# City of Tempe Transit Survey Report

# **Prepared For:**



October 2018



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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, and perception and usage of other transportation programs. 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 2008, 2010, 2012 and September/October 2014 and September of 2016. The most recent data collection was completed with 400 Tempe residents in September and October 2018. The margin of error for this sample size is  $\pm 4.9\%$  at a 95% level of confidence.

#### **Rider Characteristics and Opinions**

- Two-thirds (66%) of Tempe residents reported riding Tempe's transit service, including light rail, Orbit, Flash, and local bus/express. Although up slightly, it is statistically consistent with usage in 2016, 2014 and 2012.
- Although the proportion of Tempe residents riding transit increased slightly and the number reporting riding transit under special circumstances increased significantly, frequent or regular usage of Tempe's transit services continued to decline.
  - ➤ In 2018, only 2% of Tempe residents reported riding transit daily which is down significantly from 5% two years ago. Currently, 5% of residents indicate riding transit at least weekly, significantly fewer than 10% in 2016 and 16% in 2014. The proportion riding at least monthly dipped to 11% from 16% in 2016 and 25% in 2014.
- Although a majority of transit riders reported riding light rail in the past year (73%), it is significantly fewer than those who reported doing so in 2016 (84%). Past year usage of Orbit or Flash neighborhood shuttles (32%) and local or express buses (25%) are statistically consistent with 2016.
- More than one-third (35%) of transit riders have been using Tempe's transit system for more than ten years.
- Convenience and getting to and from recreation continue to be the most popular reasons for riding public transit (mentioned by 26% and 18%, respectively). Of note, mentions of the desire "to avoid parking" more than doubled this year (11% vs. 5% in 2016).
- Phoenix/Downtown Phoenix continues to increase in popularity as a public transit destination as does Downtown Tempe. Phoenix/Downtown Phoenix was by far the most popular destination for transit trips (48%), distantly followed by recreational activities (24%) and Downtown Tempe (21%).

Riders rated their level of satisfaction with 12 different aspects of riding the bus. Riders
were most satisfied with the comfort on the bus and driver courtesy and
professionalism (93% and 92% very + somewhat satisfied). Riders were least satisfied
with security and amenities at bus stops (66% and 67%, respectively).

#### Overall Perceptions and Satisfaction with Tempe's Transit System

- The most common "top of mind" impression was positive with 14% of residents describing it with words such as "good," "excellent" and "cool." Nearly one in ten immediately thought: they "do not use it" (9%), more and improved public transit is needed (8%), they like the free Orbit neighborhood shuttles (7%), the system is "fine," "adequate" or "average" (7%) or just thought of the light rail system in general (7%).
- Three in five (60%) residents with an opinion report being highly satisfied with the Tempe transit system, which is significantly lower than in 2016, 2014 and 2012.
  - Residents satisfied with the transit system attributed their satisfaction to good service (32%), and frequent and reliable service (23%).
  - Residents who provided lower satisfaction ratings most often mentioned the need for better/more routes (18%) and more frequent buses with extended hours (10%) as reasons for their ratings.

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

- Preference for a personal vehicle was by far the most common reason given by non-riders as an explanation for not using public transit (49%).
- The two most effective benefits for persuading non-riders to use public transit appear to be *helps reduce air pollution* and *helps improve the environment* (both at 62% somewhat or very effective).
- The two least effective benefits for persuading non-transit users to use public transit were *reduces your stress* and *saves time* with only three in ten rating them as effective.

#### Tempe in Motion (TIM)

- Total awareness of Tempe in Motion (TIM) increased significantly to hit a ten-year high of 57% (up from 44% in 2016).
- Residents aware of TIM recalled hearing about it through signs on buses (20%), street banners (12%), bill inserts (10%) and online (8%).

More than two in five (43%) of those who heard about TIM via TV, online ads, direct
mail, street banners, Pandora/Spotify, and ASU indicated the advertising had a positive
impact on their impression of transportation options in Tempe. One in five (21%)
indicated the advertising message persuaded them to try public transit in Tempe.

#### **Tempe Bicycling and Walking**

- Nearly two-thirds of residents (64%) reported having access to a bicycle.
- Among those with access to a bike, two thirds (66%) reported riding their bike at least once a month, which is similar to the 71% measured in 2016. Among the one-third who never or only occasionally ride a bike, almost half (47%) blamed hot weather for not riding it more often.
- More than one-third (35%) of those who ride a bike at least once a month report they ride for *exercise*, while 17% ride a bike *to the store* and 16% ride their bike to *parks*.
- Residents who bicycle at least monthly say they do so primarily to get *exercise* (57%) and/or to have fun (22%).
- Consistent with the prior two study periods, in 2018, two thirds (66%) of residents reported being satisfied with the quality of walking and biking paths in Tempe.
- After being read a list of three possible sidewalk improvements in Tempe, survey participants were asked to rate how high of a priority each improvement should be for the City.
  - Security and comfort on sidewalks, such as addressing hazards, obstructions and width received the highest percentage of priority ratings (70%).
- After being read a list of six possible improvements to bikeways in Tempe, survey
  participants were asked to rate how high of a priority each improvement should be for
  the City.
  - Security and comfort on multi-use paths, ease of travel around barriers, miles of multi-use paths and dedicated bike lanes received the highest percentage of priority ratings (67%, 65% and 62% respectively).
- Three in five residents (59%) have heard of Tempe's bike share system and 4% of all residents have ridden a GRID bike.

#### **Tempe Youth Free Transit Pass Program**

- In 2018, more than one-half (56%) of residents who have children ages 6 to 18 have heard of the Tempe Youth Free Transit Pass.
- Among parents aware of the program, one half (52%) indicated they heard about it through school followed distantly by word-of-mouth and/or the library (both mentioned by 12%).

#### **Conclusions**

- 1. While overall transit usage among Tempe residents increased slightly, there was a shift in the "mix" of users. There were more infrequent or casual users, but fewer regular users. Additionally, those who used public transit in the past are continuing to use it, however, there was a continued decrease in the percentage of residents who are newer riders. Finally, fewer transit users reported using light rail in 2018 than in previous years, while the percent using Orbit/Flash and City bus remained relatively constant.
- 2. Measures pertaining to *comfort on the bus, driver courtesy and professionalism, and ease of use* received a higher proportion of high satisfaction ratings than in 2016. However, the percentage of users giving high satisfaction ratings for all other evaluated attributes declined from previous years. Improvements suggested by users who are not satisfied with the system focus on a need for an improved transit environment (e.g., shade, lighting, safety, cleanliness, benches, bus driver courtesy) or increased services (e.g., more frequency and more routes).
- 3. Overall satisfaction with the transit system in Tempe continued to decline this year and perhaps is a reflection of a shift toward more casual usage of transit as well as a decrease in satisfaction of many of the transit elements evaluated this year. Concerns among those giving lower ratings fall into the two same categories as those cited by the smaller population of transit users: a level of discomfort with the transit environment (e.g., population using transit, cleanliness, security) and a need for more/better service. It is possible this general decline in satisfaction is leading some users to alter their usage to a more casual frequency.
- 4. Awareness of Tempe in Motion (TIM) increased significantly in 2018, with increased awareness of the messaging through multiple sources. The impact of the campaign continues to be positive, although there is a shift toward a neutral response.
- A majority of residents indicate they are highly satisfied with the quality of the walking and biking paths in Tempe and would like to see more biking and walking paths.
   However, security and comfort on both the sidewalks and bike paths rank highest

among residents as the top priority for improvement. This is consistent with the general sense of concern regarding safety and comfort that is beginning to surface with increased frequency among residents.

#### 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, and perception and usage of other transportation programs. 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 - 2008, 2010, 2012, 2014, and 2016. The most recent data collection was completed with 400 Tempe residents during September and October 2018. Due to size limitations, tables in the report do not show data from the studies conducted from 1998 to 2006.

Telephone calls with Tempe residents were made from WestGroup's interviewing center in Phoenix, Arizona from September 6 and October 2, 2018. Households were randomly selected 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 random-digit dial (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 400 Tempe residents. The margin of error for this sample size is  $\pm 4.9\%$  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 400, 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. This indicates a statistically significant difference and is referred to throughout the report as being "significantly" higher or lower than a comparative figure.

For example, in the table below, the 41% in the second row of column C is significantly higher than the figure in column E (24%) at the 95% confidence level. Similarly, residents ages 18 to 34 (36%, column C) were significantly more likely than those ages 35 to 54 (15%, column D) to report riding the local or express bus. Another example in the table below is that households with annual incomes of \$40,000 or more were significantly more likely than those earning less to report riding light rail (76% in column G vs. 62% in column F). Conversely, residents with lower incomes were significantly more likely to ride local or express buses (43% in column F vs. 19% in column G).

		Gender		Age			Income	
	2010	Male	Female	18-34	35-54	55+	<\$40K	\$40K+
	2018 (n=253)	(n=126) (A)	(n=127) (B)	(n=91) (C)	(n=89) (D)	(n=71) (E)	(n=61) (F)	(n=174) (G)
Light Rail	73%	70%	75%	70%	76%	73%	62%	76% <sup>F</sup>
Orbit or Flash neighborhood shuttles	32%	35%	30%	41% <sup>E</sup>	31%	24%	38%	28%
Local or express bus	25%	23%	28%	36% <sup>D</sup>	15%	25%	43% <sup>G</sup>	19%
Don't Know/Refused	12%	14%	10%	14%	11%	11%	13%	13%

For trend tables and charts displaying yearly data (rather than sub-groups of the current year), significant differences between 2018 and 2016 figures are shown using an asterisk. For example, in the table below, the 2% and 42% in the 2018 column is significantly different than the 5% and 37% in the 2016 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.

	2018 (n=253)	2016 (n=246)
Daily	2%*	5%
Weekly	4%	5%
Monthly	6%	6%
Every few months	10%	9%
Special circumstances	42%*	37%
Don't Use Transit	34%	38%

# C. Demographics

The total data were weighted in 2018, 2016, 2014 and 2012 to match the age categories from 2010. An overview of respondent demographics follows in Table 1A.

**Table 1A: Demographics** 

	2018	2016	2014	2012	2010	2008
	(n=400)	(n=401)	(n=409)	(n=400)	(n=427)	(n=424)
Gender						
Male	50%	52%	51%	50%	49%	50%
Female	50%	48%	49%	50%	51%	50%
Years Lived in Tempe						
<1 year	<1%	1%	2%	2%	2%	3%
1 – 2 years	3%	4%	5%	6%	5%	7%
3 – 5 years	10%	9%	13%	6%	10%	12%
6 – 10 years	10%	15%	14%	13%	15%	17%
11 – 20 years	24%	24%	22%	25%	19%	22%
20+ years	52%	48%	44%	49%	49%	39%
Age						
18 – 34	32%	32%	32%	32%	33%	31%
35 – 54	34%	34%	34%	33%	34%	35%
55+	33%	33%	33%	32%	33%	34%
Average Age	47.8	47.3	47.1	49.4	47.7	47.6
Education						
Some high school	1%	2%	2%	1%	2%	1%
High school graduate	10%	10%	11%	10%	9%	9%
Some college	25%	26%	33%	24%	30%	31%
College graduate	38%	33%	32%	32%	29%	31%
Post graduate	25%	27%	19%	32%	29%	26%
No answer/ Refused	1%	2%	2%	1%	1%	2%
Marital Status						
Married	49%	52%	46%	54%	61%	53%
Single	48%	45%	50%	43%	36%	44%
Refused	3%	3%	3%	3%	3%	3%

<sup>\*</sup>No significant differences compared to 2016

**Table 1B: Demographics** 

	2018	2016	2014	2012	2010	2008
	(n=400)	(n=401)	(n=409)	(n=400)	(n=427)	(n=424)
Income						
<\$20,000	7%	7%	13%	9%	10%	12%
\$20 - \$40,000	15%	18%	18%	14%	14%	19%
\$40 - \$60,000	16%	19%	18%	11%	16%	15%
\$60 - \$80,000	18%	13%	8%	14%	14%	12%
\$80 - \$100,000	11%	7%	8%	10%	11%	10%
\$100,000+	24%	20%	20%	20%	17%	19%
\$100,000 \ \$100K to \$150,000	12%	n/a	n/a	n/a	n/a	n/a
\$150,000+	12%	n/a	n/a	n/a	n/a	n/a
No answer/refused	9%	16%	14%	21%	16%	13%
Average Income	\$79,072	\$67,325	\$63,700	\$70,304	\$67,047	\$64,500
Average income	\$79,072	\$07,323	\$65,700	\$70,304	\$67,047	\$64,500
Marital Status						
Married	49%	52%	46%	54%	61%	53%
Single	48%	45%	50%	43%	36%	44%
Refused	3%	3%	3%	3%	3%	3%
Occupation						
Full-time	60%	57%	46%	46%	47%	51%
Part-time	11%	6%	11%	8%	12%	12%
Retired	16%	20%	21%	28%	23%	20%
Stay at home Spouse	6%	3%	4%	6%	7%	5%
Student	3%	6%	8%	4%	7%	8%
Unemployed/disabled	3%	5%	7%	6%	6%	4%
Refused	2%	3%	3%	2%	1%	2%
Zip Code						
85281	18%	21%	23%	19%	19%	19%
85282	32%	33%	32%	44%	38%	38%
85283	29%	24%	26%	22%	29%	29%
85284	29%	24%	19%	15%	14%	14%
03204	ZZ70	ZZ70	1370	1370	1470	1470
		I .	I.	1	1	ı

<sup>\*</sup>No significant differences compared to 2016 n/a = not applicable for these years; prior to 2018 the category was only "more than \$100,000"

### II. Rider Characteristics and Opinions

#### A. Current Use of Public Transit

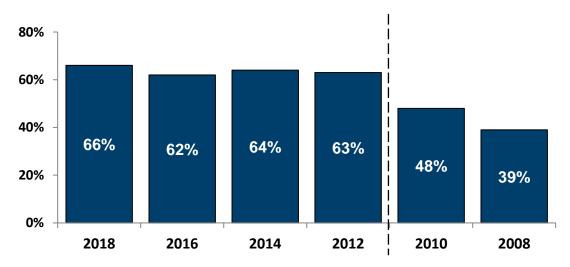
#### 1. Tempe Transit Service Usage – Among All Residents

Two-thirds (66%) of Tempe residents reported riding Tempe's transit service, including light rail, Orbit, Flash, and local bus/express. Although up slightly, it is statistically consistent with usage in 2016, 2014 and 2012.

While men and women were equally likely to ride public transit (63% and 64%), the following groups were significantly more likely to ride transit than their comparative groups:

- Residents under the age of 55 (71% aged 18-34, 66% aged 35-54 % vs. 54% of those 55+)
- College graduates (68% vs. 55% with some college or less education)
- Residents of the 85281 and 85282 zip codes (73% and 68% compared to 59% in 85283 and 55% in 85284)





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

2018 n=400, 2016 n=401, 2014 n=409, 2012 n=400, 2010 n=427, 2008 n=424

Q5: 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 All Residents

The proportion of Tempe residents riding transit increased slightly; this is likely due in part to the fact that the percent reporting riding transit only under special circumstances increased significantly. However, frequent or regular usage of Tempe's transit services continued to decline.

The positive change is the increase in the proportion of residents who indicate they are taking advantage of public transit in Tempe under unique circumstances. 42% ride transit under special circumstances which is up significantly from 37% in 2016 and 31% in 2014.

However in 2018, only 2% of Tempe residents reported riding transit daily which is down significantly from 5% two years ago. Currently, 5% of residents indicate riding transit at least weekly, significantly fewer than 10% in 2016 and 16% in 2014. The proportion riding at least monthly dipped to 11% from 16% in 2016 and 25% in 2014.

Bus, Orbit/Flash and Express riders were significantly more likely than rail only riders to report riding at least weekly (17% vs. 2%), and as expected light rail only riders were significantly more likely to say they ride transit under special or unique circumstances (77% vs. 49% of other riders).

Riders significantly more likely to report riding weekly or daily include those aged 18 to 54 (7% vs. 1% age 55+). Of note, there were no demographic groups more likely to report using transit for special/unique circumstances. It was consistent across all residents.

Table 2a: Frequency of Transit Usage

	2018	2016	2014
	(n=400)	(n=401)	(n=409)
Net Ride Daily or Weekly	5%*	10%	16%
Net Ride at least Monthly	11%	16%	25%
Daily Weekly Monthly Every few months Special/unique circumstances Don't Use Transit	2%*	5%	6%
	3%	5%	10%
	6%	6%	9%
	10%	9%	8%
	42%*	37%	31%
	34%	38%	35%

<sup>\*</sup>Indicates significant difference compared to 2016 at a 95% confidence level. Q5: In general would you say you use Tempe's transit system (including light rail, Orbit, Flash and local bus/express)...

Table 2b: Frequency of Transit Usage Demographic Breakdown

		Age				
		18-34	35-54	55+		
	2018	(n=128)	(n=136)	(n=132)		
	(n=400)	(A)	(B)	(C)		
Net Ride Daily or Weekly	5%	10% <sup>C</sup>	5%	2%		
Net Ride at least Monthly	11%	15%	11%	7%		
Daily	2%	5%	-	1%		
Weekly	3%	5%	5%	1%		
Monthly	6%	5%	6%	5%		
Every few months	10%	13%	10%	8%		
Special/unique circumstances	42%	43%	45%	39%		
Don't Use Transit	34%	27%	32%	43% <sup>AB</sup>		

A-E Indicates significant differences compared to other sub-group at the 95% level.

#### 3. Type of Transit Used in Tempe in Past Year - Among Transit Riders

Although a majority of transit riders reported riding light rail in the past year (73%), it is significantly fewer than the proportion who reported doing so in 2016 (84%). Past year usage of Orbit/Flash neighborhood shuttles (32%) and local or express buses (25%) declined slightly but are statistically consistent with 2016. Notably, a significantly higher percentage of residents responded that they "didn't know" if they had ridden transit in the past year which may, in part, explain the shifts. Of note and as expected, residents of the 85281 and 85282 zip codes were significantly more likely to report riding Orbit or Flash neighborhood shuttles than those in 85283 and 85284 (42% and 50% vs. 19% and 9%, respectively).

Table 2c: Type of Transit Ridden in Tempe in Past Year Trending Breakdown

	2018	2016	2014
	(n=253)	(n=246)	(n=256)
Light Rail Orbit or Flash neighborhood shuttles Local or express bus	73%*	84%	79%
	32%	37%	36%
	25%	28%	30%
Don't Know/Refused	12%*	7%	7%

<sup>\*</sup>Indicates significant difference compared to 2016 at the 95% confidence level. *Q5a: Which of the following have you used in Tempe in the past year?* 

Younger riders were significantly more likely to report riding buses. Specifically, residents ages 18 to 34 were significantly more likely to ride Orbit or Flash than those 55 and older (41% vs. 24%) and significantly more likely than those 35 to 54 to report riding a local or express bus in the past year (36% vs. 15%).

Table 2d: Type of Transit Ridden in Tempe in Past Year Demographic Breakdown

			Age		Income	
		18-34	35-54	55+	<\$40K	\$40K+
	2018	(n=91)	(n=89)	(n=71)	(n=61)	(n=174)
	(n=253)	(A)	(B)	(C)	(D)	(E)
Light Rail	73%	70%	76%	73%	62%	76% <sup>D</sup>
Orbit or Flash neighborhood shuttles	32%	41% <sup>C</sup>	31%	24%	38%	28%
Local or express bus	25%	36% <sup>B</sup>	15%	25%	43% <sup>E</sup>	19%
Don't Know/Refused	12%	14%	11%	11%	13%	13%

A-E Indicates significant differences compared to other sub-group at the 95% level.

#### B. Length of Use of Transit System

More than one-third (35%) of transit riders have been using Tempe's transit system for more than ten years. This represents a significant increase over the 25% measured in 2016 and continues the natural progression expected as the system ages. Of note, only 4% indicated being new transit riders who have been using the system for less than a year which is similar to the prior two measurements but continues the steady decline.

Table 3a: Length of Use of Transit System

4%	5%	60/			ļ
	J/0	6%	9%	14%	31%
6%	9%	10%	13%	27%	13%
13%	15%	24%	29%	13%	19%
19%	19%	23%	16%	10%	13%
14%*	22%	13%	13%	25%	20%
35%*	25%	18%	12%	NA	NA
11%*	4%	7%	8%	11%	4%
	13% 19% 14%* 35%*	13% 15% 19% 19% 14%* 22% 35%* 25%	13%       15%       24%         19%       19%       23%         14%*       22%       13%         35%*       25%       18%	13%       15%       24%       29%         19%       19%       23%       16%         14%*       22%       13%       13%         35%*       25%       18%       12%	13%     15%     24%     29%     13%       19%     19%     23%     16%     10%       14%*     22%     13%     13%     25%       35%*     25%     18%     12%     NA

Q8: How long have you been using the transit system in Tempe?

<sup>\*</sup>Indicates significant difference compared to 2016 at the 95% confidence level.

#### C. Main Reasons for Using Public Transit

Convenience and getting to and from recreation continue to be the most popular reasons for riding public transit (mentioned by 26% and 18%, respectively).

Interestingly, the desire "to avoid parking" was mentioned by 11% -- more than twice as many that mentioned it in 2016 (5%). Of note, this is most frequently mentioned by those ages 35-54 (19% vs. 5% of younger transit users and 10% of those 55+.)

Transit riders were also significantly more likely to report riding transit "to go downtown" (mentioned by 9% in 2018 vs. 3% in 2016 and 2014.) Light rail only riders were significantly more likely than other transit riders to report using transit to "go downtown" (16% vs. 2%). This reason was also elevated among 35 to 54-year olds (14% vs. 4% of those 18-34 and 8% age 55 or older).

**Table 3b: Main Reasons for Using Public Transit** 

Responses	2018 (n=253)	2016 (n=246)	2014 (n=256)	2012 (n=252)	2010 (n=304)	2008 (n=166)
Convenient	26%	24%	27%	16%	24%	15%
Get to/from recreation	18%	22%	18%	14%	7%	4%
To avoid parking	11%*	5%	3%	10%	7%	3%
To go downtown	9%*	3%	3%	6%	5%	-
Vehicle not available/car problems	6%	3%	1%	-	-	-
Do not have a car	5%	8%	12%	11%	9%	16%
Dislike driving/Take a break from driving	5%	4%	1%	-	-	-
Get to/from school	4%	5%	4%	2%	2%	7%
To avoid drinking and driving	4%	3%	2%	-	-	-
To get to/from work	4%	3%	2%	-	-	-
Need to get to Phoenix	2%	4%	3%	-	-	-
Saves money	2%	3%	6%	7%	4%	17%
A way to get around	2%	3%	3%	2%	-	-
Protects the environment	2%	1%	2%	1%	4%	2%

 $<sup>\</sup>overline{Q9}$ : What is the main reason you ride public transit?

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

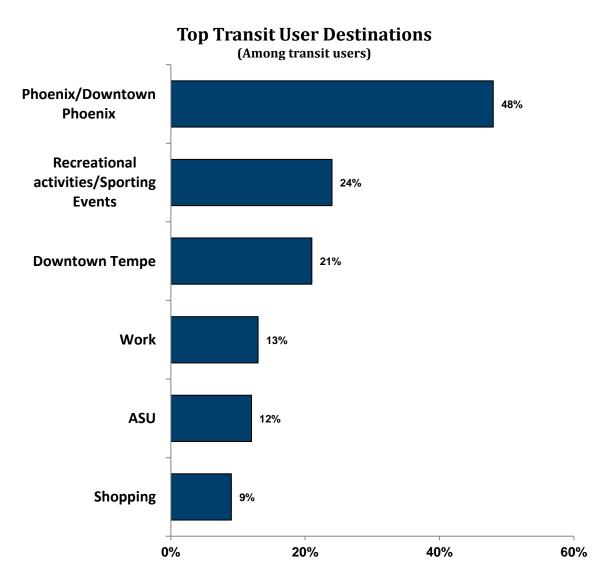
Note: Response categories with less than 2% mentions in 2018 not shown in table.

<sup>\*</sup>Indicates significant difference compared to 2016 at the 95% confidence level.

#### D. Public Transit Destinations

Phoenix/Downtown Phoenix was by far the most popular destination for transit trips; 48% of all transit riders surveyed named it as a destination. Light rail only riders were significantly more likely to report Phoenix/Downtown Phoenix as a destination than were those who ride local buses and Orbit/Flash neighborhood shuttle either solely or in addition to riding light rail (66% vs. 36%).

Recreational activities and Downtown Tempe round out the top three destinations for transit riders (24% and 21%, respectively). Work, ASU and shopping were also mentioned frequently (13%, 12% and 9% mentions, respectively).



Q10: Where do you go when you use public transit? 2018 n=253

Over the past few years, Phoenix/Downtown Phoenix continues to increase in popularity as a public transit destination as does Downtown Tempe. Nearly one-half of transit users (48%) reported using public transit to go to Phoenix (up from 25% in 2016) and 21% named Downtown Tempe as a destination year (up from 14% two years ago). Of note, the proportion reporting riding transit to a recreational activity decreased significantly this year to 26% down from 35% in 2016. Additionally, in 2016, there were open end categories for just "downtown" and "around Tempe," but those were not recorded as destinations this year. Thus, a partial explanation for some of the shifting may simply be a function of research design and the process of coding the open ends, which was adjusted this year.

Finally, the proportion of transit riders reporting "shopping" as their destination rebounded to 9% after dropping significantly to 4% in 2016 from 15% in 2014.

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

Responses	2018 (n=253)	2016 (n=246)	2014 (n=256)	2012 (n=252)	2010 (n=304)	2008 (n=166)
DT Phoenix/Phoenix	48%*	25%	15%	26%	15%	5%
Recreational activities	26%*	35%	39%	34%	38%	14%
Downtown Tempe	21%*	14%	11%	13%	7%	13%
Work	13%	14%	19%	13%	20%	31%
ASU	12%	14%	15%	16%	16%	29%
Shopping	9%*	4%	15%	12%	11%	24%
Airport	3%	4%	-	-	-	-
Community College	3%	3%	2%	-	-	-
Visit friends/family	3%	2%	4%	5%	2%	5%
Errands	3%	1%	6%	8%	5%	7%
Library	2%	2%	4%	3%	2%	7%
High School/school	2%	4%	1%	-	-	-
Downtown (general)	-	6%	1%	-	-	-
Around Tempe	-	3%	<1%	-	-	-

Q10: Where do you go when you use public transit?

\*Indicates significant difference compared to 2016 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 2% mentions in 2018 not displayed unless necessary for prior

#### 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 *comfort on the bus* and *driver courtesy and professionalism* (93% and 92% very + somewhat satisfied, respectively). Despite relatively high satisfaction with bus stops for cleanliness (85%), riders expressed the lowest level of satisfaction with *security at bus stops* and *amenities at bus stops* (66% and 67%, respectively).

There were no statistically significant shifts between 2016 and 2018 bus satisfaction ratings.

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

	2018 (n=87*)			% Very/somewhat satisfied			
	2	1010 (11–07	J				
Attribute	Very/ somewhat Satisfied	Very Satisfied	Somewhat Satisfied	2016 (n=128)	2014 (n=109)	2012 (n=141)	2010 (n=203)
Comfort on the bus	93%	56%	37%	90%	92%	92%	95%
Driver courtesy and professionalism	92%	63%	29%	89%	90%	93%	93%
Ease of using the bus	87%	56%	31%	81%	84%	93%	91%
Cleanliness of bus stops	85%	43%	42%	91%	87%	85%	NA
Cleanliness of the bus	85%	51%	34%	89%	91%	88%	92%
Route frequency	80%	38%	42%	81%	79%	79%	74%
Safety on the bus	79%	36%	43%	86%	79%	82%	95%
Hours of operation	79%	46%	33%	80%	81%	84%	NA
Reliability/on-time performance of buses	77%	46%	31%	80%	85%	86%	80%
Bus service during major events	70%	41%	29%	76%	72%	70%	NA
Amenities of bus stops	67%	30%	37%	74%	76%	72%	NA
Security at bus stops	66%	33%	33%	72%	65%	65%	NA

Q11: In general how satisfied are you with...

<sup>\*</sup>Due to a programming error, only 87 of the 115 bus/shuttle riders were asked this series of questions.

No significant differences compared to 2016

Among riders who indicated dissatisfaction with one or more attribute, the most common suggestions of what could be done to improve their satisfaction with buses was the addition of shade at bus stops (21%), more or better lighting at bus stops (20%), more frequent buses (17%), safer buses (15%) and improved schedules (10% mentioned easier to read/understand and more accurate schedules).

**Table 5b: Suggested Improvements** 

	2018 (n=45)	2016 (n=69)	2014 (n=57)
Bus stops need shade	21%	13%	17%
More/better lighting at bus stops	20%	8%	9%
More frequent buses	17%	32%	42%
Security on the bus/safer buses	15%	11%	11%
Easier schedules to read/understand/accurate	10%	5%	6%
Need better/more routes	9%	15%	7%
More courteous/professional bus drivers	7%	5%	6%
More/better benches at bus stops	7%	5%	4%
Don't like the type of people that use the bus	4%	8%	2%
Inside of bus/bus stops need to be cleaner	2%	9%	10%
Avoid having bus pass us by at bus stop	2%	5%	4%
Don't know	5%	5%	6%

Q11a: 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 2% mentions in 2018 not shown in table.

No significant differences compared to 2016

# III. Overall Perception and Satisfaction with Tempe's Transit System

#### A. Top of Mind Impression of Transportation System in Tempe

Tempe residents have a variety of initial thoughts when thinking about transportation in Tempe. The most common impression was generally positive with 14% of residents describing it with words such as "good," "excellent" and "cool." Nearly one in ten immediately thought about how they "do not use it" (9%), the need for more and improved public transit (8%), they like the free Orbit neighborhood shuttles (7%), felt the system is "fine," "adequate" or "average" (7%) or just thought of the light rail system in general (7%).

Unsurprisingly, transit riders were significantly more likely than non-riders to think of Tempe's transportation system as *good/cool/excellent* (19% vs. 7%) or *adequate/fine/average* (9% vs 3%). Transit riders were also significantly more likely to immediately think of it being *inconvenient and taking too long* (8% vs. 2%).

**Table 6: Top of Mind Impression of Tempe Transportation System** 

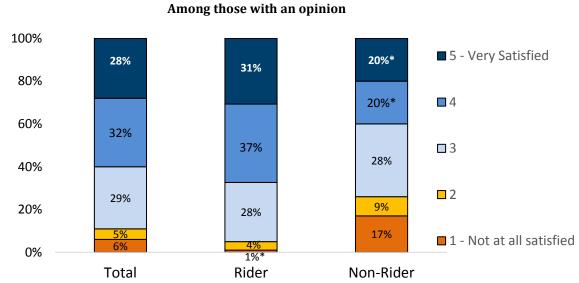
	2018 (n=400)	Transit Rider (n=253) A	Non- Rider (n=136) B
Good/excellent/cool (general positive)	14%	19% <sup>B</sup>	7%
Never used it/don't use it	9%	5%	18% <sup>A</sup>
Need more public transit/improved transit	8%	8%	9%
Like free neighborhood shuttles/Like Orbit/Mercury/Venus/Blue buses	7%	7%	8%
Adequate/fine/average	7%	9% <sup>B</sup>	3%
Light Rail (unspecified)	7%	6%	9%
Inconvenient/takes too long/not frequent enough	6%	8% <sup>B</sup>	2%
The bus system/ bus (unspecified)	6%	5%	7%
General negative/ terrible/don't like it	6%	5%	7%
Need street improvements (more bus pull outs, better timing of lights, better or more bike lanes, more park and rides)	5%	5%	4%
Traffic/congestion	5%	6%	4%
Convenient/easy	4%	5%	2%
Lots of options/ an choose between bus, light rail, shuttles	4%	4%	3%
It's free	3%	2%	4%
It's improving/progressing	3%	3%	2%
Dissatisfied that they closed McClintock/Broadway	2%	2%	2%
Don't like the transients/homeless people on light rail/buses	2%	1%	3%

Q4: What is the first thing that comes to mind when you think about the transportation system in Tempe? (As needed: by transportation system we are talking about the way people can travel around Tempe by walking, riding a bike, or using public transit). \*Responses less than 2% not shown (WG will provide all open ends under separate cover). AB Indicates significant differences compared to other sub-group at the 95% level.

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

Three in five (60%) residents with an opinion report being highly satisfied with the Tempe transit system. This figure is significantly lower than the prior three waves of research. As in the past, current riders were more likely to provide a top-two rating (68% vs. 40% of non-riders).

**Overall Satisfaction with Transit System** 



Total n=362, Rider: n=248, Non-Rider: n=106

**Table 7: Overall Satisfaction with Transit System in Tempe** (Among those with an opinion)

Satisfaction	2018 (n=362)	2016 (n=352)	2014 (n=376)	2012 (n=355)	2010 (n=377)
NET very + somewhat satisfied	60%*	69%	72%	69%	66%
5 – Very satisfied	28%*	36%	37%	39%	29%
4	32%	33%	35%	30%	37%
3	29%*	21%	17%	21%	22%
2	5%	5%	6%	5%	5%
1 – Very dissatisfied	6%	6%	5%	5%	6%
Don't know (excluded from %)	10%	12%	8%	11%	12%

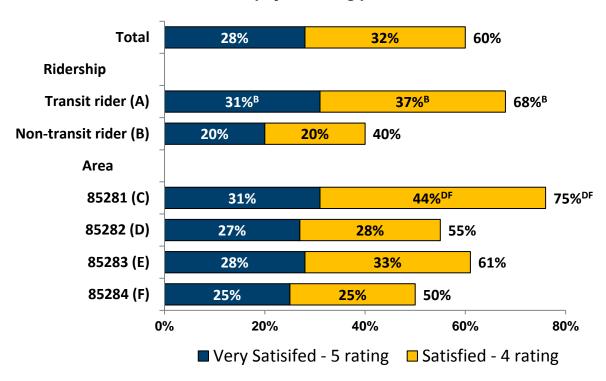
Q12. How satisfied are you with the quality of the transit system in Tempe?

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

<sup>\*</sup>Indicates significant differences compared to 2016

While the difference in satisfaction between transit riders and non-riders is significant and expected, it is important to note that both of these values are significantly lower than those reported in 2016 (transit rider satisfaction 2016 78% vs. 68% 2018; non-rider 2016 50% vs. 405 in 2018). Satisfaction was significantly higher among residents living in the 85281 zip code than for residents in 85282 and 85284 (75% vs. 55% and 50%, respectively).

# Overall Satisfaction with Transit Service (Top Two Ratings)



n=362 (Among those with an opinion)

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 (23%). These were also the top two mentions in 2016 and 2014.

Residents who provided "1," "2," or "3" ratings most often mentioned the need for better/more routes (18%) and more frequent buses with extended hours (10%) as reasons for their ratings. These were the top two mentions in 2016 and 2014. Of note, 12% simply expressed feeling uncomfortable with people who ride transit.

**Table 8: Reason for Satisfaction Level** 

	Satisfaction Level			
	Total	4,5	1,2,3	
Responses	(n=362)	(n=215)	(n=147)	
Positive				
Satisfied, good service	23%	32%	8%	
Frequent, available, reliable	15%	23%	4%	
Good routes, convenient routes	7%	10%	2%	
Buses/light rail are clean	7%	10%	2%	
Convenient (general)	6%	9%	2%	
Like the light rail/light rail is good	5%	6%	3%	
Saves money, cheap, free	2%	3%	-	
It's safe/I feel safe	2%	3%	-	
Neutral				
Always room for improvement	11%	11%	10%	
Don't use it, never used it	9%	4%	16%	
It's average/okay	3%	1%	6%	
Negative/Suggestions				
Need better/more routes, connections, doesn't go where I need to	9%	3%	18%	
Uncomfortable with people who ride transit	8%	5%	12%	
More frequent buses, more hours	8%	6%	10%	
Bus driver does not stop at bus stops	5%	4%	8%	
Need more security	3%	1%	6%	
It was dirty/needs to be cleaned up a little bit	3%	2%	5%	
Extend the light rail/more routes	2%	1%	3%	
It costs too much/too expensive	2%	<1%	4%	
Don't know	6%	7%	5%	

Q12a: Please explain your rating.

Note: Response categories with less than 2% total mentions in 2018 not shown in table.

# IV. Potential Use of Tempe's Transit System

#### A. Reasons for Not Riding Transit

Preference for a personal vehicle was by far the most common reason given by non-riders as an explanation for not using public transit (49% mentioned). An additional 4% reported needing a car for business. Other popular reasons were that they simply do not need to use transit (15%) and/or find it to be inconvenient (14%) and taking too long (13%).

Compared to 2016, non-riders were significantly more likely in 2018 to cite a lack of necessity for transit, inconvenience, and a lack of safety on transit as reasons for not using public transit. Significantly fewer non-riders blamed their lack of use on bus stops being too far away (3% vs. 11% in 2016).

**Table 9: Top Reasons for Not Using Public Transit** 

Reasons	2018 (n=136)	2016 (n=152)	2014 (n=143)	2012 (n=148)	2010 (n=123)
Prefer car	49%	59%	58%	46%	45%
Don't need to, don't have the need to use	15%*	4%	9%	6%	15%
Inconvenient (general)	14%*	6%	4%	5%	8%
Takes too long	13%	8%	6%	10%	11%
Doesn't go where they need to go	9%	7%	7%	12%	10%
Transit is not secure/safety	9%*	3%	1%		
Health/disability	6%	3%	3%	5%	7%
Don't have to go far distances	6%	3%	3%	5%	5%
Need car for business	4%	7%	1%		
Would rather take an Uber/Lyft	4%				
Not frequent enough	4%	2%	2%	3%	3%
Weather concerns/ too hot/cold/ raining	4%	1%	<1%	1%	1%
Bus stop far away	3%*	11%	11%	12%	10%
Inconvenient bus schedule times	3%	1%	1%	2%	
Don't like the type of people on transit	2%	1%			
Don't have anywhere to go	2%		1%	2%	5%
Don't know	3%	2%	2%	2%	2%

Q6: 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?

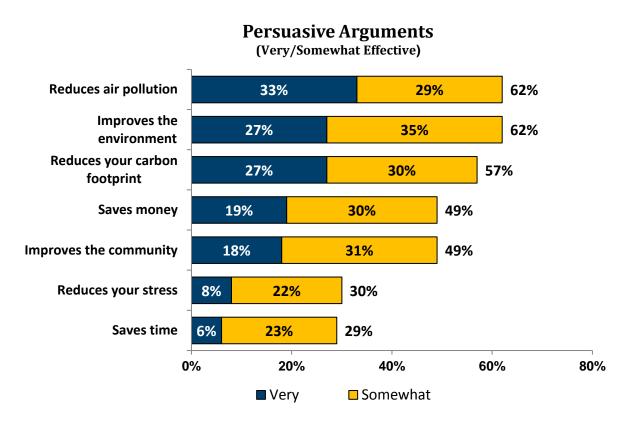
Note: Reasons with less than 2% mentions in 2018 not shown in table.

<sup>\*</sup>Indicates significant difference compared to 2016 at the 95% confidence level.

#### B. Effectiveness of Persuasive Arguments

Residents who do not use public transit in Tempe were asked to rate the effectiveness of seven arguments of using public transit for persuading them to use the bus or light rail instead of their current mode. Ratings were completed on a four-point nominal scale ("very effective," "somewhat effective," "not very effective," and "not at all effective").

- The two most effective arguments for persuading non-riders to use public transit
  appear to be helps reduce air pollution and helps improve the environment. These were
  perceived as either "somewhat effective" or "very effective" by 62% of residents.
- The two least effective arguments for persuading non-transit users to use public transit
  were reduces your stress and saves time with approximately three in ten rating them as
  "very" or "somewhat" effective (30% and 29%, respectively).



Q7: 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. 2018 n=136 (Do not use transit in Tempe)

Younger non-riders were generally more likely than older ones to rate all of the arguments as "effective" in persuading them to ride public transit. The exceptions were for reducing stress and saving time.

Men were significantly more likely than women to rate the arguments of *improves the environment* and *saves money* as "not effective."

Table 10: Effectiveness of Arguments to Persuade Transit Usage (Among those who do not use transit)

		Gen	ıder		Age	
	Total* 2018 (n=136)	Male (n=68) (A)	Female (n=68) (B)	18-34 (n=34) (C)	35-54 (n=43) (D)	55+ (n=57) (E)
Reduces air pollution						
Effective*	62%	56%	68%	76% <sup>E</sup>	65%	51%
Not effective**	34%	41%	27%	19%	33%	44% <sup>C</sup>
Improves the environment						
Effective*	62%	54%	70%	76%	56%	60%
Not effective**	32%	41% <sup>B</sup>	22%	14%	41% <sup>C</sup>	35% <sup>C</sup>
Reduces carbon footprint						
Effective*	57%	53%	60%	76% <sup>DE</sup>	52%	49%
Not effective**	35%	42%	28%	14%	44% <sup>C</sup>	40% <sup>C</sup>
Saves money						
Effective*	49%	44%	55%	62%	52%	40%
Not effective**	42%	53% <sup>B</sup>	31%	24%	44%	51% <sup>C</sup>
Improves the community						
Effective*	49%	46%	52%	62%	43%	47%
Not effective**	41%	45%	38%	24%	52% <sup>C</sup>	44%
Reduces stress						
Effective*	30%	31%	29%	29%	41% <sup>E</sup>	23%
Not effective**	62%	63%	61%	57%	52%	72% <sup>D</sup>
Saves time						
Effective*	29%	31%	26%	24%	35%	26%
Not effective**	64%	65%	63%	57%	65%	67%

Q7: 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? (Don't know and no answer percentages not shown.) Note: In 2018, all of the benefits were re-worded thus there is no tracking data for this question.

<sup>\*</sup> Very + Somewhat effective

<sup>\*\*</sup> Not very + Not at all effective

# V. Tempe in Motion (TIM)

#### A. Awareness of Tempe in Motion

Total awareness of Tempe in Motion (TIM) increased significantly to hit a ten-year high of 57% (up from 44% in 2016). Although unaided awareness was down significantly with only 12% able to name Tempe's transit program in an unaided manner (vs. 19% in 2016), 45% reported recognizing the name when they were asked in an aided manner (up significantly from 25%).

Total awareness was significantly higher among:

- Residents aged 35 to 54 (65% vs. 49% of older residents, and compared to 56% of those under 35)
- Transit riders (65% vs. 42% non-riders)
- Long time Tempe residents (62% who have lived in Tempe for more than 10 years vs. 41% of newer residents)
- Residents of the 85282 zip code (66% vs. 47% in 85284 and compared to 56% living in the other two zip codes)

Table 11: Awareness of TIM

	2018	2016	2014	2012	2010	2008
	(n=400)	(n=401)	(n=409)	(n=400)	(n=427)	(n=424)
Total Awareness (Unaided + Aided)	57%*	44%	50%	53%	54%	48%
Unaided Awareness	12%*	19%	18%	21%	24%	27%
Aided Awareness	45%*	25%	32%	32%	30%	21%

Q13/14: What is the name of Tempe's transit/transportation program? Have you ever heard of TIM/Tempe in Motion?

#### B. Source of Awareness

Residents aware of TIM recalled hearing about it through signs on buses (20%) street banners, (12%), bill inserts (10%) and online (8%). Mentions of signs on buses, online ads, and flyers or brochures were up significantly over 2016. However, significantly fewer people mentioned seeing a street banner (12% down from 20%).

**Table 12: Top Sources of TIM Awareness** 

(Among those aware of TIM)

Responses	2018 (n=227)	2016 (n=178)	2014 (n=204)	2012 (n=211)	2010 (n=230)	2008 (n=202)
Signs on the buses	20%*	11%	15%	13%	18%	20%
Street banner	12%*	20%	24%	29%	17%	20%
Bill inserts	10%	7%	3%	9%	2%	2%
Internet/online ads	8%*	3%	3%	3%	4%	3%
Sign (general)	7%	6%	1%			
Flyers/brochures	6%*	2%	3%	2%	6%	4%
TV	5%	4%	3%	6%	9%	10%
Word of mouth	4%	6%	4%	6%	3%	4%
Newspaper/Print Ads	4%	6%	5%	6%	6%	7%
ASU/School	4%	4%	5%		3%	2%
The City	4%		1%	1%		
Direct mail	3%	4%	3%	5%	5%	2%
Radio	3%	1%		<1%	<1%	1%
Billboard	3%	2%	1%			
Library	2%	4%				
Pandora/ Spotify	2%	3%	2%			
I live here/lived here a long time	2%	2%	2%			
On the light rail	2%	2%				
Work	2%		2%	1%	1%	3%
Don't know	14%*	7%	13%	16%	12%	14%

Q15: How did you hear about it?

Note: Sources with less than 2% mentions in 2018 not shown in table.

<sup>\*</sup>Indicates significant difference compared to 2016 at the 95% confidence level.

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

More than two in five (43%) of those who heard about TIM via TV, online ads, direct mail, street banners, Pandora/Spotify, and ASU indicated the advertising had a positive impact on their impression of transportation options in Tempe. More than one-half, 55%, said the advertising had *no effect*. Only 1% 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 five (21%) indicated the advertising message persuaded them to try public transit in Tempe. Among these 12 people, four reported that online ads had the most influence on their decision to try transit, three said street banners influenced them most and two credited signs on buses as having the most influence.

**Table 13: Advertising Effect on Perception** (Among those aware of TIM advertising through specified media)

	2018 (n=63)	2016 (n=71)	2014 (n=88)	2012 (n=94)	2010 (n=79)	2008 (n=120)
Make you think more positively about transportation options in Tempe	43%	54%	52%	42%	58%	57%
Have no effect on your perceptions	55%	39%	41%	52%	38%	42%
Make you think negatively about transportation options in Tempe	1%	2%	2%	2%	1%	1%
Don't know	2%	5%	5%	4%	3%	

Q16: How did the messages affect your perception of the transportation system in Tempe?

**Table 14: Advertising Effect on Transit Usage** 

(Among those who said impact of message was positive/neutral)

	2018	2016	2014	2012
	(n=61)	(n=71)	(n=83)	(n=88)
Yes	21%	25%	20%	28%
No	78%	75%	79%	72%

Q17: Did the advertising messages persuade you to try public transit in Tempe?

<sup>\*</sup>No significant differences compared to 2016

# **Table 14a: Advertising Source with Most Influenced to Use Transit**

(Among those who said message persuaded them to try transit)

Advertising Source	2018 (n=12)*
Online ads/web	4
Street banners	3
Signs on the buses	2
Flyers/ brochures	1
TV	1
Don't know/ Not aware of program	1
Other	1

Q18: What was the advertising source that most influenced your decision to try public transit in Tempe?

<sup>\*</sup>Due to the small sample size, responses are listed as numbers instead of percentages

# VI. Tempe Bicycling and Walking

#### A. Bicycle Usage

**Nearly two-thirds of residents (64%) reported having access to a bicycle.** This is statistically similar to the past six years, but remains somewhat elevated over 2008 and 2010.

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

- Male residents (70% vs. 58% for females)
- Transit riders (69% vs. 53% non-transit rider)
- Residents aged 35 to 54 (78% vs. 63% of those under 35 and compared to 51% of older residents)
- Those with annual household incomes of \$40,000 or more (72% vs. 45% with lower incomes)
- Married residents (74% vs. 55% of single residents)

Among those with access to a bike, two thirds (66%) reported riding their bike at least once a month, which is similar to the 71% measured in 2016.

Table 15: Access to and Frequency of Bike Use

	2018 (n=400)	2016 (n=401)	2014 (n=409)	2012 (n=400)	2010 (n=427)	2008 (n=424)
Have access to bike	64%	62%	61%	62%	58%	56%
Frequency						
Never/only occasionally	33%	28%	30%	32%	35%	29%
Once or twice	22%	23%	18%	18%	17%	19%
Three to five times	19%	20%	17%	11%	13%	19%
Six to ten times	10%	8%	8%	12%	9%	10%
>10 times	15%	20%	27%	24%	24%	23%
Don't know/not sure	2%	1%	1%	2%	2%	

Q19: Do you have access to a bicycle that you can ride when you want to?

Q20: How many times in a month do you ride your bike?

<sup>\*</sup>No significant differences compared to 2016

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

Those who have access to a bike but never or only occasionally ride it (33%) most often blamed hot weather for not riding it more often (47% mentioned it being "too hot outside"). Reasons given by approximately one in ten respondents include: it is too dangerous, have health issues, it is inconvenient, and being "lazy" (mentioned by 10% to 12%).

A notable and growing percentage of residents indicate they never or rarely ride their bike because of safety related factors – *too dangerous* (12%) and *too much traffic* (7%).

**Table 16: Reasons for Not Riding More Often** 

(Among those who have access to a bicycle but only ride it occasionally or never)

Responses	2018 (n=84)	2016 (n=70)	2014 (n=74)
Too hot outside/hot weather	47%	38%	32%
Too dangerous	12%*	1%	12%
Physical condition/my health	11%	9%	5%
Inconvenient/too busy	10%	4%	8%
Lazy/don't want to ride it	10%	4%	10%
Have a car/rather take car	7%	6%	1%
Too much traffic	7%	3%	2%
Distance/too far	6%	9%	1%
Bike not working properly/bike not functional	3%	6%	5%
Too much to carry	3%	1%	-
Takes too long	2%	7%	3%
Have little kids/drive kids around	2%	6%	3%
Injury	1%	1%	2%
Too old	1%	-	2%
No need/nowhere to go	1%	-	-
Not enough bike lanes/paths	-	2%	2%
Other (responses <.5%)	2%	9%	7%
Don't know/no answer	-	9%	6%

Q20a: What are some reasons you don't ride you bike more often?

\*Indicates significant difference compared to 2016 at the 95% confidence level.

Note: Question added in 2014

#### C. Bicycle Destinations

More than one-third (35%) of those who indicated riding their bikes at least once a month reported riding for *exercise*, while 17% ride a bike to *the store* and 16% ride their bike to parks (continuing an upward trend). This year a significantly higher percentage of bicyclists reported that Mill Avenue/Downtown Tempe were their destinations.

**Table 17: Bike Riding Destinations** 

(Among those who have access to a bicycle and ride it at least 1x a month)

Responses	2018 (n=167)	2016 (n=176)	2014 (n=174)	2012 (n=163)	2010 (n=155)	2008 (n=169)
Exercise	35%	44%	53%	58%	60%	56%
Store	17%	13%	14%	15%	16%	19%
Parks	16%	10%	4%	6%	4%	6%
Mill Avenue/Downtown Tempe	13%*	5%	3%	5%	3%	1%
Work/school/ASU	12%	14%	29%	18%	27%	31%
Along the canal	11%	9%	4%			
Restaurant/dinner	9%	4%	3%	2%	1%	2%
Tempe Town Lake	7%	5%	4%	6%	7%	4%
Friend's house	4%	4%	9%	7%	3%	6%
Everywhere	8%	3%	3%	2%	1%	1%
Run errands	3%	2%	2%	3%	1%	2%
The bar/when I've been drinking	2%	3%	3%	1%		
Other	2%	2%	2%	5%	2%	1%

Q21: Where do you go when you ride your bike?

Note: Destinations with less than 2% mentions in 2018 not shown in table.

<sup>\*</sup>Indicates significant difference compared to 2016 at the 95% confidence level.

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

Residents who bicycle at least monthly say they do so primarily to get *exercise* (57%) and/or to have fun (22%). Notably, significantly fewer bicyclists mentioned riding a bike because it is convenient or easy to do so (3% down from 8% in 2016).

Residents of the 85284 and 85283 zip codes were more likely than those who reside in other Tempe zip codes to report bike riding exercise (72% and 64% vs. 37% in 85281 and 50% in 85282).

Table 18: Main Reason Ride a Bike

(Among those who have access to a bicycle and ride it at least 1x a month)

Responses	2018 (n=167)	2016** (n=176)
Funnian	F 70/	F 40/
Exercise	57%	54%
Fun/Recreation/leisure	22%	26%
Convenient/easy	3%*	8%
Good for health/medical reasons	3%	5%
For the fresh air	3%	1%
Saves money	2%	4%
It's faster than walking/driving	2%	-
To go shopping	2%	1%
Saves wear and tear on car/don't want to drive	1%	4%
To get to school/work	1%	4%
Do not have a car	1%	2%
Protects environment	1%	1%
Other	1%	2%
No answer	-	1%

Q22: What is the main reason you ride a bicycle?

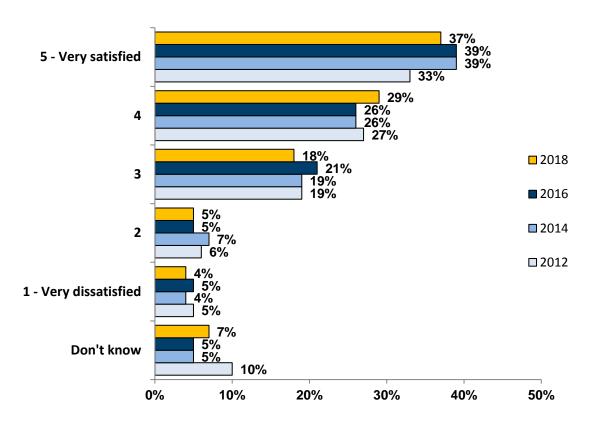
<sup>\*</sup>Indicates significant difference compared to 2016 at the 95% confidence level.

<sup>\*\*</sup>Question added in 2016.

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

Consistent with the prior two study periods, in 2018, two thirds (66%) of residents reported being satisfied with the quality of walking and biking paths in Tempe. All other ratings remained stable, as well.

# Overall Satisfaction with Tempe Walking and Bike Paths



2018 n=400, 2016 n=401, 2014 n=409, 2012 n=400

Q23: How satisfied are you with the quality of the walking and biking paths in Tempe?

\*No significant differences compared to 2016

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 everywhere, there are plenty of paths (15%) and they are fine the way they are/no problems (12%). These were the top responses in 2016 as well. Again this year, 5% commented they 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 bike lanes (6%).

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

	2010	2246	2244	2242
Responses	2018	2016	2014	2012
Positive	(n=370)	(n=380)	(n=390)	(n=362)
	450/	420/	420/	450/
They are everywhere, plenty of paths	15%	12%	12%	15%
They are fine the way they are, no problems	12%*	18%	29%	23%
Have good routes, connect well	9%	6%	3%	6%
Easy to use, accessible	7%	5%	6%	6%
They are properly maintained, well landscaped	6%	6%	4%	12%
Have seen/noticed improvements/upgrades	5%	5%	2%	
They are safe	4%	7%	5%	6%
Paths are well lit	2%	4%	5%	5%
Good for exercising/walking	2%			<1%
They added more paths	2%	2%*	1%	
Paths are scenic/beautiful	1%	1%	3%	2%
Neutral				
Never use them, no knowledge of them	4%	6%	5%	4%
Neither satisfied nor dissatisfied	2%	1%	<1%	1%
There is always room for improvement	1%*	4%	4%	3%
Negative/Suggestions				
Don't seem safe enough, make them safer	9%	9%	8%	10%
Need more bike lanes	6%	4%	9%	11%
Could use more of them	2%	7%	6%	4%
Need more education on "sharing the road"	1%			
Some routes end abruptly/have disconnects	1%	1%	2%	1%
They are not maintained	1%	2%	2%	2%
Traffic congestion is getting higher	1%	2%		
Don't know	3%	5%	6%	6%

Q23a: Please explain your rating

Note: Response categories with less than 1% total mentions in 2018 not shown in table.

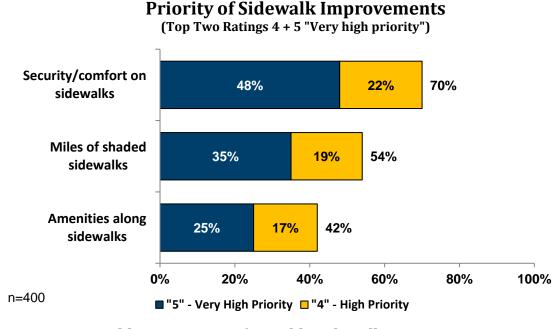
<sup>\*</sup>Indicates significant difference compared to 2016 at the 95% confidence level.

#### F. Priority of Possible Sidewalk Improvements

Residents were read a list of three possible sidewalk improvements in Tempe and asked to rate how high of a priority each improvement should be for the City.

Security and comfort on sidewalks, such as addressing hazards, obstructions and width received the highest percentage of priority ratings (70% rated a "4" or "5"). Notably, approximately one-half (48%) rated it as a "very high priority."

Just over one-half placed a high priority on the need for *miles of shaded sidewalks* (54% rated a "4" or "5"). *Amenities along sidewalks like water fountains, lighting, art and signage* ranked as the lowest priority with 42% assigning a priority rating of "4" or "5."



**Table 20: Priority of Possible Sidewalk Improvements** 

Responses	Very High	High	Some- what	Low	Very Low	DK/No answer
Security/comfort on sidewalks such as addressing hazards, obstructions and width	48%	22%	15%	7%	6%	2%
Miles of shaded sidewalks	35%	19%	22%	10%	11%	4%
Amenities along the sidewalks like water fountains, lighting, art, and signage	25%	17%	28%	12%	15%	3%

Q24-26: Now I'm going to read you a list of possible sidewalk improvements. Please indicate how high of a priority each improvement should be for the City of Tempe.

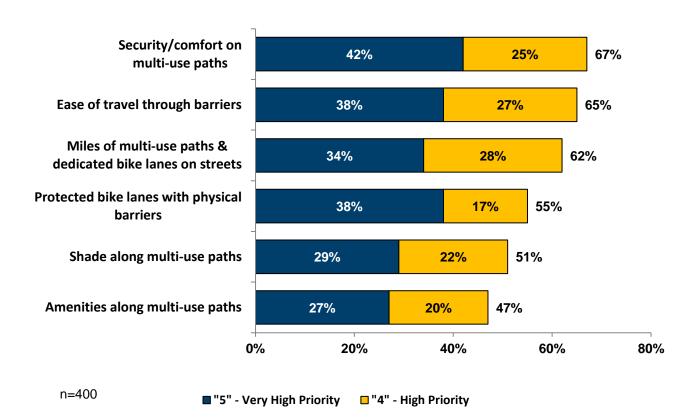
#### G. Priority of Possible Bikeway Improvements

Residents were read a list of six possible improvements to bikeways in Tempe and asked to rate how high of a priority each improvement should be for the City.

Security and comfort on multi-use paths, ease of travel around barriers, and miles of multi-use paths and dedicated bike lanes bike lanes received the highest percentage of priority ratings (67%, 65% and 62% rated a "4" or "5"). Just over one-half gave high priority ratings to protected bike lanes with physical boundaries (55%) and shade along multi-use paths and bike lanes (51%). With just under one-half (47%) rating the need for amenities along multi-use paths like water fountains, lighting, art and signage as a "4" or "5," this attribute ranked as the lowest priority.

## **Priority of Bikeway Improvements**

(Top Two Ratings 4 + 5 "Very high priority")



**Table 21: Priority of Possible Bikeway Improvements** 

Responses	Very High	High	Some- what	Low	Very Low	DK/No answer
Security/comfort on multi-use paths	42%	25%	18%	8%	6%	3%
Ease of travel through or around barriers such as railroad crossings, freeways, roads, the lake, etc.	38%	27%	22%	4%	6%	3%
Miles of multi-use paths and dedicated bike lanes on streets	34%	28%	19%	7%	9%	3%
Protected bike lanes that have a physical barrier between traffic and bikes	38%	17%	17%	12%	14%	3%
Shade along the multi-use paths and bike lanes	29%	22%	26%	11%	11%	2%
Amenities along the multi-use paths like water fountains, lighting, art and signage	27%	20%	28%	11%	14%	1%

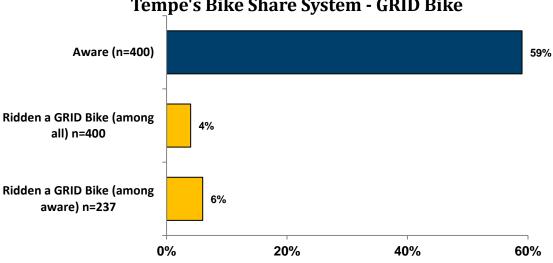
Q27-32: Now I'm going to read you a list of possible bikeway improvements. Please indicate how high of a priority each improvement should be for the City of Tempe.

#### Н. Bike Share System – GRID Bike

Three in five residents (59%) have heard of Tempe's bike share system and 4% of all residents have ridden a GRID bike (6% of those aware).

Among the 15 residents who have ridden a GRID bike, 9 reported being "very satisfied" with the quality of the bike share system in Tempe. The remaining six rated it as a "4" (2 GRID riders), "3" (3 GRID riders) or "2" (1 GRID rider) on the 1 to 5 scale where "5" means "very satisfied" and "1" means "not at all satisfied."

Residents primarily report being satisfied with GRID Bike because they are easy to access (7 mentions) and convenient to use (5 mentions). Three people expressed concern that they are or would become disorganized, a nuisance and all over the place. One person complained that pick up/drop off locations were limited and another complained about the cost.



Tempe's Bike Share System - GRID Bike

Q33: Have you ever heard of Tempe's bike share system?

Q34: Have you ridden on a green GRID bike?

Table 22: Satisfaction of Bike Share System Among those who have ridden on a GRID bike

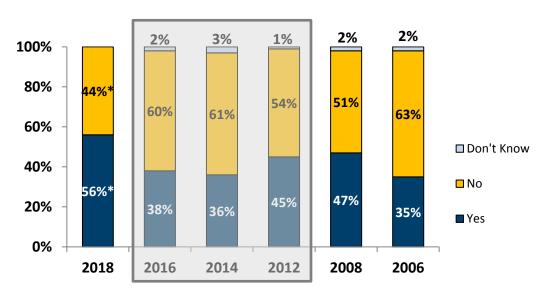
	2018 (n=15)*
5 - Very satisfied	9
4	2
3	3
2	1
1 – Very dissatisfied	-

Q35: How satisfied are you with the quality of the bike share system in Tempe? \*Unweighted frequencies shown due to very small sample size.

# VII. Tempe Youth Free Transit Pass Program

In 2018, more than one-half (56%) of residents who have children ages 6 to 18 have heard of the Tempe Youth Free Transit Pass. This is significantly higher than 47% measured ten years ago, which was the last time the question was asked only of those with children age 6+. Awareness was significantly higher among parents who use public transit (68%), but one-third of non-riders have heard of it as well (34%). Parents residing in 85282 are most likely to be aware of the pass (77%) and those in 85284 are the least likely to be familiar with them (21%).

#### Awareness of Tempe Youth Free Transit Pass



2018 n=84, 2016 n=401, 2014 n=409, 2012 n=400, 2008 n=98, 2006 n= *QD5: Have you ever heard of the Tempe Youth Free Transit Pass Program?*\*Indicates significant difference compared to 2014 at the 95% confidence level.
Note: 2018, 2008 and 2006: question was asked only of people with children ages 6 years and old. In 2012, 2014, and 2016 this question was asked of all residents.

Among parents aware of the program, one half (52%) indicated they heard about it *through* school followed by word-of-mouth and/or the library (both mentioned by 12%).

**Table 23: Sources for Tempe Youth Transit Pass Program Information** (Among those aware of the program)

Sources	2018* (n=47)	2008* (n=46)	2016 (n=150)	2014 (n=148)	2012 (n=179)
Through school	52%	28%	24%	20%	24%
Word-of-mouth	12%	33%	16%	20%	19%
(friends/family)					
Library	12%	7%	11%	7%	7%
Advertisement	5%		4%	8%	6%
Bill insert	3%	2%	8%	3%	7%
Mail/ flyer	3%				1%
Web site	3%	4%	1%	2%	3%
Letter from the City	2%	4%	3%	5%	5%
Radio	2%				
Don't know	3%	11%	7%	5%	10%

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

\*In 2008 and again in 2018, question was asked only of people with children aged 6 years and older.

Data for 2016-2014-2012 is shown for easy reference.

Note: Sources with less than 2% mentions in 2018 not shown

**APPENDIX A: Questionnaire** 

# City of Tempe – Tempe in Motion 2018 Questionnaire

-	e: 85281, 85282, 85283, 85284 = 400 :: Males/Females 50/50 each quota group
-	stribution will be monitored for representativeness of sample English and Spanish
Resear	, may I please speak with? This is calling from WestGroup ch on behalf the City of Tempe. We are conducting a survey with Tempe residents about ant issues affecting the City's transportation system. This is not a telemarketing call; we want your opinions on a variety of issues important to Tempe residents.
1.	Are you a Tempe resident? Yes – CONTINUE No – THANK AND TERMINATE
1a. Did	you answer this call using a cell phone? a. Yes b. no
2.	What is your zip code?  a. 85281  b. 85282  c. 85283  d. 85284  e. Other/Don't know/Refused – THANK AND TERMINATE
3.	What is your age?
3.a	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.	What is the first thing that comes to mind when you think about the transportation system in Tempe? IF NECESSARY, by transportation system we are talking about the way people can travel around Tempe by walking, riding a bike, or using public transit.
5.	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

- 5a. IF a, b, c, or d IN Q5: 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
- 6. ASK IF "e- don't use transit" IN 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? What other reasons? DO NOT READ LIST (Multiple responses allowed)
  - a. Prefer to drive my car
  - b. Bus stops far away
  - c. Takes too long
  - d. Need car for business
  - e. Doesn't go where need to go
  - f. Inconvenient (general): Specify
  - g. No need to use it
  - h. Health reasons/disability
  - i. Don't have to go far distances
  - j. Ride bike instead
  - k. Work from home/Telecommute/Don't commute
  - 1. Don't feel safe/secure on transit
  - m. Service isn't frequent enough
  - n. Other: Specify \_\_\_
  - o. Don't know
- 7. ASK IF "e- don't use transit" IN Q5: 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?
  - a. Helps reduce air pollution
  - b. Helps improve the environment
  - c. Saves money
  - d. Saves time
  - e. Reduces your stress
  - f. Improves the community
  - g Reduces your carbon footprint
  - h. DO NOT READ None/DK/No answer

#### ASK IF a, b, c, d in Q5: ALL OTHERS SKIP TO Q12

- 8. How long have you been using the transit system in Tempe? DO NOT READ LIST
  - a. Less than a year
  - b. 1 to 2 years
  - c. 2 to 4 years
  - d. 4 to 6 years
  - e. 6 to 10 years
  - f. More than 10 years
  - g. Don't know/NA

- 9. What is the main reason you use public transit? DO NOT READ LIST
  - a. Convenient
  - b. Get to/from places
  - c. Don't have a car
  - d. Get to/from school
  - e. To avoid parking
  - f. Need to get to Phoenix
  - g. Dislike driving/Take a break from driving h. Saves money

  - i. To go downtown
  - j. A way to get around
  - k. To avoid drinking and driving
  - 1. To get to/from work
  - m. Vehicle not available/Having car problems
  - n. Other (SPECIFY:
- 10. 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. Downtown Phoenix
  - 1. Phoenix (general)
  - m. Downtown Tempe
  - n. Airport
  - o. Other (SPECIFY:\_

#### ASK ONLY OF THOSE WHO ANSWER "A" OR "B" IN Q5a. In general, how 11. satisfied are you with: ROTATE LIST

	Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied	DK/ no answer
a. Cleanliness of buses	4	3	2	1	0
b. Cleanliness of bus stops	4	3	2	1	0
c. Amenities at bus stops	4	3	2	1	0
(e.g. shade, seating, bike					
racks)					
d. Reliability/on-time	4	3	2	1	0
performance of buses					
e. Driver courtesy and	4	3	2	1	0
professionalism					
f. Route frequency	4	3	2	1	0
g. Hours of operation	4	3	2	1	0
h. Comfort on the bus	4	3	2	1	0
i. Ease of using the bus	4	3	2	1	0
(e.g., using schedules,					

getting to the bus stop,					
paying fares)					
j. Security at bus stops	4	3	2	1	0
k. Security on the bus	4	3	2	1	0
l. Bus service during major	4	3	2	1	0
City events					

- 11a. ONLY ASK IF ANSWER IS SOMEWHAT DISSATISFIED OR VERY DISSATIFIED IN Q11: You indicated dissatisfaction with some of the attributes, what could be done to improve your satisfaction with the bus service? DO NOT READ LIST.
  - a. More frequent buses
  - b. Need better/more routes
  - c. Bus stops need shade
  - d. Security in the bus/safer
  - e. Inside of the bus/bus stops need to be cleaner
  - f. Don't like the type of people that use the bus
  - g. More/better lighting at bus stops
  - h. More courteous/professional bus drivers
  - i. Easier schedules to read/understand/accurate
  - j. More/better benches at bus stops
  - k. Avoid having bus pass us by at bus stop
  - 1. Other (SPECIFY:
  - m. Don't know/Not sure
  - n. Nothing

#### ASK ALL:

- 12. 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"
- 12a. Please explain your rating. DO NOT READ LIST.
  - a. Satisfied/Good service
  - b. Frequent/Available/Reliable Service
  - c. Don't use it/Never used it
  - d. Good routes/convenient routes
  - e. Need better routes/need more routes/need more connections/doesn't go where I need to go
  - f. More frequent buses/longer hour
  - g. Always room for improvement
  - h. Convenient (general- probe for specifics)
  - i. Clean
  - j. Dirty/needs to be cleaned up
  - k. Like Light rail/Light rail is good
  - 1. Needs more security
  - m. Uncomfortable with people who ride transit
  - n. Other (Specify)
- 13. What is the name of Tempe's transit/transportation program? DO NOT READ LIST
  - a. Tempe in Motion SKIP TO 15
  - b. Valley Metro ASK Q14
  - c. Orbit ASK Q14
  - c. Other (SPECIFY: \_\_\_\_\_\_) ASK Q14
  - d. Don't know ASK Q14

- 14. Have you ever heard of Tempe in Motion? a. YES
- b. NO (IF NO SKIP TO Q19)
- 15. IF YES IN Q14 or "Tempe in Motion" in Q13: How did you hear about it? DO NOT READ LIST
  - a. Street Banners
  - b. Signs on the Buses
  - c. Bill inserts
  - d. Word of Mouth
  - e. Newspaper / Print ads
  - f. Sign (general)
  - g. Direct mail
  - h. TV
  - i. ASU / School
  - j. Library
  - k. Pandora or Spotify
  - 1. Internet / Online ads / web
  - m. Just know / I live here / Lived here a long time
  - n. Billboard
  - o. Flyers / Brochure
  - p. On Light Rail
  - q. Other (SPECIFY:)
  - r. Don't know/Not aware of the program
- 16. IF a through p selected in Q15: How did the messages affect your perception of the transportation system in Tempe? Did it. 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
- 17. If a or b in Q16: Did the advertising messages persuade you to try public transit in Tempe?
  - a. Yes
  - b. No
  - c. Don't know
- 18. IF "a" in Q17: What was the advertising source that most influenced your decision to try public transit in Tempe? ONLY SHOW ITEMS SELECTED IN Q15. SINGLE RESPONSE.
  - a. Street Banners
  - b. Signs on the Buses
  - c. Bill inserts
  - d. Word of Mouth
  - e. Newspaper / Print ads
  - f. Sign (general)
  - g. Direct mail
  - h. TV
  - i. ASU / School
  - j. Library
  - k. Pandora or Spotify
  - 1. Internet / Online ads / web
  - m. Just know / I live here / Lived here a long time
  - n. Billboard
  - o. Flyers / Brochure
  - p. On Light Rail
  - q. Other (SPECIFY:)

- r. Don't know/Not aware of the program
- 19. Do you have access to a bicycle that you can ride when you want to?
  - a. Yes
  - b. No SKIP TO Q23
- 20. IF YES IN Q19: 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
- 20a. If none/never ride it in Q20: What are some reasons why you don't ride your bike more often? DO NOT READ LIST
  - a. Too hot outside / hot weather
  - b. Physical condition / my health
  - c. Distance / Too far
  - d. Takes too long
  - e. Bike not working properly / bike not functional
  - f. Have little kids / drive kids around
  - g. Prefer Car
  - h. Time / Convenience / Too busy
  - i. Lazy / Don't want to ride it
  - j. Too much traffic
  - k. Not enough bike lanes / paths
  - 1. Injury
  - m. Have too much to carry
  - n. Too dangerous
  - o. Other
  - p. Don't know/NA
- 21. IF RIDE BIKE 1+ times in Q20: Where do you go when you ride your bike? DO NOT READ LIST
  - a. Exercise
  - b. Store
  - c. Work / school / ASU
  - d. Parks
  - e. Along the canals
  - f. Tempe Town Lake
  - g. Mill Avenue / Downtown Tempe
  - h. Friend's house
  - i. Restaurant / Dinner
  - j. Everywhere
  - k. The bar / when I've been drinking
  - 1. The light rail
  - m. Run errands
  - n. Nowhere/just riding for exercise
  - o. Other (SPECIFY:)

- 22. What is the main reason you ride a bicycle? (DO NOT READ LIST)
  - a. Exercise
  - b. Fun/Recreation/Leisure
  - c. Convenient/Easy
  - d. Health reasons/Good for health/Medical reasons
  - e. Saves money
  - f. Saves wear and tear on my car
  - g. To get to school/work
  - h. Don't have a car
  - i. Not have to walk
  - j. Other (SPECIFY:)

#### ASK ALL:

- 23. 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"
- 23a. Please explain your rating. DO NOT READ LIST.
  - a. No problems/Fine the way they are
  - b. Plenty of paths/Paths are everywhere
  - c. Make Paths safer/Paths need to be safer/Paths don't seem safe enough
  - d. Paths are safe/Paths seem safe
  - e. Good routes/routes connect well
  - f. Paths are properly maintained/paths are well-landscaped
  - g. Paths are easy to use/Paths are easy to access
  - h. Improvements have been made/Noticed or seen upgrades
  - i. Well-lit
  - j. Need more bike lanes
  - k. Need more walking paths
  - 1. More lanes/paths have been added
  - m. No one uses bike lanes
  - n. NEVER USE PATHS/NO KNOWLEDGE
  - o. Other (Specify:)

24-26. Now I am going to read you a list of possible sidewalk 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....

RANDOM ORDER 24-26	Very high priority	High priority	Somewhat of a priority	Low priority	Very low priority	DK / Refused
24. Miles of shaded sidewalks	5	4	3	2	1	0
25. Security/comfort on sidewalks such as addressing hazards, obstructions and width	5	4	3	2	1	0
26. Amenities along the sidewalks like water fountains, lighting, art, and signage	5	4	3	2	1	0

27-32. Now I am going to read you a list of possible bikeway 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....

RANDOM ORDER 27-32	Very high priority	High priority	Somewhat of a priority	Low priority	Very low priority	DK / Refused
27. Miles of multi-use paths and dedicated bike lanes on streets	5	4	3	2	1	0
28. Security/comfort on multi-use paths	5	4	3	2	1	0
29. Amenities along the multi- use paths like water fountains, lighting, art and signage	5	4	3	2	1	0
30. Ease of travel through or around barriers such as railroad crossings, freeways, roads, the lake, etc.						
31. Shade along the multi-use paths and bike lanes	5	4	3	2	1	0
32. Protected bike lanes that have a physical barrier between traffic and bikes	5	4	3	2	1	0

- 33. Have you heard of Tempe's bike share system?
  - a. Yes
  - b. No
  - c. Don't know
- 34. If Yes in Q33, have you ridden on a green GRID bike?
  - a. Yes
  - b. No
  - c. Don't know
- 35. If Yes in Q34, how satisfied are you with the quality of the bikeshare system in Tempe? Please rate your satisfaction level on a 1 to 5 scale where 5 means "very satisfied" and "1" means "very dissatisfied"
- 35a. Please explain your rating.

## **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.

- D2. 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
- D3. Are you married or single?
  - a. Married
  - b. Single
  - c. No answer
- D4. Do you have children ages 6 to 18?
  - a. Yes
  - b. No
  - c. Don't know
- D5. If yes in D4, 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 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. \$100,000 to \$150,000
  - f. More than \$150,000
  - g. No answer

Thanks for your time. That concludes our interview.