



PUBLIC MEETING AGENDA

Transportation Commission

MEETING DATE

Tuesday, December 1, 2020 at 7:30 a.m.

MEETING LOCATION

Join Via Cisco Webex Meeting – link below

<https://tempe.webex.com/tempe/onstage/g.php?MTID=ed93339225e63ac5c227b19c8319dc19f>

Event password: t5A2Tk3PBW6

United States Toll+1-408-418-9388

Access code: 146 683 3865

AGENDA ITEM	PRESENTER	ACTION or INFORMATION
1. Public Appearances The Transportation Commission welcomes public comment for items listed on this agenda. There is a three-minute time limit per citizen.	Brian Fellows, Commission Chair	Information
2. Approval of Meeting Minutes The Commission will be asked to review and approve the November 10, 2020 meeting minutes.	Brian Fellows, Commission Chair	Action
3. Commission Business The Chair will recognize outgoing Commissioners Thomas and Guzy for their service as their terms end Dec. 31, 2020.	Brian Fellows, Commission Chair	Information
4. Annual Report Staff will present the 2020 annual report including Transportation Commission goals for 2021.	Shelly Seyler, Engineering & Transportation Department	Action
5. 20-Minute City Survey Results Kathy DeBoer with WestGroup Research will present the findings from the 20-Minute City resident survey.	Kathy DeBoer, WestGroup Research	Information
6. 2020 Transportation Satisfaction Survey Results Kathy DeBoer with WestGroup Research will present the findings from the 2020 Transportation Satisfaction resident survey.	Kathy DeBoer, WestGroup Research	Information
7. Long-Term Transit Fund Plan and Service Changes Staff will present the proposed transit service reductions as part of the budget saving process.	Eric Iwersen and Sam Stevenson, Engineering & Transportation Department	Action
8. Department & Regional Transportation Updates Staff will provide updates and current issues being discussed at regional transportation and transit agencies.	Engineering & Transportation Department Staff	Information

9. Future Agenda Items Commission may request future agenda items.	Brian Fellows, Commission Chair	Information and Possible Action
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According to the Arizona Open Meeting Law, the Transportation Commission may only discuss matters listed on the agenda. The city of Tempe endeavors to make all public meetings accessible to persons with disabilities. With 48 hours advance notice, special assistance is available at public meetings for sight and/or hearing-impaired persons. Please call 350-4311 (voice) or for Relay Users: 711 to request an accommodation to participate in a public meeting.



Minutes
City of Tempe Meeting of the Transportation Commission
November 10, 2020

Minutes of the meeting of Tempe Transportation Commission held on Tuesday, November 10, 2020, 7:30 a.m. via Cisco Webex.

(MEMBERS) Present:

Susan Conklu
JC Porter
John Kissinger
Mary Harriman
David A. King
Paul Hubbell
Pam Goronkin

John Federico
Peter Schelstraete
Brian Fellows
Jeremy Browning
John Christoph
Lloyd Thomas

(MEMBERS) Absent:

Ryan Guzy

City Staff Present:

Marilyn DeRosa, Engineering & Transportation Director
Shelly Seyler, Deputy Engineering & Transportation Director
Robert Yabes, Principal Planner
Chase Walman, Planner II
Vanessa Spartan, Planner II
Abel Gunn, Transportation Financial Analyst
Cathy Hollow, Traffic Engineer
Ryan Lesveque, Deputy Community Development Director

Sue Taaffe, Senior Management Assistant
TaiAnna Yee, Public Information Officer
Laura Kajfez, Neighborhood Services Specialist
Amanda Nelson, Public Information Officer
Bonnie Richardson, Principal Planner
Eric Iwersen, Transit Manager
Julian Dresang, City Engineer

Guests Present:

Mike James

David Sokalowski

Commission Chair Brian Fellows called the meeting to order at 7:33 a.m.

Agenda Item 1 – Public Appearances

None

Agenda Item 2 – Minutes

Brian Fellows introduced the minutes of October 10, 2020 meeting of the Transportation Commission and asked for a motion for approval.

Motion: Commissioner Paul Hubbell

Second: Commissioner Peter Schelstraete

Decision: Approved by Commissioners

Susan Conklu
JC Porter
John Kissinger
Mary Harriman
David A. King
Pam Goronkin
Paul Hubbell

John Federico
Peter Schelstraete
Brian Fellows
Jeremy Browning
John Christoph
Lloyd Thomas
Jeremy Browning

Agenda Item 3 – Annual Report

Shelly Seyler presented the draft 2020 Transportation Commission Annual Report. Discussion included adding the following goals to the 2021 report:

- Work with community advocacy groups on programs like the Bike Hero Award.
- Maintain regular contact and form partnerships with other Boards and Commissions.
- Provide general recommendations regarding transportation safety.

Staff will modify the goals and request a formal vote for approving the annual report at the December meeting.

Agenda Item 4 – Reconsideration of Setting Speed Limits

Brian Fellows presented the Transportation Commission a draft a letter for the City Council requesting that they reconsider their previous consensus on setting speed limits.

A motion was made to edit the letter to include the public comment web link, and request through the City Clerk's Office that the following agenda item be added to an upcoming Regular Council Meeting: "City of Tempe Speed Limit Study: Request to Agenize for Public Comment."

Motion: Commissioner Pam Goronkin

Second: Commissioner John Christoph

Decision: Approved by Commissioners

Susan Conklu
JC Porter
John Kissinger
Mari Harriman
David A. King
Pam Goronkin

John Federico
Paul Hubbell
Brian Fellows
Lloyd Thomas
John Christoph

Nay: Peter Schelstraete
Jeremy Browning

Agenda Item 5 – Entitled Development Projects

Ryan Levesque demonstrated the capabilities of the Community Development web page, www.tempe.gov/projects.

Presentation topics included:

- Building permits issued/construction underway
- In plan review for building permit

- Plans approved/entitled
- In review for planning entitlements

Agenda Item 6 – Vision Zero

Cathy Hollow made a presentation about the current status of the Vision Zero plan. Presentation topics included:

- Background
- Data monitoring
- Initiatives and projects
 - Traffic Engineering and Police Department discussion
 - Pedestrian grade separations
 - Bike lanes and pedestrian signals
 - Intersection improvements
 - New signals
 - School speed zones
 - Neighborhood traffic calming

Agenda Item 7 – Department & Regional Transportation Updates

Susan Conklu informed the Commission that the City of Scottsdale will revise its ordinance on Nov. 23 as it relates to scooters and e-bikes.

Agenda Item 8 - Future Agenda Items

The following future agenda items have been previously identified by the Commission or staff:

- December 1
 1. Annual Report
 2. Transit Service Reduction Plan
 3. 20-Minute City Market Research Results
 4. 2020 Transit Satisfaction Survey Results
 5. Recognition of Outgoing Commissioners
- January 12
 1. Transit Service Reduction Plan
 2. Commission Business
 3. Personal Delivery Devices
 4. Open Streets
 5. Scottsdale Road Bike Lanes
- February 9
 1. Country Club Way Streetscape
 2. Transportation Demand Management Association
 3. Mobility Hubs
 4. Outreach Plan for I-10 Corridor Construction
- March 9
- April 13
 1. North/South Rail Spur MUP
 2. Transit Service Reduction Plan
 3. ADA and Sidewalk Infrastructure
- May 11
 1. Commuter Rail Study/ MAG Commuter Rail Plan

2. AZ State Rail Plan/AZDOT Phoenix-Tucson Corridor Plan
 3. Ash/University Intersection
 4. Bike Bait Program Update
-
- June 8
 - July 13
 - August 10
 - September 14
 - October 12
 - Annual Report
 - November 9
 - Annual Report
 - December 14

The next meeting is scheduled for December 1, 2020.

The meeting was adjourned at approximately 9:08 a.m.

Prepared by: Sue Taaffe

Reviewed by: Shelly Seyler

Transportation Commission 2020 Annual Report

**Transportation Commission
December 1, 2020**



Proposed Goals for 2021



1. Select project(s) to be submitted for local and federal grants,
2. Monitor and provide feedback for Tempe Streetcar project, bus and light rail operations, bicycle and pedestrian projects and bike share program
3. Oversee strategic development of transportation systems and use of transit funds
4. Monitor progress and provide feedback of Transportation Master Plan and the transportation chapter of the General Plan and emerging technologies
5. Monitor and provide feedback on Vision Zero plan
6. Ensure programs and projects are compliant with Americans with Disabilities Act
7. Work with community advocacy groups on programs like the Bike Hero Award
8. Maintain regular contact and form partnerships with other Boards and Commissions
9. Provide general recommendations regarding transportation safety

TRANSPORTATION COMMISSION 2020 ANNUAL REPORT

Description as Defined in Ordinance:

The Transportation Commission shall have the following powers and duties:

- (1) To suggest to the Mayor and City Council qualified and interested persons eligible for appointment for commission vacancies;
- (2) To consult, through the chairman of the commission, with the Engineering and Transportation Department, as to the items to be included on the agenda of meetings of the commission prior to the preparation and distribution of the agenda by the Engineering and Transportation Department;
- (3) To prepare and submit an annual report to the City Manager and City Council including applicable Council committees;
- (4) To advise and make recommendations to the City Council and to assist city departments and the City Manager to plan and implement a balanced transportation system within Tempe which incorporates all forms of transportation in a unified, interconnected manner and complements land use, making a positive environmental impact through reduction of energy consumption, air pollution and congestion, while promoting economic development and providing mobility for all persons, including elderly and disabled;
- (5) To advise and make recommendations to the City Council and to assist city departments and the City Manager on appropriate performance standards and benchmarks for use in evaluating the city's transportation system and program, based on nationally recognized guidelines and local priorities;
- (6) To advise and make recommendations to the City Council and to assist city departments and the City Manager on transportation plans, projects and ordinances, including but not limited to:
 - a. To recommend and review short and long-range plans and studies for the city's transportation system, including streets, transit, bicycling, pedestrians and demand management;
 - b. To periodically review and update the transportation elements of the city's general plan;
 - c. To provide input and review regional, state and federal transportation plans, projects and issues especially as provided by federal law; and
 - d. To promote and maintain bicycling as a safe and effective mode of travel for recreation, health and transportation.
- (7) To advise and recommend to the City Council and to assist city departments and the City Manager annually on the elements of prioritized, unified operating and capital improvement program budgets for transportation;
- (8) To provide a forum for public hearings and other public involvement mechanisms to assure community-based transportation plans, projects and issues, and to meet all federal and other guidelines for public involvement in transportation projects where applicable; and
- (9) To take any such further actions as may be deemed necessary and appropriate to further the goals of the commission.

TCC § {City Code, Chapter 2, Article V, Division 8}

List of Board and Commission Members, Including Attendance and Service Dates from January 2020 to December 2020:

<u>Board/Commission Members:</u>	<u>Service Dates:</u>	<u>Attendance Record:</u>
Browning, Jeremy	12/31/2022	Attended 8 meetings out of 10
Conklu, Susan	12/31/2020	Attended 10 meetings out of 10
Fellows, Brian	12/31/2020	Attended 10 meetings out of 10
Guzy, Ryan	12/31/2020	Attended 10 meetings out of 10
Thomas, Lloyd A.	12/31/2020	Attended 8 meetings out of 10
Paul Hubbell	12/31/2022	Attended 8 meetings out of 10
David A. King	12/31/2021	Attended 9 meetings out of 10
John Kissinger	12/31/2022	Attended 9 meetings out of 10
Pam Goronkin	12/31/2021	Attended 7 meetings out of 10
JC Porter	12/31/2021	Attended 10 meetings out of 10
John Federico	12/31/2021	Attended 10 meetings out of 10
Peter Schelstraete	12/31/2021	Attended 10 meetings out of 10
Christina Pucci	12/31/2020	Attended 7 meetings out of 8
John M. Christoph	12/31/2022	Attended 10 meetings out of 10
Mary Harriman	12/31/2022	Attended 4 meetings out of 9

Name of Chair and Vice Chair:

- Chair – Brian Fellows
- Vice Chair – JC Porter

Staff Liaison and Contact Information:

<u>Staff Liaison:</u>	<u>Department:</u>	<u>Phone:</u>	<u>Email:</u>
Shelly Seyler	Engineering & Transportation	480-350-8854	shelly_seyler@tempe.gov

Meeting Frequency and Location:

Meetings are typically held the second Tuesday of the month at 7:30 a.m. at 200 E. Fifth Street, Don Cassano Community Room, Tempe, AZ 85281 or via Cisco WebEx.

Number of Meetings Cancelled and Reason for Cancellation:

- The April meeting was canceled due to COVID-19.
- The July meeting was canceled due to lack of agenda items.

Vacancies and Duration of Vacancies:

- One seat was vacant from Jan. 1 to Jan. 16, 2020.
- One seat was vacant from Sept. 30, 2020 to Dec. 31, 2020.

Subcommittee and Subcommittee Activity:

Did the Board/Commission have any subcommittees active during the reporting period? YES NO

Mission Statement:

The mission of the Transportation Commission is to ensure that the city has a balanced transportation system which incorporates all forms of transportation in an interconnected manner while complementing land use, making a positive

environmental impact through reduction of energy consumption, air pollution and congestion, promoting economic development, providing mobility and accessibility for all persons, and creating a forum for residents to provide input on transportation plans, projects and issues.

Accomplishments (Past 12 Months):

Council Priority #4: Implementing sustainable growth and development strategies to improve Tempe's environment, quality of life and economic outcomes. Tempe strives to make long-term generational investments in technology, infrastructure and public transit that create a safe, clean, equitable and healthy city.

Transportation Commission accomplishments as they relate to the above-mentioned Council priority:

Development Bonus Program: Commission supported the Development Bonus Program.

Bike Hero: Commission selected Julian Dresang as the 2020 Bike Hero Award recipient.

Tempe / Mesa Streetcar Extension Feasibility Study: Commission supported the findings of the Tier 2 analysis.

Setting Speed Limits: Commission supported Alternative A and recommended that Apache Boulevard between Rural and the border with Mesa be reduced to 30 mph.

Transit Shelter Design: Commission supported the final design concept.

Transit Service Reductions: Commission supported the public outreach approach and reduction plan metrics.

GRiD Bike Share: Commission supported exploring Option 2: Dissolve existing GRID bike share system and allow private companies to provide the service AND Option 3: Issue new RFQ for micromobility service.

Speed Limits: Commission approved drafting a letter to the City Council requesting that they reconsider their previous consensus on setting speed limits.

Annual Report: Commission approved the 2020 Transportation Commission Annual Report.

Goals Related to City Council Strategic Priorities, if Applicable (Next 12 Months):

- Recommend project(s) to be submitted for regional and federal grants.
- Guide and provide feedback for Tempe Streetcar project, bus and light rail operations, bicycle and pedestrian projects and bike share program.
- Guide strategic development of transportation systems and use of transit funds.
- Guide progress and provide feedback of Transportation Master Plan, the transportation chapter of the General Plan and emerging transportation technologies.
- Guide and provide feedback on Vision Zero plan.
- Ensure programs and projects are compliant with Americans with Disabilities Act (ADA).
- Work with community advocacy groups on programs like the Bike Hero Award.
- Maintain regular contact and form partnerships with other Boards and Commissions.
- Provide general recommendations regarding transportation safety.



City of Tempe 20–Minute City Survey

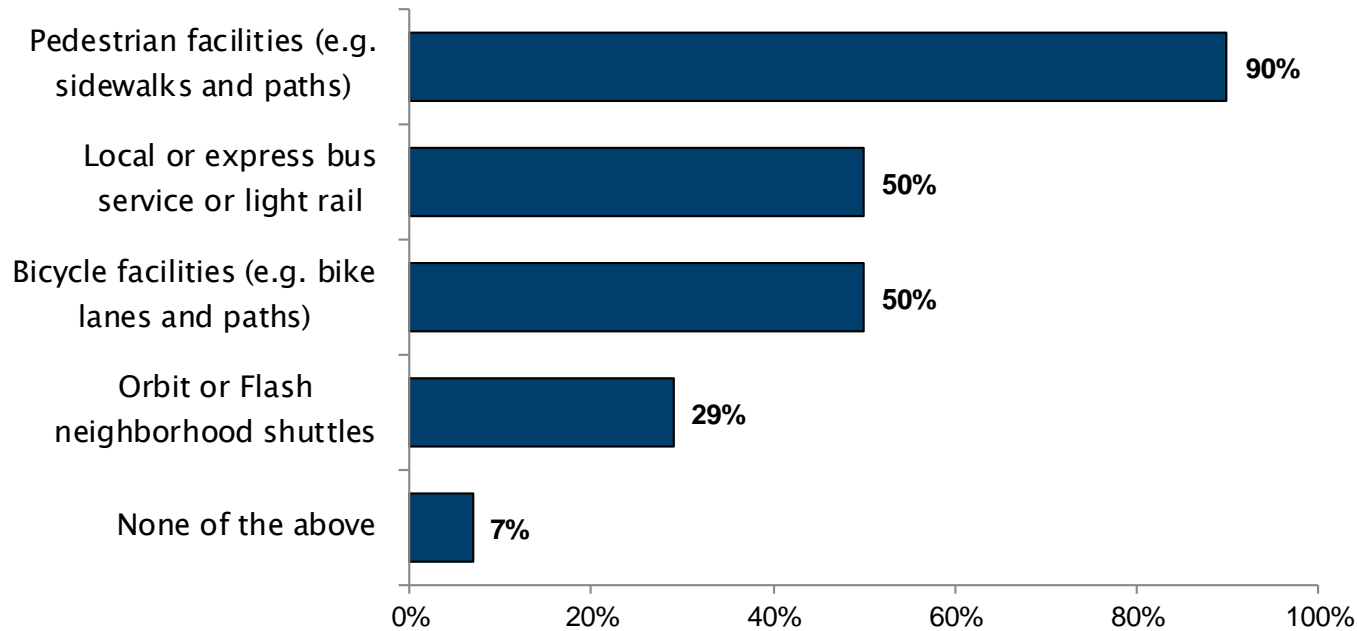
December 2020

Methodology

- Survey of Tempe residents to gain insights into the importance and current perceptions of being a “20-Minute City”
- 421 Tempe residents between April 28 and May 30, 2020 (345 telephone and 76 online)
- Margin of error is $\pm 4.8\%$ at a 95% confidence level

Resident Use of Transportation Services

Usage of Transportation Services in Past 12 Months



Q8: Have you used any of the following services or facilities in Tempe in the past year?
2020 n=421

- 85281: significantly more likely to report using *local or express bus service or light rail* (66%) and *orbit or flash neighborhood shuttles* (46%)
- 85284: least likely to report using the *Orbit or Flash neighborhood shuttles* (2%)

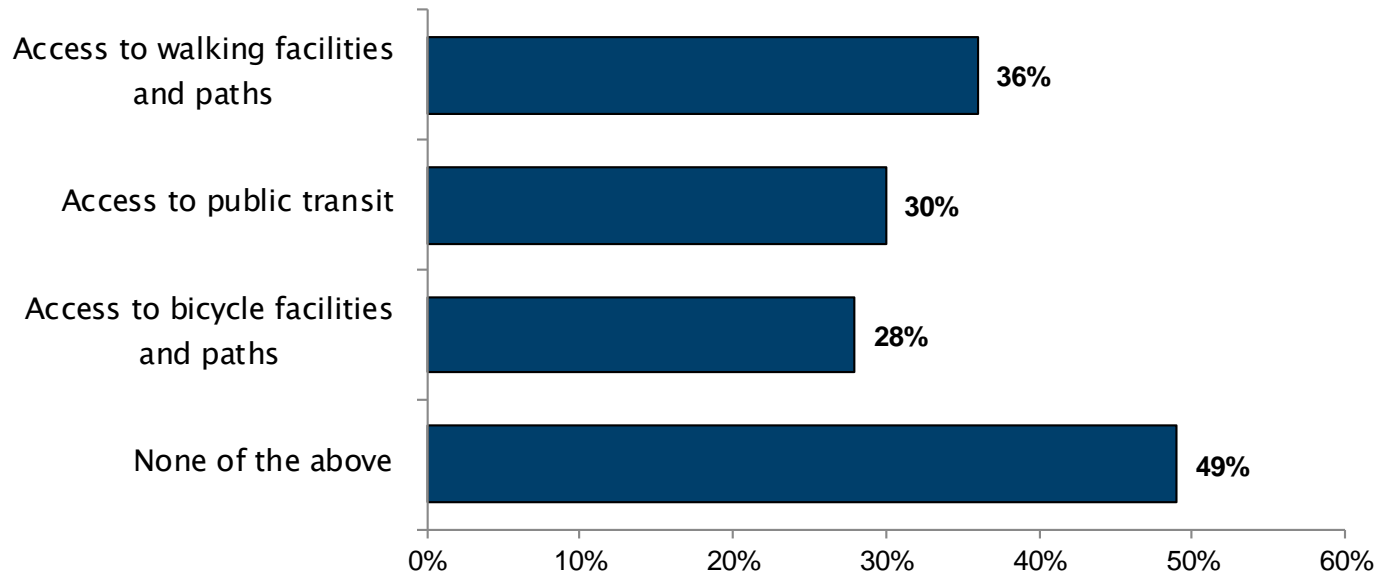
Transportation Services - Demographics

	Total n=421	Age			Ethnicity	
		18-34 n=158 A	35-54 n=137 B	55+ n=120 C	White n=299 D	All Others n=122 E
Pedestrian facilities (e.g. sidewalks and paths)	91%	95% ^{BC}	90%	85%	93%	85%
Local or express bus service or light rail	51%	62% ^{BC}	47%	38%	45%	62% ^D
Bicycle facilities (e.g. bike lanes and paths)	50%	57% ^C	49%	43%	51%	48%
Orbit or Flash neighborhood shuttles	29%	37% ^C	31% ^C	18%	25%	39% ^D
None of the above	7%	2%	7%	11% ^A	6%	7%

Q8: Have you used any of the following services or facilities in Tempe in the past year?

Services Impacting Location of Home

Factors in Choosing Current Residence



Q7: Please indicate if any of the following were an important factor in choosing the location where you currently live in Tempe. Select all that apply.

2020 n=421

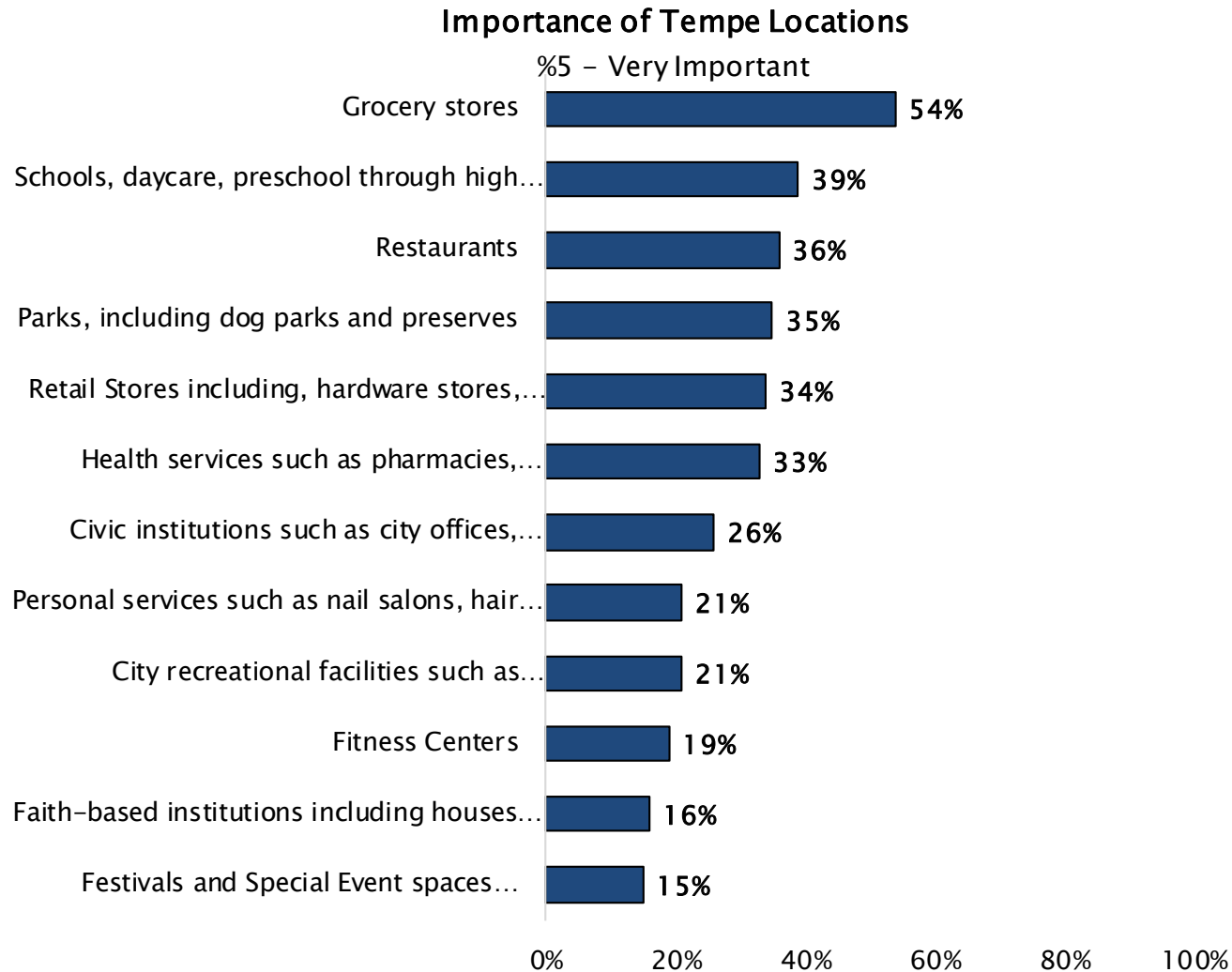
- 85281: significantly more likely to have reported having *access to walking facilities and paths* as an important factor (47% vs. 20%-27%)
- 85283: more likely to regard having *access to bicycle facilities and paths* as an important factor (39% vs. 21% to 27%)

Services Impact - Demographics

	Total n=421	Age			Years in Tempe		
		18-34 n=158 A	35-54 n=137 B	55+ n=120 C	1-5 n=113 D	6-20 n=154 E	20+ n=153 F
Access to public transit	30%	45% ^{BC}	28% ^C	16%	40% ^F	32% ^F	21%
Access to bicycle facilities and paths	28%	33%	26%	23%	27%	30%	27%
Access to walking facilities and paths	36%	43% ^B	31%	33%	40%	37%	31%
None of the above	49%	34%	55% ^A	59% ^A	37%	45%	61% ^{DE}

Q7: Please indicate if any of the following were an important factor in choosing the location where you currently live in Tempe. Select all that apply.

Importance of Proximity to Locations



Q9: For each of the following locations, please rate how important it is to you that you or your family members are within 20 minutes of that location by walking, biking or by taking public transit using a 1 to 5 scale where a "1" means "not at all important" and a 5 means "very important".

2020 n=421

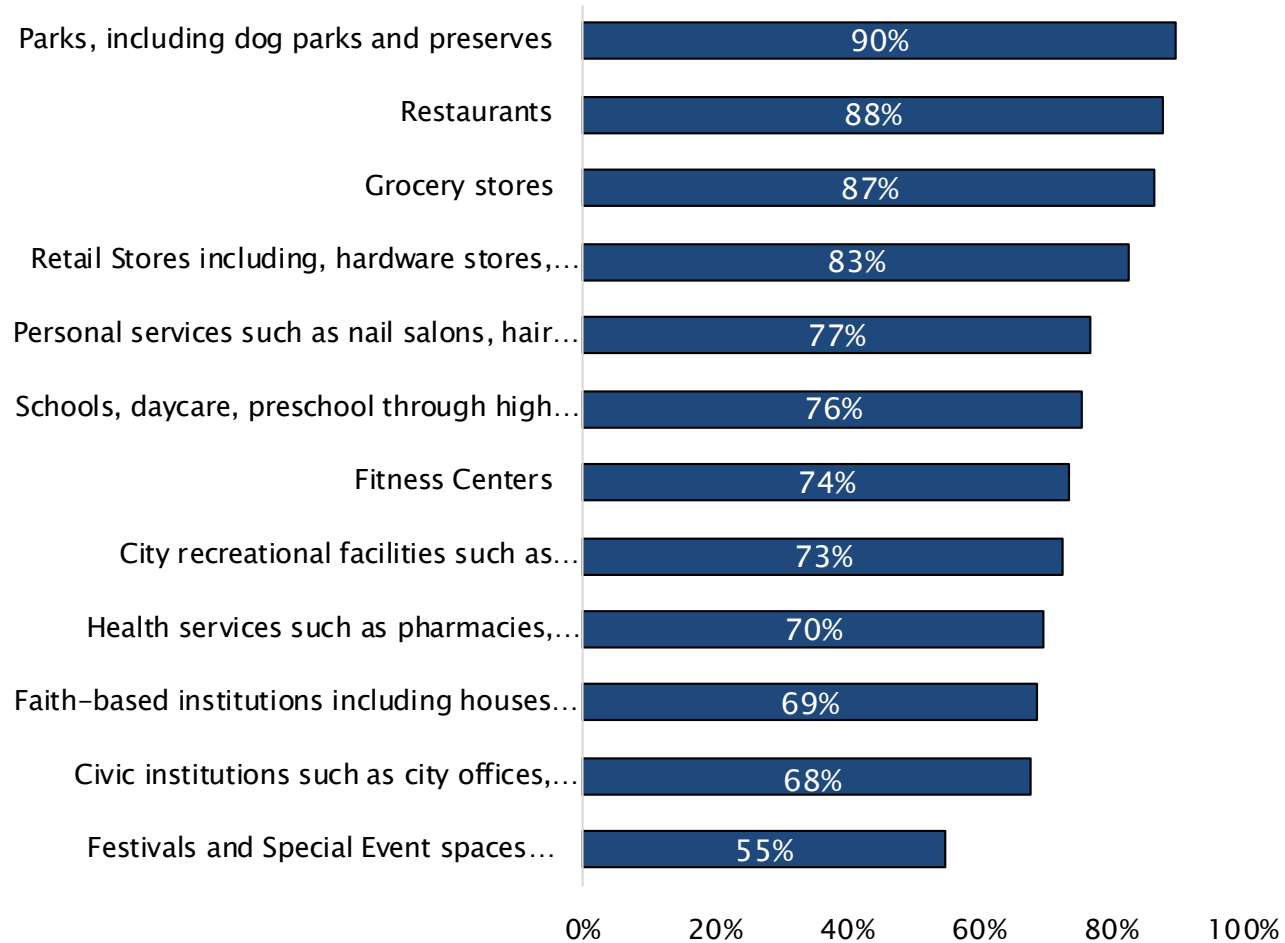
Importance of Proximity – Demographics

Locations	Total 5 – Very Important n=421	Gender		Annual Household Income		
		Male n=218 A	Female n=202 B	<\$40K n=98 C	\$40-\$80K n=121 D	\$80K+ n=159 E
Grocery stores	54%	44%	64% ^A	66% ^E	58% ^E	42%
Schools, daycare, preschool through high school, higher education institutions	39%	35%	43%	41%	43%	35%
Restaurants	36%	33%	39%	42%	33%	32%
Parks, including dog parks and preserves	35%	33%	38% ^T	36%	40%	35%
Retail Stores including, hardware stores, convenience stores, malls, and stand-alone stores	34%	29%	38%	45% ^E	35%	25%
Health services such as pharmacies, physicians, therapy, etc.	33%	26%	40% ^A	44% ^E	43% ^E	21%
Civic institutions such as city offices, fire and police stations	26%	20%	32% ^A	31%	27%	19%
Personal services such as nail salons, hair salons, banks, post offices, and cleaners	21%	19%	24%	24%	26% ^E	15%
City recreational facilities such as museums, libraries, community centers, etc.	21%	17%	24%	26%	26% ^E	15%
Fitness Centers	19%	16%	22%	25%	17%	20%
Faith-based institutions including houses of worship and faith-based services	16%	11%	20% ^A	15%	26% ^E	8%
Festivals and Special Event spaces and venues in Tempe	15%	12%	18%	22% ^E	16%	8%

Current Personal Proximity to Locations

Current NET Personal Proximity to Tempe Locations

% within 20 minutes by any mode



Q10: Now, please tell me if it takes you 20 minutes or less personally to travel to each of the following locations in Tempe either by walking, biking or taking public transit.

2020 n=421

Current Proximity - Demographics

Locations	Total within 20 min n=421	Age			Annual Household Income		
		18-34 n=161 A	35-54 n=139 B	55+ n=115 C	<\$40K n=101 D	\$40-\$80K n=121 E	\$80K+ n=156 F
Parks, including dog parks and preserves	90%	92% ^C	92% ^C	83%	85%	94% ^D	92%
Restaurants	88%	92% ^C	90% ^C	79%	86%	91%	88%
Grocery stores	87%	92% ^C	88%	80%	88%	93% ^F	84%
Retail Stores including, hardware stores, convenience stores, malls, and stand-alone stores	83%	90% ^C	85% ^C	69%	84%	86%	81%
Personal services such as nail salons, hair salons, banks, post offices, and cleaners	77%	83% ^C	76%	70%	76%	83%	78%
Schools, daycare, preschool through high school, higher education institutions	76%	81%	72%	74%	77%	78%	76%
Fitness Centers	74%	78%	73%	70%	70%	81% ^D	74%
City recreational facilities such as museums, libraries, community centers, etc.	73%	78%	71%	69%	73%	75%	76%
Health services such as pharmacies, physicians, therapy, etc.	70%	77% ^C	72% ^C	57%	69%	71%	68%
Faith-based institutions including houses of worship and faith-based services	69%	72%	70%	64%	66%	73%	68%
Civic institutions such as city offices, fire and police stations	68%	77% ^{BC}	63%	59%	70%	65%	70%
Festivals and Special Event spaces and venues in Tempe	55%	61% ^C	56%	45%	58%	54%	57%

Current Proximity by Mode

Proximity to Tempe Locations by Mode

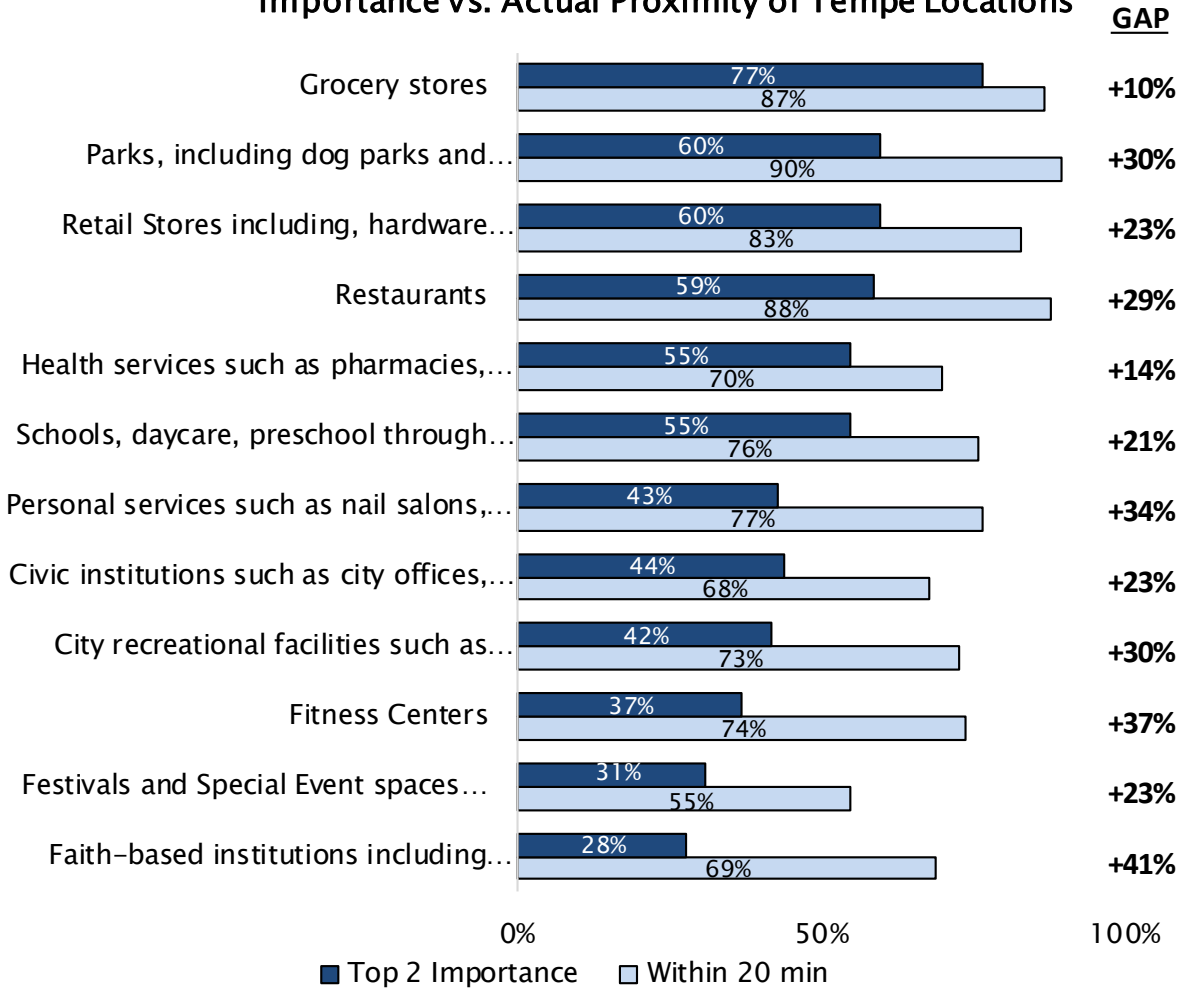


Q10: Now, please tell me if it takes you 20 minutes or less personally to travel to each of the following locations in Tempe either by walking, biking or taking public transit.

2020 n=421

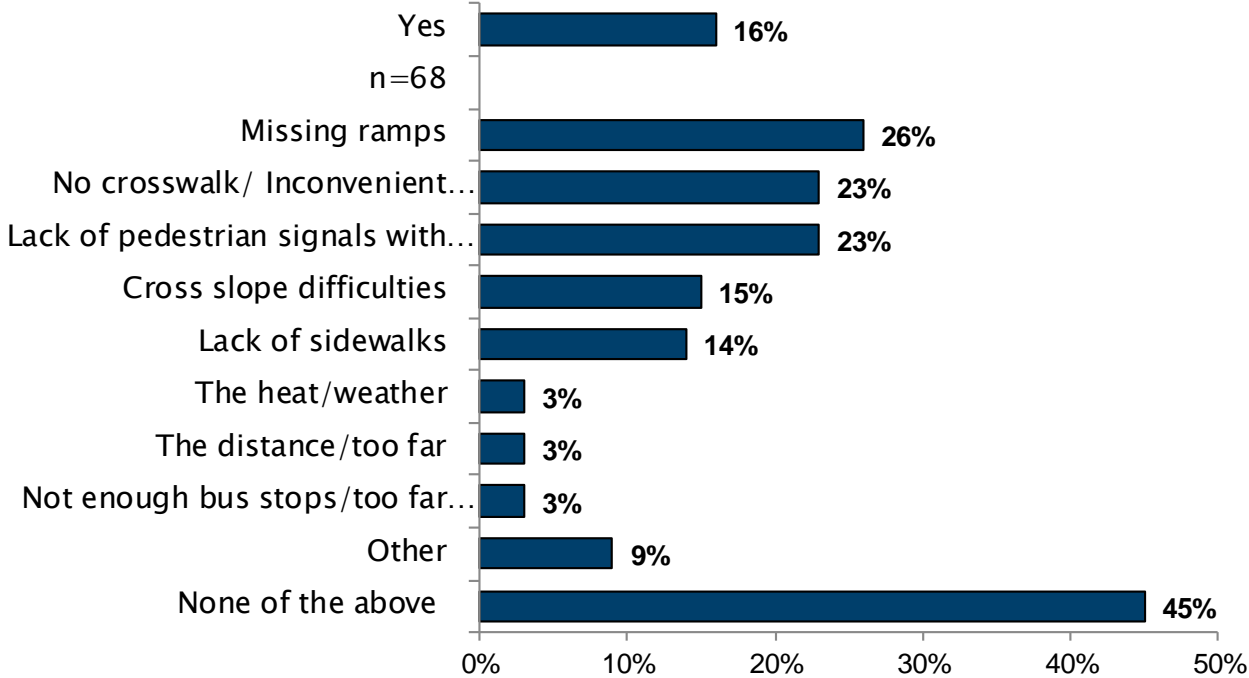
Gap: Importance vs. Current Proximity

Importance vs. Actual Proximity of Tempe Locations



Residents with Disabilities

Households with Disabilities and Their Barriers



Q11: Do you and/or other household members have a disability as defined by the American with Disabilities Act?

Q12: Which of the following are physical barriers that make it difficult or prevent you or a family member from reaching your destinations?

2020 n=421

Questions?

Kathy DeBoer
WestGroup Research
Kathy@westgroupresearch.com

City of Tempe 20 Minute Survey Report

Prepared For:



June 2020



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Executive Summary

The City of Tempe commissioned WestGroup Research to complete a multi-mode survey of Tempe residents in an effort to gain insights into the importance and current perceptions of being a “20-minute city.” This report analyzes the data collected by the survey and, where appropriate, compares responses of the residents by meaningful demographic variables. The data collection was completed with 421 Tempe residents between April 28 and May 30, 2020. The survey was completed with 421 Tempe residents via phone interviews and using online panels. The margin of error for this sample size is $\pm 4.8\%$ at a 95% confidence level.

Resident Usage of Transportation Services

- Nine in ten (90%) Tempe residents reported using pedestrian facilities such as sidewalks and paths in the City of Tempe in the past year. One-half used local or express bus service or light rail (50%) and/or bicycle facilities (50%) in the past year.

Importance vs. Access to Tempe Locations

- The most common factor selected by Tempe residents as impacting the choice of a location for their current home was having access to walking facilities and paths, which was reported by one-third of residents (36%).
 - Tempe residents living in 85281 were significantly more likely to have reported having access to walking facilities and paths as an important factor compared to those in the other three zip codes (47% vs. 20%-27%, respectively).
 - Residents who have lived in Tempe for less than 20 years were significantly more likely to report having access to public transit as an important factor compared to those living in Tempe for longer than 20 years (26% vs. 23% 20+ years). Similarly, younger residents were more likely than older residents to indicate that access to public transit was an important factor in their decision of where to live in Tempe (45% of those under age 35 vs. 16% of those age 55+).
- When residents were asked to rate the importance of being within 20 minutes of specific locations in Tempe by walking, biking or taking public transit, grocery stores were most frequently selected as a highly important destination (54% “very important” and 23% gave a “4” rating giving grocery stores the highest top-two rating of 77%).

- Roughly four in ten of residents rated being near schools/daycare (39%) as “very important”, while an additional one-third gave the same rating for being near restaurants (36%), parks/preserves (35%), retail stores (34%), and health services (33%).
 - Residents who reported having a household member with a disability were significantly more likely to report being within 20 minutes of more than half of these items as “very important” compared to those without disabilities.
- Next, residents were asked if they personally live within 20 minutes of each location either by walking, biking, or taking public transit. Nine in ten of Tempe residents reported being within 20 minutes of parks (90%), restaurants (88%), and grocery stores (87%) either by walking, biking or by public transit.
 - Residents living in 85283 were significantly more likely to report living within 20 minutes of personal services compared to residents in all other Tempe zip codes. Additionally, Tempe residents ages 18-34 were significantly more likely to report living within 20 minutes of eight of the twelve locations compared to residents ages 55 or older.
- A gap analysis was done on the importance of being within 20 minutes of each location vs. actually living within 20 minutes of each location. This was done by taking the percentage of people who reported being within 20 minutes of each location by walking, biking or public transit and subtracting the top-two importance percentage for that location.
 - All twelve locations have a positive gap, meaning there are more residents within 20 minutes of each location than there are those who indicated it is important to be within 20 minutes of each location.
 - Unsurprisingly, grocery stores, which has the highest importance percentage, had the smallest gap of +10.

American with Disabilities Act

- Nearly two in ten (16%) of Tempe residents reported having a household member with a disability as defined by the American with Disabilities Act.
 - Out of that group, roughly one-quarter listed missing ramps (26%), no crosswalks (23%), or lack of pedestrian signals (23%) as a physical barrier for their household member with a disability.

I. Introduction

A. Background

The City of Tempe commissioned WestGroup Research to complete a multi-mode survey of Tempe residents in an effort to gain insights into the importance and current perceptions of being a “20-minute city.” This report analyzes the data collected by the survey and, where appropriate, compares responses of the residents by meaningful demographic variables. The data collection was completed with 421 Tempe residents between April 28 and May 30, 2020.

Telephone calls with Tempe residents were made from WestGroup’s interviewing center in Phoenix, Arizona from April 28 and May 30, 2020. Households were randomly selected from both landline and cell phone sample according to Tempe zip codes. Additionally, residents who participate as online panel members (either in WestGroup’s internal panel or those participating in a national panel) were invited to complete the survey as well. Online panel members were specifically targeted to help build a representative sample among younger residents. A total of 345 residents participated by telephone and 76 via the online survey. Overall, a quota was set to achieve equal representation of men and women and the distributions by age and zip code were closely monitored to make sure a representative distribution was achieved. Weighting by gender and age was applied to bring the overall distributions in line with Census population attributes for Tempe.

The survey was completed with 421 Tempe residents. The margin of error for this sample size is $\pm 4.8\%$ 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=219 and $\pm 6.8\%$ for males, for example).

Based on a sample size of 421, **the overall sampling error for the total sample** (at the conventional 95% confidence level) is $\pm 4.8\%$. 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 ^A, ^B, and ^C). 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 96% in the first row of column A is significantly higher than the figures in column B (89%) and C (86%) at the 95% confidence level.

	Total n=421	Age		
		18-34 n=161 A	35-54 n=139 B	55+ n=115 C
Pedestrian facilities (e.g. sidewalks and paths)	91%	96% ^{BC}	89%	86%
Local or express bus service or light rail	51%	63% ^{BC}	47%	38%
Bicycle facilities (e.g. bike lanes and paths)	50%	57% ^C	48%	43%
Orbit or Flash neighborhood shuttles	29%	37% ^C	31% ^C	18%
None of the above	7%	2%	7%	11% ^A

C. Demographics

Slightly more than half of respondents interviewed were male (52%) and six in ten have lived in Tempe for more than ten years (60%). The average age was 44.2 years and the average household income was \$83,200. Roughly three in ten have children under the age of 18 at home while 16% reported having a disability as defined by the American with Disabilities Act. An overview of all respondent demographics follows in Table 1.

Table 1: Demographics

	Total n=421		Total n=421
Gender		Income	
Male	52%	<\$20,000	10%
Female	48%	\$20 - \$40,000	14%
		\$40 - \$60,000	13%
Years Lived in Tempe		\$60 - \$80,000	16%
<1 year	4%	\$80 - \$100,000	11%
1 – 2 years	8%	\$100 - \$150,000	13%
3 – 5 years	14%	\$150,000+	14%
6 – 10 years	13%	Refused	10%
11 – 20 years	23%	Average Income	\$83,200
20+ years	37%	Children at home <18	28%
Age		Ethnicity	
18 – 34	38%	Caucasian/White	71%
35 – 54	33%	Latino/Hispanic	13%
55+	28%	Asian	6%
Average Age	44.2	African American/Black	3%
Education		Other	6%
Some high school	2%	Refused	2%
High school graduate	9%	Zip Code	
Some college	25%	85281	25%
College graduate	36%	85282	35%
Post graduate	27%	85283	26%
Refused	1%	85284	14%
HH Member w/ Disability	16%		

II. Resident Usage of Transportation Services

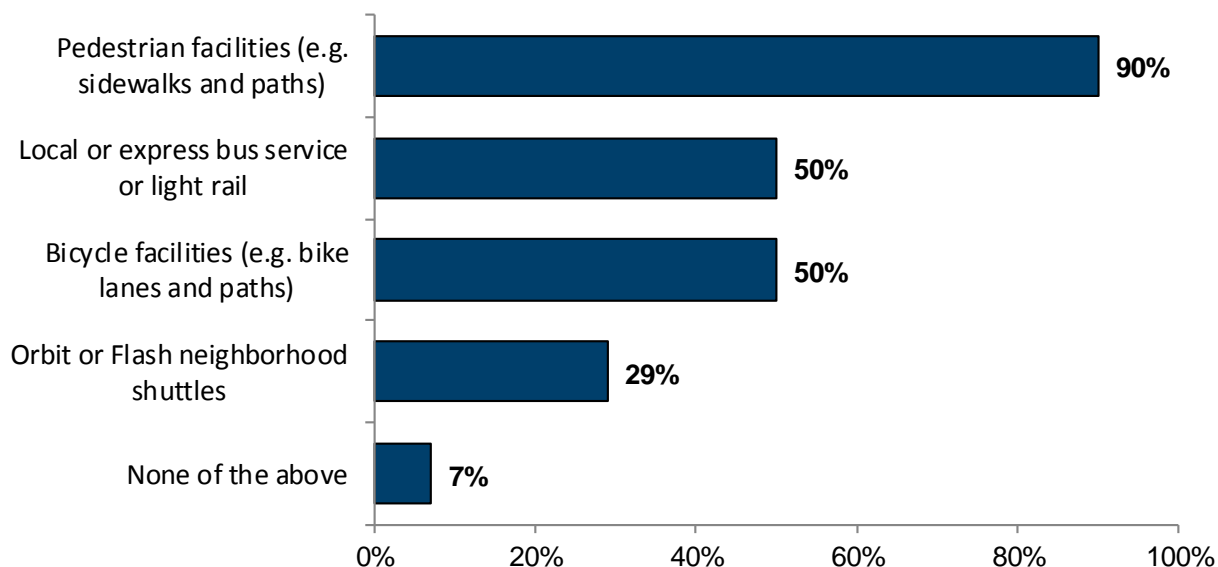
Nine in ten (90%) Tempe residents reported using *pedestrian facilities such as sidewalks and paths* in the City of Tempe in the past year. One-half used *local or express bus service or light rail* (50%) and/or *bicycle facilities* (50%) in the past year. In addition, nearly three in ten (29%) rode Orbit or Flash neighborhood shuttles over the past year. Of note, 7% reported they had not used any of these transportation services within the last year.

Residents living in 85281 were significantly more likely to report using *local or express bus service or light rail* (66%) and *orbit or flash neighborhood shuttles* (46%) compared to the other three Tempe zip codes. These residents were also much more likely to report using *pedestrian facilities* compared to those living in 85282, while residents in 85284 were the least likely to report using the *Orbit or Flash neighborhood shuttles*.

Findings based on household incomes:

- Residents with incomes less than \$80K were much more likely to report using the *Orbit or Flash neighborhood shuttles* in the past year compared to those with higher incomes (35% vs. 20% \$80K+).
- Residents with incomes of \$80K or more were significantly more likely than those with incomes less than \$40K to report using *pedestrian facilities* (96% vs. 87% <\$40K).

Usage of Transportation Services in Past 12 Months



Q8: Have you used any of the following services or facilities in Tempe in the past year?
2020 n=421

Table 2: Usage of Transportation Services in Past 12 Months by Zip Code

	Total n=421	Zip Code			
		85281 n=105 A	85282 n=146 B	85283 n=109 C	85284 n=62 D
Pedestrian facilities (e.g. sidewalks and paths)	90%	94% ^B	87%	92%	92%
Local or express bus service or light rail	50%	66% ^{BCD}	47%	48%	34%
Bicycle facilities (e.g. bike lanes and paths)	50%	52%	44%	55%	53%
Orbit or Flash neighborhood shuttles	29%	46% ^{BCD}	31% ^D	25% ^D	2%
None of the above	7%	3%	9% ^A	6%	8%

Q8: Have you used any of the following services or facilities in Tempe in the past year?

Tempe residents under the age of 35 were significantly more likely to report using all four types of transportation services compared to older residents. Conversely, those ages 55 and older were more likely to state they haven’t used any of the listed services over the past year (12% vs. 7% and 3%).

Additionally, non-white residents were more likely to report using the *bus service or light rail* and the *Orbit or Flash neighborhood shuttles* compared to white residents (62% vs. 45% bus/light rail; 39% vs. 25% Orbit/Flash).

Table 3: Usage of Transportation Services in Past 12 Months by Demographics

	Total n=421	Age			Ethnicity	
		18-34 n=158 A	35-54 n=137 B	55+ n=120 C	White n=299 D	All Others n=122 E
Pedestrian facilities (e.g. sidewalks and paths)	91%	95% ^{BC}	90%	85%	93%	85%
Local or express bus service or light rail	51%	62% ^{BC}	47%	38%	45%	62% ^D
Bicycle facilities (e.g. bike lanes and paths)	50%	57% ^C	49%	43%	51%	48%
Orbit or Flash neighborhood shuttles	29%	37% ^C	31% ^C	18%	25%	39% ^D
None of the above	7%	2%	7%	11% ^A	6%	7%

Q8: Have you used any of the following services or facilities in Tempe in the past year?

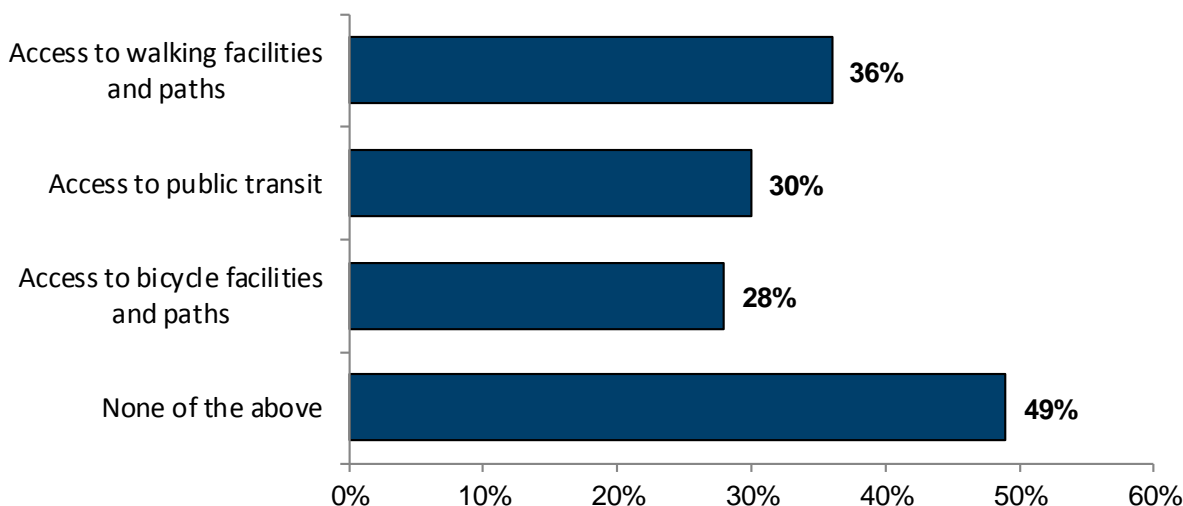
III. Importance vs. Access to Tempe Locations

A. Factors Impacting Choice of Current Residential Location

The most common factor selected by Tempe residents as impacting the choice of a location for their current home was having *access to walking facilities and paths*, which was reported by one-third of residents (36%). Another three in ten reported that *access to public transit* (30%) and *access to bicycle facilities and paths* (28%) were important factors in choosing their location. However, nearly one-half of Tempe residents said that none of these were important factors for their decision to live in their current location (49%).

Tempe residents living in 85281 were significantly more likely to have reported having *access to walking facilities and paths* as an important factor compared to those in the other three zip codes (47% vs. 20%-27% respectively). Those in 85283 were also more likely to regard having *access to bicycle facilities and paths* as an important factor compared to residents in 85282 and 85284. Notably, residents living in 85282 and 85284 were much more likely to indicate none of the factors were important compared to those living in 85281 and 85283.

Factors in Choosing Current Residence



Q7: Please indicate if any of the following were an important factor in choosing the location where you currently live in Tempe. Select all that apply.
2020 n=421

Table 4: Factors in Choosing Current Residence by Demographics

	Total n=421	Zip Code			
		85281 n=105 A	85282 n=146 B	85283 n=109 C	85284 n=62 D
Access to public transit	31%	47% ^{BCD}	27%	24%	21%
Access to bicycle facilities and paths	28%	27%	23%	39% ^{BD}	21%
Access to walking facilities and paths	36%	42% ^B	27%	41% ^B	35%
None of the above	49%	37%	58% ^{AC}	45%	54% ^A

Q7: Please indicate if any of the following were an important factor in choosing the location where you currently live in Tempe. Select all that apply.

Tempe residents ages 18-34 were significantly more likely than older residents to select having *access to public transit* (45% vs. 22% age 35+) and/or *access to walking facilities/paths* as an important factor compared to older residents (43% vs. 31% ages 35-54).

Interestingly, residents who have lived in Tempe for less than 20 years were significantly more likely to report having *access to public transit* as an important factor compared to those living in Tempe for longer than 20 years (26% vs. 23% 20+ years). The reverse is also true where residents living in Tempe for longer than 20 years were more likely to state none of the items were important factors compared those living in Tempe for less than 20 years (61% vs. 42% <20 years).

Table 5: Factors in Choosing Current Residence by Demographics

	Total n=421	Age			Years in Tempe		
		18-34 n=158 A	35-54 n=137 B	55+ n=120 C	1-5 n=113 D	6-20 n=154 E	20+ n=153 F
Access to public transit	30%	45% ^{BC}	28% ^C	16%	40% ^F	32% ^F	21%
Access to bicycle facilities and paths	28%	33%	26%	23%	27%	30%	27%
Access to walking facilities and paths	36%	43% ^B	31%	33%	40%	37%	31%
None of the above	49%	34%	55% ^A	59% ^A	37%	45%	61% ^{DE}

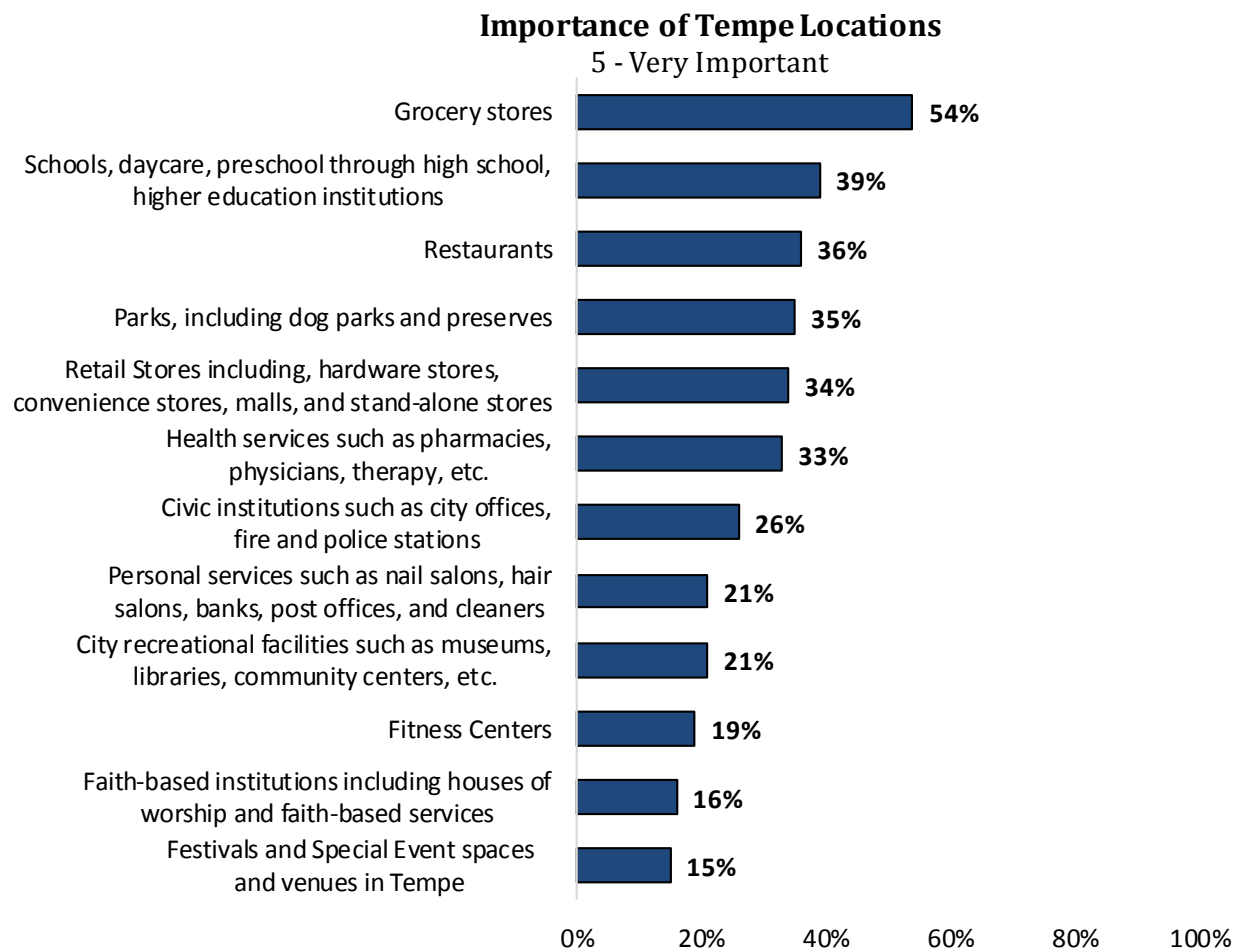
Q7: Please indicate if any of the following were an important factor in choosing the location where you currently live in Tempe. Select all that apply.

B. Importance of Proximity to Tempe Locations

Residents were asked to rate the importance of being within 20 minutes of specific locations in Tempe by walking, biking or taking public transit.

Grocery stores were most frequently selected as a highly important destination to have within 20 minutes by walking, biking or public transit (54% “very important and 23% gave a “4” rating giving grocery stores the highest top-two rating of 77%).

Roughly four in ten residents rated being near *schools/daycare* (39%) as “very important”, while an additional one-third gave the highest importance rating for being near *restaurants* (36%), *parks/preserves* (35%), *retail stores* (34%), and *health services* (33%). Fewer than one in five residents rated being near *fitness centers* (19%), *faith-based institutions* (16%) and *festival/special event spaces* (15%) as “very important”.



Q9: For each of the following locations, please rate how important it is to you that you or your family members are within 20 minutes of that location by walking, biking or by taking public transit using a 1 to 5 scale where a “1” means “not at all important” and a 5 means “very important”.

2020 n=421

Table 6: Importance of Close Proximity to Tempe Locations

Locations	Total Top 2 n=421	5 – Very Important	4	3	2	1 – Not at all Important
Grocery stores	77%	54%	23%	10%	5%	8%
Parks, including dog parks and preserves	60%	35%	25%	16%	10%	13%
Retail Stores including, hardware stores, convenience stores, malls, and stand-alone stores	60%	34%	26%	22%	7%	11%
Restaurants	59%	36%	23%	22%	7%	11%
Health services such as pharmacies, physicians, therapy, etc.	55%	33%	22%	22%	10%	13%
Schools, daycare, preschool through high school, higher education institutions	55%	39%	16%	9%	10%	26%
Civic institutions such as city offices, fire and police stations	44%	26%	18%	22%	14%	20%
Personal services such as nail salons, hair salons, banks, post offices, and cleaners	43%	21%	22%	29%	12%	15%
City recreational facilities such as museums, libraries, community centers, etc.	42%	21%	21%	28%	13%	16%
Fitness Centers	37%	19%	18%	22%	13%	27%
Festivals and Special Event spaces and venues in Tempe	31%	15%	16%	32%	16%	20%
Faith-based institutions including houses of worship and faith-based services	28%	16%	12%	18%	14%	39%

Tempe residents in 85281 were significantly more likely to rate living within 20 minutes of restaurants as “very important” compared to those living in 85284. Additionally, those residing in 85283 were significantly more likely to report living near retail stores as “very important” compared to residents in 85281 and 85284.

Table 7: Importance of Close Proximity to Tempe Locations by Zip Code

Locations	Total 5 – Very Important n=421	Zip Code			
		85281 n=105 A	85282 n=146 B	85283 n=109 C	85284 n=62 D
Grocery stores	54%	53%	57%	56%	44%
Schools, daycare, preschool through high school, higher education institutions	39%	36%	40%	43%	37%
Restaurants	36%	44% ^D	34%	37%	25%
Parks, including dog parks and preserves	35%	37%	36%	39%	25%
Retail Stores including, hardware stores, convenience stores, malls, and stand-alone stores	34%	29%	34%	41% ^{AD}	26%
Health services such as pharmacies, physicians, therapy, etc.	33%	35%	34%	36%	25%
Civic institutions such as city offices, fire and police stations	26%	21%	24%	31%	26%
Personal services such as nail salons, hair salons, banks, post offices, and cleaners	21%	17%	22%	25%	20%
City recreational facilities such as museums, libraries, community centers, etc.	21%	24%	20%	20%	18%
Fitness Centers	19%	18%	19%	23%	15%
Faith-based institutions including houses of worship and faith-based services	16%	12%	17%	19%	13%
Festivals and Special Event spaces and venues in Tempe	15%	19%	15%	14%	10%

Females and residents with incomes lower than \$80K were significantly more likely to rate being within 20 minutes of *grocery stores* and *health services* as “very important” compared to males and those with higher incomes. Females were also more likely than males to feel it “very important” to be close to *civic institutions* and *faith-based institutions*.

Table 8: Importance of Close Proximity to Tempe Locations by Demographics

Locations	Total 5 – Very Important n=421	Gender		Annual Household Income		
		Male n=218 A	Female n=202 B	<\$40K n=98 C	\$40-\$80K n=121 D	\$80K+ n=159 E
Grocery stores	54%	44%	64% ^A	66% ^E	58% ^E	42%
Schools, daycare, preschool through high school, higher education institutions	39%	35%	43%	41%	43%	35%
Restaurants	36%	33%	39%	42%	33%	32%
Parks, including dog parks and preserves	35%	33%	38%	36%	40%	35%
Retail Stores including, hardware stores, convenience stores, malls, and stand-alone stores	34%	29%	38%	45% ^E	35%	25%
Health services such as pharmacies, physicians, therapy, etc.	33%	26%	40% ^A	44% ^E	43% ^E	21%
Civic institutions such as city offices, fire and police stations	26%	20%	32% ^A	31%	27%	19%
Personal services such as nail salons, hair salons, banks, post offices, and cleaners	21%	19%	24%	24%	26% ^E	15%
City recreational facilities such as museums, libraries, community centers, etc.	21%	17%	24%	26%	26% ^E	15%
Fitness Centers	19%	16%	22%	25%	17%	20%
Faith-based institutions including houses of worship and faith-based services	16%	11%	20% ^A	15%	26% ^E	8%
Festivals and Special Event spaces and venues in Tempe	15%	12%	18%	22% ^E	16%	8%

Residents who reported having a household member with a disability were more likely than those without disabilities present in their family to feel it is “very important” to be within 20 minutes of all locations except for fitness centers . Of note, the following locations were significantly more likely to be named as “very important” -- grocery stores, retail stores, civic institutions, personal services, city recreational facilities, faith-based institutions and festival/special event spaces.

Being within 20 minutes of *schools/daycares, health services, personal services, city recreational facilities, and faith-based institutions* was significantly more likely to be “very important” to minority residents.

Table 9: Importance of Close Proximity to Tempe Locations by Demographics (2)

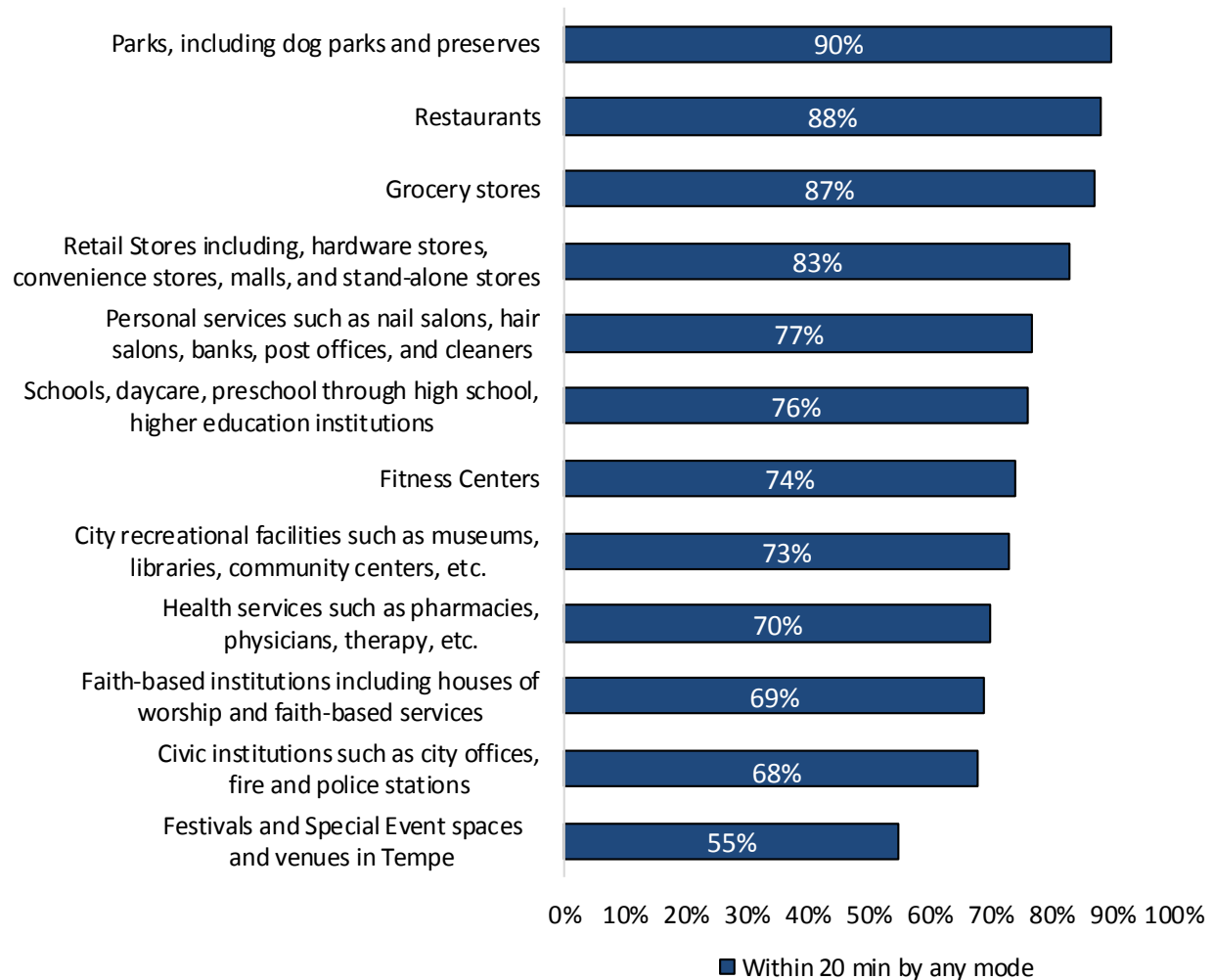
Locations	Total 5 – Very Important n=421	Ethnicity		Disability	
		White n=299 A	Others n=122 B	Yes n=66 C	No n=355 D
Grocery stores	54%	53%	60%	66% ^D	52%
Schools, daycare, preschool through high school, higher education institutions	39%	34%	52% ^A	49%	37%
Restaurants	36%	35%	38%	40%	35%
Parks, including dog parks and preserves	35%	33%	40%	43%	34%
Retail Stores including, hardware stores, convenience stores, malls, and stand-alone stores	34%	31%	41%	49% ^D	31%
Health services such as pharmacies, physicians, therapy, etc.	33%	28%	44% ^A	44%	31%
Civic institutions such as city offices, fire and police stations	26%	23%	31%	45% ^D	22%
Personal services such as nail salons, hair salons, banks, post offices, and cleaners	21%	18%	29% ^A	33% ^D	19%
City recreational facilities such as museums, libraries, community centers, etc.	21%	17%	29% ^A	33% ^D	18%
Fitness Centers	19%	16%	25%	17%	19%
Faith-based institutions including houses of worship and faith-based services	16%	12%	24% ^A	27% ^D	13%
Festivals and Special Event spaces and venues in Tempe	15%	14%	18%	27% ^D	13%

C. Current Personal Proximity to Tempe Locations

Next, residents were asked if they personally live within 20 minutes of each location either by walking, biking, or taking public transit.

Nine in ten Tempe residents reported being within 20 minutes of **parks (90%), restaurants (88%), and grocery stores (87%)** either by walking, biking or taking public transit. Another eight in ten reported being within 20 minutes of **retail stores (83%)** and **personal services such as nail and hair salons (77%)**. Tempe residents reported having the least proximity to **festival/special event venues** with only one-half being within 20 minutes of one (55%).

Current NET Personal Proximity to Tempe Locations



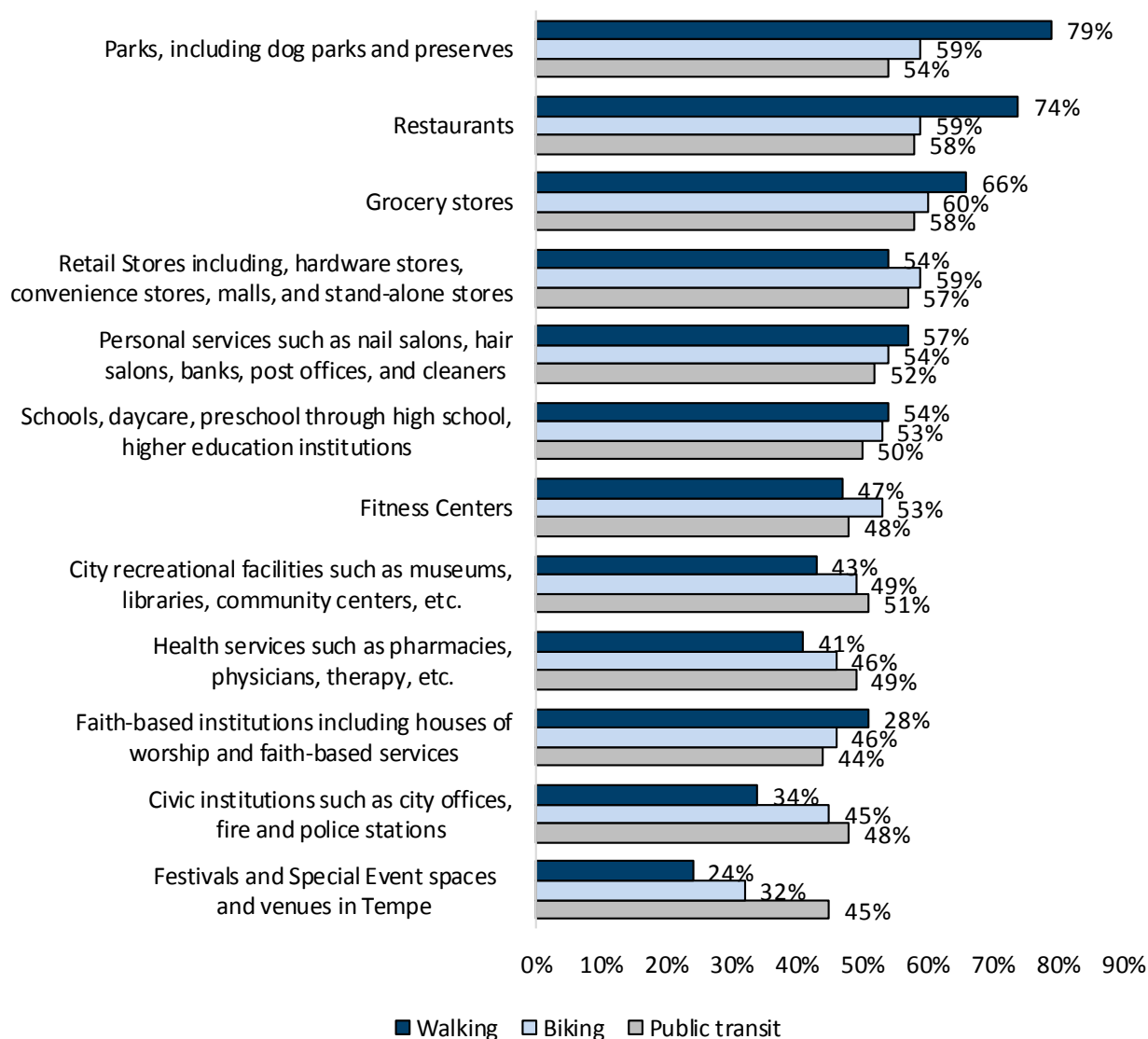
Q10: Now, please tell me if it takes you 20 minutes or less personally to travel to each of the following locations in Tempe either by walking, biking or taking public transit.
2020 n=421

Tempe residents were most likely to report living within 20 minutes of *parks* (79%) and *restaurants* (74%) by walking.

Approximately, six in ten residents can reach *restaurants, grocery stores, and retail stores* in 20 minutes by biking or by taking transit (57% to 60%). While six in ten (59%) can also walk to a park in 20-minutes, slightly fewer (54%) can take public transit to a park within that time.

Festival/special event venues were the least likely to be in 20-minute proximity among all three modes of travel (public transit 45%, biking 32%, and walking 24%).

Types of Close Proximity to Tempe Locations



Q10: Now, please tell me if it takes you 20 minutes or less personally to travel to each of the following locations in Tempe either by walking, biking or taking public transit.

2020 n=421

Residents living in 85283 were significantly more likely to report living within 20 minutes of *personal services* compared to residents in all other Tempe zip codes. Residents in 85281 and 85282 were much more likely to report being near *festivals and special event spaces* compared to those living in 85283 and 85284.

Lastly, residents in 85284 the least likely of all Tempe zip codes to report living within 20 minutes of seven of the twelve listed locations.

**Table 10: Close Proximity to Tempe Locations
NET % within 20 minutes of each location**

Locations	Total n=421	Zip Code			
		85281 n=105 A	85282 n=146 B	85283 n=109 C	85284 n=62 D
Parks, including dog parks and preserves	90%	92%	86%	95% ^B	86%
Restaurants	88%	89%	85%	92%	83%
Grocery stores	87%	87%	89%	91%	80%
Retail Stores including, hardware stores, convenience stores, malls, and stand-alone stores	83%	85% ^D	80%	91% ^{BD}	71%
Personal services such as nail salons, hair salons, banks, post offices, and cleaners	77%	69%	76%	90% ^{ABD}	71%
Schools, daycare, preschool through high school, higher education institutions	76%	78%	73%	79%	74%
Fitness Centers	74%	76%	70%	76%	77%
City recreational facilities such as museums, libraries, community centers, etc.	73%	79% ^D	73% ^D	78% ^D	58%
Health services such as pharmacies, physicians, therapy, etc.	70%	69%	66%	80% ^{BD}	62%
Faith-based institutions including houses of worship and faith-based services	69%	66%	69%	75%	67%
Civic institutions such as city offices, fire and police stations	68%	76%	65%	65%	62%
Festivals and Special Event spaces and venues in Tempe	55%	75% ^{BCD}	57% ^{CD}	44%	37%

Findings by ethnicity:

- White residents were more likely to report being with 20 minutes of *restaurants* and *schools* by walking only (77% vs. 67% non-white)
- Non-white residents were significantly more likely to be within 20 minutes of *retail stores* by all modes combined (91% vs. 79% white)

Residents who reported having a disability in their household were significantly LESS likely to report being within 20 minutes of the following locations:

- Ten out of twelve listed locations by bicycle (all excluding *parks* and *civic institutions*)
- Three out of twelve destinations by public transit (*restaurants, faith-based institutions, and personal services*)
- *Fitness centers* by any means of travel combined (59% vs. 77% no disability)

Lastly, as shown in the table below, Tempe residents ages 18-34 were significantly more likely than residents 55 and older to report living within 20 minutes of eight of the twelve locations.

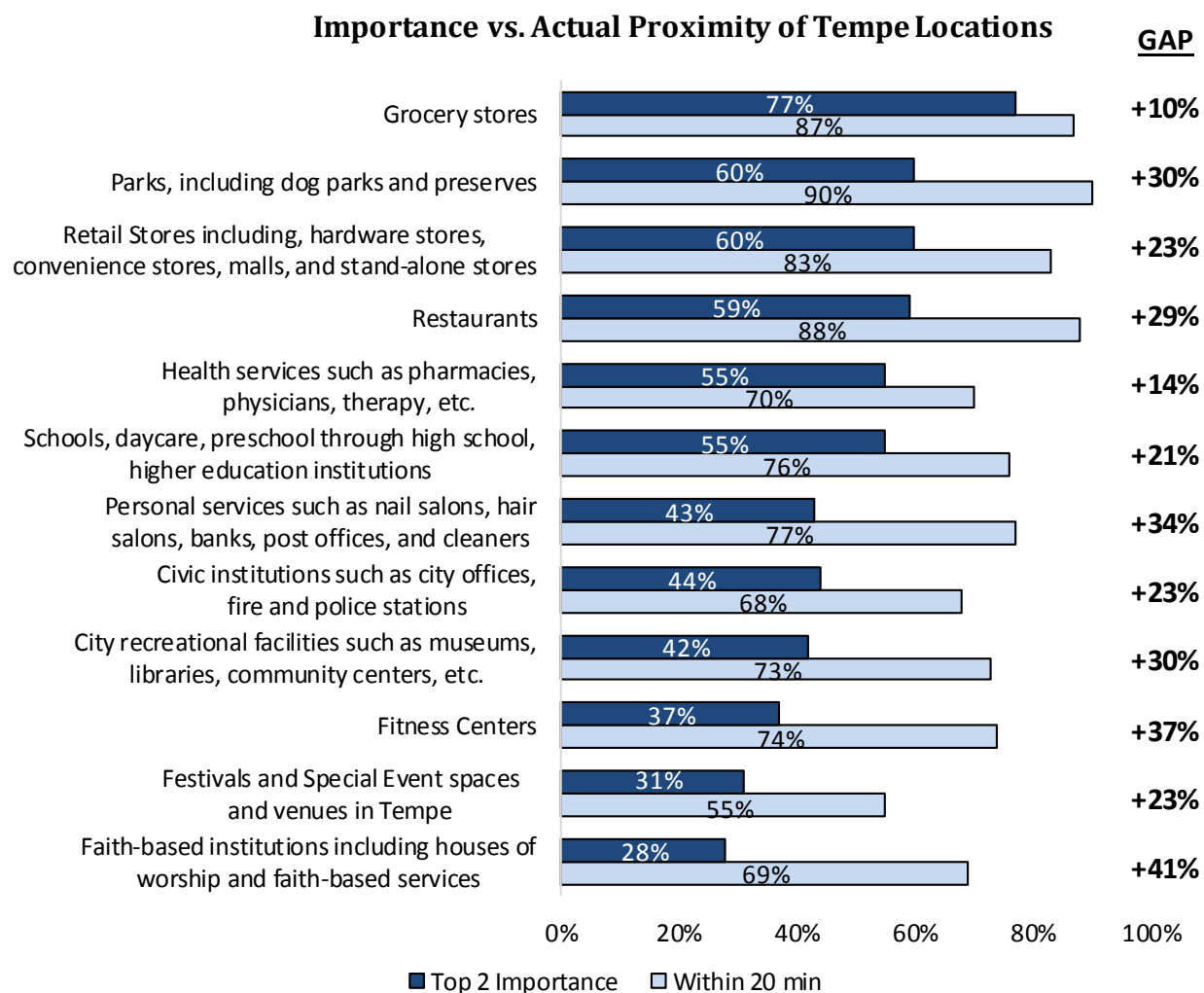
Table 11: Close Proximity to Tempe Locations by Demographics
NET % within 20 minutes of each location

Locations	Total within 20 min n=421	Age			Annual Household Income		
		18-34 n=161 A	35-54 n=139 B	55+ n=115 C	<\$40K n=101 D	\$40-\$80K n=121 E	\$80K+ n=156 F
Parks, including dog parks and preserves	90%	92% ^C	92% ^C	83%	85%	94% ^D	92%
Restaurants	88%	92% ^C	90% ^C	79%	86%	91%	88%
Grocery stores	87%	92% ^C	88%	80%	88%	93% ^F	84%
Retail Stores including, hardware stores, convenience stores, malls, and stand-alone stores	83%	90% ^C	85% ^C	69%	84%	86%	81%
Personal services such as nail salons, hair salons, banks, post offices, and cleaners	77%	83% ^C	76%	70%	76%	83%	78%
Schools, daycare, preschool through high school, higher education institutions	76%	81%	72%	74%	77%	78%	76%
Fitness Centers	74%	78%	73%	70%	70%	81% ^D	74%
City recreational facilities such as museums, libraries, community centers, etc.	73%	78%	71%	69%	73%	75%	76%
Health services such as pharmacies, physicians, therapy, etc.	70%	77% ^C	72% ^C	57%	69%	71%	68%
Faith-based institutions including houses of worship and faith-based services	69%	72%	70%	64%	66%	73%	68%
Civic institutions such as city offices, fire and police stations	68%	77% ^{BC}	63%	59%	70%	65%	70%
Festivals and Special Event spaces and venues in Tempe	55%	61% ^C	56%	45%	58%	54%	57%

D. Importance vs. Access Gap Analysis

A gap analysis was done on the importance of being within 20 minutes of each location vs. actually living within 20 minutes of each location. This was done by taking the percentage of people who reported being within 20 minutes of each location by walking, biking or public transit and subtracting the top-two importance percentage for that location. Therefore, a positive gap means there is a higher percentage of people within 20 minutes of the location than the percent of people who feel it is important to be within 20 minutes that location.

All twelve locations have a positive gap, meaning there are more residents within 20 minutes of each location than there are those who indicated it is important to be within 20 minutes of each location. Unsurprisingly, grocery stores, which has the highest importance percentage, had the smallest gap of +10. Reversely, faith-based institutions, the location with the lowest importance percentage, has the largest gap of +41 meaning 41% of people live near this location, but don't feel it is important to be within 20 minutes of it.

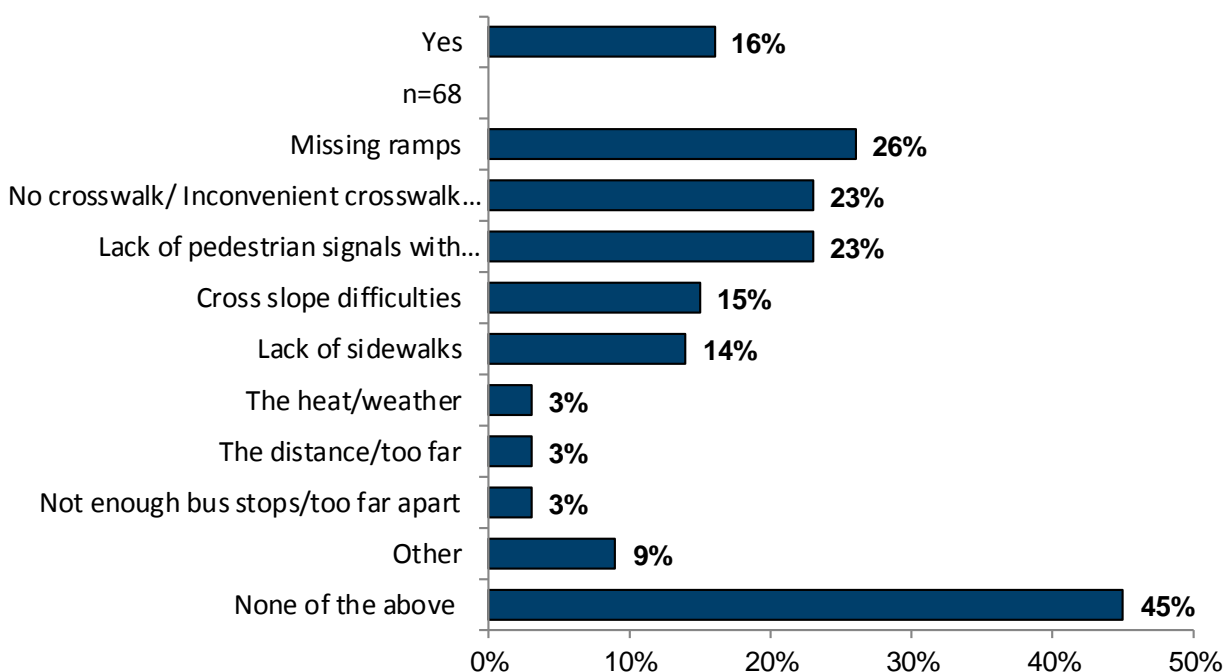


IV. Households with Disabilities and Physical Barriers

Nearly two in ten (16%) Tempe residents reported having a household member with a disability as defined by the American with Disabilities Act. Out of that group, roughly one-quarter listed *missing ramps* (26%), *no crosswalks* (24%), or *lack of pedestrian signals* (24%) as a physical barrier for their household member with a disability. Almost one-half of those with a household member with a disability reported having no physical barriers (44%).

Residents living in 85284 were much more likely to report *missing ramps* as a physical barrier compared to those in 85281 and also more likely to report no crosswalks compared to those in other zip codes. Additionally, those in 85281 or 85282 were significantly more likely to report having no physical barriers for their household member with a disability compared to residents living in 85284.

Households with Disabilities and Their Barriers



Q11: Do you and/or other household members have a disability as defined by the American with Disabilities Act?

Q12: Which of the following are physical barriers that make it difficult or prevent you or a family member from reaching your destinations?

2020 n=421

Table 12: Households with Disabilities by Demographics

	Total n=421	Zip Code			
		85281 n=106 A	85282 n=146 B	85283 n=110 C	85284 n=59 D
Yes	16% <i>n=66</i>	17% <i>n=18</i>	15% <i>n=22</i>	17% <i>n=19</i>	11% <i>n=7</i>
Missing ramps	26%	12%	33%	19%	57% ^A
No crosswalk/ Inconvenient crosswalk distances or locations	23%	10%	24%	25%	43%
Lack of pedestrian signals with accessible push button	23%	23%	12%	35%	30%
Cross slope difficulties	15%	-	16%	19%	43%
Lack of sidewalks	14%	5%	16%	20%	16%
The heat/weather	3%	11%	-	-	-
The distance/too far	3%	5%	5%	-	-
Not enough bus stops/too far apart	3%	10%	-	-	-
Other	9%	-	8%	20%	-
None of the above	45%	51% ^D	50% ^D	46%	14%

APPENDIX A: Questionnaire

**City of Tempe – 20-Minute City Survey
2020 Questionnaire**

Sample: 85281, 85282, 85283, 85284 = 400 – Representative quotas by zip code

Quotas: Males/Females 50/50

Age distribution will be monitored along with representativeness of ethnicity

Good _____, This is _____ calling from WestGroup Research on behalf of the City of Tempe. We are conducting a survey with residents about their experiences living in Tempe. 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. Gender:

a. Male

b. Female

4. What is your age? OPEN-TEXT BOX

5. Which of the following best describes your race or ethnic background?

Select all that apply.

a. Caucasian/White

b. African American/Black

c. Latino/Hispanic

d. Asian

e. Other (Specify)

f. Prefer not to Answer

6. How long have you lived in Tempe?

a. Less than 1 year

b. 1 to 2 years

c. 3 to 5 years

d. 6 to 10 years

e. 11 to 20 years

f. More than 20 years

g. Prefer not to answer

- 7 Please indicate if any of the following were an important factor in choosing the location where you currently live in Tempe.

Select all that apply.

- a. Access to public transit
 - b. Access to bicycle facilities and paths
 - c. Access to walking facilities and paths
 - d. None of the above
8. Have you used any of the following services or facilities in Tempe in the past year?
Yes/No TO EACH - ROTATE LIST
- a. Local or express bus service or light rail
 - b. Orbit or Flash neighborhood shuttles
 - d. Pedestrian facilities (e.g. sidewalks and paths)
 - e. Bicycle facilities (e.g. bike lanes and paths)

The next few questions are to understand how accessible various locations in Tempe are to you. We are interested in understanding what is within 20 minutes of where you live and what locations are further away.

For reference, 20 minutes in distance is approximately equal to how long it would take the average person to walk 1 mile, bike 4 miles, or use public transit to travel 6 miles. Please keep these distances in mind as you answer the following questions.

9. For each of the following locations, please rate how important it is to you that you or your family members are within 20 minutes of that location by walking, biking or by taking public transit using a 1 to 5 scale where a “1” means “not at all important” and a 5 means “very important”.

(Remind the respondent that the questions only apply to transit, bike, walk trips and does not apply to driving or taxi ride or Uber or Lyft trips or dial-a-ride trips)

(READ IF NEEDED - 20 minutes in distance is approximately equal to how long it would take the average person to walk 1 mile, bike 4 miles, or use public transit to travel 6 miles).

ROTATE LIST

- a. Grocery stores
- b. Restaurants
- c. Fitness Centers
- d. Parks, including dog parks and preserves
- e. Festivals and Special Event spaces and venues in Tempe
- f. Retail Stores including, hardware stores, convenience stores, malls, and stand-alone stores
- g. Schools, daycare, preschool through high school, higher education institutions
- h. Health services such as pharmacies, physicians, therapy, etc.
- i. City recreational facilities such as museums, libraries, community centers, etc.

- j. Faith-based institutions including houses of worship and faith-based services
- k. Civic institutions such as city offices, fire and police stations
- l. Personal services such as nail salons, hair salons, banks, post offices, and cleaners

10. Now, please tell me if it takes you 20 minutes or less personally to travel to each of the following locations in Tempe either by walking, biking or taking public transit.

Does it take you 20 minutes or less to travel to...[LOCATION]? IF YES - Are you within 20 minutes of walking, biking AND/OR public transit?

INTERVIEWER NOTE: If respondent says "no", check no and move on to next location, DO NOT clarify biking/walking/transit.

(Remind the respondent that the questions only apply to transit, bike, or walk trips and does not apply to driving or taxi ride or Uber or Lyft trips or dial-a-ride trips)

RESPONSES FOR EACH LOCATION: Yes, within 20 min walking/Yes, within 20 min bicycling/Yes, within 20 min transit/No(mutually exclusive)/Don't know(mutually exclusive)

ROTATE LIST

- a. Grocery stores
- b. Restaurants
- c. Fitness Centers
- d. Parks
- e. Festivals and Special Event spaces and venues
- f. Retail Stores
- g. Schools
- h. Health services such as pharmacies, physicians, therapy, etc.
- i. City and recreational facilities
- j. Faith-based institutions
- k. Civic institutions
- l. Personal services such as nail salons, hair salons, massages, etc.

American with Disabilities Act.--

11. Do you and/or other household members have a disability as defined by the American with Disabilities Act?

- a. Yes
- b. No

12. IF YES IN Q11: Which of the following are physical barriers that make it difficult or prevent you or a family member from reaching your destinations?

Select all that apply.

- a. Lack of sidewalks
- b. No crosswalk/ Inconvenient crosswalk distances or locations
- c. Missing ramps
- d. Cross slope difficulties
- e. Lack of pedestrian signals with accessible push button
- f. Something else I have not mentioned? _____
- g. None of the above (mutually exclusive)

13. IF ANY SELECTED IN Q12: What specific locations of those barriers come to mind?

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. To assist the City with understanding where you live in Tempe, could you please provide the major cross streets that are closest to where you live?

_____ and _____

IF R DOES NOT WANT TO GIVE CROSS STREETS: Could you give me the name of a major landmark that is near your home?

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. Prefer not to answer

D3. Do you have children under the age of 18 living in your home?

- a. Yes
- b. No

D4. Was your annual household income before taxes last year...

- a. Less than \$20,000
- b. \$20,000 to \$39,999
- c. \$40,000 to \$59,999
- d. \$60,000 to \$79,999
- e. \$80,000 to \$99,999
- f. \$100,000 to \$150,000
- f. More than \$150,000
- g. Prefer not to answer

Thanks for your time. That concludes our interview.



City of Tempe Transportation Satisfaction Survey

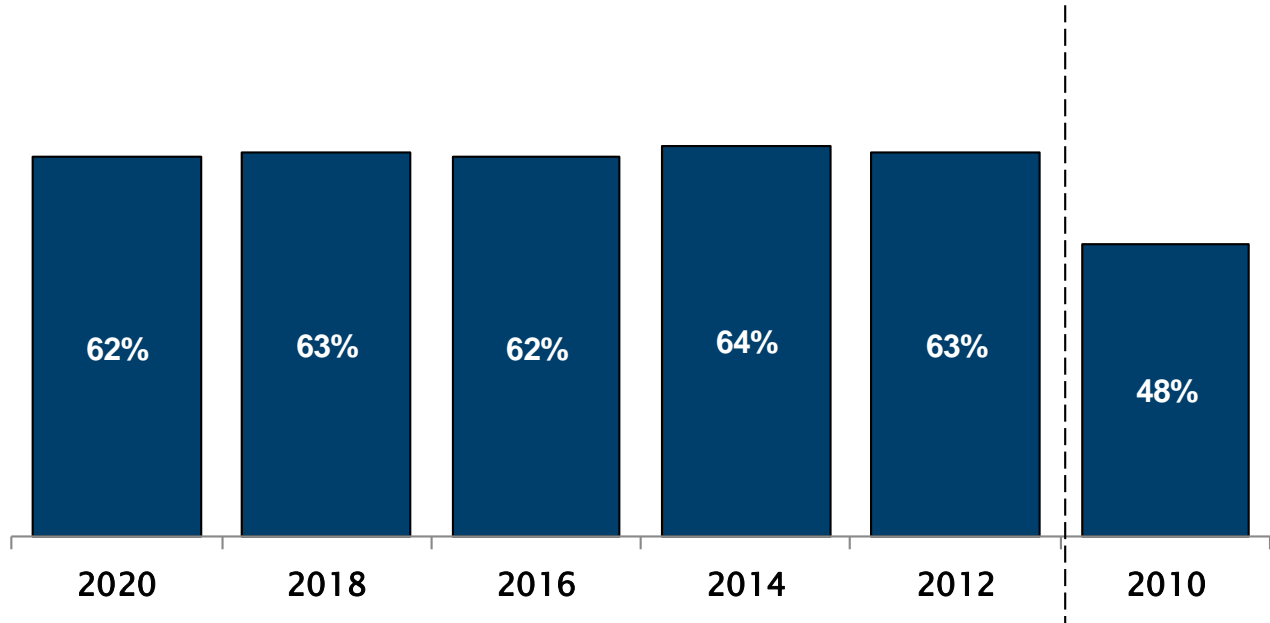
December 2020

Methodology

- Survey of Tempe residents to gain insights into perceptions about public transit among both riders and non-riders, and perception and usage of other transportation programs
- 401 Tempe residents between September 9 and October 14, 2020 (330 telephone and 71 online)
- Margin of error is $\pm 4.9\%$ at a 95% confidence level

Transit Usage

Transit Service Usage in Tempe
Percentage of residents who ride Tempe transit service at all



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

2020 n=401, 2018 n=400, 2016 n=401, 2014 n=409, 2012 n=400, 2010 n=427

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]*

Frequency of Transit Usage

Frequency - Tracking

	2020 (n=401)	2018 (n=400)	2016 (n=401)	2014 (n=409)
Net Ride Daily or Weekly	6%	5%	10%	16%
Net Ride at least Monthly	12%	11%	16%	25%
Daily	2%	2%	5%	6%
Weekly	4%	3%	5%	10%
Monthly	6%	6%	6%	9%
Every few months	7%	10%	9%	8%
Special/unique circumstances	43%	42%	37%	31%
Don't Use Transit	38%	34%	38%	35%
Don't know/No answer	<1%	3%	<1%	<1%

No significant differences compared to 2018

Q5: In general would you say you use Tempe's transit system (including light rail, Orbit, Flash and local bus/express).

Frequency – By Age

	2020 (n=401)	18-34 (n=136) (A)	Age 35-54 (n=136) (B)	55+ (n=124) (C)
Net Ride Daily or Weekly	6%	5%	10%^C	4%
Net Ride at least Monthly	12%	13%	17%^C	6%
Daily	2%	1%	4%	1%
Weekly	4%	4%	7%	3%
Monthly	6%	8%	7% ^C	2%
Every few months	7%	6%	8%	9%
Special/unique circumstances	43%	48%	38%	42%
Don't Use Transit	38%	34%	37%	44%

^{A-C} Indicates significant differences compared to other sub-group at the 95% level.

Type of Transit Used Among Riders

Type of Transit - Tracking

	2020 (n=248)	2018 (n=253)	2016 (n=246)	2014 (n=256)
Light Rail	72%	73%	84%	79%
Orbit or Flash neighborhood shuttles	33%	32%	37%	36%
Local or express bus	19%	25%	28%	30%
Don't Know/Refused	15%	12%	7%	7%

*Indicates significant difference compared to 2018 at the 95% confidence level.

Q5a: Which of the following have you used in Tempe in the past year?

Type of Transit – Demographics

Transit Type	2020 (n=248)	Age			Income		
		18-34 (n=91) (A)	35-54 (n=86) (B)	55+ (n=70) (C)	<\$40K (n=36) (D)	\$40K-\$80K (n=91) (E)	80K+ (n=104) (F)
Light Rail	72%	79% ^C	72%	63%	76%	74%	70%
Orbit or Flash neighborhood shuttles	33%	40% ^C	36% ^C	22%	44% ^F	40% ^F	22%
Local or express bus	19%	17%	27% ^C	14%	38% ^F	19%	15%
Don't Know/Refused	15%	6%	15% ^A	27% ^A	7%	13%	21% ^D

^{A-F} Indicates significant differences compared to other sub-group at the 95% level.

Length of Transit Usage Among Riders

Time Riding	2020 (n=248)	2018 (n=253)	2016 (n=246)	2014 (n=256)	2012 (n=252)	2010 (n=304)
Less than a year	9%*	4%	5%	6%	9%	14%
1 – 2 years	9%	6%	9%	10%	13%	27%
2 – 4 years	12%	13%	15%	24%	29%	13%
4 – 6 years	20%	19%	19%	23%	16%	10%
6 – 10 years	22%*	14%	22%	13%	13%	25%
More than 10 years	23% net*	35%	25%	18%	12%	NA
11 to 20 Years	15%	na	na	na	na	na
More than 20 Years	8%	na	na	na	na	na
Don't know	5%*	11%	4%	7%	8%	11%

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

*Indicates significant difference compared to 2018 at the 95% confidence level.

Reasons for Usage Among Riders

Responses	2020 (n=248)	2018 (n=253)	2016 (n=246)	2014 (n=256)	2012 (n=252)	2010 (n=304)
Get to/from recreation	20%	18%	22%	18%	14%	17%
To avoid parking	12%	11%	5%	3%	10%	7%
Convenient	11%*	26%	24%	27%	16%	24%
To go downtown	10%	9%	3%	3%	6%	5%
To avoid drinking and driving	7%	4%	3%	2%	-	-
Saves money	6%*	2%	3%	6%	7%	4%
Need to get to Phoenix	6%*	2%	4%	3%	-	-
Dislike driving/Take a break from driving	6%	5%	4%	1%	-	-
To get to/from work	5%	4%	3%	2%	-	-
Vehicle not available/car problems	4%	6%	3%	1%	-	-
Do not have a car	4%	5%	8%	12%	11%	9%
Get to/from school	3%	4%	5%	4%	2%	2%
A way to get around	3%	2%	3%	3%	2%	-
Protects the environment	3%	2%	1%	2%	1%	4%
To get to/from airport	3%	1%	3%	1%	1%	1%

Q9: What is the main reason you ride public transit?

*Indicates significant difference compared to 2018 at the 95% confidence level.

Note: Response categories with less than 2% mentions in 2020 not shown in table.

Destinations Using Transit Among Riders

Responses	2020 (n=248)	2018 (n=253)	2016 (n=246)	2014 (n=256)	2012 (n=252)	2010 (n=304)
DT Phoenix/Phoenix	47%	48%	25%	15%	26%	15%
Recreational activities	21%	26%	35%	39%	34%	38%
Downtown Tempe	18%	21%	14%	11%	13%	7%
Work	12%	13%	14%	19%	13%	20%
ASU	10%	12%	14%	15%	16%	16%
Shopping	9%	9%	4%	15%	12%	11%
Airport	5%	3%	4%	-	-	-
Restaurant	4%*	<1%	-	-	1%	3%
Around Tempe	3%	-	3%	<1%	-	-
Medical appointment	2%	1%	2%	2%	4%	2%
Library	2%	2%	2%	4%	3%	2%
Mesa	2%	1%	-	-	1%	<1%
Visit friends/family	1%	3%	2%	4%	5%	2%
Errands	1%*	3%	1%	6%	8%	5%
High School/school	1%	2%	4%	1%	-	-
Downtown (general)	1%	-	6%	1%	-	-

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

*Indicates significant difference compared to 2018 at the 95% confidence level.

Note: Destinations with less than 2% mentions in 2020 not displayed unless necessary for prior

Bus Satisfaction Among Riders

Attribute	% Very/somewhat satisfied				
	2020 (n=69)	2018 (n=87*)	2016 (n=128)	2014 (n=109)	2012 (n=141)
Driver courtesy and professionalism	97%	92%	93%	93%	93%
Cleanliness of the bus	94%	85%	88%	88%	92%
Comfort on the bus	94%	93%	92%	92%	95%
Ease of using the bus	91%	87%	93%	93%	91%
Safety on the bus	88%	79%	82%	82%	95%
Cleanliness of bus stops	88%	85%	85%	85%	NA
Hours of operation	86%	79%	84%	84%	NA
Route frequency	84%	80%	79%	79%	74%
Reliability/on-time performance of buses	82%	77%	86%	86%	80%
Bus service during major events	71%	70%	70%	70%	NA
Security at bus stops	70%	66%	65%	65%	NA
Amenities of bus stops	58%	67%	72%	72%	NA

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

*Due to a programming error, only 87 of the 115 bus/shuttle riders were asked this series of questions in 2018.

No significant differences compared to 2018

Suggested Improvements Among Dissatisfied Riders

	2020 (n=38)	2018 (n=45)	2016 (n=69)	2014 (n=57)
Bus stops need shade	26%	21%	13%	17%
→ Inside of bus/bus stops need to be cleaner	23%*	2%	9%	10%
More frequent buses	19%	17%	32%	42%
Need better/more routes	19%	9%	15%	7%
Easier schedules to read/understand/accurate	14%	10%	5%	6%
Need more pullouts/more space for pick ups	12%	-	-	3%
Security on the bus/safer buses	8%	15%	11%	11%
More/better lighting at bus stops	8%	20%	8%	9%
Get rid of it/waste of money	7%	-	-	-
Better AC/temperature on the bus	6%	-	-	-
More restroom facilities	6%	-	-	-
Don't like the type of people that use the bus	5%	4%	8%	2%
Better parking for the light rail	5%	-	-	-
Improve transfers	3%	-	-	-
Light rail needs to be faster	3%	-	-	-
Don't know	2%	5%	5%	6%

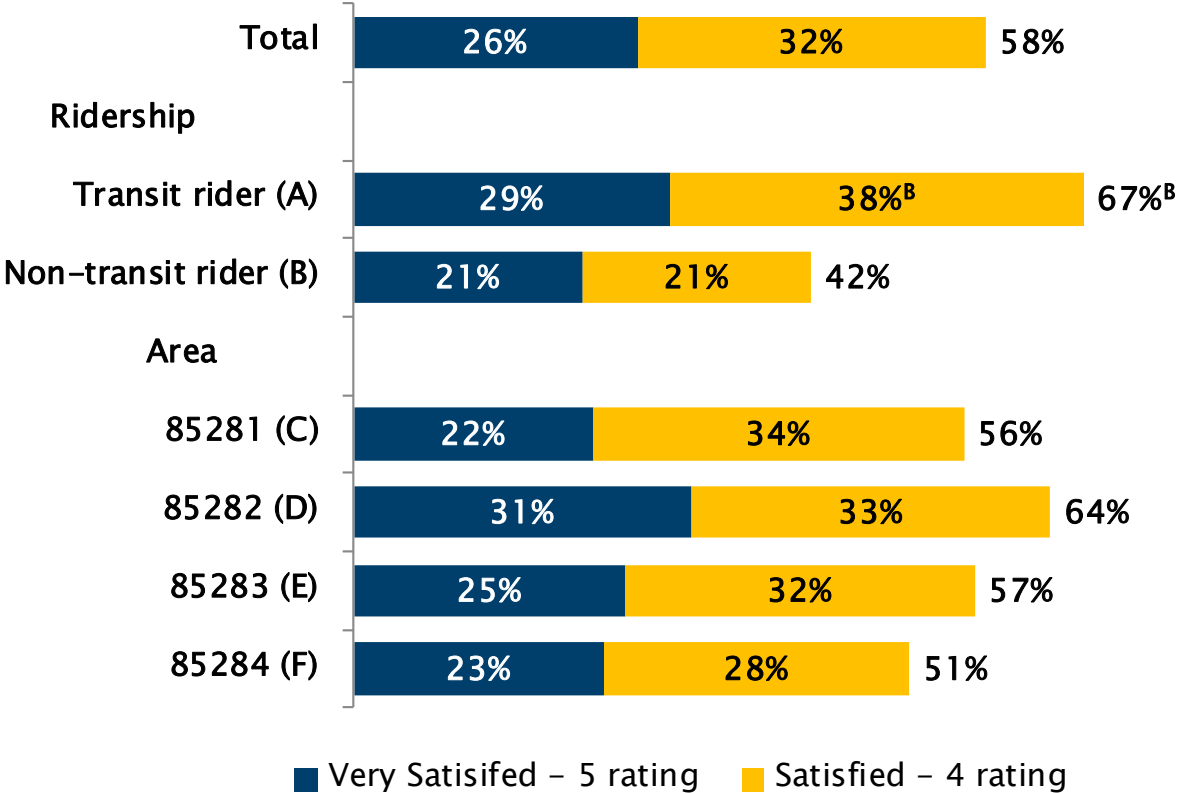
Q11a: You indicated dissatisfaction with some of the attributes, what could be done to improve your satisfaction with the bus service?

Note: Response categories with less than 3% mentions in 2020 not shown in table.

*Indicates significant difference compared to 2018 at the 95% confidence level.

Overall Satisfaction with Transit System

Overall Satisfaction with Transit Service
(Top Two Ratings)



2020 n=373 (Among those with an opinion)

Overall Satisfaction Tracking

Satisfaction	2020 (n=373)	2018 (n=362)	2016 (n=352)	2014 (n=376)	2012 (n=355)
NET very + somewhat satisfied	58%	60%	69%	72%	69%
5 – Very satisfied	26%	28%	36%	37%	39%
4	32%	32%	33%	35%	30%
3	27%	29%	21%	17%	21%
2	8%	5%	5%	6%	5%
1 – Very dissatisfied	6%	6%	6%	5%	5%
Don't know (excluded from %)	8%	10%	12%	8%	11%

Q12. How satisfied are you with the quality of the transit system in Tempe?
 No significant differences compared to 2018

Tempe In Motion (TIM)

Awareness - Tracking

	2020 (n=401)	2018 (n=400)	2016 (n=401)	2014 (n=409)	2012 (n=400)	2010 (n=427)
Total Awareness of TIM (Unaided + Aided)	46%*	57%	44%	50%	53%	54%
Unaided Awareness	4%*	12%	19%	18%	21%	24%
Aided Awareness	43%	45%	25%	32%	32%	30%

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

*Indicates significant difference compared to 2018 at the 95% confidence level.

Source for TIM Awareness - Tracking

Responses	2020 (n=185)	2018 (n=227)	2016 (n=178)	2014 (n=204)	2012 (n=211)	2010 (n=230)
Signs on the buses	16%	20%	11%	15%	13%	18%
Street banner	11%	12%	20%	24%	29%	17%
Bill inserts	10%	10%	7%	3%	9%	2%
Flyers/brochures	9%	6%	2%	3%	2%	6%
TV	9%	5%	4%	3%	6%	9%
Internet/online ads	5%	8%	3%	3%	3%	4%
Sign (general)	5%	7%	6%	1%	--	--
Word of mouth	4%	4%	6%	4%	6%	3%
Billboard	4%	3%	2%	1%	--	--
On the light rail	4%	2%	2%	--	--	--

Impact of TIM Advertising

	*2020 (n=152)	2018 (n=63)	2016 (n=71)	2014 (n=88)	2012 (n=94)	2010 (n=79)
Make you think more positively about transportation options in Tempe	42%	43%	54%	52%	42%	58%
Have no effect on your perceptions	55%	55%	39%	41%	52%	38%
Make you think negatively about transportation options in Tempe	1%	1%	2%	2%	2%	1%
Don't know	2%	2%	5%	5%	4%	3%
	*2020 (n=147)	2018 (n=61)	2016 (n=71)	2014 (n=83)	2012 (n=88)	2010
Advertising messages persuaded you to try public transit in Tempe	19%	21%	25%	20%	28%	N/A

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

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

No significant differences compared to 2018.

***Note:** Prior to 2020, questions were only asked of those with awareness of very specific advertising sources, but beginning in 2020 everyone aware of TIM through any advertising or media was asked to rate the impact on their perception. Only those who did not identify a source (don't know/lived here a long time) were excluded.

Bike Usage, Frequency, and Destinations

Access and Frequency

	2020 (n=401)	2018 (n=400)	2016 (n=401)	2014 (n=409)	2012 (n=400)	2010 (n=427)
Have access to bike	63%	64%	62%	61%	62%	58%
Frequency per Month						
Never/only occasionally	31%	33%	28%	30%	32%	35%
Once or twice	20%	22%	23%	18%	18%	17%
Three to five times	15%	19%	20%	17%	11%	13%
Six to ten times	12%	10%	8%	8%	12%	9%
>10 times	21%	15%	20%	27%	24%	24%
Don't know/not sure	1%	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?

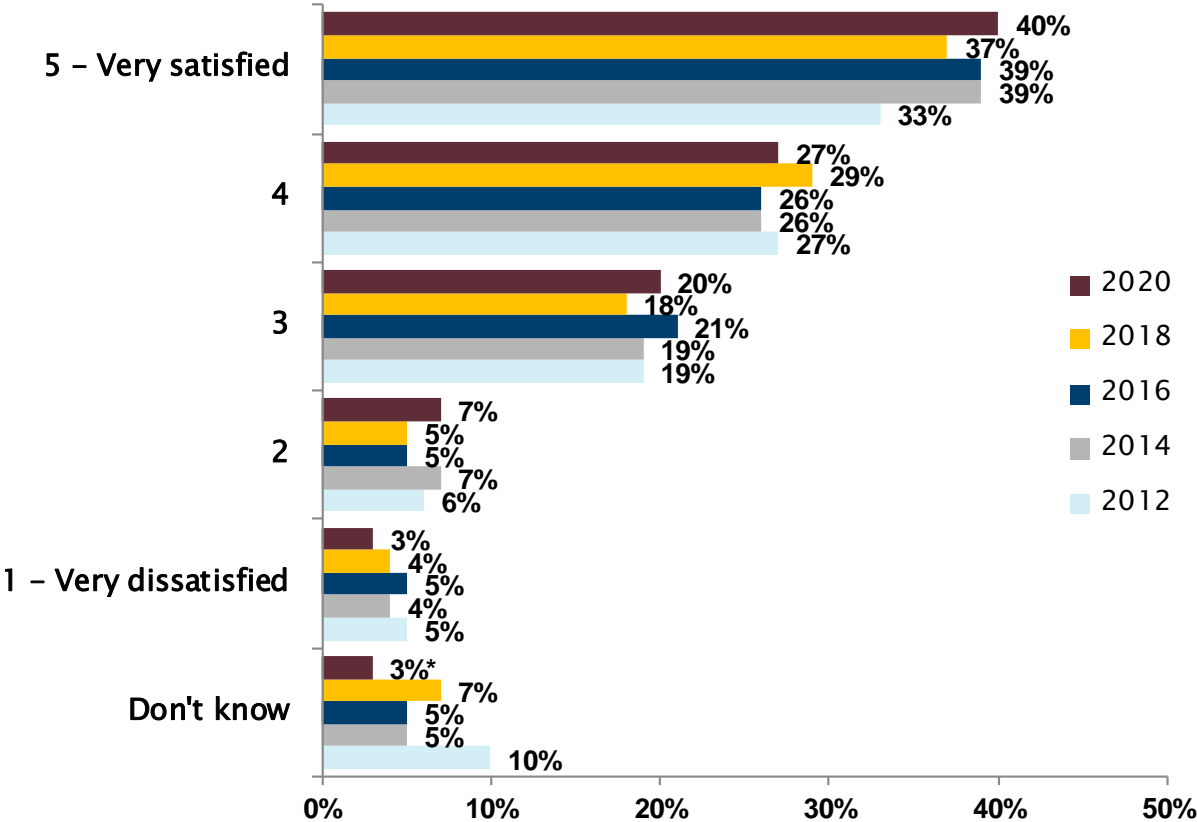
No significant differences compared to 2018

Destinations

Responses	2020 (n=174)	2018 (n=167)	2016 (n=176)	2014 (n=174)	2012 (n=163)	2010 (n=155)
Exercise	40%	35%	44%	53%	58%	60%
Parks	19%	16%	10%	4%	6%	4%
Work/school/ASU	16%	12%	14%	29%	18%	27%
Along the canal	15%	11%	9%	4%	--	--
Restaurant/dinner	13%	9%	4%	3%	2%	1%
Store	11%	17%	13%	14%	15%	16%
Tempe Town Lake	11%	7%	5%	4%	6%	7%

Satisfaction with Walking and Bike Paths

Overall Satisfaction with Tempe Walking and Bike Paths



Reasons for Satisfaction Ratings

Responses	2020 (n=389)	2018 (n=370)	2016 (n=380)	2014 (n=390)	2012 (n=362)
Positive					
Paths are everywhere, plenty of paths	18%	15%	12%	12%	15%
Paths are properly maintained, well landscaped	16%*	6%	6%	4%	12%
Paths are fine the way they are, no problems	11%	12%	18%	29%	23%
Paths are safe	9%	4%	7%	5%	6%
Have good routes, connect well	8%	9%	6%	3%	6%
Paths are easy to use, accessible	6%	7%	5%	6%	6%
Have seen/noticed improvements/upgrades	3%	5%	5%	2%	--
Good for exercising/walking	3%	2%	--	--	<1%
Paths are well lit	2%	2%	4%	5%	5%
Like the paths along the canal	2%	1%	--	--	--
Neutral					
Never use paths, no knowledge of them	4%	4%	6%	5%	4%
There is always room for improvement	3%	1%	4%	4%	3%
Negative/Suggestions					
Paths don't seem safe enough, make them safer	11%	9%	9%	8%	10%
Need more bike lanes	5%	6%	4%	9%	11%
Paths are not maintained	4%*	1%	2%	2%	2%
Could use more paths	3%	2%	7%	6%	4%
Need more walking paths	3%	2%	1%	--	2%
Don't know					
	<1%*	3%	5%	6%	6%

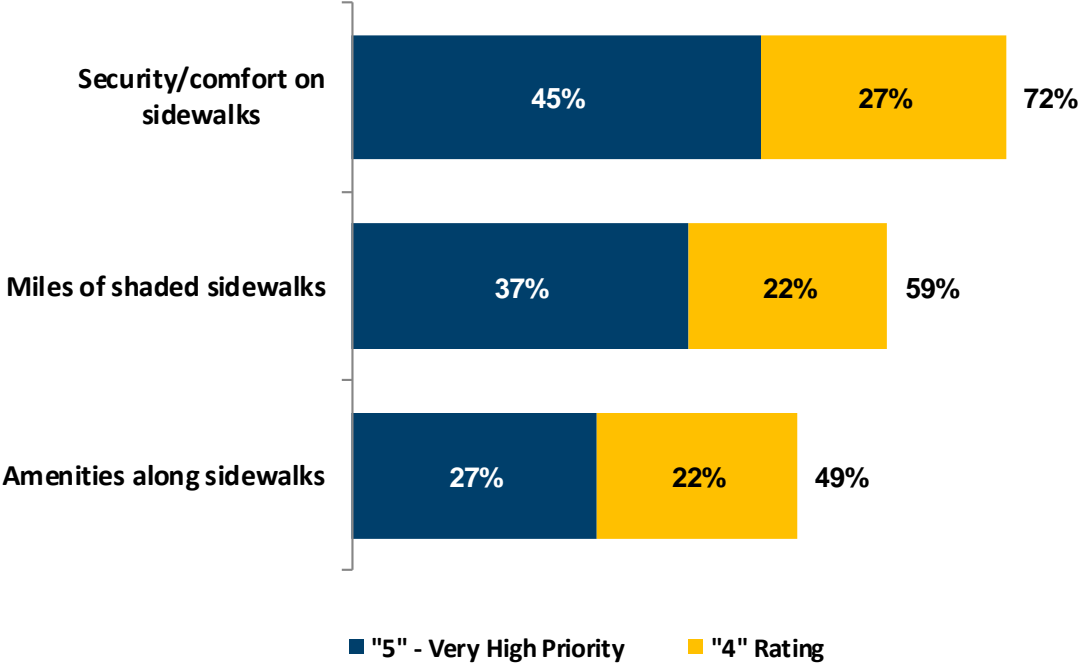
Q23a: Please explain your rating

*Indicates significant difference compared to 2018 at the 95% confidence level.

Note: Response categories with less than 2% total mentions in 2020 not shown in table.

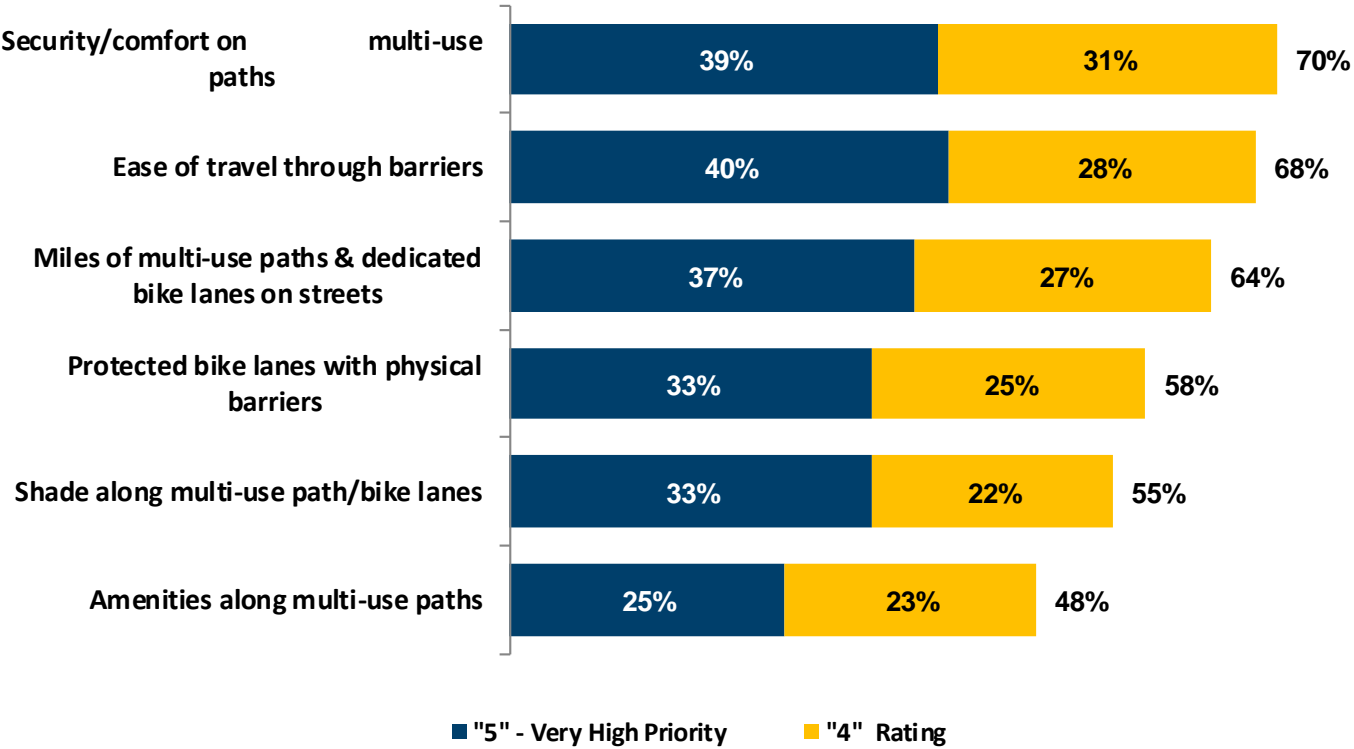
Sidewalk Improvement Priorities

Priority of Sidewalk Improvements
(Top Two Ratings 4 + 5 "Very high priority")



Bikeway Improvement Priorities

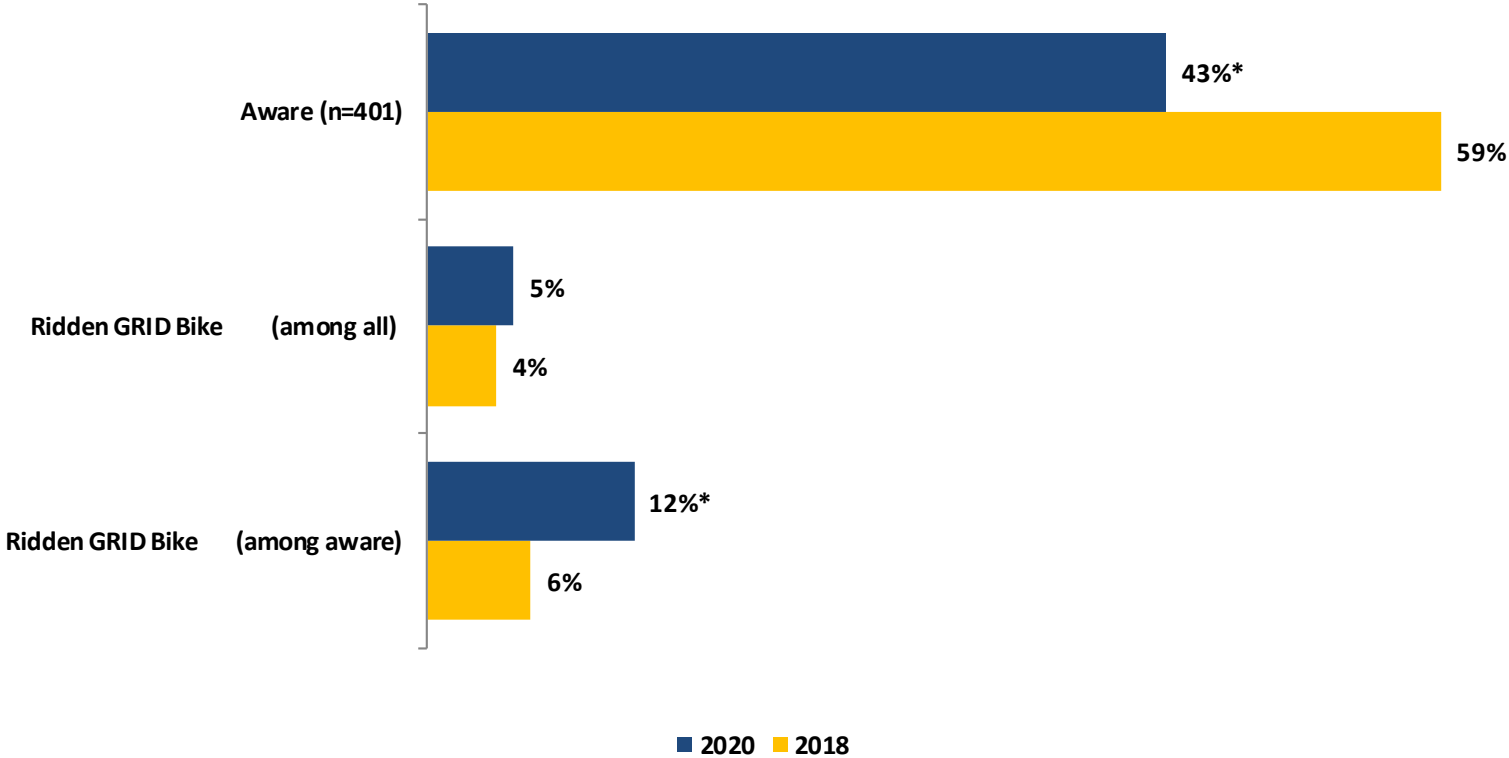
Priority of Bikeway Improvements
(Top Two Ratings 4 + 5 "Very high priority")



Total n= 401

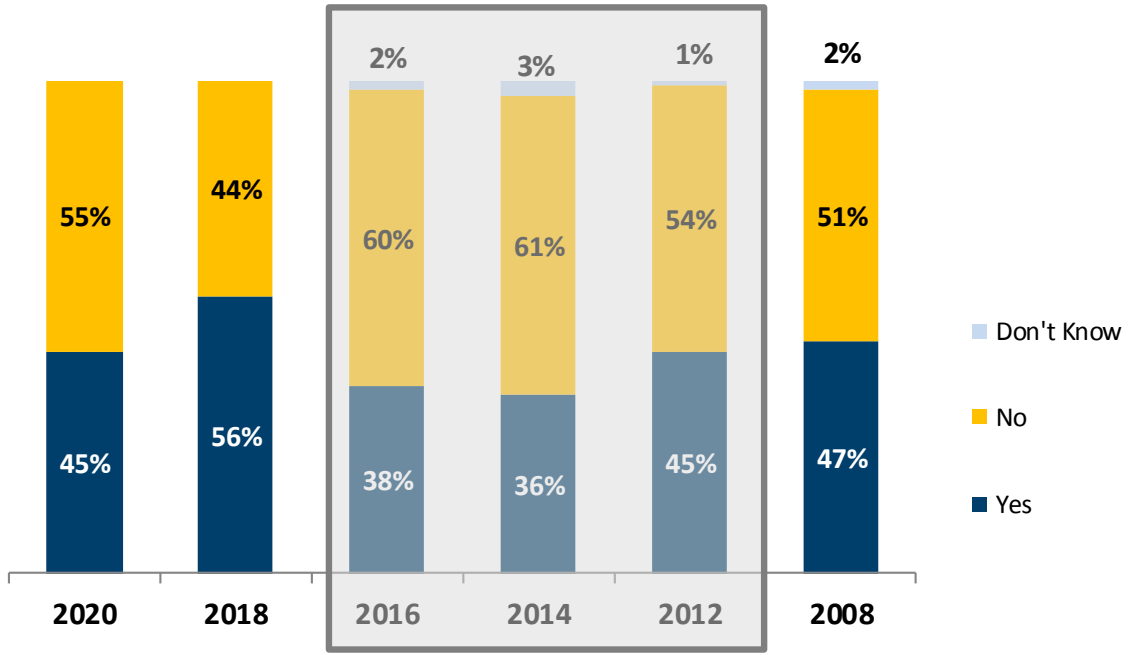
GRID Bikes

Tempe's Bike Share System - GRID Bike



Youth Free Transit Pass

Awareness of Tempe Youth Free Transit Pass



2020 n=95, 2018 n=84, 2016 n=401, 2014 n=409, 2012 n=400, 2008 n=98,
QD5: Have you ever heard of the Tempe Youth Free Transit Pass Program?
 No significant differences compared to 2018
 Note: 2020, 2018, and 2008: question was asked only of people with children ages 6 years old and older. In 2012, 2014, and 2016 this question was asked of all residents.
 This data is available in earlier reports.

Conclusions

1. Transit usage among Tempe residents over the past year stayed the same.
2. The “mix” of users first noted in 2018 (i.e., more infrequent or casual users, but fewer regular users) was still evident in 2020. However, there was an increase in the percentage of riders new to public transit.
3. The percentage of bus users giving high satisfaction ratings for 11 of the 12 attributes increased from previous years.
4. Overall satisfaction with the transit system continued to decline, primary driven by residents who are not using public transit.
5. Awareness of Tempe in Motion decreased in 2020, particularly unaided awareness.
6. A majority of residents indicated they are highly satisfied with the quality of the walking and biking paths in Tempe.

Questions?

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City of Tempe Transportation Survey Report

Prepared For:



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Executive Summary

The City of Tempe commissioned WestGroup Research to complete a 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 and, where appropriate, compares responses of the residents by meaningful demographic variables, as well as to data from the 2018 study and for the past ten years. This study was first conducted in 2001 and has continued to be conducted periodically. The most recent data collection was completed with 401 Tempe residents in September/October 2020. The margin of error for this sample size is $\pm 4.9\%$ at a 95% level of confidence.

Rider Characteristics and Opinions

- Three in five Tempe residents (62%) reported using Tempe's transit service, including light rail, Orbit, Flash, and local bus/express. This usage level is consistent with the four measurements taken over the past eight years.
- Ridership frequencies reported in 2020 are consistent with 2018 levels. The higher proportion of residents who indicated taking advantage of Tempe public transit under unique circumstances in 2018 remained elevated in 2020 (43%). The percentage of daily riders remained stable at 2% and the proportion of those riding at least monthly measured at 12%, similar to 2018 (11%).
- As in 2018, 72% of transit riders reported using light rail in the past year, which is significantly lower than in 2016 (84%). Past year usage of Orbit/Flash neighborhood shuttles (33%) is consistent with prior years, however only 19% reported riding local or express buses in the past year which is down from 25% in 2018. These declines are likely due, at least in part, to the COVID-19 pandemic.
- Nearly one in four riders (22%) reported riding Tempe's transit system for more than ten years, which is down significantly from 35% in 2018, but similar to the 25% measured in 2016. In contrast, brand new ridership measures significantly higher in 2020 with 9% reporting they have been riding for less than one year (vs. 4% in 2018). This is likely due in part to a higher representation of younger riders in the 2020 sample.
- For the past ten years, convenience was the most popular reason given for riding public transit (mentioned by one in four riders). However, in 2020, the top reason for using public transit was to get to or from recreation (20%), followed by to avoid parking (12%), to go downtown (10%) and convenience (11% down significantly from 26% in 2018).
- Phoenix/Downtown Phoenix continues to be the most popular destination for transit trips (47%), followed distantly by recreational activities and Downtown Tempe (21% and 18%, respectively).

- Riders rated their level of satisfaction with 12 different aspects of riding the bus. Riders were most likely to be satisfied with driver courtesy and professionalism, cleanliness of the bus and comfort on the bus (97%, 94% and 94% very + somewhat satisfied). Riders were least satisfied with amenities at bus stops (58%).

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." While 12% immediately thought: they "do not use it," 11% suggested that *more and improved public transit is needed*.
- Three in five (58%) residents with an opinion report being highly satisfied with the Tempe transit system, which is similar to 2018 but significantly lower than in 2016, 2014 and 2012.
 - Residents satisfied with the transit system attributed their satisfaction to *good service* (21%), followed *good/convenient routes* (12%), *frequent and reliable service* (11%), and *cleanliness* (10%).
 - Residents who provided lower satisfaction ratings most often mentioned the need for better/more routes (16%), more cleaning (10%), and more frequent buses with extended hours (9%) as reasons for their ratings.

Potential Use of Tempe's Transit System

- Preference for a personal vehicle continues to be by far the most common reason given by non-riders as an explanation for not using public transit (45% mentioned).
- The two most effective benefits for persuading non-riders to use public transit appear to be *helps improve the environment* and *helps reduce air pollution* (61% and 58% 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 one-third rating them as effective.

Tempe in Motion (TIM)

- After hitting a ten year high of 57% in 2018, total awareness of Tempe in Motion (TIM) decreased significantly to 46% which was similar to the 44% measured in 2016.
- Residents aware of TIM recalled hearing about it through signs on buses (16%), street banners (12%), bill inserts (10%) and flyers/brochures (9%) and TV (9%).
- Slightly more than two in five residents who heard about TIM via advertising of some kind indicated (42%) the advertising had a positive impact on their impression of

transportation options in Tempe. One in five (19%) indicated the advertising message persuaded them to try public transit in Tempe.

Tempe Bicycling and Walking

- Nearly two-thirds of residents (63%) reported having access to a bicycle.
- Among those with access to a bike, more than two thirds (68%) reported riding their bike at least once a month, which is similar to 2018. Those who have access to a bike but never or only occasionally ride it (31% of residents) most often blamed *hot weather* for not riding it more often (43%).
- Two in five (40%) of those with access to a bike who ride at least once a month reported riding for *exercise*, while 19% ride their bike *to parks*, 16% ride *to school*, and 15% ride *along the canal*.
- Residents who bicycle at least monthly say they do so primarily to get *exercise* (52%) and/or *for fun and recreation* (27%).
- Consistent with the prior three study periods, in 2020, more than two-thirds of residents indicated being satisfied with the quality of walking and biking paths in Tempe (67%).
- 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 largest percentage of high priority ratings (72%).
- 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 (70%, 68% and 64% respectively).
- In 2020, under one-half of residents (43%) had heard of Tempe's bike share system which is down significantly from 59% in 2018. Despite awareness being down, usage is up – with 5% of all residents reporting they have ridden on a green GRID bike.

Tempe Youth Free Transit Pass Program

- In 2020, nearly one-half (45%) of residents who have children ages 6 to 18 have heard of the Tempe Youth Free Transit Pass
- Among parents aware of the program, school (35%), word of mouth (21%), and the library (13%) were the top ways they had learned about the Tempe Youth Free Transit Pass Program.

Conclusions

1. Despite the presence of the COVID-19 pandemic, the reported overall transit usage among Tempe residents over the past year stayed the same. It is possible that the phrasing “in the past year” covered up an impact of the pandemic and having a different time frame (e.g., past 30 days) would reveal a different finding. However, there was a decrease in the percent of riders reporting to take the local/express buses, which may reflect an impact from the pandemic.

The shift in the “mix” of users first noted in 2018 (i.e., more infrequent or casual users, but fewer regular users) was still evident in 2020. However, there was a notable increase in the percentage of riders new to public transit in Tempe, this was likely due, at least in part, to the successful effort to garner more survey participation from residents under the age of 55.

2. The percentage of bus users giving high satisfaction ratings for 11 of the 12 evaluated attributes increased from previous years. The biggest shifts occurred for cleanliness on the bus and safety on the bus – both up 9 points. While overall satisfaction with cleanliness was slightly higher than in the past, significantly more riders in 2020 suggested cleaner buses and bus stops (likely an impact of COVID-19 concerns), increased shade at stops, as well as improved transit services in general (more routes and increased frequency) were needed.
3. Overall satisfaction with the transit system in Tempe continued to decline for the third straight wave, primary driven by residents who are not using any of the public transit available in the City. Overall satisfaction among transit users did not change. Along with the typical requested improvements of more routes and better frequencies, the need for improved cleaning practices was again noted as a reason for dissatisfaction.
4. Awareness of Tempe in Motion (TIM) decreased significantly in 2020, particularly unaided awareness. It is possible this was impacted by the higher representation of younger and/or new-to-the City residents within the overall sample. The impact of the campaign on overall impressions of the system continues to be positive, however the percentage of residents indicating they are persuaded by the messaging continues to decline.
5. A majority of residents indicate they are highly satisfied with the quality of the walking and biking paths in Tempe, however residents feel that the top priority for both types of paths should be to increase the security and comfort on the paths.

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 - 2010, 2012, 2014, 2016, and 2018. The most recent data collection was completed with 401 Tempe residents during September 2020. Due to size limitations, tables in the report do not show data from the studies conducted from 1998 to 2008.

In previous years, data was only collected by telephone. In 2020, data was primarily collected via telephone (330 surveys), but in an effort to complete more surveys with younger residents, an online survey conducted through a national panel company was added (71 surveys). Panel data was collected online from September 9 to September 29, 2020. The telephone calls with Tempe residents were made by WestGroup interviewers working remotely in the Phoenix area from September 11 to October 14, 2020. 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. Households were randomly selected according to Tempe zip codes.

Quotas were set as targets (using Census data) to achieve balanced representation of men and women as well as a representative distribution of the sample by age. Post-survey weighting was applied to the data for zip code, gender and age to make sure the final data achieved the targeted representative sample.

The survey was completed with 401 Tempe residents. The margin of error for this sample size is +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 ^A, ^B, and ^C). 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 10% and 17% in the first and second rows of column B is significantly higher than the figures in column C (4% and 6%) at the 95% confidence level.

Frequency of Transit Usage Demographic Breakdown

	Age			
	2020 (n=401)	18-34 (n=136) (A)	35-54 (n=136) (B)	55+ (n=124) (C)
Net Ride Daily or Weekly	6%	5%	10% ^C	4%
Net Ride at least Monthly	12%	13%	17% ^C	6%
Daily	2%	1%	4%	1%
Weekly	4%	4%	7%	3%
Monthly	6%	8%	7% ^C	2%
Every few months	7%	6%	8%	9%
Special/unique circumstances	43%	48%	38%	42%
Don't Use Transit	38%	34%	37%	44%

For trend tables and charts displaying yearly data; significant differences between 2020 and 2018 figures are shown using an asterisk. For example, in the table below, the 46% and 4% in the 2020 column is significantly different than the 57% and 12% in the 2018 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.

	2020 (n=401)	2018 (n=400)	2016 (n=401)
Total Awareness of TIM (Unaided + Aided)	46%*	57%	44%
Unaided Awareness	4%*	12%	19%
Aided Awareness	43%	45%	25%

C. Demographics

While quotas (based on Census data) were used as targets to achieve for a representative sample of Tempe residents, the total data were weighted in 2020 by gender, age and zip code to adjust for slight discrepancies between the targeted quotas and actual demographic representation in the final sample. An overview of respondent demographics follows in Table 1A. The addition of the web survey/panel component increased the percentage of younger residents, as did the quota targeting. Both of which likely have impacted the length of residency in Tempe as well.

Table 1a: Demographics

	2020 (n=401)	2018 (n=400)	2016 (n=401)	2014 (n=409)	2012 (n=400)	2010 (n=427)
Gender						
Male	52%	50%	52%	51%	50%	49%
Female	48%	50%	48%	49%	50%	51%
Years Lived in Tempe						
<1 year	4%*	<1%	1%	2%	2%	2%
1 – 2 years	11%*	3%	4%	5%	6%	5%
3 – 5 years	20%*	10%	9%	13%	6%	10%
6 – 10 years	18%*	10%	15%	14%	13%	15%
11 – 20 years	14%*	24%	24%	22%	25%	19%
20+ years	32%*	52%	48%	44%	49%	49%
Age						
18 – 34	34%	32%	32%	32%	32%	33%
35 – 54	34%	34%	34%	34%	33%	34%
55+	31%	33%	33%	33%	32%	33%
Average Age	45.6*	47.8	47.3	47.1	49.4	47.7
Education						
Some high school	2%	1%	2%	2%	1%	2%
High school graduate	7%	10%	10%	11%	10%	9%
Some college	26%	25%	26%	33%	24%	30%
College graduate	35%	38%	33%	32%	32%	29%
Post graduate	29%	25%	27%	19%	32%	29%
No answer/ Refused	1%	1%	2%	2%	1%	1%
Marital Status						
Married	46%	49%	52%	46%	54%	61%
Single	49%	48%	45%	50%	43%	36%
Refused	5%	3%	3%	3%	3%	3%

*Indicates significant difference compared to 2018 at a 95% confidence level.

Table 1b: Demographics

	2020 (n=401)	2018 (n=400)	2016 (n=401)	2014 (n=409)	2012 (n=400)	2010 (n=427)
Income						
<\$20,000	5%	7%	7%	13%	9%	10%
\$20 - \$40,000	11%	15%	18%	18%	14%	14%
\$40 - \$60,000	14%	16%	19%	18%	11%	16%
\$60 - \$80,000	18%	18%	13%	8%	14%	14%
\$80 - \$100,000	11%	11%	7%	8%	10%	11%
\$100,000+	32%	24%	20%	20%	20%	17%
\$100K to \$150,000	16%	12%	n/a	n/a	n/a	n/a
\$150,000+	16%	12%	n/a	n/a	n/a	n/a
No answer/refused	9%	9%	16%	14%	21%	16%
Average Income	\$89,958*	\$79,072	\$67,325	\$63,700	\$70,304	\$67,047
Occupation						
Full-time	63%	60%	57%	46%	46%	47%
Part-time	7%	11%	6%	11%	8%	12%
Retired	16%	16%	20%	21%	28%	23%
Stay at home Spouse	5%	6%	3%	4%	6%	7%
Student	4%	3%	6%	8%	4%	7%
Unemployed/disabled	4%	3%	5%	7%	6%	6%
Refused	1%	2%	3%	3%	2%	1%
Zip Code						
85281	25%*	18%	21%	23%	19%	19%
85282	35%	32%	33%	32%	44%	38%
85283	26%	29%	24%	26%	22%	29%
85284	14%*	22%	22%	19%	15%	14%

*Indicates significant difference compared to 2018 at a 95% confidence level.

n/a = not applicable for these years; prior to 2018 the category was only "more than \$100,000"

II. Rider Characteristics and Opinions

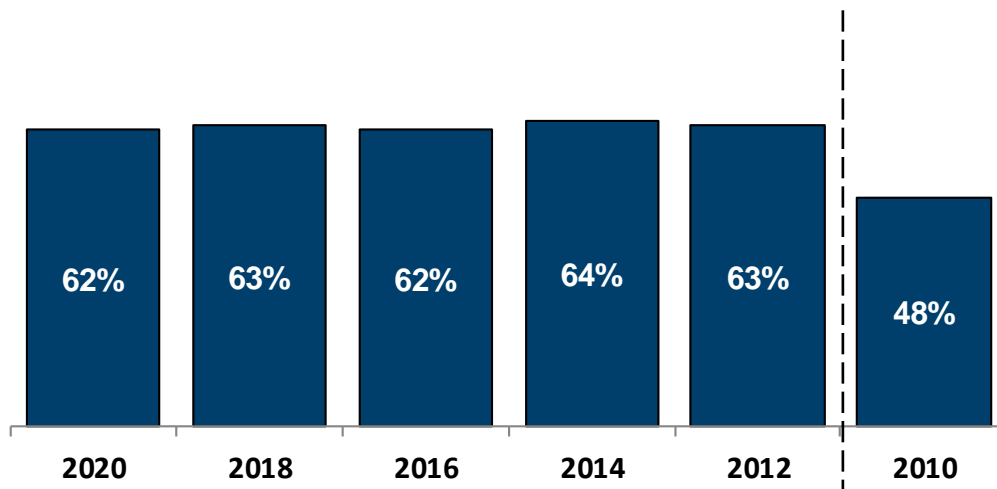
A. Current Use of Public Transit

1. Tempe Transit Service Usage – Among All Residents

Three in five Tempe residents (62%) reported riding Tempe’s transit service, including light rail, Orbit, Flash, and local bus/express. This usage level is consistent with the four measurements taken over the past eight years.

Similar to 2018, men and women were equally likely to ride public transit (both at 62%). Additionally, there were no significant differences found between other sub-groups or demographics in 2020 transit service usage.

Transit Service Usage in Tempe
 Percentage of residents who ride Tempe transit service at all



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

2020 n=401, 2018 n=400, 2016 n=401, 2014 n=409, 2012 n=400, 2010 n=427

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

Ridership frequencies reported in 2020 are consistent with 2018 levels. The higher proportion of residents who indicated taking advantage of Tempe public transit under unique circumstances in 2018 remained elevated in 2020 (43%). The percentage of daily riders remained stable at 2%, which is significantly lower than in 2016 and 2014. The proportion of those riding at least monthly also measured at 12%, down from 16% in 2016 and 25% in 2014.

As was true in 2018, local bus, Orbit/Flash and Express riders were significantly more likely than rail only riders to report riding at least weekly (19% vs. 5%), and as expected light rail only riders were significantly more likely to say they generally ride transit under special or unique circumstances (82% vs. 46% of other riders).

Riders significantly more likely to report riding weekly or daily include those ages 35 to 54 (10% vs. 4% age 55+, compared to 5% 18-34 years old). Of note, there were no demographic groups significantly more likely than others to report using transit for special/unique circumstances. It was consistent across all residents.

Table 2a: Frequency of Transit Usage

	2020 (n=401)	2018 (n=400)	2016 (n=401)	2014 (n=409)
Net Ride Daily or Weekly	6%	5%	10%	16%
Net Ride at least Monthly	12%	11%	16%	25%
Daily	2%	2%	5%	6%
Weekly	4%	3%	5%	10%
Monthly	6%	6%	6%	9%
Every few months	7%	10%	9%	8%
Special/unique circumstances	43%	42%	37%	31%
Don't Use Transit	38%	34%	38%	35%
Don't know/No answer	<1%	3%	<1%	<1%

No significant differences compared to 2018

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**

	2020 (n=401)	Age		
		18-34 (n=136) (A)	35-54 (n=136) (B)	55+ (n=124) (C)
Net Ride Daily or Weekly	6%	5%	10% ^C	4%
Net Ride at least Monthly	12%	13%	17% ^C	6%
Daily	2%	1%	4%	1%
Weekly	4%	4%	7%	3%
Monthly	6%	8%	7% ^C	2%
Every few months	7%	6%	8%	9%
Special/unique circumstances	43%	48%	38%	42%
Don't Use Transit	38%	34%	37%	44%

^{A-C} 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*

As in 2018, 72% of transit riders reported riding light rail in the past year, which is significantly lower than in 2016 (84%). Past year usage of Orbit/Flash neighborhood shuttles (33%) is consistent with prior years, however only 19% reported riding local or express buses in the past year which is down from 25% in 2018 and significantly fewer than in 2016 and 2014. This shift is likely due, at least in part, to the COVID-19 pandemic. 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 (49% and 36% vs. 25% and 6%, respectively).

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

	2020 (n=248)	2018 (n=253)	2016 (n=246)	2014 (n=256)
Light Rail	72%	73%	84%	79%
Orbit or Flash neighborhood shuttles	33%	32%	37%	36%
Local or express bus	19%	25%	28%	30%
Don't Know/Refused	15%	12%	7%	7%

*Indicates significant difference compared to 2018 at the 95% confidence level.

Q5a: Which of the following have you used in Tempe in the past year?

In 2020, younger riders (18 to 34 years old) were significantly more likely than those 55 and older to report riding light rail and neighborhood shuttles, but not buses which is typically the

case. Of note, residents 35 and older give a “don’t know” response at a significantly higher rate than those 18 to 34 years old (15%-27% vs. 6%).

Additionally, a significantly higher proportion of those with annual household incomes under \$40,000 report riding buses and/or shuttles compared to residents with higher household incomes.

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

Transit Type	2020 (n=248)	Age			Income		
		18-34 (n=91) (A)	35-54 (n=86) (B)	55+ (n=70) (C)	<\$40K (n=36) (D)	\$40K-\$80K (n=91) (E)	80K+ (n=104) (F)
Light Rail	72%	79% ^C	72%	63%	76%	74%	70%
Orbit or Flash neighborhood shuttles	33%	40% ^C	36% ^C	22%	44% ^F	40% ^F	22%
Local or express bus	19%	17%	27% ^C	14%	38% ^F	19%	15%
Don’t Know/Refused	15%	6%	15% ^A	27% ^A	7%	13%	21% ^D

^{A-F} Indicates significant differences compared to other sub-group at the 95% level.

B. Length of Use of Transit System

Nearly one in four riders (22%) reported using Tempe’s transit system for more than ten years, which is down significantly from 35% in 2018 but similar to the 25% measured in 2016. In contrast, brand-new ridership is up significantly in 2020 with 9% reporting they have been using transit in Tempe for less than one year (vs. 4% in 2018 and 5% in 2016). This is likely due, at least in part, to a higher representation of younger riders in the 2020 sample.

Of note, this was the first year that specific categories beyond “more than ten years” were available and 15% reported riding for 11 to 20 years and 8% reported they have been using transit in Tempe for more than twenty years.

Table 3a: Length of Use of Transit System

Time Riding	2020 (n=248)	2018 (n=253)	2016 (n=246)	2014 (n=256)	2012 (n=252)	2010 (n=304)
Less than a year	9%*	4%	5%	6%	9%	14%
1 – 2 years	9%	6%	9%	10%	13%	27%
2 – 4 years	12%	13%	15%	24%	29%	13%
4 – 6 years	20%	19%	19%	23%	16%	10%
6 – 10 years	22%*	14%	22%	13%	13%	25%
More than 10 years	23% net*	35%	25%	18%	12%	NA
11 to 20 Years	15%	na	na	na	na	na
More than 20 Years	8%	na	na	na	na	na
Don’t know	5%*	11%	4%	7%	8%	11%

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

*Indicates significant difference compared to 2018 at the 95% confidence level.

C. Main Reasons for Using Public Transit

For the past ten years, convenience was the most popular reason given for riding public transit with typically one in four riders mentioning it. However, in 2020, the top reason for using public transit was to get to or from recreation (20%), followed by to avoid parking (12%), to go downtown (10%) and convenience (11% down significantly from 26%).

Notably, mentions of using public transit to avoid drinking and driving and to save money increased significantly compared to 2018 and as might be expected are more likely to be mentioned by riders under the age of 55.

Table 3b: Main Reasons for Using Public Transit

Responses	2020 (n=248)	2018 (n=253)	2016 (n=246)	2014 (n=256)	2012 (n=252)	2010 (n=304)
Get to/from recreation	20%	18%	22%	18%	14%	7%
To avoid parking	12%	11%	5%	3%	10%	7%
Convenient	11%*	26%	24%	27%	16%	24%
To go downtown	10%	9%	3%	3%	6%	5%
To avoid drinking and driving	7%	4%	3%	2%	-	-
Saves money	6%*	2%	3%	6%	7%	4%
Need to get to Phoenix	6%*	2%	4%	3%	-	-
Dislike driving/Take a break from driving	6%	5%	4%	1%	-	-
To get to/from work	5%	4%	3%	2%	-	-
Vehicle not available/car problems	4%	6%	3%	1%	-	-
Do not have a car	4%	5%	8%	12%	11%	9%
Get to/from school	3%	4%	5%	4%	2%	2%
A way to get around	3%	2%	3%	3%	2%	-
Protects the environment	3%	2%	1%	2%	1%	4%
To get to/from airport	3%	1%	3%	1%	1%	1%

Q9: What is the main reason you ride public transit?

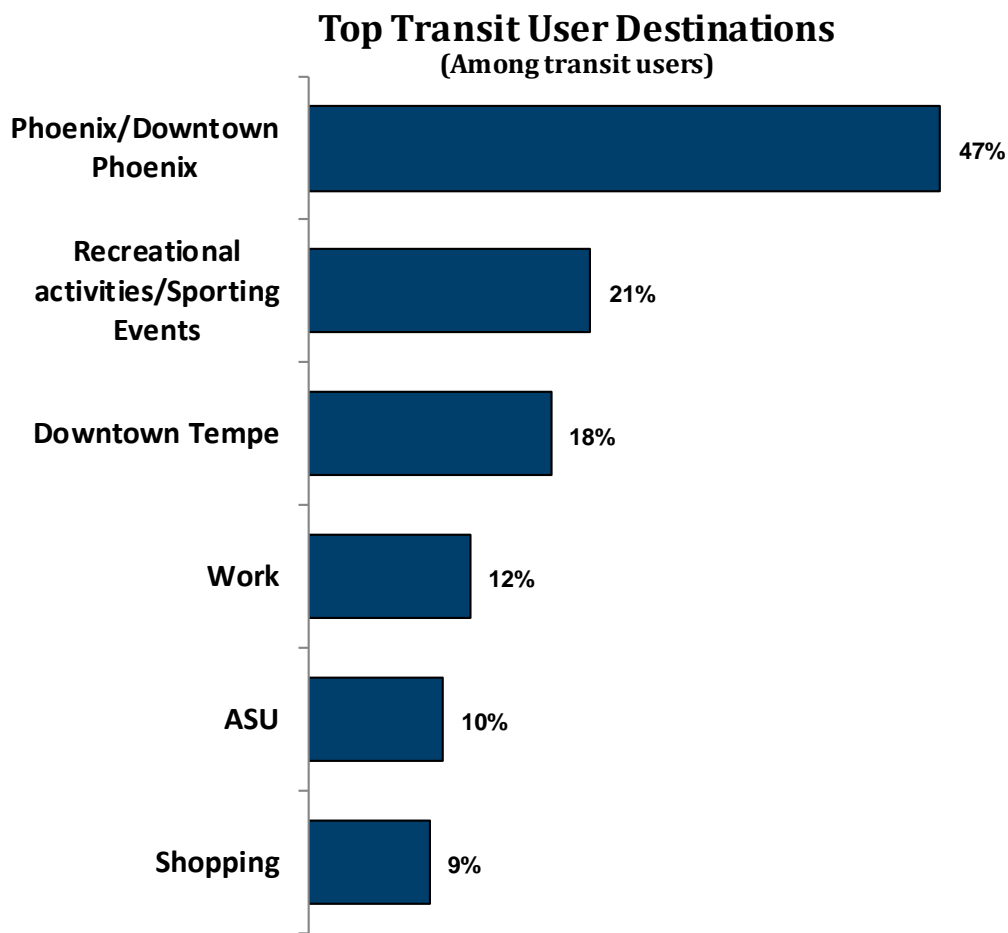
*Indicates significant difference compared to 2018 at the 95% confidence level.

Note: Response categories with less than 2% mentions in 2020 not shown in table.

D. Public Transit Destinations

Phoenix/Downtown Phoenix continues to be the most popular destination for transit trips; 47% of all transit riders surveyed named it as a destination. As was also the case in 2018, 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 (61% vs. 34%).

Recreational activities and Downtown Tempe round out the top three destinations for transit riders (21% and 18%, respectively). Work, ASU and shopping were again frequently by one in ten riders.



Q10: Where do you go when you use public transit? 2020 n=248

Despite the changes and challenges COVID-19 has caused this year, most destinations were reported at the same level as in the past with the exceptions of a significant increase in *restaurant* mentions and decrease in mentions of *errands* in general.

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

Responses	2020 (n=248)	2018 (n=253)	2016 (n=246)	2014 (n=256)	2012 (n=252)	2010 (n=304)
DT Phoenix/Phoenix	47%	48%	25%	15%	26%	15%
Recreational activities	21%	26%	35%	39%	34%	38%
Downtown Tempe	18%	21%	14%	11%	13%	7%
Work	12%	13%	14%	19%	13%	20%
ASU	10%	12%	14%	15%	16%	16%
Shopping	9%	9%	4%	15%	12%	11%
Airport	5%	3%	4%	-	-	-
Restaurant	4%*	<1%	-	-	1%	3%
Around Tempe	3%	-	3%	<1%	-	-
Medical appointment	2%	1%	2%	2%	4%	2%
Library	2%	2%	2%	4%	3%	2%
Mesa	2%	1%	-	-	1%	<1%
Visit friends/family	1%	3%	2%	4%	5%	2%
Errands	1%*	3%	1%	6%	8%	5%
High School/school	1%	2%	4%	1%	-	-
Downtown (general)	1%	-	6%	1%	-	-

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

*Indicates significant difference compared to 2018 at the 95% confidence level.

Note: Destinations with less than 2% mentions in 2020 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 likely to be satisfied with driver courtesy and professionalism, cleanliness of the bus and comfort on the bus (97%, 94% and 94% very + somewhat satisfied, respectively).

As has been the case since 2012, riders were least likely to express satisfaction with bus service during major events, security at bus stops and amenities at bus stops (71%, 70%, and 58%, respectively).

Although none of the shifts were statistically significant, eleven of the twelve attributes received higher ratings in 2020 compared to 2018 (up 1 to 9 points). Major event bus service remained stable (71% vs. 70%) and amenities of bus stops decreased by 8-points (58% vs. 67% in 2018).

Table 5a: 2020 Satisfaction with Bus Service
(Among bus riders)

Attribute	2020 (n=69)			% Very/somewhat satisfied			
	Very/ somewhat Satisfied	Very Satisfied	Somewhat Satisfied	2018 (n=87*)	2016 (n=128)	2014 (n=109)	2012 (n=141)
Driver courtesy and professionalism	97%	75%	22%	92%	93%	93%	93%
Cleanliness of the bus	94%	51%	43%	85%	88%	88%	92%
Comfort on the bus	94%	46%	48%	93%	92%	92%	95%
Ease of using the bus	91%	57%	34%	87%	93%	93%	91%
Safety on the bus	88%	45%	43%	79%	82%	82%	95%
Cleanliness of bus stops	88%	35%	53%	85%	85%	85%	NA
Hours of operation	86%	67%	19%	79%	84%	84%	NA
Route frequency	84%	52%	32%	80%	79%	79%	74%
Reliability/on-time performance of buses	82%	54%	28%	77%	86%	86%	80%
Bus service during major events	71%	37%	34%	70%	70%	70%	NA
Security at bus stops	70%	26%	44%	66%	65%	65%	NA
Amenities of bus stops	58%	20%	38%	67%	72%	72%	NA

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

*Due to a programming error, only 87 of the 115 bus/shuttle riders were asked this series of questions in 2018.

No significant differences compared to 2018

Among riders dissatisfied with one or more attribute, the most common suggestions to improve their satisfaction with buses was the addition of *shade at bus stops* (26%), *cleaner buses/bus stops* (23%), *more frequent buses* (19%) and *better or more routes* (19%).

Despite the very small sample sizes, the dramatic increase in suggestions to improve the cleanliness of buses and bus stops are likely due to the concerns over COVID-19 (23%/8 mentions up from 2% /1 mention in 2018).

Table 5b: Suggested Improvements

	2020 (n=38)	2018 (n=45)	2016 (n=69)	2014 (n=57)
Bus stops need shade	26%	21%	13%	17%
Inside of bus/bus stops need to be cleaner	23%*	2%	9%	10%
More frequent buses	19%	17%	32%	42%
Need better/more routes	19%	9%	15%	7%
Easier schedules to read/understand/accurate	14%	10%	5%	6%
Need more pullouts/more space for pick ups	12%	-	-	3%
Security on the bus/safer buses	8%	15%	11%	11%
More/better lighting at bus stops	8%	20%	8%	9%
Get rid of it/waste of money	7%	-	-	-
Better AC/temperature on the bus	6%	-	-	-
More restroom facilities	6%	-	-	-
Don't like the type of people that use the bus	5%	4%	8%	2%
Better parking for the light rail	5%	-	-	-
Improve transfers	3%	-	-	-
Light rail needs to be faster	3%	-	-	-
Don't know	2%	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 3% mentions in 2020 not shown in table.

*Indicates significant difference compared to 2018 at the 95% confidence level.

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

A. Top of Mind Impression of Transportation System in Tempe

When thinking about transportation in Tempe, aside from “not using it” (12%), residents’ top of mind positive thoughts were most often related to it being *generally good* (14%) and *liking the free neighborhood shuttles* (9%). The top of mind negative association or suggestion was *needing more or improved transit* (11%).

Transit riders were significantly more likely than non-riders to immediately think of generally positive words such as “excellent” or “good” (17% vs. 9%) or of light rail (12% vs. 5%). Non-riders were significantly more likely to be unable to think of anything (13% vs. 4% don’t know).

Table 6: Top of Mind Impression of Tempe Transportation System

	2020 (n=401)	2018 (n=400)	2020	
			Transit Rider (n=248) A	Non-Rider (n=153) B
Positive				
Good/excellent/cool (general positive)	14%*	23%	17% ^B	9%
Like free neighborhood shuttles/Orbit/Mercury/Venus/Blue buses	9%	7%	10%	8%
Lots of options/ can choose between bus, light rail, shuttles	7%	4%	8%	4%
Good bike lanes/paths/able to walk	6%*	1%	5%	7%
New street car system/trolleys	3%*	1%	5% ^B	1%
It’s free	2%	3%	2%	2%
Neutral				
Never used it/don’t use it	12%	9%	11%	15%
Light Rail (unspecified)	9%	7%	12% ^B	5%
Adequate/fine/average	7%	7%	6%	8%
The bus system/ bus (unspecified)	4%	6%	3%	4%
Negative/Suggestions				
Need more public transit/improved transit	11%	12%	12%	10%
General negative/don’t like it	4%*	8%	4%	5%
Transit is a waste of money/expensive	5%	2%	4%	8%
Needs improvements (timing of lights, better routes, etc.)	3%	5%	3%	4%
Inconvenient/slow	3%	3%	4%	2%
Don’t know	7%	8%	4%	13% ^A

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 (All open ends available under separate cover).

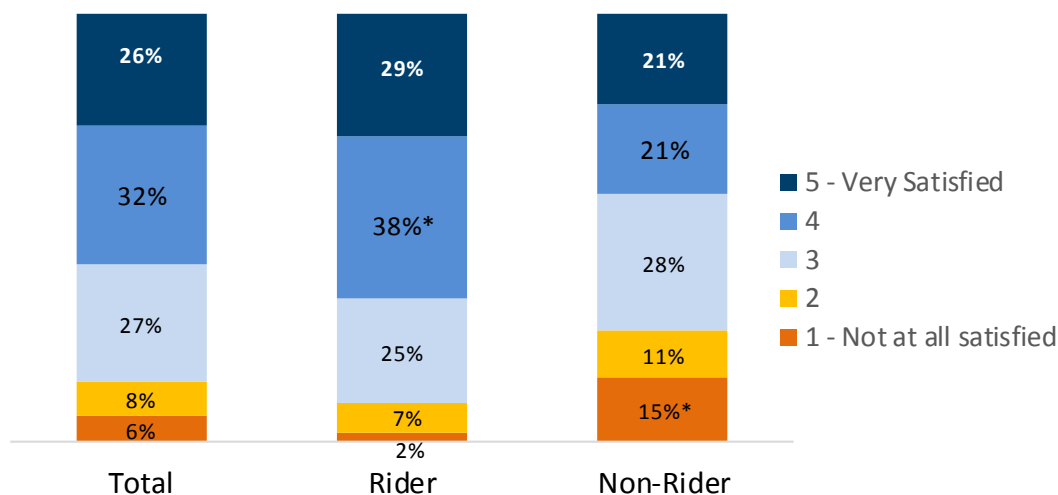
* Indicates significant difference compared to 2018 at the 95% confidence level.

^{AB} Indicates significant differences compared to other sub-group at the 95% level.

B. Overall Satisfaction with Tempe Transit System

Three in five (58%) residents with an opinion report being highly satisfied with the Tempe transit system. While this is similar to 2018, it remains significantly lower than in 2016 and 2018. As in the past, current riders were more likely to provide a top-two rating (67% vs. 42% of non-riders).

**Overall Satisfaction with Transit System
Among those with an opinion**



Total n=373, Rider: n=246, Non-Rider: n=127

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

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

Satisfaction	2020 (n=373)	2018 (n=362)	2016 (n=352)	2014 (n=376)	2012 (n=355)
NET very + somewhat satisfied	58%	60%	69%	72%	69%
5 – Very satisfied	26%	28%	36%	37%	39%
4	32%	32%	33%	35%	30%
3	27%	29%	21%	17%	21%
2	8%	5%	5%	6%	5%
1 – Very dissatisfied	6%	6%	6%	5%	5%
Don't know (excluded from %)	8%	10%	12%	8%	11%

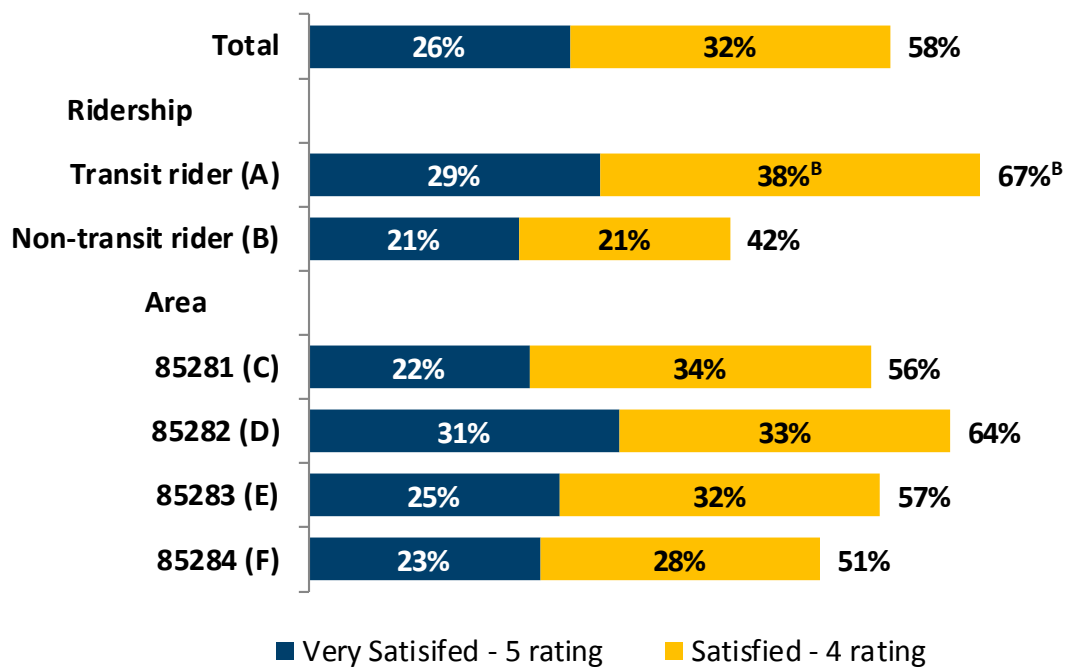
Q12. How satisfied are you with the quality of the transit system in Tempe?

No significant differences compared to 2018

As expected, transit riders were significantly more likely than non-riders to express satisfaction with the quality of the transit service in Tempe (67% vs. 42%). Although these results are similar to 2018, both ratings are lower than measured in 2016 when 78% of riders and 50% of non-riders were satisfied.

This year there were no significant differences in satisfaction by zip code. In 2018 residents living in the 85281 zip code were significantly more likely to be satisfied than those living in 85282 and 85284. However, in 2020, satisfaction among residents of 85281 dropped from 75% to 56%.

Overall Satisfaction with Transit Service (Top Two Ratings)



2020 n=373 (Among those with an opinion)

Residents satisfied with the transit system (rated “4” or “5”) primarily attributed their satisfaction to *good service (21%), followed by good/convenient routes (12%), frequent and reliable service (11%), and cleanliness (10%),* which were also the top mentions in 2018.

Residents who gave lower ratings (1-3) most often mentioned the need for *better/more routes (16%), more cleaning (10%) and more frequent buses with extended hours (9%)* as reasons for their ratings. The top two mentions for the past six years were *better/more routes* and *more frequent buses with extended hours*.

Overall, significantly fewer people mentioned *good service, frequent/available or reliable service, transportation for those who need it, and easy to use* in 2020 than in 2018. Notably, only 4% expressed feeling uncomfortable with people who ride transit in 2020 (4 vs. 8% in 2018).

Table 8: Reason for Satisfaction Level

Responses	2020 (n=373)	2018 (n=362)	2020 Satisfaction Level	
			4,5 (n=216)	1,2,3 (n=156)
Positive				
Satisfied, good service	14%*	23%	21%	4%
Good routes, convenient routes	8%	7%	12%	4%
Frequent, available, reliable	7%*	15%	11%	-
It's clean	7%	7%	10%	3%
Provides transportation for those who need it	4%*	1%	7%	1%
Convenient (general)	4%	6%	6%	1%
Like the light rail/light rail is good	4%	5%	6%	1%
Saves money, cheap, free	3%	2%	5%	-
Easy to use	3%*	<1%	4%	<1%
Neutral				
Don't use it, never used it	11%	9%	4%	21%
Always room for improvement	6%*	11%	7%	5%
It's average/okay	2%	3%	2%	3%
Negative/Suggestions				
Need better/more routes, connections, doesn't go where I need to	11%	9%	7%	16%
More frequent buses, more hours	7%	8%	5%	9%
It was dirty/needs to be cleaned up a little bit	6%	3%	4%	10%
Uncomfortable with people who ride transit	4%*	8%	2%	6%
Bus driver does not stop at bus stops	3%	5%	2%	4%
Need more security	3%	3%	1%	7%
Buses take too long/it's slow	3%	1%	1%	6%
It's not convenient	2%*	<1%	<1%	5%
Don't know	4%	6%	3%	5%

Q12a: Please explain your rating. Note: Response categories with < 2% total mentions in 2020 not shown in table.

IV. Potential Use of Tempe's Transit System

A. Reasons for Not Riding Transit

Preference for a personal vehicle continues to be by far the most common reason given by non-riders as an explanation for not using public transit (45% mentioned). An additional 7% reported *needing a car for business*. Other popular reasons were that they simply *do not need to use transit* (14%) and/or *find it to be inconvenient* (13%), *does not go where they need to go* (9%) or *it takes too long* (8%).

Notably, mentions of *transit is not secure* or concerns about safety decreased to 3% after spiking to 9% in 2018. In addition, compared to 2018, non-riders were significantly more likely in 2020 to cite *riding a bike instead* as a reason for not using public transit.

Table 9: Top Reasons for Not Using Public Transit

Reasons	2020 (n=153)	2018 (n=136)	2016 (n=152)	2014 (n=143)	2012 (n=148)
Prefer car	45%	49%	59%	58%	46%
Don't need to, don't have the need to use	14%	15%	4%	9%	6%
Inconvenient (general)	13%	14%	6%	4%	5%
Doesn't go where they need to go	9%	9%	7%	7%	12%
Takes too long	8%	13%	8%	6%	10%
Need car for business	7%	4%	7%	1%	--
Bus stop far away	6%	3%	11%	11%	12%
Ride bike instead	5%*	1%	3%	2%	--
Work from home/telecommute	4%	1%	3%	--	--
Too expensive	4%	1%	--	1%	2%
Buses are unreliable/not on time	4%	1%	1%	1%	--
Transit is not secure/safety	3%*	9%	3%	1%	--
Weather concerns/ too hot/cold/ raining	3%	4%	1%	<1%	1%
Don't like the type of people on transit	3%	2%	1%	--	--
Don't have to go far distances	2%	6%	3%	3%	5%
Inconvenient (unspecified)	2%	1%	1%	2%	8%
I don't work/retired	2%	--	1%	1%	5%
Buses are dirty	2%	1%	--	1%	--
Don't know	1%	3%	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?

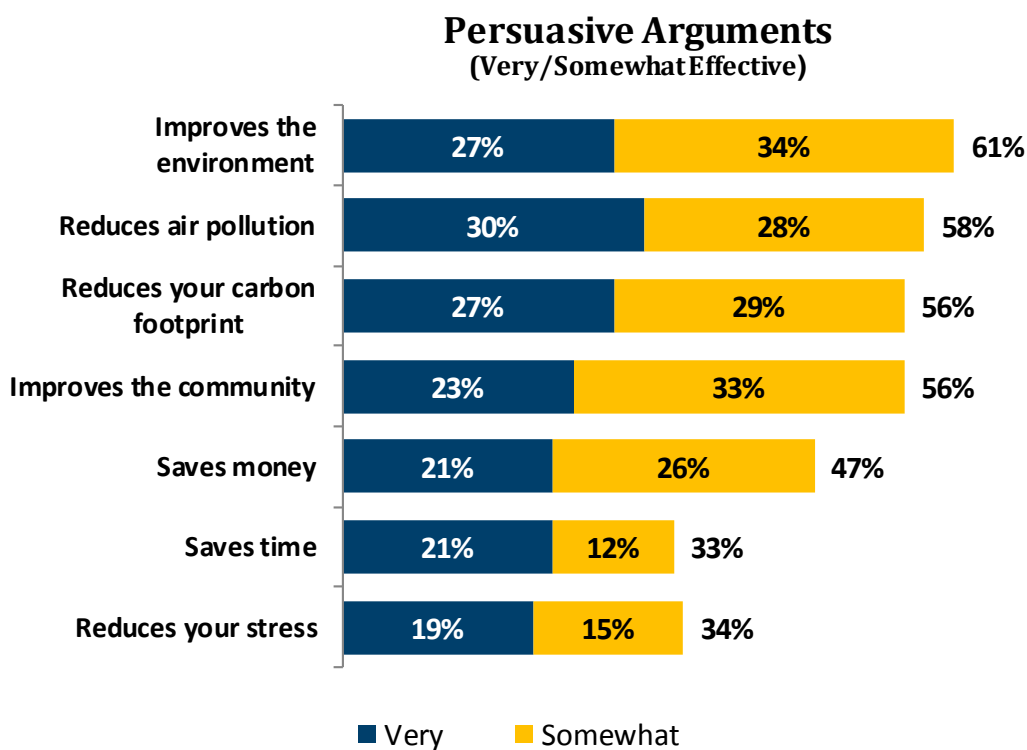
*Indicates significant difference compared to 2018 at the 95% confidence level.

Note: Reasons with less than 2% mentions in 2020 not shown in table.

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 improve the environment* and *helps reduce air pollution*.** These were perceived as either “somewhat effective” or “very effective” by 61% and 58% of residents. These also ranked at the top in 2018. However, *improves the community* made gains from 49% in 2018 to 56% in 2020 (data shown on next page).
- **The two least effective arguments for persuading non-transit users to use public transit were again *reduces your stress* and *saves time*** with approximately one-third rating them as “very” or “somewhat” effective (34% and 33%, 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.
2020 n=153 (Do not use transit in Tempe)

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

	Total 2020 (n=153)	Total 2018 (n=136)
Improves the environment		
Effective	61%	62%
Not effective	39%	32%
Reduces air pollution		
Effective	58%	62%
Not effective	42%	34%
Reduces carbon footprint		
Effective	56%	57%
Not effective	43%	35%
Improves the community		
Effective	56%	49%
Not effective	43%	41%
Saves money		
Effective	47%	49%
Not effective	52%	42%
Reduces stress		
Effective	34%	30%
Not effective	66%	62%
Saves time		
Effective	33%	29%
Not effective	67%	64%

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 prior to 2018 for this question.

No significant differences compared to 2018

Effective = Very+ Somewhat effective

Not Effective = Not very + Not at all effective

Younger non-riders were generally more likely than those 35 and older to rate all of the arguments as “effective” in persuading them to ride public transit. In most cases, the difference is statistically relevant in comparison to one or both of the older age groups.

Women were significantly more likely than men to rate *helps improve the environment* as “effective” (71% vs. 49%).

Table 10b: Effectiveness of Arguments to Persuade Transit Usage 2020
(Among those who do not use transit)

	Total 2020 (n=153)	Gender		Age		
		Male (n=80) (A)	Female (n=73) (B)	18-34 (n=46) (C)	35-54 (n=50) (D)	55+ (n=54) (E)
Improves the environment						
Effective*	61%	49%	74% ^A	76% ^D	53%	56%
Not effective**	39%	50% ^B	26%	24%	47% ^C	42%
Reduces air pollution						
Effective*	58%	51%	67%	69%	57%	53%
Not effective**	42%	49% ^B	33%	31%	43%	47%
Reduces carbon footprint						
Effective*	56%	50%	63%	75% ^{DE}	45%	51%
Not effective**	43%	48%	36%	25%	53% ^C	47% ^C
Improves the community						
Effective*	56%	49%	63%	76% ^{DE}	46%	49%
Not effective**	43%	48%	36%	24%	53% ^C	47% ^C
Saves money						
Effective*	47%	47%	47%	69% ^{DE}	44%	32%
Not effective**	52%	53%	52%	31%	54% ^C	68% ^C
Reduces stress						
Effective*	34%	39%	28%	49% ^E	32%	24%
Not effective**	66%	60%	72%	51%	68%	74% ^C
Saves time						
Effective*	33%	37%	28%	53% ^E	33% ^E	16%
Not effective**	67%	63%	72%	47%	67%	84% ^{CD}

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.)

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

* Very + Somewhat effective

** Not very + Not at all effective

Non-riders were asked if there were any other benefits that might effectively persuade them to use public transit, 17% indicated they felt they could be enticed by other benefits. The most popular suggestions by these 26 non-riders included more *destinations/more routes*, *faster service*, *more direct routes/less transfers*, and *safer* (each mentioned by 3 or 4 non-riders).

Table 10c: Other Benefits Effective in Persuading use of Public Transit

Other Benefits	2020 (n=153)
Yes, there are other benefits	17% (n=26)
If it went more places/had more routes	4
Faster service	3
More direct routes/less transfers	3
If it was safer	3
If they gave a tax deduction	3
If bus stops were closer to home/destination	3
Free bus rides	2
Cuts down on pollution/helps air quality	2
Lower cost of transportation/gas prices go up	2
More frequent service	1
If it's more reliable/on-time	1
Other	3
Don't know/No answer	1

Q7.Other: Are there any other benefits that would be somewhat or very effective in persuading you to use public transit?

Q7.OTH: What is that benefit?

**Due to the small sample size, responses are listed as numbers instead of percentages*

V. Tempe in Motion (TIM)

A. Awareness of Tempe in Motion

After reaching a ten year high of 57% in 2018, total awareness of Tempe in Motion (TIM) decreased significantly to 46%, which was similar to the 44% measured in 2016. Unaided awareness dropped significantly with only 4% able to name Tempe’s transit program in an unaided manner (down from 12% in 2018) and 43% reported recognizing the name when they were asked in an aided manner (similar to 45% previously).

Of note, in response to the unaided question, 22% of residents named Orbit and 13% named Valley Metro as the name of Tempe’s transportation program.

Total awareness of TIM was significantly higher among:

- Residents aged 35 to 54 (57% vs. 37% of younger residents, and compared to 45% of those 55+)
- Transit riders (53% vs. 36% non-riders)
- Long time Tempe residents (62% who have lived in Tempe for more than 10 years vs. 33% of newer residents)

Table 11: Awareness of TIM

	2020 (n=401)	2018 (n=400)	2016 (n=401)	2014 (n=409)	2012 (n=400)	2010 (n=427)
Total Awareness of TIM (Unaided + Aided)	46%*	57%	44%	50%	53%	54%
Unaided Awareness	4%*	12%	19%	18%	21%	24%
Aided Awareness	43%	45%	25%	32%	32%	30%

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

*Indicates significant difference compared to 2018 at the 95% confidence level.

B. Source of Awareness

Residents aware of TIM recalled hearing about it through *signs on buses (16%) street banners, (12%), bill inserts (10%), flyers/brochures (9%) and on TV (9%)*. These results are consistent with 2018 results.

Table 12: Top Sources of TIM Awareness
(Among those aware of TIM)

Responses	2020 (n=185)	2018 (n=227)	2016 (n=178)	2014 (n=204)	2012 (n=211)	2010 (n=230)
Signs on the buses	16%	20%	11%	15%	13%	18%
Street banner	11%	12%	20%	24%	29%	17%
Bill inserts	10%	10%	7%	3%	9%	2%
Flyers/brochures	9%	6%	2%	3%	2%	6%
TV	9%	5%	4%	3%	6%	9%
Internet/online ads	5%	8%	3%	3%	3%	4%
Sign (general)	5%	7%	6%	1%	--	--
Word of mouth	4%	4%	6%	4%	6%	3%
Billboard	4%	3%	2%	1%	--	--
On the light rail	4%	2%	2%	--	--	--
Direct mail	3%	3%	4%	3%	5%	5%
Library	3%	2%	4%	--	--	--
Work	3%	2%	--	2%	1%	1%
Newspaper/Print Ads	2%	4%	6%	5%	6%	6%
Bill inserts	2%	2%	7%	3%	9%	9%
Ad/commercial (unspecified)	2%	1%	2%	--	1%	1%
ASU/School	1%	4%	4%	5%	--	3%
The City	<1%*	4%	--	1%	1%	--
Radio	1%	3%	1%	--	<1%	<1%
Pandora/ Spotify	1%	2%	3%	2%	--	--
I live here/lived here a long time	1%	2%	2%	2%	--	--
Don't know	16%	14%	7%	13%	16%	12%

Q15: How did you hear about it?

*Indicates significant difference compared to 2018 at the 95% confidence level.

Note: Sources with less than 2% mentions in 2020 not shown in table.

C. Advertising Impact on Perception of Tempe Transportation Options

Slightly more than two in five residents who heard about TIM via advertising of some kind (42%) indicated the advertising had a positive impact on their impression of transportation options in Tempe. Over one-half, 55%, said the advertising had *no effect* and only 1% reported it 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 (19%) indicated the advertising message persuaded them to try public transit in Tempe.** Among those persuaded, the advertising sources they felt most influenced them to try to public transit were bill inserts, signs on buses, and street banners (each mentioned by 5-7 people).

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

	*2020 (n=152)	2018 (n=63)	2016 (n=71)	2014 (n=88)	2012 (n=94)	2010 (n=79)
Make you think more positively about transportation options in Tempe	42%	43%	54%	52%	42%	58%
Have no effect on your perceptions	55%	55%	39%	41%	52%	38%
Make you think negatively about transportation options in Tempe	1%	1%	2%	2%	2%	1%
Don't know	2%	2%	5%	5%	4%	3%
	*2020 (n=147)	2018 (n=61)	2016 (n=71)	2014 (n=83)	2012 (n=88)	2010
Advertising messages persuaded you to try public transit in Tempe	19%	21%	25%	20%	28%	N/A

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

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

No significant differences compared to 2018.

***Note:** Prior to 2020, questions were only asked of those with a awareness of very specific advertising sources, but beginning in 2020 everyone aware of TIM through any advertising or media was asked to rate the impact on their perception. Only those who did not identify a source (don't know/lived here a long time) were excluded.

Table 14: Advertising Source with Most Influenced to Use Transit
(Among those who said message persuaded them to try transit)

Advertising Source	2020 (n=28)	2018 (n=12)*
Bill inserts	7	-
Signs on the buses	6	2
Street banners	4	3
TV	3	1
On the light rail	3	-
ASU	1	-
Flyers/brochures	1	1
Billboard	1	-
Pandora/Spotify	1	-
Direct mail	1	-
Newspapers/Print ads	1	-
Don't know/ Not aware of program	2	1
Other	1	1

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

**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 (63%) reported having access to a bicycle. This is statistically similar to the past eight years.

Residents aged 35 to 54 were significantly more likely than residents aged 55 or older to report having access to a bicycle they can ride when they want (69% vs. 57% and compared to 63% of younger residents)

Among those with access to a bike, more than two thirds (68%) reported riding their bike at least once a month, which is similar to the 66% measured in 2018.

Table 15: Access to and Frequency of Bike Use per Month

	2020 (n=401)	2018 (n=400)	2016 (n=401)	2014 (n=409)	2012 (n=400)	2010 (n=427)
Have access to bike	63%	64%	62%	61%	62%	58%
Frequency per Month						
Never/only occasionally	31%	33%	28%	30%	32%	35%
Once or twice	20%	22%	23%	18%	18%	17%
Three to five times	15%	19%	20%	17%	11%	13%
Six to ten times	12%	10%	8%	8%	12%	9%
>10 times	21%	15%	20%	27%	24%	24%
Don't know/not sure	1%	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?

No significant differences compared to 2018

B. Reasons Do Not Ride Bicycle More Often

Those who have access to a bike but never or only occasionally ride it (31% of residents) most often blamed hot weather for not riding it more often (43% mentioned it being “*too hot outside*”). Other key reasons given include: *it is too dangerous, it is inconvenient, and prefer to take car* (mentioned by 12% to 14%). Significantly fewer mentioned *laziness* as a reason for not riding their bike more often (1% down from 10% in 2018).

Table 16: Reasons for Not Riding More Often

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

Responses	2020 (n=78)	2018 (n=84)	2016 (n=70)	2014 (n=74)
Too hot outside/hot weather	43%	47%	38%	32%
Too dangerous	14%	12%	1%	12%
Have a car/rather take car	13%	7%	6%	1%
Inconvenient/too busy	12%	10%	4%	8%
Bike not working properly/bike not functional	7%	3%	6%	5%
Physical condition/my health	6%	11%	9%	5%
Too much traffic	3%	7%	3%	2%
Distance/too far	3%	6%	9%	1%
Lazy/don't want to ride it	1%*	10%	4%	10%
Have little kids/drive kids around	1%	2%	6%	3%
Injury	1%	1%	1%	2%
Too old	1%	1%	-	2%
No need/nowhere to go	1%	1%	-	-
Not enough bike lanes/paths	1%	-	2%	2%
Other (responses <.5%)	5%	2%	9%	7%
Don't know/no answer	-	-	9%	6%

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

*Indicates significant difference compared to 2018 at the 95% confidence level.

Note: Question added in 2014

C. Bicycle Destinations

Two in five of those with access to a bike who ride at least once a month (40%) reported riding for *exercise*, while 19% ride their bike *to parks*, 16% ride *to school*, and 15% ride *along the canal*. After increasing significantly to 13% in 2018, the percentage of bicyclists reporting Mill Avenue/Downtown Tempe as their destination dropped to 4%, to a level consistent with prior study years.

Table 17: Bike Riding Destinations

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

Responses	2020 (n=174)	2018 (n=167)	2016 (n=176)	2014 (n=174)	2012 (n=163)	2010 (n=155)
Exercise	40%	35%	44%	53%	58%	60%
Parks	19%	16%	10%	4%	6%	4%
Work/school/ASU	16%	12%	14%	29%	18%	27%
Along the canal	15%	11%	9%	4%	--	--
Restaurant/dinner	13%	9%	4%	3%	2%	1%
Store	11%	17%	13%	14%	15%	16%
Tempe Town Lake	11%	7%	5%	4%	6%	7%
The bar/when I've been drinking	6%	2%	3%	3%	1%	--
Run errands	6%	3%	2%	2%	3%	1%
Everywhere	5%	8%	3%	3%	2%	1%
Mill Avenue/Downtown Tempe	4%*	13%	5%	3%	5%	3%
Bike trails/mountain trails	4%	--	--	--	--	--
The Greenbelt	3%	--	--	--	--	--
Friend's house	3%	4%	4%	9%	7%	3%
Other	1%	2%	2%	2%	5%	2%

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

*Indicates significant difference compared to 2018 at the 95% confidence level.

Note: Destinations with less than 2% mentions in 2020 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* (52%) and/or *for fun and recreation* (27%).

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

Responses	2020 (n=174)	2018 (n=167)	2016** (n=176)
Exercise	52%	57%	54%
Fun/Recreation/leisure	27%	22%	26%
It's faster than walking/driving	5%	2%	-
Protects environment	4%	1%	1%
Convenient/easy	4%	3%	8%
Saves wear and tear on car/don't want to drive	2%	1%	4%
Good for health/medical reasons	1%	3%	5%
Saves money	1%	2%	4%
To get to school/work	1%	1%	4%
Do not have a car	1%	1%	2%
For the fresh air	1%	3%	1%
Other	1%	1%	2%
No answer	1%	-	1%

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

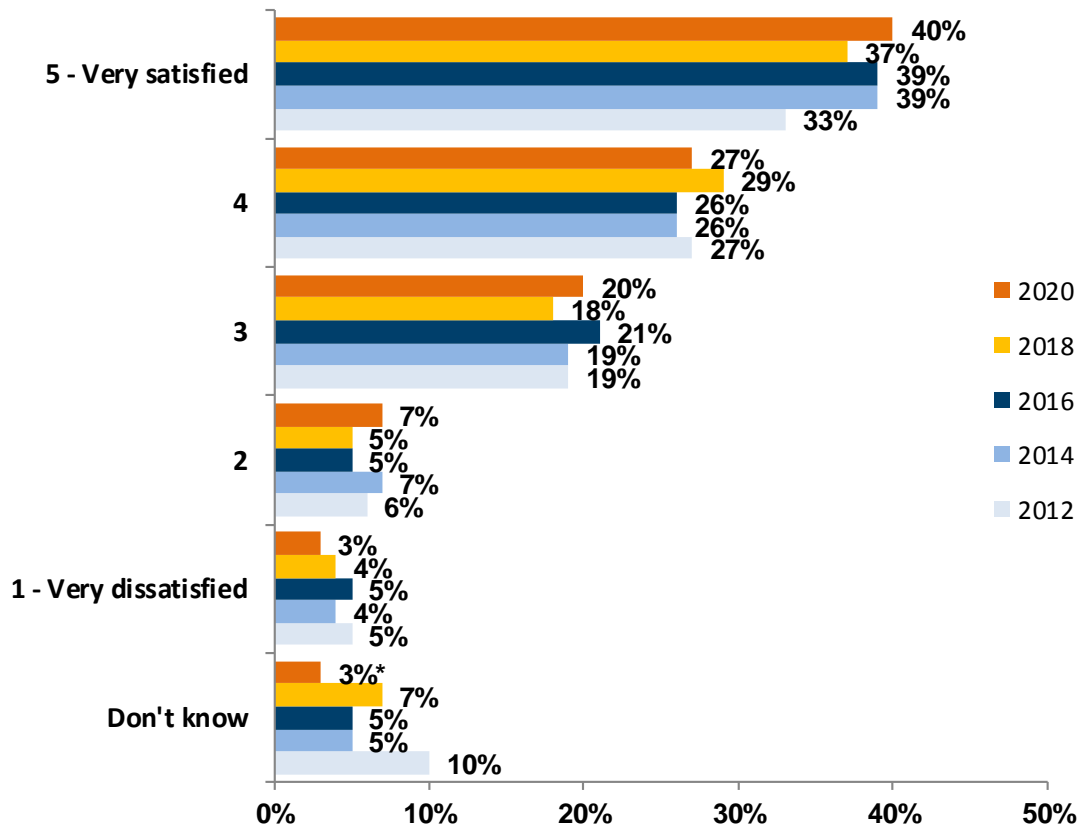
**Indicates significant difference compared to 2018 at the 95% confidence level.*

***Question added in 2016.*

E. Overall Satisfaction with Bicycle and Pedestrian Paths

Consistent with the prior three study periods, in 2020, more than two-thirds of residents indicated being satisfied with the quality of walking and biking paths in Tempe (67% gave a rating of 4 or 5, where 5 means “very satisfied”). All other ratings remained stable, as well.

Overall Satisfaction with Tempe Walking and Bike Paths



2020 n=401, 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?

*Indicates significant difference compared to 2018 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 *paths are everywhere, there are plenty of paths (18%), paths are properly maintained/well landscaped (16%) and paths are fine (11%).***

While *plentiful paths* and *no problems with paths* were the top two mentions for the prior eight years, this year residents were significantly more likely to mention *appreciating that paths are properly maintained and well landscaped (16% up from 6% in 2018 and 2016)*. **Top negative reasons included *paths don't seem safe enough/make them safer (11%), need more bike lanes (5%), and paths are not maintained (4% up significantly from 1% in 2018)*.**

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

Responses	2020 (n=389)	2018 (n=370)	2016 (n=380)	2014 (n=390)	2012 (n=362)
Positive					
Paths are everywhere, plenty of paths	18%	15%	12%	12%	15%
Paths are properly maintained, well landscaped	16%*	6%	6%	4%	12%
Paths are fine the way they are, no problems	11%	12%	18%	29%	23%
Paths are safe	9%	4%	7%	5%	6%
Have good routes, connect well	8%	9%	6%	3%	6%
Paths are easy to use, accessible	6%	7%	5%	6%	6%
Have seen/noticed improvements/upgrades	3%	5%	5%	2%	--
Good for exercising/walking	3%	2%	--	--	<1%
Paths are well lit	2%	2%	4%	5%	5%
Like the paths along the canal	2%	1%	--	--	--
Neutral					
Never use paths, no knowledge of them	4%	4%	6%	5%	4%
There is always room for improvement	3%	1%	4%	4%	3%
Negative/Suggestions					
Paths don't seem safe enough, make them safer	11%	9%	9%	8%	10%
Need more bike lanes	5%	6%	4%	9%	11%
Paths are not maintained	4%*	1%	2%	2%	2%
Could use more paths	3%	2%	7%	6%	4%
Need more walking paths	3%	2%	1%	--	2%
Don't know					
	<1%*	3%	5%	6%	6%

Q23a: Please explain your rating

*Indicates significant difference compared to 2018 at the 95% confidence level.

Note: Response categories with less than 2% total mentions in 2020 not shown in table.

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 high priority ratings (72% rated a “4” or “5”). Notably, nearly one-half (45%) rated it as a “very high priority.” **Approximately three in five residents placed a high priority on the need for miles of shaded sidewalks** (59% rated a “4” or “5”). With one-half of residents (49%) rating it as a high priority, *amenities along sidewalks like water fountains, lighting, art and signage* ranks as the lowest priority overall. While there were no statistically significant shifts compared to 2018, the proportion rating *miles of shade* and *amenities* as a high priority increased by seven-points.

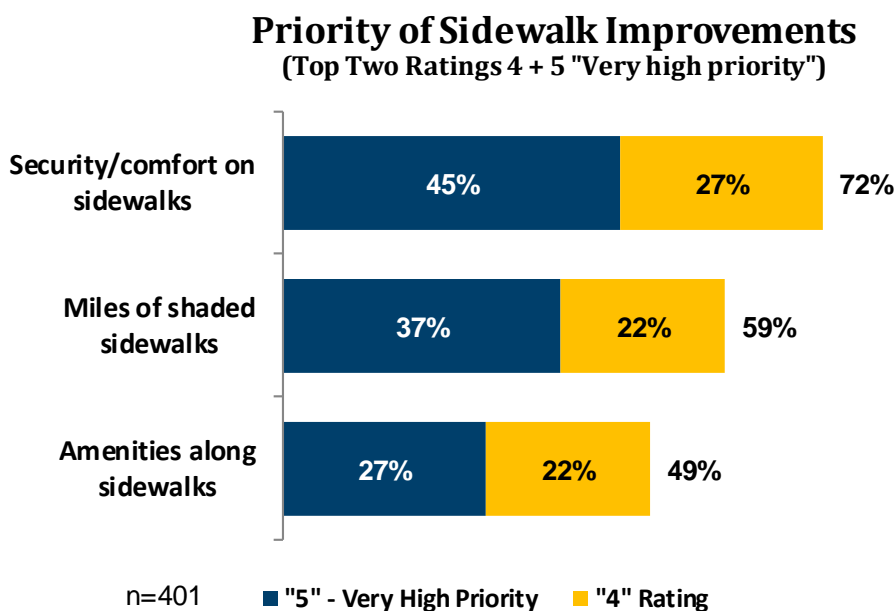


Table 20: 2020 Priority of Possible Sidewalk Improvements

Responses	"5 -Very High"	"4"	"3"	"2"	"1-Very Low"	No answer
Security/comfort on sidewalks such as addressing hazards, obstructions and width	45%	27%	14%	8%	5%	1%
Miles of shaded sidewalks	37%	22%	20%	12%	8%	<1%
Amenities along the sidewalks like water fountains, lighting, art, and signage	27%	22%	28%	11%	12%	<1%

Q24-26: 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....

Table 21: Very High/High Priority of Possible Sidewalk Improvements by Year

Responses	2020 (n=401)	2018 (n=400)
Security/comfort on sidewalks such as addressing hazards, obstructions and width	72%	70%
Miles of shaded sidewalks	59%	54%
Amenities along the sidewalks like water fountains, lighting, art, and signage	49%	42%

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.
 No significant differences compared to 2018

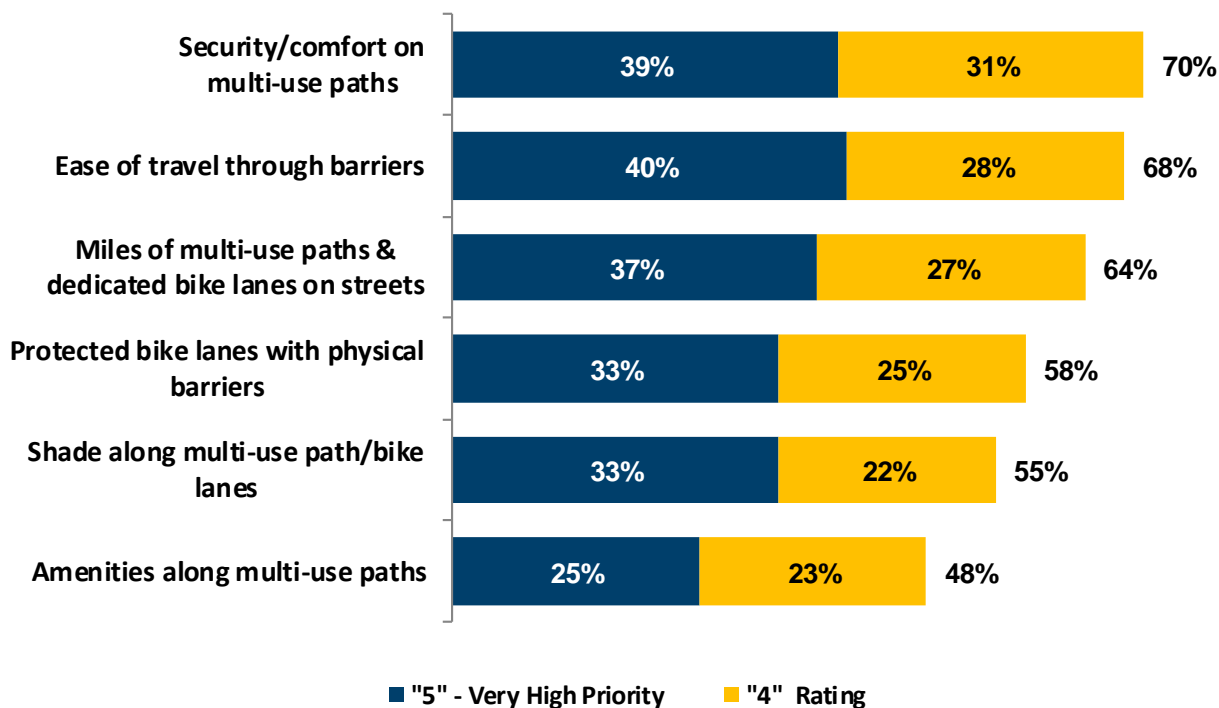
G. Priority of Possible Bikeway Improvements

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 received the highest percentage of priority ratings (70%, 68% and 64% rated a “4” or “5”). More than one-half gave high priority ratings to protected bike lanes with physical boundaries (58%) and shade along multi-use paths and bike lanes (55%). With just under one-half (48%) 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.

Compared to 2018, priority ratings for all improvements increased slightly (1 to 4 percentage-point increases). None of the increases were statistically significant.

Priority of Bikeway Improvements
(Top Two Ratings 4 + 5 "Very high priority")



n=401

Table 22a: 2020 Priority of Possible Bikeway Improvements

Responses	“5 -Very High”	“4”	“3”	“2”	“1-Very Low”	No answer
Security/comfort on multi-use paths	39%	31%	18%	7%	5%	1%
Ease of travel through or around barriers such as railroad crossings, freeways, roads, the lake, etc.	40%	28%	20%	7%	5%	-
Miles of multi-use paths and dedicated bike lanes on streets	37%	27%	21%	6%	9%	1%
Protected bike lanes that have a physical barrier between traffic and bikes	33%	25%	18%	12%	11%	1%
Shade along the multi-use paths and bike lanes	33%	22%	21%	12%	12%	<1%
Amenities along the multi-use paths like water fountains, lighting, art and signage	25%	23%	26%	14%	11%	<1%

Q27-32: 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.

Table 22b: Very High/High Priority of Possible Bikeway Improvements by Year

Responses	2020 (n=401)	2018 (n=400)
Security/comfort on multi-use paths	70%	67%
Ease of travel through or around barriers such as railroad crossings, freeways, roads, the lake, etc.	68%	65%
Miles of multi-use paths and dedicated bike lanes on streets	64%	62%
Protected bike lanes that have a physical barrier between traffic and bikes	58%	55%
Shade along the multi-use paths and bike lanes	55%	51%
Amenities along the multi-use paths like water fountains, lighting, art and signage	48%	47%

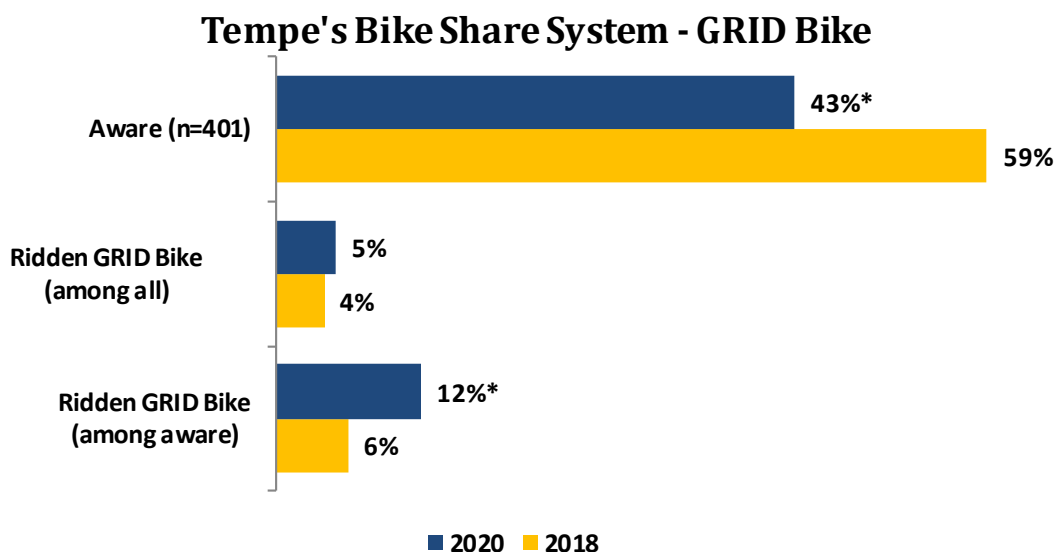
Q27-32: Now I’m going to read you a list of possible bikeway improvements. Please indicate how high of a priority each improvement should be for the City of Tempe.

No significant differences compared to 2018

H. Bike Share System – GRID Bike

In 2020, under one-half of residents (43%) had heard of Tempe’s bike share system which is down significantly from 59% in 2018. Despite awareness being down, usage is up – with 5% of all residents reporting they have ridden on a green GRID bike (12% of those aware).

Among the 20 residents who have ridden a GRID bike, one-half (10) reported being satisfied (rated 4 or 5) with the quality of the bike share system in Tempe. Residents primarily report being satisfied with GRID Bike because they are *easy to access* (5 mentions), *convenient* to use (3 mentions) and are in *good condition* (3 mentions). Complaints included that there are *not enough/not easy to find* (6 mentions) and are *expensive* (3 mentions).



Q33: Have you ever heard of Tempe's bike share system?
 Q34: Have you ridden on a green GRID bike?

Table 23: Satisfaction of Bike Share System Among those who have ridden on a GRID bike

	2020 (n=20)*	2018 (n=15)*
5 - Very satisfied	4	9
4	6	2
3	7	3
2	3	1
1 – Very dissatisfied	-	-

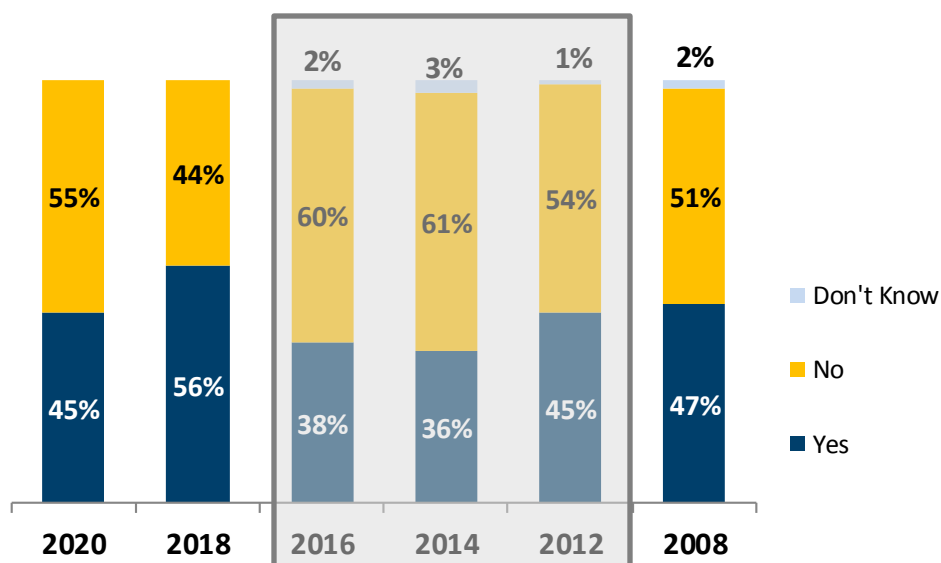
Q35: How satisfied are you with the quality of the bike share system in Tempe?
 *Unweighted frequencies shown due to very small sample size.

VII. Tempe Youth Free Transit Pass Program

In 2020, nearly one-half (45%) of residents who have children ages 6 to 18 have heard of the Tempe Youth Free Transit Pass. While this is down from the 56% measured in 2018, the decrease is not statistically significant. Awareness was significantly higher among parents who use public transit (55%), but 27% of non-riders have heard of it as well. Parents who have lived in Tempe for more than ten years had a significantly higher level of awareness than did newer residents (56% vs. 32% who have lived in Tempe for ten years or less).

Parents residing in 85281 and 85283 are most likely to be aware of the pass (55%) and those in 85282 are the least likely to be familiar with them (30%). (Of note, none of these zip code differences are statistically relevant).

Awareness of Tempe Youth Free Transit Pass



2020 n=95, 2018 n=84, 2016 n=401, 2014 n=409, 2012 n=400, 2008 n=98,
 QD5: Have you ever heard of the Tempe Youth Free Transit Pass Program?

No significant differences compared to 2018

Note: 2020, 2018, and 2008: question was asked only of people with children ages 6 years old and older. In 2012, 2014, and 2016 this question was asked of all residents.

This data is available in earlier reports.

Among parents aware of the program, *school* (35%), *word of mouth* (21%), and the *library* (13%) were the top ways they had learned about the Tempe Youth Free Transit Pass Program.

Table 24: Sources for Tempe Youth Transit Pass Program Information
(Among those aware of the program)

Sources	2020* (n=43)	2018* (n=47)	2008* (n=46)	2016 (n=150)	2014 (n=148)	2012 (n=179)
Through school	35%	52%	28%	24%	20%	24%
Word-of-mouth (friends/family)	21%	12%	33%	16%	20%	19%
Library	13%	12%	7%	11%	7%	7%
Bill insert	5%	3%	2%	8%	3%	7%
Letter from the City	5%	2%	4%	3%	5%	5%
Web site	4%	3%	4%	1%	2%	3%
Employer/work	4%	--	--	--	--	1%
At the park	2%	--	--	--	--	2%
Don't know	3%	3%	11%	7%	5%	10%

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

*In 2008 and again in 2018-2020, 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 2020 not shown

APPENDIX A: Questionnaire

**City of Tempe – Tempe in Motion
Questionnaire – September 2020**

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 WestGroup Research 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.

D1. Gender: 1 Male 2 Female

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?

3a. 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 twenty years

f. More than twenty 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, d or e IN Q5: Which of the following have you used in Tempe in the past year?
MULTIPLE RESPONSES ALLOWED
- Local or express bus
 - Orbit or Flash neighborhood shuttles
 - Light rail
6. *ASK IF “f- 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)*
- Prefer to drive my car
 - Bus stops far away
 - Takes too long
 - Need car for business
 - Doesn’t go where we need to go
 - Inconvenient
 - REMOVE “DON’T KNOW HOW TO USE THE TRANSIT SYSTEM/BUS”
 - No need to use it
 - Health reasons/disability
 - Don’t have to go far distances
 - Ride bike instead
 - Work from home/Telecommute/Don’t commute
 - Don’t feel safe / secure on transit
 - Service isn’t frequent enough
 - Other: (SPECIFY: _____) _____
 - Don’t know
7. *ASK IF “f- 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?*
- Helps reduce air pollution
 - Helps improve the environment
 - Saves money
 - Saves time
 - Reduces your stress
 - Improves the community
 - Reduces your carbon footprint
 - Other: (SPECIFY: _____)
 - DO NOT READ - None/DK/No answer

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

8. 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
 - 11 to 20 years
 - More than 20 years

- h. 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. Go to downtown
 - j. A way to get around
 - k. To avoid drinking and driving
 - l. To get to/from work
 - m. Vehicle not available/Have 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
 - l. Phoenix (general)
 - m. Downtown Tempe
 - n. Airport
 - o. Other (SPECIFY: _____)
- 11. ASK ONLY OF THOSE WHO ANSWER "A" OR "B" IN Q5a. For each of the following attributes, please tell me if you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied. In general, how 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 (e.g. shade, seating, bike racks)	4	3	2	1	0
d. Reliability/on-time performance of buses	4	3	2	1	0
e. Driver courtesy and professionalism	4	3	2	1	0
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 (e.g., using schedules, getting to the bus stop, paying fares)	4	3	2	1	0
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 city events	4	3	2	1	0

11a. ONLY ASK IF ANSWER IS SOMEWHAT DISSATISFIED OR VERY DISSATISFIED 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
- l. 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. Don't use it/Never used it
- b. Good routes/convenient routes
- c. Need better routes/need more routes/need more connections/doesn't go where I need to go
- d. More frequent buses/longer hour
- e. Always room for improvement
- f. Convenient (general- probe for specifics)
- g. Clean
- h. Dirty/needs to be cleaned up
- i. Like Light rail/Light rail is good
- j. Needs more security
- k. Uncomfortable with people who ride transit
- l. Other (SPECIFY: _____)

13. To the best of your knowledge, 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. Facebook
 - b. Twitter
 - c. NextDoor
 - d. Instagram
 - e. Street Banners
 - f. Signs on Buses
 - g. Bill inserts
 - h. Word of Mouth
 - i. Newspaper / Print ads
 - j. Sign (general)
 - k. Direct mail
 - l. TV
 - m. ASU / School
 - n. Library
 - o. Pandora or Spotify
 - p. Internet / Online ads / web
 - q. Just know / I live here / Lived here a long time
 - r. Billboard
 - s. Flyers / Brochure
 - t. On Light Rail
 - u. Other (SPECIFY:)
 - v. Don't know/Not aware of program
16. IF a THRU p OR R thru u 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. Facebook
 - b. Twitter
 - c. NextDoor
 - d. Instagram
 - e. Street Banners
 - f. Signs on Buses
 - g. Bill inserts

- h. Word of Mouth
 - i. Newspaper / Print ads
 - j. Sign (general)
 - k. Direct mail
 - l. TV
 - m. ASU / School
 - n. Library
 - o. Pandora or Spotify
 - p. Internet / Online ads / web
 - q. Just know / I live here / Lived here a long time
 - r. Billboard
 - s. Flyers / Brochure
 - t. On Light Rail
 - u. Other (SPECIFY:)
 - v. Don't know/Not aware of 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 ten times
 - e. More than ten times
 - f. Don't know/NA
- 20a. If none/never ride it in Q20: What are some reasons you don't ride a bike more often?
DO NOT READ LIST
- a. Physical condition / my health
 - b. Distance / Too far
 - c. Takes too long
 - d. Bike not working properly / bike not functional
 - e. Have little kids / drive kids around
 - f. Prefer Car
 - g. Time / Convenience / Too busy
 - h. Lazy / Don't want to ride it
 - i. Too much traffic
 - j. Not enough bike lanes / paths
 - k. Injury
 - l. Have too much to carry
 - m. Too dangerous
 - n. Other
 - o. 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
- l. 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
- l. 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?
- Yes
 - No
 - 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.

- D2. What is the highest grade of school or year of college that you have completed?
- Some high school
 - High school graduate
 - Some college
 - College graduate
 - Post graduate
 - No answer
- D3. Are you married or single?
- Married
 - Single
 - No answer
- D4. Do you have children ages 6 to 18?
- Yes
 - No
 - Don't know
- D5. If yes in D4, have you ever heard of the Tempe Youth Free Transit Pass Program?
- Yes
 - No
 - 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 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 \$39,999
 - c. \$40,000 to \$59,999
 - d. \$60,000 to \$79,999
 - e. \$80,000 to \$99,999
 - f. \$100,000 to \$149,999
 - f. More than \$150,000
 - g. No answer

Thanks for your time. That concludes our interview.

MEMORANDUM



TO: Transportation Commission

FROM: Shelly Seyler, PE, Deputy Engineering and Transportation Director (480-350-8854)
Eric Iwersen, Transit Manager (480-350-8810)
Sam Stevenson, Senior Transportation Planner (480-858-7765)

DATE: December 1, 2020

SUBJECT: Long-Term Transit Fund Plan and Service Changes

PURPOSE

The purpose of this memo is to provide the Commission with an update on the Transit Tax Fund and the upcoming transit service changes for Tempe.

CITY COUNCIL STRATEGIC PRIORITY

- Quality of Life 3.26: Achieve a multimodal transportation system (20-minute city) where residents can walk, bicycle, or use public transit to meet all basic daily, non-work needs.
- Quality of Life 3.29: Achieve ratings of “Very Satisfied” or “Satisfied” with the “Overall Satisfaction with Transit System in Tempe” greater than or equal to 80% as measured by the City of Tempe Transit Survey.

BACKGROUND

The Tempe Transit Tax passed in 1996 and provides an ongoing source of funds for all Tempe bus, rail, and Orbit service, paratransit service, bicycle and pedestrian enhancements, and a variety of other mobility options for Tempe visitors and residents. This half-cent (on every sales tax dollar), non-sunsetting fund provides upwards of \$43 million dollars annually depending on how the local economy performs.

In the last 24 years, the City Council has advanced a strong program that has built major capital projects including 40 miles of multi-use paths, the East Valley Bus Operations and Maintenance Facility, multiple transformative streetscape projects, and the Transportation Center. Throughout the years, Tempe has expanded bus and rail service to fully cover the City (no transit “deserts”) that includes fixed route/major arterial service, the Orbit neighborhood circulator system, light rail, and the upcoming Tempe Streetcar. It should be noted that as the City has expanded transit service and completed the majority of the capital projects promised in the tax initiative, the fund has become largely an operating expenses fund. Transit service is operated through a partnership with Valley Metro, is coordinated with neighboring cities, and has been generally considered successful for Tempe and in the state of Arizona. Tempe also has the highest per capita transit ridership in the region.

The cost to the Transit Fund to operate Tempe transit service (bus and light rail operations) in fiscal year 2021 is expected to total approximately \$45 million. This amount is offset by sources of revenue like federal grants, regional Public Transit Funds / Prop 400 (PTF) money, real estate holdings, and transit ticket sales (farebox recovery). In late Spring 2020 the federal government passed the Coronavirus Aid, Relief, and Economic Securities Act that included one-time funding for transit agencies across the country. This CARES money was distributed to Valley Metro and offsets the costs for transit service in Fiscal Year 2021, our current year. This significantly relieves the burden of the Tempe Transit Fund annual transit operations costs. The Tempe share of this CARES money totals approximately \$21 million for the FY21, allowing Tempe to focus on the process and a slower timeline for addressing the long-term structural health of the Transit Fund.

As the global pandemic persists and the subsequent impact to the world economy continues, Tempe too is experiencing a declining economic condition and more specifically, a reduction in sales tax collections. Engineering and Transportation and Budget and Finance staff have been watching the performance of the local economy and believe that the Transit Fund should prepare for expenditure reductions. Essentially there is less sales tax revenue coming in than the long-term expenditures will require. Based upon this projected long-term fund shortfall, the fund will need to institute cuts to the recurring costs of up to

\$9.5 million. This is a significant number and the following information is the proposed approach to achieve this Transit Fund reduction to ensure the long-term health of the fund, and its ability to provide City-wide transit, bicycle, and pedestrian services.

SERVICE REDUCTION AND OPTIMIZATION PLAN

Staff has embarked upon a multi-year process to address the long term structural issue with the transit fund that will include data-based decision making, broad and detailed public involvement with an adherence to equity requirements, maximization of revenue sources, careful reduction of transit service and ongoing maintenance costs, and exploration of optimization and efficiency efforts. Staff will work closely with Valley Metro and our neighboring cities to determine and propose all necessary service reductions. The overall philosophy of this plan is to minimize the transit rider impact and loss of service to valuable programs in Tempe. The following items highlight some points to the proposed approach.

- Tempe and Valley Metro staff will review the performance of all of Tempe's six Orbit routes, one Flash route, Tempe Streetcar, three Express bus routes, light rail, and all 16 fixed route bus routes. This will include looking at:
 - Cost per boarding – correlation between ridership and costs of providing the service
 - Ridership by hour
 - Ridership by route
 - Review of operating arrangements with Valley Metro and subcontractors to explore opportunities to reduce annual operating costs through efficiencies. The current bus service contract is due to expire in 2023.
- Public Involvement will be conducted in concert with the bi-annual regional service change schedule and will include both the Valley Metro outreach process and the standard Tempe public and resident engagement activities, board and commission process, and all other stakeholder outreach.
- Explore technological or industry changes that can bring a cost savings while supporting public mobility options.
- Careful attention to federal and regional requirements like Title VI and ensuring equity with all decision making.
- Continued commitment to the original language in the Transit Tax ballot language (see attached).
- Maintain staffing levels but explore personnel efficiencies particularly when vacancies occur.
- Maximize lesser financial obligations in the Transit Fund that can be reduced or eliminated including landscape and pathway maintenance costs, special events, giveaways, collateral materials, staff travel, training, and conferences.
 - Eliminate Tour de Tempe (hold virtually like Tour de Fat)
 - Modify Bike to Work Day
- Maximize revenue generation
 - Ensure local and regional ticket sales are compliant to reduce fare evasion and reduced fare abuse, verifying all riders have purchased tickets
 - Explore and promote real estate and lease agreements that reimburse the Transit Fund
 - Explore possible advertising on buses, Streetcar and bus shelters
 - Explore partnering with other transit service partners like Flixbus
 - Continue federal and regional funding like Prop 400/PTF
 - Explore increasing fares system-wide
 - Explore charging a fare for Orbit

The following public involvement tools will be used to notify the public of the proposed reductions.

- Tempe Today
- Social media
- Email blasts
- Advertising at major bus stops, Transportation Center
- On-board surveys (when allowed)
- Values mapping survey to determine community needs
- Dedicated web page (tempe.gov/TransitChanges)

SERVICE REDUCTION CHANGES APRIL 2021

As part of the larger transit fund balancing effort, staff advanced six proposed service changes in the Fall of 2020 that, if approved, would take effect in April, 2021. These proposals were developed as a result of recent transit studies (for Routes 72, 520, 521, and 522) or aim to reduce duplicate service (for Routes 32 and 40) in areas where alternate transit services exist. The service changes are detailed in the attached PowerPoint and public input summary and are summarized below:

- Route 32: Elimination of service on Baseline Road in Tempe. Riders can use Route 77 to connect to Route 32.
- Route 40: Elimination of service on Apache Blvd in Tempe. Riders can use Valley Metro Rail to connect to Route 40.
- Route 72: Elimination of the service on University Drive, College Ave., and Veterans Way that connects to the Tempe Transportation Center. Riders can use Valley Metro Rail, Orbit Earth, Orbit Mars, Orbit Mercury, or Routes 30, 48, and 62 to connect to Route 72.
- Route 520: Eliminate route. Riders can use Route 521 from the McClintock/Baseline Park and Ride lot to get to Downtown Phoenix.
- Route 521: Modify route to begin and end at the McClintock/Baseline Park and Ride lot. The route would run nonstop between the park and ride and downtown Phoenix.
- Route 522: Modify route to begin and end at the Tempe Sports Complex Park and Ride lot. The route would run nonstop between the park and ride and downtown Phoenix.

A total of 135 survey responses were received. For each of the six proposals, survey respondents could indicate the level of impact that each proposal would have on their travel habits: “No Opinion”, “No Impact”, “Some Impact”, or “Significant Impact”. For all six proposals, the majority of respondents indicated either “No Impact” or “No Opinion”. Therefore, staff are recommending the advancement of all six service changes proposed for implementation in April, 2021.

The survey also included questions to gauge community values with respect to transit service. Staff intends to use the community’s response to these questions to help guide the future iterations of proposed transit expenditure reductions. Some of the more important areas of Tempe’s transit system include maintaining the fare-free Orbit system, frequency of light rail, and frequency of Orbit service. Some of the lower-ranking areas include improved holiday service (reducing the number of holidays with Sunday service), local bus span of service, and Orbit span of service – and these lower-ranking areas will be further reviewed to identify potential transit fund expenditure reduction strategies for implementation in October, 2021 and beyond. Staff will return to council in January with more details related to the future iterations of transit fund expenditure reductions.

LONG TERM REVENUE GENERATION AND FUND BALANCING

Bus and Rail Service Contracts: Tempe will continue to work with Valley Metro to identify possible ways to create savings in these two contracts, which account for the bulk of expenditures in the Transit Fund. Rail and Streetcar operations scenarios are proposed to be discussed with Valley Metro and partner cities. The bus service contract for Tempe and the East Valley ends on June 30, 2023. The contract for East Valley service would likely be released for bid in summer or fall 2022. Tempe will be looking at the structure of the EV contract as it relates to Tempe to see if there is rationale for any structural change to the management of the contract and if there are opportunities for reductions in service costs.

Advertising: Tempe staff is recommending to advance research and cost estimates for advertising on and in streetcar vehicles, light rail platforms, bus fleet (excluding Orbit), naming rights for Streetcar, and Tempe bus shelters. These potential rail and bus fleet revenue monies would be explored as part of a Valley Metro contract. Advertising at bus shelters would be a separate and Tempe-led effort. Staff would return to Council in 2021 to share potential advertising revenues and the process that would be required to modify the City zoning code to allow for such advertising activities.

Orbit Fare:

Due to the public response to, and in keeping with the original intent of Orbit service, staff is recommending to not advance the idea of implementing a fare for Orbit. More specifically, the community values response was clearly not in favor of this revenue generating idea, and staff predicts a ridership decrease with an Orbit fare.

Other Factors

- It is important to note that the Transit Tax has been in place nearly 25 years and has built and implemented a majority of what the ballot language indicated. The fund and service are already operating nearly at maximum capacity, and to

further maintain and enhance the system would require additional other funding sources or City investment beyond what the tax generates.

- Prop 400 expires December 31, 2025 and if there is no continuation of it through Prop400E, there will be significantly more reductions in Tempe and regional service.

RECOMMENDATION OR DIRECTION REQUESTED

Receive Commission direction on proposed April, 2021 service changes and the proposed exploration of advertising revenue possibilities.

TIMELINE/NEXT STEPS

- Dec. 1, 2020: Transportation Commission
- Dec. 3, 2020: Council Direction for April, 2021
- April, 2021: First round of service reductions and fund changes
- Summer, Spring 2021: Public and Council review process, including Boards and Commissions
- October, 2021: 2nd round of reductions and fund changes
- Fall/Winter 2021/2022: Public and Council review process, as needed
- April and October 2022: 3rd and 4th round of reductions and fund changes, as needed

FISCAL IMPACT or IMPACT TO CURRENT RESOURCES

Approximately \$9.5 million in recurring reductions to the Transit Fund which will be applied over time. CARES Act provides sufficient funding for transit service operations for FY21. Transit Fund expenditure reductions for transit operations will begin in April, 2021 and continue, as needed, into FY23 to achieve structural balance to the Transit Fund. Base line budget adjustments including landscape and pathway maintenance, special events, staff travel, giveaways, collateral materials, training, and conferences have already begun.

ATTACHMENTS

1. PowerPoint
2. Public Input Summary, October, 2020

Long-Term Transit Fund Plan and Service Changes

**Transportation Commission
December 1, 2020**



City Council Strategic Priority Performance Measures



Quality of Life 3.26

Achieve a multimodal transportation system (20-minute city) where residents can walk, bicycle, or use public transit to meet all basic daily, non-work needs.

Quality of Life 3.29

Achieve ratings of “Very Satisfied” or “Satisfied” with the “Overall Satisfaction with Transit System in Tempe” greater than or equal to 80% as measured by the City of Tempe Transit Survey.



Agenda



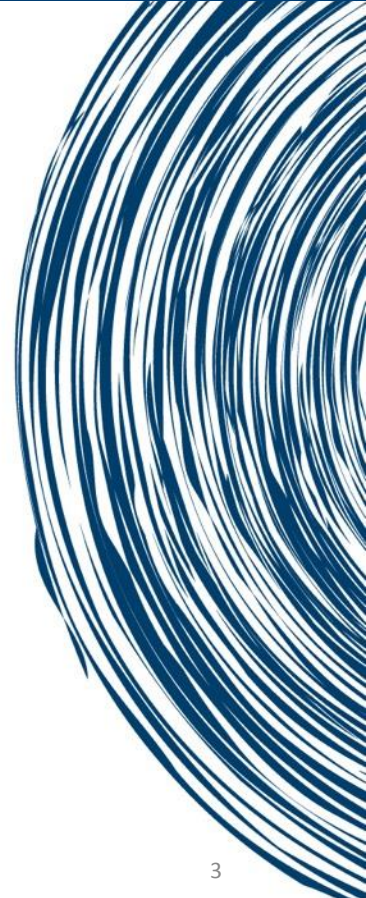
- Fall 2020 Public Feedback Overview
 - Community Values - Transit
 - April 2021 Proposed Changes

- Long Term Funding Strategies & Council Follow-Up Items
 - Transit Fund Update
 - Orbit Fare
 - Advertising

- Next Steps

Direction:

- Service Changes April 2021
- Orbit Fare
- Potential Advertising Revenue



Tempe Transit Tax Program Elements



16 arterial bus routes



6 Orbit routes & FLASH



3 Express bus routes



Paratransit



6 miles of light rail with 9 stations



Streetcar



GRiD bike share



Multi-modal friendly streetscapes



38 miles of shared use paths

Public Feedback Summary



- Advertised at bus stops and Tempe Transportation Center, social media, emails and post cards
- 135 Survey Responses
 - 134 (99%) Live, work or visit Tempe
 - 116 (86%) use transit
- Community Values Analysis
 - Inform future rounds of transit service reductions
- Proposed April 2021 Service Changes
 - Public support

VIRTUAL PUBLIC MEETINGS

TRANSIT SERVICE CHANGES

Thursday, Sept. 24 at noon
Saturday, Sept. 26 at 11 a.m.
Online input: Sept. 24-Oct. 25

tempe.gov/TransitChanges

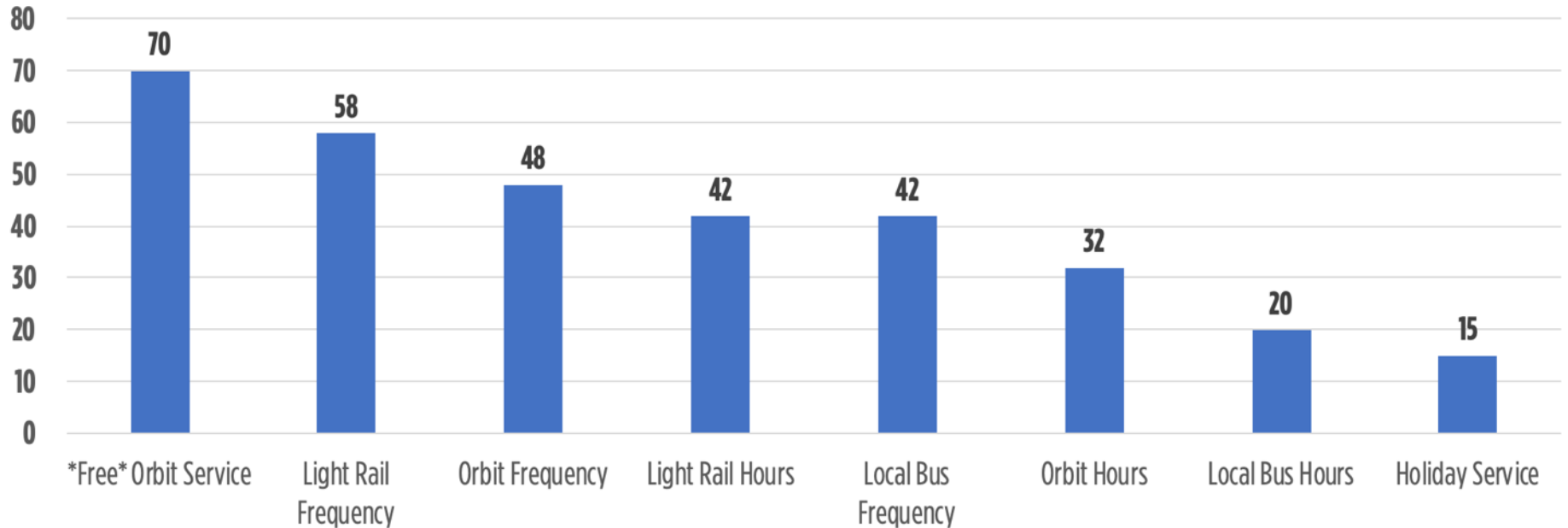
Tempe in Motion

The graphic is a vertical stack of four colored boxes. The top box is purple with white text 'VIRTUAL PUBLIC MEETINGS' written vertically. The second box is black with white bus icons on either side and the text 'TRANSIT SERVICE CHANGES' in large white letters. The third box is dark blue with white text listing meeting dates and times. The bottom box is black with green text for the website URL and the 'Tempe in Motion' logo.

Community Values Summary



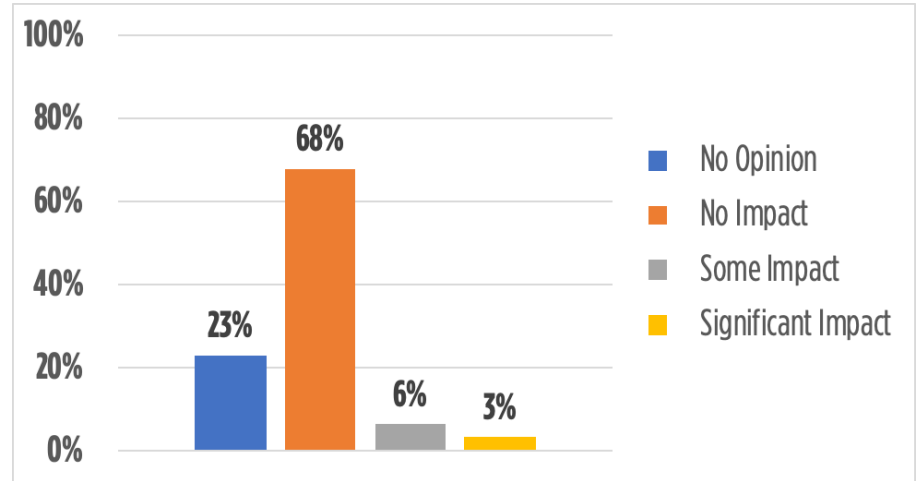
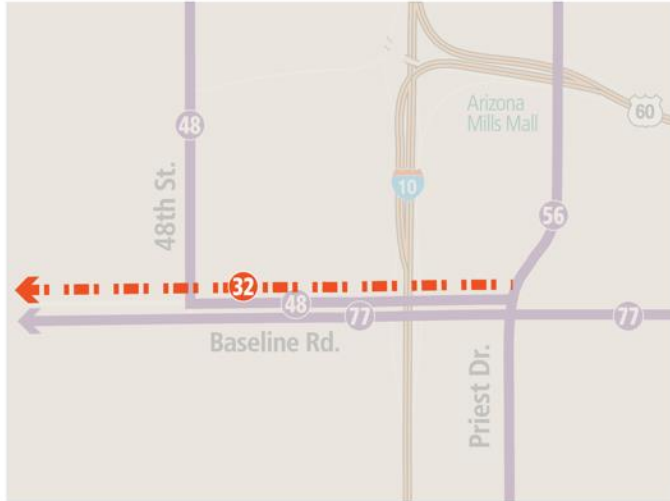
Help us understand the areas of our system that are most important to you. SELECT UP TO 3 areas that are most important to keep.



Route 32 – 32nd Street



PROPOSED ELIMINATION



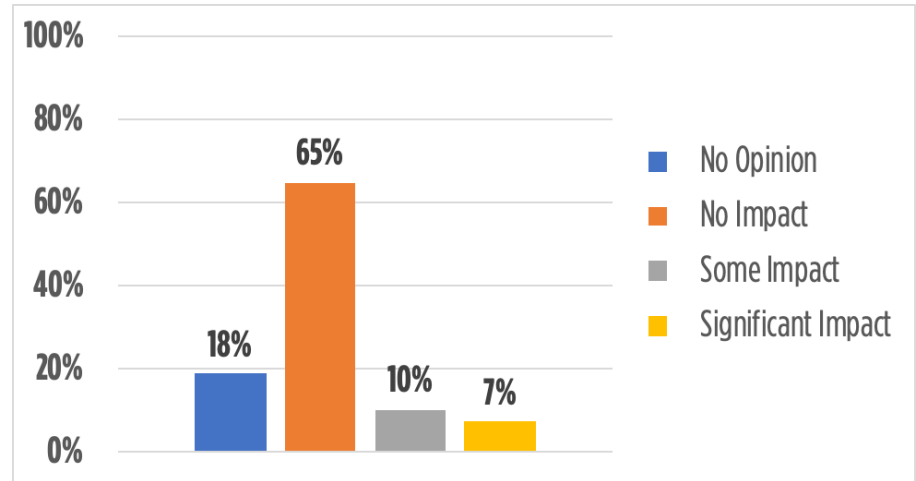
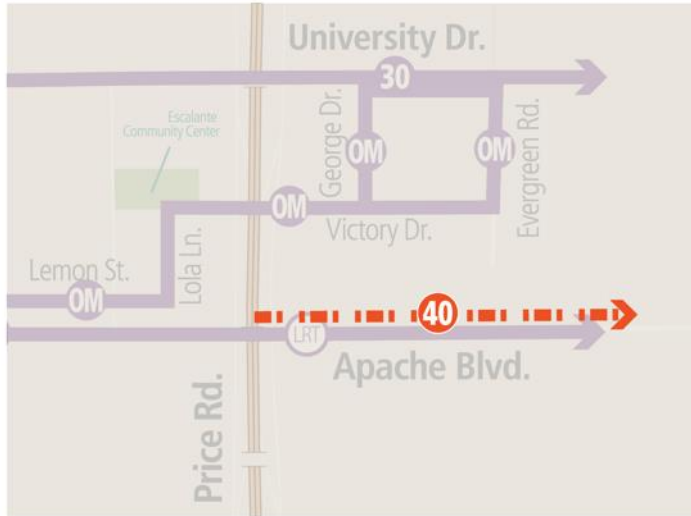
Legend

-  Proposed Elimination
-  Other Transit Connections

Route 40 – Apache/Main



PROPOSED ELIMINATION



Legend

-  Proposed Elimination
-  Other Transit Connections

Route 72 – Scottsdale/Rural

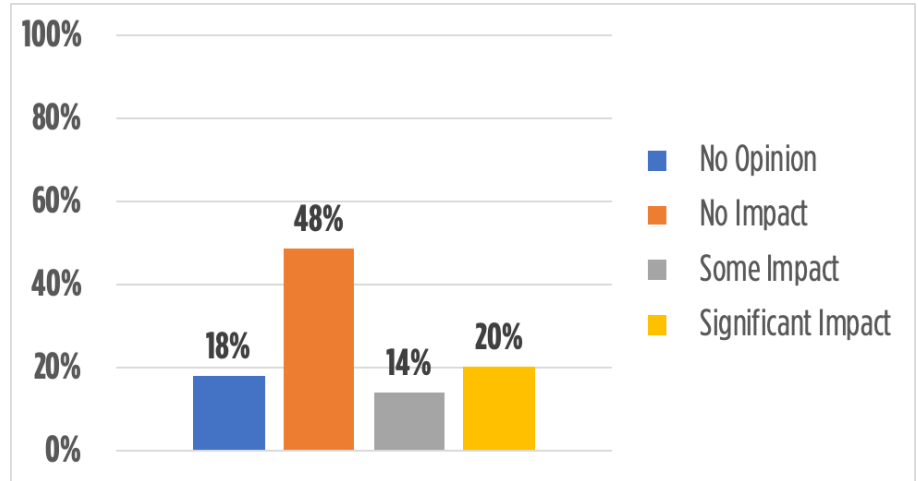


PROPOSED ELIMINATION



Legend

- Proposed Route
- Proposed Elimination
- Other Transit Connections

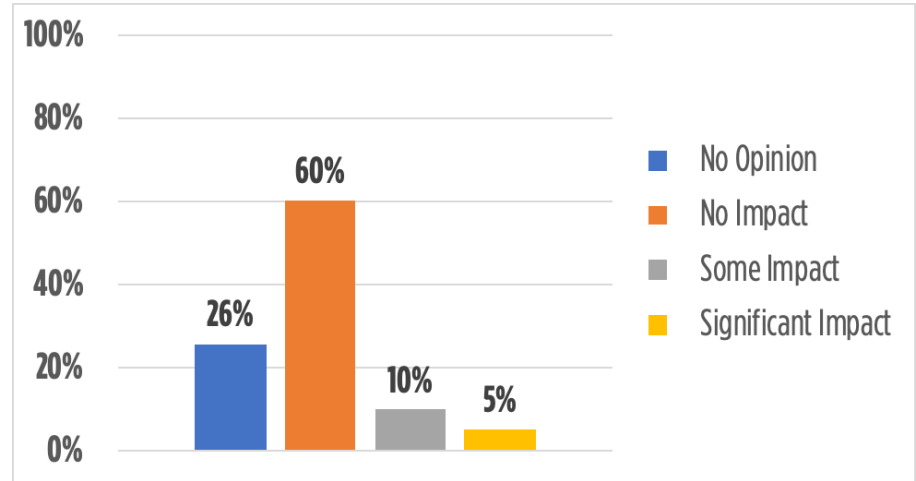
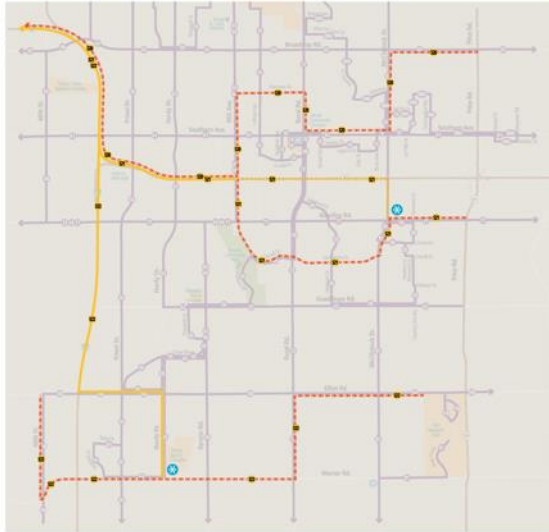


Tempe Express – Routes 520, 521 & 522



PROPOSED ELIMINATION

Nonstop Express Service to Phoenix



Legend

- Current Express Routes
- Proposed Elimination
- Proposed Additions
- Other Transit Connections
- Park-and-Ride

Transit Fund 5-year Forecast



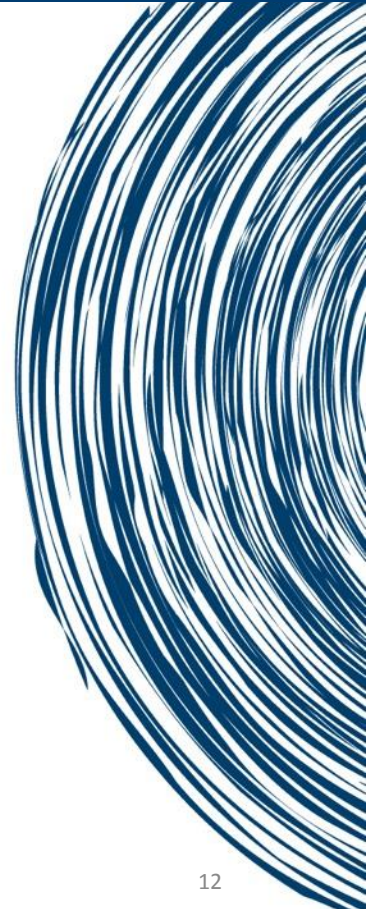
- Forecast assumes \$9.5M in transit fund reductions
 - Transit service
 - Capital program, staffing efficiencies
- Sales Tax 2020 Q1 improvement
- Continue coordination with Budget Office
- February 2021 forecast to budget for FY 22



Long-Term Expenditure Reduction Strategies



- Prioritize Transit Service
 - Data-driven proposals & community values
 - Twice-Annual Reductions
- Complete federally-funded & priority capital projects
 - Bike/Ped: Country Club Way, Priest Drive, Scottsdale Road
 - Bus Pullouts
 - Transit Shelter Design
 - New Orbit Buses
- Vacancies Frozen
- Continued Partnerships – FlixBus, ASU
- Electric Bus Demonstration and Testing
- Review of transit service contracts



New Revenue Generation / Follow up Council Items



- Orbit Fare - Not Recommended
 - Cost to implement & sustain
 - Unfavorable per survey results / community support
 - Expected ridership reduction
- Advertising (next slide)
- Transit Service Agreements – To Be Explored
 - Strategize arrangements to maximize Tempe's local transit investment
 - Leverage Tempe Infrastructure and Assets
 - Maximize effectiveness local funding and achievement of strategic priorities



New Revenue Generation / Advertising



Existing

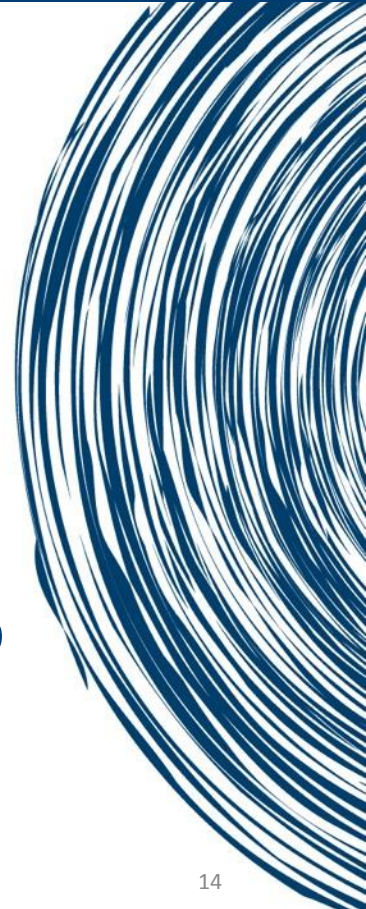
- Valley Metro train wraps & interiors (ceiling) (\$175K Tempe FY20)

Opportunities

- Light rail stations
- Streetcar vehicle interior & wraps & naming rights
- Fixed route bus fleet wraps, Orbit excluded
- Bus shelters

Recommendations & Next Steps

- Advance rail, Streetcar & bus fleet assets for potential revenue numbers with Valley Metro
- Issue RFP for bus shelter advertising numbers
- Careful coordination with City Attorneys Office and Zoning Code





Council Direction

- Approve proposed April 2021 service changes
- Orbit Fare – Maintain as a fare free system
- Advance bus shelter (RFP) & rail, streetcar & bus advertising estimation with VM

Next Steps

- Jan. 2021: Return to Council
 - Proposed October 2021 Service Changes
 - Bus service contract & regional context information
- Spring 2021: Public Outreach
- May 2021: Council Direction – October 2021 Service Changes
 - Advertising



Transit Changes: Public Input Summary, October 2020

I. Background

Due to the coronavirus pandemic and anticipated lower Transit Tax revenue, Tempe is exploring cost-saving transit service reductions that will strive to minimize service impacts and still provide equitable transit service. It is anticipated that reductions will occur using a phased approach over the next two years and that outreach will take place every six months during this timeframe. The use of data and equity metrics as well as public input will be integral to developing a framework for how reductions will be structured.

II. Outreach

- **Postcards** inviting the public to attend the meetings or to comment online were mailed to the areas surrounding Tempe's high ridership bus stops and **signs** were posted at 100 of Tempe's busiest bus stops and approximately 65 express bus stops.
- Virtual public meetings were held on September 24 and 26, 2020; a total of 9 **members of the public attended online**.
- The topic was **posted online** from September 24 - October 25, 2020 on the Tempe Forum.

Below is a summary of additional **outreach tools** that were used to provide information to the public regarding the meetings, project, and opportunities for input:

FACEBOOK

9/10/20 – public meetings. Reach/Impressions: 584 | Engagement: 24
9/18/20 – public meeting reminder. Reach/Impressions: 945 | Engagement: 22
10/1/20 – online input reminder. Reach/Impressions: 754 | Engagement: 14
10/20/20- feedback closes: Reach/Impressions: 1995 | Engagement: 164

TWITTER

9/10/20 – public meetings. Reach/Impressions: 2210 | Engagement: 97
9/18/20 – public meeting reminder. Reach/Impressions: 1591 | Engagement: 35
9/24/20 – day of meeting reminder. Reach/Impressions: 1229 | Engagement: 6
10/1/20 – feedback reminder. Reach/Impressions: 2779 | Engagement: 58
10/20/20 – feedback closes. Reach/Impressions: 2395 | Engagement: 145

NEXTDOOR

9/10/20 – public meetings. Reach/Impressions: 1916 | Engagement: 1
10/20/20 – feedback closes. Reach/Impressions: 1013 | Engagement: 0

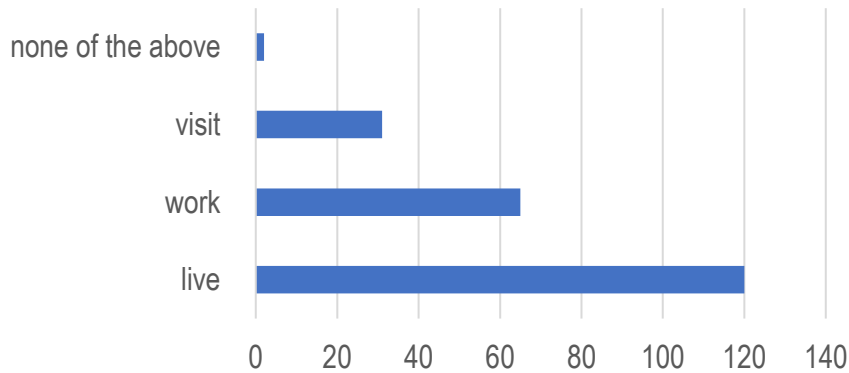
PRESS RELEASE

9/10/20 – virtual public meeting. 2360 emails sent, 37.4% open rate, 2.2% click rate
9/17/20 – virtual public meeting to dedicated list. 262 emails sent, 44.6% open rate, 6.3% click rate
9/21/20 – Coronavirus newsletter. 6582 emails sent, 32.7% open rate, 5.3% click rate
9/23/20 – Coronavirus newsletter. 6583 emails sent, 35.1% open rate, 10.7% click rate
10/15/20 – survey reminder. 2277 emails sent, 25.2% open rate, 3.2% click rate
10/21/20 – Coronavirus newsletter. 6616 emails sent, 30.2% open rate, 3.2% click rate

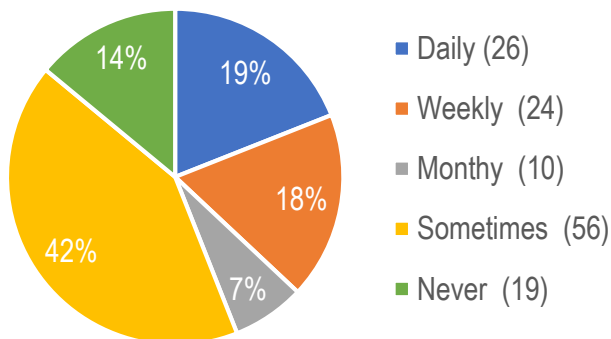
III. Survey Results

A total of 135 unduplicated survey responses were received.

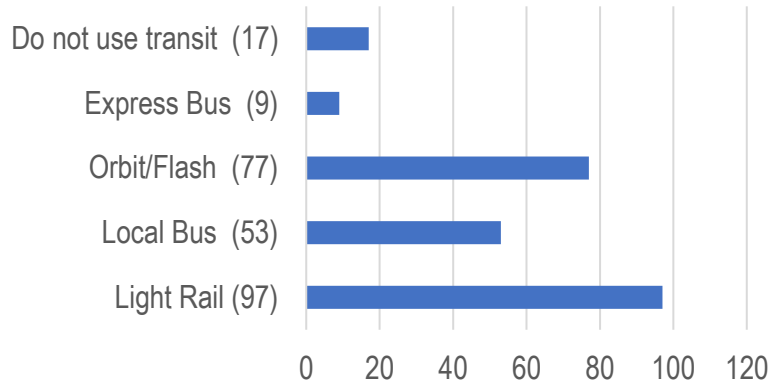
Question 1: *Do you live, work or visit Tempe?* (218 answers, some respondents replied with more than one answer)



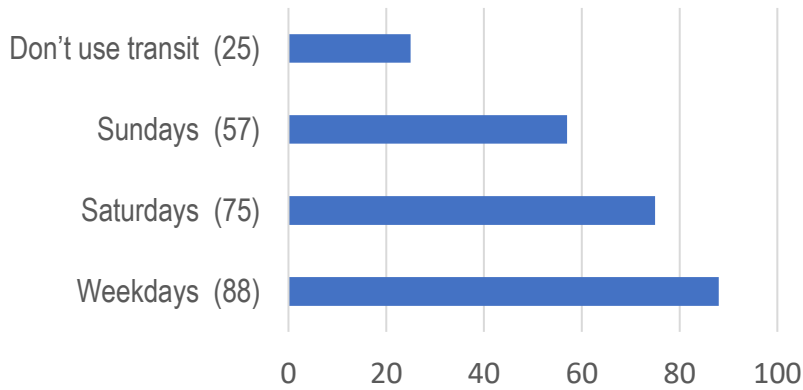
Question 2: *How often do you use public transit in Tempe?* (136 responses)



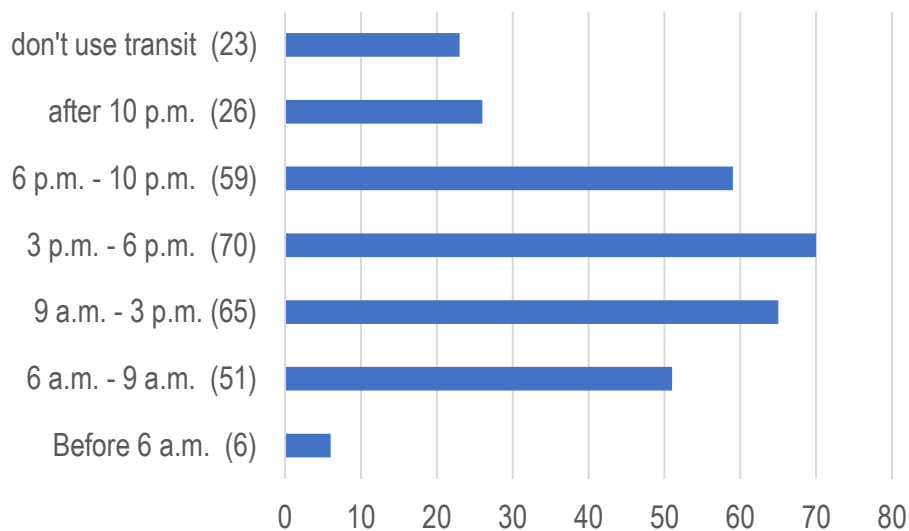
Question 3: *If you use public transit in Tempe, which of the following do you use?* (261 answers, some respondents replied with more than one answer)



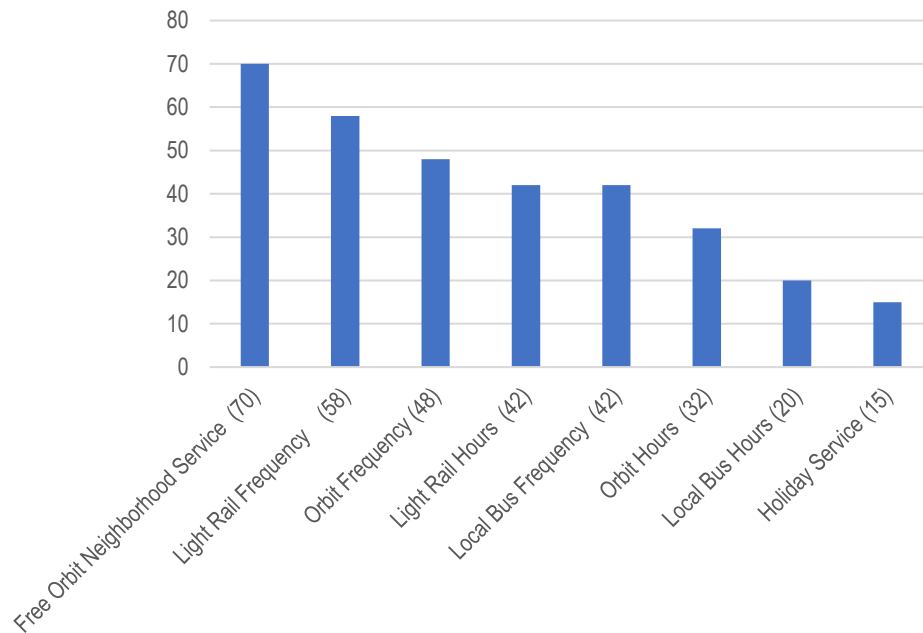
Question 4: *If you use transit in Tempe, what days do you use it?* (245 answers, some respondents replied with more than one answer)



Question 5: *If yes, what time of day do you use transit?* (300 answers, some respondents replied with more than one answer)



Question 6: Help us understand the areas of our system that are most important to you. CIRCLE UP TO 3 areas that are most important to keep. Local bus routes in Tempe are routes 30, 32, 40, 45, 48, 56, 61, 62, 65, 66, 72, 77, 81 and 108.



Question 7: Please list any ideas you have for ways for Tempe to save money to run its transit system.

1. Reduce bus frequency and the number of buses on the road.
2. I live on the Mars route. The bus passes my house many times per week with nobody on it other than the driver the vast majority of the time. When the bus used to go directly to Connolly and Curry schools it was quite busy.
3. Have Orbit routes run on roads that have less road bumps or dips in the road. I ride the Orbit Earth and when it passes through the neighborhood, it has to slow down because of the dips in the road, which slows down service and requires more fuel for the bus to pick up speed again. Honestly the route could be shortened through the neighborhood to just at least go to the North Multi-generation Center but not have to wind back and forth as much in between the neighborhood streets
4. Mobile payment system could help recover revenue and save money, I've noticed the fare box is frequently broken. even if you are unable to completely phase out the fare box, we could still recover more revenue from riders who pay by app. It also mitigates reduce fare abuse and can be used with rear door boarding. I ride the Saturn weekly but I am frequently alone, I am disappointed that south Tempe does not have orbit routes and limits my options for housing. we need to eliminate the Saturn route, which would cover a large portion of the cuts. I want to avoid charging a fee on the orbit which would impact homeless and low income people, cutting the Saturn might be justified if riders are unwilling or unable to pay for the trip and reduces ridership even more.
5. Delay operation of the Tempe Streetcar. Most of the route is redundant.

6. Prior to COVID, some "rush-hour" periods I've seen multiple Orbit busses have to pass by a stop without taking new riders due to ridership -- After COVID the city might consider to study ridership and increase service during peak times.
7. Nothing yet.
8. Require non transit vehicles in order to be in a designated central area such as Playa Del Norte to Broadway and Mill to McClintock, to buy and display a decal. It is overdue time for the City to stop worsening congestion.
9. Fare increase?
10. Transit is not something that should be cut.
11. Sell more advertising space. Reduce service hours on routes with historically low ridership. Service planning to combine two routes into one route that serves more locations
12. Make sure people aren't getting free rides on the lightrail!! Have people actually checking tickets. And charge \$.50 for orbit. Stop giving non-Tempe residences and homeless people free rides.
13. Although its important to have transit in all parts of Tempe, areas with low ridership should use smaller busses or educate riders on dial-a-ride options so more busses can be freed for busier routes.
14. Maybe stop with the trolley to no where
15. close all vacant main road bike lanes now.
16. Promote it more to keep so many cars near the downtown area. Educate the public how to use it so it is more likely to be adapted.
17. Charge to ride the Orbit
18. THE HOMELESS PEOPLE RUIN IT. I love the light rail, but the trash scum of the earth people ride on there. It stinks like S.H.I.T. Most all of the busses are empty except for criminals. STOP ALL PUBLIC TRANSIT AND WATCH OUR CITY FLOURISH. Homeless people should bike everywhere it's good for you. You can't bike if you're drunk, but you can ride the bus.
19. The orbit system seems to serve little purpose, most locations can be reached faster by local bus, light rail and even biking.
20. Increase hotel, airport and visitor transportation taxes, not via local taxes and definitively no new taxes on Tempe properties-they are way too high as it is!
21. electric buses and Orbit; any possibility to team up/cost share with Ahwatukee, Scottsdale, or Mesa?
22. Run fewer routes to fill up the busses on routes that aren't traveled as heavily. Cut to every 30 minutes.
23. I am still driving at age 81. I do not know how long I will be approved to drive, so my transportation concerns focus on what will be available to me when my needs are greater than they are now. How will I get to the light rail station(s)? How far can I walk to get to an Orbit stop? There aren't places to sit at the Orbit stops near my home; when I can't stand & wait -- where can I rest? Will I be restricted to always using Lift or Uber??

24. I used to be a "buser" when working downtown Phoenix and for me that was the only way to go. Now I don't have occasion to use public transportation, but I believe it is important for Tempe to keep it up.
25. While I do use the normal bus routes and the light rail, I never use the orbit and I am unsure of how much it is accessed. While I hate to see a free public transit service go away, I never see many people on the orbit. Is this a necessary service? I could be wrong and it may have huge participation, but it does not appear so.
26. Get help from the state/federal government until the crisis passes. Or raise taxes to pay for it.
27. If stops are removed, will routes be faster (less operational cost)? If stops are removed, will stop shelter and cleaning costs be saved? With some of cost savings, encourage use of RideChoice for seniors where distance between stops becomes an issue. What is the ridership of the eastern portion of the Saturn Orbit route? Could the Saturn route be pared down to just the western portion of the Saturn route?
28. In many ways, the Mercury Orbit route duplicates sections of the Local 30 route and the LRT route. Could Mercury just be eliminated?
29. Only run AC (with windows shut) from May through September. October through April leave the windows open. Charge .25 cents with a punch card.
30. I think money can be saved if businesses and employers are buying bus passes for their employees, if Tempe eliminated free Orbit or made the orbit conditionally free, like Free orbit for students, the disabled, and anyone with a Tempe Library Card. I think if you found a way to do a reloadable bus pass that might be worthwhile. Where people use the pass kiosks to preload money and that money rolls over, and you can only preload up to a certain amount and need to use it. Maybe a local tax can be passed where a small % goes to the MTA. Like tax auto parts, bike parts, or vehicle registration/title. Maybe charge higher rates for Express routes. I think the trolley was a bad idea.
31. How about forcing the derelicts and drunks to actually buy a ticket?
32. Try to collect fares on the buses. Perhaps put a box with a slot, behind the driver. I'm not sure if this would work.
33. Charge for the Orbits
34. Institute a City Bike Service in fall/winter/spring.
35. Defund the police, tax the wealthy
36. Riders are supposed to have paid fares to ride. Could you get a supervisor to check cards for boarders? Could they have a "portable fare box" where I could tap my card? I doubt you would be able to collect a day's worth of fares this way, but it might be enough to give it a try.
37. Pull funding from police, especially in regards to funding that goes into riot gear and other ridiculous militant gear that is unneeded by any force that is there to help the public.
38. Charge small fee 50 cents or buck to ride free orbit and then less homeless will use and more people who pay the taxes for it will ride it.

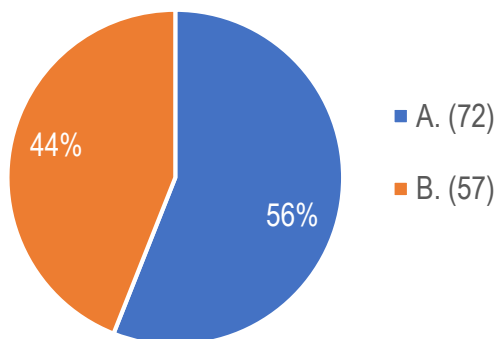
39. I do not have any ideas that have not already been applied. I will note that I do not advise reducing frequency at this time as this will increase the number of passengers per bus, which is detrimental to our social distancing efforts.
40. If needed, you could convert sparingly used ORBIT routes to an on-demand service for the general public.
41. It is good to get rid of duplication but be careful not to disrupt students getting to school by transit. Also it would be nice if you are eliminating duplication, which should have never occurred in the first place, it would be better to reach the areas that don't get services at all and require people to find alternatives to public transit. And the parks have never been connected or the main entertainment venues and golf areas. This whole thing needs to be overhauled and looked at with some common sense.
42. By reducing some expenditures from the transit system, such as by eliminating holiday service, re-allocating some funds to durable improvements for pedestrians and bicyclists could reduce motor vehicle traffic without requiring ongoing expenses.
43. These are for the Orbit buses: Ensure the contracts are RFP'ed at every opportunity. Setup WiFi and sponsorship to generate revenue. Advertise on exterior of buses (smaller style to not detract from orbit bus image)
44. Less frequent times, for the time being offer the same routes but less often.
45. Track the traffic on the Orbit bus, and use the data to reduce hours/frequency of Orbit where there is low traffic.
46. sales tax - who only tax property owners? property owners already pay for school and many other things. Many people who use free public transit don't own property. A sales tax to benefit public programs is something better shared by ALL.
47. Publicize Orbit routes more. Put more effort into letting local neighborhoods know Orbit is available to them. Many see the buses but know nothing about the service.
48. Shorten the Orbit Earth route. It goes back and forth (zig zags) on its neighborhood routes which takes up time. Specifically in the Indian Bend neighborhood, it just needs to route at the North Tempe Multigenerational Center and the Westbound route should go along Lilac Dr and not Marigold Ln. The Westbound route should stay straight on College Ave rather than going onto McKellips Rd. Don't make the scheduled change to the Orbit Earth route on Oct 26. The Flash can make changes to cover the intended new route for the Orbit Earth. Routes 48 and 62 should depart from the Tempe Transportation Center towards Tempe Marketplace at least 15 minutes apart. Otherwise I only have a 5 minute window to catch either route towards Tempe Marketplace. Buses (incl local bus and Orbit) need to run AT LEAST every 15 minutes. People are impatient and don't want to wait upwards of 30 minutes to an hour for the next bus to arrive. If buses are more often, more people would ride if they know they don't have to spend too much time waiting. For those routes with less passengers, maybe get smaller buses or more fuel efficient buses. But nonetheless, buses should run every AT LEAST every 15 minutes. Arizona Mills should have a Transit Center like Tempe Marketplace.

49. Dear Council and Mayor Woods. I am a professor at ASU (and so are many of our neighbors), residing at XXX E 15th street. Congratulations on your election and successful work. We are concerned however with the following. Walking around the campus to work, we observe empty Orbit buses, in most cases nobody except the driver or just one person inside; this continues for many months now. Given that this is a significant burden on the taxpayers, why is this allowed to happen? Please consider, at the very least, reducing the schedule, to save money and environment. Thank you,
50. Charge the riders enough money to cover the operating costs.
51. With respect, prefer total shut down of non school busses. In the absence of a dedicated school bus system, use bus during school hours only. Close down all other times.
52. Earth is pretty much useless, cut Earth and the orbit routes that go down south. Most people who live in South and North Tempe have cars. Orbit is mostly used by ASU graduate students, serve them between ASU, Tempe Marketplace, Walmart, etc.
53. decrease orbit services except at commuting hours
54. Place security personnel on Light Rail to enforce fair paying! We did, occasionally take Light Rail from Mesa, mostly through Tempe and on into Phoenix. It always amazes us there were no security officers riding on board and all the freeloaders in Tempe knew they could get free rides! So, our tax dollars pay for the freeloaders. Not good!!! Course, with Covid, we won't be stepping onto a Light Rail train any time soon, regardless of the press releases that talk about cleaning, etc.
55. I use Orbit occasionally. If you had to cut back I would prefer you cut back on the frequency. I am retired so have the benefit of flexibility. If it came every half hour or even every 45 min it would be fine with me. When you have more money increase the times.
56. How many riders per hour per day on routes and could these be serviced by smaller vehicles. There are far too many empty buses or nearly empty buses.
57. Instead of every 15 minutes for orbit buses, what about every 20 minutes?
58. I have used the light rail twice since it began. I don't use the transit system because the light rail is too slow & I don't feel safe with some of the population that rides.
59. Sell advertising on the busses
60. Tempe can find many ways to save money in other ways and should be doing everything it can to fully fund transit. Low income people who have been hardest hit by the pandemic and have no alternative transportation options shouldn't also be worrying about having even worse transportation right now. In fact, the city should be doing everything it can to improve transit and make it better. The temporary conditions caused by the pandemic are being used to fuel what could become permanent harmful changes to the city's transit system and this is unacceptable in 2020.
61. Buses run too frequently for the few riders. I usually see buses with only 0-1 rider. Why not run them less frequently & clog streets less?

62. Alter the route so that it connects more directly with the light rail, and decrease the frequency of buses but make the schedule predictable & reliable. I would use the Mars Orbit bus more if it ran through the middle of my neighborhood instead of just along the north edge, if the single stop was more centrally located in the neighborhood, and if the bus headed straight north to connect with the light rail. I don't use it currently because the current setup doubles (at least) my commute time to ASU.

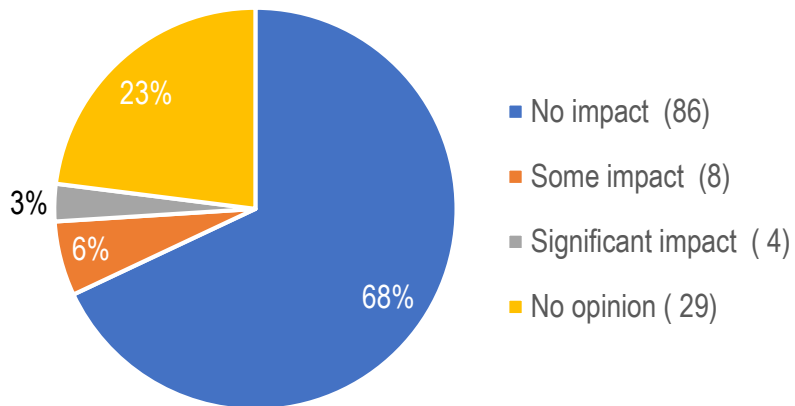
Question 8: *Tempe runs city-wide transit service with additional routes and frequency in areas with higher demand/use for transit. Please check which one of the following you feel is more important:*

- A. It is more important to have transit in all parts of Tempe even if those routes aren't used very much. 72 responses/56%
- B. It is more important to have transit in only the parts of Tempe where people use transit. 57 responses/44%

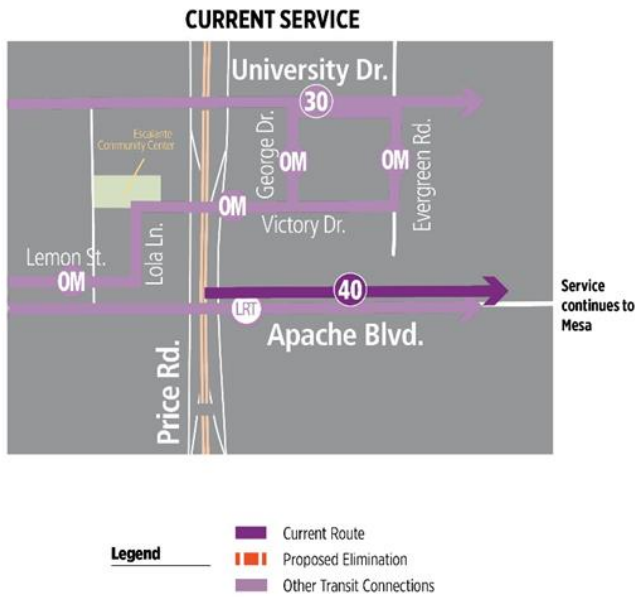


For questions 9 – 14, tell us how these proposed service changes would affect your travel habits.

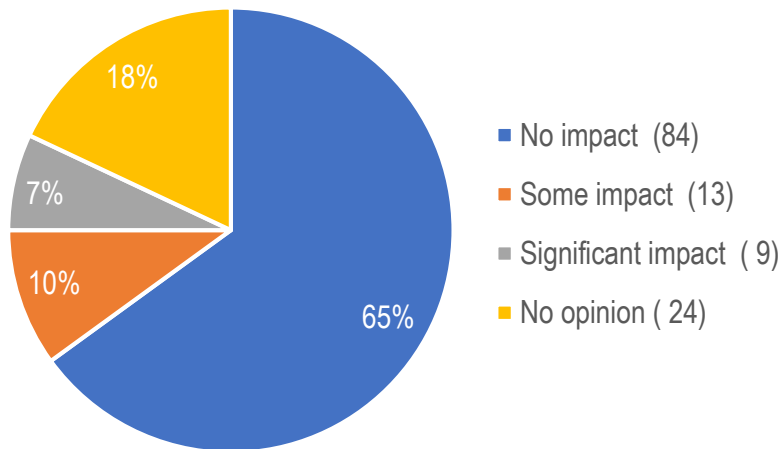
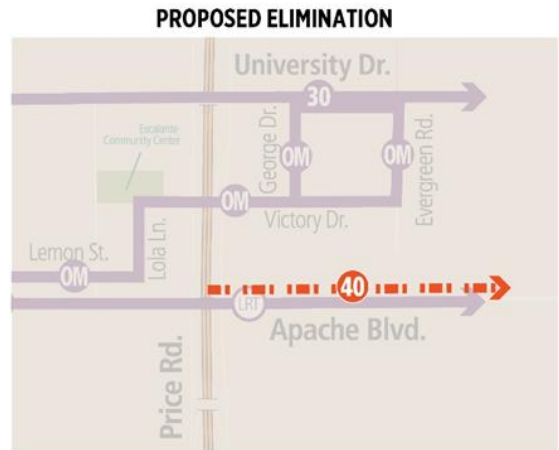
Question 9: Route 32 - 32nd Street- 32nd Street- Eliminate service on Baseline Road in Tempe. Riders can use route 77 to connect to route 32.



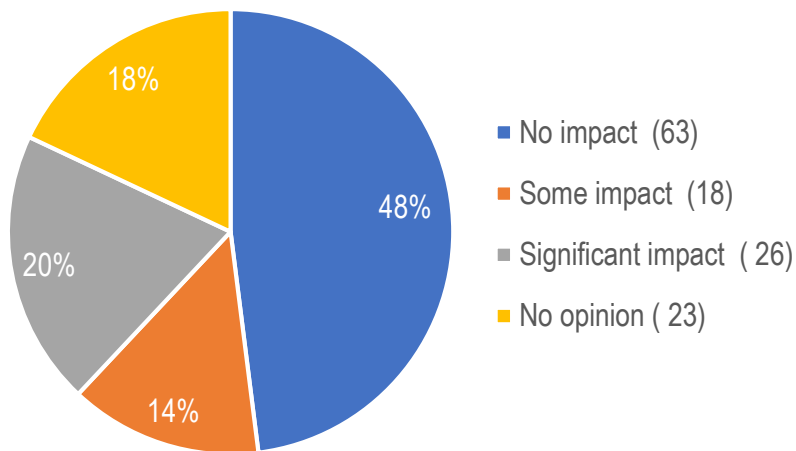
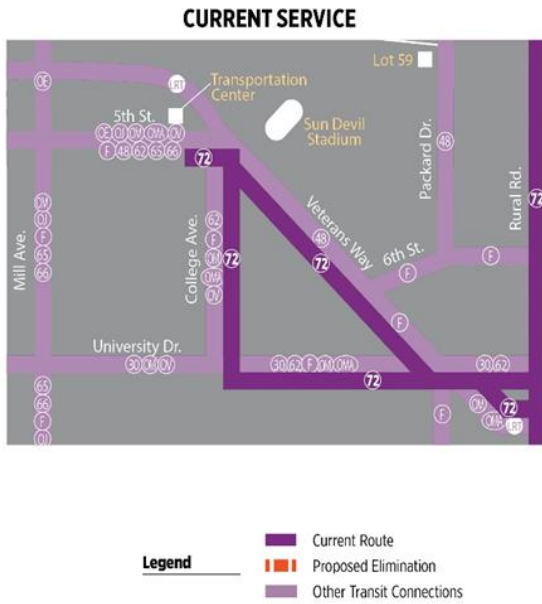
Question 10: Route 40 - Apache/Main- Eliminate service in Tempe. Riders can use light rail or Orbit Mercury to connect to route 40.



ROUTE 40
PROPOSED SERVICE CHANGE

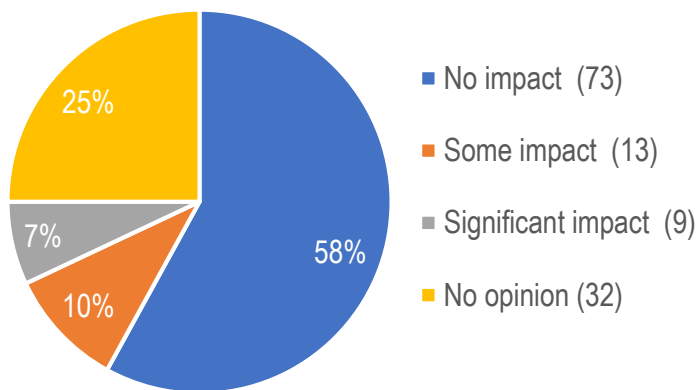
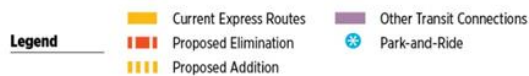


Question 11: Route 72 - Scottsdale/Rural - Eliminate the portion on University Drive, College Ave, and Veterans Way that connects to the Tempe Transportation Center. Riders can use light rail, Orbit Earth, Mars, Mercury and routes 30, 48 and 62 to get to route 72.



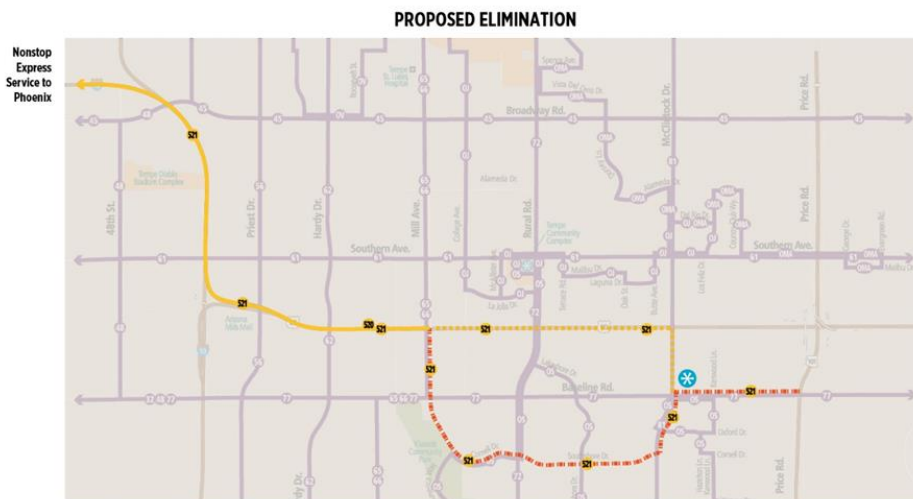
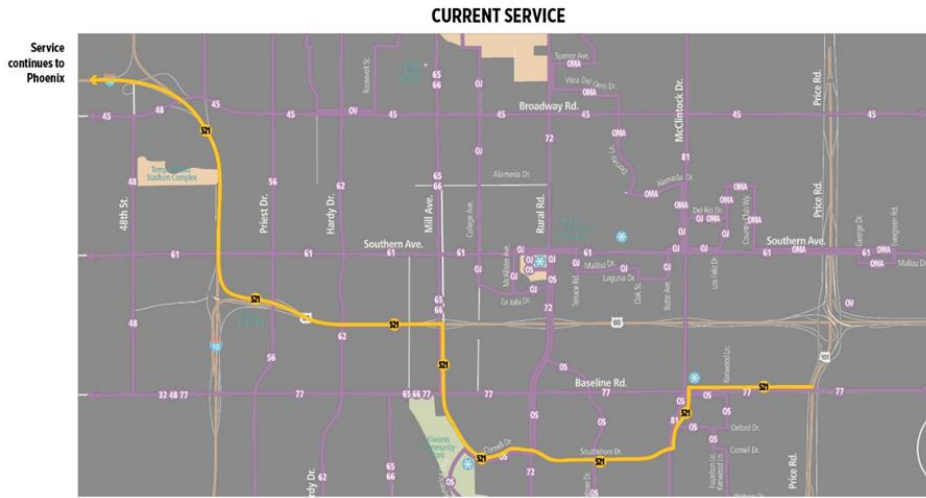
Question 12: Route 520 - Eliminate route. Riders can use route 521 from McClintock/Baseline park and ride lot to get to downtown Phoenix.

EXPRESS BUS 520 PROPOSED SERVICE CHANGE



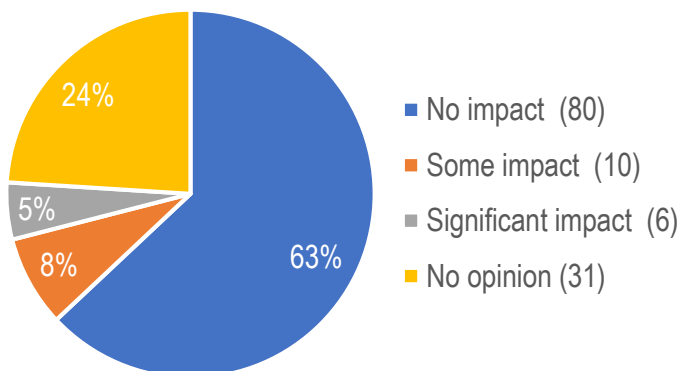
Question 13: Route 521 - Modify route to begin and end at the McClintock/Baseline park and ride lot. The route would run nonstop between the park and ride and downtown Phoenix.

EXPRESS BUS 521
PROPOSED SERVICE CHANGE

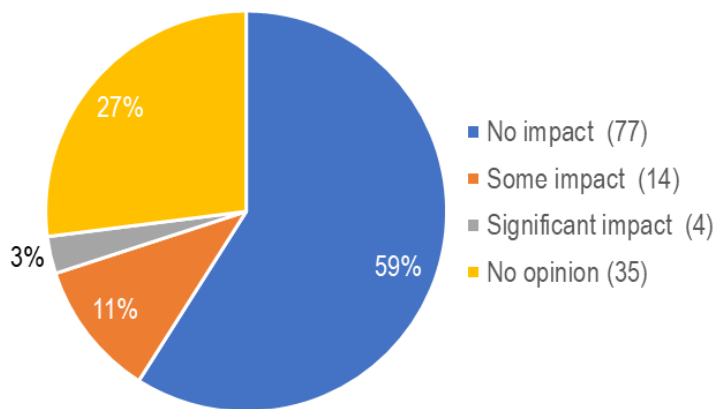
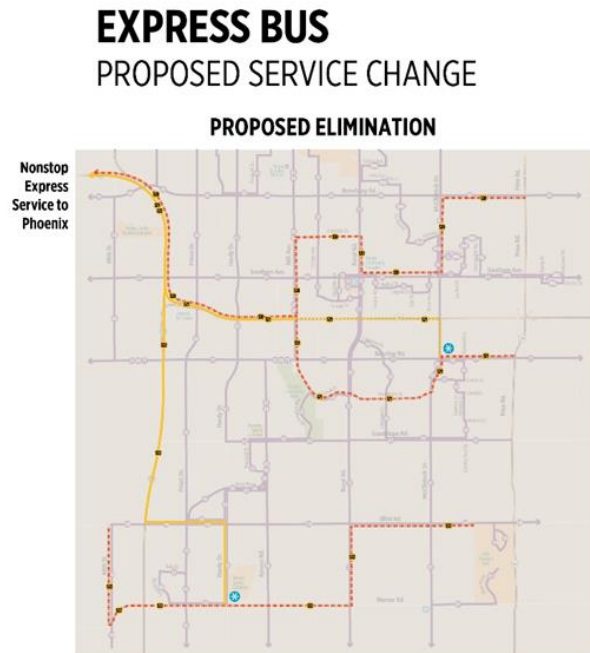
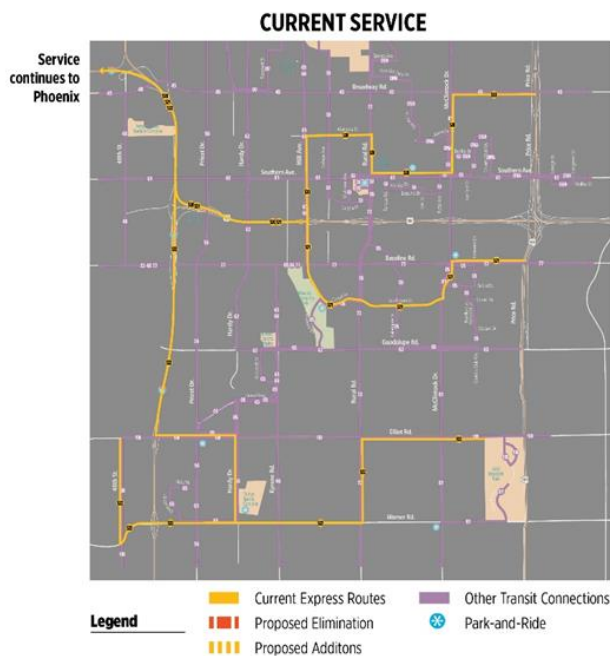


Legend

- Current Express Routes
- Proposed Elimination
- Other Transit Connections
- * Park-and-Ride
- Proposed Addition



Question 14: *Route 522 - Modify route to begin and end at the Tempe Sports Complex park and ride lot. The route would run nonstop between this park and ride location and downtown Phoenix.*



Question 15: *Please share any other thoughts or ideas you have about the proposed transit service changes.*

1. For the elimination of Route 520, could the park and ride be at the Tempe Public Library. If not, can the location of the Park and Ride be relocated to the north/west side of the Target across the street from the Fry's. The current park and ride location is too close to customer parking. I feel it a little dangerous with all the store's traffic. The parking lot across from Fry's is never used.
2. The circular bus near me is EMPTY. The bus stops near me have homeless people sleeping, living, or hanging out all day. One guy even hangs up his

hammock to sleep. These are far bigger issues to me than where one particular bus stops or doesn't stop.

3. Please do NOT eliminate Route 72 service into University/Rural TC. I use that bus everyday to get to ASU, and if that service is removed, I will have to travel on foot further to my morning class. I take the bus to the University/Rural Light Rail Station, which is connected to ASU and very convenient to me because it is only a 6 min walk from the bus stop to campus. If service to that is cut, that will add at least 10-20 mins to that commute because I will probably be stuck at the University Dr & Rural Rd intersection and that will mean I will be late to my class. So please keep Route 72 service to University/Rural TC.
4. Flash buses that still have signage that a fare is required at the front door should have those signs removed and new signs or bus wraps that indicate that it is free to ride. Additionally the fare boxes should be removed or at least covered to avoid confusion. If they are removed, less weight to move and less fuel consumed though. The Flash should also connect to the University/Rural Transit Center and avoid the intersection of Veterans Way and University Dr. It should instead use Rural Rd and University Dr. This way it still serves all the current stops and adds a connection to the University/Rural Transit Center. Additionally since the Flash now serves Rio Salado Pkwy, does the Orbit Earth have to make its route change that's planned for end of Oct? Lastly, Route 72 probably doesn't need to connect to the Tempe Transportation Center, but it should at least connect to the University/Rural Transit Center for easier connections to Orbit and the Light Rail (if so, I know it will require the 72 to go thru ASU campus a bit but the connectivity of the route is important; I feel like connecting to the University/Rural Transit Center is less of a detour from its route than having to connect all the way to the Tempe Transportation Center.)
5. Express buses through the neighborhoods eliminate the need for a car and allow my family to own a single vehicle. Eliminating the 520 which has about 12 riders pre COVID adds a half hour to my commute since it requires the light rail and transfer to a city bus.
6. Living in south Tempe, south of Elliot Rd, I wish there were Orbit rides to downtown during cultural activities, such as the Festival of the Arts, fireworks, Gammage events, etc. The Orbit rides wouldn't have to run all the time but during high times for major activities. The biggest concern is finding parking in the downtown areas and near ASU. We have parked at a friend's house near Broadway and caught the Orbit there; unfortunately, that friend has moved! How nice it would be to catch a ride at the Tempe Sports Complex that would go up Mill Avenue so we could get off at several possible stops along the way. Orbit rides from South Tempe would also help students get to ASU for classes and activities since traffic congestion and parking are problems.
7. I do not approve of the route 72 change, a 20 minute city can very quickly become a 40 minute city when a transfer is added and we have to consider that frequency may be reduced in the near future for light rail and buses. It increases our risk of heat related illness. a large portion of riders will be impacted during off peak hours when the 72 runs very efficiently. It's one of our most important routes and I feel its very important that it continues to serve the transit center to keep connectivity and accessibility to transit services.

8. Elimination of express routes may have an adverse effect upon air quality. Streetcar operation should be delayed as most of the route is redundant.
9. Nothing at this time
10. These proposals are about more than funding. The proposed change to take route 72 out of TTC is appalling. Transit planning must be balanced with all transportation. When you squeeze transit, you encourage private vehicle use. There's no point in being informed about future changes as I can see you are going to make my life worse.
11. It is impossible to see what is depicted in the images on a mobile device. Please ensure access to everyone by making sure surveys are accessible on every type of device. Transit services are a necessity. They should not be cut.
12. A lot of people are riding for free cause of corona. If you open up the upass to more people you might be able to get some to buy it. Tell people that you'll honor the Upass for a year after social distancing ends, make it limited to drive up demand, and you'll get some money coming in. Even a discount is better than no money at all.
13. Your descriptions of route changes are hard to understand. The verbiage is not supported by a clear difference in the pictures. I did the best I could to answer.
14. bike lanes waste time and money.
15. None of these has any impact on me or others in my household. Whatever we can do to increase efficiency and reduce waste time and emissions is a good thing.
16. It is a good idea to expand public transit
17. Cancel 100% of public transit and protect the families who clean up trash instead of spread it all around.
18. The changes should be temporary as Covid ridership is different than "normal" usage.
19. What ever keeps the light rail. It is vital for Tempe's future and image to keep the light rail between Orice rd and downtown Phoenix.. I also believe having light rail going south to at least Warner rd and loop back would be useful for south Tempe residents.
20. How will new streetcar affect Orbit and bus routes? Will there continue to be Orbit rides from Tempe Library to ASU? Mill Ave? Fine Arts Center?
21. no impact to me personally or my employees at this time
22. I checked "no opinion" on all of them, because right now I don't need to use buses. But, someday I'll need to find ways to get to the light rail, and to the grocery stores. So -- I'll need options & hope services will not be cut.
23. Not a user at this time, so proposed changes are N/A to me.
24. These do not affect me, but they may affect others. I always have my bike with me so even if the route is inconvenient on Valley Metro, I can usually solve for that by pedaling when necessary.
25. I use the 72 frequently to get to Tempe transit center. This change would have a big impact on me.

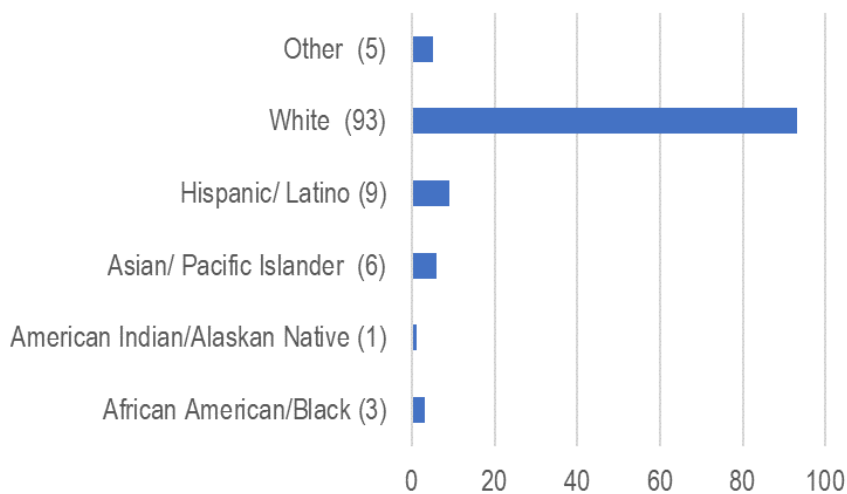
26. Ways to combine bike + light rail are most important to me
27. If I were given the option on taxes forms to contribute to transit I would love to have that as an option. I also think that if there is a medium or large business that wants a presence in Tempe, they can choose to pay an annual public transit tax, or elect to opt into buying bus passes for the employees. I think riders with disabilities need the same day ADA service kept so that they are less at risk during high heat when the only option is waiting without shade for 30-60 minutes because of route frequency. I think if ASU is building more student./campus housing they also should be fiscally responsible for contributions to operating transit.
28. Please do not eliminate route 520. It is the most convenient route for me, one I use everyday.
29. Later times for the 72!
30. Are there free transfers? It could get expensive and timely for people to change buses or transit more frequently.
31. When I saw the sign posting about this I was worried that there would be rather harsh service changes. In the "old days" the route 72 cut off service just south of where I live and there was no Sunday service at all. These don't seem too bad, but they look to potentially have the most impact on those that rely on the Express Routes.
32. Arizona needs better public transport, not to be having route frequencies cut or to have less access to some areas. This mostly effects lower class people and makes it even harder to leave poverty for many. Public Transport is also the eco friendly thing to do and making it worse makes AZ an even less environmentally supportive place then it already is.
33. I support the changes to route 72
34. North tempe should have access to mill ave via orbit or trolley to reduce traffic and give locals access to enjoy downtown
35. With exception of route 72, most changes would not impact me and thus I do not believe I have the credibility to speak on them. I will note that the change to route 72 would inconvenience me by increasing my commute to about 20-30 minutes of additional walking from an original 5 minutes of walking.
36. None at this time.
37. The proposed elimination on Route 72 is in the area where I work. That transit access also needs to be maintained for ASU students.
38. Maintain the Orbit bus system. But you need to advertise its benefit more. Do all neighbors know about the free orbit? Have the mayor and city officials do a few rides and share to social media.
39. Route 72 doesn't need to connect to the Tempe Transportation Center but it should at least connect to the University/Rural Transit Center via Lemon St and McAllister Ave. Rural Rd is a wide and very traffic-heavy road that is sometimes dangerous for pedestrians to cross. Routes that are Free should have the word FREE in large font on the bus so that maybe it can attract more riders. More people would ride if they know it's free. Otherwise they aren't going to do research to find if there are any free transit rides available. Advertising is important to get people to become riders

40. As a student at ASU, the proposed changes to Route 72 would severely limit my transportation options to and from campus.
41. I'm in support of mass cutbacks. Please quit making Tempe tax payers foot the bill for unused and unasked for services.
42. Uber and Lyft and Waymo can cover the car less. Work with these companies for vouchers to cover the poor. Students should have dedicated bus system funded by school dollars, and students should attend their neighborhood school to minimize the need.
43. You wouldn't catch me on a bus or trolley in Tempe, ever!!!
44. I know the Saturn route is rather new and I bought my house because I know there would be an alternate transportation if ever I needed it. I have needed it and am so grateful to have the Saturn here in So. Tempe. I hope you can keep it going even if you have to cut the hours. I can work around cut hours or frequency but if it goes away it would be really sad for us older folks here in So. Tempe. Please hang on to it if possible.
45. rt 72 needs to meet light rail at veteran's way. it is extremely unsafe for disabled riders to be crossing rural rd and also to be navigating the hill.
46. dont change anything please maybe charge for services itll be easier for those who want to subsidize to subsidize ask cagg if erry car buyer wants also a bus pass have insurers provide bus passes
47. It's far past time to execute this changes and allocate resources to other areas
48. It is a drain n taxpayer money?
49. Getting rid of the loop on the 72 that connects it to the Tempe transit center is fantastic - as long as it still loops into the light rail stop on the corner of Rural/University. I never understood why this did that when you should just be able to transfer to one of the other buses or light rail if going to downtown tempe. Its not like it saves any time really, especially if transfers were better coordinated (which they are not). I feel like all the bus routes could benefit from this truncation... why only the 72? If you really need to cut costs, stop the unnecessarily loops of the bus routes that drive into mall parking lots (AZ Mills and Tempe Marketplace) and find other ways to facilitate transfers. The reality though is that in 2020, no city should be cutting transit service. This is careless and misguided. You should be doing everything you can to increase service and make transit a more viable transportation option for MORE people, not cutting the service and making it worse for the people who rely on it. A great way to do this would be to defund the police department and fully fund transit. The FY2019/2020 budget for the city has the police department funded at nearly \$100 million. This is a per capita spending of about \$500 per resident in the city. The U.S. Average is only about \$350. Just reducing police funding to an average level would save \$30 million. Cutting it even more to reflect the reality that police do more harm in the community than good, could save \$50 million. This more than covers the needed revenue for transit and everyone would be better off. Fewer racist power hungry cops on the streets, and safer, more affordable transportation for everyone. Seems like a win-win for any city.

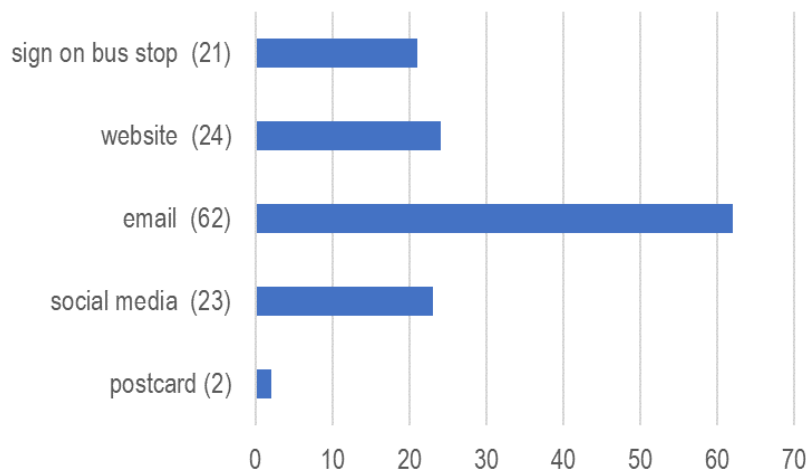
50. Other ways to save money: Stop repaving the roads. a \$10 million budget for street resurfacing?? Car will drive just fine on the existing roads for a long time. There is no reason the cities in the Valley need to repave roads every 5-7 years. Some cities in places that have rain and snow, don't repave roads for 20+ years and people manage just fine. Yes, they complain about bad roads, but so do people in Phoenix... And cars in both places still manage to drive on them. If I kept combing through the budget, there would likely be many more examples of ways the city could easily save money short term in order to make sure that transit remains fully funded. Transit should be THE priority of the city and the hit to the city will be temporary... a few years at most. And without transportation, people will not be able to get around. Low income families who are the hardest hit by the pandemic will be even worse off if Tempe cuts any transit service or routes. Quite frankly, it is a travesty that this is something this so-called progressive city is thinking about. I am ashamed to live in a place that isn't putting transit over other less vital budget items that city residents can get by without for a few years. People can not get by without transportation. You should be doing everything you can to improve service, not make it worse.

51. I often see the Mars Orbit buses idling completely empty at the north edge of my neighborhood. My impression is that most people in the neighborhood don't use this bus because the bus stop is too far away and the subsequent route takes too long to connect to downtown Tempe destinations. If the bus went through the middle of my neighborhood and then headed straight north to connect to the light rail, I would use it for commuting instead of my car. Even if the frequency of buses is reduced, I would use the Orbit if the route is improved and if the schedule is predictable and reliable.

Question 16: Race/Ethnicity (respondents may choose more than one answer)



Question 17: How did you find out about Tempe's proposed transit service changes?
(respondents may choose more than one answer)



IV. Other Comment Received:

V: Metro 10/12/2020
101 N. 1st Av
PHX, AZ 85003

Att: Jessica Parks, Sam Stevenson
Tempe Transit Planner

Am TOTALLY IN FAVOR OF RTD #12

GOING STRAIT UP/DOWN SCOTTSDALE/RURAL RD

THERE IS ABSOLUTELY NO REASON WHY

~~RTD #12~~ SHOULD GO TO THE TTC! SO MUCH

TIME IS WASTED GOING WEST ON UNIVERSITY

NORTH ON COLLEGE (WHERE THE ROAD IS

FULL OF POTHOLES & DIPS) WEST AGAIN ON

5th ST. + THEN MAKING ALL THESE

TRISITS & TURNS BEFORE IT GETS BACK

ON RURAL RD & CONTINUES SOUTH!

ARE YOU HIDING NO??!!

HAVE BEEN Hoping FOR THIS TO HAPPEN

FOR YEARS! PLEASE LET IT BECOME

A REAL TX! THANK YOU

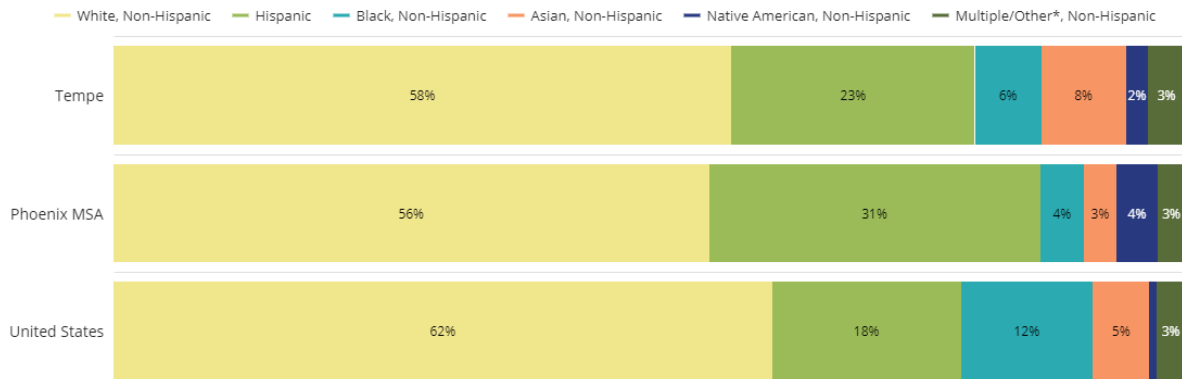
Jana L
Tempe

V. Demographic Information

Since Tempe has bus routes throughout the entire city, the project area is the city limits.

Race and Ethnicity

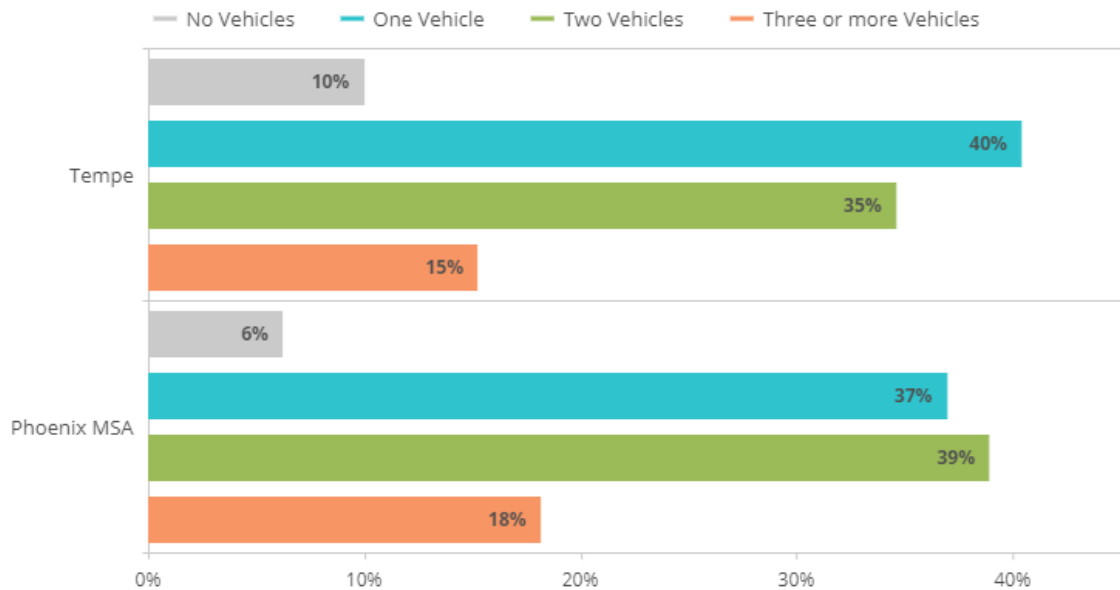
In Tempe, 42% of the population are part of a minority race or ethnic group.
The largest percent of the population is **White (58%)**.



Transportation in Tempe

Vehicles Available

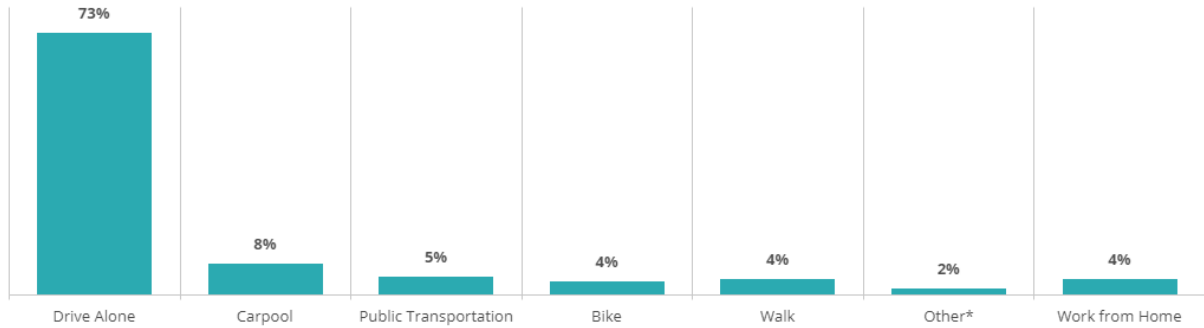
Universe: Total Occupied Housing Units





Means of Transportation to Work

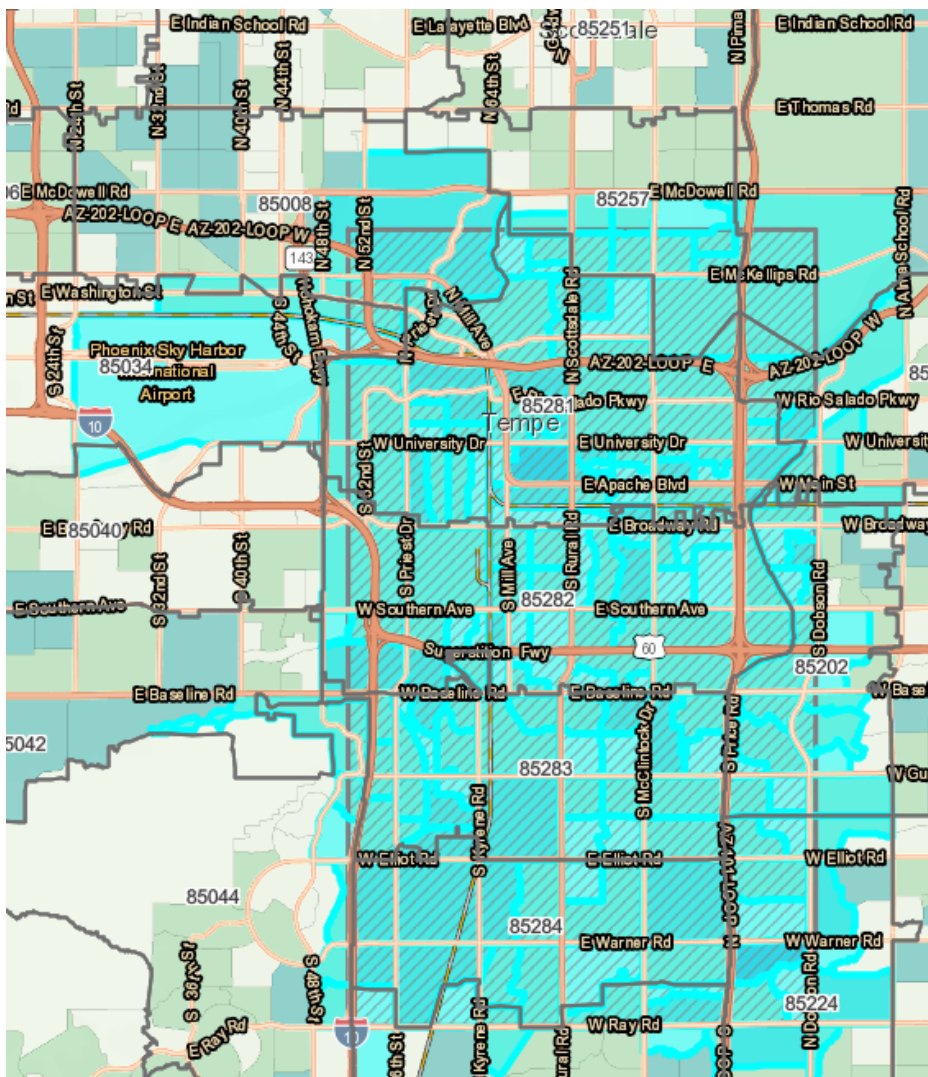
Universe: Total Workers, Age 16+



Other includes Taxicab and Motorcycle

Source: U.S. Census Bureau, 2017 American Community Survey (ACS) 5-Year Estimates

The data that follows is based on census tract data that includes the area in turquoise below.



Selected Block Groups ACS 2012-2016 ACS 5-Year Estimates

Topic	Estimate	Percent
Total Population	45,191	
Race and Ethnicity		
Hispanic	9,169	20.3%
Non-Hispanic		
White, Non-Hispanic	27,256	60.3%
Black, Non-Hispanic	3,189	7.1%
Native American, Non-Hispanic	1,127	2.5%
Asian, Non-Hispanic	2,602	5.8%
Pacific Islander, Non-Hispanic	451	1.0%
Other, Non-Hispanic	22	0.0%
Two or More, Non-Hispanic	1,375	3.0%
Minority (1)	17,935	39.7%
Ability to Speak English		
Population 5 years and over	42,869	-
Speak Only English	33,072	77.1%
Speak Other Languages	9,797	22.9%
Speak English "very well"	7,198	-
Persons with Limited English Proficiency (LEP)	2,599	-
Speak English "well"	1,716	-
Speak English "not well"	725	-
Speak English "not at all"	158	-
Households		
Total Households	18,021	-
Family Households (Families)	8,430	46.8%
Married-couple family	4,997	-
Female Householder, no husband present	2,138	-
with own children under 18 years	906	-
Nonfamily Households	9,591	53.2%
Householder living alone	5,919	-
Household Income (in 2016 inflation-adjusted dollars)		
Total Households	18,021	-
Less than \$10,000	2,041	11.3%
\$10,000 to \$14,999	1,104	6.1%
\$15,000 to \$24,999	1,990	11.0%
\$25,000 to \$34,999	1,811	10.0%
\$35,000 to 49,999	2,701	15.0%
\$50,000 to \$74,999	2,851	15.8%
\$75,000 to \$99,999	2,652	14.7%
\$100,000 to \$149,999	1,800	10.0%
\$150,000 to \$199,999	638	3.5%
\$200,000 or more	433	2.4%
with related children under 18 years	101	-
Female householder, no husband present	671	-
with related children under 18 years	612	-
Male householder, no wife present	206	-
with related children under 18 years	145	-
Commuting to Work		
Workers 16 years and over	25,946	-
Car or Truck - drive alone	18,570	71.6%
Car or Truck - carpool	2,381	9.2%
Public Transportation	1,227	4.7%
Bicycle	1,543	5.9%
Walked	545	2.1%
Other means (taxicab, motorcycle, etc.)	619	2.4%
Work at home	1,061	4.1%
Vehicles Available		
Occupied Housing Units	18,021	-
No vehicle available	1,946	10.8%
1 vehicle available	7,362	40.9%
2 vehicles available	6,100	33.8%
3 or more vehicles available	2,613	14.5%
Area		
Total Area in Acres	6,816.2	-
Total Area in Square Miles	10.7	-

Source: United States Census Bureau, American Community Survey 2012-2016 5yr Estimates

Source: U.S. Census Bureau, 2012-2016 American Community Survey (ACS) 5-Year Estimates. ACS data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate is represented through the use of a margin of error (MOE). In addition to sampling variability, the ACS estimates are subject to nonsampling error. The MOE and effect of nonsampling error is not represented in these tables. Supporting documentation on subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website (www.census.gov/acs) in the Data and Documentation section. Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website (www.census.gov/acs) in the Methodology section. The MOE for individual data elements can be found on the American FactFinder website (factfinder2.census.gov). Note: Although the ACS produces population, demographic and housing unit estimates, the 2010 Census provides the official counts of the population and housing units for the nation, states, counties, cities and towns. Prepared by: Maricopa Association of Governments, www.azmag.gov, (602) 254-6300

MEMORANDUM

TO: Tempe Transportation Commission
FROM: Shelly Seyler, Deputy Engineering & Transportation Director, 350-8854
DATE: December 1, 2020
SUBJECT: Future Agenda Items
ITEM #: 9



PURPOSE:

The Chair will request future agenda items from the Commission members.

RECOMMENDATION OR DIRECTION REQUESTED:

This item is for information only.

- January 12
 1. Commission Business
 2. Transit Service Reduction Plan
 3. Personal Delivery Devices (verbal update)
 4. Open Streets (verbal update)
- February 9
 1. Country Club Way Streetscape
 2. Transportation Demand Management Association
 3. Mobility Hubs
- March 9
 1. Outreach Plan for I-10 Corridor Construction
 2. Scottsdale Road Bike Lanes
 3. ADA and sidewalk infrastructure
- April 13
 1. North/South Rail Spur MUP
 2. Transit Service Reduction Plan
 3. Transit Shelter Design
- May 11
 1. Commuter Rail Study/ MAG Commuter Rail Plan
 2. AZ State Rail Plan/AZDOT Phoenix-Tucson Corridor Plan
 3. Ash/University Intersection
 4. Bike Bait Program Update
- June 8
- July 13
- August 10
- September 14
- October 12
 1. Annual Report
- November 9
 1. Annual Report
- December 14