



## Transit Shelter Design Project: Public Input Summary, October 2019

### I. Background

Tempe is working with a consultant team, guided by a Steering Committee, to develop new shelter designs that encourage increased ridership by improving the waiting environment and provide a new iconic Tempe identity for the transit system.

Currently, there are 806 transit stops in Tempe; 38% have shelters. Tempe is committed to working with all stakeholders to develop a new shelter that is sustainable, comfortable, and adapts to a variety of locations.

### II. Outreach

Postcards inviting the public to attend the meetings or to comment online were mailed to 3853 households. The mailing was targeted to households surrounding bus stops with the highest ridership. Public meetings were held on Sept. 21 (3 attendees) and Sept. 25, (8 attendees) 2019 and the topic was posted online from Sept. 21 – October 16, 2019 through Tempe Forum. A total of 124 unduplicated survey responses were received.

#### FACEBOOK

**9/5 – public meetings**  
Reach/Impressions: 939  
Engagement: 36

**9/20 – public meeting reminder**  
Reach/Impressions: 1088  
Engagement: 34

**10/13 – online input reminder**  
Reach/Impressions: 1964  
Engagement: 161

#### NEXTDOR

**9/5 – public meetings**  
Reach/Impressions: 3302  
Engagement: 10

#### TWITTER

**9/5 – public meetings**  
Reach/Impressions: 3462  
Engagement: 12

**9/20 – public meeting reminder**  
Reach/Impressions: 5288  
Engagement: 19

**10/13 – online input reminder**  
Reach/Impressions: 3822  
Engagement: 27

#### MEDIA

**Press release:**  
**9/5 – public meetings:**  
emails sent: 1319  
open rate: 26.5%

**9/19 – Tempe this Week:**  
emails sent: 3672  
open rate: 35.2%

**Pandora ads:**  
Impressions: 62,644  
Click rate: .05%

### III. Survey Results

Respondents were asked to report how important each of the elements are to a transit shelter and to rank them in order of importance. Below are the responses from the 124 people who took the survey.

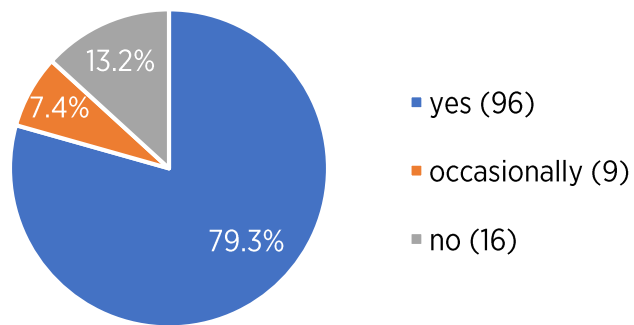
#### Question 1: How important are the following items at a bus stop? (124 responses)

	Essential	Very important	Nice to have	Not important	Don't know	Your rank
Shade	87.8%	8.1%	1.6%	.8%		1
Protection from rain	38.2%	34.1%	22.8%	4.1%		5
Use of sustainable materials	25.2%	37.4%	26.8%	8.1%	1.6%	9
Seating	51.2%	30.1%	14.6%	3.3%		2
Bike racks	16.3%	29.3%	37.4%	11.4%	4.9%	11
Scooter parking	4.1%	14.6%	39%	33.3%	4.9%	13
Availability of route info	61%	24.4%	10.6%	1.6%	.8%	4
Resistance to vandalism	39%	31.7%	17.0%	5.7%	4.1%	10
Visibility of oncoming traffic	54.5%	26.8%	11.4%	2.4%	1.6%	6
Enhanced accessibility elements beyond required for ADA	54.5%	20.3%	13.8%	4.9%	4.9%	8
Availability of trash & recycling	47.2%	34.1%	13.8%	2.4%		7
Lighting	56.1%	32.5%	6.5%	3.3%		3
Public art incorporated	13%	27.6%	39.8%	16.3%	.8%	12

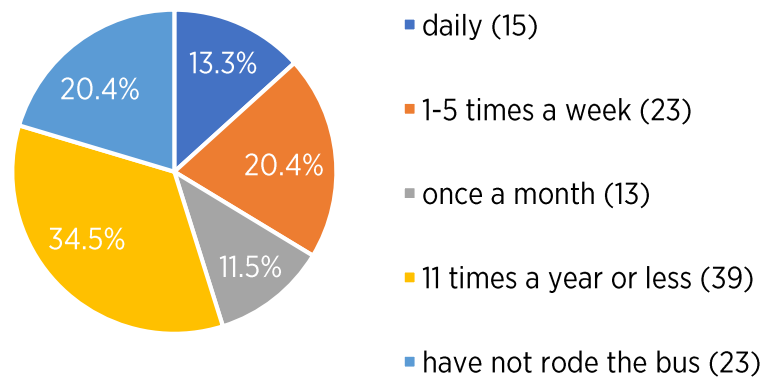
#### Question 2: Please rank the above items based on your priorities for a transit shelter. (124 responses)

1. Shade
2. Seating
3. Lighting
4. Availability of route info
5. Protection from the rain
6. Visibility of oncoming traffic
7. Availability of trash and recycling bins
8. Accessibility in addition to the ADA elements
9. Use of sustainable materials
10. Resistance to vandalism
11. Bike racks
12. Public art incorporated
13. Scooter parking

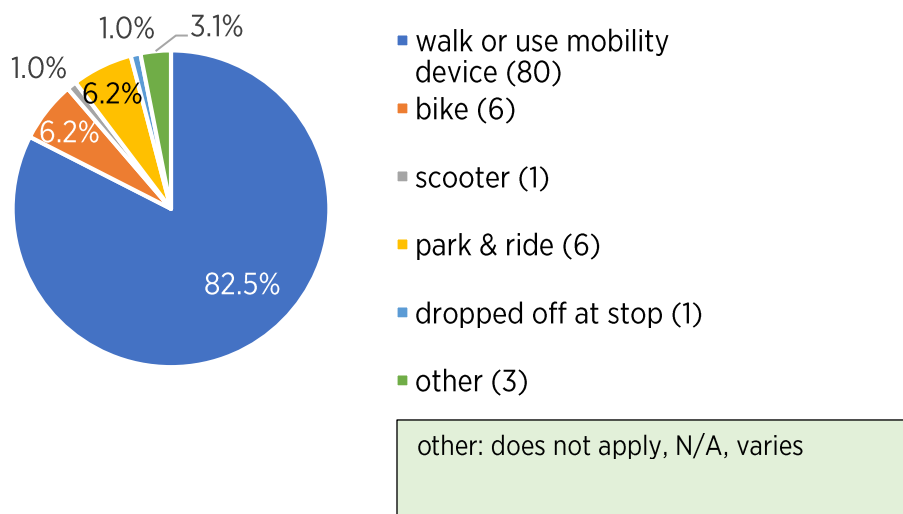
**Question 3: Do you own or have access to a vehicle? (121 responses)**



**Question 4: How often do you ride the bus? (113 responses)**

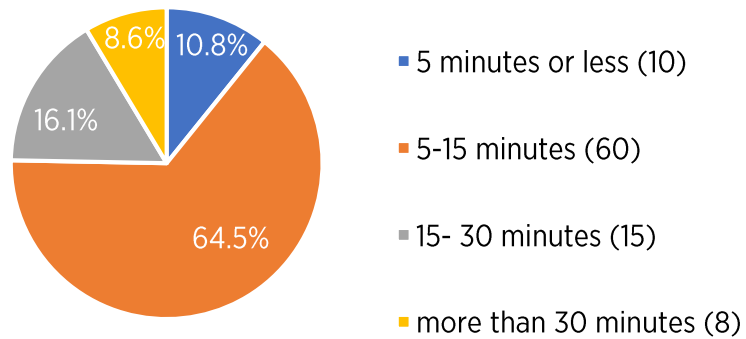


**Question 5: How do you typically get to the bus stop? (97 responses)**

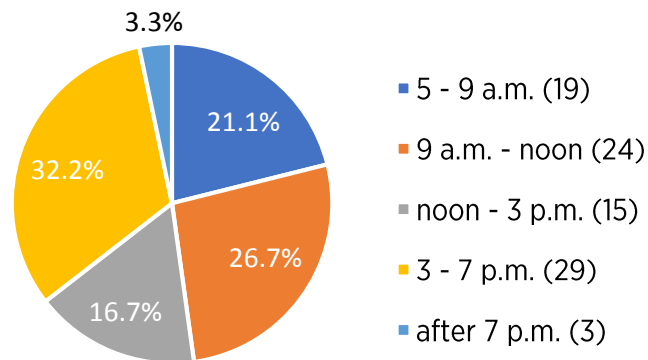


other: does not apply, N/A, varies

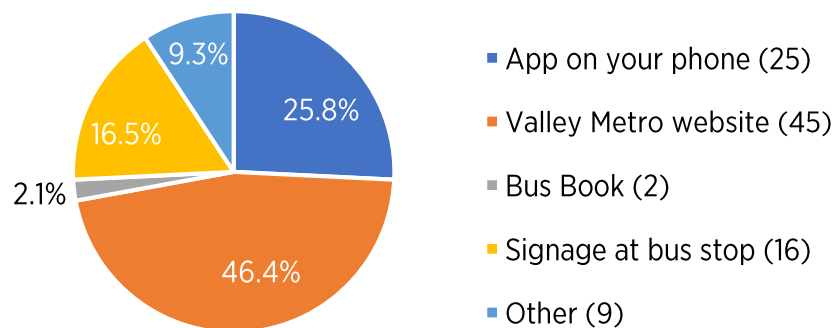
**Question 6: How much time do you typically spend at a bus stop? (93 responses)**



**Question 7: What time of day do you use the bus? (90 responses)**

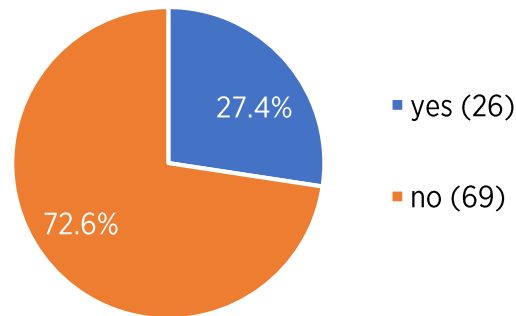


**Question 8: How do you get bus/transit information? (97 responses)**



Other: Google (2), both VM website & signage, pamphlet, I know schedule, all of the above, none, no need

**Question 9: Do you typically connect to another route? (95 responses)**



**Question 10: Please share any other thoughts you have related to the design of Tempe's Transit Shelters. (52 responses)**

1. fantasy mushrooms with seating around the stem and whimsical characters attached
2. I love that COT incorporates public art, and hope they will continue to do so. Using non-metallic materials for seating is appreciated so that sitting in the summer is possible. The bus stop I use has limited shade.
3. Cooling stations with fans/misters - similar to those sponsored by APS at the downtown light rail stations.
4. Use seat dividers so that people aren't sleeping on the seats. Make them uncomfortable enough so that people aren't camping out in these structures long term.
5. Some bus stops have turned into temporary homeless shelters, people sleeping in the ground and mountains of stuff everywhere. The bus stops smell like urine. I have stopped using the bus on southern avenue because of this. Its super frustrating to take an Uber when I could take a bus. But I don't feel safe at a bus stop that has been taken over by the homeless. I know this isn't PC, but it's the truth and a real problem.
6. Lighting/visibility to driver is extremely important to me as a person in a mobility device...more than one I have been driven past (especially if its' dark.) Available room at stop to deploy ramp...also more than once I have had to contend with plants, rocks, signage, or other items while trying to safely use the ramp to get on or off the bus. Depending on my schedule, I may need to ride the bus pretty much anytime of the day. However, I was not able to check as many as apply when trying to answer this question. I appreciate being able to use public transit and believe that there are many ways to improve the accessibility factor to make it safer and more efficient for both riders and drivers.
7. Shelters that face South or West should be provided with additional seating on the opposite side of the structure that would provide shade. In addition, automatic sensors should be incorporated to notify the transit driver that there is a rider awaiting without having to flag down the bus.
8. Solar roofs for bus stops to create shade and power lighting
9. Obviously there is not enough money for shelters at all bus stops. Therefore the bus stops with the highest usage/number of riders should be given the shelters. Shelters are less important in areas where the usage is low. More shelters are more important than public art. If public art means higher costs, I would use the money for public art to build shelters.

10. Artistic design makes the shelters desirable to be at.
11. Shade shade shade! No one especially in an aging world wants to be without shade. Great design should encourage use not just be a great photo in an architecture/urban planning book. Tempe and other cities thus far in metro Phoenix have done a poor job. Get it right this time please!
12. Please use established public artists to work with the community to come up with integrated artistic elements for the shelters, not architects or graphic designers (who may view art as simply a decorative element of the shelters).
13. Real trees, & plants are much better for shade than metal sculptures! We need to be planting trees for clean air anyway, so figuring out how to shade more transit stops is a cobenefit for all. Often built shade structures also emit additional heat. We need to focus on cool and shady both. I have had bikes stolen from transit stops, so don't prioritize them. Scooters are often left in ways that negatively impact ADA access.
14. I used to take the Orbit buses back when there actually was a way to get to my school/work via public transit. It was awesome, but because it was free it attracted a lot of homeless people and that deterred a lot of other people from using it. It is important that buses and bus stops are clean and feel secure for people to use them.
15. I want to see public drinking fountains established in Tempe, particularly where homeless people tend to congregate. Bus stops are an excellent first location for such life-giving facilities could be placed.
16. The form doesn't allow you to select multiple time periods for when you ride the bus. There will be data error in your survey results because of this.
17. I have actually liked the transit shelters that have been in use the last few years.
18. SHADE AND SAFETY ARE IMPORTANT
19. The stupid homeless bums should all be locked up and tossed in the desert. Please SHUT DOWN THE FREE BUSES IN AND AROUND TEMPE. WE HAVE A HUGE BUM PROBLEM. THEY ARE CRIMINALS. THEY WILL HURT YOU AND ROB YOU. I BLAME THE TEMPE GOVERNMENT FOR AIDING THEM THEY SHOULD ALL GO TO SOME OTHER STUPID CITY THAT HAS FREE BUSES LIKE THE ORBIT. SHUT DOWN SHUT DOWN SHUT DOWN THE ORBIT!!!
20. Please keep the indigent / homeless from sleeping in and using the shelters as temp homes. If you make them more comfortable, the more the indigent will use them and NO one will use the transit shelter for its intended purpose. I've seen 3-4 people standing out in the sun outside the shelter when 1 homeless person has their camp set up inside. This is becoming the norm and needs to stop.
21. The seats must not be made of a material that gets really hot in the summer. We are wearing shorts and the metal seats actually burn my legs. The main goal should be an effort for every shelter to be in the shade at all times. I know it is not possible, but you should really TRY to figure out how to do it. There is not much you can do about minor vandalism, so I wouldn't put much focus on it. People are going to write/paint junk on the shelters. Just try to remove the writing as often as we can afford.
22. Keeping scooters and other devices out of the wheelchair locations is critical.
23. Transit shelters are nice, but I don't think the city should spend large amounts of money on shelters. There are better things Tempe could spend its money on - like improving bus routes, or at long last extending orbit bus routes into south Tempe. on the whole, I think Tempe wastes a lot of money on transit, due to mismatched priorities. The city is always looking to be "iconic", but really should just be trying to improve transportation.
24. Please, do not damage the shade and seating functionality of the transit stop by installing or designing anti-homeless features. Homelessness is a temporary, economic policy driven problem separate from transit design and architecture. Permanently reducing the usefulness of transit stop features for the sole purpose of covering up poverty is detrimental to the fabric of civic life. In general, the more shade the better.

25. Steel is highly recyclable[sustainable] but in summer, re-radiates heat, so thermal insulation of canopy should be added to roof deck, ideally. Humans just fry under steel constructions! Few transit shelter designs are site specific to solar orientation, in fact in summer when solar angles are high, so many shelter designs offer shade! Public art in bus shelters has shown to be problematic as few artists have any training in public realm design parameters of ADA, safety and welfare of humans, traffic sightlines; further, artists have no state license for such designs, so that are violating state law for the use of taxpayer monies! Essentially, using tax money to practice engineering and architecture with no liability insurance and no license to lose or be reprimanded! Not responsible to the public! The survey does not address the 'hot potato' of homelessness and loitering...a demanding design criteria to incorporate! Regionalism in design expression is not addressed in survey... the transit shelters in Old Town Downtown have done well over time in communicating the red brick theme of old town and standing seam metal roofs look good and wear well and harken to pre-statehood [territorial] building traditions of old town Tempe. Is there a civic theme that can be reinforcing of Tempe's unique character? demanding but worth aspiring to! No mention of solar panels...becoming a reality and yet..... almost always so poorly done!
26. I question whether this is or should be a priority for the city. Also, will this encourage more homelessness by accommodating the homeless? Bus stops seem to be a great place to congregate.
27. I have tried repeatedly to use public transit and not done so. The 6 mile route from house to work by pub.trans. took 3 changes of vehicle, walking at least 3/4 mi and over an hour of transit time one way. Biking was out of the question because there is no safe way to ride a bike in Tempe. I drive because it is faster and more convenient. This said, I've used public transit in other cities when it has been clean, reliable and fast and love it.
28. Bench seats with vegetative shade would be awesome on so many levels.
29. They should include water fountains. In addition to art, they can creatively suggest ways to support the Green movement - e.g. use your own water bottles, bring your own bags, turn off the lights, etc.
30. We need them moved from corners
31. FIRST priority is safety, we don't want to encourage vandalism. It should be closed on the sides but visible like a Plexiglas but resistance to carving onto it as I have seen this happen. Shelter should be easily washable for any tagging. Exceptional lighting.
32. We would like the city council members to drive around Tempe and look at bus stops in the north side and the south side. We live on the south side of Tempe and it is a very visual difference on what Tempe spends on the north side bus stops vs the south side. The south side in most cases gets a bench and a bus sign, while the north side has these elaborate art designed bus stops with plenty of shade and seating. I know Tempe members like to focus on the Mill Ave. and Town Lake area, but there is a whole city of Tempe not just the brightly polished areas. We pay taxes and vote on the south side and would appreciate more attention to detail when it comes to city projects. The amount of people taking the bus would increase if they had shade and a place to sit. We think if you spent the money wisely on more shade and more seating for all instead of art work that really makes more sense. Art is great, BUT when it's 115 degrees, shade and seating wins out every time. Lets work for all! Also safety is a great concern! We're big on helping the homeless, but we must think about the safety of our citizens that ride the bus and make riding the bus cost a few cents so you don't have homeless camping out in the buses. Safety, shade, and seating! The 3 "s" are what we are thinking about.
33. I don't have to take the bus, but I do when the weather is in the 80s or below. Even in pleasant weather, the sun is brutal. Shade with sun angles taken into account is essential.\*sidenote: your "when do you take the bus" button is only allowing one answer

34. Misters can be solar powered and set to activate when the outside temperature is over 100 degrees. If you expect to get people out of their air conditioned cars, you have to provide shade and misters. People will not wait in 110-degree heat without cooling of some kind, especially in dress clothes for work.
35. Orbit is my regular bus line. I would probably use it more often if there were more protection from the sun.
36. Add screens with current location data of the buses on that route.
37. It would be nice if more bus stops had shade. Maybe could incorporate other cooling techniques--like green walls and misters.
38. I think transit shelters should be an enclosed space for ticket holders. Such as ones for the new trolley system. There should be scanners that open once a valid ticket is scanned to make use of and waiting for the transit safer. I would use the transit system more often if they were free of loitering people.
39. It would be nice if each shelter were also aesthetically pleasing to enhance the appearance of our city. I would suggest giving each shelter a unique feature.
40. Shelters with solar panels for shade and to power the lights. Real time Gps updates of that particular bus' current arrival time at each stop (that would be so cool!) and also great for people who don't have smartphones with App access. Drinking fountains at some might be worth considering.
41. This seems like a huge waste of time and money. There isn't anything wrong with the existing design of transit stops in Tempe, there are simply not enough of them that are sheltered and provide seating, which are the two most essential things. And even if they did have seating and shade, none of the streets you need to walk on to get to the bus stop are shaded. That is one of the real obstacles to people using transit... not the fact that we do not have iconic bus shelters. Why doesn't the city spend taxpayer dollars on things that might actually make people ride transit more. More bus service, better routes, new Orbit buses, street shading, and seat + shade at bus stops that don't already have it.
42. A lot of them don't have enough shade and that can be lethal here. Also I want solar panels as shade if possible. And I am ashamed whenever I see something that looks like an anti-homeless measure, like benches with obnoxious dividers. The art at some stops is very nice, and makes the city seem more welcoming though.
43. Shelter from the elements, particularly the sun, is the most important, and while I appreciate the desire of having a "standard" transit shelter, I also think that it's important to have custom/unique elements as part of each structure - based on the nature, history or story of a particular area. This can be done through the design of the shelter itself, or by incorporating some form of Public Art to accomplish this.... It's another opportunity to keep the story of our community alive - for residents and visitors alike.
44. Can we just stop with the "art" requirement for anything new that is built? Tempe is sending a fortune on ugly garbage a toddler could make for free.
45. shade and water for everyday use; sustainability for our future - but need more PR on how Tempe builds sustainability e.g. solar panels - can they be installed on shade covers; can water fountains be installed in shade?,
46. Given the climate and heat, shade s/b a component of ADA. I chose ADA as first priority if I could choose two top, shade and ADA would be it. Art is important to character areas if the city, much time was spent on character areas - use that in guidance for art and make stops distinct. Incorporate water fountains and/or misting systems into shelters. With the climate we have, if you want to increase use, must cool down and offer relief to riders. Climate, Temperature, ADA, safety, clean with distinctive art that IDs character areas with route or street or stop.
47. Sustainable materials are nice, but I'm more interested in using renewable energy to power the lights, fans, or electric elements in a shelter. Please have a solar component to this design.

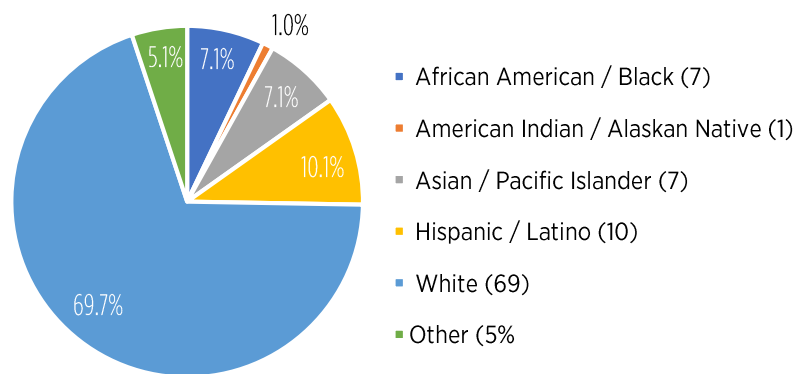


48. Made with recycled materials with the thought that they can be cleaned easily. Really homeless people sleep all over the benches and there aren't room for real people whom ride.
49. Consider the Ike's system (like Mill Ave District) at transit shelters. Provide live information on routes and other important message the City wants to convey
50. Maximize shade. And if utilities/energy/use of station allowed, a button push operated cooling station like the light rail stop in Downtown Phoenix in high traffic stops. If I could be a little more comfortable as I waited, I would use the bus more often.
51. The 'check all that apply' question is not set up to accept more than one check mark. I stopped taking the McClintock Dr. bus to down-town Tempe when the route was changed which meant I would have to transfer to arrive at my destination.
52. When I have out of town guests, they would likely use the bus. I would like for this to be an easy, clean, safe system.
53. I would like to ride the bus. Too far to walk to the bus line. I would like the Orbit to go down McKemy St. I would ride it a least 7 or 8 times a week. I am elderly and do not drive. I have to depend on Neighbor helping Neighbor or friends for rides.

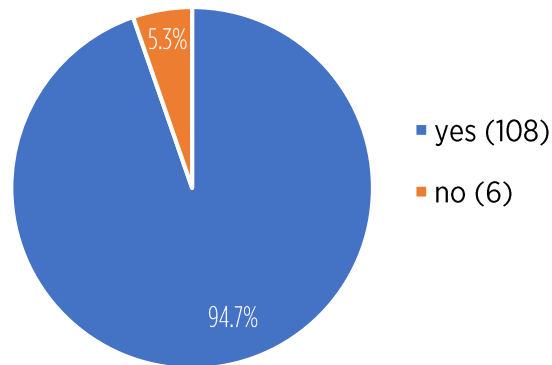
Emailed in separate from survey:

"I know I missed the dates to attend the public meetings about the design for the transit shelters, but may I say a couple of things here? 1. We live in Arizona, where it gets VERY hot, which isn't news to you! But the people who have to wait for a bus or train have to be out IN that heat, waiting for their transportation. Why can't you make them a cool place? My idea is to have a solar panel on the roof that operates a fan so at least they are getting a breeze - even if it's hot air - it's still air movement. 2. It would be nice and SAFE if a low-light came on when movement is detected when someone enters the shelter area. I am a single woman and safety is paramount! 3. As for materials, instead of using materials that are hot (metal, concrete) please help the planet and use recycled materials such as milk cartons (I've seen park benches in my home city of Portland, OR made from them!). 4. And finally, have LOTS of places to sit. No one likes to stand with small children, groceries, etc. and wait! Thank you so much!!!"

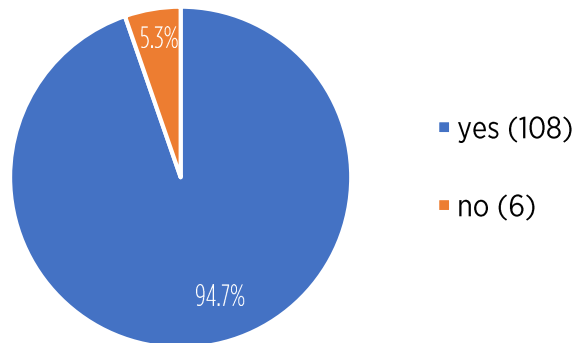
### Question 11: Race/ethnicity (103 responses)



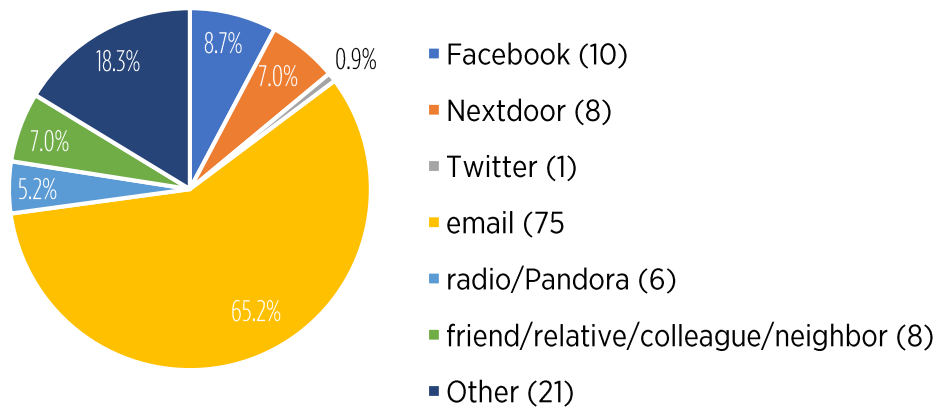
**Question 12: Do you own a smart phone? (114 responses)**



**Question 13: Do you have access to the internet at home? (114 responses)**



**Question 14: How did you find out about this project? (129 responses)**



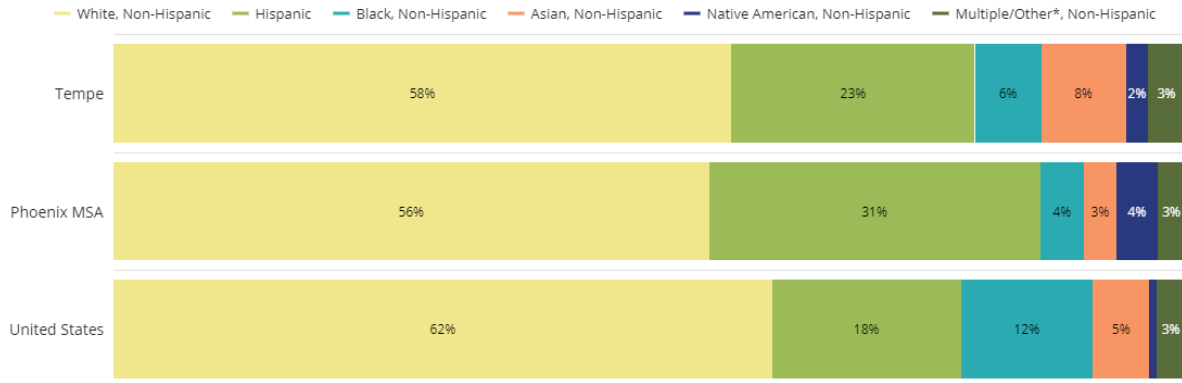
Other: surveyor /at bus stop (10), sign on bus (2), presentation at Disability Committee, mail, random search, 311, on Forum for another survey, tv, website

## IV. Demographic Information

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

### Race and Ethnicity

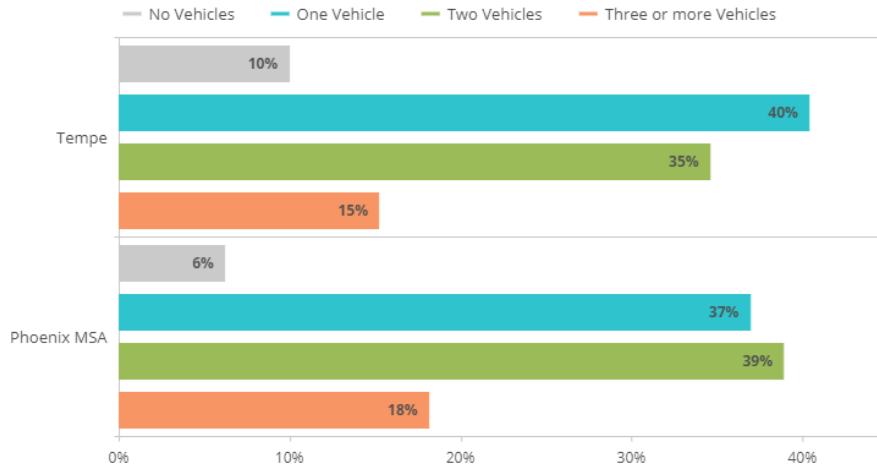
In Tempe, 42% of the population are part of a minority race or ethnic group.  
The largest percent of the population is **White (58%)**.



### Transportation in Tempe

#### Vehicles Available

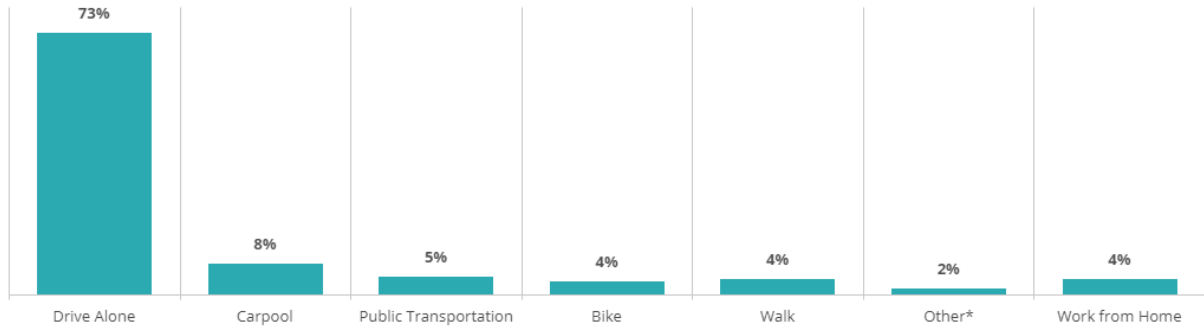
Universe: Total Occupied Housing Units





## Means of Transportation to Work

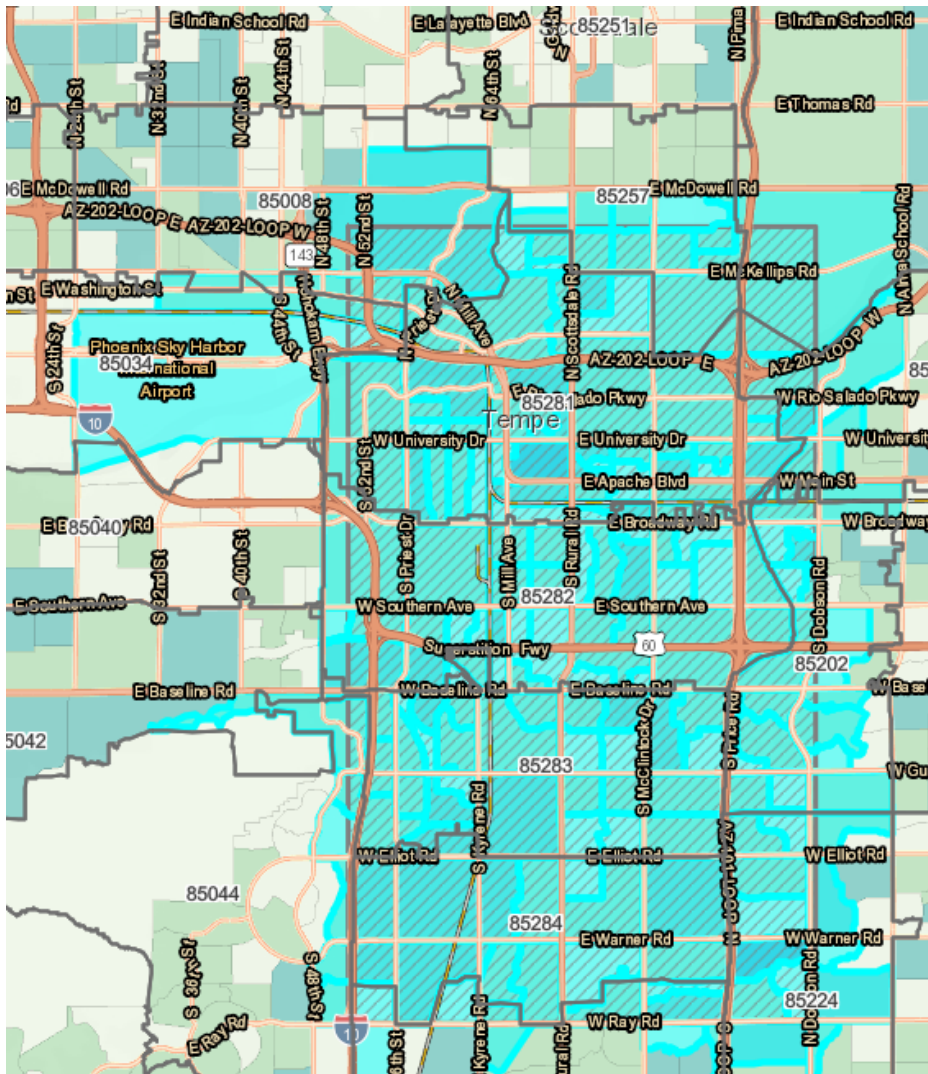
Universe: Total Workers, Age 16+



\*Other\* includes Taxicab and Motorcycle

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

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



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

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

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

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