



PUBLIC MEETING AGENDA Transportation Commission

MEETING DATE

Tuesday, January 14, 2025 from 7:30 to 9 a.m.

MEETING LOCATIONS

Web Ex: <https://tempe.webex.com/tempe/j.php?MTID=m2715f3e8d2d5fd56fe85050a94e291f7>

Join by phone +1-408-418-9388 United States Toll

Webinar Number: 2495 435 6986

In Person

200 E. Fifth Street, 2nd floor

Don Cassano Community Room

Tempe, AZ 85281

| AGENDA ITEM | PRESENTER | ACTION or INFORMATION |
|---|--|-----------------------|
| 1. Public Appearances The Commission welcomes public comment. There is a three-minute time limit per citizen. | Amanda Nelson, Commission Chair | Information |
| 2. Approval of Meeting Minutes The Commission will be asked to review and approve meeting minutes from the December 10, 2024 meeting. | Amanda Nelson, Commission Chair | Action |
| 3. Commission Business Welcome new Commissioners Mark Richwine, Ginny Sylvester, Kendra Flory, Andrea Chalmers, Roy Peterson and Hasaan Al Saad | Amanda Nelson, Commission Chair | Information |
| 4. Commission Business The Commission will be asked to elect a chair and vice chair for 2025 as well as reach consensus on meeting date and time. | Amanda Nelson, Commission Chair | Action |
| 5. 2024 Transit Survey Results Kathy DeBoer with WestGroup Research will present the findings from the 2024 transit satisfaction resident survey. | Kathy DeBoer, WestGroup Research | Information |
| 6. Mill Avenue Streetscape Update Staff will provide an update on the Mill Avenue Streetscape Project. | Eric Iwersen, Transportation and Sustainability Department | Information |
| 7. Mars and Mercury Pilot Program | Sam Stevenson, Transportation and Sustainability Department | Information |

| | | |
|--|--|-------------|
| Staff will update the Commission on a pilot program to increase frequency on Orbit routes Mars and Mercury. | | |
| 8. Department & Regional Transportation Updates Staff and Commission members will provide information on relevant meetings and events. | Transportation and Sustainability Department Staff | Information |
| 9. Future Agenda Items Commission may request future agenda items. | Commission Chair | Information |

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 350-2775 (voice) or 350-8400 (TDD) to request an accommodation to participate in a public meeting.

Minutes
City of Tempe Meeting of the Transportation Commission
December 10, 2024



Minutes of the meeting of Tempe Transportation Commission held on Tuesday, December 10, 2024 at 7:30 a.m. via Webex and at the Tempe Transportation Center located at 200 E. Fifth Street, Tempe AZ 85281.

(MEMBERS) Present:

David Sokolowski
Stevie Milne
Dawn Hocking
Amanda Nelson
JC Porter
Kelsey Files

Peter Schelstraete
David King
Pam Goronkin
Jacob Cox
Anthony Strait
Claire Lauer

(MEMBERS) Absent:

Paul Hubbell
Robert Miller

City Staff Present:

Sue Taaffe, Senior Management Assistant
Cathy Hollow, City Traffic Engineer
Morgan Kennedy, Neighborhood Services Specialist
Mary Kate Nacke, Public Information Officer
Trevor Malzewski, Intern
Lindsay Post, Senior Transportation Planner

Shauna Warner, Neighborhood Program Manager
Eric Iwersen, Transportation & Sustainability Director
Sam Stevenson, Transit Manager
Emily DelRoss, Transportation Planner
Rebecca Rothman, Community Services Manager

Guests Present:

John Federico
Brian Passaro
Marty Ziech

Commission Chair Amanda Nelson called the meeting to order at 7:31 a.m.

Agenda Item 1 – Public Appearances

None

Agenda Item 2 – Minutes

Amanda Nelson introduced the minutes of the September 10, 2024 meeting of the Transportation Commission and asked for a motion for approval.

Motion: Commissioner JC Porter

Second: Commissioner Anthony Strait

Decision: Approved by Commissioners

David Sokolowski

Stevie Milne

Dawn Hocking

Amanda Nelson

JC Porter

Claire Lauer

Peter Schelstraete

David King

Pam Goronkin

Jacob Cox

Anthony Strait

Agenda Item 3 – Commission Business

Amanda Nelson acknowledged outgoing Commissioners JC Porter, Pam Goronkin, David King, James Dwyer, Paul Hubbell, and Peter Schelstraete.

Agenda Item 4 – Annual Report

Eric Iwersen presented the 2024 Transportation Commission Annual Report including the 2025 Transportation Commission goals.

Discussion included parklets, transit satisfaction council priority, and review of Commission applications. Some items in the discussion will be advanced and discussed at a future commission meeting (eg. Transit Satisfaction).

A motion was made to approve the 2024 annual report.

Motion: Commissioner Kelsey Files

Second: Commissioner David King

Decision: Approved by Commissioners

David Sokolowski

Stevie Milne

Dawn Hocking

Amanda Nelson

JC Porter

Kelsey Files

Peter Schelstraete

David King

Pam Goronkin

Jacob Cox

Anthony Strait

Claire Lauer

Agenda Item 5 – Streetcar Locally Preferred Alternative – Rio East Dobson Extension

Eric Iwersen and Sam Stevenson provided an update on the Streetcar Locally Preferred Alternative. Topics included:

- Overview
- Rio East-Dobson Extension (REDE)
- Locally Preferred Alternative (LPA)
 - Streetcar technology
 - Route
- Timeline and Next Steps

Discussion included the City of Mesa's decision on LPA, frequency, operational costs, and assessment of efficiency on Rural Road.

A motion was made to approve the Streetcar Locally Preferred Alternative.

Motion: Commissioner JC Porter

Second: Commissioner Anthony Strait

Decision: Approved by Commissioners

Stevie Milne
Dawn Hocking
Amanda Nelson
JC Porter
Claire Lauer
Kelsey Files

Peter Schelstraete
David King
Pam Goronkin
Jacob Cox
Anthony Strait

Nay: David Sokolowski

Agenda Item 6 – Public Art Plan

Rebecca Rothman provided an update on city's public art plan. Topics included:

- Overview
- Design
- Outreach

Discussion included bus shelter art and outreach for art education.

Agenda Item 7 – Department & Regional Transportation Updates

Eric Iwersen informed the Commission that the College Avenue and University Drive Grade Separated Crossing project will not move forward into construction due to lack of public support, cost and design concerns.

Agenda Item 8 – Future Agenda Items

Parklet Program, College Avenue traffic safety and transit program communication/outreach were requested as future agenda items. The following future agenda items have been previously identified by the Commission or staff:

- January 14
 - Commission Business – Chair
 - TMA/TDM, Personal Delivery Devices
 - 2024 Transit Survey Results
- February 11 - cancelled
- March 11
 - Vision Zero Update
 - Transit Fund Revenue Analysis
 - Bike Bait
- March 17 - Joint Meeting with Sustainability Commission
 - Transportation Plan & Transportation Equity
- April 8
 - McKellips (Scottsdale to College) Streetscape
 - Alameda Drive Streetscape Project (before and after) & Speed Data
- May 13

- Bike Hero Award
 - June 10
 - July 8
 - August 12
 - September 9
 - October 14
 - TBD: Prop 479 – MAG
 - Late 2025/Early 2026: Transit Prioritization Strategies

The next meeting is scheduled for January 14, 2025. The meeting was adjourned at 8:37a.m.

Prepared by: Sue Taaffe
Reviewed by: Eric Iwersen

MEMORANDUM



TO: Tempe Transportation Commission
FROM: Shelly Seyler, Deputy Transportation & Sustainability Director, 350-8854
DATE: January 14, 2025
SUBJECT: Commission Business
ITEM #: 4

PURPOSE:

To request that the Transportation Commission makes selections for the positions of chair and vice-chair as well as reach consensus on a meeting date and time.

RECOMMENDATION OR DIRECTION REQUESTED:

This item is for action.

CITY COUNCIL STRATEGIC PRIORITY:

- N/a

BACKGROUND

At the January meeting of each year, the Commission addresses the following business:

- Chair and Vice-Chair. The Commission annually elects a Chair and Vice-Chair for the upcoming year per the Tempe City Code, Sec. 2-249 "The officers of the commission shall be selected by the commission members at the first meeting of the commission following the 31st day of December of each year and shall serve until the 31st day of December of the next succeeding year. No officer shall serve in the same capacity for more than two (2) consecutive one-year terms.
- Meeting Dates and Times. The Commission regularly scheduled meetings are the 2nd Tuesday of each month at 7:30 a.m.

As of Jan. 14, 2025, the Commission has 15-member positions filled. Transportation Commission members are listed below.

1. Amanda Nelson (Current Chair and is NOT eligible for reappointment for chair)
2. Dawn Hocking (Current Vice Chair and is NOT eligible for reappointment for vice chair)
3. David Sokolowski
4. Stevie Milne
5. Robert J. Miller
6. Jacob Cox
7. Kelsey Files
8. Clair Lauer
9. Ginny Sylvester
10. Kendra Flory
11. Mark Richwine
12. Andrea Chalmers

13. Roy Peterson
14. Anthony Strait
15. Hassan Al Saad

According to Chapter 2, Article V, Division 8, Section 2 181 through 183 of the Tempe City Code, all boards and commissions established by the City shall have the following powers and duties unless otherwise specified:

Sec. 2-181. - Powers and duties.

(a) All boards and commissions established by the City shall have the following powers and duties unless otherwise specified:

- (1) To act in an advisory capacity to the City Council for the purpose of making recommendations consistent with its duties;
- (2) To establish such rules and regulations as it deems necessary for its government and for the faithful performance of its duties; to set a time for regular meetings which shall be held at least once a month if there is business to transact; to establish the manner in which special meetings may be held and the notice to be given thereof; and to provide that a majority of the total number of members shall constitute a quorum. The affirmative vote of a majority of the members participating in the meeting shall be required for passage of any matter before the board;
- (3) To organize by electing one (1) of its members as Chairman of the Board and one (1) as Vice-Chairman. The city staff representative assigned to the board or commission shall act as Secretary but shall not be entitled to take part in any voting;
- (4) To require attendance of the members at regular meetings and provide that absence from three (3) consecutive regular meetings or six (6) meetings within any twelve (12) month time period without consent from the Chairman or Vice-Chairman if the Chairman is unavailable, shall be deemed to constitute a resignation and such position shall thereupon be deemed vacant;
- (5) To consult, through the Chairman of the Board, or the Vice-Chairman if the Chairman is unavailable, with the assigned city department on the items to be included on the agenda of the meetings prior to preparation and distribution of the agenda by the assigned city department; and
- (6) To review and approve the official minutes of the board or commission as prepared by the assigned city department no later than thirty (30) days after the meeting or Commission and if such minutes cannot be approved, for any reason, within such period of time, such minutes shall be transferred to the City Council without approval.

(b) All boards and commissions shall have the authority to create subcommittees, subject to the following restrictions:

- (1) Subcommittees shall be created upon written notice to the City Council. The request shall state in detail the purpose for its creation, the members of the board or commission who will comprise its membership and the anticipated additional resources needed to adequately staff the subcommittee;
- (2) All subcommittees shall sunset within one (1) year of creation, or until its intended purpose has been met. The City Council may dissolve a subcommittee at any time;
- (3) All members of subcommittees must be current members of originating board or commission;
- (4) No board or commission may have more than two (2) active subcommittees at the same time; and
- (5) Subcommittees must meet all requirements of state law, the City Charter and this Code.

Sec. 2-182. - Terms and removal.

- (a) The Mayor, with the approval of the City Council, shall select for appointment and reappointment the members of each board and commission. Unless otherwise specified, the members of each board and commission shall be selected from residents of the City.
- (b) The term of office for each member of the board and commission shall be from the first of January of each year and end on the 31st day of December, three (3) years thereafter except if otherwise provided in this article.
- (c) Members of the board and commission may not serve more than three (3) total terms on any board or commission, and not more than two (2) complete consecutive terms.
- (d) Any vacancy shall be filled for the unexpired term of the member whose office is vacant in the same manner as such member received original appointment.
- (e) The Mayor, with the approval of the City Council, may for cause remove any member of the board or commission.

Sec. 2-183. - Compensation of members.

Members shall receive no compensation for their service.

According to Chapter 2, Article V, Division 8, Section 2-250 of the Tempe City Code, the Transportation Commission shall have the following powers and duties:

Sec. 2-250. - 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.

City of Tempe Transit Survey Results

January 14, 2025



Methodology & Research Objectives

Research Objectives:

- 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

Methodology:

- 414 Tempe residents (278 telephone – land line and cell - and 136 online)
- Margin of error is +4.8% at a 95% confidence level

No Incentive Offered

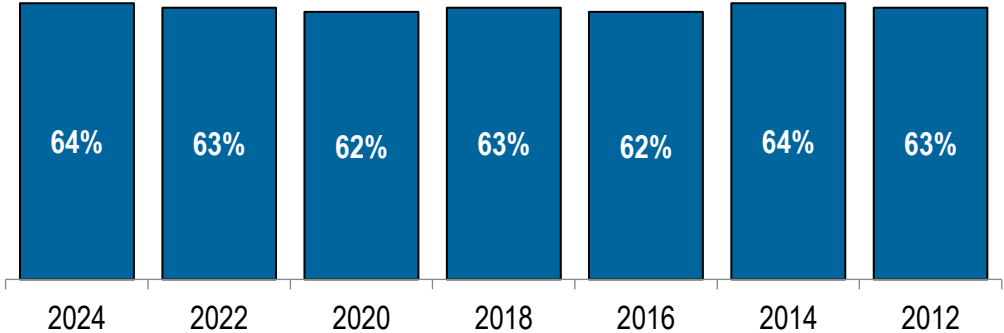
Survey Dates:

- Online: September 17 to September 27, 2024
- Phone: September 5 to September 24, 2024

Rider Characteristics and Opinions

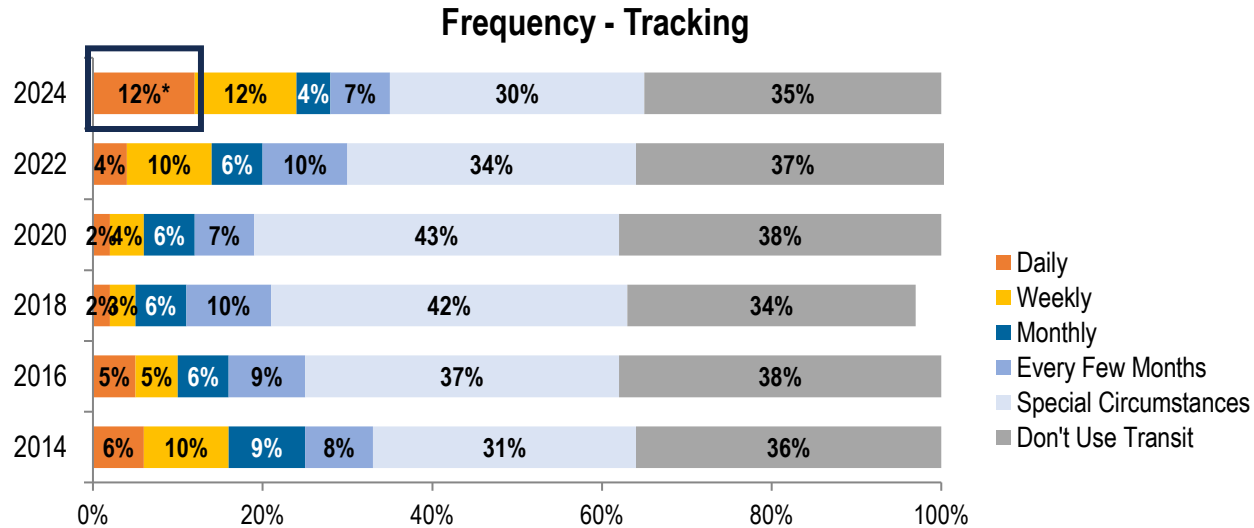
Transit Usage

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

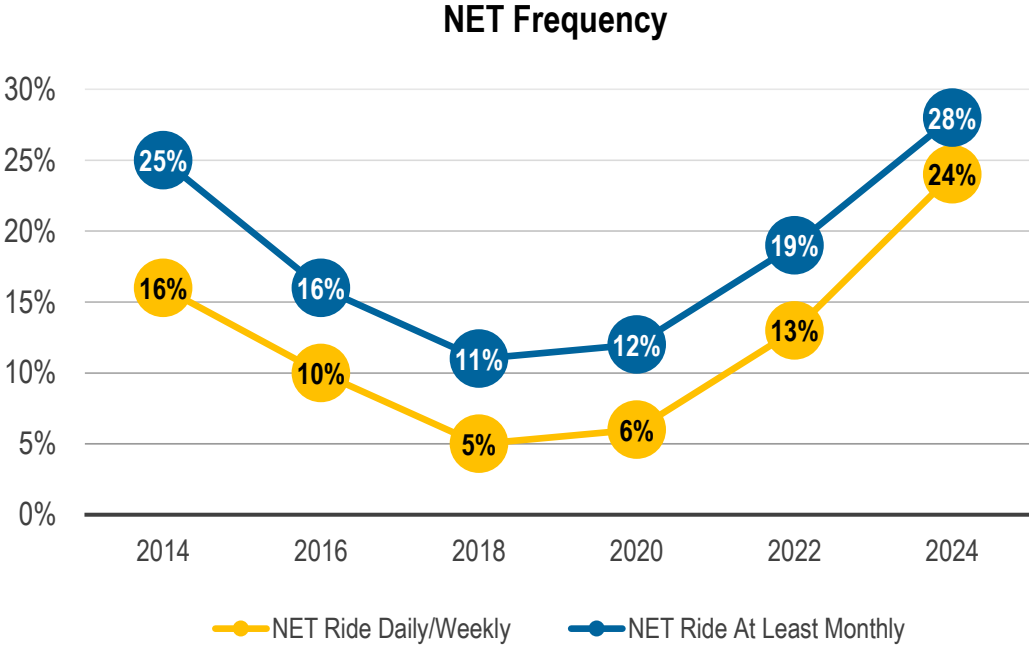


Frequency of Transit Usage

- Significant increase in daily usage – highest compared to previous 5 studies
- Riders significantly more likely to report riding at least weekly include those:
 - Ages 18 to 34 (49% vs. 12% age 35+)
 - Local bus, Orbit/Flash and Express bus riders (60% vs. 21% Light rail only)



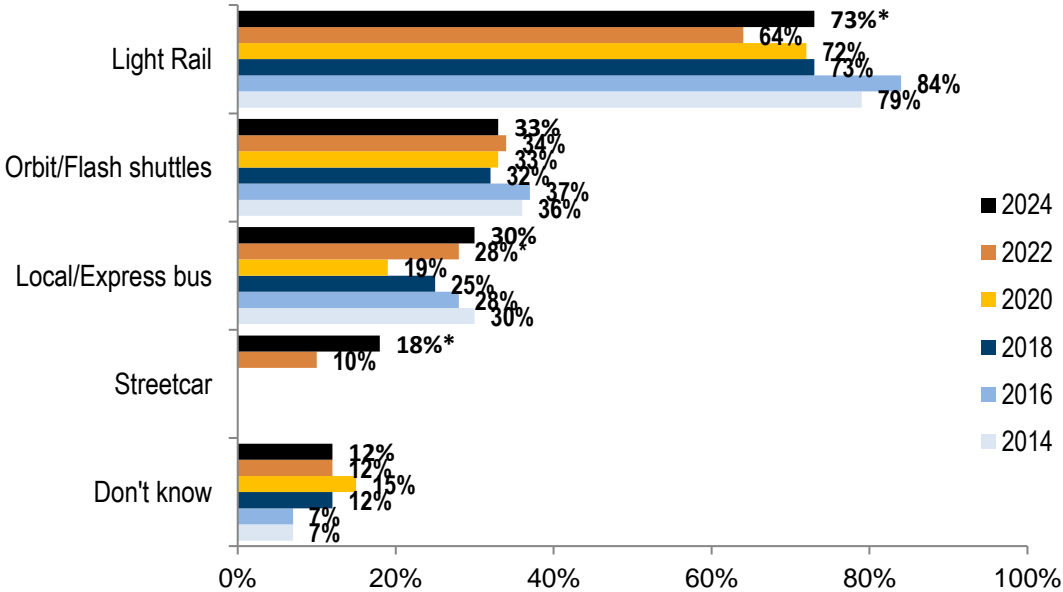
Frequency of Transit Usage



Type of Transit Used Among Riders

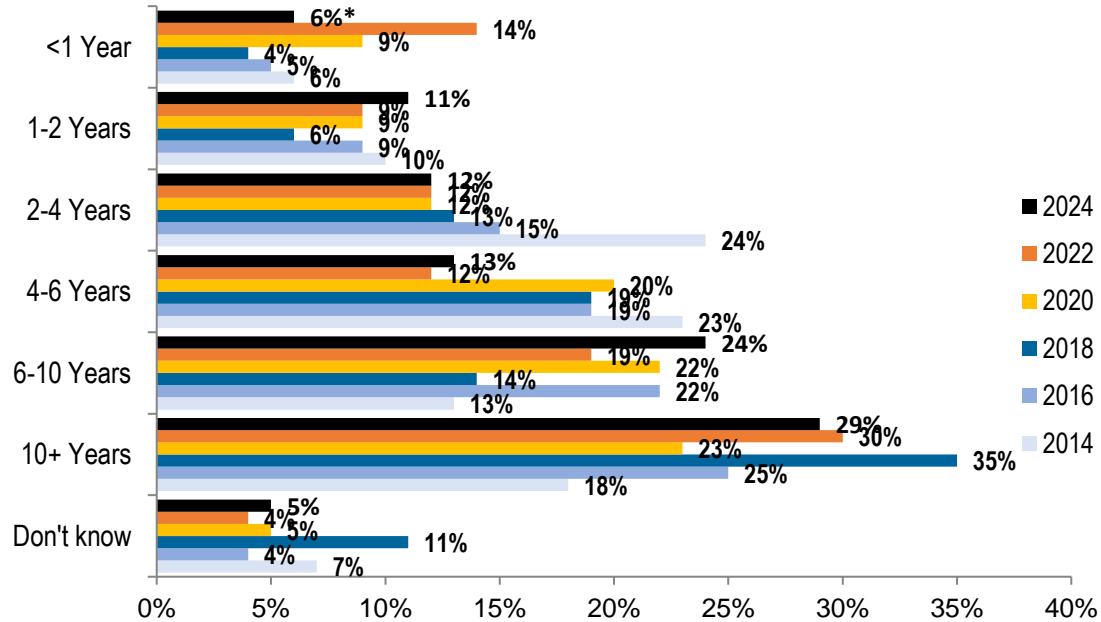
- Light rail continues to be the most used form of transit among Tempe residents, and usage increased compared to 2022.
- Use of the Streetcar increased significantly.
- Residents in 85281 and 85282 more likely than others to use the neighborhood shuttles.
- Bus and Streetcar usage highest among those 18 to 34 years old (41% and 26%).

Type of Transit - Tracking



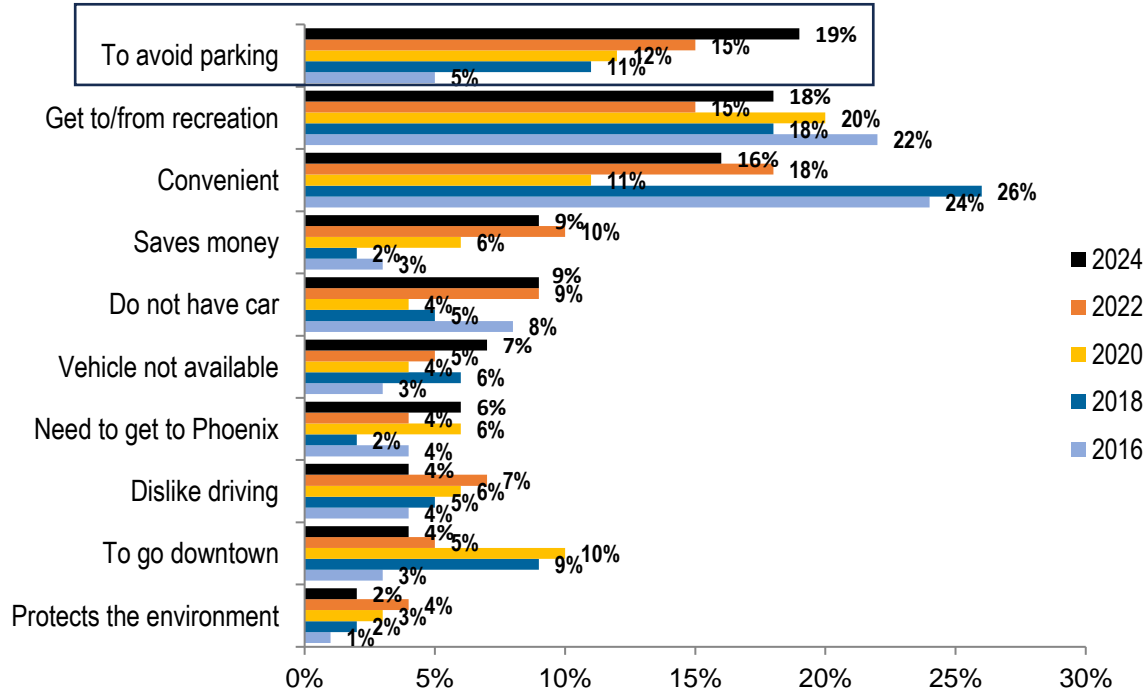
Length of Transit Usage Among Riders

Length of Transit Usage - Tracking



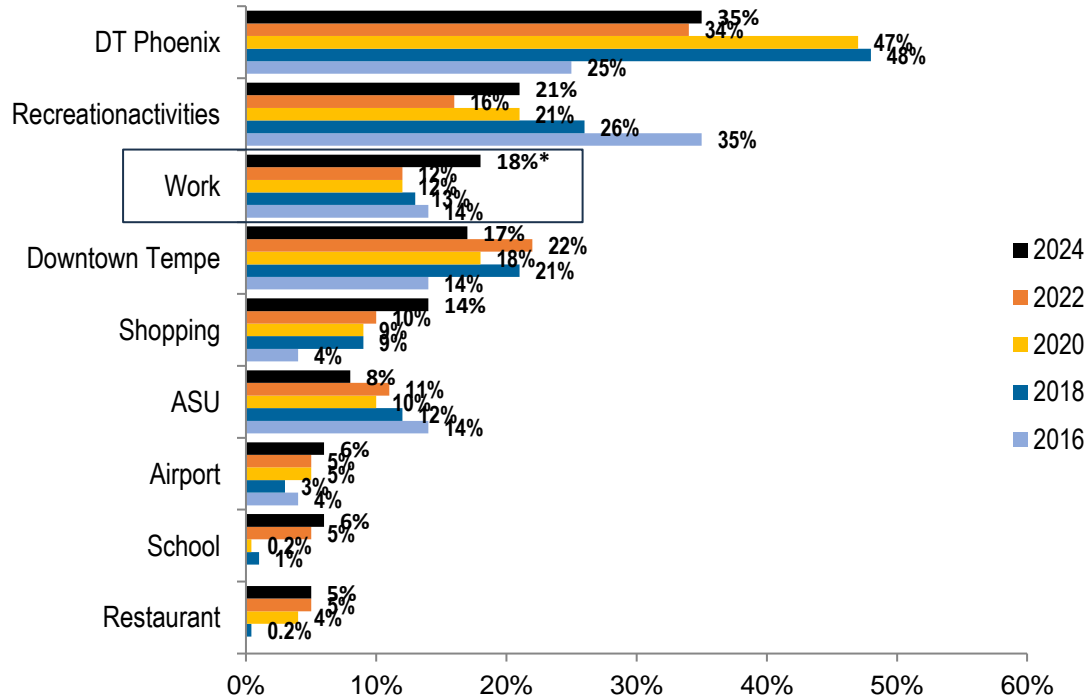
Reasons for Usage Among Riders

Top Reasons for Usage – Tracking



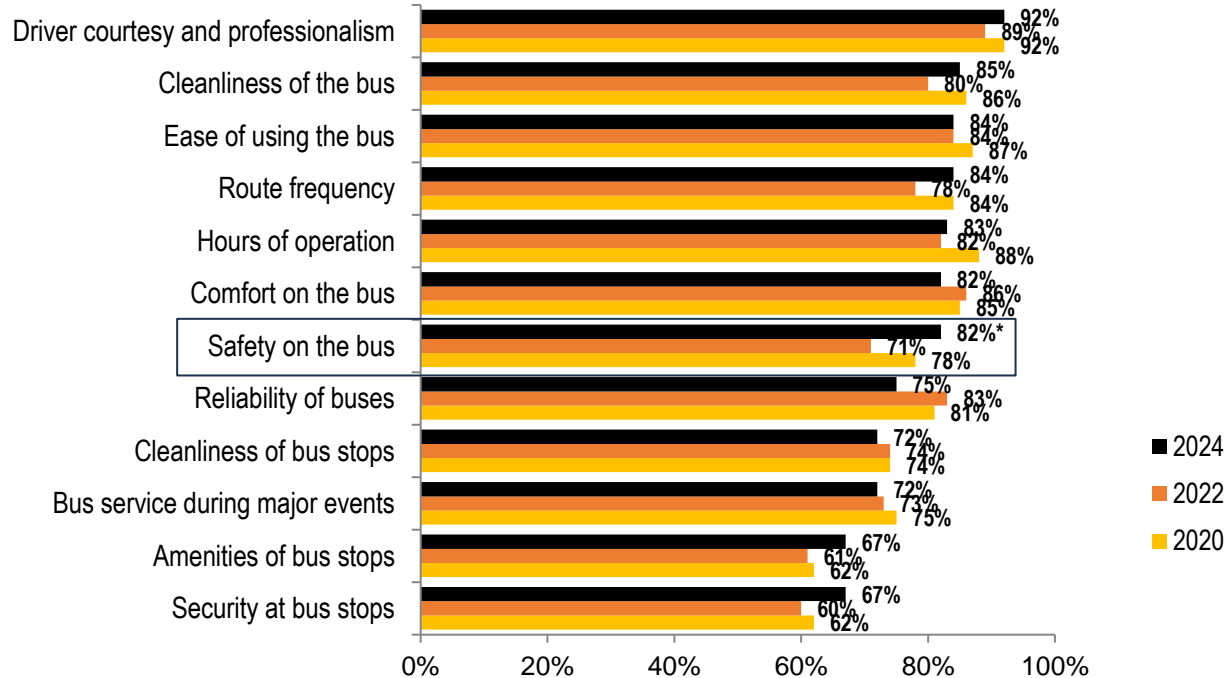
Destinations Using Transit Among Riders

Top Destinations – Tracking



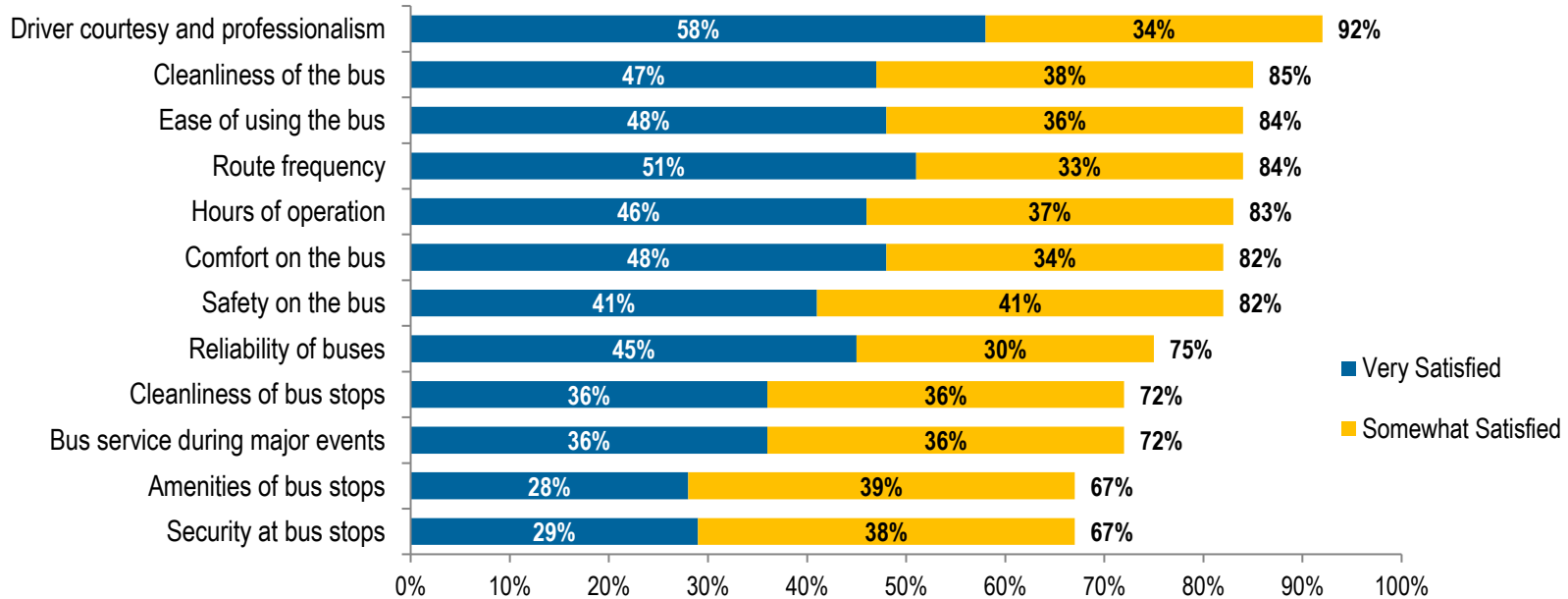
Bus Satisfaction Among Riders

Bus Top-Two Satisfaction - Tracking



Bus Satisfaction Among Riders

Bus Top-Two Satisfaction - 2024



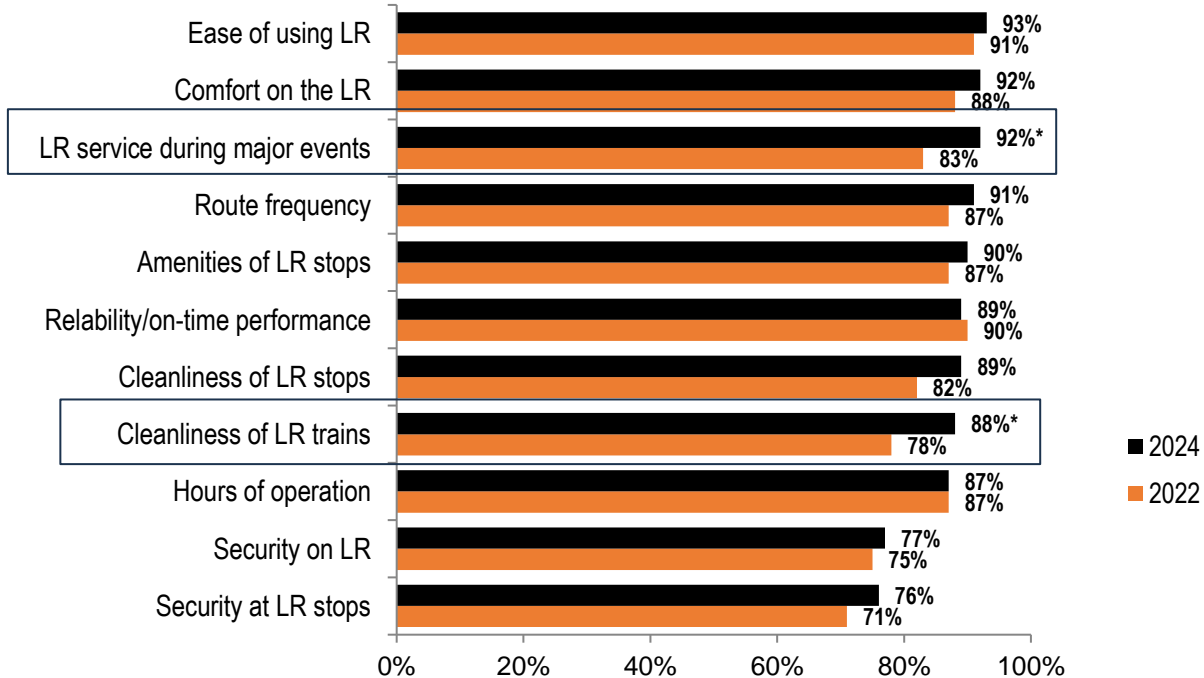
Suggested Bus Improvements

Among Dissatisfied Bus Riders

| | 2024 (n=74) | 2022 (n=85) | 2020 (n=38) | 2018 (n=45) | 2016 (n=69) |
|--|----------------|----------------|----------------|----------------|----------------|
| Inside of bus/bus stops need to be cleaner | 31% | 24% | 23% | 2% | 9% |
| More frequent buses | 27% | 22% | 19% | 17% | 32% |
| Security on the bus/safer buses | 19% | 19% | 8% | 15% | 11% |
| Don't like the type of people that use the bus | 15% | 17% | 5% | 4% | 8% |
| Bus stops need shade | 13% | 20% | 26% | 21% | 13% |
| Need better/more routes | 12% | 8% | 19% | 9% | 15% |
| More/better bus routes | 8% | 7% | 2% | - | - |
| More courteous/professional drivers | 4% | 8% | - | 6% | - |
| More/better benches at bus stops | 4% | 4% | - | 6% | - |
| Easier way to pay the fare | 3% | 3% | - | - | - |
| More/better lighting at bus stops | 2% | 3% | 8% | 20% | 8% |
| Avoid bus passing us by at stops | 2% | - | - | - | - |
| More room/accessible for bikes | 2% | - | - | - | - |
| More handicapped accessible | 2% | 1% | - | - | - |
| Buses should be free/inexpensive | 1% | 1% | - | - | - |
| Don't know | 7% | 1% | 2% | 5% | 5% |

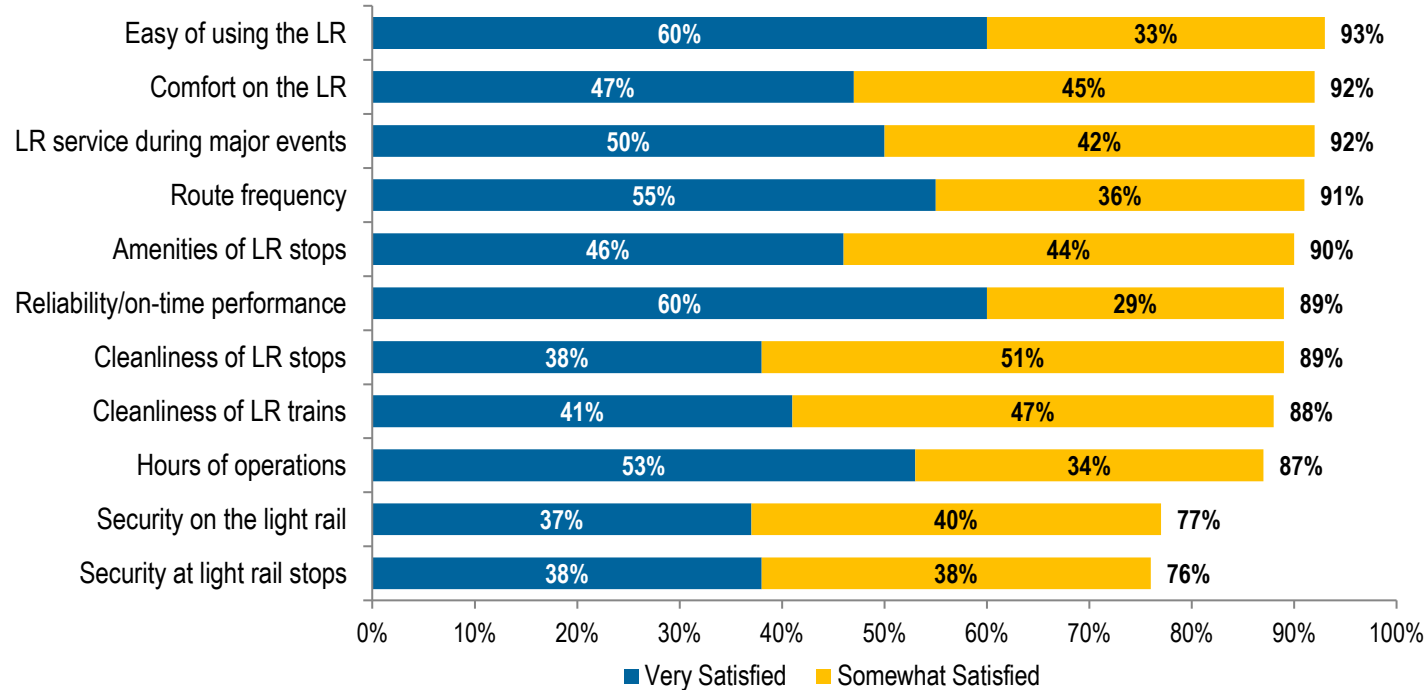
Light Rail Satisfaction Among Riders

Light Rail Top-Two Satisfaction - Tracking



Light Rail Satisfaction Among Riders

Light Rail Top-Two Satisfaction - 2024



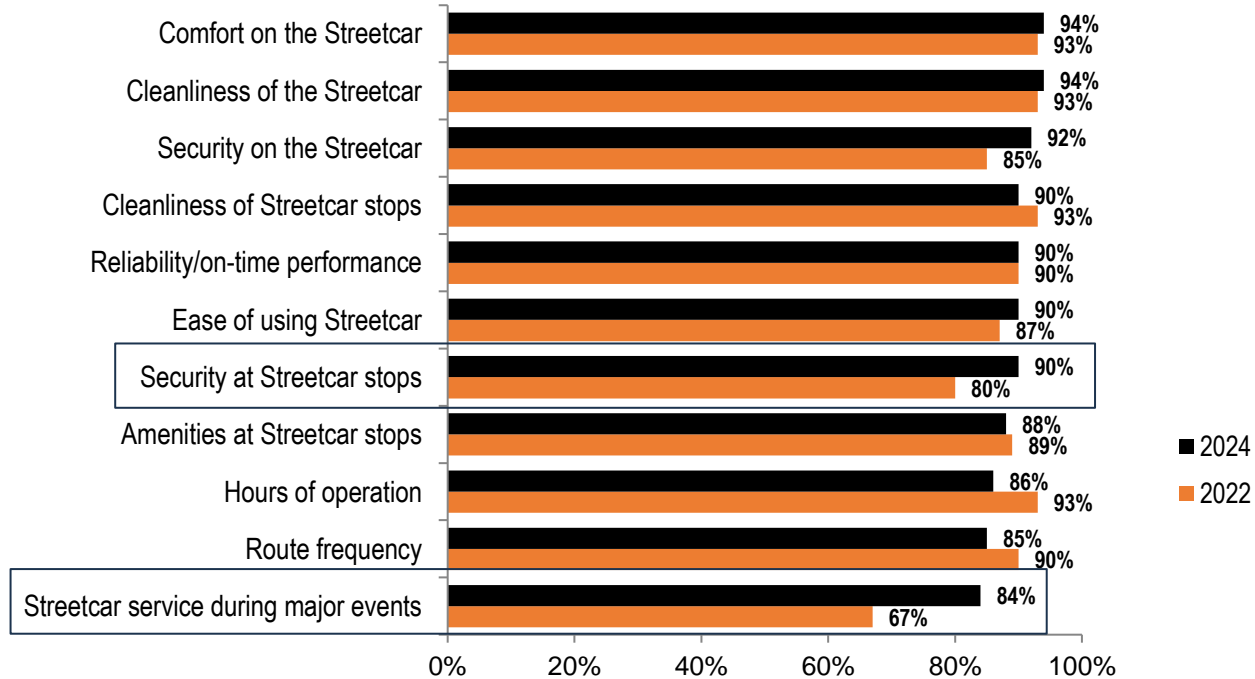
Suggested Light Rail Improvements

Among Dissatisfied Light Rail Riders

| | 2024 (n=83) | 2022 (n=84) |
|---|----------------|----------------|
| Security in the train/safer | 29% | 38% |
| Inside of the light rail/at stops need to be cleaner | 21% | 27% |
| More frequent light rail | 19% | 17% |
| Don't like the type of people that use the train | 13% | 18% |
| Need better/more routes | 10% | 3% |
| Later service/later times for weekdays/run 24 hours a day | 9% | 9% |
| Light rail stops need shade | 9% | 8% |
| It's too crowded/add more rail cars | 5% | - |
| Accessible for people with disabilities/ADA | 3% | - |
| Check tickets/get rid of free riders | 2% | 3% |
| More/better lighting at train stops | 2% | 1% |
| Friendlier operators/drivers | 2% | - |
| Better payment system/more options/smart phone payments | 1% | 3% |
| Other | 5% | 5% |
| Don't know | 6% | 4% |

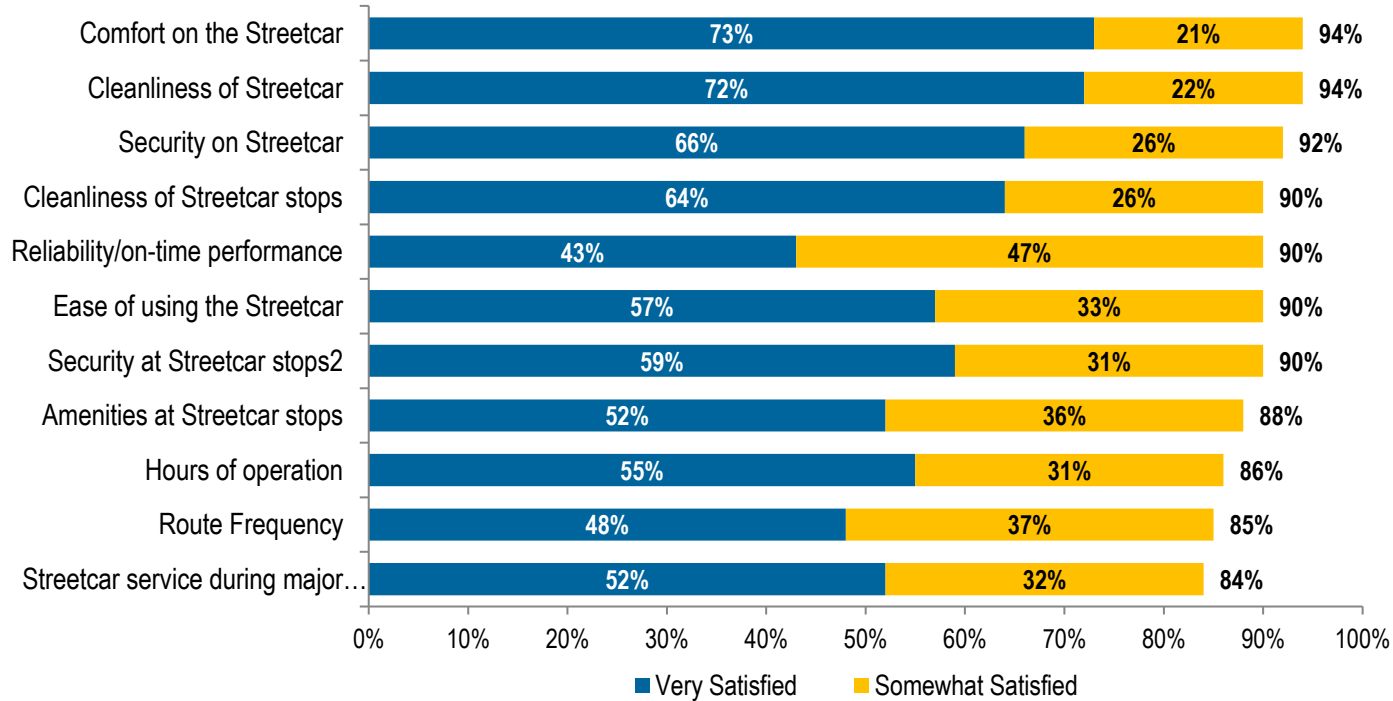
Streetcar Satisfaction Among Riders

Streetcar Top-Two Satisfaction - Tracking



Streetcar Satisfaction Among Riders

Streetcar Top-Two Satisfaction - 2024



Suggested Streetcar Improvements

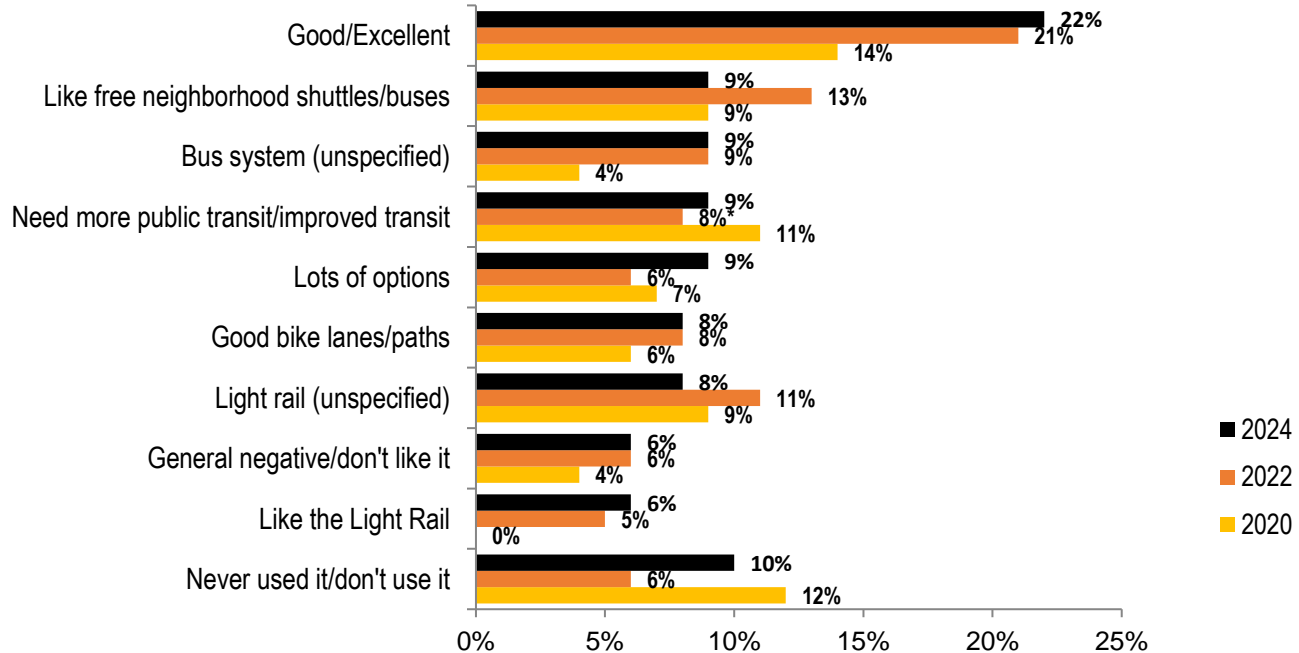
Among Dissatisfied Streetcar Riders

| | 2024 (n=12) | 2022 (n=3) |
|---|----------------|---------------|
| Reliability/ on time performance/Gets stuck in traffic/runs late/ | 3 | - |
| More frequent Streetcar service | 3 | 1 |
| Easier schedules to read/understand/accurate/hard to find schedules | 3 | 1 |
| Security in the Streetcar/safer | 1 | - |
| Cleaner inside of the Streetcar/at stops | 1 | - |
| Hours of operation | 1 | 1 |
| Should be free/not worth the cost | 1 | |

Overall Perception and Satisfaction with Tempe's Transit System

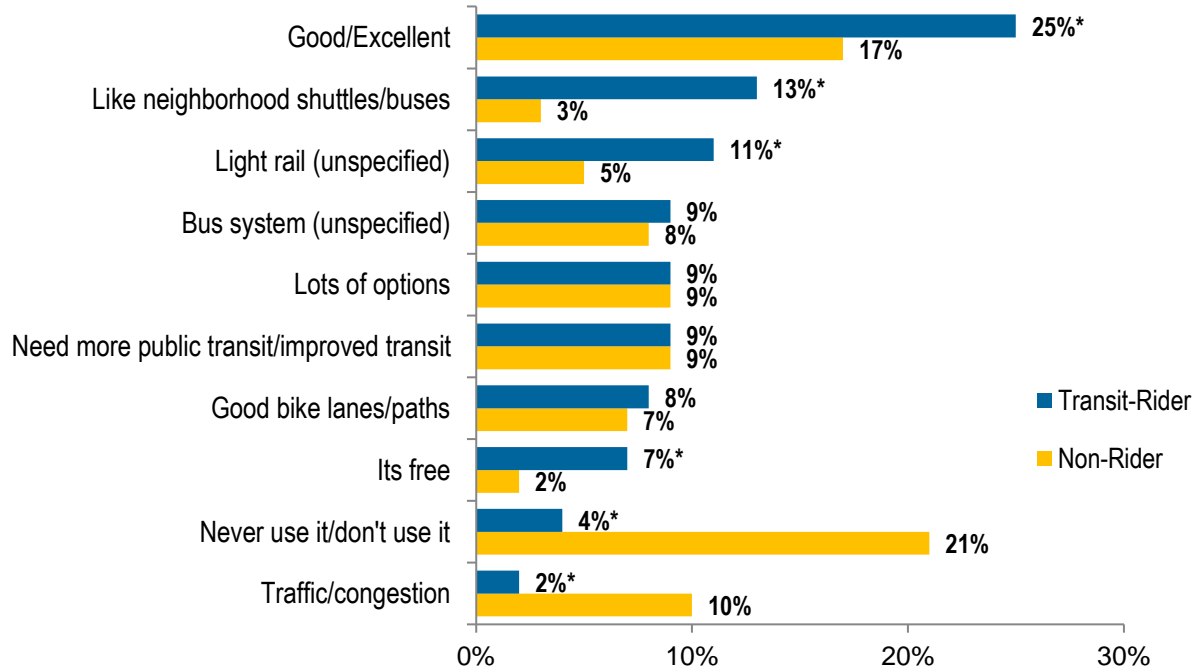
Top-of-Mind Impressions of Transit System

Top Responses - Tracking



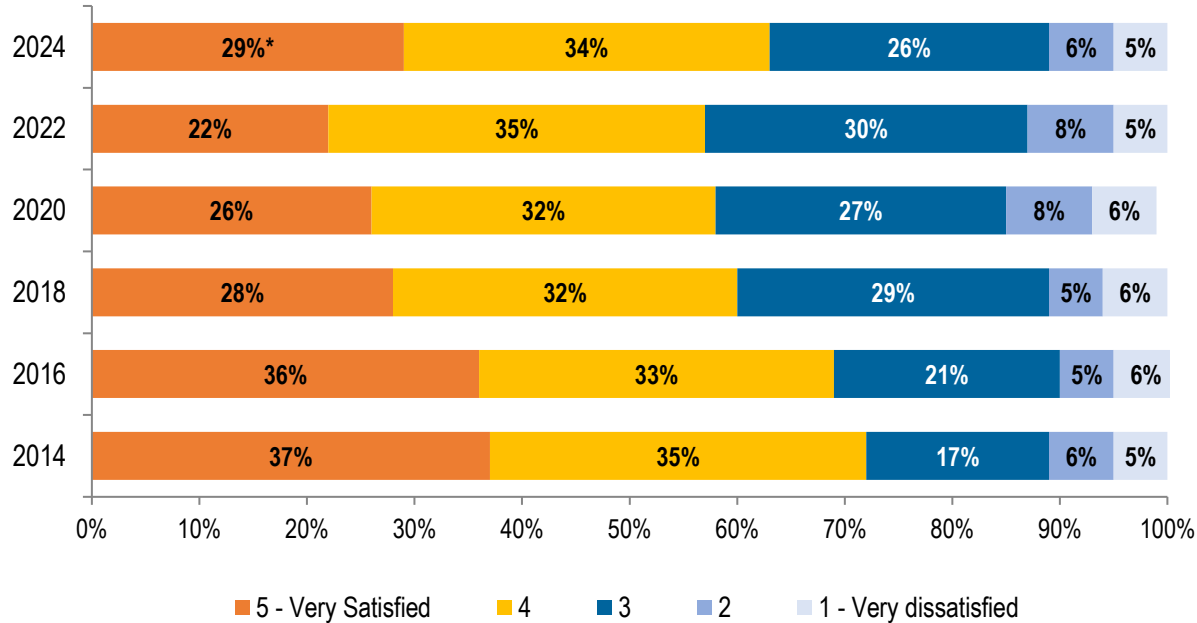
Top-of-Mind Impressions of Transit System

Top Responses – Transit Rider Vs. Non-Rider 2024



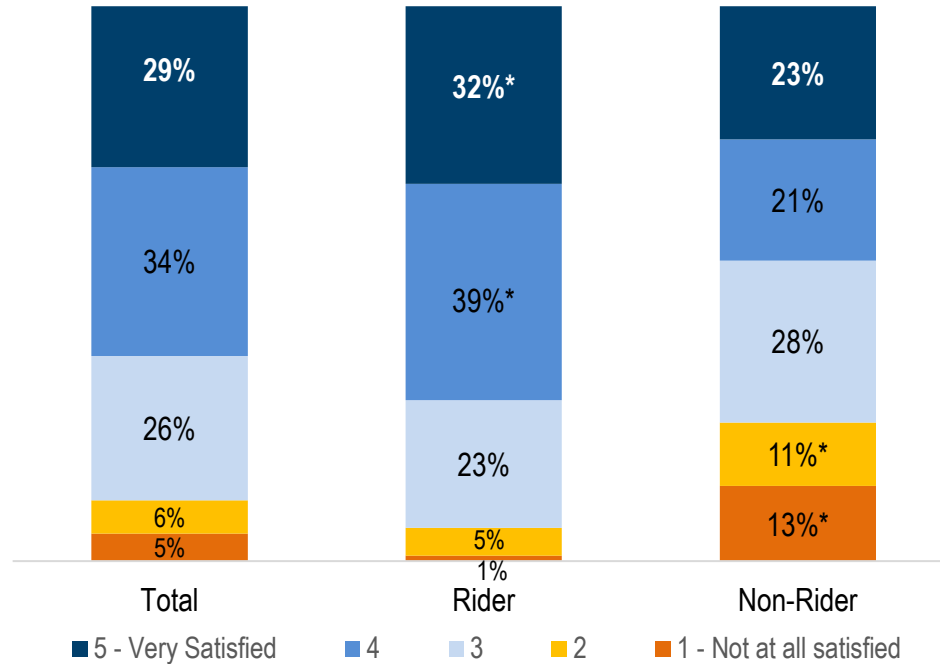
Overall Satisfaction with Transit System

Overall Satisfaction - Tracking



Overall Satisfaction with Transit System

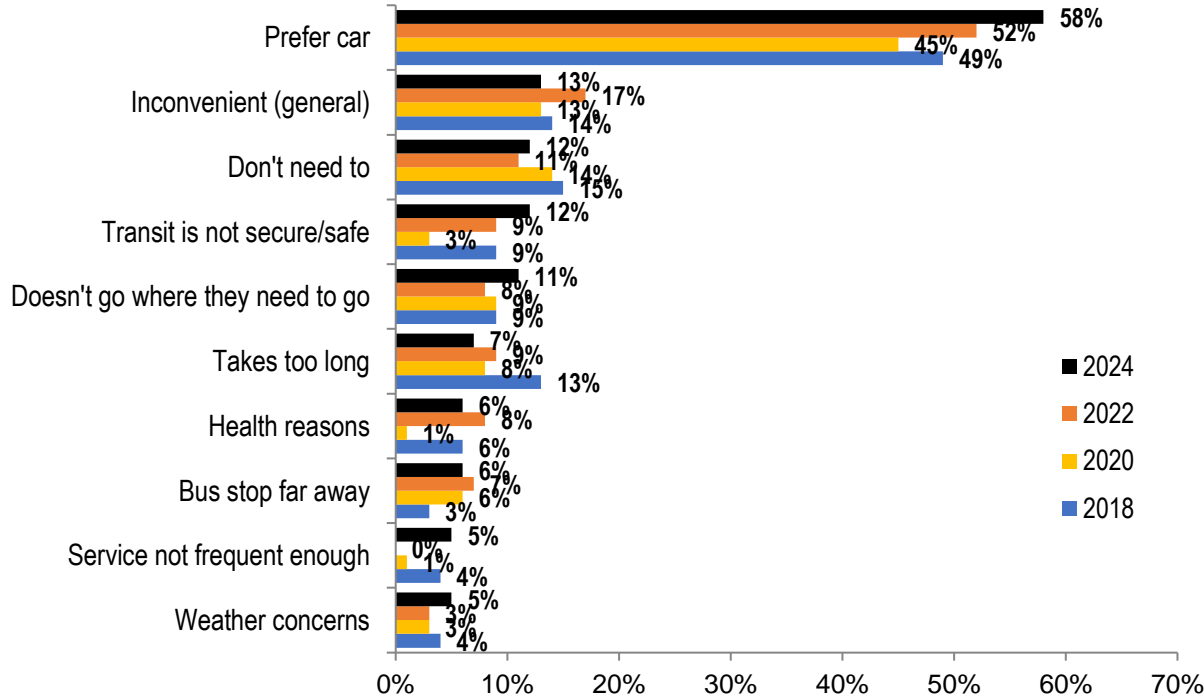
Overall Satisfaction – Rider Vs. Non-Rider 2024



Reasons for Not Riding Transit

Reasons for Not Using Transit

Top Reasons for Not Using Transit – Tracking



Tempe Bicycling and Walking

Bike Usage, Frequency, and Destinations

Access and Frequency

| | 2024 (n=414) | 2022 (n=400) | 2020 (n=401) | 2018 (n=400) | 2016 (n=401) |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Have access to bike | 59% | 56% | 63% | 64% | 62% |
| Frequency per Month | | | | | |
| Never/only occasionally | 35% | 36% | 31% | 33% | 28% |
| Once or twice | 17% | 18% | 20% | 22% | 23% |
| Three to five times | 22% | 18% | 15% | 19% | 20% |
| Six to ten times | 12% | 8% | 12% | 9% | 8% |
| >10 times | 14% | 19% | 21% | 15% | 20% |
| Don't know/not sure | - | <1% | 1% | 2% | 1% |

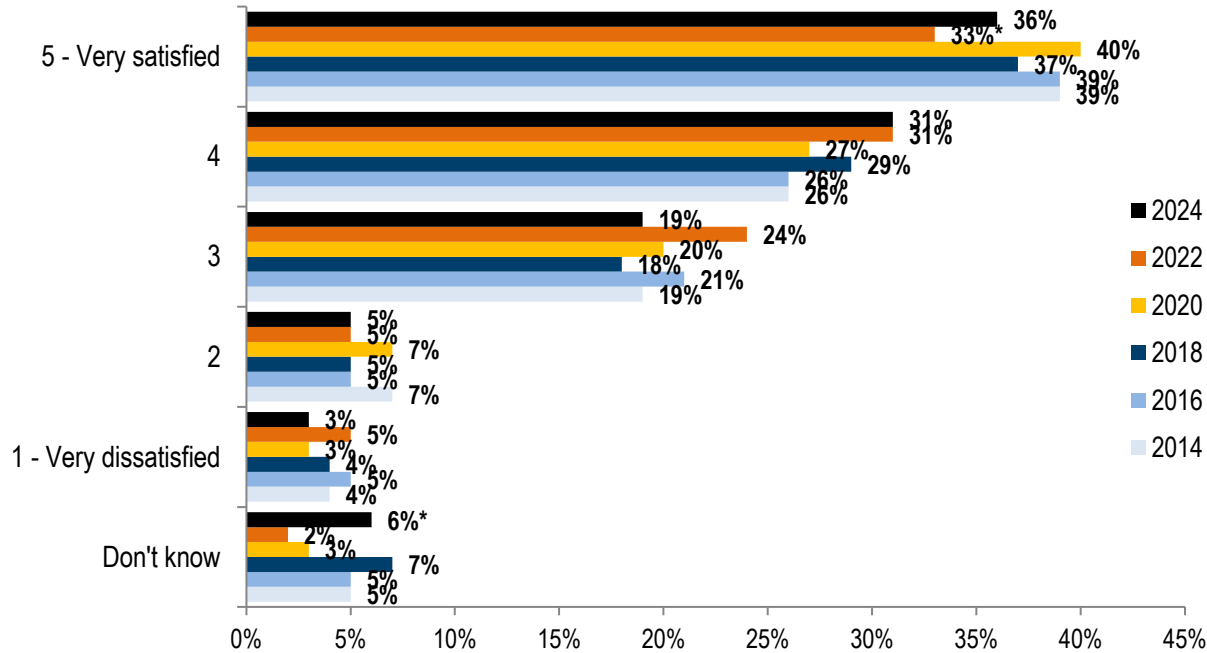
Bike Usage, Frequency, and Destinations

Destinations

| Responses | 2024 (n=156) | 2022 (n=143) | 2020 (n=174) | 2018 (n=167) | 2016 (n=176) |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Exercise | 28% | 39% | 40% | 35% | 44% |
| Store | 21% | 15% | 11% | 17% | 13% |
| Parks | 18% | 24% | 19% | 16% | 10% |
| Work/school/ASU | 17% | 12% | 16% | 12% | 14% |
| Along the canal | 15% | 15% | 15% | 11% | 9% |
| Tempe Town Lake | 7% | 10% | 11% | 7% | 5% |
| Friend's house | 7% | 7% | 3% | 4% | 4% |
| Bike trails/mountain trails | 7%* | 2% | 4% | - | - |
| Restaurant/dinner | 6% | 10% | 13% | 9% | 4% |
| Everywhere | 3% | 5% | 5% | 8% | 3% |
| Run errands | 3% | 4% | 6% | 3% | 2% |
| Locally | 3% | 2% | 1% | - | 1% |
| Get to/from recreational activities | 3% | - | - | - | - |
| The bar/when I've been drinking | 2% | 3% | 6% | 2% | 3% |
| Mill Avenue/Downtown Tempe | 2% | 3% | 4% | 13% | 5% |
| Other | 3% | - | 1% | 2% | 2% |

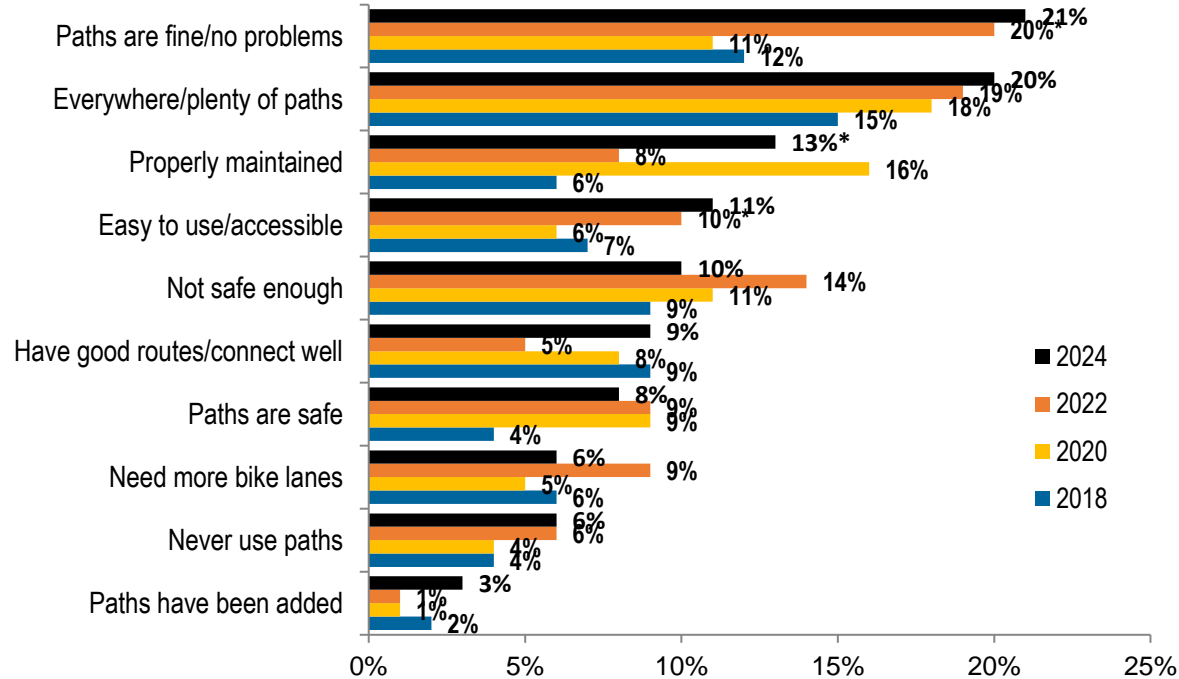
Satisfaction with Walking and Bike Paths

Overall Walking/Bike Path Satisfaction – Tracking



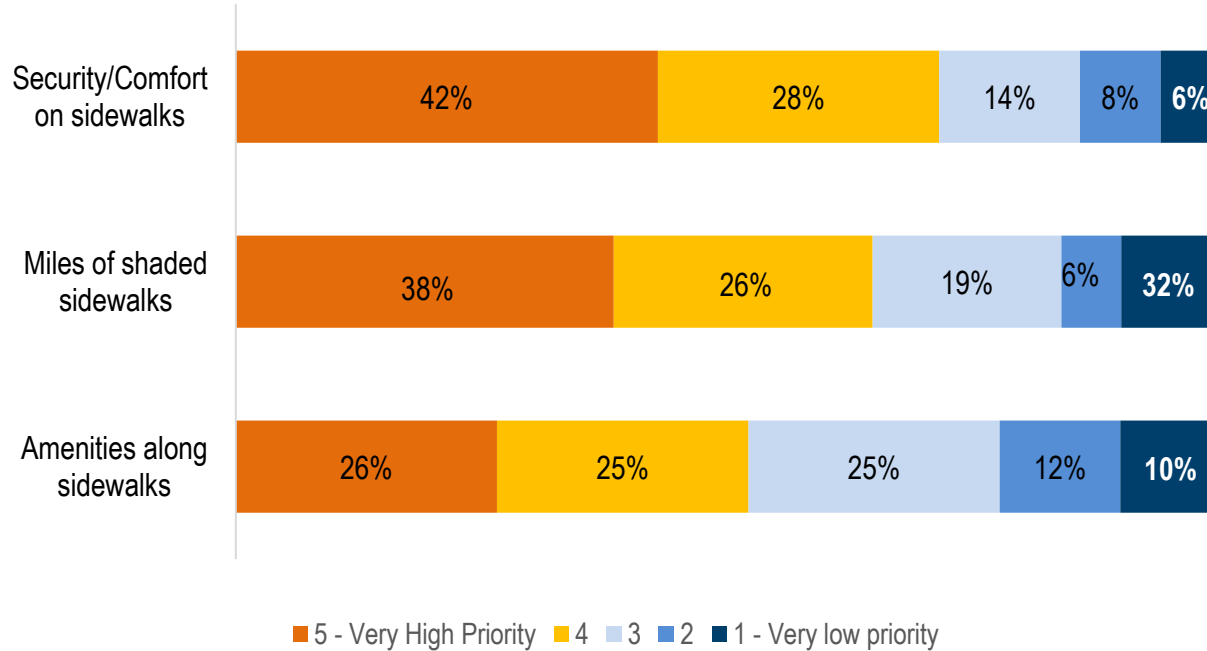
Reasons for Walking/Bike Path Satisfaction Ratings

Top Reasons for Satisfaction Ratings – Tracking

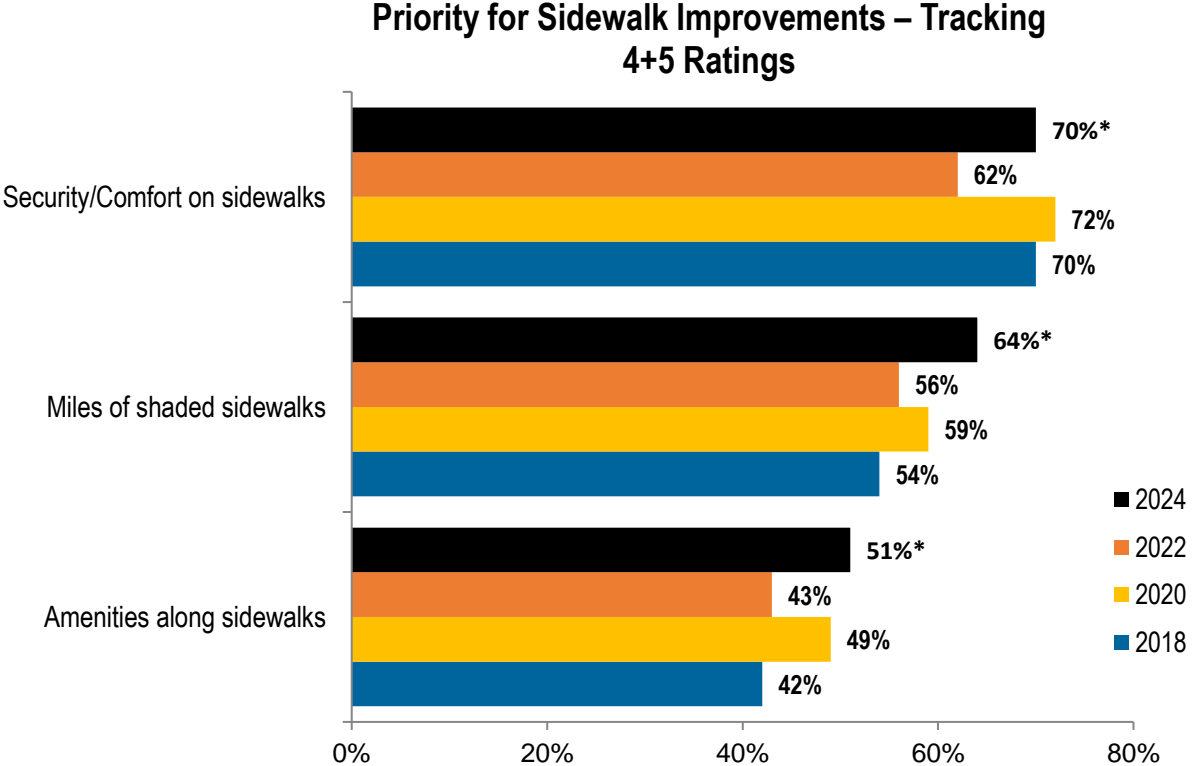


Priority of Sidewalk Improvements

Level of Priority for Sidewalk Improvements 2024

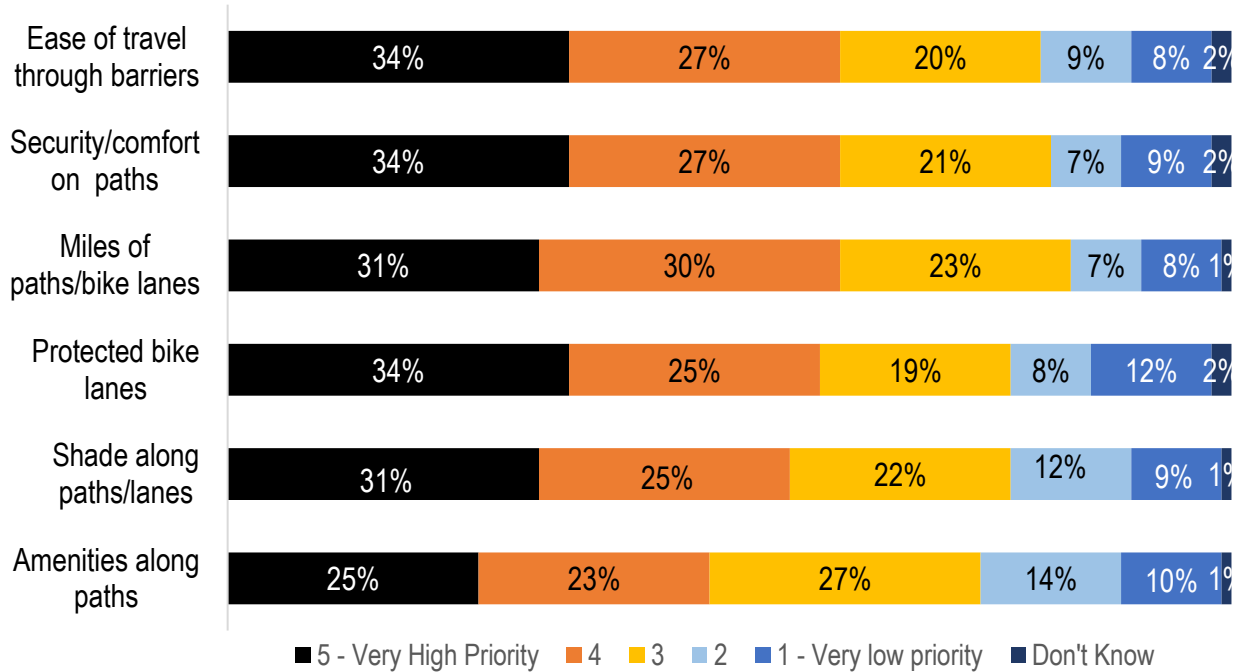


Priority for Sidewalk Improvements - Tracking

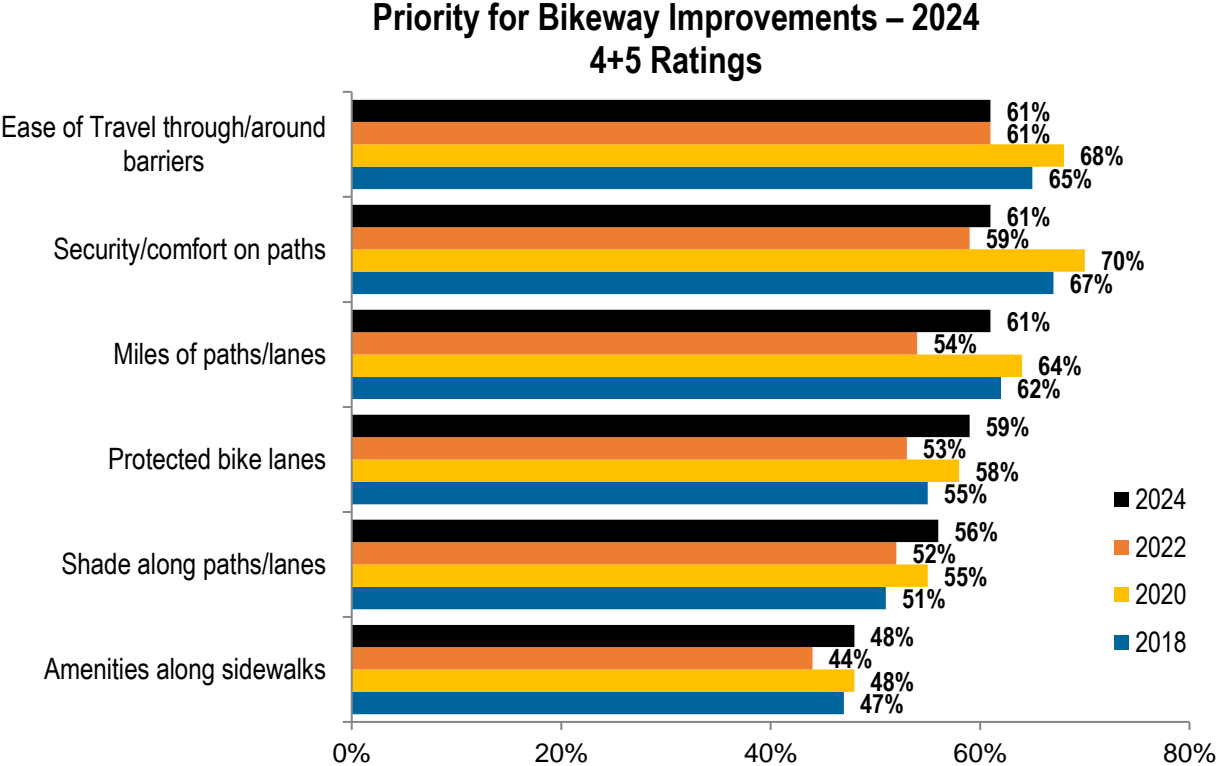


Priority of Bikeway Improvements

Level of Priority for Bikeway Improvements 2024



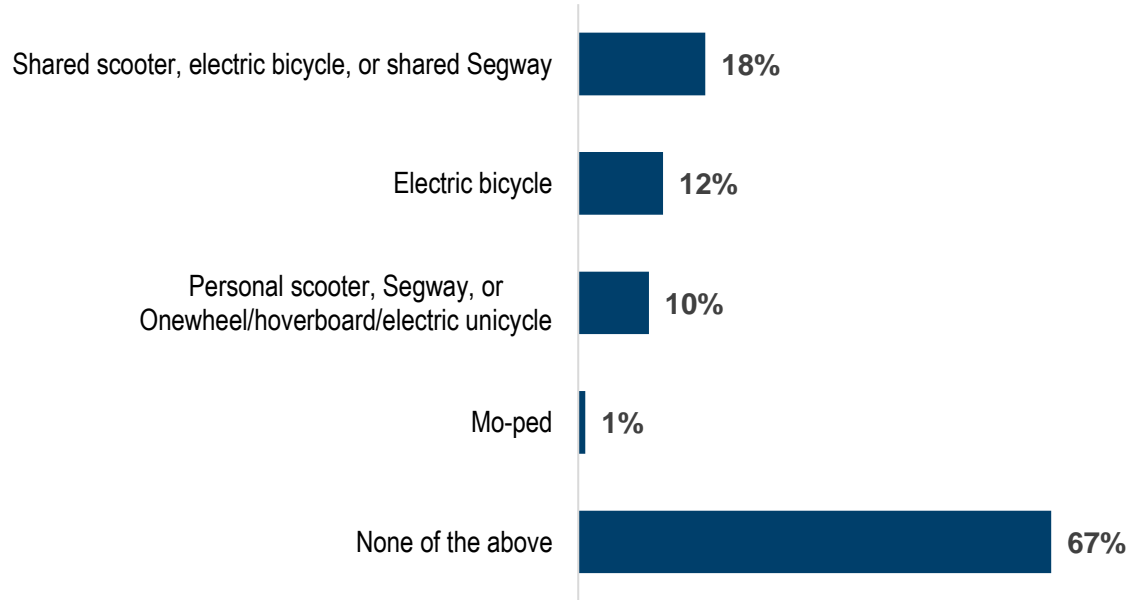
Priority for Bikeway Improvements - Tracking



Miscellaneous Other Topics

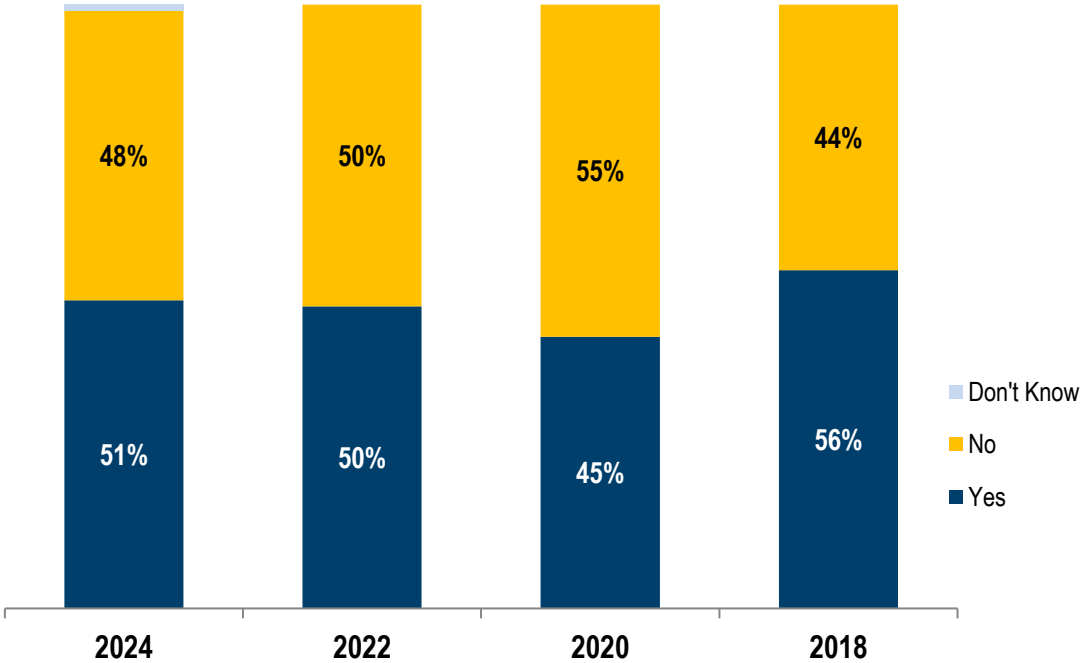
Micromobility Device Usage

Micromobility Device Usage



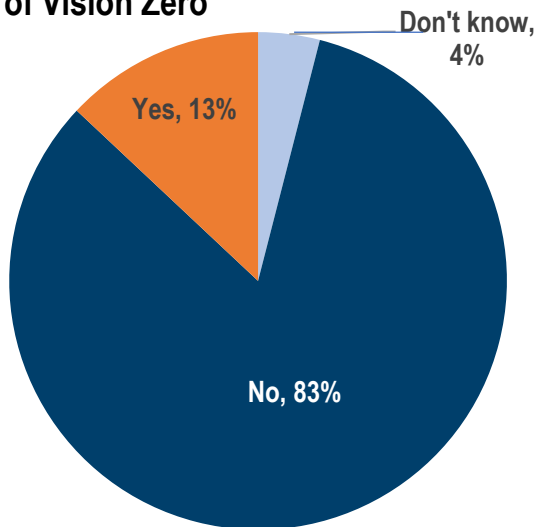
Youth Free Transit Pass

Awareness of Tempe Youth Free Transit Pass



Vision Zero

Awareness of Vision Zero



| Meaning | 2024 (n=35) |
|----------------------------------|----------------------|
| Yes, know what it means | 58% (n=28) |
| Reduce deaths from car accidents | 46% |
| Have no car accidents | 18% |
| Slow traffic | 10% |
| Safety/safety on the roads | 8% |
| Zero emissions/carbon | 7% |
| Reduce pedestrian fatalities | 7% |
| Zero visibility/low visibility | 4% |
| Other | 11% |
| Don't know | 4% |

Conclusions

Overall Satisfaction Increased

Overall satisfaction with the transit system increased to highest level since 2016.

Increase is mainly due to improved perceptions of reliability, frequency and convenience.

Frequency of Transit Use Increased

Overall percentage of residents using transit has remained consistent over the years, however, in 2024 riders are reporting more frequent transit usage than in the past (daily, weekly, monthly) and fewer trips related to special events. .

Streetcar Usage Increased

A significantly larger percentage of residents report using the Streetcar in 2024 than in 2022.

Satisfaction continues to be high, however, some growing concern about reliability in the schedule and frequency of Streetcar stops.

Conclusions

Safety Perceptions Improved

Although safety remains area with lowest satisfaction among light rail riders, more bus riders are reporting they feel safe while on the bus than in the past.

Bus riders are still concerned about their safety while waiting at the bus stops.

Safety and securing remain as reasons for dissatisfaction overall with the transit service in Tempe.

Residents Generally Satisfied with Bikeways and Paths

Residents continue to be satisfied with the bikeways and multi-use paths within Tempe.

However, residents are placing higher priority on walking and bike path improvements than in the past.

Security, comfort, and adding shade are deemed most important in 2024.

City of Tempe Transit Survey Report

Prepared For:



September/October 2024



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Questionnaire - Appendix A
Cross Tabulations (Available under separate cover)

Executive Summary

The City of Tempe commissioned WestGroup Research to complete a survey of Tempe residents to gain insights into perceptions about public transit among both riders and non-riders, as well as 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 2022 study and for the past four studies. The most recent data collection was completed with 414 Tempe residents in September/October 2024. The margin of error for this sample size is $\pm 4.8\%$ at a 95% level of confidence.

Rider Characteristics and Opinions

- Transit usage among Tempe residents has essentially stayed the same the past four studies. This year 64% reported using at least one element of Tempe's transit service, including light rail, Orbit, Flash, Streetcar and local bus/express.
- Ridership frequencies continued to increase in 2024. The percentage of residents reporting daily, weekly or monthly usage was at the highest level reported in the past four studies and significantly higher than reported in 2022 (28% vs. 19% ride at least monthly). This increase was primarily due to a significant increase in those reporting daily usage (12% up from 4%).
- Streetcar service began in May of 2022, and since then the percentage of residents using the streetcar has increased from 10% to 18%.
- Light rail usage increased back to levels reported in 2020 and before (73%) and local/express usage stayed at the higher pre-COVID levels (30%).
- Three in ten riders (29%) reported using Tempe's transit system for more than ten years, which was the same as in 2022.
- As in the past, the top three reasons Tempe residents use public transit were to avoid parking (19%), to get to and from places (18%), or overall convenience (16%).
- Phoenix/Downtown Phoenix continues to be the most popular destination for transit trips with 35% of all transit riders surveyed, naming it as a destination.
- Riders rated their level of satisfaction with 12 different aspects of riding the bus. Satisfaction with the bus service stayed the same on almost all of the attributes evaluated. However, there was a significant increase in rider perceptions of safety on the bus (82% very/somewhat satisfied vs. 71% in 2022).
- When riders rated their level of satisfaction with 11 different aspects of riding the light rail, riders were most likely to be satisfied with ease of using the light rail (93%), comfort (92%), light rail services during major events (up significantly to 92% from 83%) and route frequency (91%). Satisfaction levels with the light rail increased for all attributes evaluated over 2022 ratings.

- Lastly, riders rated their level of satisfaction with 11 different aspects of riding the Streetcar. Streetcar riders were most likely to be satisfied with comfort on the Streetcar, cleanliness of the Streetcar, and security on the Streetcar (94%, 94% and 92% Very + Somewhat satisfied, respectively).

Overall Perceptions and Satisfaction with Tempe's Transit System

- When describing their perceptions of the transit system in Tempe, residents' top of mind positive images were most often related to it being a generally good system (22%) and liking the neighborhood shuttles and buses (9%).
- Nearly two-thirds of residents (63%) with an opinion reported being highly satisfied with the Tempe transit system. Notably, this is the highest level of satisfaction reported since 69% in 2016.
 - Residents satisfied with the transit system (rated "4" or "5") primarily attributed their satisfaction to *good service* (23%), followed by *good/convenient routes* (17%), and *frequent and reliable service* (14%).
 - Residents who gave lower ratings (1-3) most often mentioned the need for *better or more routes* (21%), *more frequent buses with extended hours* (13%), and *more security* (10%) as reasons for their ratings.
- Preference for a personal vehicle continued to be by far the most common reason given by non-riders as an explanation for not using public transit (58% mentioned).

Tempe Bicycling and Walking

- Six in ten Tempe residents (59%) reported having access to a bicycle.
- Among those with access to a bike, roughly two-thirds (65%) reported riding their bike at least once a month, which is identical to 2022 but lower than the 69% reported in 2020.
- Those who have access to a bike but *never* or only *occasionally* ride it (35% of residents) most often blamed *hot weather* for not riding it more often (45% mentioned it being "*too hot outside*").
- One-quarter of those with access to a bike who ride at least once a month (28%) reported riding so for *exercise*, while 21% ride their bike to *stores*.
- Residents who bicycle at least monthly said they do so primarily to get *exercise* (39%), continuing the decline from the 57% reported in 2018.
- Similar to previous studies, 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 - Very satisfied").

- Among those with an opinion, the most common positive reasons for ratings included paths are *fine the way they are* (21%) and *paths are everywhere, there are plenty of paths* (20%).
- Top negative reasons included *paths don't seem safe enough/make them safer* (10%), *need more bike lanes* (6%) and *could use more paths* (5%).
- 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* had the highest percentage of high priority ratings (70% rated a “4” or “5”, up from 62%). Notably, residents’ top two ratings for all three sidewalk improvements increased dramatically this year compared to 2022.
- 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. As was reported in 2022, *ease of travel around barriers and security and comfort on multi-use paths* received the highest percentage of priority ratings (61% each rated a “4” or “5”).
- Two-thirds of Tempe residents reported they have not used any micromobility devices around Tempe (67%).

Tempe Youth Free Transit Pass Program and Vision Zero

- Similar to 2022, one-half (51%) 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* (39%), *word of mouth* (17%, up from 8%), and the *library* (10%) were the top ways they had learned about the Tempe Youth Free Transit Pass Program.
- This year, new questions related to Vision Zero were added to the survey. Most Tempe residents were not aware of Vision Zero (83%) while just 13% reported that they had heard of the traffic safety policy.
- Just over one-half of residents who had heard of Vision Zero reported they knew what it meant (58%). The majority believed it was related to *safety* with mentions of *reducing deaths from car accidents* (46%), *having no car accidents* (18%), *slowing traffic* (10%), *safety on the roads* (8%) and *reducing pedestrian fatalities* (7%).

Conclusions

1. Overall satisfaction for the transit system increased among Tempe residents in 2024 and is the highest reported since 2016. This is mainly due to reliability, frequency and convenience.
2. While overall the percentage of residents using transit to some degree has remained similar to previous studies, riders are reporting more frequent transit usage than in the past (daily, weekly, monthly) and fewer trips related to special or unique events.
3. Residents have continued to embrace the newer Streetcar service with a significantly larger proportion of riders reporting to use it in 2024. After using the Streetcar for two years, riders are still reporting high satisfaction ratings for all attributes; however, there are growing concerns of reliability in the schedule and frequency of streetcar stops.
4. Although safety remains the area with the lowest satisfaction among light rail riders, bus riders are reporting they feel much safer now while on the bus. However, bus riders are still feeling the least satisfied with security while waiting at their bus stops. Safety and security also remain as a reason for dissatisfaction with the transit service in Tempe.
5. Tempe residents are generally satisfied with bikeways and paths. However, they are placing higher priorities on walking and bicycle path improvements than in the past. Security, comfort and adding shade onto paths are deemed most important in 2024 while residents are less concerned about amenity improvements.

I. Introduction

A. Background

The City of Tempe commissioned WestGroup Research to complete a telephone 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. 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 the past four studies that were conducted in 2016, 2018, 2020 and 2022. The most recent data collection was completed with 414 Tempe residents during September and October 2024. Due to size limitations, tables in the report do not show data from the studies conducted from 1998-2014.

In previous studies, data was only collected by telephone. In 2022 and 2024, data was primarily collected via telephone (278 surveys), but to complete more surveys with younger residents, an online survey conducted through a national panel company was added (136 surveys). Panel data was collected online from September 17 to September 27, 2024. The telephone calls with Tempe residents were made by WestGroup from September 5 to September 24, 2024. A combination of random-digit dial (RDD) sample to contact "land line" households along with cell-phone sample database to reach cellphone 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 gender and age to make sure the final data achieved the targeted representative sample.

The survey was completed with 414 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 male residents vs. female residents is dictated by the size of these subgroups (n=207 and $\pm 6.8\%$ for males, for example).

Based on a sample size of 414, **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 49% and 54% in the first and second rows of column A is significantly higher than the figures in column B and C (16% and 8%; 18% and 12%) at the 95% confidence level.

Frequency of Transit Usage Demographic Breakdown

| | 2024 (n=414) | 18-34 (n=132) (A) | Age 35-54 (n=141) (B) | 55+ (n=140) (C) |
|----------------------------------|-----------------|-------------------------|--------------------------------|-----------------------|
| Net Ride Daily or Weekly | 24% | 49%^{BC} | 16%^C | 8% |
| Net Ride at least Monthly | 28% | 54%^{BC} | 18% | 12% |
| Daily | 12% | 23% ^{BC} | 8% | 5% |
| Weekly | 12% | 26% ^{BC} | 8% | 3% |
| Monthly | 4% | 5% | 2% | 4% |
| Every few months | 7% | 3% | 10% ^A | 7% |
| Special/unique circumstances | 30% | 19% | 38% ^A | 32% ^A |
| Don't Use Transit | 35% | 24% | 32% | 50% ^{AB} |

For trend tables and charts displaying yearly data, significant differences between 2024 and 2022 figures are shown using an asterisk. For example, in the table below, the 73% in the 2024 column is significantly different than the 64% in the 2022 column at the 95% confidence level. Statistical testing between earlier studies is not shown in this report; however, important trends over time are called out when appropriate.

| | 2024 (n=266) | 2022 (n=251) | 2020 (n=248) | 2018 (n=253) | 2016 (n=246) |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Light Rail | 73%* | 64% | 72% | 73% | 84% |
| Orbit or Flash neighborhood shuttles | 33% | 34% | 33% | 32% | 37% |
| Local or express bus | 30% | 28% | 19% | 25% | 28% |
| Streetcar | 18%* | 10% | - | - | - |
| Don't Know/Refused | 12% | 12% | 15% | 12% | 7% |

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 2024 by gender and age 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. Generally, the profile of 2024 respondents were statistically similar to 2022 respondents with only slight changes in education and employment status. The average income of respondents continues to increase.

Table 1a: Demographics

| | 2024 (n=414) | 2022 (n=400) | 2020 (n=401) | 2018 (n=400) | 2016 (n=401) |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Gender | | | | | |
| Male | 50% | 49% | 52% | 50% | 52% |
| Female | 49% | 50% | 48% | 50% | 48% |
| Nonbinary/other | 1% | 1% | - | - | - |
| Years Lived in Tempe | | | | | |
| <1 year | 5% | 7% | 4% | <1% | 1% |
| 1 – 2 years | 9% | 10% | 11% | 3% | 4% |
| 3 – 5 years | 14% | 14% | 20% | 10% | 9% |
| 6 – 10 years | 16% | 14% | 18% | 10% | 15% |
| 11 – 20 years | 17% | 17% | 14% | 24% | 24% |
| 20+ years | 39% | 38% | 32% | 52% | 48% |
| Age | | | | | |
| 18 – 34 | 32% | 34% | 34% | 32% | 32% |
| 35 – 54 | 34% | 34% | 34% | 34% | 34% |
| 55+ | 34% | 31% | 31% | 33% | 33% |
| Average Age | 46.3 | 45.1 | 45.6 | 47.8 | 47.3 |
| Education | | | | | |
| Some high school | 1% | 1% | 2% | 1% | 2% |
| High school graduate | 11%* | 7% | 7% | 10% | 10% |
| Some college | 27% | 28% | 26% | 25% | 26% |
| College graduate | 34%* | 42% | 35% | 38% | 33% |
| Postgraduate | 27% | 21% | 29% | 25% | 27% |
| No answer/ Refused | <1% | 1% | 1% | 1% | 2% |
| Marital Status | | | | | |
| Married | 44% | 46% | 46% | 49% | 52% |
| Single | 55% | 52% | 49% | 48% | 45% |
| Refused | 2% | 2% | 5% | 3% | 3% |

*Indicates significant difference compared to 2022 at a 95% confidence level.

Table 1b: Demographics

| | 2024 (n=414) | 2022 (n=400) | 2020 (n=401) | 2018 (n=400) | 2016 (n=401) |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Income | | | | | |
| <\$20,000 | 6% | 6% | 5% | 7% | 7% |
| \$20 - \$40,000 | 11% | 13% | 11% | 15% | 18% |
| \$40 - \$60,000 | 18% | 15% | 14% | 16% | 19% |
| \$60 - \$80,000 | 12% | 15% | 18% | 18% | 13% |
| \$80 - \$100,000 | 9% | 11% | 11% | 11% | 7% |
| \$100,000+ | 36% | 31% | 32% | 24% | 20% |
| \$100K to \$150,000 | 16% | 17% | 16% | 12% | n/a |
| \$150,000+ | 20%* | 14% | 16% | 12% | n/a |
| No answer/refused | 8% | 9% | 9% | 9% | 16% |
| Average Income | \$92,035 | \$85,898 | \$89,958 | \$79,072 | \$67,325 |
| Occupation | | | | | |
| Full-time | 58% | 60% | 63% | 60% | 57% |
| Part-time | 7% | 10% | 7% | 11% | 6% |
| Retired | 22%* | 16% | 16% | 16% | 20% |
| Stay at home Spouse | 3% | 4% | 5% | 6% | 3% |
| Student | 4% | 7% | 4% | 3% | 6% |
| Unemployed/disabled | 4% | 3% | 4% | 3% | 5% |
| Refused | 1% | 1% | 1% | 2% | 3% |
| Race | | | | | |
| White | 80% | 77% | - | - | - |
| Hispanic | 18% | 14% | - | - | - |
| Black/African American | 5% | 4% | - | - | - |
| Asian | 4% | 7% | - | - | - |
| American Indian/Alaska Native | 3% | 2% | - | - | - |
| Native Hawaiian/Pacific Islander | 1% | 1% | - | - | - |
| Multi-racial | 3% | 1% | - | - | - |
| Other | 2% | 1% | - | - | - |
| Refused | 3% | 6% | - | - | - |
| Zip Code | | | | | |
| 85281 | 24% | 20% | 25% | 18% | 21% |
| 85282 | 31% | 33% | 35% | 32% | 33% |
| 85283 | 26% | 23% | 26% | 29% | 24% |
| 85284 | 15% | 20% | 14% | 22% | 22% |
| 85288 | 4% | 4% | - | - | - |

*Indicates significant difference compared to 2022 at a 95% confidence level.

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

II. Rider Characteristics and Opinions

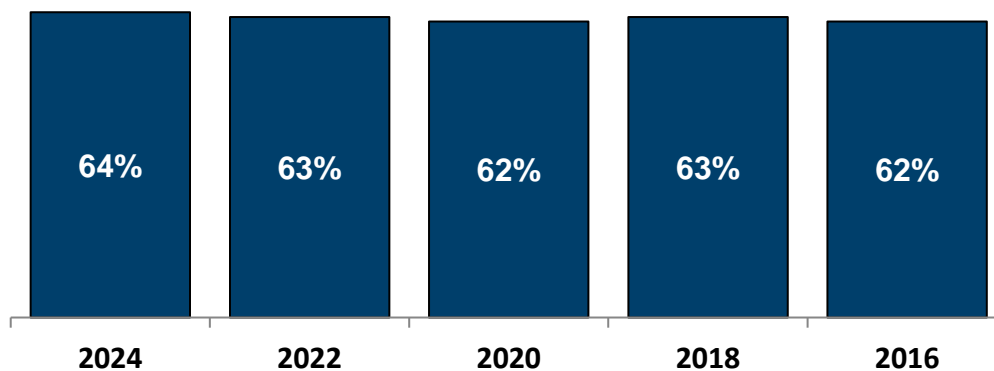
A. Current Use of Public Transit

1. Tempe Transit Service Usage – Among All Residents

Transit usage among Tempe residents has essentially stayed the same the past four studies. This year 64% reported riding Tempe’s transit service, including light rail, Orbit, Flash, Streetcar and local bus/express.

In 2024, men were more likely than women to use public transit (69% men and 60% women). Notably, residents living in 85281 were significantly more likely to report using some sort of transit (81% vs. 47%-66% other zips).

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



2024 n=414; 2022 n=400; 2020 n=401, 2018 n=400, 2016 n=401

Q5: In general would you say you use Tempe’s transit system (including light rail, Streetcar, 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 continued to increase in 2024. The percentage of residents reporting daily, weekly or monthly usage was at the highest level reported in the past four studies and significantly higher than reported in 2022 (28% vs. 19% ride at least monthly). This increase was primarily due to a significant increase in those reporting daily usage (12% up from 4%). Conversely, the proportion of residents who indicated taking advantage of Tempe public transit under unique circumstances continued to decline slightly compared to 2020 (30%, down from 43%).

As was true in previous studies, local bus, Orbit/Flash and Express riders were significantly more likely than rail only riders to report riding at least weekly (60% vs. 21%), and as expected, light rail only riders were significantly more likely to say they generally used transit under special or unique circumstances (64% vs. 19% of other riders).

As expected, older residents (age 55+) were less likely than younger residents to report using any form of public transit (50% vs. 68% of those 35-54 and 76% of those 18-34). Higher-income residents were more likely to report using transit for special events (32%), whereas those with household incomes under \$40,000 were more likely to report using transit on a more consistent basis.

Table 2a: Frequency of Transit Usage

| | 2024 (n=414) | 2022 (n=400) | 2020 (n=401) | 2018 (n=400) | 2016 (n=401) |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Net Ride Daily or Weekly | 24%* | 13% | 6% | 5% | 10% |
| Net Ride at least Monthly | 28%* | 19% | 12% | 11% | 16% |
| Daily | 12%* | 4% | 2% | 2% | 5% |
| Weekly | 12% | 10% | 4% | 3% | 5% |
| Monthly | 4% | 6% | 6% | 6% | 6% |
| Every few months | 7% | 10% | 7% | 10% | 9% |
| Special/unique circumstances | 30% | 34% | 43% | 42% | 37% |
| Don't Use Transit | 35% | 37% | 38% | 34% | 38% |
| Don't know/No answer | <1% | <1% | <1% | 3% | <1% |

*Indicates significant difference compared to 2022 at a 95% confidence level.

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

Table 2b: Frequency of Transit Usage Demographic Breakdown

| | 2024 (n=414) | Age | | |
|----------------------------------|-----------------|-------------------------|-------------------------|-----------------------|
| | | 18-34 (n=132) (A) | 35-54 (n=141) (B) | 55+ (n=140) (C) |
| Net Ride Daily or Weekly | 24% | 49%^{BC} | 16%^C | 8% |
| Net Ride at least Monthly | 28% | 54%^{BC} | 18% | 12% |
| Daily | 12% | 23% ^{BC} | 8% | 5% |
| Weekly | 12% | 26% ^{BC} | 8% | 3% |
| Monthly | 4% | 5% | 2% | 4% |
| Every few months | 7% | 3% | 10% ^A | 7% |
| Special/unique circumstances | 30% | 19% | 38% ^A | 32% ^A |
| Don't Use Transit | 35% | 24% | 32% | 50% ^{AB} |

^{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

Streetcar began service in May of 2022, and since then the percentage of residents using the streetcar has increased from 10% to 18%. Light rail usage increased back to levels reported in 2020 and before (73%) and local/express usage stayed at the higher pre-COVID levels (30%). Residents of the 85281 and 85282 zip codes were much more likely to report riding Orbit or Flash neighborhood shuttles than those in 85284 (46% and 34% vs. 18%, respectively). Streetcar usage was highest among residents living in 85281 (40% vs. 6% to 13% in the other zips).

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

| | 2024 (n=266) | 2022 (n=251) | 2020 (n=248) | 2018 (n=253) | 2016 (n=246) |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Light Rail | 73%* | 64% | 72% | 73% | 84% |
| Orbit or Flash neighborhood shuttles | 33% | 34% | 33% | 32% | 37% |
| Local or express bus | 30% | 28% | 19% | 25% | 28% |
| Streetcar | 18%* | 10% | - | - | - |
| Don't Know/Refused | 12% | 12% | 15% | 12% | 7% |

*Indicates significant difference compared to 2022 at the 95% confidence level.

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

In 2022, younger riders (18 to 34 years old) were significantly more likely than those 55 and older to report riding local/express buses and the Streetcar (41% vs. 15% bus; 26% vs. 10% Streetcar). Neighborhood shuttle usage is highest among those ages 35 to 54 (43% vs. 30% under 35 and 24% over 55).

Additionally, a much higher proportion of those with annual household incomes under \$40,000 reported riding buses and/or shuttles compared to residents with higher household incomes; those with less than a college degree also were more likely to ride local or express buses (40% vs. 23%).

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

| Transit Type | 2024 (n=266) | Age | | | Income | | |
|--------------------------------------|-----------------|-------------------------|------------------------|----------------------|-------------------------|------------------------------|------------------------|
| | | 18-34 (n=101) (A) | 35-54 (n=95) (B) | 55+ (n=70) (C) | <\$40K (n=42) (D) | \$40K-\$80K (n=82) (E) | 80K+ (n=125) (F) |
| Light Rail | 73% | 74% | 73% | 69% | 69% | 75% | 74% |
| Orbit or Flash neighborhood shuttles | 33% | 30% | 43% ^C | 24% | 42% | 25% | 36% |
| Local or express bus | 30% | 41% ^C | 28% ^C | 15% | 50% ^{EF} | 25% | 27% |
| Streetcar | 18% | 26% ^C | 16% | 10% | 24% | 14% | 21% |
| Don't Know/Refused | 12% | 3% | 14% ^A | 21% ^A | 5% | 14% | 9% |

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

B. Length of Use of Transit System

Three in ten riders (29%) reported using Tempe’s transit system for more than ten years, which was the same as in 2022. The percentage of new riders declined (14% down to 6%), however, the percentage using transit for one to two years increased slightly (11% up from 9%).

Table 3a: Length of Use of Transit System

| Time Riding | 2024 (n=266) | 2022 (n=251) | 2020 (n=248) | 2018 (n=253) | 2016 (n=246) |
|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Less than a year | 6%* | 14% | 9% | 4% | 5% |
| 1 – 2 years | 11% | 9% | 9% | 6% | 9% |
| 2 – 4 years | 12% | 12% | 12% | 13% | 15% |
| 4 – 6 years | 13% | 12% | 20% | 19% | 19% |
| 6 – 10 years | 24% | 19% | 22% | 14% | 22% |
| More than 10 years | 29% | 30% | 23% | 35% | 25% |
| 11 to 20 Years | 17% | 19% | 15% | na | na |
| More than 20 Years | 12% | 11% | 8% | na | na |
| Don’t know | 5% | 4% | 5% | 11% | 4% |

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

*Indicates significant difference compared to 2022 at the 95% confidence level.

C. Main Reasons for Using Public Transit

As in the past, the top three reasons Tempe residents use public transit were to avoid parking (19%), to get to and from places (18%), or overall convenience (16%).

Older riders were significantly more likely to mention avoiding parking (22% 35-54 and 25% 55+ vs 11% 18-34) and *convenience* as their main reason (24% 55+ vs. 14% under age 35) where as younger residents are more likely to indicate they use transit to save money (17% under 34 vs. 5% age 55+) and/or they don't have a car (12% under age 34 vs. 4% age 55+).

Table 3b: Main Reasons for Using Public Transit

| Responses | 2024 (n=266) | 2022 (n=251) | 2020 (n=248) | 2018 (n=253) | 2016 (n=246) |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| To avoid parking | 19% | 15% | 12% | 11% | 5% |
| Get to/from places | 18% | 15% | 20% | 18% | 22% |
| Convenient | 16% | 18% | 11% | 26% | 24% |
| Saves money | 9% | 10% | 6% | 2% | 3% |
| Do not have a car | 9% | 9% | 4% | 5% | 8% |
| Vehicle not available/car problems | 7% | 5% | 4% | 6% | 3% |
| Need to get to Phoenix | 6% | 4% | 6% | 2% | 4% |
| To get to/from work | 5% | 3% | 5% | 4% | 3% |
| Dislike driving/Take a break from driving | 4% | 7% | 6% | 5% | 4% |
| To go downtown | 4% | 5% | 10% | 9% | 3% |
| To avoid drinking and driving | 4% | 3% | 7% | 4% | 3% |
| Saves wear and tear on car | 3% | 1% | - | 1% | 1% |
| Protects the environment | 2% | 4% | 3% | 2% | 1% |
| A way to get around | 2% | 3% | 3% | 2% | 3% |
| To get to/from airport | 2% | 3% | 3% | 1% | 3% |
| Get to/from places | 2% | 3% | 2% | 2% | 2% |
| Get to/from school | 2% | 2% | 3% | 4% | 5% |
| It's free | 2% | 2% | - | - | - |
| Health problems/handicapped | 2% | - | 1% | - | - |
| Saves time/fast | 2% | - | - | - | - |
| Enjoy the people | 2% | - | - | - | - |

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

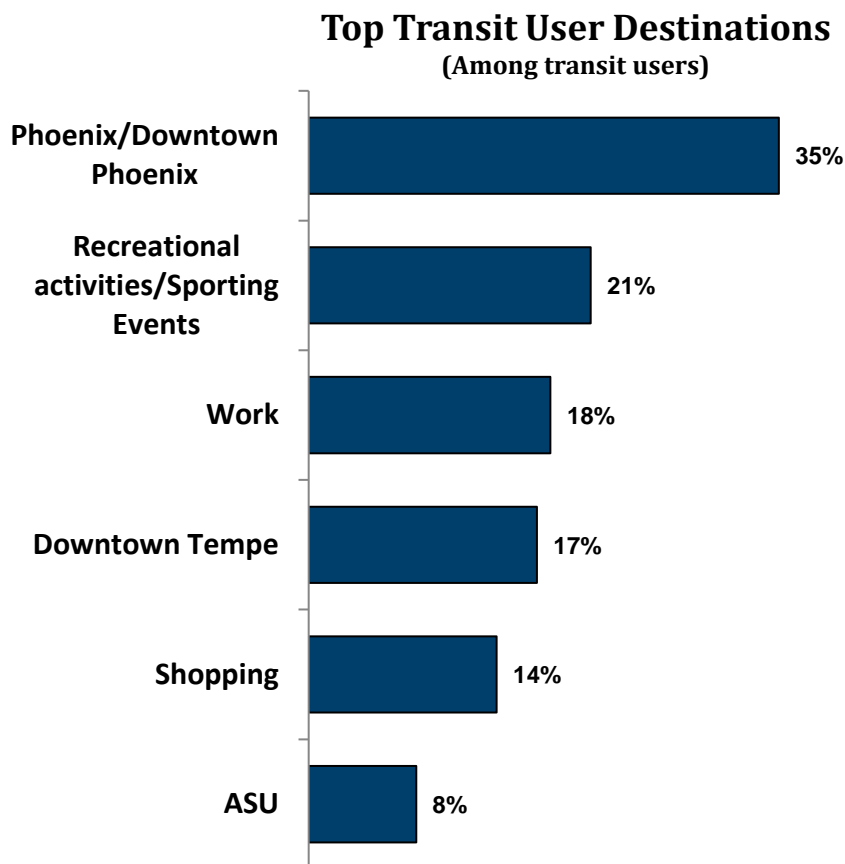
No significant differences compared to 2022 at the 95% confidence level.

Note: Response categories with less than 2% mentions in 2024 not shown in table.

D. Public Transit Destinations

Phoenix/Downtown Phoenix continues to be the most popular destination for transit trips with 35% of all transit riders surveyed, naming it as a destination. As was also the case in the past, light rail only riders were significantly more likely to report Phoenix/Downtown Phoenix and/or recreational activities as a destination than were those who used other forms of public transit in the city (51% vs. 14% DT Phoenix and 25% vs. 15% recreational activities).

Work increased as a reported destination in 2024 (18% up from 12%), while Downtown Tempe and shopping again rounded out the top five destinations for transit riders (17% and 14%, respectively).



Q10: Where do you go when you use public transit? 2024 n=266

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

| Responses | 2024 (n=266) | 2022 (n=251) | 2020 (n=248) | 2018 (n=253) | 2016 (n=246) |
|-----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| DT Phoenix/Phoenix | 35% | 34% | 47% | 48% | 25% |
| Recreational activities | 21% | 16% | 21% | 26% | 35% |
| Work | 18%* | 12% | 12% | 13% | 14% |
| Downtown Tempe | 17% | 22% | 18% | 21% | 14% |
| Shopping | 14% | 10% | 9% | 9% | 4% |
| ASU | 8% | 11% | 10% | 12% | 14% |
| Airport | 6% | 5% | 5% | 3% | 4% |
| School (unspecified) | 6% | 5% | <1% | 1% | - |
| Restaurant | 5% | 5% | 4% | <1% | - |
| Library | 4% | 3% | 2% | 2% | 2% |
| Visit friends/family | 4% | 3% | 1% | 3% | 2% |
| Medical appointment | 2% | 3% | 2% | 1% | 2% |
| Everywhere | 2% | 1% | - | 1% | - |
| Light rail | 2% | 2% | <1% | <1% | - |
| Home | 2% | 1% | 1% | 1% | - |
| Bus stops/ other forms of transit | 1% | 3% | - | - | - |
| Around Tempe | 1% | 1% | 3% | - | 3% |
| Mesa | 1% | 2% | 2% | 1% | - |
| In/around neighborhood | 1% | 2% | 3% | <1% | - |

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

*Indicates significant difference compared to 2022 at the 95% confidence level.

Note: Destinations with less than 2% mentions in 2024 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.”).

Satisfaction with the bus service stayed the same on almost all of the attributes evaluated. However, there was a significant increase in rider perceptions of *safety on the bus* (82% very/somewhat satisfied vs. 71% in 2022). There were notable but not significant differences on *amenities at bus stops* (67% vs. 61%), *security at bus stops* (67% vs. 60%), and *reliability or on-time performance of busses* (75% vs. 83%).

Riders were most likely to be satisfied with *driver courtesy and professionalism, cleanliness of the bus, ease of using the bus* and *route frequency* (92%, 85% and 84% Very + Somewhat satisfied, respectively).

Table 5a: 2024 Satisfaction with Bus Service
(Among bus riders)

| Attribute | 2024 (n=124) | | | % Very/somewhat satisfied | | | |
|--|--------------------------------|-------------------|-----------------------|---------------------------|-----------------|------------------|-----------------|
| | Very/ somewhat Satisfied | Very Satisfied | Somewhat Satisfied | 2022 (n=126) | 2020 (n=108) | 2018 (n=87**) | 2016 (n=128) |
| Driver courtesy and professionalism | 92% | 58% | 34% | 89% | 92% | 93% | 93% |
| Cleanliness of the bus | 85% | 47% | 38% | 80% | 86% | 88% | 92% |
| Ease of using the bus | 84% | 48% | 36% | 84% | 87% | 93% | 91% |
| Route frequency | 84% | 51% | 33% | 78% | 84% | 79% | 74% |
| Hours of operation | 83% | 46% | 37% | 82% | 88% | 84% | NA |
| Safety on the bus | 82%* | 41% | 41% | 71% | 78% | 82% | 95% |
| Comfort on the bus | 82% | 48% | 34% | 86% | 85% | 92% | 95% |
| Reliability/on-time performance of buses | 75% | 45% | 30% | 83% | 81% | 86% | 80% |
| Cleanliness of bus stops | 72% | 36% | 36% | 74% | 74% | 85% | NA |
| Bus service during major events | 72% | 36% | 36% | 73% | 75% | 70% | NA |
| Amenities at bus stops | 67% | 28% | 39% | 61% | 62% | 72% | NA |
| Security at bus stops | 67% | 29% | 38% | 60% | 62% | 65% | NA |

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

*Indicates significant difference compared to 2022 at the 95% confidence level.

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

Among riders dissatisfied with one or more attributes, the most common suggestions offered to improve their satisfaction with buses were to keep the inside of the *buses/bus stops cleaner* (31%), *increase the frequency of buses* (27%), and *better or more security on buses* (19%).

Table 5b: Suggested Improvements

| | 2024 (n=74) | 2022 (n=85) | 2020 (n=38) | 2018 (n=45) | 2016 (n=69) |
|--|----------------|----------------|----------------|----------------|----------------|
| Inside of bus/bus stops need to be cleaner | 31% | 24% | 23% | 2% | 9% |
| More frequent buses | 27% | 22% | 19% | 17% | 32% |
| Security on the bus/safer buses | 19% | 19% | 8% | 15% | 11% |
| Don't like the type of people that use the bus | 15% | 17% | 5% | 4% | 8% |
| Bus stops need shade | 13% | 20% | 26% | 21% | 13% |
| Need better/more routes | 12% | 8% | 19% | 9% | 15% |
| More/better bus routes | 8% | 7% | 2% | - | - |
| More courteous/professional drivers | 4% | 8% | - | 6% | - |
| More/better benches at bus stops | 4% | 4% | - | 6% | - |
| Easier way to pay the fare | 3% | 3% | - | - | - |
| More/better lighting at bus stops | 2% | 3% | 8% | 20% | 8% |
| Avoid bus passing us by at stops | 2% | - | - | - | - |
| More room/accessible for bikes | 2% | - | - | - | - |
| More handicapped accessible | 2% | 1% | - | - | - |
| Buses should be free/inexpensive | 1% | 1% | - | - | - |
| Don't know | 7% | 1% | 2% | 5% | 5% |

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 1% mentions in 2024 not shown in table.

No significant differences compared to 2022 at the 95% confidence level.

F. Satisfaction with Light Rail

Light rail riders were asked to rate their level of satisfaction with eleven different aspects of riding the light rail. Riders rated the attributes by using four-point nominal scales (“very satisfied,” “somewhat satisfied,” “not very satisfied,” and “not at all satisfied.”).

Satisfaction levels with the light rail increased for nearly all attributes evaluated over 2022 ratings. Riders were most likely to be satisfied with *ease of using the light rail (93%), comfort (92%), light rail services during major events (up significantly to 92% from 83%) and route frequency (91%)*. Light rail riders were least likely to express satisfaction with *security on the light rail and security at light rail stops (77% and 76%, respectively)*, although the percentage of riders who were satisfied with both safety attributes improved over 2022.

Table 6a: 2024 Satisfaction with Light Rail
(Among light rail riders)

| Attribute | 2024 | | | 2022 % Very/Somewhat Satisfied (n=162) |
|---|--------------------------------|-------------------|-----------------------|---|
| | Very/ somewhat Satisfied | Very Satisfied | Somewhat Satisfied | |
| Ease of using the light rail | 93% | 60% | 33% | 91% |
| Comfort on the light rail | 92% | 47% | 45% | 88% |
| Light rail service during major events | 92%* | 50% | 42% | 83% |
| Route frequency | 91% | 55% | 36% | 87% |
| Amenities of light rail stops | 90% | 46% | 44% | 87% |
| Reliability/on-time performance of light rail | 89% | 60% | 29% | 90% |
| Cleanliness of light rail stops | 89% | 38% | 51% | 82% |
| Cleanliness of the light rail | 88%* | 41% | 47% | 78% |
| Hours of operation | 87% | 53% | 34% | 87% |
| Security on the light rail | 77% | 37% | 40% | 75% |
| Security at light rail stops | 76% | 38% | 38% | 71% |

Q12: In general how satisfied are you with...

*Indicates significant difference compared to 2022 at the 95% confidence level.

Among riders dissatisfied with one or more attributes, the most common suggestions to improve their satisfaction with light rail were the addition of *security in the train* (29%), *cleaner trains/stops* (21%), and *increased frequency of the light rail trains* (19%).

Table 6b: Suggested Improvements

| | 2024 (n=83) | 2022 (n=84) |
|---|----------------|----------------|
| Security in the train/safer | 29% | 38% |
| Inside of the light rail/at stops need to be cleaner | 21% | 27% |
| More frequent light rail | 19% | 17% |
| Don't like the type of people that use the train | 13% | 18% |
| Need better/more routes | 10% | 3% |
| Later service/later times for weekdays/run 24 hours a day | 9% | 9% |
| Light rail stops need shade | 9% | 8% |
| It's too crowded/add more rail cars | 5% | - |
| Accessible for people with disabilities/ADA | 3% | - |
| Check tickets/get rid of free riders | 2% | 3% |
| More/better lighting at train stops | 2% | 1% |
| Friendlier operators/drivers | 2% | - |
| Better payment system/more options/smart phone payments | 1% | 3% |
| Other | 5% | 5% |
| Don't know | 6% | 4% |

Q12a: You indicated dissatisfaction with some of the attributes, what could be done to improve your satisfaction with the light rail?

Note: Response categories with less than 1% mentions in 2024 not shown in table.

No significant differences compared to 2022 at the 95% confidence level.

G. Satisfaction with Streetcar

Finally, Streetcar riders were asked to rate their level of satisfaction with eleven different aspects of riding the Streetcar. Riders rated the attributes by using four-point nominal scales (“very satisfied,” “somewhat satisfied,” “not very satisfied,” and “not at all satisfied.”).

Streetcar riders were most likely to be satisfied with *comfort on the Streetcar, cleanliness of the Streetcar, and security on the Streetcar* (94%, 94% and 92% Very + Somewhat satisfied, respectively). Riders were least likely to express satisfaction with *Streetcar service during major city events* (84% but this was up from 67% in 2022).

Table 7a: 2024 Satisfaction with Streetcar
(Among Streetcar riders)

| Attribute | 2024 | | | 2022 % Very/Somewhat Satisfied (n=26) |
|--|--------------------------------|-------------------|-----------------------|--|
| | Very/ somewhat Satisfied | Very Satisfied | Somewhat Satisfied | |
| Comfort on the Streetcar | 94% | 73% | 21% | 93% |
| Cleanliness of Streetcar | 94% | 72% | 22% | 93% |
| Security on the Streetcar | 92% | 66% | 26% | 85% |
| Cleanliness of Streetcar stops | 90% | 64% | 26% | 93% |
| Reliability/on-time performance of Streetcar | 90% | 43% | 47% | 90% |
| Ease of using the Streetcar (e.g., using schedules, getting to the Streetcar stop, paying fares) | 90% | 57% | 33% | 87% |
| Security at Streetcar stops | 90% | 59% | 31% | 80% |
| Amenities at Streetcar stops (e.g. shade, seating, bike racks) | 88% | 52% | 36% | 89% |
| Hours of operation | 86% | 55% | 31% | 93% |
| Route frequency | 85% | 48% | 37% | 90% |
| Streetcar service during major city events | 84% | 52% | 32% | 67% |

Q12NEW: In general how satisfied are you with...

No significant differences compared to 2022 at the 95% confidence level.

Just 12 Streetcar riders were dissatisfied with one or more attributes. Among these 12, there was frustration with the *Streetcar getting stuck in traffic and resulting in it not running on time*, they would like to see *more service*, and others would like to see the *schedules easier to find and understand*.

Table 7b: Suggested Improvements

| | 2024 (n=12) | 2022 (n=3) |
|---|----------------|---------------|
| Reliability/ on time performance/Gets stuck in traffic/runs late/ | 3 | - |
| More frequent Streetcar service | 3 | 1 |
| Easier schedules to read/understand/accurate/hard to find schedules | 3 | 1 |
| Security in the Streetcar/safer | 1 | - |
| Cleaner inside of the Streetcar/at stops | 1 | - |
| Hours of operation | 1 | 1 |
| Should be free/not worth the cost | 1 | |

Q12NEWa: You indicated dissatisfaction with some of the attributes, what could be done to improve your satisfaction with the Streetcar service?

Note: Responses reported in frequency due to small sample size

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

A. Top of Mind Impression of Transit System in Tempe

When describing their perceptions of the transit system in Tempe, residents' top of mind positive images were most often related to it being a *generally good system* (22%) and *liking the neighborhood shuttles and buses* (9%). The top-of-mind negative impressions were *the need for more transit* (9%) and simply *not liking it* (6%). Notably a larger proportion of residents mentioned accessibility this year when thinking about the transit system in Tempe (4%, up from 1% 2022).

Transit riders were significantly more likely than non-riders to immediately think of generally positive words such as "excellent" or "good" (25% vs. 17%), "like the neighborhood shuttles" (13% vs. 3%), "free" (7% vs. 2%), or "accessible" (5% vs. 1%). Non-riders were significantly more likely to think of "traffic" or "congestion" (10% vs. 2% riders).

Table 8: Top of Mind Impression of Tempe Transit System

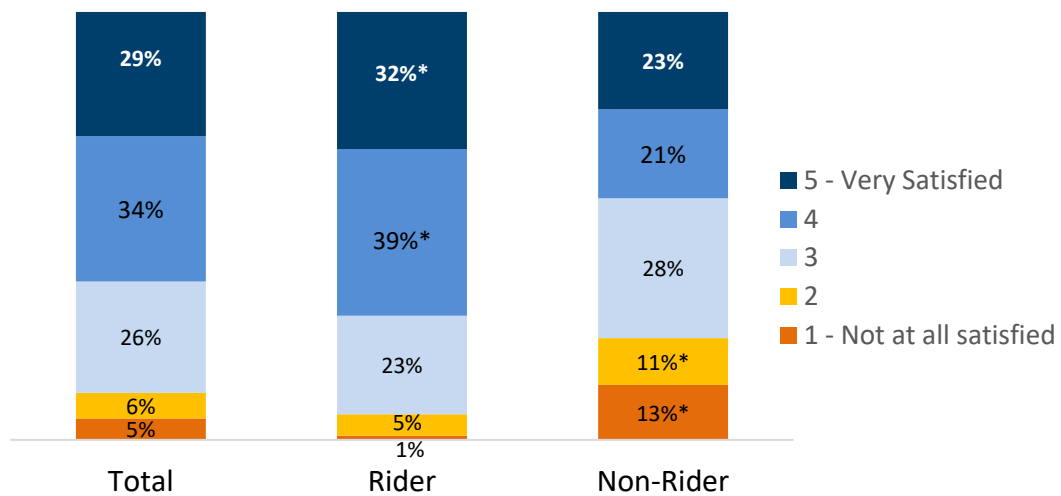
| | 2024 (n=414) | 2022 (n=400) | 2024 | |
|---|-----------------|-----------------|-------------------------------|---------------------------|
| | | | Transit Rider (n=266) A | Non-Rider (n=147) B |
| Positive | | | | |
| Good/excellent/cool (general positive) | 22% | 21% | 25% ^B | 17% |
| Like the neighborhood shuttles/Orbit/Mercury/Blue buses | 9% | 13% | 13% ^B | 3% |
| Lots of options/ can choose between bus, light rail, shuttles | 9% | 6% | 9% | 9% |
| Good bike lanes/paths/ able to walk | 8% | 8% | 8% | 7% |
| Like the light rail | 6% | 5% | 6% | 6% |
| It's free | 5% | 4% | 7% ^B | 2% |
| Available/accessible | 4%* | 1% | 5% ^B | 1% |
| Like the scooters | 1%* | 3% | <1% | 1% |
| Neutral | | | | |
| Never used it/don't use it | 10%* | 6% | 4% | 21% ^A |
| The bus system/ bus (unspecified) | 9% | 9% | 9% | 8% |
| Light rail (unspecified) | 8% | 11% | 11% ^B | 5% |
| New street car system/trolleys | 3%* | 6% | 4% | 1% |
| Adequate/fine/average | 3% | 4% | 4% | 2% |
| Negative/Suggestions | | | | |
| Need more public transit/improved transit | 9% | 8% | 9% | 9% |
| General negative/don't like it | 6% | 6% | 5% | 8% |
| Traffic/ congestion | 5% | 6% | 2% | 10% ^A |
| Needs improvements (timing of lights, better routes, etc.) | 4% | 7% | 3% | 6% |
| Unsafe/dangerous | 4% | 3% | 3% | 5% |
| Inconvenient/slow | 2% | 3% | 2% | 3% |
| Don't know | 3% | 3% | 2% | 4% |

Q4: What is the first thing that comes to mind when you think about the transportation system in Tempe? Responses less than 3% not shown (All open ends available under separate cover). *Indicates significant difference compared to 2022 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

Nearly two-thirds of residents (63%) with an opinion reported being highly satisfied with the Tempe transit system. Notably, this is the highest level of satisfaction reported since 69% in 2016. As in the past, current riders were more likely to provide a top two rating (71% vs. 44% of non-riders). Residents who have lived in Tempe for 10 years or less were least likely to provide a top satisfaction rating when compared to those who have lived in Tempe for a longer period (57% <11 years vs. 75% 11-20 years and 65% 20+ years). This year there were no notable differences in satisfaction by gender or other sub-groups.

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



Total n=368, Rider: n=261, Non-Rider: n=106

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

Table 9: Overall Satisfaction with Transit System in Tempe
(Among those with an opinion)

| Satisfaction | 2024 (n=368) | 2022 (n=371) | 2020 (n=373) | 2018 (n=362) | 2016 (n=352) |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| NET Very + Somewhat satisfied | 63% | 57% | 58% | 60% | 69% |
| 5 – Very satisfied | 29%* | 22% | 26% | 28% | 36% |
| 4 | 34% | 35% | 32% | 32% | 33% |
| 3 | 26% | 30% | 27% | 29% | 21% |
| 2 | 6% | 8% | 8% | 5% | 5% |
| 1 – Very dissatisfied | 5% | 5% | 6% | 6% | 6% |
| Don't know (excluded from %) | 11% | 8% | 8% | 10% | 12% |

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

*Indicates significant difference compared to 2022 at the 95% confidence level.

Residents satisfied with the transit system (rated “4” or “5”) primarily attributed their satisfaction to *good service (23%)*, followed by *good/convenient routes (17%)*, and *frequent and reliable service (14%)*.

Residents who gave lower ratings (1-3) most often mentioned the need for *better or more routes (21%)*, *more frequent buses with extended hours (13%)*, and *more security (10%)* as reasons for their ratings. Additionally, mentions of buses being dirty decreased significantly in 2024 among Tempe residents (2%, down from 6% 2022).

Almost one in ten residents could not provide a reason for their satisfaction rating (8%, up significantly from 2%).

Table 10: Reason for Satisfaction Level

| Responses | 2024 (n=368) | 2022 (n=371) | 2024 Satisfaction Level | |
|--|-----------------|-----------------|----------------------------|------------------|
| | | | 4,5 (n=232) | 1,2,3 (n=136) |
| Positive | | | | |
| Satisfied, good service | 16% | 11% | 23% | 4% |
| Good routes, convenient routes | 12% | 11% | 17% | 3% |
| Frequent, available, reliable | 9% | 10% | 14% | 2% |
| Convenient (general) | 5% | 6% | 7% | 2% |
| It's clean | 4% | 5% | 6% | - |
| Saves money, cheap, free | 4% | 4% | 5% | 2% |
| Easy to use | 4% | 2% | 4% | 2% |
| There are a lot of options (general) | 3% | 6% | 5% | - |
| Like the light rail/light rail is good | 3% | 3% | 3% | 1% |
| Provides transportation for those who need it | 1% | 3% | 2% | - |
| Neutral | | | | |
| Don't use it, never used it | 10% | 12% | 4% | 20% |
| Always room for improvement | 7% | 11% | 7% | 8% |
| It's average/okay | 3% | 4% | 1% | 7% |
| Negative/Suggestions | | | | |
| Need better/more routes, connections, doesn't go where I need to | 12% | 9% | 6% | 21% |
| More frequent buses, more hours | 9% | 8% | 6% | 13% |
| Need more security | 6% | 6% | 4% | 10% |
| Uncomfortable with people who ride transit | 5% | 4% | 2% | 9% |
| It was dirty/needs to be cleaned up a little bit | 2%* | 6% | 3% | 1% |
| Bus driver does not stop at bus stops | 2% | 3% | 1% | 4% |
| Extend the light rail/more routes | 1% | 3% | <1% | 1% |
| Don't know | 8%* | 2% | 6% | 11% |

Q12a: Please explain your rating. Note: Response categories with < 3% total mentions in 2024 not shown in table.

*Indicates significant difference compared to 2022 at the 95% confidence level.

IV. Reasons for Not Riding Transit

Preference for a personal vehicle continued to be by far the most common reason given by non-riders as an explanation for not using public transit (58% mentioned). Other popular reasons were that they simply *find transit to be inconvenient* (13%), they *do not need to use transit* (12%), it is *not safe/secure* (12%) and/or *doesn't go where they need it to go* (11%).

Notably, mentions of *transit is not secure* or concerns about safety continues to increase after decreasing to 3% in 2020 (12% in 2024). Additionally, this year showed significantly fewer mentions of *riding working from home or telecommuting* (1%, down from 5%).

Table 11: Top Reasons for Not Using Public Transit

| Reasons | 2024 (n=147) | 2022 (n=147) | 2020 (n=153) | 2018 (n=136) | 2016 (n=152) |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| Prefer car | 58% | 52% | 45% | 49% | 59% |
| Inconvenient (general) | 13% | 17% | 13% | 14% | 6% |
| Don't need to, don't have the need to use | 12% | 11% | 14% | 15% | 4% |
| Transit is not secure/safety | 12% | 9% | 3% | 9% | 3% |
| Doesn't go where they need to go | 11% | 8% | 9% | 9% | 7% |
| Takes too long | 7% | 9% | 8% | 13% | 8% |
| Health reasons | 6% | 8% | 1% | 6% | - |
| Bus stop far away | 6% | 7% | 6% | 3% | 11% |
| Weather concerns/ too hot/cold/ raining | 5% | 3% | 3% | 4% | 1% |
| Service isn't frequent enough | 5% | - | 1% | 4% | 1% |
| Need car for business | 4% | - | 7% | 4% | 2% |
| Buses are unreliable/not on time | 3% | 1% | 4% | 1% | 1% |
| Ride bike instead | 2% | 1% | 5% | 1% | 3% |
| Don't know how to use transit system | 2% | 1% | - | 1% | 4% |
| Buses are dirty | 1% | 3% | 2% | 1% | -- |
| Convenience (unspecified) | 1% | 2% | 2% | 1% | 1% |
| Bus stops are not safe | 1% | 1% | 1% | - | - |
| Work from home/telecommute | 1%* | 5% | 4% | 1% | 3% |
| Don't have to go far distances | 1% | 1% | 2% | 6% | 3% |
| Inconvenient bus schedule times | 1% | 1% | - | 3% | - |
| Don't know | 3% | <1% | 1% | 3% | 2% |

Q6: People tell us different reasons why they do not use public transit like riding the bus or light rail or Streetcar. What are some of the reasons why you currently do not use public transit?

*Indicates significant difference compared to 2022 at the 95% confidence level.

Note: Reasons with less than 2% mentions in 2024 not shown in table.

V. Tempe Bicycling and Walking

A. Bicycle Usage

Six in ten Tempe residents (59%) reported having access to a bicycle. Although higher than the 56% reported in 2022, this remains somewhat lower than the 62%-64% found in the last four studies.

Residents aged 35 to 54 were significantly more likely than other residents to report having access to a bicycle they can ride when they want (73% vs. 58% 18-34 and 45% 55+). Men were also much more likely to report having a bicycle compared to women (70% vs. 48% women) as were residents living in 85284 (76% vs. 40%-59% other zips).

Among those with access to a bike, roughly two-thirds (65%) reported riding their bike at least once a month, which is identical to 2022 but lower than the 69% reported in 2020.

Table 17: Access to and Frequency of Bike Use per Month

| | 2024 (n=414) | 2022 (n=400) | 2020 (n=401) | 2018 (n=400) | 2016 (n=401) |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Have access to bike | 59% | 56% | 63% | 64% | 62% |
| Frequency per Month | | | | | |
| Never/only occasionally | 35% | 36% | 31% | 33% | 28% |
| Once or twice | 17% | 18% | 20% | 22% | 23% |
| Three to five times | 22% | 18% | 15% | 19% | 20% |
| Six to ten times | 12% | 8% | 12% | 9% | 8% |
| >10 times | 14% | 19% | 21% | 15% | 20% |
| Don't know/not sure | - | <1% | 1% | 2% | 1% |

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 2022

B. Reasons Do Not Ride Bicycle More Often

Those who have access to a bike but *never* or only *occasionally* ride it (35% of residents) most often blamed *hot weather* for not riding it more often (45% mentioned it being “*too hot outside*”). Other key reasons given included: *it is too dangerous* (11%), *their health* (11%), *no interest in riding* (10%), and they *prefer to take a car* (9%). Women and young residents were significantly more likely to report not riding more often due to *hot weather* compared to men and those over the age of 55+ (56% women vs. 33% men; 59% <35 vs. 28% 55+).

Table 18: Reasons for Not Riding More Often
(Among those who have access to a bicycle but only ride it occasionally or never)

| Responses | 2024 (n=87) | 2022 (n=82) | 2020 (n=78) | 2018 (n=84) | 2016 (n=70) |
|---|----------------|----------------|----------------|----------------|----------------|
| Too hot outside/hot weather | 45% | 35% | 43% | 47% | 38% |
| Too dangerous | 11% | 19% | 14% | 12% | 1% |
| Physical condition/my health | 11% | 10% | 6% | 11% | 9% |
| Lazy/don’t want to ride it | 10%* | 1% | 1% | 10% | 4% |
| Have a car/rather take car | 9% | 9% | 13% | 7% | 6% |
| Inconvenient/too busy | 8% | 10% | 12% | 10% | 4% |
| Bike not working properly/bike not functional | 6% | 4% | 7% | 3% | 6% |
| Not enough bike lanes/paths | 5% | 3% | 1% | - | 2% |
| Too old | 4% | 3% | 1% | 1% | - |
| Too much traffic | 3% | 4% | 3% | 7% | 3% |
| Takes too long | 3% | 1% | - | 2% | - |
| Injury | 2% | 2% | 1% | 1% | 1% |
| Have little kids/drive kids around | 2% | 5% | 1% | 2% | 6% |
| Have too much to carry | 1% | 1% | - | - | - |
| Get exercise another way | 1% | 1% | - | - | - |
| Distance/too far | 1% | 3% | 3% | 6% | 9% |
| No need/nowhere to go | 1% | - | 1% | 1% | - |
| Other (responses <.5%) | 1% | 2% | 5% | 2% | 9% |
| Don’t know/no answer | 3% | 2% | - | - | 9% |

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

*Indicates significant difference compared to 2022 at the 95% confidence level.

C. Bicycle Destinations

One-quarter of those with access to a bike who ride at least once a month (28%) reported riding so for *exercise*, while 21% ride their bike to *stores*. Another two in ten ride to *parks* (18%) or *work or school* (17%). This year, significantly more residents reported riding their bike for *mountain biking* purposes compared to 2022 (7%, up from 2%). Tempe residents under the age of 55 were more likely to ride their bike to the *store* compared to older residents (26% <55 vs. 6% 55+).

Table 19: Bike Riding Destinations
(Among those who have access to a bicycle and ride it at least 1x a month)

| Responses | 2024 (n=156) | 2022 (n=143) | 2020 (n=174) | 2018 (n=167) | 2016 (n=176) |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Exercise | 28% | 39% | 40% | 35% | 44% |
| Store | 21% | 15% | 11% | 17% | 13% |
| Parks | 18% | 24% | 19% | 16% | 10% |
| Work/school/ASU | 17% | 12% | 16% | 12% | 14% |
| Along the canal | 15% | 15% | 15% | 11% | 9% |
| Tempe Town Lake | 7% | 10% | 11% | 7% | 5% |
| Friend’s house | 7% | 7% | 3% | 4% | 4% |
| Bike trails/mountain trails | 7%* | 2% | 4% | - | - |
| Restaurant/dinner | 6% | 10% | 13% | 9% | 4% |
| Everywhere | 3% | 5% | 5% | 8% | 3% |
| Run errands | 3% | 4% | 6% | 3% | 2% |
| Locally | 3% | 2% | 1% | - | 1% |
| Get to/from recreational activities | 3% | - | - | - | - |
| The bar/when I’ve been drinking | 2% | 3% | 6% | 2% | 3% |
| Mill Avenue/Downtown Tempe | 2% | 3% | 4% | 13% | 5% |
| Other | 3% | - | 1% | 2% | 2% |

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

*Indicates significant difference compared to 2022 at the 95% confidence level.

Note: Destinations with less than 2% mentions in 2024 not shown in table.

D. Main Reason for Riding a Bicycle

Residents who bicycle at least monthly said they do so primarily to get *exercise* (39%), continuing the decline from the 57% reported in 2018. One-quarter bike *for fun and recreation* (25%) while another 6% ride their bike due to convenience.

Table 20: Main Reason Ride a Bike
(Among those who have access to a bicycle and ride it at least 1x a month)

| Responses | 2024 (n=156) | 2022 (n=143) | 2020 (n=174) | 2018 (n=167) | 2016** (n=176) |
|---|-----------------|-----------------|-----------------|-----------------|-------------------|
| Exercise | 39% | 44% | 52% | 57% | 54% |
| Fun/Recreation/leisure | 25% | 26% | 27% | 22% | 26% |
| Convenient/easy | 6% | 3% | 4% | 3% | 8% |
| Saves money | 5% | 7% | 1% | 2% | 4% |
| Don't have to worry about parking spots | 5% | - | - | - | - |
| I like it/prefer to travel this way | 5% | - | - | - | - |
| It's faster than walking/driving | 4% | 4% | 5% | 2% | - |
| Good for health/medical reasons | 3% | 3% | 1% | 3% | 5% |
| To get to school/work | 3% | 2% | 1% | 1% | 4% |
| Do not have a car | 2% | 3% | 1% | 1% | 2% |
| Protects environment | 2% | 1% | 4% | 1% | 1% |
| Go shopping | 1% | 2% | - | 2% | - |
| Don't have a driver's license | 1% | - | - | - | - |
| For the fresh air | 1% | 3% | 1% | 3% | 1% |
| To not have to walk | 1% | - | - | - | - |
| Transportation in general | 1% | - | - | - | - |
| Other | 3% | 2% | 1% | 1% | 2% |
| No answer | - | - | 1% | - | 1% |

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

No significant differences compared to 2022 at the 95% confidence level.

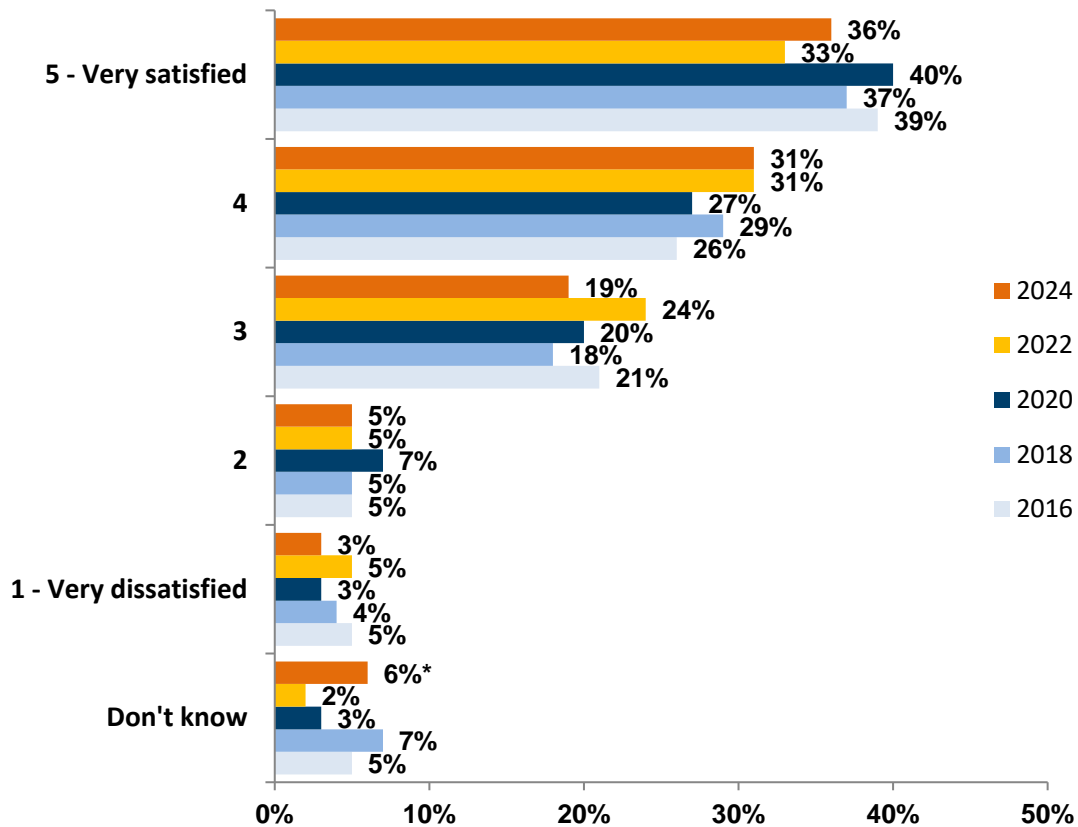
**Question added in 2016.

E. Overall Satisfaction with Bicycle and Pedestrian Paths

Similar to previous studies, 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 - Very satisfied”). Although not significant, the percentage of those providing a “5 – Very satisfied” rating increased three percentage points this year compared to 2022 (36%, up from 33%).

Residents living in 85284 were more likely than those in other zips to report high levels of satisfaction with the bike and pedestrian paths in their area (85% gave “4” or “5 – Very satisfied” vs. 60%-69% of those in other areas).

Overall Satisfaction with Tempe Walking and Bike Paths



2024 n=414; 2022 n=400; 2020 n=401, 2018 n=400, 2016 n=401

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

*Indicates significant difference compared to 2022 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 fine the way they are (21%)* and *paths are everywhere, there are plenty of paths (20%)*.** Residents were significantly more likely to mention *paths are properly maintained and accessible* this year (13%, up from 8%). Another one in ten were satisfied due to *easy and accessible paths* and having *good routes* (11% and 9%, respectively).

Top negative reasons included *paths don't seem safe enough/make them safer (10%)*, *need more bike lanes (6%)* and *could use more paths (5%)*.

Table 21: Reasons for Satisfaction Rating
(Among those with an opinion)

| Responses | 2024 (n=389) | 2022 (n=392) | 2020 (n=389) | 2018 (n=370) | 2016 (n=380) |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| Positive | | | | | |
| Paths are fine the way they are, no problems | 21% | 20% | 11% | 12% | 18% |
| Paths are everywhere, plenty of paths | 20% | 19% | 18% | 15% | 12% |
| Paths are properly maintained, well landscaped | 13%* | 8% | 16% | 6% | 6% |
| Paths are easy to use, accessible | 11% | 10% | 6% | 7% | 5% |
| Have good routes, connect well | 9% | 5% | 8% | 9% | 6% |
| Paths are safe | 8% | 9% | 9% | 4% | 7% |
| Paths have been added/there are more | 3%* | <1% | 1% | 2% | - |
| Paths are wide enough | 2% | 4% | 1% | 1% | - |
| Paths are well lit | 2% | 2% | 2% | 2% | 4% |
| Like the paths along the canal | 2% | 2% | 2% | 1% | - |
| Neutral | | | | | |
| Never use paths, no knowledge of them | 3% | 6% | 4% | 4% | 6% |
| There is always room for improvement | 2% | 2% | 3% | 1% | 4% |
| Negative/Suggestions | | | | | |
| Paths don't seem safe enough/make them safer | 10% | 14% | 11% | 9% | 9% |
| Need more bike lanes | 6% | 9% | 5% | 6% | 4% |
| Could use more paths | 5% | 3% | 3% | 2% | 7% |
| Not enough shade/too hot | 4% | 2% | 1% | 1% | - |
| Paths are not maintained | 3% | 5% | 4% | 1% | 2% |
| Need more walking paths | 3% | 3% | 3% | 2% | 1% |
| Lanes need to be wider | 2% | 2% | 1% | 1% | - |
| Educate drivers/bikers on "sharing the road" | 1%* | 3% | <1% | 1% | - |
| Don't know | 1% | 1% | <1% | 3% | 5% |

Q23a: Please explain your rating

*Indicates significant difference compared to 2022 at the 95% confidence level.

Note: Response categories with less than 2% total mentions in 2024 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.

Notably, residents’ top two ratings for all three sidewalk improvements increased dramatically this year compared to 2022. *Security and comfort on sidewalks, such as addressing hazards, obstructions and width* remained the top priority with the highest percentage of high priority ratings (70% rated a “4” or “5”, up from 62%). Additionally, two-thirds of residents placed a high priority on the need for *miles of shaded sidewalks* (64% rated a “4” or “5”, up from 56%) while one-half rated *amenities along sidewalks like water fountains, lighting, art and signage* as a high priority (51%, up from 43%).

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

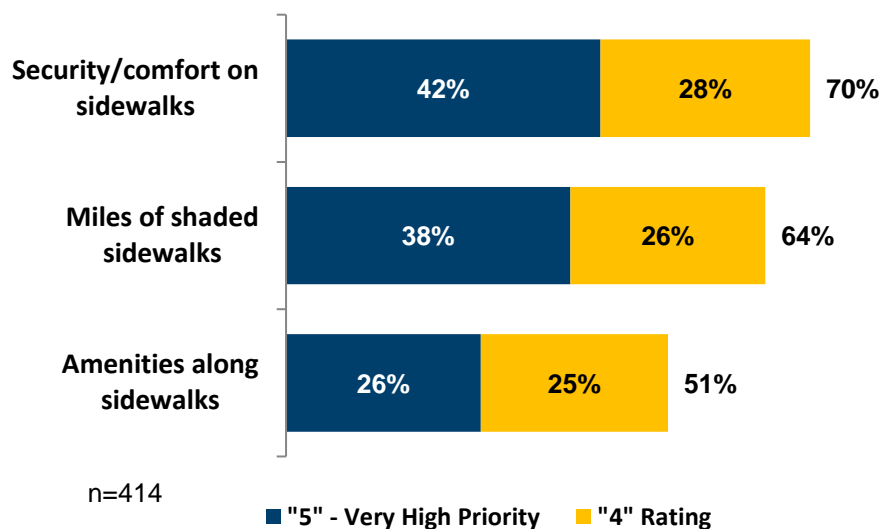


Table 22: 2024 Priority of Possible Sidewalk Improvements

| Responses | “5 -Very High” | “4” | “3” | “2” | “1-Very Low” | No answer |
|--|----------------|-----|-----|-----|--------------|-----------|
| Security/comfort on sidewalks such as addressing hazards, obstructions and width | 42% | 28% | 14% | 8% | 6% | 1% |
| Miles of shaded sidewalks | 38% | 26% | 19% | 6% | 10% | 1% |
| Amenities along the sidewalks like water fountains, lighting, art, and signage | 26% | 25% | 25% | 12% | 10% | 2% |

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 23: Very High/High Priority of Possible Sidewalk Improvements by Year

| Responses | 2024 (n=414) | 2022 (n=400) | 2020 (n=401) | 2018 (n=400) |
|--|-----------------|-----------------|-----------------|-----------------|
| Security/comfort on sidewalks such as addressing hazards, obstructions and width | 70%* | 62% | 72% | 70% |
| Miles of shaded sidewalks | 64%* | 56% | 59% | 54% |
| Amenities along the sidewalks like water fountains, lighting, art, and signage | 51%* | 43% | 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.

*Indicates significant difference compared to 2022 at the 95% confidence level.

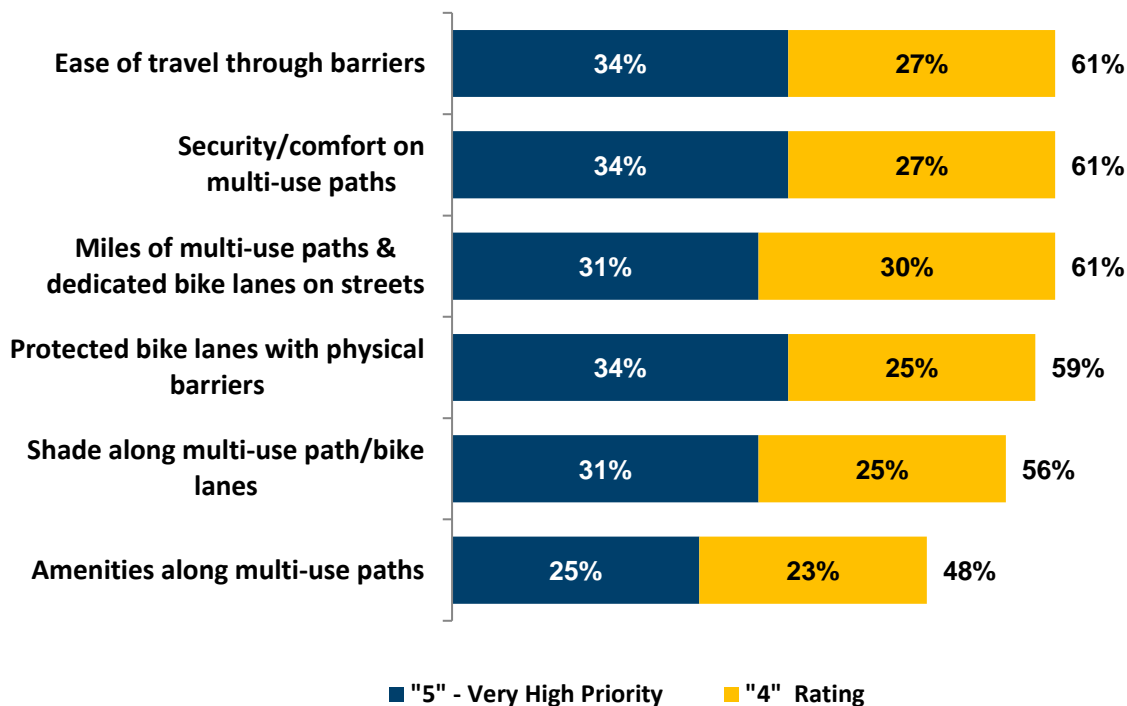
G. Priority of Possible Bikeway Improvements

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.

As was reported in 2022, ease of travel around barriers and security and comfort on multi-use paths received the highest percentage of priority ratings (61% each rated a “4” or “5”). The same proportion of residents provided high priority ratings to *miles of multi-use paths and bike lanes* (61%), which is a 7-point increase compared to 2022. Just over one-half rated *protected bike lanes with physical boundaries* (59%) and *shade along multi-use paths and bike lanes* (56%) as a high priority. With 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.

To note, after decreasing in 2022, priority ratings for all improvements either increased or remained the same in 2024.

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



n=414

Table 24a: 2024 Priority of Possible Bikeway Improvements

| Responses | “5 -Very High” | “4” | “3” | “2” | “1-Very Low” | No answer |
|---|----------------|-----|-----|-----|--------------|-----------|
| Ease of travel through or around barriers such as railroad crossings, freeways, roads, the lake, etc. | 34% | 27% | 20% | 9% | 8% | 2% |
| Security/comfort on multi-use paths | 34% | 27% | 21% | 7% | 9% | 2% |
| Miles of multi-use paths and dedicated bike lanes on streets | 31% | 30% | 23% | 7% | 8% | 1% |
| Protected bike lanes that have a physical barrier between traffic and bikes | 34% | 25% | 19% | 8% | 12% | 2% |
| Shade along the multi-use paths and bike lanes | 31% | 25% | 22% | 12% | 9% | 1% |
| Amenities along the multi-use paths like water fountains, lighting, art and signage | 25% | 23% | 27% | 14% | 10% | 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 24b: Very High/High Priority of Possible Bikeway Improvements by Year

| Responses | 2024 (n=414) | 2022 (n=400) | 2020 (n=401) | 2018 (n=400) |
|---|-----------------|-----------------|-----------------|-----------------|
| Ease of travel through or around barriers such as railroad crossings, freeways, roads, the lake, etc. | 61% | 61% | 68% | 65% |
| Security/comfort on multi-use paths | 61% | 59% | 70% | 67% |
| Miles of multi-use paths and dedicated bike lanes on streets | 61% | 54% | 64% | 62% |
| Protected bike lanes that have a physical barrier between traffic and bikes | 59% | 53% | 58% | 55% |
| Shade along the multi-use paths and bike lanes | 56% | 52% | 55% | 51% |
| Amenities along the multi-use paths like water fountains, lighting, art and signage | 48% | 44% | 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.

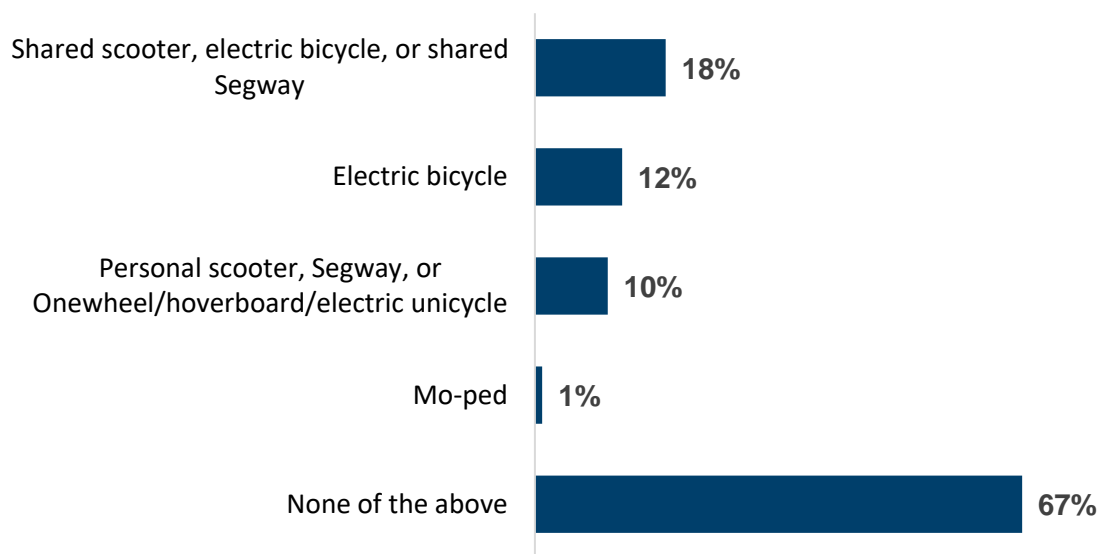
No significant difference compared to 2022 at the 95% confidence level.

H. Micromobility Devices

In 2024, residents were asked which micromobility devices they have used to travel around Tempe, if any. **Two-thirds of Tempe residents reported they have not used any micromobility devices around Tempe (67%).** Two in ten have used some type of shared scooter, e-bike, or segway (18%) while one-tenth of residents reported using an electric bicycle (12%) or personal scooter, segway, or “one wheel” (10%).

Men and younger residents were significantly more likely to report using any type of micromobility device compared to women and those over the age of 35 (40% men vs. 26% women; 60% <35 vs. 20% 35+). Residents living in 85281 or 85282 were more likely than others to report using shared devices (24% and 22% vs. 9% to 18% of residents in other zip codes). 85281 residents also were highly likely to report using an electric bike (23%).

Micromobility Device Usage



New2024. Which of the following micromobility devices (e.g., scooter, electric bicycle mo-ped, skateboard) have you used to travel around Tempe in the past year? Select all that apply.
n=414

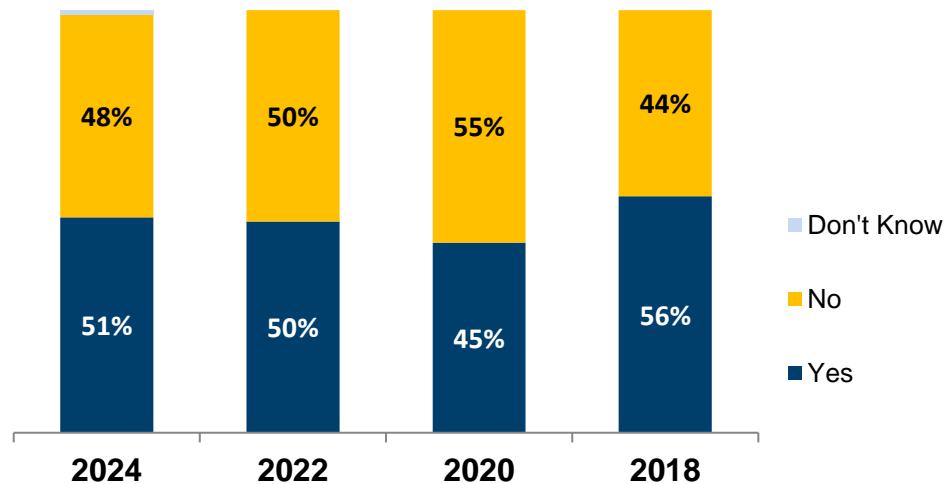
VII. Miscellaneous

A. Tempe Youth Free Transit Pass Program

Similar to 2022, one-half (51%) of residents who have children ages 6 to 18 have heard of the Tempe Youth Free Transit Pass. While this is still down from the 56% measured in 2018, it remains higher than the 45% measured in 2020.

Awareness was significantly higher among parents who use public transit (58%), but 28% 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 (65% vs. 32% who have lived in Tempe for ten years or less).

Awareness of Tempe Youth Free Transit Pass



2024 n=414; 2022 n=400; 2020 n=95, 2018 n=84, 2016 n=401, 2014 n=409
 QD5: Have you ever heard of the Tempe Youth Free Transit Pass Program?
 No significant differences compared to 2022

Among parents aware of the program, *school* (39%), *word of mouth* (17%, up from 8%), and *the library* (10%) were the top ways they had learned about the Tempe Youth Free Transit Pass Program. Although not statistically significant, fewer residents reported hearing about the program through the *bill insert* this year than in 2022 (2%, down from 12%).

Table 26: Sources for Tempe Youth Transit Pass Program Information
(Among those aware of the program)

| Sources | 2024 (n=42) | 2022 (n=45) | 2020 (n=43) | 2018 (n=47) |
|--------------------------------|----------------|----------------|----------------|----------------|
| Through school | 39% | 32% | 35% | 52% |
| Word of mouth (friends/family) | 17% | 8% | 21% | 12% |
| Library | 10% | 10% | 13% | 12% |
| Letter from the City | 4% | 6% | 5% | 2% |
| Employer/work | 4% | 4% | 4% | - |
| Advertisement | 3% | 6% | 1% | 5% |
| Television | 3% | - | - | - |
| Bill insert | 2% | 12% | 5% | 3% |
| Flyer/pamphlet | 2% | 4% | - | - |
| Twitter/Facebook | 2% | 2% | - | - |
| Website (general) | 2% | - | 4% | 3% |
| Don't know | 7% | 8% | 3% | 3% |

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

*In 2018-2024, question was asked only of people with children aged 6 years and older.

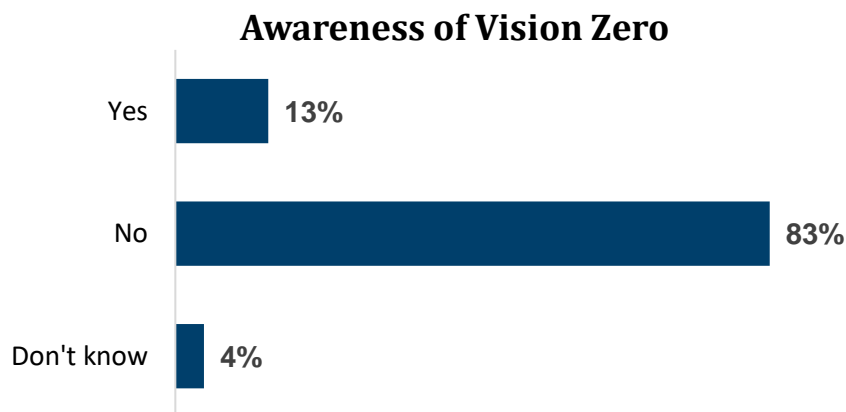
Note: Sources with less than 2% mentions in 2024 not shown

No significant difference compared to 2022 at the 95% confidence level.

B. Vision Zero

This year, new questions related to Vision Zero were added to the survey. Most Tempe residents were not aware of Vision Zero (83%) while just 13% reported that they had heard of the traffic safety policy. Residents living within the 85284 zip code were most likely to report being aware of Vision Zero (27% vs. 3%-14% other zips).

Just over one-half of residents who had heard of Vision Zero reported they knew what it meant (58%). The majority believed it was related to safety with mentions of *reducing deaths from car accidents* (46%), *having no car accidents* (18%), *slow traffic* (10%), *safety on the roads* (8%) and *reducing pedestrian fatalities* (7%).



28. Have you heard of Vision Zero?
n=414

Table 27: Awareness of Vision Zero Meaning
(Among those aware)

| Meaning | 2024 (n=35) |
|----------------------------------|----------------------|
| Yes, know what it means | 58% (n=28) |
| Reduce deaths from car accidents | 46% |
| Have no car accidents | 18% |
| Slow traffic | 10% |
| Safety/safety on the roads | 8% |
| Zero emissions/carbon | 7% |
| Reduce pedestrian fatalities | 7% |
| Zero visibility/low visibility | 4% |
| Other | 11% |
| Don't know | 4% |

28NEWa. Do you know what it means?
28a. If YES, what does it mean? (do not read list)

The majority of those aware of Vision Zero mentioned they heard about it through *street banners* (60%), the *Tempe Today water bill* (18%), the *Tempe city website* (8%), or the *newspaper* (6%).

Table 28: Source of Awareness of Vision Zero
(Among those aware)

| Source | 2024 (n=53) |
|------------------------|----------------|
| Street banners | 60% |
| Tempe today water bill | 18% |
| Tempe city website | 8% |
| Newspaper | 6% |
| Internet/online | 4% |
| Television | 4% |
| Through work | 3% |
| News | 3% |
| Word of mouth | 2% |
| Other | 13% |
| Don't know | 2% |

28b. If YES, how did you hear about it? (do not read list)

APPENDIX A: Questionnaire

**City of Tempe – Tempe in Motion
Questionnaire – September 2024**

Sample: 85281, 85282, 85283, 85284, 85288 = 400

Quotas: Males/Females 50/50 each quota group

Minimum 200 transit users

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.

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. 85288
 - f. Other/Don't know/Refused – THANK AND TERMINATE

3. What is your age?

- 3a. What gender should I record for you? Please stop me when I state what applies to you.
 - a. Male
 - b. Female
 - c. Non-binary
 - d. Prefer to self-describe
 - e. Prefer not to answer

- 3b. 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, Streetcar, 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
 - a. Local or express bus
 - b. Orbit or Flash neighborhood shuttles
 - c. Light rail
 - d. Streetcar
 - e. don't know/Refused
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, light rail or streetcar. What are some of the reasons why you currently do not use public transit? What other reasons? DO NOT READ LIST (Multiple responses allowed)
 - a. Prefer to drive my car
 - b. Bus stops far away
 - c. Takes too long
 - d. Need car for business
 - e. Doesn't go where we need to go
 - f. Inconvenient
 - g. Don't know how to use the transit system/bus
 - h. No need to use it
 - i. Health reasons/disability
 - j. Don't have to go far distances
 - k. Ride bike instead
 - l. Work from home/Telecommute/Don't commute
 - m. Don't feel safe / secure on transit
 - n. Service isn't frequent enough
 - o. Other: (SPECIFY: _____)
 - p. Don't know

ASK IF a, b, c, d, e in Q5: ALL OTHERS SKIP TO Q13

-
7. How long have you been using the transit system in Tempe? DO NOT READ LIST
- a. Less than a year
 - b. 1 to 2 years
 - c. 2 to 4 years
 - d. 4 to 6 years
 - e. 6 to 10 years
 - f. 11 to 20 years
 - g. More than 20 years
 - h. Don't know/NA
8. 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: _____)
9. Where do you go when you use public transit? DO NOT READ LIST. (Multiple responses allowed)
- a. ASU
 - b. Community College
 - c. High School
 - d. Work
 - e. Shopping
 - f. Errands
 - g. Medical appointment
 - h. Visit friends/family
 - i. Recreational activities
 - j. Library
 - k. Downtown Phoenix
 - l. Phoenix (general)
 - m. Downtown Tempe
 - n. Airport

o. Other (SPECIFY: _____)

10. ASK ONLY OF THOSE WHO ANSWER “A” OR “B” IN Q5a. For each of the following attributes of the Local Bus, Orbit or Neighborhood Shuttle systems, 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 |

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

11. ASK ONLY OF THOSE WHO ANSWER "C – Light Rail" IN Q5a For each of the following attributes of the Light Rail System, 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 Light Rail | 4 | 3 | 2 | 1 | 0 |
| b. Cleanliness of Light Rail stops | 4 | 3 | 2 | 1 | 0 |
| c. Amenities at Light Rail stops (e.g. shade, seating, bike racks) | 4 | 3 | 2 | 1 | 0 |
| d. Reliability/on-time performance of Light Rail | 4 | 3 | 2 | 1 | 0 |
| e. Route frequency | 4 | 3 | 2 | 1 | 0 |
| f. Hours of operation | 4 | 3 | 2 | 1 | 0 |
| g. Comfort on the Light Rail | 4 | 3 | 2 | 1 | 0 |
| h. Ease of using the Light Rail (e.g., using schedules, getting to the Light Rail stop, paying fares) | 4 | 3 | 2 | 1 | 0 |
| i. Security at Light Rail stops | 4 | 3 | 2 | 1 | 0 |
| j. Security on the Light Rail | 4 | 3 | 2 | 1 | 0 |
| k. Light Rail 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 light rail service?

- a. More frequent trains
- b. Need better/more routes
- c. Rail stops need shade
- d. Security in the train/safer
- e. Inside of the train/ at stops need to be cleaner
- f. Don't like the type of people that use the train
- g. More/better lighting at train stops
- h. Easier schedules to read/understand/accurate
- i. Other (SPECIFY: _____)
- j. Don't know/Not sure
- k. Nothing

Q12.: ASK ONLY OF THOSE WHO ANSWER "D – Streetcar" IN Q5a For each of the following attributes of the Streetcar, 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 Streetcar | 4 | 3 | 2 | 1 | 0 |
| b. Cleanliness of Streetcar stops | 4 | 3 | 2 | 1 | 0 |
| c. Amenities at Streetcar stops (e.g. shade, seating, bike racks) | 4 | 3 | 2 | 1 | 0 |
| d. Reliability/on-time performance of Streetcar | 4 | 3 | 2 | 1 | 0 |
| e. Route frequency | 4 | 3 | 2 | 1 | 0 |
| f. Hours of operation | 4 | 3 | 2 | 1 | 0 |
| g. Comfort on the streetcar | 4 | 3 | 2 | 1 | 0 |
| h. Ease of using the streetcar (e.g., using schedules, getting to the streetcar stop, paying fares) | 4 | 3 | 2 | 1 | 0 |
| i. Security at streetcar stops | 4 | 3 | 2 | 1 | 0 |
| j. Security on the streetcar | 4 | 3 | 2 | 1 | 0 |
| k. Streetcar service during major city events | 4 | 3 | 2 | 1 | 0 |

Q12a. ONLY ASK IF THE ANSWER IS SOMEWHAT DISSATISFIED OR VERY DISSATISFIED IN Q12:
You indicated dissatisfaction with some of the attributes, what could be done to improve your satisfaction with the streetcar service? DO NOT READ LIST.

- a. More frequent streetcars
- b. Need better/more routes
- c. Stops need shade
- d. Security in the streetcar/safer
- e. Inside of the streetcar/at stops need to be cleaner
- f. Don't like the type of people that use the streetcar
- g. More/better lighting at stops
- h. Easier schedules to read/understand/accurate
- i. Other (SPECIFY: _____)
- j. Don't know/Not sure
- k. Nothing

ASK ALL:

13. 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"

13a. 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: _____)

14. Do you have access to a bicycle that you can ride when you want to?

- a. Yes
- b. No – SKIP TO Q19

15. IF YES IN Q14: How many times in a month do you ride your bike?
- None/never ride it/only ride it occasionally
 - Once or twice
 - Three to five times
 - Six to ten times
 - More than ten times
 - Don't know/NA
- 15a. If none/never ride it in Q15: What are some reasons you don't ride a bike more often?
DO NOT READ LIST
- Physical condition / my health
 - Distance / Too far
 - Takes too long
 - Bike not working properly / bike not functional
 - Have little kids / drive kids around
 - Prefer Car
 - Time / Convenience / Too busy
 - Lazy / Don't want to ride it
 - Too much traffic
 - Not enough bike lanes / paths
 - Injury
 - Have too much to carry
 - Too dangerous
 - Other
 - Don't know/NA
16. IF RIDE BIKE 1+ times in Q15: Where do you go when you ride your bike? DO NOT READ LIST
- Exercise
 - Store
 - Work / school / ASU
 - Parks
 - Along the canals
 - Tempe Town Lake
 - Mill Avenue / Downtown Tempe
 - Friend's house
 - Restaurant / Dinner
 - Everywhere
 - The bar / when I've been drinking
 - The light rail
 - Run errands
 - Nowhere/just riding for exercise
 - Other (SPECIFY:)

17. IF RIDE BIKE 1+ times in Q15 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: _____)

18. Which of the following micromobility devices (e.g., scooter, electric bicycle mo-ped,) have you used to travel around Tempe in the past year? Select all that apply.

- a. Electric bicycle
- b. Personal scooter, Segway, or Onewheel/hoverboard/electric unicycle
- c. Shared scooter, electric bicycle, or shared Segway
- d. Mo-ped
- e. None of the above (mutually exclusive)

ASK ALL:

19. 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"
- 19a. 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: _____)

20-22. 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 20-22 | Very high priority | High priority | Somewhat of a priority | Low priority | Very low priority | DK / Refused |
|--|--------------------|---------------|------------------------|--------------|-------------------|--------------|
| 20. Miles of shaded sidewalks | 5 | 4 | 3 | 2 | 1 | 0 |
| 21. Security/comfort on sidewalks such as addressing hazards, obstructions and width | 5 | 4 | 3 | 2 | 1 | 0 |
| 22. Amenities along the sidewalks like water fountains, lighting, art, and signage | 5 | 4 | 3 | 2 | 1 | 0 |

23-28. 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 23-28 | Very high priority | High priority | Somewhat of a priority | Low priority | Very low priority | DK / Refused |
|---|--------------------|---------------|------------------------|--------------|-------------------|--------------|
| 23. Miles of multi-use paths and dedicated bike lanes on streets | 5 | 4 | 3 | 2 | 1 | 0 |
| 24. Security/comfort on multi-use paths | 5 | 4 | 3 | 2 | 1 | 0 |
| 25. Amenities along the multi-use paths like water fountains, lighting, art and signage | 5 | 4 | 3 | 2 | 1 | 0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 26. Ease of travel through or around barriers such as railroad crossings, freeways, roads, the lake, etc. | | | | | | |
| 27. Shade along the multi-use paths and bike lanes | 5 | 4 | 3 | 2 | 1 | 0 |
| 28. Protected bike lanes that have a physical barrier between traffic and bikes | 5 | 4 | 3 | 2 | 1 | 0 |

29. Have you heard of Vision Zero?

- a. Yes
- b. No
- c. dk

29a. If YES in Q 29, what does it mean? (do not read list)

- a. Slow traffic
- b. Have no car accidents
- c. Reduce deaths form car accidents
- d. Other: Specify:

29b. If YES in Q 29, how did you hear about it? (do not read list)

- a. Street banners
- b. Social media
- c. Tempe today water bill
- d. Word of mouth
- e. Other: Specify

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

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

- D2. Are you married or single?
- a. Married
 - b. Single
 - c. No answer
- D3. Do you have children ages 6 to 18?
- a. Yes
 - b. No
 - c. Don't know
- D4. If yes in D3, have you ever heard of the Tempe Youth Free Transit Pass Program?
- a. Yes
 - b. No
 - c. Don't know
- D4a. IF YES IN D4: 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
- D5. 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

- D6. Do you identify as being Hispanic, Latino, or of Spanish Origin?
- a. Yes
 - b. No
 - c. Prefer not to answer
- D7. How would you best describe your race?
- d. White
 - e. Black or African American
 - f. Asian
 - g. American Indian or Alaska Native
 - h. Native Hawaiian or other Pacific Islander
 - i. Other
 - j. Prefer not to answer
- D8. 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: Tempe City Council
FROM: Eric Iwersen, Transportation & Sustainability Director
DATE: 1/14/2025
SUBJECT: Mill Avenue Streetscape (University Drive to Rio Salado Parkway)



PURPOSE:

To provide the Commission with an update on the downtown Mill Avenue Streetscape Project (University Drive to Rio Salado Parkway).

RECOMMENDATION:

For information only.

CITY COUNCIL STRATEGIC PRIORITY

- 1.05 – Feeling of Safety in Your Neighborhood
- 3.14 – ADA Transition Plan
- 3.26 – 20 Minute City
- 4.11 – Tree Coverage
- 5.03 – Capital Investment

BACKGROUND INFORMATION and UPDATE:

The project launched in 2022 to develop a guiding concept and construction documents to update the underground infrastructure as well as refresh the hardscape in the downtown. Staff coordination with stakeholders was a key piece of moving the project forward and outreach continues as the project construction moves forward. Collaboration with other Tempe staff teams and important downtown partners/stakeholders included:

The project is well under construction with major completion of the intersection of Mill and University complete and the first two southern blocks (University to 6th) at more than 50% complete. Sidewalk install, tree planting, irrigation and electrical lines are all being installed currently. Work is expected to move to the segment of Rio Salado to 3rd St in late January, early February.

Stakeholders:

- Downtown Tempe Authority & Merchants/Businesses
- Arizona State University
- Tempe Tourism
- Chamber of Commerce
- Salt River Pima Maricopa Indian Community
- Downtown Neighbors & Property Owners

Departments: Public Works, Transportation and Sustainability, Community Development, and Community Services.

Boards and Commissions: Arts & Culture Commission, Neighborhood Advisory Commission, Commission on Disability Concerns, Transportation Commission, Development Review Commission, Human Relations Commission, Historic Preservation Commission, Parks, Recreation, Golf and Double

Butte Cemetery Advisory Board, Desert Conservation Commission, Mayor's Youth Advisory Commission.

FISCAL IMPACT:

All budget transfers are complete for the project.

ATTACHMENTS:

PowerPoint Presentation

Downtown Tempe Streetscape Improvements **Mill Avenue** **University Drive – Rio Salado Parkway**

Progress Update

Jan. 14, 2025





Overview

- Project History and Progress of Construction
- Outreach, Business and Event Coordination
- Construction Schedule and Next Steps



Performance measures



- 1.05 – Feeling of Safety in Your Neighborhood
- 3.14 – ADA Transition Plan
- 3.26 – 20 Minute City
- 4.11 – Tree and Shade Canopy
- 5.03 – Capital Investment Created



Overall Project Scope

Elements of Project

- Irrigation and Electrical Lines
- Sidewalk Brick and Expanded Pedestrian Space
- Trees and Planting areas
- Accent/String Lighting
- Lithomosaic Historical Images
- ADA Improvements (ramps and slope requirements)
- Bus Shelters with Indigenous Designs
- Mill Ave Gateway Sign

Refresh Downtown Mill Ave

Support Area Businesses, Events and Neighborhoods



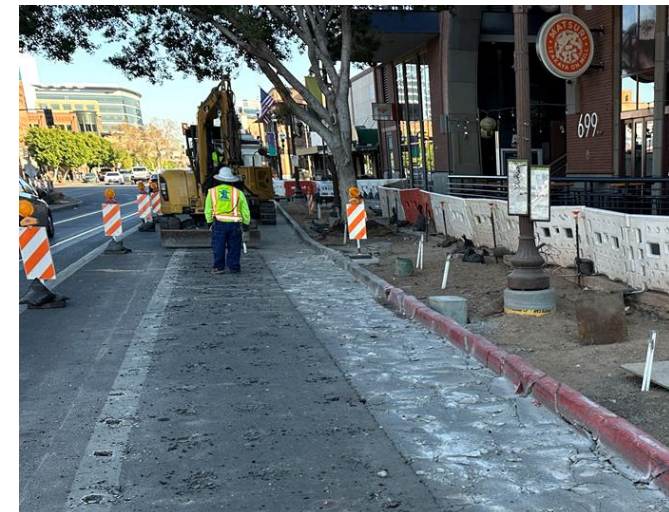
Project Area / Mill Ave (University to Rio Salado)





Key Elements & Approach

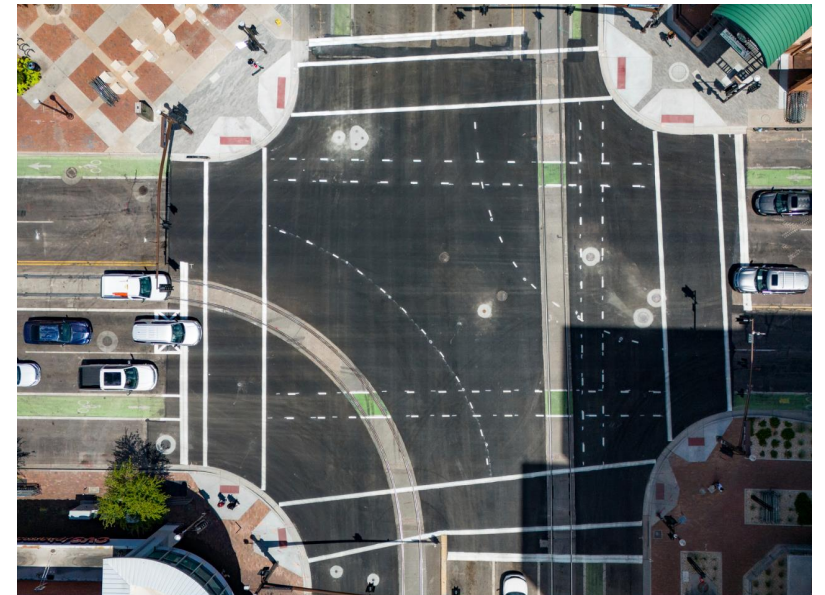
- Retain business and pedestrian access
- Construct half of sidewalk at a time
- Utilize on-street parking areas for work zones
- Limit vehicular lane closures and impacts
- Retain Streetcar and transit operations
- Concrete band over irrigation and utility lines
- Sidewalk brick removal, grading and ADA improvements between “bump outs”.
- Utility infrastructure upgrades
- Hardscape/landscape upgrades





Project Progress Summer and Fall 2024

- University – 6th St.
- Completed intersection of Mill Ave and University Drive
 - Upgrades to traffic signal infrastructure and ADA sidewalk ramps
 - New red brick and concrete pavers
 - Full re-pave of intersection
- Continue work north to 6th St.
- 6 Intersections re-paved, re-done overall



Irrigation and Electrical Lines

- New irrigation lines to support tree and plant success
- New electrical lines to support downtown events, growth and operations needs



Sidewalk Brick and Expanded Pedestrian Space

- New red brick and concrete pavers
- Concrete bands delineating patios from pedestrian area
- “Bulb-outs” to create expanded pedestrian space at multiple intersections





Trees and Planting Areas

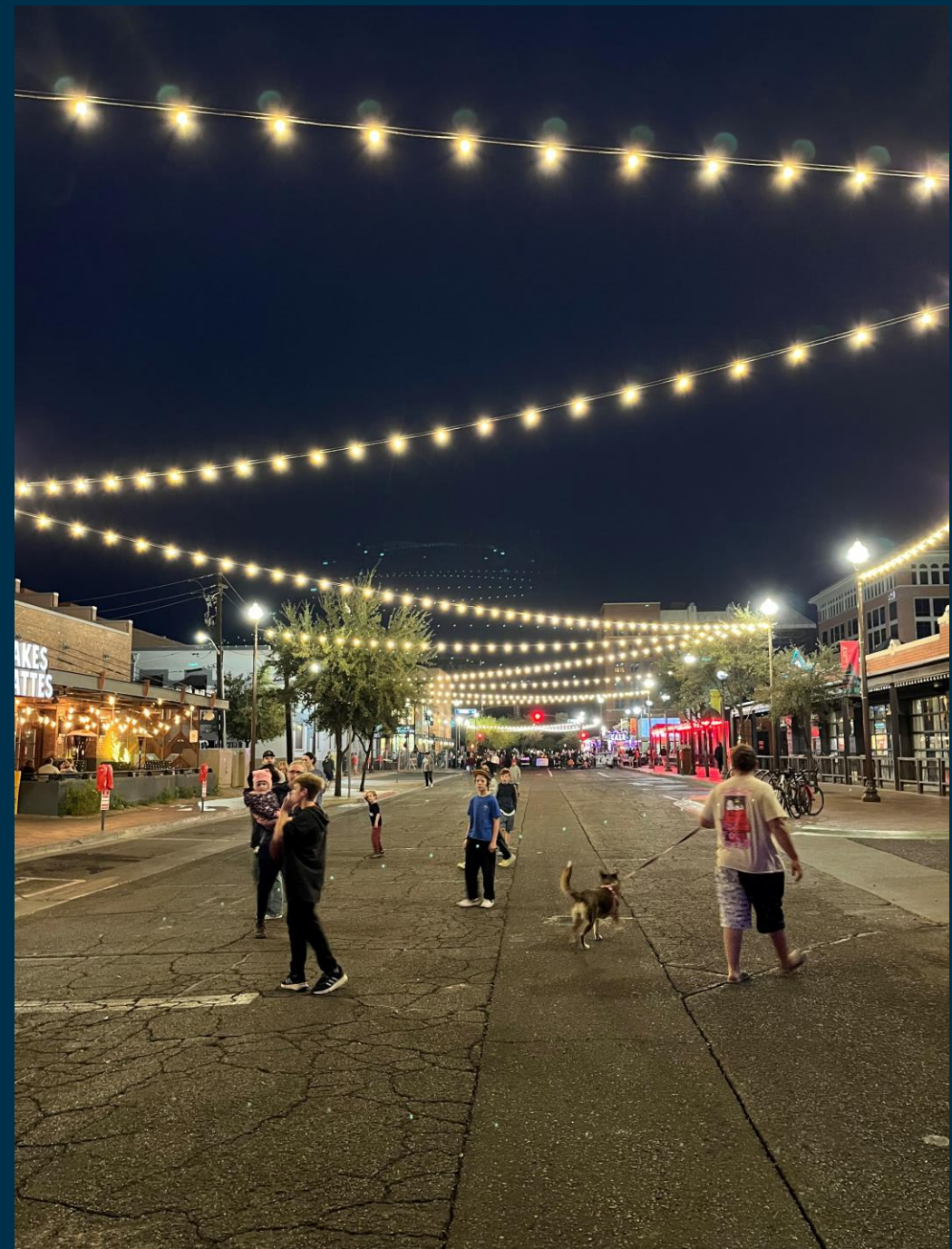
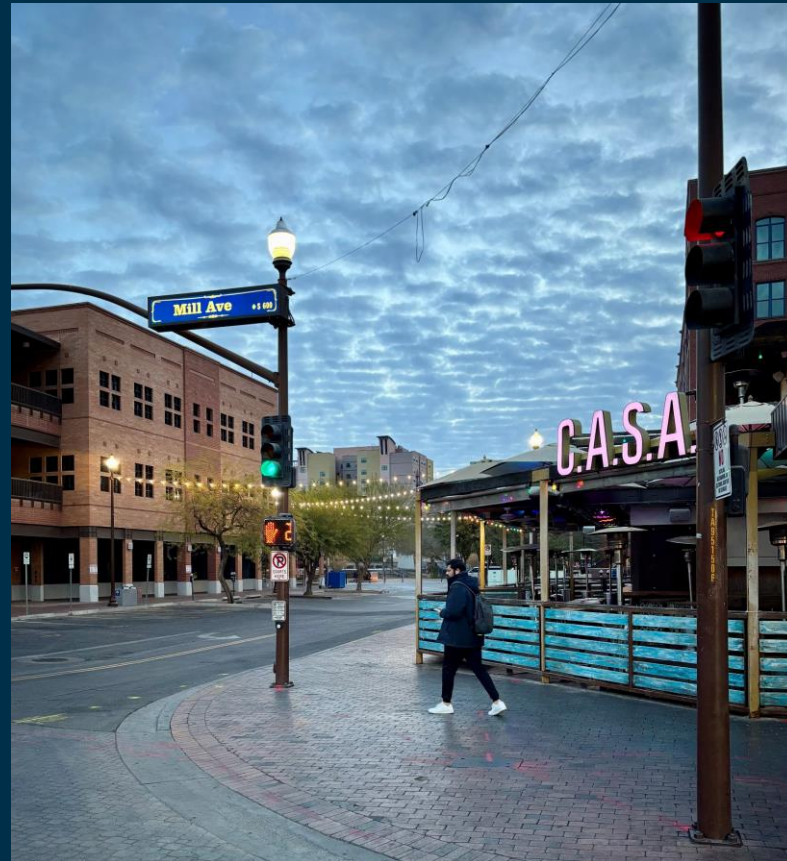
- 5 new sustainable desert tree species
 - Chinese Pistache, Ghost Gum Eucalyptus, Mastic, Olive, Tipu
- Expanded planter islands
- Preserve existing healthy Ficus
- First new trees installed December 2024





Accent/String Lighting

- 3 blocks of new overhead string lights installed
 - 4th St. Mill to Maple
 - 6th St. Myrtle to Maple





Lithomosaic Historical Images

- 22 images of full Tempe history @ sidewalk corners



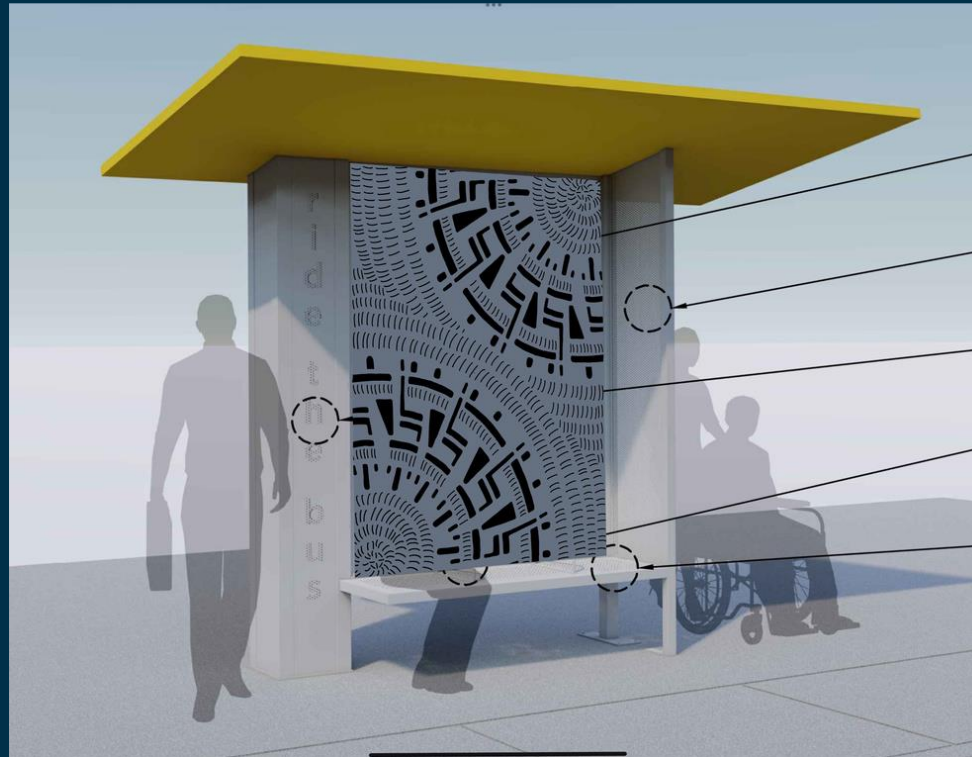
ADA Improvements

- New pedestrian ramps at all intersections
- New push buttons with current ADA requirements
- Sidewalk cross-slope improvements



Bus Shelters with Indigenous Designs

- Working with Heiku, Public Art, Transit to develop designs into new shelters
- Artists: Joshua Yazzie, Jacob Butler
- 3 new shelters on Mill Ave
- Concrete Bus Bays





Project Status January 2025





Events and Business Outreach

Successful Holiday Event Coordination
Continued Coordination with DTA, Tempe
Tourism, ASU, Businesses
Upcoming:

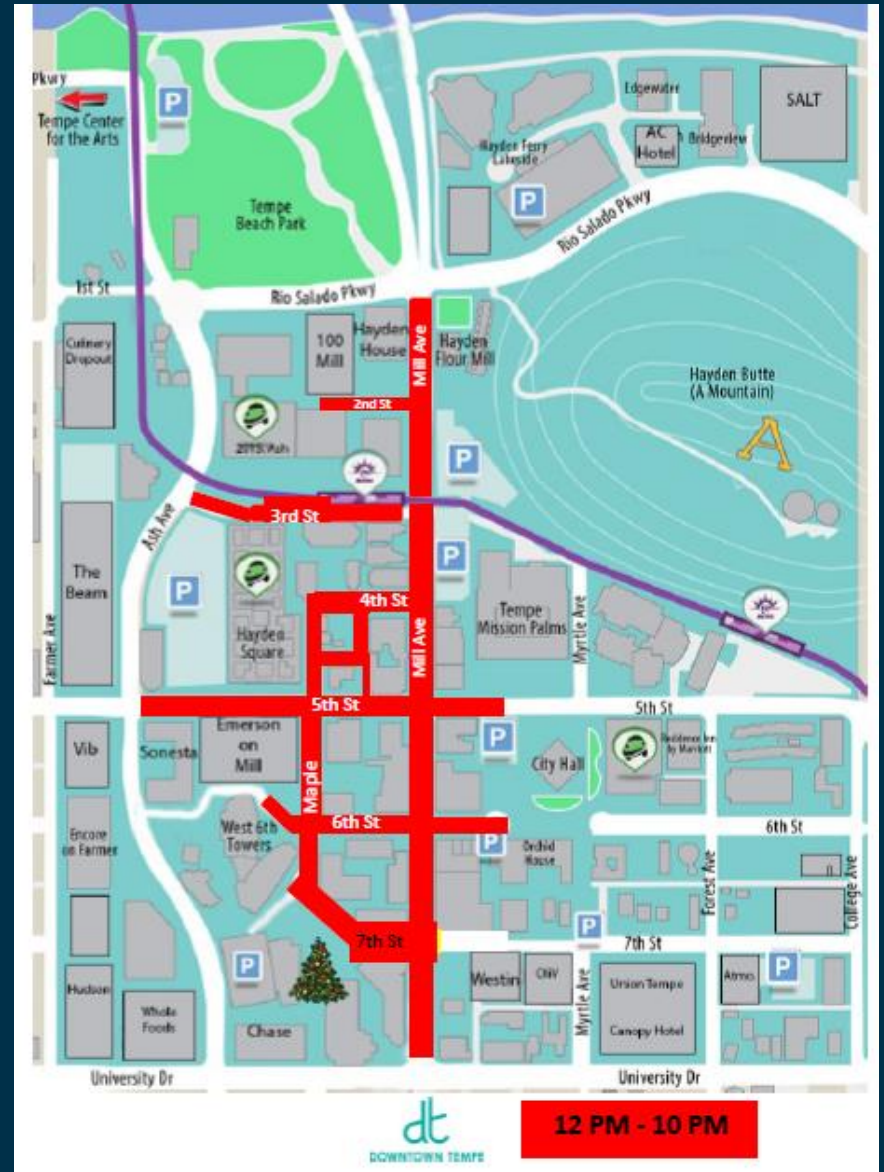
Rock 'n' Roll Running Series

Tempe Blooms

Innings Festival

Spring Festival of the Arts

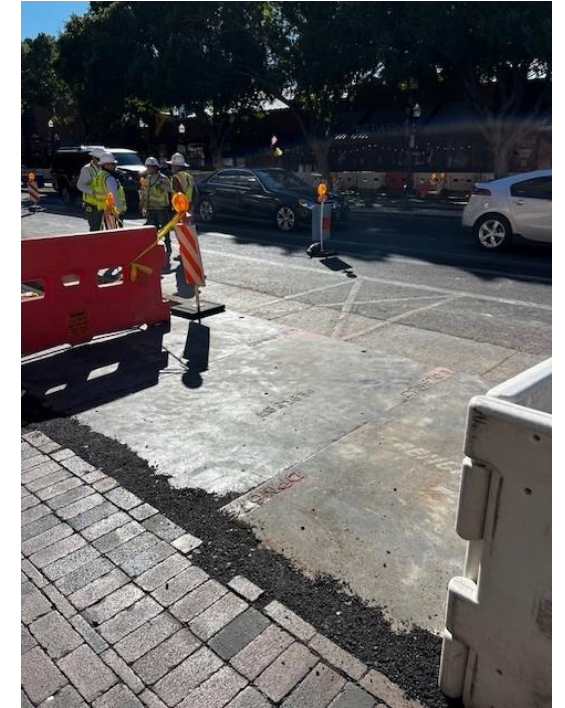
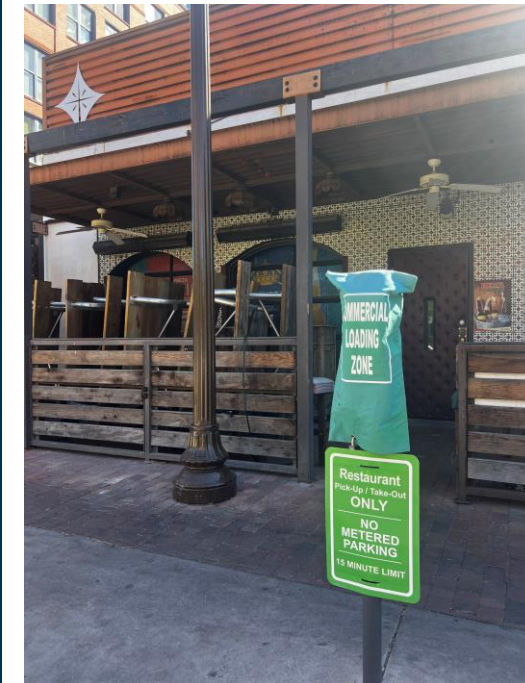
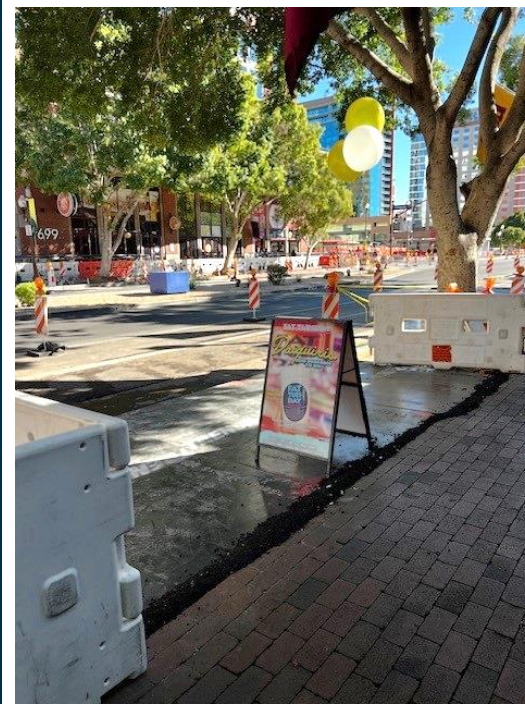
2nd Sundays





Coordination

- Mid-block safety access coordinated with necessary businesses
- Short term food/retail pick-up reserved on 6th St. and 7th St. near Mill Ave.





- Regular updates coordinated through DTA @downtowntempe and City of Tempe @tempegov
- Targeted communications with directly impacted businesses
 - One-on-one meetings for business frontage work
 - Advance notice for significant restrictions
 - Pedestrian Signage



Schedule

- Intersection of Mill Ave. and University Dr. completed Aug. 7, 2024
- Additional crew will be mobilized in late January to accelerate construction
- Day and nighttime operations to run concurrently
- Midblock
 - University Dr. to 7th St. expected completion February 2025
 - 7th St. to 6th St. expected completion March 2025
- Intersections
 - 6th St. Intersection improvements will begin March 2025
 - 5th St. and 7th St. intersections will begin June 2025 concurrently
- Target project completion date Fall 2026



Next Steps

- Ongoing dialogue with businesses/merchants
- Careful coordination with patios, business access
- Virtual meetings every second Tuesday at 2 p.m.
 - Jan 14
 - Feb 11
 - March 11
 - April 8

Questions



MEMORANDUM

TO: Tempe Transportation Commission
FROM: Sam Stevenson, Transit Manager, Transportation & Sustainability, 480-858-7765
DATE: January 14, 2025
SUBJECT: Orbit Mars and Mercury Pilot Program



PURPOSE:

The purpose of this memo is to provide the Commission with an update on the Orbit system and a pilot project to enhance service on the Mars and Mercury routes.

CITY COUNCIL STRATEGIC PRIORITY:

- 3.26 20-Minute City: Achieve a rate of dwellings from which residents can meet all basic daily, non-work needs within 20-minutes utilizing a multimodal transportation system (walk, bicycle, or use public transit).
- 3.29 Transit System Satisfaction: Achieve ratings of “Very Satisfied” or “Satisfied” with the “Overall Satisfaction with Transit System in Tempe” greater than or equal to 75% for both riders and non-riders as measured by the City of Tempe Transportation Survey.

BACKGROUND INFORMATION:

Tempe’s Orbit Neighborhood Circulator network provides frequent, fare-free service connecting Tempe’s neighborhoods to major activity centers and other transit services. Six routes comprise the network (Mercury, Venus, Earth, Mars, Jupiter and Saturn), which operate 7 days/week, 365 days/year. The system was initially launched in 2007 following a robust public involvement process and has been further refined through several iterations of public feedback.

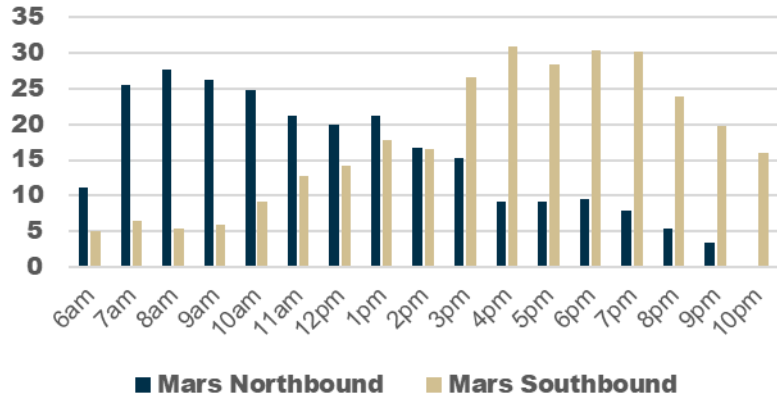
Ridership has continued to increase following the decline observed during the pandemic. During FY 2024, a total of 2,040,290 passenger boardings were reported, which represents over 90% of pre-pandemic values. The table below shows the distribution of boardings between the system’s six routes during FY 2024. It should be noted that Orbit Mars and Mercury transport approximately half of all Orbit passengers.

| Route | FY 2024 Ridership |
|--------------|-------------------|
| Mars | 550,531 |
| Mercury | 423,563 |
| Jupiter | 362,952 |
| Venus | 341,025 |
| Earth | 256,121 |
| Saturn | 106,098 |
| Total | 2,040,290 |

During Fall, 2024, several requests for additional service were received in response to high passenger loads on the Mars and Mercury routes. Staff performed observations in the field, analyzed automatic passenger counter (APC) data, on-time performance data, and the fleet utilization strategy to further understand passenger demand patterns and available resources. Several findings emerged from the analysis:

- The highest passenger loads occur on the Mars and Mercury routes
- The highest passenger loads occur proximal to Downtown Tempe and ASU Campus. Specifically, for Orbit Mars, the highest passenger loads occur between the Tempe Transportation Center and Dorsey Ln/Broadway Rd. For Orbit Mercury, the highest passenger loads occur between the Tempe Transportation Center and 8th St./McClintock. Passengers were observed being unable to board during these segments due to buses arriving near or at capacity.
- Routes traveling inbound towards Downtown Tempe (Mars Northbound and Mercury Westbound) experience higher passenger loads during the morning hours. Routes traveling outbound from Downtown Tempe (Mars Southbound and Mercury Eastbound) experience higher passenger loads during the afternoon hours. The chart below depicts this trend, as an example.

Average Max Load (September, 2024, M - Th)



- Passenger loads are highest Monday – Thursday while ASU is in session (fall and spring semesters)
- Due to a reduction in service that was implemented in 2021, the Orbit fleet currently has two additional buses available for service above and beyond the desired 20% spare ratio. A third bus is available for most of the day, before and after the school trip that serves Connolly Middle School.

Based on these findings and available fleet, a schedule was developed to overlay additional service (two additional trips per hour) within the busiest segments of the Mars and Mercury routes during periods of peak travel demand. Because the service currently provided is unable to meet passenger demand, the enhancement is being implemented as a pilot project, which allows for an expedited implementation timeline with public outreach to be performed once the change has taken effect. This approach is intended to increase capacity when needed, within the highest-ridership segments, without impacting service levels on the broader Orbit network. Service will operate Monday – Thursday during the spring and fall semesters. The pilot project will initially operate for a one-year term and allows for flexibility to further adjust the schedule as appropriate while performance is monitored.

Orbit Short Trips



The additional service will be implemented beginning on January 27, 2025. Two public meetings are scheduled for February 18, virtually at noon, and in-person at 5:30 p.m. in the Don Cassano Community Room at the Tempe Transportation Center. The public comment period is scheduled for February 18 to March 4, and a survey will be conducted during that time with information provided through on-board signage, signage at bus stops, neighborhood postcards, and social media.

FISCAL IMPACT or IMPACT TO CURRENT RESOURCES:

Operating costs for the Orbit system are \$14 million for FY 2025 and are primarily funded through Tempe's half-cent, dedicated Transit sales tax. Costs to implement the additional service on Mars and Mercury are expected to be \$250,000 annually.

ATTACHMENTS:

1. PowerPoint

Orbit Mars and Mercury Pilot Program

Transportation Commission – Jan. 14, 2025





Agenda

- Orbit System Overview
- Costs and Funding
- Ridership
- Passenger Feedback
- Data and Analysis
- Mars and Mercury Short Trips
- Timeline and Next Steps



Performance Measures

3.26 20-Minute City

Achieve a rate of dwellings from which residents can meet all basic daily, non-work needs within 20-minutes utilizing a multimodal transportation system (walk, bicycle, or use public transit).

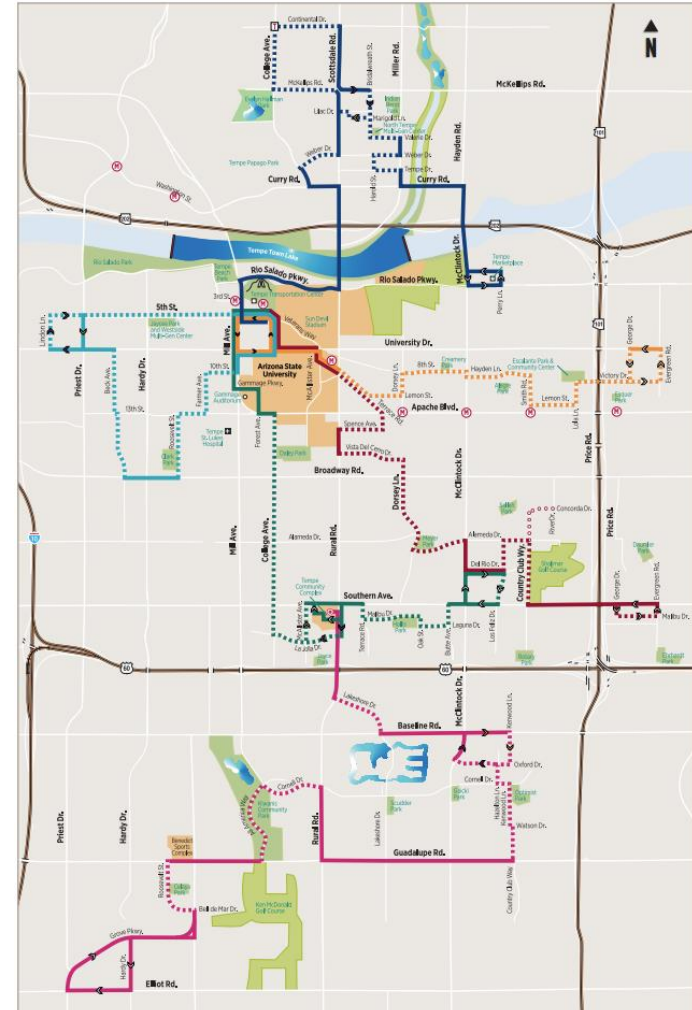
3.29 Transit System Satisfaction

Achieve ratings of “Very Satisfied” or “Satisfied” with the “Overall Satisfaction with Transit System in Tempe” greater than or equal to 75% for both riders and non-riders as measured by the City of Tempe Transportation Survey.



Orbit System Overview

- Outstanding Residential Bus In Tempe
- Neighborhood Circulator Network
- Six Routes
- Free to Ride
- 7 days/week
- Frequent Service
 - Every 15 minutes Mon – Sat
 - Every 30 minutes Sunday
 - Orbit Saturn – every 30 minutes





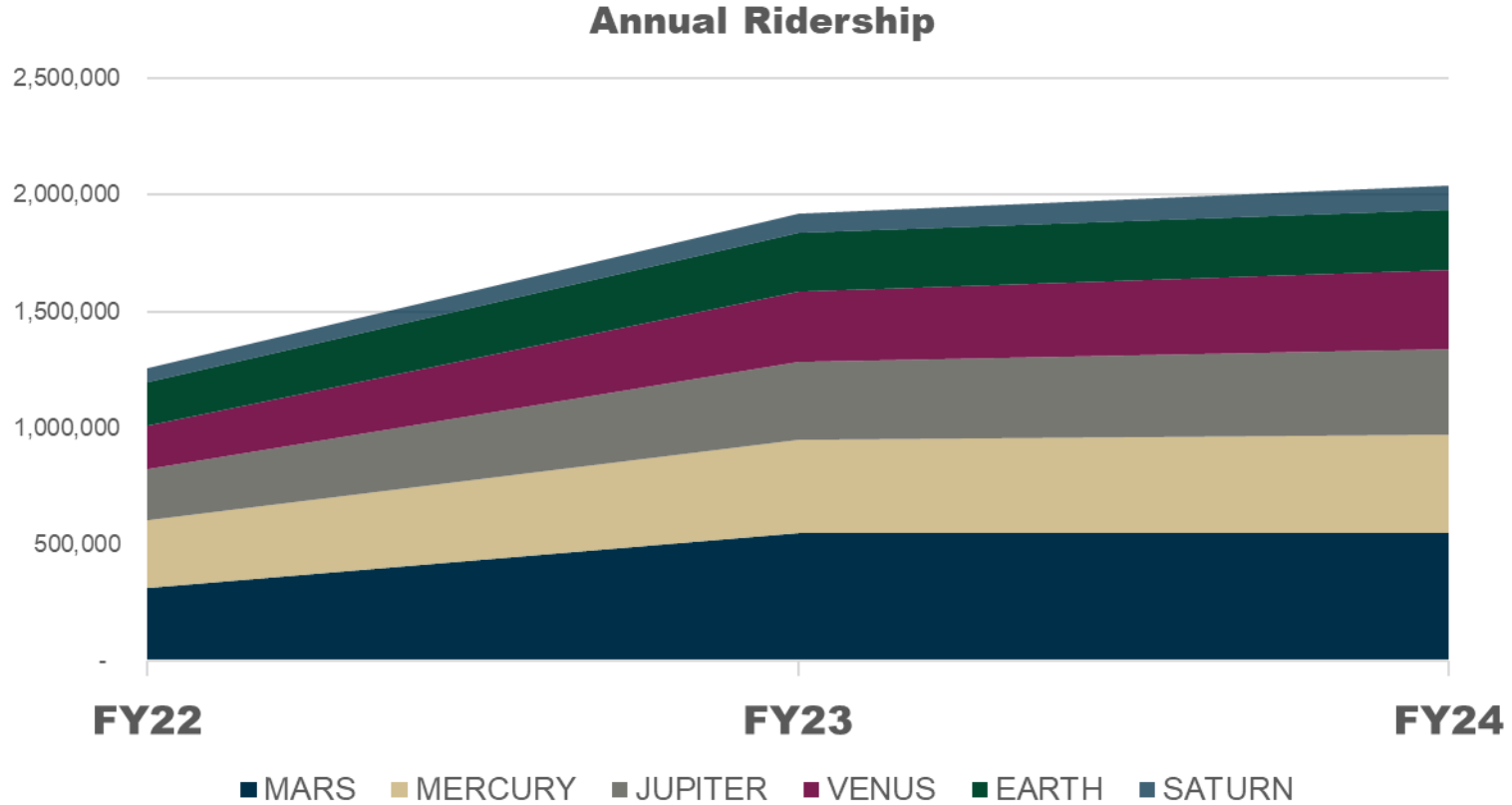
Orbit Costs and Funding

- Annual Operating Costs (FY 2025):
 - \$14 million
- Operations Funding:
 - \$13.2 million – Tempe Transit Tax
 - \$0.8 million – Federal Preventative Maintenance
- Orbit Vehicles (capital)
 - 85% Federal Match
 - 15% Regionally-Funded (Prop 400)
- Service Operated by Valley Metro



Orbit Ridership

- 2.04 million passenger boardings (FY 2024)



- “...delays and overcrowding on the MARS buses ... the MARS route consistently has a higher number of passengers”
- “Orbit Mars and Mercury buses often reach full capacity early in the route”
- “...this bus [Orbit Mars] is consistently packed every morning and every evening and consistently doesn't even stop at college and university due to overcrowding at peak times”



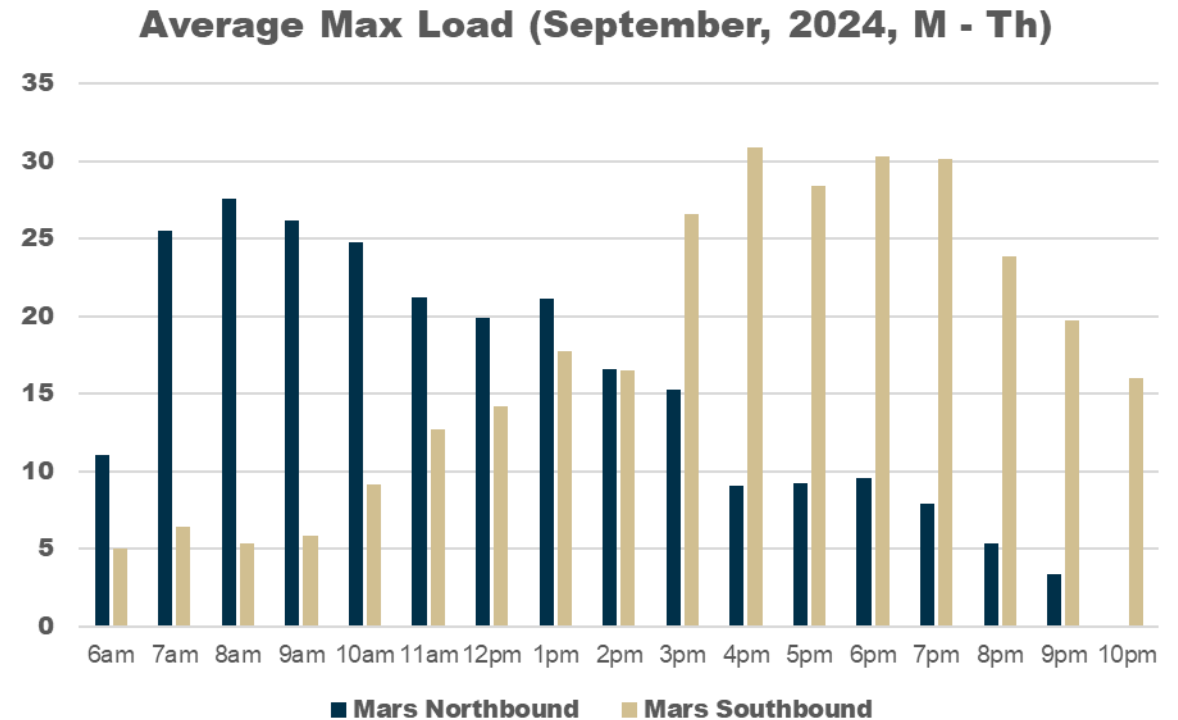


Data and Analysis

- Field Observations
- Automatic Passenger Counter (APC) Data
 - Ridership by Time of Day
 - Ridership by Location / Stop
- On Time Performance (OTP) Data
- Fleet Utilization

Findings:

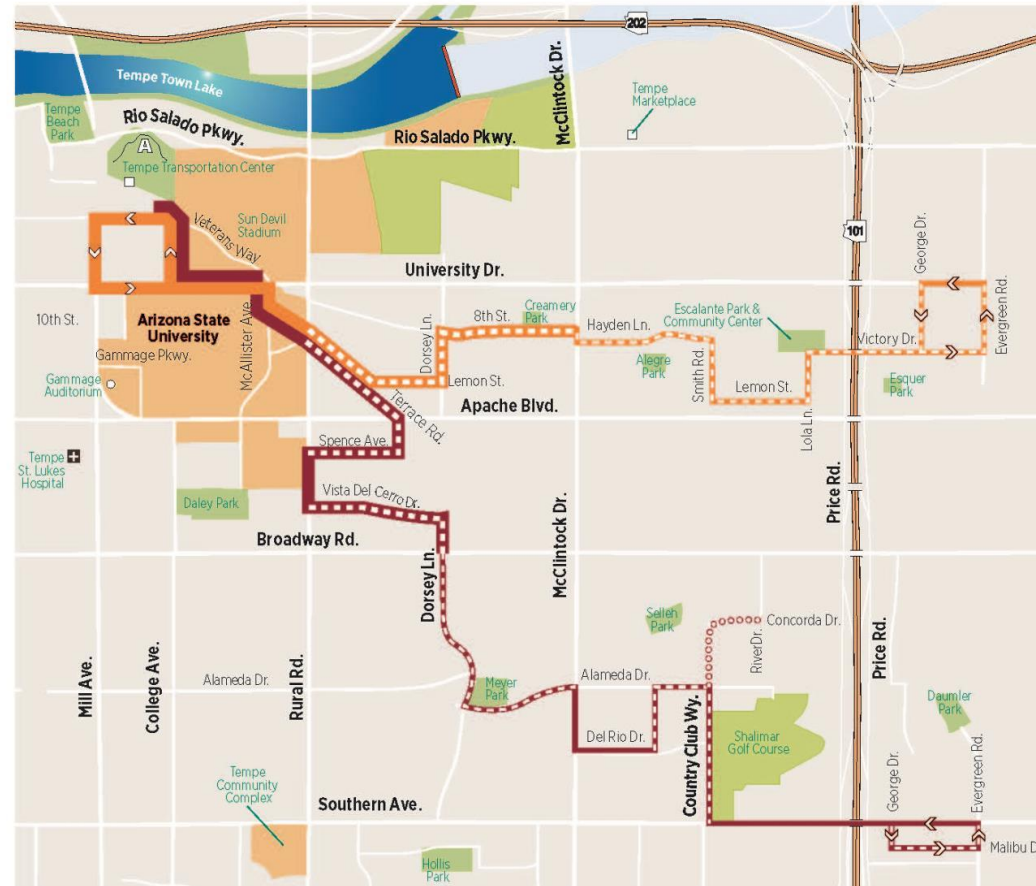
- Highest passenger loads: Mars and Mercury
- Highest loads near Downtown Tempe
- Higher ridership M – Th, when ASU in session
- 2 - 3 additional buses available



Mars and Mercury Short Trips

- Orbit “Short Trips”
 - Mars: between TTC and Dorsey/Broadway
 - Mercury: between TTC and 8th/McClintock
- Monday – Thursday during ASU Spring/Fall Semesters
- 2 Additional trips/hour
 - Some trips every 7/8 min
- 1-Year Pilot
- \$250,000 annually

Orbit Short Trips



- Mars
- - - Mars with flag stops
- Trips run on school days only
- Mars Short Trips
- - - Mars Short Trips with flag stops
- Mercury
- - - Mercury with flag stops
- Mercury Short Trips
- - - Mercury Short Trips with flag stops

★
Added Service!
Orbit Short Trips



Timeline and Next Steps

- “Before” Data Collection and Analysis: Fall, 2024
- Transportation Commission: Jan.14, 2025
- Short Trips and Schedule Adjustments Implemented: Jan. 27, 2025
- Public Meetings: Feb. 18, 2025
- Public Comment Period: Feb. 18 – March 4, 2025
 - On-Board signage, bus stop signage, postcards, social media
- “After” Data Collection and Analysis: Spring, 2025 – Fall, 2025
- Maintain, adjust or eliminate short trip service: January 2026

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tempe.gov/Orbit



MEMORANDUM



TO: Tempe Transportation Commission
FROM: Shelly Seyler, Deputy Transportation & Sustainability Director
DATE: January 14, 2025
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.

- February 11 - cancelled
- March 11
 1. Vision Zero Update
 2. Transit Fund Revenue Analysis
 3. Bike Bait Program
 4. TDM/TMA and Personal Delivery Devices
- March 17 - Joint Meeting with Sustainability Commission
 1. Transportation Plan & Transportation Equity
- April 8
 1. McKellips (Scottsdale to College) Streetscape
 2. Alameda Drive Streetscape Project (before and after) & Speed Data
 3. College Avenue Traffic Study
- May 13
 1. Bike Hero Award
 2. Communication/Outreach Plans
 3. Parklets
- June 10
- July 8
- August 12
- September 9
- October 14
- Late 2025/Early 2026: Transit Prioritization Strategies
- TBD: Miller – Curry to McKellips Streetscape
- TBD: Western Canal MUP Extension
- TBD: Prop 479 – MAG