



## THE PROJECT

The City of Tempe partnered with Valley Metro to test a new prototype transit bus called the “ Grande West Vicinity” on all Orbit routes. If successful, this bus will be a candidate for replacing some of the aging light-duty Orbit fleet. This bus can be alternatively fueled by compressed natural gas (CNG), has a larger seating capacity and is wheelchair accessible with a low floor, allowing easy access for passengers with mobility devices. It has a rear-engine design that is expected to improve air conditioning performance, improving passenger and operator comfort. The older light-duty buses are unable to operate a full day, requiring additional buses to enable mid-day refueling and several buses operate on unleaded gasoline, not a clean burning fuel. They are currently scheduled to be replaced incrementally over the next three years.

During the testing phase of this bus, Tempe and Valley Metro are analyzing maneuverability, operating range, mechanical performance and seeking feedback from passengers, residents, bus operators and service technicians. If the testing is successful, and meets the necessary Orbit operating range of approximately 250 miles between refueling, the city can potentially reduce the Orbit fleet size by up to five vehicles while maintaining current service levels.

## OUTREACH

### MEDIA

- **Social media** posts announcing test bus and encouraging people to provide input online:  
Facebook: 3113 reached;  
Nextdoor 5327 impressions
- **Press release**
- **City website** with information and survey

### MEETINGS/INFO

- City Council Friday packet

### SURVEYS

- **On-board surveys** were conducted by Valley Metro and City staff from Oct. 11- 22
- **Signs** were posted in the test vehicles encouraging riders to take the survey online

### VALLEY METRO

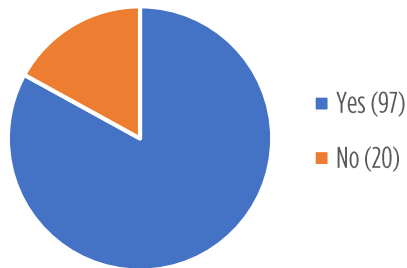
- Two **Facebook** posts with a total of 2478 reached; 468 engagements; 301 video views

## SURVEY RESULTS

One hundred and seventeen individuals responded to the survey. Not all respondents answered every question. The results are below.

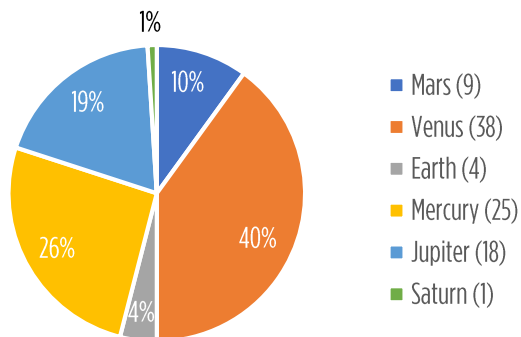
### Question 1: Does the Orbit travel along your street?

Does Orbit travel on your street?



### Question 1 a: If yes, which route?

Which route?

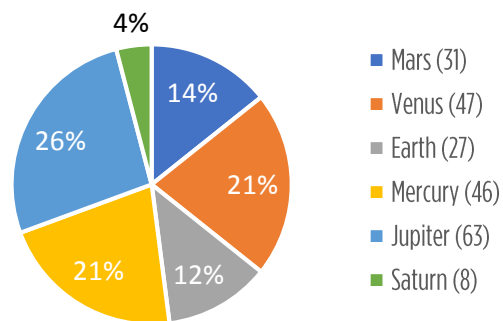


### Question 2: Do you ride the Orbit?

100% of those responding to this question (114) responded that they rode the Orbit.

### Question 2 a: If yes, which route(s)

Which Orbit(s) do you ride?



**Question 3: Have you ridden the Vicinity bus prototype?** Yes (108 ) 94%; No (7) 6%

**Question 4: If yes, please tell us what you like about it?**

1. A lot more room, A/C is much better, looks a lot nicer
2. A/C works, roomier.
3. A/C, more room.
4. Absolutely loved it. Lots of space, it can accommodate a lot of people. Very convenient
5. AC is great.
6. Accessible for disability people to get on having the wheelchair in the middle.
7. Air conditioning better, better ride, more people.
8. Awesome. Spacious.
9. Beautiful and bigger than the previous one.
10. Better seats; more comfortable
11. Big and clean.
12. Bigger. More seats.
13. Call bar down low.
14. Clean and well lit. Nice design.
15. Cold, colors, not crowded.
16. Convenient, helpful.
17. Convenient. Park at library takes to ASU.
18. Cool, comfortable, spacious.
19. Décor, looks, seats, basically everything.
20. Definitely more room. AC seems to work a lot better too.
21. Efficient for getting where you need to be.
22. Everything.
23. Everything. Design, stop buttons, sliding doors, seats.
24. Excellent - better than smaller.
25. Free.
26. Frequency, free to users, clean.
27. Gets me to where I need to go.
28. Helps people who can't walk, a/c, important to have after dark.
29. High tech, two mirrors, two doors, chairs, more walking room, better a/c, more comfortable, makes you want to get on, stop button is great.
30. I can track while calling Valley Metro call center. More seats, hence extra capacity.
31. I have nothing to say within this area
32. I like it because of the big windows.
33. I like it because there is more space and is cool and fresh.☑
34. I like it! Its big, easy to see, plenty of seats and standing space, and the design makes it more comfortable when it's crowded because of the forward facing seats.
35. I like it.
36. I like the interior of the bus. It is very nice and new. We need more. The driver area is nice.

37. I like the new seats! The space it has and the comfort of the seats is the best part I get to enjoy my ride without any problems you should replace the old ones with the new ones
38. I like the stop sign, space in bus and the sitting arrangement
39. I love it! So spacious! Feels clean and professional! More seating means I don't have to stand as often, and it is much quieter than the blue orbits!
40. I love it!! It's bigger which makes for a better riding experience. I love the A/C. I love the stop buttons. I love the seat pattern and the large windows!
41. I loved the ride and I feel that it can hold more passengers then the current busses can. Also love riding the new busses the run on mercury and Jupiter they have better AC also more room for more passengers. Also love the double doors on the bus.
42. If it's the new bus, it's great. More space. Modern. Smother Ride. Less jerking.
43. Increased capacity and smoother ride. Would love to have it as a regular bus.
44. Interior design and it's spaciousness.
45. It has a lot of room and the seat are more comfortable and there set up nice and the temperature inside is good. I prefer more of these buses instead of the old buses.
46. It is great. Seats are more comfortable than previous. Even the bus is more specious than previous. Liked a lot.
47. It is so very smooth and spacious. It feels like a REAL bus. It was so refreshing to get to my destination without being shaken to my core like the older mini buses do. The old mini buses rattle so bad you can not even carry a conversation, and air conditioning is virtually non-existent. The new bus is a vast improvement and something I can be proud to ride.
48. It looks very cool and hi tech , its very spacious .
49. It seems a lot nicer, more seats.
50. It was very nice. The bus was full, standing room only when I rode it. Even standing The wider bus gave me more elbow room than on the regular Mars shuttle.
51. It's has good ventilation and it holds a lot of people
52. It's infinitely more comfortable. I love the amphitheater like seating in the back, which allows all passengers to see forward without an obstruction. It rides far smoother on bumpy streets. The Orbit system is a testament to Tempe's dedication to community. The working air conditioning is spectacular! The old buses almost got dangerously stuffy. My students take the Orbit home, and the drivers are so kind and considerate to them, despite the rudeness many students often demonstrate. Thank you for bringing kindness and integrity to Arizona.
53. It's so clean and big.
54. It's a bigger bus and has better air conditioning than the old ones. Since it's new it looks much more refreshing to the eyes.
55. It's a lot cooler and doesn't bounce over the speed bumps. A lot more space.
56. It's been fine.
57. It's bigger and the air conditioning works.
58. It's bigger.
59. It's bigger.
60. It's bigger. It has more space.

61. It's more spacious, and speedy. It's visually appealing.
62. It's pretty cool. Feel premium and new.
63. It's quicker and free.
64. It's really nice, more space to sit. I like it.
65. Large, cleaner, drives good
66. Larger vehicle, more space for sitting and standing, two active doors, Air conditioned bus, better interiors.
67. Larger, more open, better a/c.
68. Less cramped than smaller buses.
69. Like it - reminds me of city bus.
70. Love it. Very comfortable, more space. A/C is perfect, not hot and stuffy.
71. Love the size, that the A/C actually works. There is room for so many people. The original Orbit buses are often too cramped for the amount of passengers. The AC in the original buses is terrible and it is generally hotter on the bus than outside.
72. More capacity
73. "More comfortable, better over bumps ,
74. Better seating arrangement.
75. More room for standees in the front.
76. Even better than the regular
77. Valley Metro buses
78. I hope you will get more !"
79. More comfortable, not as loud.
80. More open, curved seats.
81. More room.
82. More seating, a/c, double doors, higher capacity in general.
83. More seats, more spacious.
84. More standing room, better seats.
85. New design, a/c works well, comfortable seating.
86. Nice interior. Solid.
87. Nice.
88. Please keep this bus in Arizona
89. Really nice - love it. Comfy seats, beautiful, spacious, clean.
90. Roomy.
91. Seating, more open.
92. Seating. Easier to get on and off
93. Seats comfy. Looks bigger.
94. Seats facing forward, more spacious.
95. Sits lower to the ground.
96. Spacious bus which can fit more people. The older bus fills up a lot too quickly. Seems cleaner as well.
97. Spacious.
98. Spacious. A/C really good.

99. Stop buttons, A/C, windows are big, not leaking like old buses.
100. Super nice, seats are more comfortable. Buttons are a nice touch rather than the pull string. Back seating is a lot better and more convenient to sit in compared to the two rows.
101. Temperature, seats.
102. The a/c works great. Drivers are nice.
103. The air conditioning works better. More passengers can ride.
104. The bus looks nice.
105. The bus was very comfortable and the driver was very nice! I feel that has more space and this is very helpful for rush hours in the morning! And I love the two doors!
106. The new Orbit has a lot more space than the old blue orbits and I like it. It's also convenient for holding more passengers.
107. The new Vicinity bus prototype is more modern and comfortable than the old buses. They are more spacious, better air-conditioned, and seat more people. Overall, they are a major improvement from the blue orbit buses.
108. The old one with it's cloth seats. The new one is excellent too.
109. The seating arrangement is much more comfortable than the majority of current Orbit buses, and the air conditioning cools the bus interior more evenly.
110. The size is good. More space.
111. Very roomy and comfortable. Lots of seat options.
112. Very very nice.

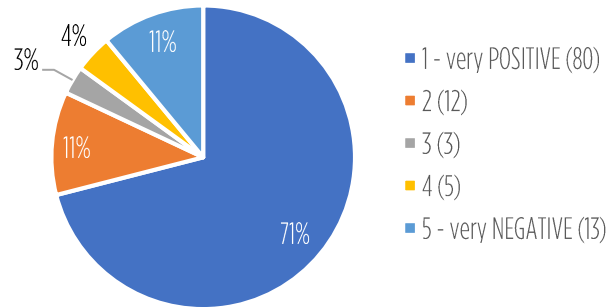
**Question 5 : If yes, please tell us what you dislike about it?**

1. Ac is too high/cold (3)
2. All good.
3. Being passed up when not full - gets on @ TTC for this reason.
4. Drivers need driving and safety training. Some drivers are not paying attention, resulting in slamming on the brakes. It is usually a jarring, rough ride.
5. Drivers speeding over speed bumps.
6. Even with more seating, things do get cramped.
7. Having the back of the bus lower for accessible for disabled people.
8. Horribly uncomfortable seats
9. I am not excited with the new test bus at all. The "stop" button is very inconvenient; If you are in a crowd of individuals, there is not anyway to get to the button unless someone chooses to assist you. 2. On the one bus, no one knew about the button, so a person missed their stop. 3. Having limited seating without having to use the second set of stairs is not helpful to the elderly or to an individual like myself with knee problems. 4. And, what is the actual point of having any of your buses that kneel when the bus drive does not want to lower the bus. It is bad enough that many of your drivers do not even go to the curb meaning it is even a larger drop from the bus to the street.
10. Rumor has it, the plan is to charge for the buses rather than having the free Orbit service. "
11. I don't see anything bad about this new Orbit.
12. I haven't been on it long enough to know. Seats could be longer (I'm tall).
13. I wasn't sure how to ring for a stop on the new bus. Didn't see anything to pull to stop.

14. It helps a lot of people, so I don't have anything that I don't like about it.
15. It was perfect!
16. Less seats than really big one. Seats seem like they might get dirty.
17. Love it, love the space
18. Love it.
19. Miss the blue coloring.
20. More grab bars, holds needed
21. Need more buses due to ASU when busy. Need grocery store on route.
22. Needs for bus pulls/stop buttons.
23. No dislikes
24. No issues (2)
25. No issues, except for sometimes passengers.
26. No strings to pull to stop. Haven't seen disabled.
27. Not enough standing room.
28. Not so far.
29. Nothing (18 responses)
30. Seems to be a large open floor which could be filled with additional seating ... wheelchair ramps have an entry point at the front of the bus which is seemingly too narrow for those using mobile assisted chairs or motorized chairs etc
31. Small first step, more visible stop buttons.
32. Sometimes not big enough.
33. Sometimes the driver can be rude.
34. Steps
35. Stop button difficult to access for aisle passengers, much noisy at the rear end as compared to blue buses
36. That this type of bus has not replaced most if not all of the current Orbit fleet of buses.
37. the head room at the very rear of the bus is not great.
38. The stop buttons are far apart and not clearly visible
39. The wire we had to pull for notifying the driver to stop was easier for passengers.
40. There aren't enough stop buttons within the reach of passengers. The seats are a little stiff.
41. This is a larger vehicle going through the neighborhood.
42. Will need to get used to noise - might be A/C.

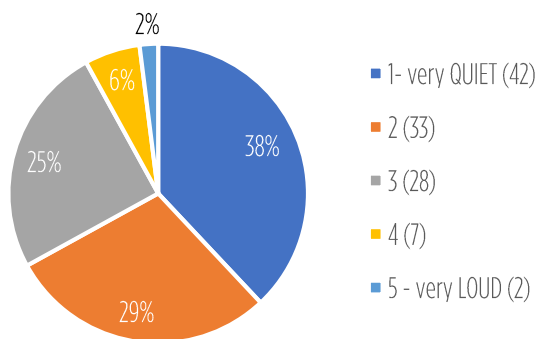
**Question 6: On a scale of 1 to 5, with 1 being very positive and 5 being very negative, please indicate your overall experience as a passenger riding the Vicinity test bus.**

Overall experience as a passenger



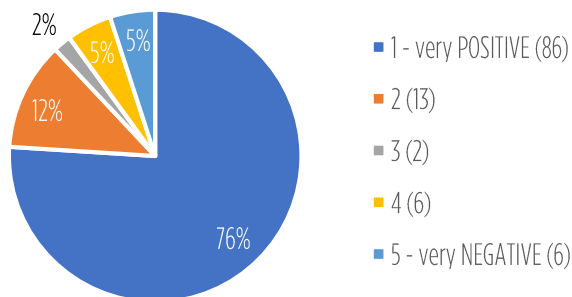
**Question 7: On a scale of 1 to 5 with 1 being very quiet and 5 being very loud, please tell us your perception of the noise made by the Vicinity test bus.**

Perception of noise



**Question 8: On a scale of 1 to 5 with 1 being very positive and 5 being very negative, please indicate your overall experience of having the Vicinity test bus in our community.**

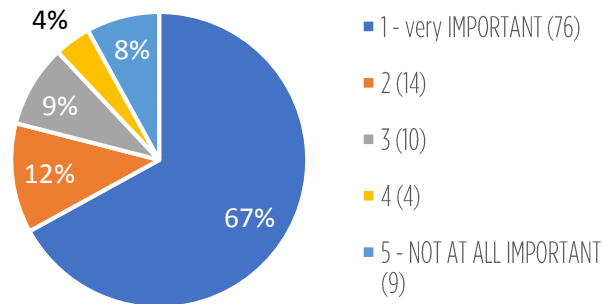
Experience of having "Vicinity" bus in community





**Question 9: On a scale of 1 to 5 with 1 being very important and 5 being not important at all, please indicate how important it is to add seating and space on the Orbit buses.**

Importance of adding seating



**Question 10: Additional feedback/comments.**

1. Add more newer buses than smaller, because bus gets full.
2. Add more of these buses rather than smaller buses.
3. Air conditioning goes out all the time no matter what bus. Don't like little blue buses.
4. ASU student.
5. ASU student. Bus @ 9am often full. Need big buses at that time.
6. Bike rider also.
7. Capacity is important at rush hour.
8. I believe using the orbit buses are very helpful, the people are friendly and it is very convenient to get one to places.
9. I like it!
10. I love the bus and think that we need more.
11. I want to say many of your bus drivers are a pleasure to ride with-I have always had a good experience on the Jupiter South -the first two leaving. Venus has friendly bus drivers--it just is there is one or two bus drivers in the first one in the morning going to transportation center that run late. For me, it does not matter because the Jupiter leaves a bit later than the Mars South but on the Venus there are students who when missing the Mars South are late for school. Since I have knee issues, my biggest complaint is either the Orbit does not go near the curb for either pick up or drop off. And, the kneeling bus not using this aspect of the bus. I do not think a person should need to ask.
12. Info sign looks like stop. Rules need be clear about 50 feet from intersection at Daley Park. Please call regarding stop issue 623-229-9676. Driver has issue.
13. Interested to see how it works in summer.
14. It would be convenient to have these buses on weekends.
15. It's really important to add more seats on Mars! Because it travels across the neighborhood where students live.
16. Like stop buttons. Like scooters/bikes in conjunction w/ Orbit.
17. Long time rider - grateful for service.

18. Love the spacious space and it is nice and cool.
19. Loved it.
20. Many ASU students take bus. With smaller ones sometimes there wasn't enough room for more.
21. "More forward facing seats which is more enjoyable"
22. Need to connect to Mesa. Take it to connect to VA. Need route on Apache going to Mesa. Would like to get to library & Marketplace faster - Express.
23. New buses are much better than the old ones overall for passengers
24. No bigger than this bus please.
25. Noise reduction required on the interior although it is not so noisy from outside.
26. Only that when Venus has a detour there might be a little notice or posted.
27. Overfull.
28. Peak 8-9 and 12-1. No Car. Not enough stop buttons.
29. Please get rid of the Mini Buses
30. Please have the Vicinity type replace all the Orbit buses as soon as possible!
31. Really improved. Driver got kids under control.
32. Seating in here is fine.
33. Seating is important so I don't have to wait for 2nd bus.
34. Thank you for the updated ones. I hope you update them all.
35. The extra seating is necessary during rush hour, but at other times the original and small buses work fine (except the lack of good air conditioning)
36. The Orbit busses are a great and important public transportation service in Tempe, and I am glad the service is seeing investments and improvements.
37. The small blue orbit buses are nothing compared to these newer bigger models! I only hope that they are more ecologically friendly.
38. This is an amazing change.
39. This program is so important for Tempe. I am thrilled to see such tireless dedication to free public transit options. It helps those who have little, and encourages us to utilize public transit in order to reduce our growing traffic problem.
40. Use smaller buses when it's not as busy
41. \*Passenger got off before question 8 (2 respondents)

### **Comments received on City Facebook Post:**

#### **On post:**

1. Not sure many folks are too interested in noisy heavy duty vehicles driving around quiet neighborhoods at all hours. Bad move Tempe! What is the cost comparison, taking into account wear and tear on the lighter duty roadways? I can hear the screeching heavy duty drum brakes now!
2. Yeah, me too.
3. I wish there was an optional "tip" collection... where since there is not a Fare we can just give the bus rout some pocket change in appreciation; or not.
4. That's going to make it down 8th and make lefts and rights ???

5. I really like the 2017 version best.
6. What happens to the decommissioned original orbit bus light duty? I'd like to turn one into a Rv.
7. They get sold and you can buy them to turn into an RV. Tucson just got one of our articulated buses from Phoenix, and LA tour companies bought a few of old buses to turn into hop on hop off tour buses.
8. The new version is only 2 ft less than the 2017 version, has the same amount of capacity but cuts the bike positions to 2!?!?! Coming from an avid transit rider, I like the 2017 ones due to the better A/C units and they have 3 bike racks! They aren't that loud and even look nice...
9. Why is this city SO far behind in the times? Can yall PLEASE look into getting ELECTRIC busses?!? The City of Greenville SC has them, Clemson University has them, Louisiana has them now. Im pretty sure there are govt grants to help with cost. Reach out to the cities that have them. Quit dumping money needlessly.
10. MADE IN THE USA in SC, PROTERRA electric transit buses
11. Electric buses aren't proven enough yet. I wouldn't put any trust in them
12. Also hybrids haven't proven much better either
13. City of Greenville has had them for almost 10yrs. The pollution in itself from these busses versus diesel/gas is much less. Not sure what needs to be "proven" to you.
14. Go Tempe

**On comparison photo:**

1. Is there any comparison of noise level?
2. Why is this city SO far behind in the times? Can yall PLEASE look into getting ELECTRIC busses?!? The City of Greenville SC has them, Clemson University has them, Louisiana has them now. Im pretty sure there is govt grants to help with cost. Reach out to the cities that have them. Quit dumping money needlessly. MADE IN THE USA in SC, PROTERRA electric transit buses

**Comments received on Nextdoor Post:**

1. Yeah, a longer bus to block my driveway.
2. Awesome! It looks like it makes better use of space. The Mercury is always full between the transit center and McClintock due to the college students. Not complaining but I am excited to see that we are getting bigger buses to replace the smaller blue ones. The new ones they have so far are great, but do not make the best seating space usage.... Woo hoo!!!!
3. In all of my non-scientific observations I have rarely observed a need for more than a 5 passenger minivan for an orbit, outside of taking high schoolers to school in the morning...
4. Can we remove the orbit bus from the optimist park route? First of all, I rarely see anyone riding it, so why do we need an even bigger bus? Do you keep stats on use for every route? I would suggest assessing usage info before doing this. Secondly, a majority of these orbit drivers speed in front of my house, where I have small children playing. And yes, we have called to complain at every opportunity we get. I don't understand why a mass, public transportation system has to go through a small neighborhood? This all seems very unsafe to me. How do we get a petition together to remove this route all together?

5. Personally I glad they exist. I use them all the time. Sometimes I will take one of my little ones to the park on an Orbit. I go to Mill Ave and the library on the Orbit. High school kids are not the only ones who use it. Just because the whole city doesn't use it, does t mean we need to get rid of it. I agree that it should not speed in neighborhoods, but it could just be a perception issue. Especially if you don't like them anyway.
6. I have not seen the new buses yet, but will hopefully get to try one out during this trial period. I would also like to make the following replies to other posts: Hi Lawrence - I think your observation may be area specific. As someone who uses the Mars Orbit very often, this route is very highly utilized, at almost all times of day - not just for high school students getting to and from McClintock High for example. Some sections of the route are definitely more high volume than others, but I feel that the overall volumes per run of a single route loop are not insignificant. Hi Shauna - I think all the orbit drivers keep a record of their passenger numbers, so someone somewhere will have the usage figures. I am not familiar with the route that goes though your area, but I can say from the Mars route, there are some drivers who are better about speed limits than others. As for why the buses go through the neighborhoods - they are meant to be neighborhood circulators - helping get people to and from locations that are not easily covered by the bigger buses on the major roads. I don't know how the routes are planned, but perhaps getting some support for changing the route in your area could be achievable.
7. Thanks! Greatly needed on some of the more well-used routes!
8. I'm glad they meander thru neighborhoods. Wish there was more routes!
9. Mine goes to the Escalante community center and park which is important as long as the drivers do not stop to pick up riders along the way hence blocking driveways and our road, Lola Lane which is a single lane road.
10. Awesome, I love the orbits. Use them all the time. One of my favorite features about Tempe.
11. I totally agree with Shauna about speeding. Some of the drivers are going 40+ in a 25 zone on country club between southern & alameda. The drivers know when the motorcycle police with radar are out on that street then strictly obey the limit. As soon as the officer leaves the bus driver speeds through the neighborhood.
12. The Orbits have GPS on them. If there is a problem with speed, you just write down the number and call valley metro.
13. I think you would be surprised how fast 25 mph is especially with a larger vehicle on a side street. It appears faster than it is. I did a test with a friend on my two lane street in my large truck. I couldn't even go the full 25 thinking it was too fast. My friend was yelling at passing cars for going too fast which is why we did the test. We were both surprised at the results. I am not saying the drivers aren't exceeding the speed limit but they may not be.
14. Was going to say the same thing. 25 seems faster than you think.
15. The orbit is great. Our high school kids can't get to and from school without it as they have no school bus since we are not far enough away from the school. Even though for middle school we were. Dont stop this city of tempe. Thank you.
16. Love the Orbit! I'm from NYC and don't drive. I take the Valley Metro buses, light rail and use the Orbit shuttles to get around Tempe. All of those combined, it's not really too bad traveling since I live and work in Tempe. I don't know what buses some of you have seen but I see them and they're pretty decently packed all the time. I live at the stop across from the Tempe Public Library there's always so many students and young people riding that bus. It's good for kids and young people to have the independence to get around to places they hang out with friends or work without the responsibility of driving and parking a car.