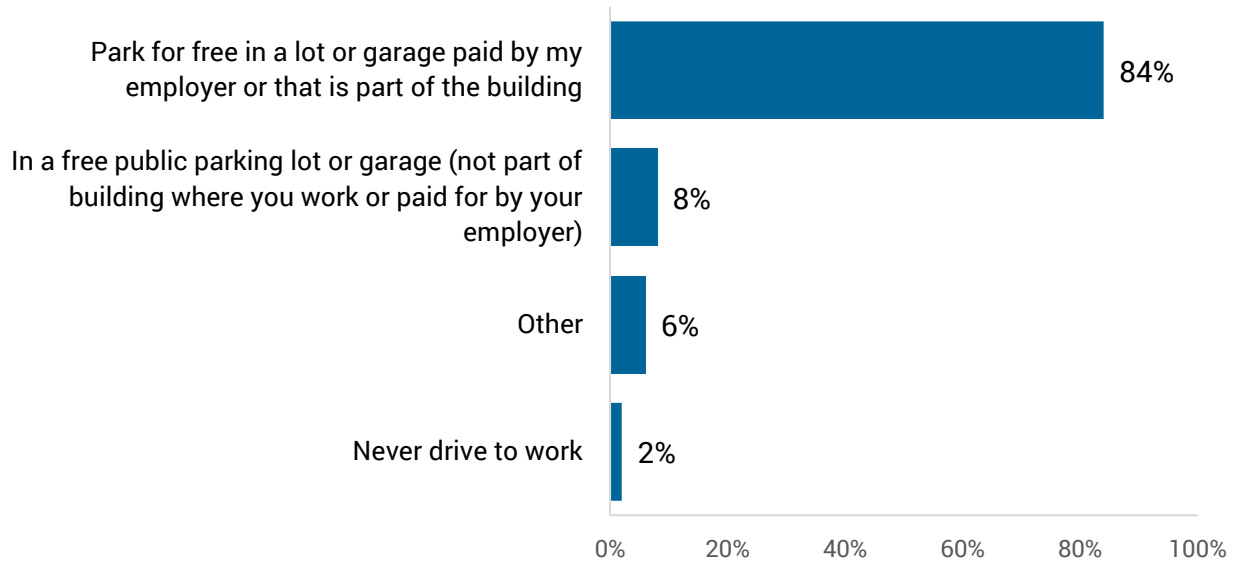


Figure 99: Type of parking used

If you drive to work, where do you typically park?



C.4. Demographics

The demographic profile of employees responding to the survey was:

- Employment status: 93% full time worker
- Hourly wage: 73% made more than \$20 per hour, 25% \$10 to \$20 per hour and 2% less than \$10 per hour
- Sex: 60% female, 40% male
- Age: 19% under 35 years; 48% 35-54, 37% 55+
- Race/ethnicity: 78% Caucasian/White; 12% Hispanic, 8% African American/Black, 4% Asian/Pacific Islander, 2% Native American (percents add to more than 100% as respondents could choose more than one race/ethnicity category)
- Educational attainment: 60% had a bachelor’s degree or graduate degree
- Annual household income: 48% had annual household incomes of \$100,000 or greater, while 15% had annual household incomes of less than \$40,000

Figure 100: Respondent work status and hourly wage

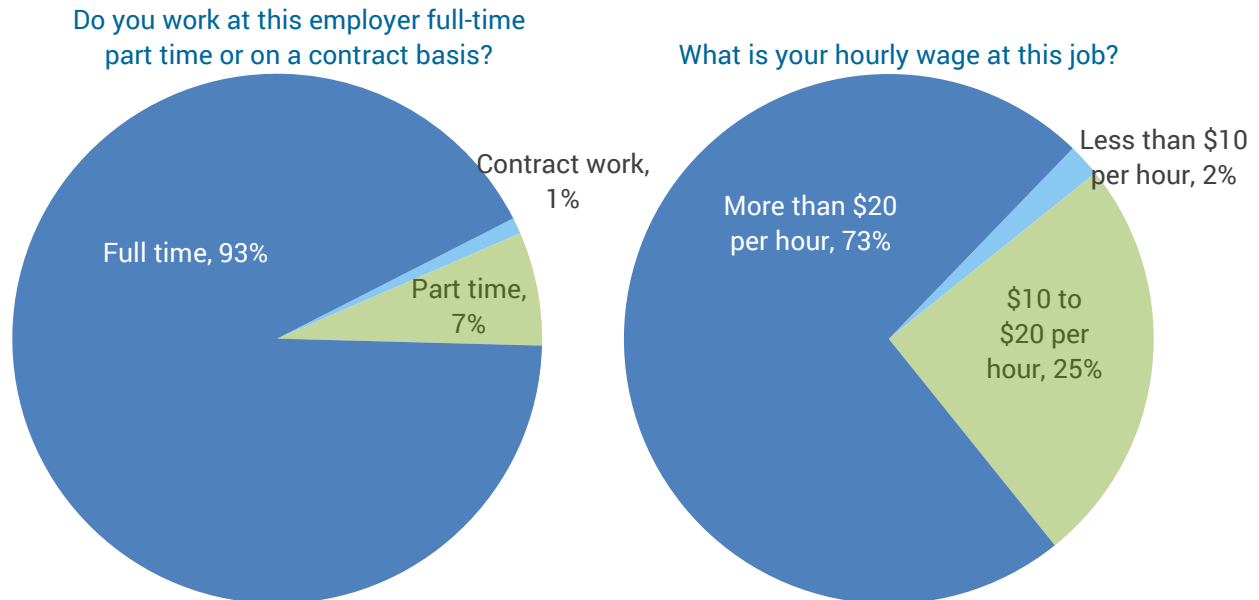


Figure 101: Respondent gender and age

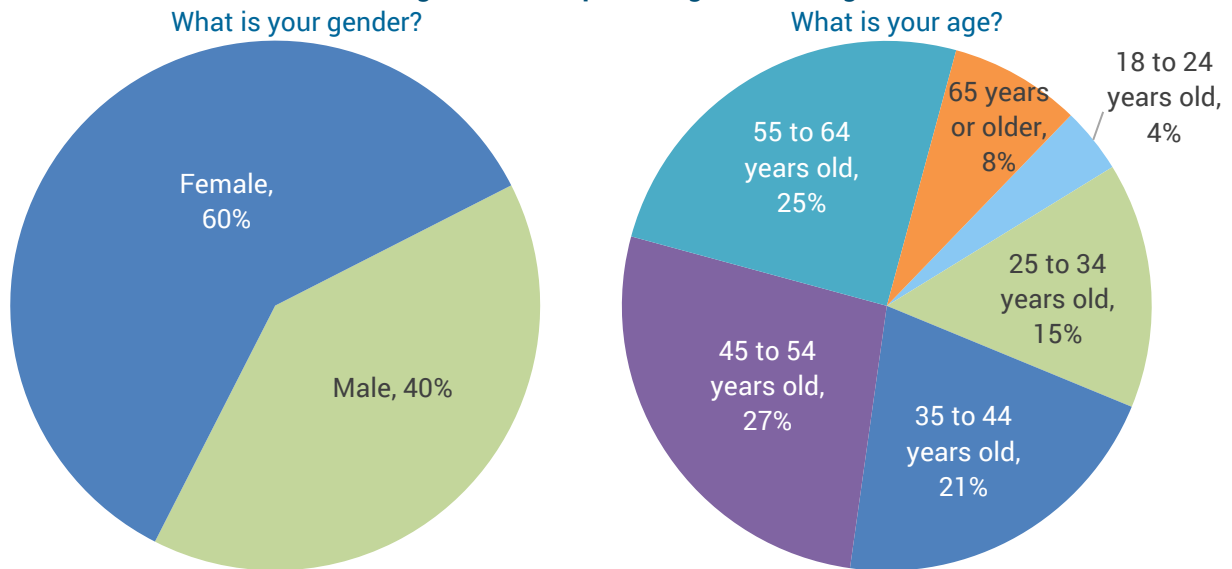


Figure 102: Respondent race/ethnicity

Which category best describes your race? (Check all that apply)

Percents may add to more than 100% as respondents could choose more than one response If you drive to work, where do you typically park?

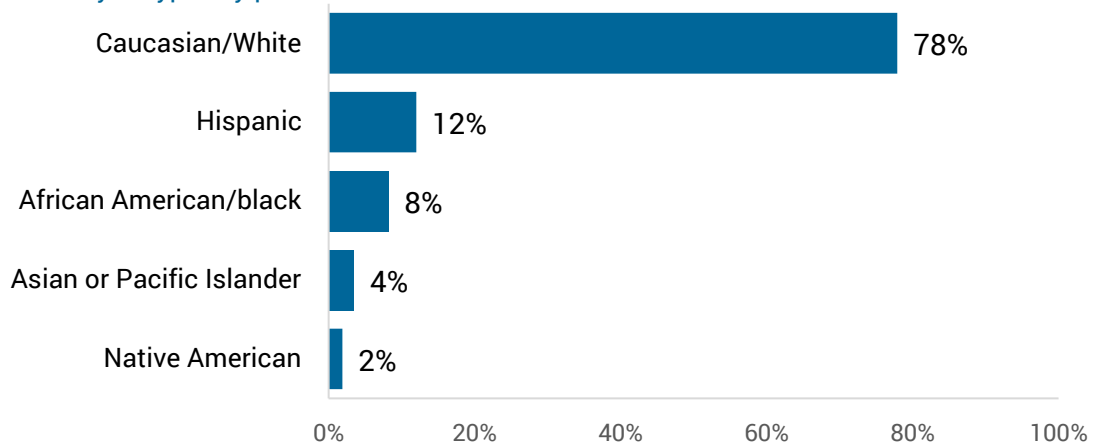


Figure 103: Respondent educational attainment

How much education have you completed?

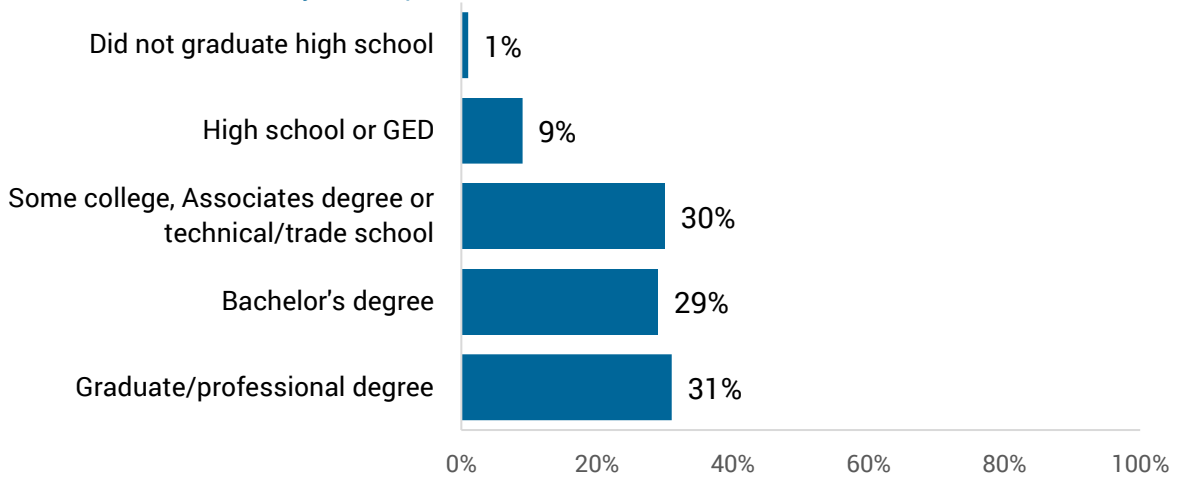
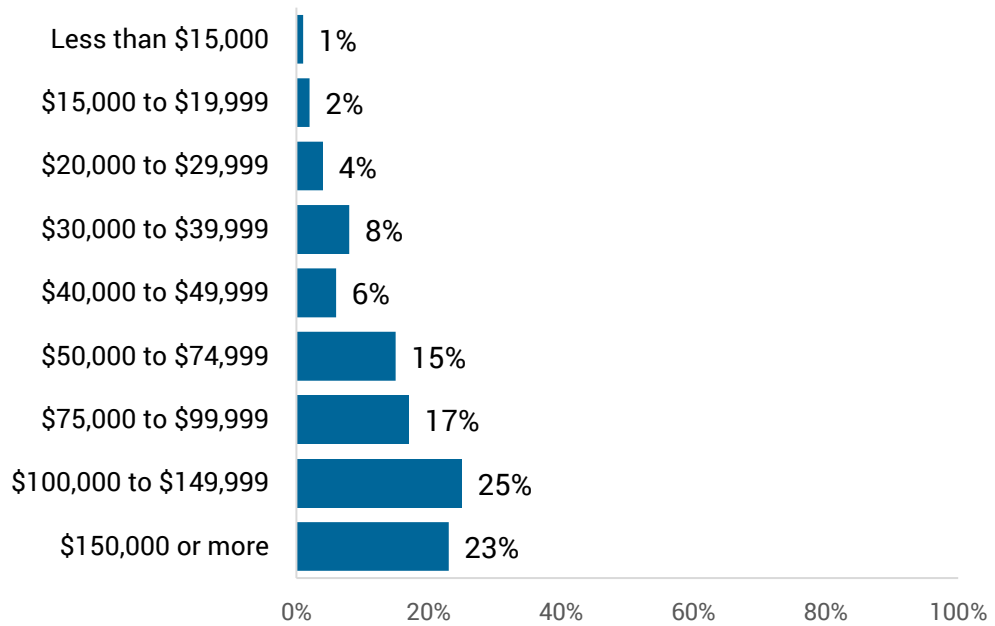


Figure 104: Respondent annual household income

How much was your household's total income before taxes in 2018? Please include income from all sources for all persons living in your household.



C.5. Key Findings by Employee and Station Area Characteristics

C.5.1. Key Findings by Transit Station Typology

Figure 105 below shows the percent of respondents who used various transportation modes for their work commute at least once in the week before completing the survey by the various typologies of the DART rail station nearest to their workplace. (For a full list of the categories into which the stations were classified into types, see Figure 33 on page 43. More information about the station typologies can be found on Figure 112 on page 342 in *Appendix D: Survey Methodology*.) Figure 106 displays the percent of respondents who said they would be unlikely to use DART for their work commute and the percent for various explanations of nonDART use by the typologies of the station nearest to their workplace. Differences in the proportions within a column within a typology were statistically significant if they are shaded in grey.

No differences were observed in the proportion of respondents who used various transportation modes for the work commute by the distance of the workplace from a DART station or by the number of light rail lines serving the station nearest to the workplace. A slightly smaller proportion of employees whose station area near their workplace was scored as very walkable reported driving alone for the work commute compared to the proportion of those whose station nearest their workplace was scored somewhat walkable or car dependent. A corresponding small increase in the proportion who used transit or walked or biked was observed for the very walkable station areas compared to station areas that were only somewhat walkable or car-dependent, but neither of these differences were statistically significant.

However, employees whose workplaces were near stations with the highest average ridership were less likely to have driven alone for their commute and were more likely to have walked or biked. Oddly though, those who worked near stations with lower average ridership were most likely to have used transit for the work commute in the last week. This could be due to small sample size and a few employees who were more likely to use transit.

Figure 105: Modal share of work commute by station typology

Station typology	Percent of respondents who used each mode at least once in the last week		
	Drive alone	Transit (bus and/or light rail)	Walk or Bike
Overall	94%	3%	2%
Radius Distance to Nearest Station			
Half-mile or less	94%	4%	2%
Half-mile to one-mile	94%	3%	3%
Walkability of Nearest Station			
Car-dependent	97%	1%	1%
Somewhat walkable	94%	3%	2%
Very walkable or walker's paradise	91%	7%	7%
Transit Service Availability of Nearest Station			
1 line or 1 line plus peak	93%	3%	2%
2 or 3 lines	96%	3%	3%
Average Ridership of Nearest Station			
Less than 1,000	92%	13%	3%
1,000 to 1,300	97%	1%	1%
More than 1,300	83%	6%	8%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

Employees whose workplace was within a half-mile radius of a DART rail station more likely to switch to DART for the work commute than were those whose workplace was outside the half-mile radius.

Those whose workplace was near a station having one line or one line plus peak service were less likely to cite physical barriers as a reason for not using DART than were those near stations with 2 or 3 lines of transit service.

Figure 106: Likelihood of switching to DART and reasons for not using DART by station typology

Station typology	Percent of respondents unlikely to switch to DART for the work commute	Percent of respondents who said any of the following was a very big reason or big reason for not using DART			
		Need car before or after work, need car for workday trips	Bus stops or rail stations are too far from home or too far from work	Takes too long to use transit or service is not frequent enough	Physical barriers (missing sidewalks, can't cross busy roadway/highway, etc.)
Overall	55%	75%	60%	46%	12%
Radius Distance to Nearest Station					
Half-mile or less	44%	76%	64%	43%	9%
Half-mile to one-mile	58%	75%	58%	47%	13%
Walkability of Nearest Station					
Car-dependent	56%	73%	57%	46%	14%
Somewhat walkable	59%	77%	63%	41%	9%
Very walkable or walker's paradise	42%	73%	60%	57%	13%
Transit Service Availability of Nearest Station					
1 line or 1 line plus peak	60%	78%	63%	40%	8%
2 or 3 lines	52%	72%	58%	50%	15%
Average Ridership of Nearest Station					
Less than 1,000	40%	58%	53%	39%	8%
1,000 to 1,300	59%	79%	63%	44%	12%
More than 1,300	38%	71%	53%	56%	13%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

C.5.2. Key Findings by Employment Characteristics

Survey participants who worked for organizations with 25 or fewer employees were more likely to use transit or active transportation (walk or bike) than were those who worked for larger organizations. The employee's work schedule, however, was not found to be associated with modal choices for the work commute.

Work schedules did impact preference as demonstrated by a greater proportion of employees who arrived for work and departed work outside of DART's peak service times saying they were unlikely to switch to DART for the work commute more than those whose work schedule coincided with the DART peak service. However, those who do work during DART's peak services were more likely to say they need a car before or after work or during the workday than those who worked alternate schedules.

Those whose hourly wage was less than \$10 per hour were much less likely to drive alone for the work commute (63% commuted at least one day by driving alone) than those whose hourly wage was \$10 per hour or more (over 90% commuted at least one day by driving alone). Those whose hourly wage was less than \$10 per hour were more likely to commute by transit or by walking or biking than were those with higher wages, with only 1% of those with hourly wages of more than \$20 per hour having used transit or active transportation in the last week. As seen in Figure 107, a greater proportion of employees with higher wages said they would be unlikely to switch to DART for the work commute than those who made lower wages.

While needing to make trips during the workday or needing to make stops on the way to or from work was often cited as a reason respondents did not use DART, these were not statistically significantly associated with mode choices in the week previous to the survey. Nearly 1 in 10 of those whose commute was less than three miles had walked or biked at least once for the work commute in the week previous to the survey, while none whose work commute was between three and 15 miles had done so. Three percent of those whose commute was more than 15 miles had walked at least once, but likely that walk was part of a transit commute.

Those who reported making stops on the way to or from work or making trips during the workday were more likely to cite these as reasons to not use DART than were those who did not make stops during their commute or leave the workplace during the workday. Oddly, those who said the nearest bus stop or rail station to their workplace was within three blocks of their workplace were less likely to have used transit (3%) than those who said the nearest station or stop was more than three blocks from their workplace (8%).

Employees who said that free parking was available right next to the building in which their workplace was located were more likely to have driven alone for their work commute (96%) compared to those who said free parking was further away (88%). Survey participants who reported having free parking right next to their workplace were more likely to cite the time it takes to use transit or physical barriers as reasons they did not use DART than were those who reported free parking being further away from the workplace.

Those who worked for larger employers (25 or more employees) were more likely to say that a reason they did not use DART was that a bus stop or rail station was too far away from either their work and/or home than those who worked for smaller companies. Perhaps the larger employers are located further from stations, or at least were perceived to be further by employees.

Figure 107: Modal share of work commute by employment characteristics

Employment characteristics	Percent of respondents who used each mode at least once in the last week		
	Drive alone	Transit (bus and/or light rail)	Walk or Bike
Overall	94%	3%	2%
Size of employer			
10 or less employees	94%	6%	6%
11 to 25 employees	83%	9%	4%
More than 25 employees	97%	1%	1%
Employee work schedule			
Work other times/days	91%	3%	2%
Work weekdays only, arriving and leaving between 6:00 AM and 7:00 PM	96%	3%	2%
Employee hourly wage			
Less than \$10 per hour	63%	13%	13%
\$10 to \$20 per hour	92%	7%	5%
More than \$20 per hour	96%	1%	1%
Frequency of making trips during the workday			
Once a week or more	95%	2%	3%
Less than once a week	92%	4%	2%
Frequency of making stops on the way to or from work			
Never	94%	3%	3%
1 or more times a week	95%	2%	2%
Distance of work commute			
3 miles or less	89%	0%	8%
3.1 to 15 miles	96%	3%	0%
more than 15 miles	95%	4%	3%
Distance of nearest bus stop or rail station from workplace			
Within 3 blocks	94%	3%	2%
More than 3 blocks	97%	8%	3%
Distance of free parking from workplace			
Right next to building	96%	2%	2%
Further than right next to building	88%	3%	1%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

Figure 108: Likelihood of switching to DART and reasons for not using DART by employment characteristics

Employment characteristics	Percent of respondents unlikely to switch to DART for the work commute	Percent of respondents who said any of the following was a very big reason or big reason for not using DART			
		Need car before or after work, need car for workday trips	Bus stops or rail stations are too far from home or too far from work	Takes too long to use transit or service is not frequent enough	Physical barriers (missing sidewalks, can't cross busy roadway/highway, etc.)
Overall	55%	75%	60%	46%	12%
Size of employer					
10 or less employees	41%	77%	51%	56%	12%
11 to 25 employees	46%	64%	49%	46%	15%
More than 25 employees	55%	77%	63%	44%	12%
Employee work schedule					
Work other times/days	65%	69%	59%	42%	10%
Work weekdays only, arriving and leaving between 6:00 AM and 7:00 PM	49%	78%	61%	48%	13%
Employee hourly wage					
Less than \$10 per hour	33%	75%	56%	25%	25%
\$10 to \$20 per hour	39%	63%	46%	44%	13%
More than \$20 per hour	59%	79%	66%	49%	12%
Frequency of making trips during the workday					
Once a week or more	53%	79%	58%	45%	11%
Less than once a week	65%	67%	61%	48%	13%
Frequency of making stops on the way to or from work					
Never	63%	59%	68%	53%	9%
1 or more times a week	52%	80%	57%	43%	13%
Distance of work commute					
3 miles or less	66%	66%	33%	28%	17%
3.1 to 15 miles	49%	82%	53%	55%	13%
more than 15 miles	58%	71%	76%	43%	10%
Distance of nearest bus stop or rail station from workplace					
Within 3 blocks	54%	75%	60%	45%	11%
More than 3 blocks	59%	71%	63%	44%	12%
Distance of free parking from workplace					
Right next to building	53%	75%	61%	48%	14%
Further than right next to building	61%	76%	49%	29%	3%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

C.5.3. Key Findings by Respondent Demographics

Employees who had less than one vehicle per driver in their household were less likely to have driven alone for the work commute than were those who had at least one vehicle per driver.

Females were more likely to drive alone for the work commute than were males (96% and 91%, respectively). Non-Hispanic Whites were more likely to drive alone than were those who identified as another race or ethnicity (96% and 91%, respectively). Those with a college degree were more likely to drive alone for the work commute (97%) than were those with no college degree (91%).

Younger employees (less than 35 years old) were more likely to use transit or to walk or bike for their commute than were older people. Similarly, a greater proportion of older respondents said they would be unlikely to switch to DART for the work commute than younger respondents. More Non-Hispanic Whites reported they would be unlikely to switch to DART compared to respondents of other race/ethnicities.

Employees with annual household incomes of less than \$40,000 were less likely to drive alone for the work commute and more likely to use transit or walk or bike than were those with incomes of \$40,000 or more.

Those with a college degree or with annual household incomes of \$40,000 or more were more likely to cite needing a car to make stops on the way to or from work or to make trips during the workday as reasons they do not use DART than were those with household incomes below \$40,000 and without a college degree. Those with lower incomes were more likely to cite physical barriers as a reason not to use DART than were those with higher incomes.

Figure 109: Modal share of work commute by respondent characteristics

Respondent characteristics	Percent of respondents who used each mode at least once in the last week		
	Drive alone	Transit (bus and/or light rail)	Walk or Bike
Overall	94%	3%	2%
Bicycles per household member			
Less than one bicycle per person	94%	3%	2%
One or more bicycles per person	95%	2%	3%
Vehicles per household driver			
Less than one vehicle per driver	86%	6%	3%
One vehicle per driver	96%	2%	2%
More than one vehicles per driver	95%	2%	3%
Presence of children in household			
No children in household	94%	4%	4%
One or more children in household	94%	1%	1%
Sex of respondents			
Male	91%	4%	3%
Female	96%	2%	2%
Age of respondent			
Less than 35 years old	91%	7%	9%
35 to 44 years old	93%	2%	2%
45 to 54 years old	96%	2%	1%
55+ years old	96%	1%	1%
Race/ethnicity of respondent			
Non-Hispanic White	96%	3%	2%
Other	91%	4%	4%
Educational attainment of respondent			
Bachelor's or graduate degree	97%	2%	3%
No college degree	91%	4%	3%
Annual household income of respondent			
less than \$40,000	79%	12%	8%
\$40,000 to \$99,999	97%	1%	2%
\$100,000 or more	96%	2%	2%

Note: grey shading indicates differences are statistically significant $p < 0.05$.

Figure 110: Likelihood of switching to DART and reasons for not using DART by respondent characteristics

Respondent characteristics	Percent of respondents unlikely to switch to DART for the work commute	Percent of respondents who said any of the following was a very big reason or big reason for not using DART			
		Need car before or after work, need car for workday trips	Bus stops or rail stations are too far from home or too far from work	Takes too long to use transit or service is not frequent enough	Physical barriers (missing sidewalks, can't cross busy roadway/highway, etc.)
Overall	55%	75%	60%	46%	12%
Bicycles per household member					
Less than one bicycle per person	51%	76%	59%	46%	13%
One or more bicycles per person	60%	75%	65%	47%	9%
Vehicles per household driver					
Less than one vehicle per driver	44%	65%	56%	52%	16%
One vehicle per driver	54%	77%	60%	43%	13%
More than one vehicles per driver	56%	78%	68%	52%	9%
Presence of children in household					
No children in household	50%	76%	59%	49%	15%
One or more children in household	56%	75%	61%	44%	9%
Sex of respondents					
Male	57%	77%	57%	46%	10%
Female	50%	74%	62%	47%	14%
Age of respondent					
Less than 35 years old	37%	68%	60%	57%	21%
35 to 44 years old	57%	74%	59%	45%	7%
45 to 54 years old	56%	75%	60%	47%	10%
55+ years old	61%	81%	62%	39%	12%
Race/ethnicity of respondent					
Non-Hispanic White	57%	78%	62%	45%	11%
Other	42%	70%	56%	50%	15%
Educational attainment of respondent					
Bachelor's or graduate degree	49%	80%	61%	51%	12%
No college degree	60%	67%	60%	40%	12%
Annual household income of respondent					
less than \$40,000	42%	57%	52%	48%	20%
\$40,000 to \$99,999	50%	75%	57%	48%	15%
\$100,000 or more	58%	81%	65%	45%	7%

Note: grey shading indicates differences are statistically significant p<0.05.