

# City of Tempe Transit Survey Report

Prepared For:



City of Tempe  
October 2016



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## Executive Summary

The City of Tempe commissioned WestGroup Research to complete a telephone survey of Tempe residents in an effort to gain insights into perceptions about public transit among both riders and non-riders. This report analyzes the data collected by the survey and, where appropriate, compares responses of the residents by meaningful demographic variables, as well as to data from studies conducted in September of 2006, 2008, 2010, 2012 and September/October 2014. The most recent data collection was completed with 401 Tempe residents in September 2016. The margin of error for this sample size is approximately  $\pm 4.9\%$  at a 95% level of confidence.

### Rider Characteristics and Opinions

- More than three in five (62%) Tempe residents indicated they used Tempe's transit service in the past year, including light rail, Orbit, Flash, and local bus/express.
- Among residents who indicated use of Tempe's transit service in the past year, 16% reported at least riding on a monthly basis. This is down significantly from 2014 when one quarter (25%) indicating riding on a monthly basis, while "special circumstances" usage is up slightly (31% to 37%).
- In general there are fewer new transit users, but users are continuing use public transit as the years go by. The proportion of surveyed transit riders who report having used the transit service for less than a year was 5%, however, nearly one-half (47%) have been riding transit in the city for more than 6 years (up from 31% in 2014).
- *Convenience* and *getting to and from recreation* were again the most popular reasons for riding public transit (mentioned by 24% and 22%, respectively).
- *Recreational activities* and *Phoenix/Downtown Phoenix* were the top destinations for transit riders (35% and 20%, respectively). *ASU, work* and *Downtown Tempe* were each mentioned by 14% of riders.
- A lower proportion of riders in 2016 indicated they use public transit to go shopping (4% vs. 15%), however the destination of Phoenix/Downtown Phoenix increased significantly to 20% up from 13% in 2014.
- Riders were most satisfied with the *cleanliness of the bus stops* and *their comfort on the bus* (91% and 90% very + somewhat satisfied, respectively). Despite their high satisfaction with bus stops for cleanliness, riders expressed the lowest level of satisfaction with *security and amenities at bus stops* (72% and 74%).

### Overall Satisfaction and Improvements of Tempe's Transit System

- More than two-thirds (69%) of residents with an opinion indicated they were highly satisfied with the Tempe transit system.
  - Residents satisfied with the transit system (rating it a “4” or “5”) mention *good service* (32%) and *frequent and reliable service* (18%).
  - Residents who provided “1”, “2”, or “3” ratings mentioned *more/better routes* (14%) and *more frequent buses with extended hours* (8%) as needed improvements.
- *On-time performance of buses* continued to top the list with the highest percentage of “high priority” ratings as it did in 2014 (79% of residents provided a top-two rating).

### Potential Use of Tempe's Transit System

- When non-riders were asked why they do not use public transit, well over half (59%) indicated they *prefer using a car*.
- Perceived effectiveness of each argument presented to residents regarding motivation to use public transit has been declining since prior to 2006.
  - The argument *improves air quality/good for environment* was perceived as either “somewhat effective” or “very effective” by 51% of residents, compared to a range of 60% to 74% since 2006.
  - *Reduces congestion* was seen as effective by 44%, compared to a range of 49% to 69% since 2006.
  - *Saves money on gas, auto insurance/maintenance* was perceived as effective by 42% compared to a range of 44% to 72% between 2006 and 2014.

### Tempe in Motion (TIM)

- Total awareness of Tempe in Motion (TIM) remained statistically comparable to recent years (44%), as did the proportion of TIM-aware residents who knew the correct meaning of the TIM acronym (65%).
- Residents aware of TIM, recalled hearing about it through *street banners* (20%) and *signs on buses* (11%).

- Among those aware of TIM advertising, over half (54%) indicated it had a positive impact on their impression of transportation options in Tempe.
  - One in four (25%) indicated “yes” when asked whether the advertising message persuaded them to try public transit in Tempe.

### Tempe Bicycling and Walking

- Approximately three in five residents (62%) report having access to a bicycle.
- Among those who reported having access to a bike, 71% reported they ride their bike at least once a month, which is virtually the same as in 2014.
- Those who never or only occasionally ride their bicycle most often say they don't ride it more often because it is *too hot outside* (38%).
- Approximately three in seven (44%) of those who indicated riding their bikes at least once a month report they ride for *exercise*, while 13% report riding a bike to *the store* and 12% ride a bike to *work/school*.
- Residents who bicycle at least monthly say they do so primarily to get *exercise* (54%) and/or *to have fun* (26%).
- As was the case in 2014, two thirds (65%) of residents reported being satisfied with the quality of walking and biking paths in Tempe.
- Among those with an opinion, the most common positive reasons for ratings included *they are fine the way they are/no problems* (18%) and *they are everywhere, there are plenty of paths* (12%). Top negative reasons included *don't seem safe enough/make them safer* (9%) and *need more of them* (7%) or *need more bike lanes* (4%).
- *Protected bike lanes, safer paths* and *adding more bike and pedestrian paths* received the highest percentage of priority ratings (63% to 66%).

### Tempe Youth Free Transit Pass Program

- Nearly two in five (38%) residents surveyed in 2016 reported having heard of the Tempe Youth Free Transit Pass. This is consistent with 2014 awareness.
- Among those aware of the program, one quarter (24%) indicated they heard about it *through school* followed by 16% citing *word-of-mouth*.

## Conclusions

1. Transit usage among Tempe residents continues to stay consistent over the past four years. Additionally it appears that those who used public transit in the past are continuing to use it with a notable increase in those who have used transit six or more years and a decrease in the percentage who are newer riders. However, in 2016, there was an increase in using transit only in special circumstances versus a more consistent basis.
2. Satisfaction with various bus system attributes among bus riders generally follow a similar hierarchy compared to the previous two waves of the study. Measures pertaining to *comfort on the bus*, *cleanliness of the bus*, and *driver courtesy and professionalism* have the highest levels of satisfaction, while measures pertaining to *bus service during major events*, *amenities* and *security at bus stops* tend to be near the bottom. This indicates the overarching perception surrounding the bus system among current riders has not changed much since 2012. It should be noted, however, that satisfaction with “ease of use” continues to decline from 2012 (and all previous years); a conversation about what could be causing this continued drop off is likely warranted.
3. Overall satisfaction with the transit system in Tempe declined slightly this year compared to 2014, but is in-line with satisfaction reported in 2012. Interestingly, on-time performance was most often selected as the highest priority for transit system improvements; in other markets it is more common to see requests for more service, longer hours, or more frequent service at the top of the list. Also, there was a decline in satisfaction among riders for reliability and on-time performance compared to 2014. Again, a conversation about what could be causing this continued concern about reliability is likely warranted.
4. The effectiveness of messaging arguments in favor of public transit usage measured in this survey has been in decline for more than ten years. In particular, the argument *saves money on gas/auto insurance/maintenance* saw a steep decline compared to 2012. Normalized or decreasing gas prices in addition to increasingly improved fuel efficiencies in vehicles likely play a role in residents’ perceived benefit of public transit versus individual vehicular transport. Only the messaging pertaining to *improves air quality/good for environment* was considered to be an effective measure by more than half of the population. It appears that it may be necessary to look into other messaging that resonates stronger with non-transit users.

## I. Introduction

### A. Background

The City of Tempe commissioned WestGroup Research to complete a telephone survey of Tempe residents in an effort to gain insights into perceptions about public transit among both riders and non-riders. This report analyzes the data collected by the survey and, where appropriate, compares responses of the residents by meaningful demographic variables, as well as to data from studies conducted over the past ten years - September 2006, 2008, 2010, 2012 and September/October 2014. The most recent data collection was completed with 401 Tempe residents in September 2016. Due to size limitations, tables in the report do not show data from the studies conducted from 1998 to 2004.

Telephone calls with Tempe residents were made from WestGroup's interviewing center in Phoenix, Arizona during September 2016. Households were selected by means of random digit dialing (RDD) according to Tempe zip codes. A quota was set to achieve equal representation of men and women as well as a representative distribution of the sample by age. A combination of RDD sample to contact "land line" households" along with cell-phone sample database to reach cell-phone only households was used to access potential respondents. All phone numbers were manually dialed.

The survey was completed with 401 Tempe residents. The margin of error for this sample size is approximately  $\pm 4.9\%$  at a 95% confidence level. Cross tabulations of the data collected in this survey are included under a separate cover.

### B. Sample Sizes and Associated Sampling Error

There is a certain amount of sampling "error" that occurs with survey research because of the variability that is present whenever a portion of a population is examined to provide insight into attitudes, opinions, and behaviors of the total population. This "error" does not imply an "error" on the part of the researcher, but reflects the likelihood that the estimates derived from interviewing a sample of the population differ from the numbers that would be obtained if the entire population were interviewed using the identical questions.

The amount of sampling error is determined almost entirely by the size of the subgroup of the sample and not by the size of the total sample interviewed. In other words, the sampling error associated with respondents who are males residents vs. female residents is dictated by the size of these subgroups (n=208 and  $\pm 6.9\%$  for males, for example).

Based on a sample size of 401, **the overall sampling error for the total sample** (at the conventional 95% confidence level) is  $\pm 4.9\%$ . This means that the probability is 95% that our estimates are within 5 percentage points of the numbers we would have obtained had we interviewed every qualified resident in Tempe. If a response differs

from the overall response of the sample by more than this percentage, the difference is said to be "statistically significant."

Throughout this report, each sub-group in a table or chart may be identified with a superscript letter (such as <sup>A</sup>, <sup>B</sup>, and <sup>C</sup>). A letter after a number indicates that the number is statistically higher than the number in the column with that letter. For example, in the table below, the 90% in the first row of column C is significantly higher than the figures in columns D and E (79% and 80%, respectively) at the 95% confidence level.

|  | 2016<br>(n=246) | Gender                 |                          | Age                    |                        |                      | Income                  |                          |
|--|-----------------|------------------------|--------------------------|------------------------|------------------------|----------------------|-------------------------|--------------------------|
|  |                 | Male<br>(n=134)<br>(A) | Female<br>(n=113)<br>(B) | 18-34<br>(n=89)<br>(C) | 35-54<br>(n=86)<br>(D) | 55+<br>(n=69)<br>(E) | <\$40K<br>(n=59)<br>(F) | \$40K+<br>(n=153)<br>(G) |
| Light Rail<br>Orbit or Flash<br>neighborhood<br>shuttles | 84%             | 88%                    | 79%                      | 90% <sup>DE</sup>      | 79%                    | 80%                  | 80%                     | 85%                      |
| Local or express bus                                     | 37%             | 39%                    | 35%                      | 40%                    | 41% <sup>E</sup>       | 28%                  | 55% <sup>G</sup>        | 31%                      |
| Don't Know/Refused                                       | 28%             | 27%                    | 28%                      | 35%                    | 24%                    | 26%                  | 45% <sup>G</sup>        | 20%                      |
|  | 7%              | 3%                     | 11% <sup>A</sup>         | 2%                     | 8%                     | 11% <sup>C</sup>     | 7%                      | 6%                       |

For trend tables and charts displaying yearly data (rather than sub-groups of the current year), significant differences between 2016 and 2014 figures are shown using an asterisk. For example, in the table below, the 5% in the 2016 column is significantly different than the 10% in the 2014 column at the 95% confidence level. Statistical testing between earlier years is not shown in this report; however, important trends over time are called out when appropriate.

|                       | 2016<br>(n=246) | 2014<br>(n=256) |
|-----------------------|-----------------|-----------------|
| Daily                 | 5%              | 6%              |
| Weekly                | 5%*             | 10%             |
| Monthly               | 6%              | 9%              |
| Every few months      | 9%              | 8%              |
| Special circumstances | 37%             | 31%             |
| Don't Use Transit     | 38%             | 35%             |

### C. Demographics

The total data was weighted in 2016, 2014 and 2012 to match the age categories from 2010. Data was also weighted in 2006. An overview of respondent demographics follows in Table 1A.



Table 1A: Demographics

|                             | 2016<br>(n=401) | 2014<br>(n=409) | 2012<br>(n=400) | 2010<br>(n=427) | 2008<br>(n=424) | 2006**<br>(n=407) |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| <b>Gender</b>               |                 |                 |                 |                 |                 |                   |
| Male                        | 52%             | 51%             | 50%             | 49%             | 50%             | 51%               |
| Female                      | 48%             | 49%             | 50%             | 51%             | 50%             | 49%               |
| <b>Years Lived in Tempe</b> |                 |                 |                 |                 |                 |                   |
| <1 year                     | 1%              | 2%              | 2%              | 2%              | 3%              | 7%                |
| 1 – 2 years                 | 4%              | 5%              | 6%              | 5%              | 7%              | 10%               |
| 3 – 5 years                 | 9%*             | 13%             | 6%              | 10%             | 12%             | 16%               |
| 6 – 10 years                | 15%             | 14%             | 13%             | 15%             | 17%             | 15%               |
| 11 – 20 years               | 24%             | 22%             | 25%             | 19%             | 22%             | 17%               |
| 20+ years                   | 48%             | 44%             | 49%             | 49%             | 39%             | 35%               |
| <b>Age**</b>                |                 |                 |                 |                 |                 |                   |
| 18 – 34                     | 32%             | 32%             | 32%             | 33%             | 31%             | 30%               |
| 35 – 54                     | 34%             | 34%             | 33%             | 34%             | 35%             | 25%               |
| 55+                         | 33%             | 33%             | 32%             | 33%             | 34%             | 45%               |
| Average Age                 | 47.3            | 47.1            | 49.4            | 47.7            | 47.6            | 50.3              |
| <b>Education</b>            |                 |                 |                 |                 |                 |                   |
| Some high school            | 2%              | 2%              | 1%              | 2%              | 1%              | 5%                |
| High school graduate        | 10%             | 11%             | 10%             | 9%              | 9%              | 14%               |
| Some college                | 26%*            | 33%             | 24%             | 30%             | 31%             | 33%               |
| College graduate            | 33%             | 32%             | 32%             | 29%             | 31%             | 30%               |
| Post graduate               | 27%*            | 19%             | 32%             | 29%             | 26%             | 18%               |
| No answer/<br>Refused       | 2%              | 2%              | 1%              | 1%              | 2%              | 2%                |
| <b>Income</b>               |                 |                 |                 |                 |                 |                   |
| <\$20,000                   | 7%*             | 13%             | 9%              | 10%             | 12%             | 12%               |
| \$20 - \$40,000             | 18%             | 18%             | 14%             | 14%             | 19%             | 20%               |
| \$40 - \$60,000             | 19%             | 18%             | 11%             | 16%             | 15%             | 17%               |
| \$60 - \$80,000             | 13%*            | 8%              | 14%             | 14%             | 12%             | 11%               |
| \$80 - \$100,000            | 7%              | 8%              | 10%             | 11%             | 10%             | 9%                |
| \$100,000+                  | 20%             | 20%             | 20%             | 17%             | 19%             | 15%               |
| No answer/refused           | 16%             | 14%             | 21%             | 16%             | 13%             | 16%               |
| Average Income              | \$67,325        | \$63,700        | \$70,304        | \$67,047        | \$64,500        | \$51,500          |

\*Indicates significant difference compared to 2014 at the 95% confidence level.

\*\*Between 2001-2006 ages were reported in the following categories: 18-34, 35-49, 50+. In more recent years, age categories were updated as listed above.

**Table 1B: Demographics**

|                       | 2016<br>(n=401) | 2014<br>(n=409) | 2012<br>(n=400) | 2010<br>(n=427) | 2008<br>(n=424) | 2006<br>(n=407) |
|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Marital Status</b> |                 |                 |                 |                 |                 |                 |
| Married               | 52%             | 46%             | 54%             | 61%             | 53%             | 53%             |
| Single                | 45%             | 50%             | 43%             | 36%             | 44%             | 44%             |
| Refused               | 3%              | 3%              | 3%              | 3%              | 3%              | 3%              |
| <b>Occupation**</b>   |                 |                 |                 |                 |                 |                 |
| Full-time             | 57%             | 46%             | 46%             | 47%             | 51%             | 45%             |
| Part-time             | 6%              | 11%             | 8%              | 12%             | 12%             | 10%             |
| Retired               | 20%             | 21%             | 28%             | 23%             | 20%             | 27%             |
| Student               | 6%              | 8%*             | 4%              | 7%              | 8%              | 4%              |
| Stay at home Spouse   | 3%              | 4%              | 6%              | 7%              | 5%              | 5%              |
| Unemployed/disabled   | 5%              | 7%              | 6%              | 6%              | 4%              | 7%              |
| Refused               | 3%              | 3%              | 2%              | 1%              | 2%              | 3%              |
| <b>Zip Code</b>       |                 |                 |                 |                 |                 |                 |
| 85281                 | 21%             | 23%             | 19%             | 19%             | 19%             | 25%             |
| 85282                 | 33%             | 32%             | 44%             | 38%             | 38%             | 43%             |
| 85283                 | 24%             | 26%             | 22%             | 29%             | 29%             | 24%             |
| 85284                 | 22%             | 19%             | 15%             | 14%             | 14%             | 9%              |

\*Indicates significantly different from 2014 at the 95% confidence level. \*\*In 2008 question was changed to accept multiple responses.

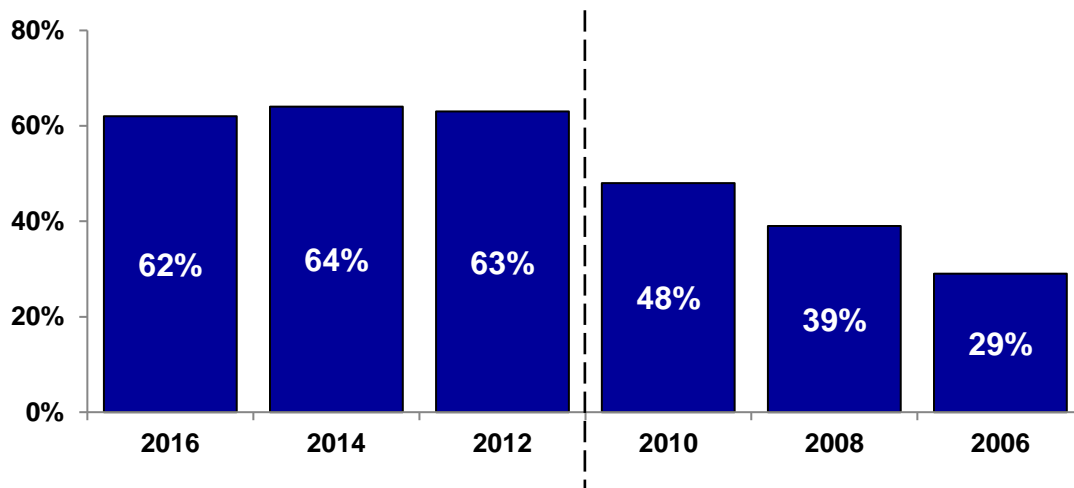
## II. Rider Characteristics and Opinions

### A. Current Use of Public Transit

#### 1. Using Tempe Transit Service

More than three in five (62%) Tempe residents indicated they used Tempe’s transit service in the past year, including light rail, Orbit, Flash, and local bus/express. This is consistent with usage in 2014 and 2012.

**Transit Service Usage in Tempe**  
 Percentage of residents who rode Tempe Transit Service in past year



Note: Beginning in In 2012, respondents were asked about *Tempe Transit Service* usage; in previous years, the question was about *Tempe city bus* usage.

2016 n=401, 2014 n=409, 2012 n=400, 2010 n=427, 2008 n=424, 2006 n=407

Q4: *In general would you say you use Tempe’s transit system (including light rail, Orbit, Flash and local bus/express)... [daily, weekly, monthly, every few months, only under special or unique circumstances]*

## 2. General Public Transit Use

Among residents who have used Tempe's transit service in the past year, 16% reported that they generally ride at least once a month. This is down significantly from 2014 when one quarter (25%) indicating riding on a monthly basis.

Riders significantly more likely to report riding weekly or daily include those aged 18 to 54 (13% vs. 4% age 55+) and those with annual household incomes of less than \$80K (12% vs. 4% earning less).

**Table 2a Frequency of Transit Usage**

|                       | 2016<br>(n=246) | 2014<br>(n=256) |
|-----------------------|-----------------|-----------------|
| Daily                 | 5%              | 6%              |
| Weekly                | 5%*             | 10%             |
| Monthly               | 6%              | 9%              |
| Every few months      | 9%              | 8%              |
| Special circumstances | 37%             | 31%             |
| Don't Use Transit     | 38%             | 35%             |

Q4: In general would you say you use Tempe's transit system (including light rail, Orbit, Flash and local bus/express)...

**Table 2b Type of Transit Usage  
Trending Breakdown**

|                                      | 2016<br>(n=246) | 2014<br>(n=256) |
|--------------------------------------|-----------------|-----------------|
| Light Rail                           | 84%             | 79%             |
| Orbit or Flash neighborhood shuttles | 37%             | 36%             |
| Local or express bus                 | 28%             | 30%             |
| Don't Know/Refused                   | 7%              | 7%              |

\*Indicates significant difference compared to 2014 at the 95% confidence level.

Note: Question added in 2012.

Q4a: Which of the following have you used in Tempe in the past year?

**Table 2c Type of Transit Usage  
Demographic Breakdown**

|  | 2016<br>(n=246) | Gender                 |                          | Age                    |                        |                      | Income                  |                          |
|--|-----------------|------------------------|--------------------------|------------------------|------------------------|----------------------|-------------------------|--------------------------|
|  |                 | Male<br>(n=134)<br>(A) | Female<br>(n=113)<br>(B) | 18-34<br>(n=89)<br>(C) | 35-54<br>(n=86)<br>(D) | 55+<br>(n=69)<br>(E) | <\$40K<br>(n=59)<br>(F) | \$40K+<br>(n=153)<br>(G) |
| Light Rail                                 | 84%             | 88%                    | 79%                      | 90% <sup>DE</sup>      | 79%                    | 80%                  | 80%                     | 85%                      |
| Orbit or Flash<br>neighborhood<br>shuttles | 37%             | 39%                    | 35%                      | 40%                    | 41% <sup>E</sup>       | 28%                  | 55% <sup>G</sup>        | 31%                      |
| Local or express bus                       | 28%             | 27%                    | 28%                      | 35%                    | 24%                    | 26%                  | 45% <sup>G</sup>        | 20%                      |
| Don't Know/Refused                         | 7%              | 3%                     | 11% <sup>A</sup>         | 2%                     | 8%                     | 11% <sup>C</sup>     | 7%                      | 6%                       |

<sup>ABC</sup> Indicates significant differences compared to other sub-group at the 95% level.

## B. Length of Use of Transit System

The proportion of surveyed transit riders who report having used the transit service for less than a year was 5%, however, nearly one-half (47%) have been riding transit in the city for more than 6 years (up from 31% in 2014).

**Table 3a: Length of Use of Transit System**

(Among those who have ridden in the past year)

| Time Riding      | 2016<br>(n=246) | 2014<br>(n=256) | 2012<br>(n=252) | 2010<br>(n=304) | 2008<br>(n=166) | 2006<br>(n=119) |
|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Less than a year | 5%              | 6%              | 9%              | 14%             | 31%             | 17%             |
| 1 – 2 years      | 9%              | 10%             | 13%             | 27%             | 13%             | 27%             |
| 2 – 4 years      | 15%*            | 24%             | 29%             | 13%             | 19%             | 20%             |
| 4 – 6 years      | 19%             | 23%             | 16%             | 10%             | 13%             | 13%             |
| 6 – 10 years     | 22%*            | 13%             | 13%             | 25%             | 20%             | 21%             |
| >10 years        | 25%             | 18%             | 12%             | NA              | NA              | NA              |
| Don't know       | 4%              | 7%              | 8%              | 11%             | 4%              | 4%              |

Q7: How long have you been using the transit system in Tempe?

\*Indicates significant difference compared to 2014 at the 95% confidence level.

### C. Reasons for Using Public Transit

**Convenience and getting to and from recreation were again the most popular reasons for riding public transit (mentioned by 24% and 22%, respectively). “Don’t have a car” was a distant third with only 8% citing this reason.**

**Table 3b: Top Reasons for Using Public Transit**  
(Among those who have ridden in the past year)

| Responses                                  | 2016<br>(n=246) | 2014<br>(n=256) | 2012<br>(n=252) | 2010<br>(n=304) | 2008<br>(n=166) | 2006<br>(n=119) |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Convenient                                 | 24%             | 27%             | 16%             | 24%             | 15%             | 14%             |
| Get to/from recreation                     | 22%             | 18%             | 14%             | 7%              | 4%              | 2%              |
| Don’t have car                             | 8%              | 12%             | 11%             | 9%              | 16%             | 29%             |
| Get to/from school                         | 5%              | 4%              | 2%              | 2%              | 7%              | 5%              |
| To avoid parking                           | 5%              | 3%              | 10%             | 7%              | 3%              | 4%              |
| Need to get to Phoenix                     | 4%              | 3%              | -               | -               | -               | -               |
| Dislike Driving/ Take a break from driving | 4%              | 1%              | -               | -               | -               | -               |
| Saves money                                | 3%              | 6%              | 7%              | 4%              | 17%             | 8%              |
| To go downtown                             | 3%              | 3%              | 6%              | 5%              | -               | -               |
| A way to get around                        | 3%              | 3%              | 2%              | -               | -               | -               |
| To avoid drinking and driving              | 3%              | 2%              | -               | -               | -               | -               |
| To get to/from work                        | 3%              | 2%              | -               | -               | -               | -               |
| Vehicle not available/ Having car problems | 3%              | 1%              | -               | -               | -               | -               |

Q8: What is the main reason you ride public transit?

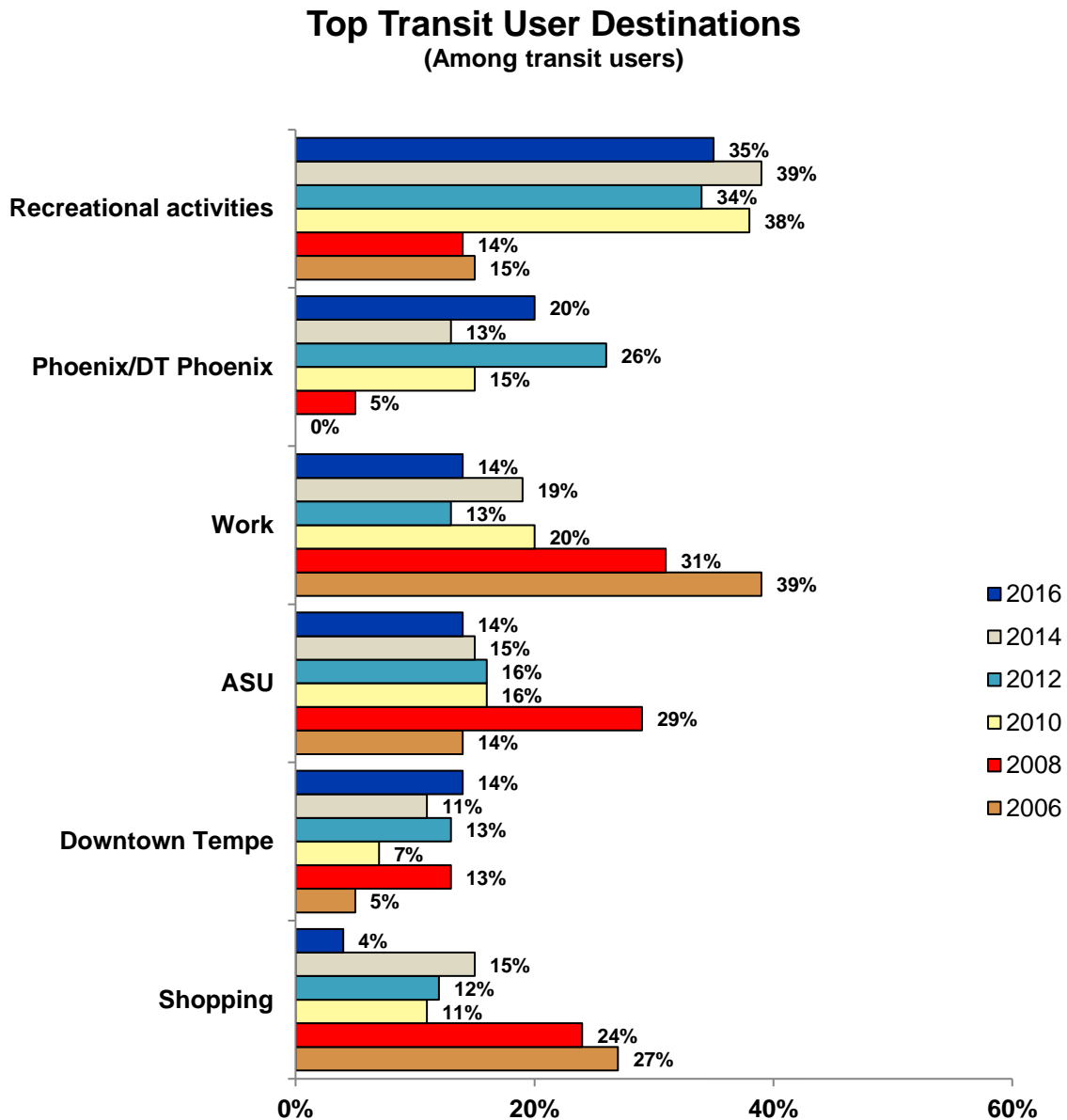
\*Indicates significant difference compared to 2014 at the 95% confidence level.

Note: In years prior to 2010, the question was worded: *What is the main reason you ride the bus?*

Note: Response categories with less than 3% mentions in 2016 not shown in table.

**D. Public Transit Destinations**

**Recreational activities and Phoenix/Downtown Phoenix were the top destinations for transit riders (35% and 20%, respectively).** ASU, work and Downtown Tempe were each mentioned by 14% of riders.



Q9: Where do you go when you use public transit?

2016 n=246, 2014 n=256, 2012 n=252, 2010 n=304, 2008 n=166, 2006 n=119



**A lower proportion of riders in 2016 indicated they use public transit to go shopping (4% vs. 15% in 2014), however the destination of *Phoenix/Downtown Phoenix* increased significantly to 20% up from 13% in 2014.**

**Table 4: Top Public Transit Trip Destinations**  
(Among public transit users)

| Responses               | 2016<br>(n=246) | 2014<br>(n=256) | 2012<br>(n=252) | 2010<br>(n=304) | 2008<br>(n=166) | 2006<br>(n=119) |
|-------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Recreational activities | 35%             | 39%             | 34%             | 38%             | 14%             | 15%             |
| DT Phoenix              | 20%*            | 13%             | 26%             | 15%             | 5%              | -               |
| Work                    | 14%             | 19%             | 13%             | 20%             | 31%             | 39%             |
| ASU                     | 14%             | 15%             | 16%             | 16%             | 29%             | 14%             |
| Downtown Tempe          | 14%             | 11%             | 13%             | 7%              | 13%             | 5%              |
| Downtown (gen)          | 6%              | 1%              | -               | -               | -               | -               |
| Phoenix                 | 5%              | 2%              | -               | -               | -               | -               |
| Shopping                | 4%*             | 15%             | 12%             | 11%             | 24%             | 27%             |
| High School             | 4%*             | 1%              | -               | -               | -               | -               |
| Airport                 | 4%              | -               | -               | -               | -               | -               |
| Community College       | 3%              | 2%              |                 |                 |                 |                 |
| Around Tempe            | 3%*             | <1%             |                 |                 |                 |                 |
| Visit friends/family    | 2%              | 4%              | 5%              | 2%              | 5%              | 6%              |
| Library                 | 2%              | 4%              | 3%              | 2%              | 7%              | 2%              |
| Errands                 | 1%              | 6%              | 8%              | 5%              | 7%              | 14%             |

Q9: *Where do you go when you use public transit?*

\*Indicates significant difference compared to 2014 at the 95% confidence level.

Note: In years prior to 2010, question was worded: *Where do you go when you use the bus?*

Note: Destinations with less than 1% mentions in 2016 not displayed.

## E. Satisfaction with Bus Service

Bus riders were asked to rate their level of satisfaction with twelve different aspects of riding the bus. Riders rated the attributes by using four-point nominal scales (“very satisfied,” “somewhat satisfied,” “not very satisfied,” and “not at all satisfied.” **Riders were most satisfied with the cleanliness of the bus stops and their comfort on the bus (91% and 90% very + somewhat satisfied, respectively).** Despite their high satisfaction with bus stops for cleanliness, riders expressed the lowest level of satisfaction with *security at bus stops* and *amenities at bus stops* (72% and 74%, respectively).

**There were no statistically relevant shifts between 2014 and 2016 bus satisfaction ratings.**

**Table 5a: 2016 Satisfaction with Bus Service**  
(Among bus riders)

| Attribute                                | 2016 (n=128)                   |                   |                       | % Very/somewhat satisfied |                 |                 |                 |
|--|--------------------------------|-------------------|-----------------------|---------------------------|-----------------|-----------------|-----------------|
|  | Very/<br>somewhat<br>Satisfied | Very<br>Satisfied | Somewhat<br>Satisfied | 2014<br>(n=109)           | 2012<br>(n=141) | 2010<br>(n=203) | 2008<br>(n=166) |
| Cleanliness of bus stops                 | 91%                            | 44%               | 47%                   | 87%                       | 85%             | NA              | NA              |
| Comfort on the bus                       | 90%                            | 43%               | 47%                   | 92%                       | 92%             | 95%             | 93%             |
| Cleanliness of the bus                   | 89%                            | 49%               | 39%                   | 91%                       | 88%             | 92%             | 89%             |
| Driver courtesy and professionalism      | 89%                            | 70%               | 19%                   | 90%                       | 93%             | 93%             | 89%             |
| Safety on the bus                        | 86%                            | 49%               | 37%                   | 79%                       | 82%             | 95%             | 92%             |
| Route frequency                          | 81%                            | 42%               | 39%                   | 79%                       | 79%             | 74%             | 78%             |
| Ease of using the bus                    | 81%                            | 53%               | 27%                   | 84%                       | 93%             | 91%             | 90%             |
| Hours of operation                       | 80%                            | 40%               | 40%                   | 81%                       | 84%             | NA              | NA              |
| Reliability/on-time performance of buses | 80%                            | 45%               | 35%                   | 85%                       | 86%             | 80%             | 76%             |
| Bus service during major events          | 76%                            | 40%               | 36%                   | 72%                       | 70%             | NA              | NA              |
| Amenities of bus stops                   | 74%                            | 25%               | 49%                   | 76%                       | 72%             | NA              | NA              |
| Security at bus stops                    | 72%                            | 30%               | 43%                   | 65%                       | 65%             | NA              | NA              |

Q10: In general how satisfied are you with...

\*Indicates significant difference compared to 2014 at the 95% confidence level.

Among riders who indicated dissatisfaction with one or more attribute, the most common suggestions of what could be done to improve satisfaction with buses is *more frequent buses* (mentioned by 32%), *better and more routes* (15%), *shade at bus stops* (13%), and *safer buses* (11%).

**Table 5b: Suggested Improvements**

|  | 2016<br>(n=69) | 2014<br>(n=57) |
|--|----------------|----------------|
| More frequent buses                            | 32%            | 42%            |
| Need better/more routes                        | 15%            | 7%             |
| Bus stops need shade                           | 13%            | 17%            |
| Security in the bus/safer                      | 11%            | 11%            |
| Inside of bus/bus stops need to be cleaner     | 9%             | 10%            |
| Don't like the type of people that use the bus | 8%             | 2%             |
| More/better lighting at bus stops              | 8%             | 9%             |
| More courteous/professional bus drivers        | 5%             | 6%             |
| Easier schedules to read/understand/accurate   | 5%             | 6%             |
| More/better benches at bus stops               | 5%             | 4%             |
| Avoid having bus pass us by at bus stop        | 5%             | 4%             |
| Don't know                                     | 5%             | 6%             |

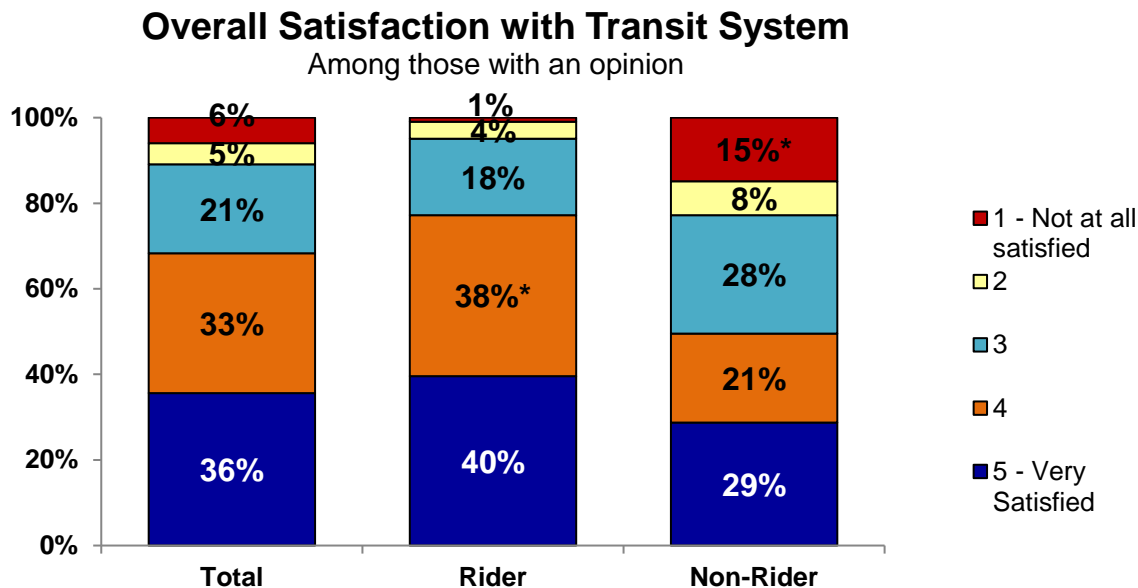
Q10a: You indicated dissatisfaction with some of the attributes, what could be done to improve your satisfaction with the bus service?

Note: Response categories with less than 5% mentions in 2016 not shown in table.

### III. Overall Satisfaction and Improvement of Tempe’s Transit System

#### A. Overall Satisfaction with Tempe Transit System

More than two-thirds (69%) of residents with an opinion indicated they were highly satisfied with the Tempe transit system. This figure is consistent with the prior three waves of research. As in the past, current riders were more likely to provide a top-two rating (78% vs. 50% of non-riders).



Total n=352, Rider: n=244, Non-Rider: n=108

\*Indicates significant differences compared to other sub-group at the 95% level.

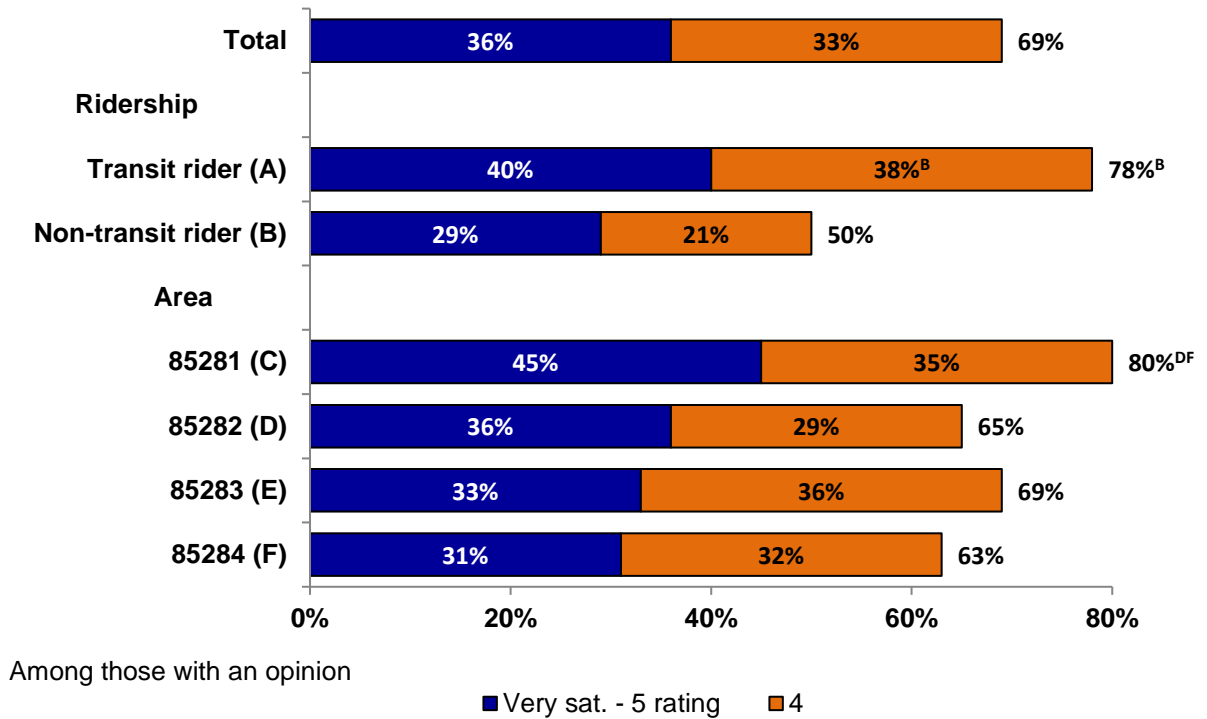
**Table 6: Overall Satisfaction with Transit System in Tempe**  
(Among those with an opinion)

| Satisfaction                         | 2016<br>(n=352) | 2014<br>(n=376) | 2012<br>(n=355) | 2010<br>(n=377) |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|
| <b>NET very + somewhat satisfied</b> | <b>69%</b>      | <b>72%</b>      | <b>69%</b>      | <b>66%</b>      |
| 5 – Very satisfied                   | 36%             | 37%             | 39%             | 29%             |
| 4                                    | 33%             | 35%             | 30%             | 37%             |
| 3                                    | 21%             | 17%             | 21%             | 22%             |
| 2                                    | 5%              | 6%              | 5%              | 5%              |
| 1 – Very dissatisfied                | 6%              | 5%              | 5%              | 6%              |
| Don't know (not included in %)       | 12%             | 8%              | 11%             | 12%             |

Q11. How satisfied are you with the quality of the transit system in Tempe?

In addition to differences between bus riders and non-riders, satisfaction ratings were higher statistically for residents in 85281 than for residents in 85282 and 85284 (80% vs. 65% and 63%, respectively).

### Overall Satisfaction with Transit Service (Top Two Ratings)



Residents were asked to explain the reason(s) for their overall satisfaction ratings.

**Residents satisfied with the transit system (rating it a “4” or “5”) attributed their satisfaction to *good service* (32%), and *frequent and reliable service* (18%).** These were also the top two mentions in 2014.

**Residents who provided “1”, “2”, or “3” ratings most often mentioned the need for *better/more routes* (14%) and *more frequent buses with extended hours* (8%) as reasons for their ratings.** Again, these were also the top two mentions in 2014.

**Table 7: Reason for Satisfaction Level**

| Responses   | Satisfaction Level |                |                  |
|---|--------------------|----------------|------------------|
|   | Total<br>(n=352)   | 4,5<br>(n=242) | 1,2,3<br>(n=110) |
| <b>Positive</b>   |                    |                |                  |
| Satisfied, good service   | 24%                | 32%            | 8%               |
| Frequent, available, reliable                                       | 13%                | 18%            | 1%               |
| Convenient (general)  | 8%                 | 11%            | --               |
| Good routes, convenient routes                                      | 6%                 | 8%             | --               |
| Buses/light rail are clean  | 4%                 | 5%             | --               |
| Like the light rail/light rail is good                              | 4%                 | 5%             | 2%               |
| Provides transportation for those in need                           | 3%                 | 4%             | 2%               |
| Saves money, cheap, free  | 3%                 | 4%             | --               |
| Easy to use   | 2%                 | 3%             | 1%               |
| <b>Neutral</b>  |                    |                |                  |
| Don't use it, never used it   | 10%                | 5%             | 19%              |
| Always room for improvement   | 5%                 | 4%             | 9%               |
| It's average/okay   | 3%                 | 2%             | 5%               |
| Drivers are adequate/well-trained                                   | 2%                 | 3%             | --               |
| <b>Negative/Suggestions</b>   |                    |                |                  |
| Need better/more routes, connections,<br>doesn't go where I need to | 8%                 | 5%             | 14%              |
| More frequent buses, more hours                                     | 6%                 | 5%             | 8%               |
| Don't like the type of people who ride the bus                      | 4%                 | 3%             | 5%               |
| Need more security  | 3%                 | 2%             | 6%               |
| It was dirty/needs to be cleaned up a little bit                    | 3%                 | 2%             | 5%               |
| Buses are not on time   | 2%                 | 1%             | 2%               |
| Bus stops need shade  | 2%                 | 3%             | 1%               |
| Buses take too long, too slow                                       | 2%                 | <1%            | 5%               |
| <b>Don't know</b>   | 4%                 | 4%             | 5%               |

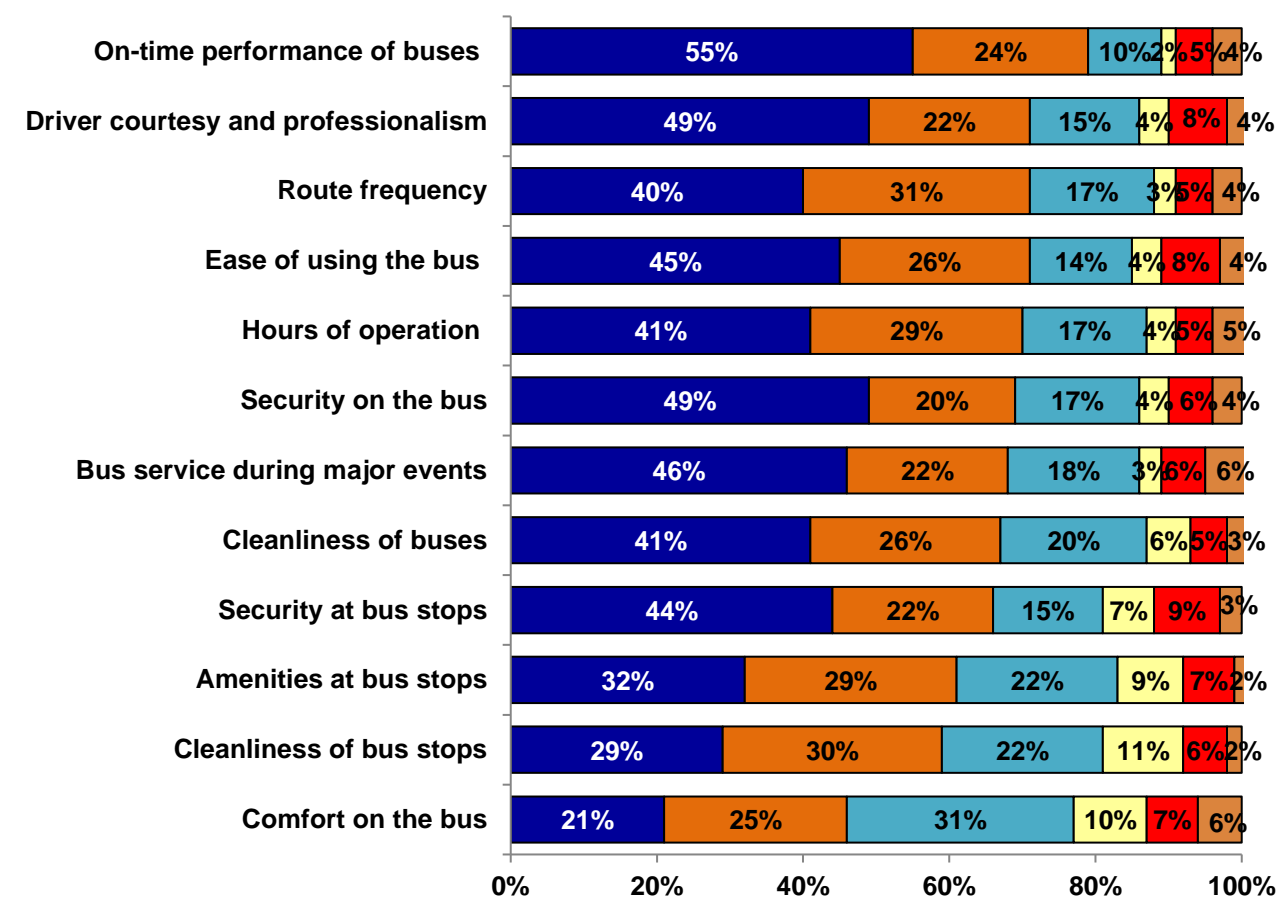
Q11a: Please explain your rating.

Note: Response categories with less than 2% total mentions in 2016 not shown in table.

### B. Priority of Possible Improvements to Tempe’s Transit System

Residents were read a list of possible transit improvements for the City and then asked to rate how high of a priority each improvement should be for the City on a one to five scale, with a “5” indicating a very high priority and a “1” indicating a very low priority. **On-time performance of buses continued to top the list with the highest percentage of “high priority” ratings as it did in 2014 (79% of residents provided a top-two rating).** Attributes considered to be less of a priority included *cleanliness of the bus stops* (59%) and *comfort on the bus* (46%), again similar to 2014, however there was a significant decrease in satisfaction and comfort on the bus compared to 2014.

### Priority of Transit Improvements



n=401

■ Very high: 5 rating ■ 4 ■ 3 ■ 2 ■ Very low: 1 ■ DK

**Table 8a: Priority of Possible Transit Improvements  
Percent Top Two Ratings  
Tracking Breakdown**

|                                     | 2016<br>(n=401) | 2014<br>(n=409) |
|-------------------------------------|-----------------|-----------------|
| On-time performance of buses        | 79%             | 77%             |
| Driver courtesy and professionalism | 71%             | 68%             |
| Route frequency                     | 71%             | 70%             |
| Ease of using the bus               | 70%             | 65%             |
| Hours of operation                  | 70%             | 69%             |
| Security on the bus                 | 69%             | 66%             |
| Bus service during major events     | 68%             | 66%             |
| Cleanliness of buses                | 67%             | 69%             |
| Security at bus stops               | 66%             | 61%             |
| Amenities at bus stops              | 61%             | 58%             |
| Cleanliness of bus stops            | 59%             | 61%             |
| Comfort on the bus                  | 46%*            | 54%             |

*Q12-23: Now I'm going to read you a list of possible transit improvements. Please indicate how high of a priority each improvement should be for the City of Tempe.*

Note: Attribute list prior to 2012 contained different attributes, this data is available in previous reports.



Female residents were more likely than male residents to provide top-two priority ratings for one-half of the attributes, as shown in Table 8b below. Notably women express more concern over security, cleanliness, courtesy and ease of use. Prioritization ratings between public transit riders and non-riders, for the most part, did not vary significantly.

**Table 8b: Priority of Possible Transit Improvements  
Percent Top Two Ratings  
Demographic Breakdown**

|                                     | 2016<br>(n=401) | Gender                 |                          | Transit Rider Status    |                             |
|-------------------------------------|-----------------|------------------------|--------------------------|-------------------------|-----------------------------|
|                                     |                 | Male<br>(n=209)<br>(A) | Female<br>(n=192)<br>(B) | Rider<br>(n=246)<br>(C) | Non-Rider<br>(n=152)<br>(D) |
| On-time performance of buses        | 79%             | 77%                    | 82%                      | 80%                     | 80%                         |
| Driver courtesy and professionalism | 71%             | 65%                    | 77% <sup>A</sup>         | 70%                     | 74%                         |
| Route frequency                     | 71%             | 68%                    | 73%                      | 70%                     | 72%                         |
| Ease of using the bus               | 70%             | 66%                    | 75% <sup>A</sup>         | 70%                     | 72%                         |
| Hours of operation                  | 70%             | 67%                    | 74%                      | 72%                     | 69%                         |
| Security on the bus                 | 69%             | 65%                    | 73% <sup>A</sup>         | 69%                     | 70%                         |
| Bus service during major events     | 68%             | 67%                    | 70%                      | 70%                     | 66%                         |
| Cleanliness of buses                | 67%             | 62%                    | 72% <sup>A</sup>         | 66%                     | 69%                         |
| Security at bus stops               | 66%             | 59%                    | 73% <sup>A</sup>         | 65%                     | 68%                         |
| Amenities at bus stops              | 61%             | 58%                    | 65%                      | 58%                     | 66%                         |
| Cleanliness of bus stops            | 59%             | 50%                    | 69% <sup>A</sup>         | 53%                     | 69% <sup>C</sup>            |
| Comfort on the bus                  | 46%             | 42%                    | 51%                      | 46%                     | 49%                         |

<sup>ABCD</sup> Indicates significantly higher percentage than comparative sub-group at the 95% level.

### C. Suggested Public Transit Priorities for City of Tempe

When asked if there was anything else they felt should be a high priority for the City of Tempe regarding public transit, **a majority of residents (70%) did not offer any suggestions.**

**Residents were most likely to suggest the City of Tempe should make having more or better bus routes a high priority (mentioned by 7%).** Other than suggesting eliminating public transit (4%), no other sentiments were shared by more than 2% of residents.

**Table 9: Suggested Public Transit Priorities**

|  | 2016<br>(n=401) | 2014<br>(n=409) |
|--|-----------------|-----------------|
| More bus routes/better routes                                | 7%              | 7%              |
| Get rid of it/waste of money/not used enough                 | 4%              | 3%              |
| More frequent buses/better run times/on time buses           | 2%              | 4%              |
| More light rail/extend light rail                            | 2%              | 4%              |
| Lower cost/buses should be free                              | 2%              | 2%              |
| Need more pullouts/more space for bus to pick up             | 2%              | 1%              |
| Easier to read schedules/make it easier to understand routes | 2%              | 2%              |
| Remove bike lanes on McClintock                              | 1%              | --              |
| Security on the bus/safer on the bus                         | 1%              | 2%              |
| Dislike people on the bus/transients/beggars                 | 1%              | 2%              |
| Improve transfers  | 1%              | -               |
| Increase public awareness/promote benefits                   | 1%              | 1%              |
| Improve handicap accessibility                               | 1%              | --              |
| Expand bike program/improve bicycle paths                    | 1%              | 2%              |
| Easier way to pay the fare/buy fare onboard                  | <1%             | <1%             |
| Faster light rail  | <1%             | --              |
| Buses need to hold more bikes/more accessible for bikes      | <1%             | <1%             |
| More courteous/professional bus drivers                      | <1%             | 1%              |
| Cleaner buses/cleaner bus stops                              |                 |                 |
| Easier way to get a schedule book                            | <1%             | --              |
| More restrooms   | <1%             | --              |
| Other  | 4%              | 7%              |
| No suggestions/don't know/no answer/satisfied                | 70%             | 65%             |

*Q23a: Is there anything else that you believe should be a high priority for the City of Tempe regarding public transit that I did not already mention? Please explain...*

## IV. Potential Use of Tempe's Transit System

### A. Reasons for Not Riding Transit

Preference for or a need for a vehicle was most commonly mentioned when non-riders were asked why they do not use public transit; approximately three in five (59%) indicated they *prefer using a car* and an additional 7% said *they need their car for business*.

**Table 10: Top Reasons for Not Using Public Transit  
(Among those who have not used public transit in the past year)**

| Reasons                                   | 2016<br>(n=152) | 2014<br>(n=143) | 2012<br>(n=148) | 2010<br>(n=123) |
|---|-----------------|-----------------|-----------------|-----------------|
| Prefer car                                | 59%             | 58%             | 46%             | 45%             |
| Bus stop far away                         | 11%             | 11%             | 12%             | 10%             |
| Takes too long                            | 8%              | 6%              | 10%             | 11%             |
| Need car for business                     | 7%              | 1%              | --              | --              |
| Doesn't go where they need to go          | 7%              | 7%              | 12%             | 10%             |
| Inconvenient (general)                    | 6%              | 4%              | 5%              | 8%              |
| Don't know how to use transit system/bus  | 6%              | 2%              | 4%              | 2%              |
| Don't need to, don't have the need to use | 4%              | 9%              | 6%              | 15%             |
| Health/disability                         | 3%              | 3%              | 5%              | 7%              |
| Don't have to go far distances            | 3%              | 3%              | 5%              | 5%              |
| Bike                                      | 3%              | 2%              | --              | --              |
| Work from home/Telecommute                | 3%              | --              | --              | --              |
| Transit is not secure                     | 3%              | 1%              | --              | --              |
| Not frequent enough                       | 2%              | 2%              | 3%              | 3%              |
| Don't know                                | 2%              | 2%              | 2%              | 2%              |

Q5: People tell us different reasons why they do not use public transit like riding the bus or light rail. What are some of the reasons why you currently do not use public transit? Question changed in 2010 to current wording above.

\*Indicates significant difference compared to 2014 at the 95% confidence level.

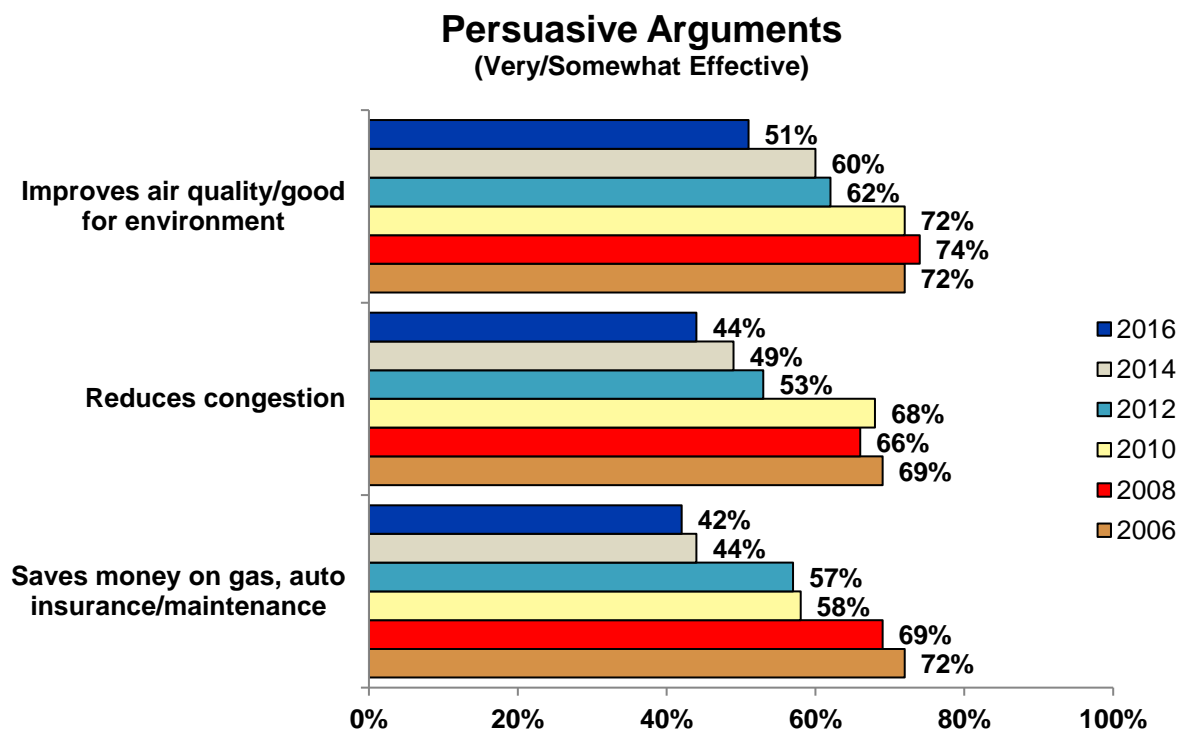
Note: Reasons with less than 2% mentions in 2016 not shown in table.

### B. Effectiveness of Persuasive Arguments

Residents were asked to rate the effectiveness of five arguments for motivating public transit usage. Ratings were completed on a four-point nominal scale (“very effective,” “somewhat effective,” “not very effective,” and “not at all effective”).

Perceived effectiveness of each argument presented to residents regarding motivation to use public transit has been declining since 2006.

- The argument *improves air quality/good for environment* was perceived as either “somewhat effective” or “very effective” by 51% of residents, compared to a range of 60% to 74% since 2006.
- *Reduces congestion* was seen as effective by 44%, compared to a range of 49% to 69% since 2006.
- *Saves money on gas, auto insurance/maintenance* was perceived as effective by 42%, compared to a range of 44% to 72% between 2006 and 2014.



Q6: For each of the following benefits to using public transit, please indicate how effective it would be in persuading you to use the bus or light rail instead of using your current mode of transportation.

Note: Slight wording change in 2012 to benefit statements.

2016 n=152, 2014 n=143, 2012 n=148, 2010 n=123; 2008 n=258; 2006 n=289

**Table 11: Effectiveness of Reasons to Persuade Transit Usage**  
 (Among those who have not ridden a bus in the past year)

|  | 2016<br>(n=152) | 2014<br>(n=143) | 2012<br>(n=148) | 2010<br>(n=123) | 2008<br>(n=258) | 2006<br>(n=289) |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Improves air quality</b>                          |                 |                 |                 |                 |                 |                 |
| Effective**  | 51%             | 60%             | 62%             | 72%             | 74%             | 72%             |
| Not effective***                                     | 44%             | 37%             | 35%             | 24%             | 24%             | 23%             |
| <b>Reduces congest.</b>                              |                 |                 |                 |                 |                 |                 |
| Effective**  | 44%             | 49%             | 53%             | 68%             | 66%             | 69%             |
| Not effective***                                     | 54%             | 46%             | 44%             | 29%             | 33%             | 28%             |
| <b>Save money on gas, insurance/<br/>maintenance</b> |                 |                 |                 |                 |                 |                 |
| Effective**  | 42%             | 44%             | 57%             | 58%             | 69%             | 72%             |
| Not effective***                                     | 55%             | 52%             | 40%             | 41%             | 31%             | 24%             |

Q6: 2006-2008: For each of the following benefits to riding the bus, please indicate how effective it would be in persuading you to ride the bus instead of using your current mode of transportation.

2010-2016: For each of the following benefits to using public transit, please indicate how effective it would be in persuading you to ride the bus or light rail instead of using your current mode of transportation. Would it be very effective, somewhat effective, not very effective, or not at all effective? The don't know or no answer response percentages not shown.

\*Indicates significant difference compared to 2014 at the 95% confidence level.

\*\* Very + Somewhat effective

\*\*\* Not very + Not at all effective

## V. Tempe in Motion (TIM)

### A. Awareness of Tempe in Motion

**Total awareness of Tempe in Motion (TIM) remained statistically comparable to recent years (44%), as did the proportion of TIM-aware residents who knew the correct meaning of the TIM acronym (65%).**

Those more likely to have net awareness of TIM include:

- Residents aged 18 to 54 vs. older residents (63% vs. 35%)
- Transit riders vs. non-transit riders (55% vs. 29%)
- Those living in Tempe six or more years vs. those living in Tempe for a shorter time frame (48% vs. 23%)

**Table 12: Awareness of TIM**

|  | 2016<br>(n=401) | 2014<br>(n=409) | 2012<br>(n=400) | 2010<br>(n=427) | 2008<br>(n=424) | 2006<br>(n=407) |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Total Awareness<br/>(Unaided + Aided)</b> | <b>44%</b>      | <b>50%</b>      | <b>53%</b>      | <b>54%</b>      | <b>48%</b>      | <b>38%</b>      |
| Unaided Awareness                            | 19%             | 18%             | 21%             | 24%             | 27%             | 18%             |
| Aided Awareness                              | 25%             | 32%             | 32%             | 30%             | 21%             | 21%             |
| <b>Meaning of TIM</b>                        | (n=178)         | (n=204)         | (n=211)         | (n=230)         | (n=202)         | (n=155)         |
| “Tempe in Motion”                            | 65%             | 68%             | 69%             | 69%             | 74%             | 67%             |
| Other  | 9%              | 5%              | 5%              | 4%              | 6%              | 6%              |
| Don't know                                   | 26%             | 26%             | 26%             | 27%             | 20%             | 28%             |

Q24/25: What is the name of Tempe's transit/transportation program? Have you ever heard of TIM?

Q25a IF YES: To the best of your knowledge, what does TIM mean or stand for?

## B. Source of Awareness

Residents aware of TIM recalled hearing about it through **street banners (20%)** and **signs on buses (11%)**. Sources of awareness were generally consistent with 2014.

**Table 13: Top Sources of TIM Awareness**  
(Among those aware of TIM)

| Responses                             | 2016<br>(n=178) | 2014<br>(n=204) | 2012<br>(n=211) | 2010<br>(n=230) | 2008<br>(n=202) | 2006<br>(n=155) |
|---------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Street banner                         | 20%             | 24%             | 29%             | 17%             | 20%             | 19%             |
| Signs on the buses                    | 11%             | 15%             | 13%             | 18%             | 20%             | 20%             |
| Bill inserts                          | 7%              | 3%              | 9%              | 2%              | 2%              | 3%              |
| Word of mouth                         | 6%              | 4%              | 6%              | 3%              | 4%              | 3%              |
| Newspaper/Print Ads                   | 6%              | 5%              | 6%              | 6%              | 7%              | 15%             |
| Sign (general)                        | 6%*             | 1%              | --              | --              | --              | --              |
| Direct mail                           | 4%              | 3%              | 5%              | 5%              | 2%              | 4%              |
| TV                                    | 4%              | 3%              | 6%              | 9%              | 10%             | 19%             |
| ASU/School                            | 4%              | 5%              | --              | 3%              | 2%              | --              |
| Library                               | 4%              | --              | --              | --              | --              | --              |
| Pandora                               | 3%              | 2%              | --              | --              | --              | --              |
| Internet/online ads                   | 3%              | 3%              | 3%              | 4%              | 3%              | 4%              |
| I live here/lived here a<br>long time | 2%              | 2%              | --              | --              | --              | --              |
| Ad/Commercial (unspec)                | 2%              | --              | --              | --              | --              | --              |
| Billboard                             | 2%              | 1%              | --              | --              | --              | --              |
| Flyers/brochures                      | 2%              | 3%              | 2%              | 6%              | 4%              | --              |
| On the light rail                     | 2%              | --              | --              | --              | --              | --              |
| Work                                  | --              | 2%              | 1%              | 1%              | 3%              | --              |
| Don't know                            | 7%              | 13%             | 16%             | 12%             | 14%             | 14%             |

Q26: How did you hear about it?

\*Indicates significant difference compared to 2014 at the 95% confidence level.

Note: Sources with less than 2% mentions in 2016 not shown in table.

**C. Advertising Effect on Perception of Tempe Transportation Options**

Over half (54%) of those who heard about TIM via newspaper, online, direct mail, or street banners indicated the advertising had a positive impact on their impression of transportation options in Tempe. An additional 39% said the advertising had *no effect*. Only 2% reported the advertising had a negative impact on their perceptions of the transportation system in Tempe.

Among those who indicated TIM advertising had a positive or neutral impact about their feelings of transportation options in Tempe, **one in four (25%) indicated “yes” when asked whether the advertising message persuaded them to try public transit in Tempe**. This is not significantly different than the 20% and 28% recorded in the prior two waves of research.

**Table 14: Advertising Effect on Perception**  
(Among those aware of TIM advertising through specified media)

|  | 2016<br>(n=71) | 2014<br>(n=88) | 2012<br>(n=94) | 2010<br>(n=79) | 2008<br>(n=120) | 2006<br>(n=89) |
|--|----------------|----------------|----------------|----------------|-----------------|----------------|
| Make you think more positively about transportation options in Tempe | 54%            | 52%            | 42%            | 58%            | 57%             | 52%            |
| Have no effect on your perceptions                                   | 39%            | 41%            | 52%            | 38%            | 42%             | 43%            |
| Make you think negatively about transportation options in Tempe      | 2%             | 2%             | 2%             | 1%             | 1%              | 4%             |
| Don't know   | 5%             | 5%             | 4%             | 3%             | --              | 1%             |

Q27: How did the messages affect your perception of the transportation system in Tempe?  
Note: Question changed in 2008 from “bus system” to “transportation.”

**Table 14a: Advertising Effect on Transit Usage**  
(Among those who said impact of message was positive/neutral)

|     | 2016<br>(n=71) | 2014<br>(n=83) | 2012<br>(n=88) |
|-----|----------------|----------------|----------------|
| Yes | 25%            | 20%            | 28%            |
| No  | 75%            | 79%            | 72%            |

Q28: Did the advertising messages persuade you to try public transit in Tempe?



## VI. Tempe Bicycling and Walking

### A. Bicycle Usage

**Approximately three in five residents (62%) reported they have access to a bicycle.** This is statistically similar to 2014 and 2012, but remains somewhat elevated over prior years.

Residents more likely to indicate having access to a bike include:

- Male residents vs. female residents (69% vs. 55%)
- Residents aged 18 to 54 vs. older residents (68% vs. 51%)
- Those with annual household incomes of \$80,000 or more vs. those with lower incomes (73% vs. 56%)
- Married residents (70% vs. 52% of singles)
- Those who reside in zip code 85284 (76% vs. 54% to 64% in other zip codes)

**Among those who reported having access to a bike, 71% reported they ride their bike at least once a month, which is virtually the same as in 2014.**

**Table 15: Access to and Frequency of Bike Use**

|                            | 2016<br>(n=401) | 2014<br>(n=409) | 2012<br>(n=400) | 2010<br>(n=427) | 2008<br>(n=424) | 2006<br>(n=407) |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Have access to bike</b> | <b>62%</b>      | <b>61%</b>      | <b>62%</b>      | <b>58%</b>      | <b>56%</b>      | <b>53%</b>      |
| <b>Frequency</b>           |                 |                 |                 |                 |                 |                 |
| Never/occasionally         | 28%             | 30%             | 32%             | 35%             | 29%             | 32%             |
| Once or twice              | 23%             | 18%             | 18%             | 17%             | 19%             | 19%             |
| Three to five times        | 20%             | 17%             | 11%             | 13%             | 19%             | 14%             |
| Six to ten times           | 8%              | 8%              | 12%             | 9%              | 10%             | 8%              |
| >10 times                  | 20%             | 27%             | 24%             | 24%             | 23%             | 25%             |
| Don't know/not sure        | 1%              | 1%              | 2%              | 2%              | --              | 2%              |

Q29: Do you have access to a bicycle that you can ride when you want to?

Q30: How many times in a month do you ride your bike?

**B. Reasons Do Not Ride Bicycle More Often**

Those who have a bike but never or only occasionally ride it (28%) were most likely to report **not riding it more often because it is too hot outside (38% mentioned)**. *Health issues* and a *far distance* rounded out the top three reasons with 9% mentioning each.

Of interest, a small percent of residents indicate they don't ride more because of safety related factors – *too much traffic* (3%), *not enough bike lanes/bike paths* (2%), or *too dangerous* (1%).

**Table 16: Reasons for Not Riding More Often**  
(Among those who have access to a bicycle but only ride it occasionally or never)

| Responses                                     | 2016*<br>(n=70) |
|---|-----------------|
| Too hot outside/hot weather                   | 38%             |
| Physical condition/my health                  | 9%              |
| Distance/too far                              | 9%              |
| Takes too long                                | 7%              |
| Bike not working properly/bike not functional | 6%              |
| Have little kids/drive kids around            | 6%              |
| Have a car/rather take car                    | 6%              |
| Time/Convenience/Too busy                     | 4%              |
| Lazy/Don't want to ride it                    | 4%              |
| Too much traffic                              | 3%              |
| Not enough bike lanes/bike paths              | 2%              |
| Injury  | 1%              |
| Too much to carry                             | 1%              |
| Too dangerous                                 | 1%              |
| Usually walk                                  | 1%              |
| Other (responses <.5%)                        | 9%              |
| Don't know/no answer                          | 9%              |

Q30a: What are some reasons you don't ride your bike more often?

\*Question added in 2016.

### C. Bicycle Destinations

Approximately three in seven (44%) of those who indicated riding their bikes at least once a month report they ride for *exercise*, while 13% report riding a bike to *the store* and 12% ride a bike to *work/school*. There was a significant increase in the percent of residents reporting to ride their bicycles to the local parks (10% up from 4%).

**Table 17: Bike Riding Destinations**  
(Among those who have access to a bicycle and ride it at least 1x a month)

| Responses                          | 2016<br>(n=176) | 2014<br>(n=174) | 2012<br>(n=163) | 2010<br>(n=155) | 2008<br>(n=169) | 2006<br>(n=142) |
|------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Exercise                           | 44%             | 53%             | 58%             | 60%             | 56%             | 59%             |
| Store                              | 13%             | 14%             | 15%             | 16%             | 19%             | 14%             |
| Work/school                        | 12%             | 24%             | 17%             | 24%             | 25%             | 24%             |
| Parks                              | 10%*            | 4%              | 6%              | 4%              | 6%              | 8%              |
| Along the canal                    | 9%              | 4%              | --              | --              | --              | --              |
| Tempe Town Lake                    | 5%              | 4%              | 6%              | 7%              | 4%              | 1%              |
| Mill Avenue/ Downtown<br>Tempe     | 5%              | 3%              | 5%              | 3%              | 1%              | 2%              |
| Friend's house                     | 4%              | 9%              | 7%              | 3%              | 6%              | 2%              |
| Restaurant/Dinner                  | 4%              | 3%              | 2%              | 1%              | 2%              | --              |
| Everywhere                         | 3%              | 3%              | 2%              | 1%              | 1%              | 3%              |
| The bar/when I've been<br>drinking | 3%              | 3%              | 1%              | --              | --              | --              |
| ASU                                | 2%              | 5%              | 1%              | 3%              | 6%              | 1%              |
| Mountains (unspecified)            | 2%              | --              | --              | --              | --              | --              |
| South Mountain                     | 2%              | --              | --              | --              | --              | --              |
| The light rail                     | 2%              | --              | --              | --              | --              | --              |
| Run errands                        | 2%              | 2%              | 3%              | 1%              | 2%              | 5%              |

Q30b: Where do you go when you ride your bike?

\*Indicates significant difference compared to 2014 at the 95% confidence level.

Note: Destinations with less than 2% mentions in 2016 not shown in table.

**D. Main Reason for Riding a Bicycle**

**Residents who bicycle at least monthly say they do so primarily to get exercise (54%) and/or to have fun (26%).** Other main reasons reported were that it is convenient (8%), good for their health (5%), saves money (4%), saves wear and tear on their car (4%), and provides transportation to school or work (4%).

Women were significantly more likely than men to say they mainly ride their bicycle for *fun or recreation* (36% vs. 19%). Residents of the 85284 zip code were significantly more likely than those who reside in other Tempe zip codes to report bike riding for fun or recreational/leisure purposes (47% vs. 16% to 18%).

**Table 18: Main Reason Ride a Bike**  
(Among those who have access to a bicycle and ride it at least 1x a month)

| Responses                                      | 2016*<br>(n=176) |
|--|------------------|
| Exercise                                       | 54%              |
| Fun/Recreation/Leisure                         | 26%              |
| Convenient/Easy                                | 8%               |
| Good for health/Medical reasons                | 5%               |
| Saves money                                    | 4%               |
| Saves wear and tear on car/don't want to drive | 4%               |
| To get to school/work                          | 4%               |
| Do not have a car                              | 2%               |
| So do not have to walk                         | 2%               |
| To go shopping                                 | 1%               |
| For the fresh air                              | 1%               |
| Protects environment                           | 1%               |
| Other  | 2%               |
| No answer                                      | 1%               |

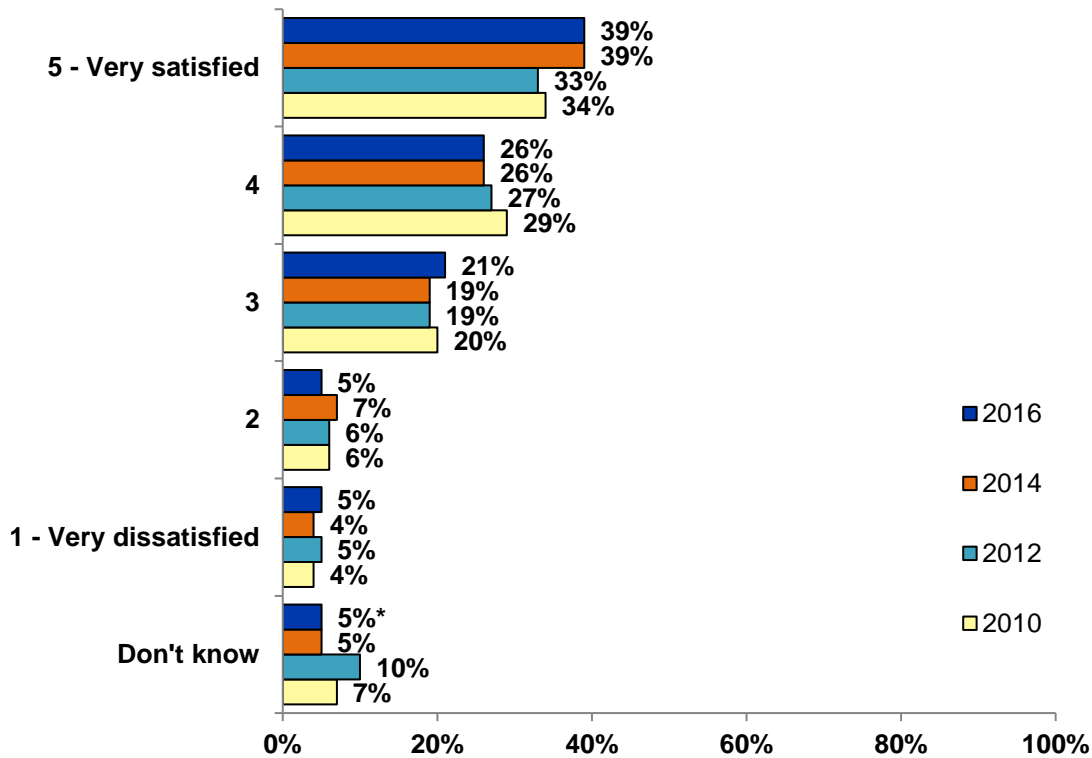
Q31: *What is the main reason you ride a bicycle?*

\*Question added in 2016.

**E. Overall Satisfaction with Bicycle and Pedestrian Paths**

As in 2014, two thirds (65%) of residents reported being satisfied with the quality of walking and biking paths in Tempe.

**Overall Satisfaction with Tempe Walking and Bike Paths**



2016 n=401, 2014 n=409, 2012 n=400, 2010 n=427

Q32: How satisfied are you with the quality of the walking and biking paths in Tempe?

\*indicates significant difference compared to 2014 at the 95% confidence level.

Residents were asked to explain the reason(s) for their satisfaction ratings for bike and pedestrian paths. **Among those with an opinion, the most common positive reasons for ratings included *they are fine the way they are/no problems (18%) and they are everywhere, there are plenty of paths (12%)***. Of note: 5% stated they had recognized improvements or upgrades to bike and pedestrian paths. **Top negative reasons included *don't seem safe enough/make them safer (9%) and need more of them or need more bike lanes (7% and 4%)***.

**Table 19: Reasons for Satisfaction Rating**  
(Among those with an opinion)

| Responses  | 2016<br>(n=380) | 2014<br>(n=390) | 2012<br>(n=362) | 2010<br>(n=397) |
|--|-----------------|-----------------|-----------------|-----------------|
| <b>Positive</b>  |                 |                 |                 |                 |
| They are fine the way they are, no problems                | 18%             | 29%             | 23%             | 20%             |
| They are everywhere, plenty of paths                       | 12%             | 12%             | 15%             | 16%             |
| They are safe  | 7%              | 5%              | 6%              | 11%             |
| Have good routes, connect well                             | 6%              | 3%              | 6%              | 4%              |
| They are properly maintained, well landscaped              | 6%              | 4%              | 12%             | 6%              |
| Have seen/noticed improvements/upgrades                    | 5%*             | 2%              | --              | --              |
| Easy to use, accessible                                    | 5%              | 6%              | 6%              | 4%              |
| Paths are well lit   | 4%              | 5%              | 5%              | 7%              |
| Paths are wide enough, have enough room                    | 3%              | 3%              | 3%              | 4%              |
| Paths are visible to motorists/clearly marked              | 3%              | 2%              | 4%              | --              |
| They added more paths                                      | 2%*             | 1%              | --              | --              |
| <b>Neutral</b>   |                 |                 |                 |                 |
| Never use them, No knowledge of them                       | 6%              | 5%              | 4%              | 5%              |
| There is always room for improvement                       | 4%              | 4%              | 3%              | 2%              |
| <b>Negative/Suggestions</b>                                |                 |                 |                 |                 |
| Don't seem safe enough, make them safer                    | 9%              | 8%              | 10%             | 11%             |
| Could use more of them                                     | 7%              | 6%              | 4%              | 9%              |
| Need more bike lanes                                       | 4%              | 9%              | 11%             | 7%              |
| Dissatisfied that they made a 3 lane road to a 2 lane road | 3%              | --              | --              | --              |
| No one used the bike lanes                                 | 3%              | --              | --              | --              |
| They are not maintained                                    | 2%              | 2%              | 2%              | 2%              |
| Better markings for bike/walk paths                        | 2%              | 1%              | --              | --              |
| Traffic congestion is getting higher                       | 2%              | --              | --              | --              |
| Lanes/paths need to be wider                               | 1%              | 4%              | 5%              | 3%              |
| <b>Don't know</b>  | <b>5%</b>       | <b>6%</b>       | <b>6%</b>       | <b>5%</b>       |

Q32a: Please explain your rating

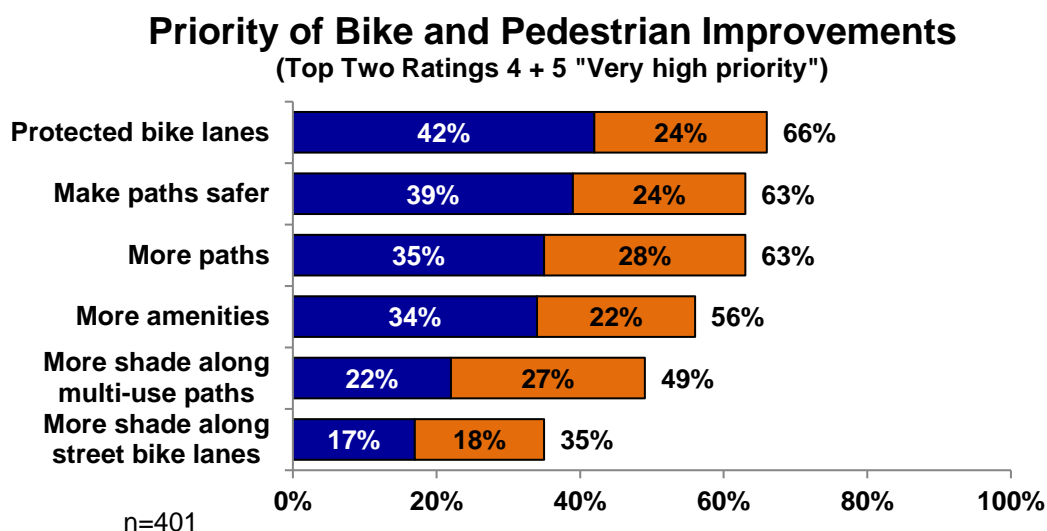
\*Indicates significant difference compared to 2014 at the 95% confidence level.

Note: Response categories with less than 2% total mentions in 2016 not shown in table.

### F. Priority of Possible Bicycle and Pedestrian Improvements

Residents were provided with a list of possible improvements for the biking and walking paths in Tempe, and then asked to indicate how high of a priority each improvement should be for the City. In 2016, two new attributes were included in the list (protected bike lanes and more shade along bike lanes).

**Protected bike lanes, safer paths and adding more bike and pedestrian paths received the highest percentage of priority ratings** (63% to 66% rated a 4 or 5, where 5 means “very high priority”). Proportions of top-two ratings for each attribute were generally comparable to 2014 figures. **With just over one-third rating the need for more shade along street bike lanes as a 4 or 5, this attribute ranked as the lowest priority.**



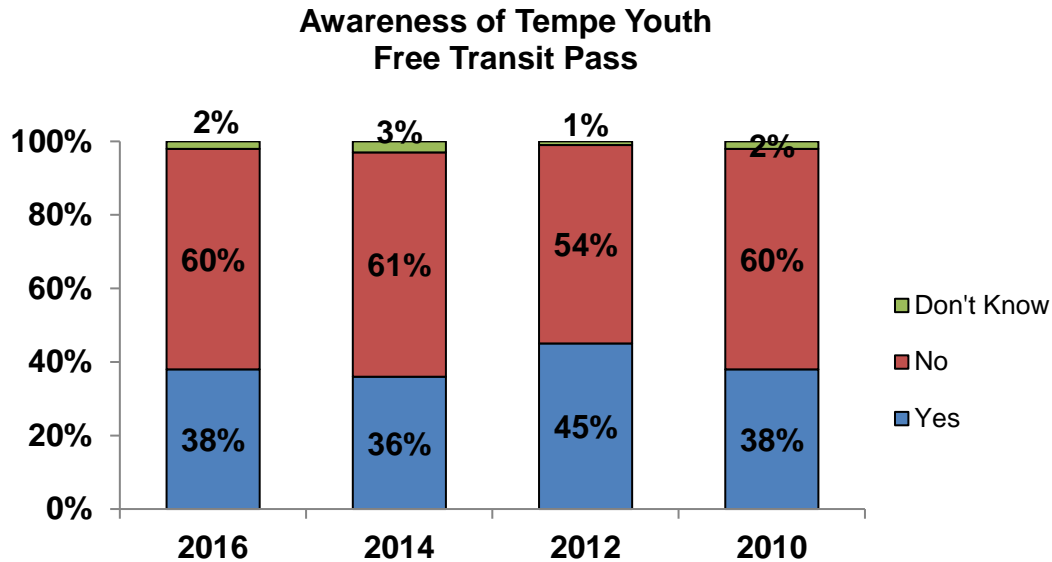
**Table 20: Priority of Possible Bicycle and Pedestrian Improvements**

| Attribute   | Top Two (4+5) rating |                 |                 |                 |
|---|----------------------|-----------------|-----------------|-----------------|
|   | 2016<br>(n=401)      | 2014<br>(n=409) | 2012<br>(n=400) | 2010<br>(n=427) |
| Protected bike lanes  | 66%                  | --              | --              | --              |
| Make paths safer  | 63%                  | 58%             | 56%             | 70%             |
| Add more bike and pedestrian paths  | 63%                  | 64%             | 62%             | 60%             |
| More amenities for bikes and pedestrians along the paths such as water fountains and lighting | 56%                  | 64%             | 61%             | 57%             |
| More shade along multi-use paths  | 49%                  | 49%             | 46%             | 54%             |
| More shade along street bike lanes  | 35%                  | --              | --              | --              |

Q33-38: Now I'm going to read you a list of possible bicycle and pedestrian improvements. Please indicate how high of a priority each improvement should be for the City of Tempe.

## VII. Tempe Youth Free Transit Pass Program

Nearly two in five (38%) residents surveyed in 2016 reported having heard of the Tempe Youth Free Transit Pass. This is consistent with 2014 awareness. Public transit users were more likely than non-users to say “yes” (43% vs. 29%). Residents in 85282 are most likely to be aware of the pass (45%) and those in 85284 are the least likely to be familiar with them (28%).



2016 n=401, 2014 n=409, 2012 n=400, 2010 n=427

QD5: Have you ever heard of the Tempe Youth Free Transit Pass Program?

\*Indicates significant difference compared to 2014 at the 95% confidence level.



Among those aware of the program, one quarter (24%) indicated they heard about it *through school* followed by 16% citing *word-of-mouth*. These were also the top sources mentioned in 2014 and 2012.

**Table 21: Sources for Tempe Youth Transit Pass Program Information**  
(Among those aware of the program)

| Sources                        | 2016<br>(n=150) | 2014<br>(n=148) | 2012<br>(n=179) |
|--------------------------------|-----------------|-----------------|-----------------|
| Through school                 | 24%             | 20%             | 24%             |
| Word-of-mouth (friends/family) | 16%             | 20%             | 19%             |
| Library                        | 11%             | 7%              | 6%              |
| Bill insert                    | 8%              | 3%              | --              |
| Advertisement                  | 4%              | 8%              | 5%              |
| Letter from the City           | 3%              | 5%              | 5%              |
| Newspaper                      | 3%              | 6%              | 9%              |
| On the bus                     | 3%              | 4%              | --              |
| Employer/work                  | 2%              | 5%              | 1%              |
| Web site                       | 1%              | 2%              | 3%              |
| Don't know                     | 7%              | 5%              | 10%             |

QD5a: How did you first hear about the Tempe Youth Free Transit Pass Program?

\*Indicates significant difference compared to 2014 at the 95% confidence level.

Note: Sources with less than 3% mentions in 2016 not shown in table except for in a few cases to maintain tracking history.

Note: Prior to 2010, question was asked only of people with children aged 6 years and older. This data is available in earlier reports.

**APPENDIX A: Questionnaire**

**City of Tempe – Tempe in Motion  
Questionnaire – September 2016**

Sample: 85281, 85282, 85283, 85284 = 400

Quotas: Males/Females 50/50 each quota group

Age distribution will be monitored for representativeness of sample English and Spanish

Good \_\_\_\_\_, may I please speak with \_\_\_\_\_? This is \_\_\_\_\_ calling from XXX on behalf the City of Tempe. We are conducting a survey with Tempe residents about important issues affecting the City's transportation system. This is not a telemarketing call; we simply want your opinions on a variety of issues important to Tempe residents.

1. Are you a Tempe resident?  
Yes – CONTINUE  
No – THANK AND TERMINATE
  
2. What is your zip code?
  - a. 85281
  - b. 85282
  - c. 85283
  - d. 85284
  - e. Other/Don't know/Refused – THANK AND TERMINATE
  
3. How long have you lived in Tempe?
  - a. Less than one year
  - b. One to two years
  - c. Three to five years
  - d. Six to ten years
  - e. Eleven to 20 years
  - f. More than 20 years
  - g. Refused/don't know/NA
  
4. In general would you say you use Tempe's transit system (including light rail, Orbit, Flash and local bus/express)?
  - a. daily
  - b. weekly
  - c. monthly
  - d. every few months
  - e. only under special or unique circumstances
  - f. I don't use transit
  - g. Don't know /NA
  
- 4a. IF a, b, c, d or e IN Q4: Which of the following have you used in Tempe in the past year?  
MULTIPLE RESPONSES ALLOWED
  - a. Local or express bus
  - b. Orbit or Flash neighborhood shuttles
  - c. Light rail

5. ASK IF “f- don’t use transit” IN Q4: People tell us different reasons why they do not use public transit like riding the bus or light rail. What are some of the reasons why you currently do not use public transit? What other reasons? DO NOT READ LIST (Multiple responses allowed)
- I prefer to drive my car
  - I don’t know how to use the transit system
  - The stops are too far away
  - I don’t like the type of people who use transit
  - Using public transit takes too long
  - Service isn’t frequent enough
  - Transit is not secure
  - Stops are not secure
  - I need my car for business
  - Public transit is dirty
  - Other: Specify \_\_\_\_\_
  - Don’t know
6. ASK IF “f- don’t use transit” IN Q4: For each of the following benefits to using public transit, please indicate how effective it would be in persuading you to use the bus or light rail instead of using your current mode. Would it be very effective, somewhat effective, not very effective, or not at all effective in persuading you to ride bus or light rail?
- Saves money on gas, auto insurance, and car maintenance
  - Improves air quality and is good for the environment
  - Reduces congestion

ASK IF a, b, c, d, e in Q4: ALL OTHERS SKIP TO Q11

7. How long have you been using the transit system in Tempe? DO NOT READ LIST
- Less than a year
  - 1 to 2 years
  - 2 to 4 years
  - 4 to 6 years
  - 6 to 10 years
  - More than 10 years
  - Don’t know/NA
8. What is the main reason you use public transit? (DO NOT READ LIST)
- Convenient
  - Don’t have a car
  - Don’t have a driver’s license
  - Enjoy the people
  - Protects the environment
  - Saves money
  - Saves wear and tear on my car
  - Other (SPECIFY: \_\_\_\_\_)

9. Where do you go when you use public transit? (DO NOT READ LIST. Multiple responses allowed)
- a. ASU
  - b. Community College
  - c. High School
  - d. Work
  - e. Shopping
  - f. Errands
  - g. Medical appointment
  - h. Visit friends/family
  - i. Recreational activities
  - j. Library
  - k. Other (SPECIFY: \_\_\_\_\_)

10. ASK ONLY OF THSE WHO ANSWER “A” OR “B” in IN Q4a In general, how satisfied are you with: ROTATE LIST

|  | Very satisfied | Somewhat satisfied | Somewhat dissatisfied | Very dissatisfied | DK/<br>no answer |
|--|----------------|--------------------|-----------------------|-------------------|------------------|
| <b>a. Cleanliness of buses</b>   | 4              | 3                  | 2                     | 1                 | 0                |
| <b>b. Cleanliness of bus stops</b>   | 4              | 3                  | 2                     | 1                 | 0                |
| <b>c. Amenities at bus stops (e.g. shade, seating, bike racks)</b>                             | 4              | 3                  | 2                     | 1                 | 0                |
| <b>d. Reliability/on-time performance of buses</b>   | 4              | 3                  | 2                     | 1                 | 0                |
| <b>e. Driver courtesy and professionalism</b>  | 4              | 3                  | 2                     | 1                 | 0                |
| <b>f. Route frequency</b>  | 4              | 3                  | 2                     | 1                 | 0                |
| <b>g. Hours of operation</b>   | 4              | 3                  | 2                     | 1                 | 0                |
| <b>h. Comfort on the bus</b>   | 4              | 3                  | 2                     | 1                 | 0                |
| <b>i. Ease of using the bus (e.g., using schedules, getting to the bus stop, paying fares)</b> | 4              | 3                  | 2                     | 1                 | 0                |
| <b>j. Security at bus stops</b>  | 4              | 3                  | 2                     | 1                 | 0                |
| <b>k. Security on the bus</b>  | 4              | 3                  | 2                     | 1                 | 0                |
| <b>l. Bus service during major city events</b>   | 4              | 3                  | 2                     | 1                 | 0                |

- 10a. ONLY ASK IF ANSWER IS SOMEWHAT DISSATISFIED OR VERY DISSATISFIED IN Q10: You indicated dissatisfaction with some of the attributes, what could be done to improve your satisfaction with the bus service?

ASK ALL:

11. How satisfied are you with the quality of the transit system in Tempe? Please rate your satisfaction level on a 1 to 5 scale where 5 means “very satisfied” and “1” means “very dissatisfied”
- 11a. Please explain your rating.

12-23. Now I am going to read you a list of possible transit improvements. Please indicate how high of a priority each improvement should be for the City of Tempe. Please use a 1 to 5 scale where “1” means “a very low priority” and a “5” means it should be a “very high priority” for the City of Tempe. The first one is....

| <b>RANDOM ORDER 12-23</b>   | <b>Very high priority</b> |  |  |  | <b>Very low priority</b> | <b>DK / Refused</b> |
|---|---------------------------|--|--|--|--------------------------|---------------------|
| <b>12. Cleanliness of buses</b>   |                           |  |  |  |                          |                     |
| <b>13. Cleanliness of bus stops</b>   |                           |  |  |  |                          |                     |
| <b>14. Amenities at bus stops (e.g. shade, seating, bike racks)</b>                             |                           |  |  |  |                          |                     |
| <b>15. Reliability/on-time performance of buses</b>   |                           |  |  |  |                          |                     |
| <b>16. Driver courtesy and professionalism</b>  |                           |  |  |  |                          |                     |
| <b>17. Route frequency</b>  |                           |  |  |  |                          |                     |
| <b>18. Hours of operation</b>   |                           |  |  |  |                          |                     |
| <b>19. Comfort on the bus</b>   |                           |  |  |  |                          |                     |
| <b>20. Ease of using the bus (e.g., using schedules, getting to the bus stop, paying fares)</b> |                           |  |  |  |                          |                     |
| <b>21. Security at bus stops</b>  |                           |  |  |  |                          |                     |
| <b>22. Security on the bus</b>  |                           |  |  |  |                          |                     |
| <b>23. Bus service during major city events</b>   |                           |  |  |  |                          |                     |

23a. Is there anything else that you believe should be a high priority for the City of Tempe regarding public transit that I did not already mention? Please explain.

24. What is the name of Tempe’s transit/transportation program? DO NOT READ LIST
- a. TIM (or Tempe in Motion) – SKIP TO Q25a
  - b. Valley Metro – ASK Q25
  - c. Orbit – ASK Q25
  - c. Other (SPECIFY: \_\_\_\_\_) – ASK Q25
  - d. Don’t know ASK Q25

25. Have you ever heard of TIM? a. YES                      b. NO (IF NO SKIP TO Q29)

25a. IF YES in Q25 or “TIM” IN Q24: To the best of your knowledge, what does TIM mean or stand for? DO NOT READ LIST

- a. Tempe In Motion
- b. Other (SPECIFY: \_\_\_\_\_)
- c. Don’t know

26. IF YES in Q25 or “TIM” IN Q24: How did you hear about it? MULTIPLE RESPONSES ALLOWED
- a. TV
  - b. Newspaper ads
  - c. Online ads/web
  - d. Direct mail
  - e. Street Banners
  - f. Twitter/Facebook

- g. Pandora
  - h. ASU Campus outdoor ads
  - i. Movie theatre advertising
  - j. Don't know/Not aware of the program
  - k. Other (SPECIFY: \_\_\_\_\_)
27. IF a, b, c, d, e, f, g, h or i in Q26: How did the messages affect your perception of the transportation system in Tempe? **READ LIST**
- a. Make you think more positively about transportation options in Tempe
  - b. Have no effect on your perceptions
  - c. Make you think negatively about transportation options in Tempe
  - d. DON'T READ – Don't know
28. If a or b in Q 27: Did the advertising messages persuade you to try public transit in Tempe?
- a. Yes
  - b. No
  - c. Don't know
29. Do you have access to a bicycle that you can ride when you want to?
- a. Yes
  - b. No – SKIP TO Q32
30. IF YES IN Q29: How many times in a month do you ride your bike?
- a. None/never ride it/only ride it occasionally
  - b. Once or twice
  - c. Three to five times
  - d. Six to 10 times
  - e. More than 10 times
  - f. Don't know/NA
- 30a. If none/never ride it in Q30: What are some reasons why don't you ride your bike more often? **(DO NOT READ LIST)**
- a. Takes too long
  - b. Have too much to carry
  - c. Too hot
  - d. Too cold
  - e. Not enough bike lanes/paths
  - f. Too much traffic
  - g. Too dangerous
  - h. Other (SPECIFY: \_\_\_\_\_)
  - i. Don't know/NA
- 30b. IF RIDE BIKE 1+ times in Q30: Where do you go when you ride your bike?
- a. Work/school
  - b. Store
  - c. Friend's house
  - d. Nowhere/just riding for exercise
  - e. Other (SPECIFY: \_\_\_\_\_)
31. What is the main reason you ride a bicycle? **(DO NOT READ LIST)**
- a. Convenient
  - b. Don't have a car

- c. Don't have a driver's license
- d. Protects the environment
- e. Saves money
- f. Saves wear and tear on my car
- g. Other (SPECIFY: \_\_\_\_\_)

**ASK ALL:**

32. How satisfied are you with the quality of the walking and biking paths in Tempe? Please rate your satisfaction level on a 1 to 5 scale where 5 means "very satisfied" and "1" means "very dissatisfied"

32a. Please explain your rating.

33-38. Now I am going to read you a list of possible bicycle and pedestrian improvements. Please indicate how high of a priority each improvement should be for the City of Tempe. Please use a 1 to 5 scale where "1" means "a very low priority" and a "5" means it should be a "very high priority" for the City of Tempe. The first one is....

| <b>RANDOM ORDER 32-35</b>                                       | <b>Very high priority</b> |   |   |   | <b>Very low priority</b> | <b>DK / Refused</b> |
|---|---------------------------|---|---|---|--------------------------|---------------------|
| 33. Miles of bike and pedestrian paths                          | 5                         | 4 | 3 | 2 | 1                        | 0                   |
| 34. Security/comfort on paths                                   | 5                         | 4 | 3 | 2 | 1                        | 0                   |
| 35. Amenities along the paths like water fountains and lighting | 5                         | 4 | 3 | 2 | 1                        | 0                   |
| 36. Shade along multi-use paths                                 | 5                         | 4 | 3 | 2 | 1                        | 0                   |
| 37. Shade along on street bike lanes                            | 5                         | 4 | 3 | 2 | 1                        | 0                   |
| 38. Protected bike lanes  | 5                         | 4 | 3 | 2 | 1                        | 0                   |

### Demographics

I have just a couple more questions about you so that we can classify your responses with other people who answered the survey. All of this information will be kept confidential.

D1. Gender: 1 Male                      2 Female

D2. What is your age: \_\_\_\_\_

D3. What is the highest grade of school or year of college that you have completed:

- a. Some high school
- b. High school graduate
- c. Some college
- d. College graduate
- e. Post graduate
- f. No answer

D4. Are you married or single?

- a. Married
- b. Single
- c. No answer

D5 . Have you ever heard of the Tempe Youth Free Transit Pass Program?



- a. Yes
  - b. No
  - c. Don't know
- D5a. IF YES IN D5: How did you first hear about the Tempe Youth Free Transit Pass Program? DO NOT READ LIST. SINGLE RESPONSE
- a. Through the school
  - b. Received a letter/postcard from the city
  - c. Advertisement
  - d. Web site
  - e. Twitter/Facebook
  - f. Other: (SPECIFY \_\_\_\_\_)
  - g. Don't know/Don't recall
- D6. Are you employed full-time, employed part-time, retired, a stay at home caregiver, a student or unemployed?
- a. Full-time
  - b. Part-time
  - c. Retired
  - d. Stay at Home Spouse
  - e. Student
  - f. Unemployed
  - g. Refused/NA
- D7. Was your annual household income before taxes last year:
- a. Less than \$20,000
  - b. \$20,000 to \$40,000
  - c. \$40,000 to \$60,000
  - d. \$60,000 to \$80,000
  - e. \$80,000 to \$100,000
  - f. More than \$100,000
  - g. No answer

Thanks for your time. That concludes our interview.