

Dear Mayor and Council,

It was my honor to facilitate the South Central Extension Meetings and is my privilege to share this summary report of the South Central Light Rail Extension Community Conversations.

This report will cover the following:

- The initial scope of work as requested by Council
- The approach we took to engaging the community
- A general summary of observations
- An appendix that lists all of the questions that were asked and all of the answers that were given as part of this public outreach process
- An addendum with additional (outside of scope) observations and recommendations

Above all else, it was exceedingly clear that the South Phoenix community is an engaged, active, and caring community truly interested in a dialogue about how to best meet the needs of the residents both today and into the future.

Very Respectfully,



Eric Bailey  
President  
Bailey Strategic Innovation Group

Independent Third Party Facilitator  
South Central Light Rail Extension Community Conversations

## **Scope of Work as Requested by Council**

Eric Bailey, President of Bailey Strategic Innovation Group, will facilitate public discussion and input at six public meetings regarding the South Central Light Rail Extension (SCE) project, implementing the Phoenix City Council's direction to "conduct a full business and community engagement process using an independent facilitator to specifically discuss the full impacts, costs and benefits of the 4-lane design."

Mr. Bailey will meet with Valley Metro, City of Phoenix and associated contractors as needed in advance of public meetings to advise on effective outreach and on meeting content, format, structure, layout, presentations, and other components to optimize results.

The facilitation should ensure the attendees are provided the opportunity to be fully informed on the SCE background and lane analysis costs/benefits/impacts, as well as the opportunity to provide meaningful input on the project lane analysis issue. Mr. Bailey will provide a report on overall findings based on the public input gathered at the public meetings.

## **Additional Output**

### Public Posting of Community Questions

After the second meeting, we (the project team) realized that over 100 cumulative questions and comments had been collected. Lisa S. of Valley Metro suggested that we place the questions and answers on the project website in addition to the appendix of this report. Beginning September 10, 2018, the list was published to the project website.

### Community observations about public meetings

During face-to-face conversations with several community members, a few recurring themes surfaced about the physical set up of the meetings.

- Police vehicles at and near the entrance to the meeting room may have dissuaded certain citizens from even approaching the building, let alone entering and sharing their questions and feedback.
- There were a couple of meetings that were not official meetings by The City or Valley Metro. Several conversations referenced information from these meetings that was either outdated or incorrect. The perception was that we (the project team) had lied or changed answers.

## Schedule and Location of Meetings

Thursday, August 30	6:00 pm	Audubon Center
Tuesday, September 4	6:00 pm	Cesar Chavez Community School
Thursday, September 6	6:00 pm	Lowell Elementary School
Wednesday, September 12	3:30 pm	South Mountain Community Center
Thursday, September 13	6:00 pm	South Mountain Community Center
Saturday, September 15	10:00 am	South Mountain Community Center

## Project Website

[www.ValleyMetro.org/southcentral](http://www.ValleyMetro.org/southcentral) or [www.valleymetro.org/project/south-central-extension](http://www.valleymetro.org/project/south-central-extension)

## **Our Approach to Community Conversations**

Traditional approaches to public meetings often lack true dialogue. With a central microphone, an audience, and a body of listeners congregated at a table, the conversation is generally one-sided. There are benefits and drawbacks to this approach. The key benefit is that it gives the person with the microphone the opportunity to share their opinion and get their questions answered. The key drawback to this approach is that it can make people feel that their questions are not as important as the questions raised by others.

The infinite variability of humanity suggests that each citizen has a unique perspective and therefore has the potential to bring up different issues and questions. Having a central microphone reduces the opportunity for everyone in the room to feel that their unique questions are as important as others who may appear to have more passion, conviction, or confidence. This is evidenced by the number of questions/comments that are asked in public forums compared to the number of people who attend. Additionally, this forum does not take into account that some citizens do not feel comfortable speaking in front of a group. The open microphone concept makes it difficult, often prohibitively difficult, for such people to get their questions answered.

The approach that we took for this community conversation was focused on the desired result: Extraordinary Dialogue while maintaining transparency. “Dialogue” meaning multi-directional communication; “Extraordinary” meaning incorporating as many unique perspectives as possible; “Transparency” meaning everyone has access to every question asked as well as the answers. These meetings were designed to have many smaller conversations rather than a few broadly shared opinions.

As with any approach, there are benefits and drawbacks. This method did not allow folks to make their opinion known broadly, to persuade or convince the people around the room. This method did not allow for public debate. Most importantly, this approach was intentionally different, and as we know, change can lead to unmet expectations, which can in turn lead to frustration or upset. I made an attempt to personally dialogue with each person who expressed frustration about not having an open microphone so that their opinions would be captured as well.

## **Principles of Human Understanding™**

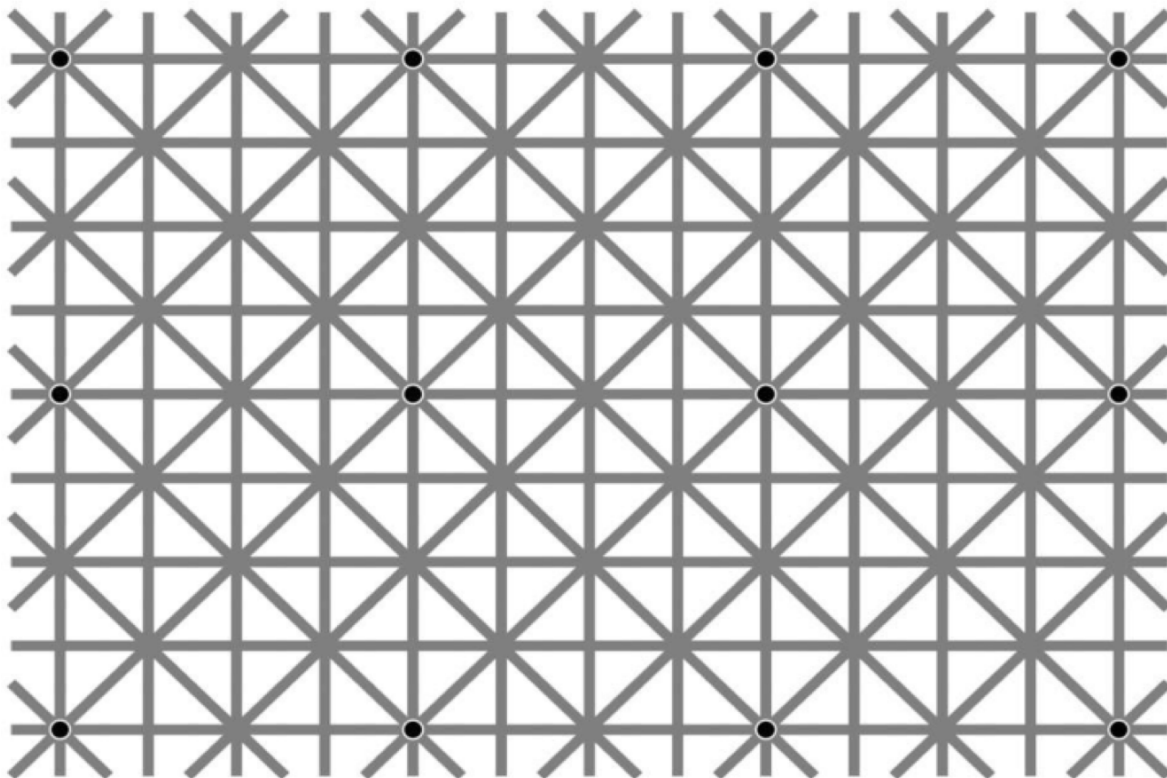
In every organization I work with, I introduce some (if not all) of my Principles of Human Understanding. These principles are rooted in psychology and neuroscience and help explain the universal barriers that adults come across when trying to communicate. Over my career, I have seen that when people are exposed to these principles prior to engaging in discussion, the conversations are more calm, more productive, and people spend more time exploring the merit of ideas that are not their own.

## The Illusion of Certainty

The first principle that I shared is the “Illusion of Certainty.” This is essentially our brain’s propensity to project certainty even if we are truly uncertain. This manifests itself in the unyielding belief that the way we see something is the way it truly is; that our idea or opinion is the one, true, right idea. When people propose ideas contrary to ours, we often feel defensive and possibly argumentative.

## Perception and Reality

The second principle that I shared is “Perception is More Important Than Reality.” We want to believe that we perceive the world as it actually is, but that is not always true. Our past experiences, attitudes, emotions, brain chemistry, and expectations are a few of the things that can influence how we perceive the world. Additionally, our perceptions are susceptible to blind spots, or gaps in perception, where we are unable to see something as it actually is. An example of this is the following image, which has twelve black circles at the intersections of the lines.



As we move our eyes around the image, we can count all twelve of them. However, we are incapable of seeing (perceiving) all twelve circles at the same time. Most of us can only see a few at a time.

The key in all of this is that all of our behaviors, the choices we make, are based on our perceptions, not necessarily reality. As we communicate with other people, it is important to understand that this is true for them as well. They are not going to react based on what you said, they are going to react based on what THEY HEARD you say. They are not going to react based on what you did, they are going to react based on what THEY FELT you did. This concept is foundational to communication, especially when conversations are of a particularly contentious nature, or there is a difference of opinion. Understanding that we can all have different perceptions of the same information is a critical foundation for meaningful dialogue.

## **Meeting Structure / Agenda**

1. Introduction to the meeting format and why this meeting will “feel different”
2. Answer top three ‘out of scope questions’
  - a. “Why Central Avenue?”
  - b. “Why Light Rail?”
  - c. “Can the Funds Be Used For Other Projects?”
3. Debunk the perception that a 4 lane configuration is not possible
4. Share logistical information about 2 and 4 lanes
5. Discuss the distinction between purpose and process to change debate into dialogue
6. Discuss the distinction between ‘traffic flow’ and ‘street capacity’
7. Share simulation information on traffic flow in the 2 and 4 lane configurations
8. Open the stations and allow attendees to ask questions of subject matter experts

## Quantitative Results

An important element of the meetings is the sheer number of questions that were answered. These questions (appendix A) cover a wide range of topics. Over the course of the six meetings, over 450 questions were asked and answered! This unprecedented result is a wonderful indication that the South Central Phoenix community has a desire to engage in the process.

Here is a breakdown of the numbers from the meetings:

- 6 Meetings at 4 locations
- 4 Stations for questions and comments
  - Traffic Flow
  - Community Enhancements
  - Project History
  - Jobs and Business Assistance
- 402 Individual Citizens Attended
  - This number takes into account that some citizens attended multiple meetings
  - Some citizens decided not to sign in
- 455 questions asked and answered at the stations
- 125 questions and comments were written down on comment cards and handed in at the meetings
- 6 questions and comments were written down on comment cards and were mailed or emailed in
- 251 questions and comments were typed on the online comment section of the project website

## Comment Cards

In addition to soliciting questions and comments from the community, there was an opportunity for citizens to share which of the following elements were most important to them. The options:

- |                       |                               |
|-----------------------|-------------------------------|
| ● Bike Lanes          | ● Improved Landscaping        |
| ● Bus Pullout         | ● Job Opportunities           |
| ● Business Assistance | ● Maintain Traffic Flow       |
| ● Enhanced Sidewalks  | ● Pedestrian Shade            |
| ● Four Lanes          | ● Turn Lanes at Intersections |

Of these options, 42% of respondents selected Bike Lanes, 39% selected Pedestrian Shade, 37% selected Turn Lanes at Intersections, 35% selected Maintain Traffic Flow, 31% selected Bus Pullouts, 29% selected Enhanced Sidewalks, 28% selected Improved Landscaping, 27% selected Four Lanes, 21% selected Job Opportunities, 17% selected Business Assistance.

## **General Observations / The Pulse of the Community**

As with any project of this nature, it is expected that there will be many varying perspectives. The South Central Extension, however, brought out dozens of personal perspectives and anecdotes that were (rightly or wrongly) projected across the entire community. It is important to understand that the following observations are based on themes, rather than just a single conversation.

One recurring theme that I encountered is that many citizens in the South Central Phoenix community feel as if their voices have not been heard in major municipal decisions. Some people feel that there is little to no outreach with the community when big changes happen. This perception can be due to a number of reasons. Some of which include a realistic dearth of community outreach, sparse invitation/attendance at community meetings, poor communication when community meetings have taken place.

The South Central Phoenix community is wonderfully engaged, and asked many powerful questions. The key takeaway is that there was a real hunger for information in the community. One common theme that I heard throughout the meetings is that there is a lot of rhetoric out there, and the people just wanted to identify, to the best of their ability, what is really going on, and how it will impact their lives.

These meetings began on Thursday August 30th. Several people referenced meetings prior to that date where “you” (City of Phoenix and/or Valley Metro) provided different information than what “you” (Eric Bailey) presented today. There was a common theme that there was quite a bit of either outdated or erroneous information in the community. Many people used these meetings to gain clarity, but it would be reasonable to assume that citizens who did not come may be operating under outdated or false information.

The overall tone of the meetings was wonderful. Outside of a few interruptions, I believe that we accomplished what we set out to accomplish, which was sharing information and giving as many people as possible the opportunity to engage in dialogue.

## **Conclusions (In Scope)**

Based on the meeting output (the questions, the information, hours of observation, and dozens of one-on-one conversations), the input indicates that the community does not feel good about losing lanes on Central Ave but sees the overall value of the 2 lane configuration when compared to the 4 lane configuration.

If the question is 2 lanes vs. 4 lanes, based on the functional use of the space, the answer seems to be 2 lanes. After the community conversations however, there might be additional questions that we could be asking. These questions are outlined as ‘themes’ in the Addendum.

**Addendum**  
**Out of Scope Observations and Opportunities**

## **Addendum: Out of Scope Observations and Opportunities**

I was asked to get the pulse of the community around the South Central Extension, specifically around 2 lanes and 4 lanes. As I was having conversations with folks from around the community, I identified there are several large conversations outside of the scope of this meeting, that are happening in the community. I think it is imperative that the City of Phoenix is at the least a part of these conversations, and at most, organizing and facilitating these conversations.

Although these additional observations are outside of the initial scope requested by Council, they are an important reflection of the complete multi-dimensional feedback we received throughout the course of this six-part community conversation.

In addition to the conversation about 2 lanes and 4 lanes, there was a predominant and critical theme that emerged from residents: They do not feel their concerns about possible displacement due to the construction and subsequent presence of light rail are being heard, and they want to engage in that conversation.

There is a significant amount of frustration as well as fear in the community over the impacts of the light rail extension. There are concerns over what will happen to their homes, their rents/leases, their livelihoods, the future of their families and the future of the community. Many feel they will be forced to leave their homes or close their businesses either directly or indirectly because of Light Rail. The citizens do not want to leave their homes, and some feel they do not have an option to leave their homes, and they are concerned about what will happen when staying in their homes is no longer a viable option. Business owners are concerned about their financial well-being and are concerned about a lack of options for relocation. This theme covers gentrification, which is an important conversation that many citizens want to have.

Another theme that coursed through many of the conversations is the perceived lack of attention the South Central Phoenix community has received in the areas of missing sidewalks, street maintenance, education, and crime. Many citizens are concerned that The City is ignoring the request to solve certain problems and moving to solve the Light Rail problem instead.

One final theme that ran across nearly every meeting were questions regarding the cost of the project. The finer financial details of a project like this are hard to nail down, especially before the engineering is finalized. There were citizens who did not believe that the financial outlay of a project like this would ultimately be worth it. Additionally, many citizens asked whether or not the money could be repurposed to address outstanding infrastructure needs in South Phoenix. While we did address this in the presentation, it remains to be a question in the community.

All of these themes are overlaid by the perception that “Nobody is listening.” Looking back through history, this perception has been ever present in the South Central Phoenix community.

Often times, these large, seemingly unanswerable questions are simply not addressed. But it doesn't have to be that way. These meetings are a powerful indication that there is a hunger for community conversations of this nature.

## Recommendation

I do not operate under the delusion that any of these themes can be resolved quickly, or by simply having a conversation. I do, however, believe that in having conversations, we can restore dignity to the topics and to the citizens that care about them. I recommend Council considers convening a Conversation Task Force where citizens are invited from around the community to come and share their thoughts, opinions, fears, and questions about these important topics. The intention of these conversations would NOT be to solve any given problem, but rather to bring the issues to light. (Granted, it is possible that solutions and ideas do come out of the forums.) The City cannot be wholly responsible for the actions of private businesses and citizens, but the City is responsible for listening to and caring for its people.

Listening leads to understanding. Understanding leads to positive change.

**Appendix A**  
**Questions and Comments from Flip Charts / Community Meetings**

## Questions & Answers/Comments from Community Meeting's Flip Charts

As part of the community meetings, presentation boards and flip charts were stationed around the meeting space. City of Phoenix, Valley Metro, and design and consultant staffs were on hand at each meeting to answer as many questions as possible in person with the goal to answer as many questions as possible during the meeting, whether presented to staff as group or individual questions. During the six community meetings, held on August 30<sup>th</sup>, September 4<sup>th</sup>, 6<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup>, and 15<sup>th</sup>, 455 questions and comments were received. The questions and answers are organized by categories in alphabetical order. The questions have been answered and affirmed as accurate by the subject matter experts.

### Questions Related to the Alignment

Q: Why not 24<sup>th</sup> Street for light rail? (8/30/18)

Q: Why can't it be down 24<sup>th</sup> Street? (9/4/18)

A: Compared to 24<sup>th</sup> Street, Central Avenue will provide light rail access to more residents and more jobs, and has more existing bus ridership. As seen in the table below, the Central Avenue corridor has approximately 2X the residents, 2X the jobs, and 4X existing bus ridership.

Corridor	Totals within 1/2 Mile of Corridor		
	Population <sup>1</sup>	Employment <sup>2</sup>	Average Weekday Ridership <sup>3</sup>
24th Street	13,361	17,126	718
Central Avenue	26,020	38,655	2,771

<sup>1</sup> American Community Survey 2016 data

<sup>2</sup> MAG 2015 data

<sup>3</sup> Valley Metro April 2018 data. Includes all North/South routes within 1/2 mile of corridor.

Q: Was Central Avenue picked because its 5.5-miles to connect with the existing light rail on Jefferson Street instead of other roads? (9/6/18)

A: Central Avenue was selected over other roadways because of its close proximity to a combination of businesses, schools, and residents. It also provides a direct connection to other regional transit services including the existing light rail line and the Central Station bus transfer center at Central Avenue and Van Buren Street where light rail passengers can transfer to buses that travel throughout the region. All of the roadways evaluated through the alternatives analysis are provided in the Locally Preferred Alternative Report available on Valley Metro's website:

<https://www.valleymetro.org/sites/default/files/uploads/event-resources/southcentral-locallypreferredalternativereport.pdf>

Q: Were we limited to 7<sup>th</sup> Avenue and 7<sup>th</sup> Street for alternatives? (8/30/18)

A: No. The alternatives analysis, which was completed in 2014, studied multiple roadways that could connect downtown Phoenix and south Phoenix with improved transit service. The analysis included 11 different combinations of segments from Central Avenue, 1<sup>st</sup> Avenue, 7<sup>th</sup> Avenue, and 7<sup>th</sup> Street. All of the roadways evaluated through the alternatives analysis are provided in the Locally Preferred Alternative Report available on Valley Metro's website:

<https://www.valleymetro.org/sites/default/files/uploads/event-resources/southcentral-locallypreferredalternativereport.pdf>

Q: Why can't it be built 3-miles at a time like elsewhere, such as north of Washington Street? (9/4/18)

A: Valley Metro constructed the initial 20-mile light rail line as single project and has since constructed two 3-mile extensions and is currently constructing a 2-mile segment in Mesa. The South Central light rail extension is being constructed as a single 5.5-mile project based on the following reasons:

Connects the neighborhoods between Baseline Road and downtown Phoenix at the same time.

Allows extension to be competitive for federal grant funding; a 2-mile or 3-mile segment would be less competitive based on federal funding criteria.

Offers cost efficiencies; splitting it into two or more phases would cost more in the long-run and result in multiple construction projects, over time, in the same areas.

Q: Will the system operate in a north, south, east and west fashion? (9/6/18)

Q: How does the system operate now that there will be two lines? (9/15/18)

A: When the South Central light rail extension opens, one route will run north and south from Baseline Road to 19<sup>th</sup> Avenue and Dunlap and eventually to Metrocenter Mall, when the Northwest Phase II Extension is open. A second route will run east and west from Main Street and Gilbert Road in Mesa to downtown Phoenix and eventually to the State Capitol, when the Capitol/I-10 West Phase I Extension is open.

Q: Where do the two lines come together? (8/30/18)

A: The north-south light rail line and east-west light rail line will come together in downtown Phoenix at Central Avenue and Jefferson Street.

Q: What will the transfer station look like from South Phoenix to Sky Harbor Airport? (9/6/18)

A: In the future, light rail passengers traveling from south Phoenix to Sky Harbor airport will be able to transfer at Central Avenue and Jefferson Street and head east to Valley Metro's 44<sup>th</sup> Street and Washington Street light rail station where they can ride the Sky Harbor Sky Train into the airport. The downtown light rail transfer will be made possible by the construction of two new light rail platforms. One station will be located on Central Avenue on the north side of Jefferson Street and the other will be located on Jefferson Street on the west side of Central Avenue.

Q: Will the intersection downtown be a timed transfer? (9/6/18)

A: Yes. The light service will be scheduled to balance the amount of time passengers will wait to transfer between light rail lines.

Q: How many park-and-rides will be built? (9/6/18)

Q: How many park-and-rides will be built? (8/30/18)

Q: Any plans for park-and-ride lots? (9/13/18)

A: Two general park-and-ride locations, one near Baseline Road and another near Broadway Road were identified during the environmental assessment phase. The need for and specific location of both park-and-rides is continuing to be evaluated.

Q: Why can't the design be reworked for 4-lane? (8/30/18)

Q: Why can't the light rail go through on the 4-lane design? (9/12/18)

A: Light rail on Central Avenue can physically be constructed with 4-lanes. However, the 2-lane design was selected for several reasons including the ability to avoid fully or partially demolishing up to 60 buildings along Central Avenue. Using the same "foot print" as the 2-lane design, 4 lanes will fit, but there are differences. The 4-lane would have less space for shade and landscaping, it would not include dedicated bike lanes, speed limits would be reduced from 35 miles per hour to 30 miles per hour on Central Avenue for cars, delivery trucks, and light rail, and at 13 of the 17 signalized collector and neighborhood streets, left turn lanes would be shared with through auto traffic. Estimated travel time for automobiles on Central Avenue would be longer for the 4-lane concept than the 2-lane design.

Q: Why is there only a 2-lane and 4-lane design? Can a new design be developed? (9/13/18)

A: During the evaluation of alternatives in 2012 and 2013 several design concepts were reviewed including 2 lanes, 4 lanes, 3 lanes and a hybrid. The hybrid includes some segments that would be 2 lanes while other segments would be 4 lanes. The 2-lane design was selected with modifications at major intersections (Buckeye, Broadway, Southern and Baseline) and at all neighborhood and collector (e.g. Alta Vista) street intersections with left turns. The modifications at the major intersections includes a 6-lane design with a dedicated left turn lane, through lane, and right turn lane in both directions. The modifications at the neighborhood and collector street intersections with left turns intersections includes a 4-lane design with a dedicated left turn lane and a shared through and right turn lane in both directions.

Q: What is being done about the addition of more stops for light rail because currently citizens have to ride the bus to get to the next stop? (9/13/18)

A: On the existing light rail system and on the South Central light rail extension, passenger stop spacing is generally every half-mile to mile. The stop spacing along with the independent trackway save passengers travel time and make it more convenient than local buses to travel long distances. On the existing light rail line a new passenger stop is currently being constructed at 50th Street and Washington Street. This new stop will fill in a large gap between stations on Washington Street. However, no other additional stations are being planned.

Q: If someone boards on Baseline and Central Avenue how far can they travel without transferring? (9/15/18)

A: If someone boards the future light rail train at Baseline Road and Central Avenue they can transfer at Jefferson Street and Central Avenue to another light rail if they desires to travel east or west. Alternatively, they can stay on the original train they boarded and travel to the Metrocenter area without a transfer.

Q: If heading north on the South Central light rail extension, can you continue all the way to Metrocenter? (9/13/18)

A: Yes.

## Questions Related to Bike Lanes

Q: Can bike lanes be moved to more residential 7<sup>th</sup> Avenue and 7<sup>th</sup> Street? (9/4/18)

A: The bike lanes included in the 2-lane design are replacing existing bike lanes from south of downtown Phoenix to Southern Avenue. There are also existing bike lanes 7<sup>th</sup> Street and a portion of 7<sup>th</sup> Avenue, south of the Salt River. The 4-lane concept does not include bike lanes on Central Avenue; bicycles will share the right lane with automobile traffic.

Q: Which is safer for bicycles, the 2-lane or 4-lane? (9/6/18)

Q: Which configuration is more bicycle-friendly, 2 or 4 lanes? (9/12/18)

Q: Which option is safer for bicycles? (9/13/18)

A: The 2-lane option provides exclusive striped bike lanes versus the shared vehicle/bike lane provided by the 4-lane option. The exclusive lane is preferred to avoid mixed vehicle and bicycle traffic.

Q: Why does design have to be different on South Central from North Central Avenue – 2-lane vs 4-lane with bike share? (9/6/18)

A: When light rail was constructed on North Central Avenue, the roadway was reduced from six lanes to four. With buildings along North Central Avenue generally set back further from the sidewalk, a 4-lane design with shared bike lanes and dedicated left turns was feasible. Constructing South Central Avenue with same design as North Central Avenue, would result in fully or partially acquiring some buildings and relocating businesses.

Q: Will the bike lanes be striped? (9/6/18)

A: Yes, but it will be striped differently depending on which lane configuration is chosen. The 2-lane option provides exclusive striped bike lanes versus the “sharrows” in the 4-lane option to designate the shared vehicle/bike lane.

Q: How much support and/or desire exists for exclusive bike lanes? (9/6/18)

A: Bike lanes currently exist on most of Central Avenue from south of downtown Phoenix to Southern Avenue. Throughout the 2-lane and 4-lane analysis, support for retaining and improving the bike lanes along Central Avenue has been received from some community members while other community members have expressed an interest in removing the existing bike lanes to provide an additional automobile lane.

Q: Are we having dedicated bike lanes throughout the entire alignment? (9/6/18)

A: Only for the 2-lane design. The 4-lane will have shared bike lane with vehicular traffic.

Q: How can we do an assessment of the current bicycle use? (9/6/18)

A: The City of Phoenix Bicycle Master Plan includes an assessment of bicycle use throughout the city. The Bicycle Master Plan is available on the web at:

<https://www.phoenix.gov/streetssite/Pages/Bicycle-Master-Plan.aspx>

Q: Why are there no bike lanes? (8/30/18)

A: In the 4-lane concept, the bike lanes were removed to make enough space for the additional automobile lane. The 2-lane design includes bike lanes from downtown Phoenix to Baseline Road.

Q: Why not add bike lanes and left turn lanes to the 4-lane option? (9/13/18)

A: Including dedicated left turn lanes and bike lanes with a 4-lane configuration would not fit within the environmental foot print and could impact up to 60 existing buildings.

Q: Can we move Central Avenue bike lanes to 3<sup>rd</sup> Street and 3<sup>rd</sup> Avenue? (9/15/18)

A: 3<sup>rd</sup> Street and 3<sup>rd</sup> Avenue are not continuous from Baseline Road to downtown Phoenix and neither roadway includes bridge crossings over the Salt River, Western Canal, and other transportation barriers.

## Questions Related to Bridges

Q: Will the Salt River Bridge withstand the weight of the light rail? (9/6/18)

Q: Will the Salt River Bridge handle the load? Was the design checked? (9/4/18)

Q: Will the Salt River Bridge sustain light rail trains? (9/4/18)

Q: Has the bridge been tested for weight and floods?

A: A four-pronged approach was taken to determine whether the existing Salt River Bridge had sufficient capacity to support light rail. First, an in-depth inspection was performed to determine the condition of the existing bridge. Second, a materials testing program was used to extract samples of concrete and reinforcing steel from the bridge to verify their strengths. Third, a hydraulic analysis of the Salt River was performed to determine the bridge's vulnerability to scour during high flow events. And fourth, a 3-D computer model was created using the construction plans of the original bridge to analyze the effects of light rail traffic, highway traffic, river flow events, wind, and other force effects on the bridge. In summary, the analysis showed that the existing bridge has sufficient capacity to support two light rail tracks and two traffic lanes provided that certain repairs and improvements were made. These repairs and improvements include: supplementing the existing scour slab that is currently only in the low-flow channel with new scour slab extensions that extend all the way across the river to the abutments; provide a new overlay on the bridge deck to refurbish the existing traffic-worn surface; replace some of the rubber bearing pads where the bridge beams rest on top of the piers and abutments; repair areas of spalled concrete at pier diaphragms; and repair some cracks at the abutments.

The bridge has been tested by two major (larger than 100 year storm) floods occurred in the late 1970's. Structural analysis of the bridge indicates the bridge is adequate for two traffic lanes and light rail loading. Additional protection against scour (protects bridge during a flood) is being prepared and will be implemented.

Q: Will light rail go under the bridges downtown and over the Salt River Bridge? (8/30/18)

A: Yes. Light rail will go under the Union Pacific Railroad bridges and Jackson Street bridges in downtown Phoenix and will cross the river on the existing Salt River Bridge.

Q: Why aren't we building a new bridge for light rail similar to Tempe? (8/30/18)

Q: Why is the Salt River Bridge not being replaced? (9/15/18)

A: The design team completed a structural assessment on the existing bridge, and it was determined that the existing bridge was in very good shape, and therefore can be retrofitted to accommodate light rail for the usable life of the light rail infrastructure.

Q: Can 4 lanes fit on the Salt River Bridge? (9/4/18)

A: The Salt River Bridge cannot structurally support light rail and four lanes.

Q: Will the Salt River Bridge be bottlenecked? (9/4/18)

A: In the 2-lane design, the bridge and the roadway on either side of the bridge have the same number of auto lanes. The 4-lane concept has two auto lanes (one lane in each direction) on the bridge and through the roundabouts, but has four auto lanes (2 lanes in each direction) north of the bridge and south of the roundabouts. With a change in the number of lanes in the 4-lane concept, northbound traffic could be affected south of the roundabouts and a southbound traffic could be affected north of the bridge.

Q: Will light rail fit under the heavy rail bridge downtown? (9/6/18)

A: Yes.

Q: How will the light rail travel under the Central Bridge? Is flooding an issue?

A: An underground storm water detention structure will be installed under Central Avenue to temporarily store the excess flood water (up to 50-year storm) before the storm water gets pumps into the nearby storm drain system.

Q: Will the area under Jackson Street flood? (9/6/18)

A: An underground storm water detention structure will be installed under First Avenue at Jackson to temporarily store the excess flood water (up to 50 year storm) before the storm water gets pumps into the nearby storm drain system. The street and light rail tracks would remain operational under a 50 year storm event.

Q: How will light rail travel under I-17 Bridge? (9/4/18)

Q: How will the light rail get under the overpass? (9/4/18)

Q: What about the bridges? Can light rail get under the I-17 historic bridge? (9/4/18)

A: Yes, light rail will operate under the new I-17 bridge being proposed by the Arizona Department of Transportation (ADOT), as the current bridge has met the end of its useful life. The light tracks will stay in the middle of Central Avenue. ADOT will look into raising the bridge as part of their bridge replacement project, and Valley Metro is proposing lowering Central Avenue slightly to maximize the vertical clearance between the proposed track elevations and the new bridge.

## Questions Related to Bus Service

Q: The South Mountain West Rapid goes to Capitol, will this route go away? (9/4/18)

A: Any decision to modify the South Mountain West Rapid will be made closer to the planned opening of the South Central light rail extension in 2023. As with any route in the region, ridership is the determining factor for any changes made to a route, including changes to frequency, the hours of operation, and changes to the route itself.

Q: How late will buses run? (9/4/18)

A: For any routes in the region, ridership is the determining factor for any changes made to a route, including changes to frequency, the hours of operation, and changes to the route itself. A key component of the T2050 program is to analyze routes that intersect with light rail and provide hours of operation that match light rail hours for the most utilized routes.

Q: What happens to the bus service? (9/4/18)

Q: Will bus service be reduced on Central Avenue? (9/12/18)

A: Bus service continues to operate along the current 26-mile alignment providing much needed connections between modes, especially at routes that intersect with light rail and at transit centers and park-and-rides along the alignment.

Q: Instead of 30 minute waits for buses can we have 15 minute waits? (9/4/18)

A: As with any route in the region, ridership is the determining factor for any changes made to a route, including changes to frequency, the hours of operation, and changes to the route itself. By way of example, Route 0 (Central Avenue) currently operates on a 10-minute frequency for portions of the route during peak times, and 20-minute frequency during the remaining hours of operation.

Q: Would bus stop intervals stay the same? (9/6/18)

Q: What will the frequency be? (9/12/18)

Q: What will happen to bus service on Central once light rail is built? (9/12/18)

A: As with any route in the region, ridership is the determining factor for any changes made to a route, including changes to frequency, the hours of operation, and changes to the route itself.

Q: Why keep buses with light rail on Central? (8/30/18)

Q: Why do we have buses and light rail? (9/4/18)

Q: Why simultaneous bus and light rail on the same route? (9/13/18)

Q: Why still have buses if light rail would be in place? (9/12/28)

Q: Why bus with light rail? (9/12/18)

Q: Why do we need to have both buses and light rail on Central Avenue? (9/13/18)

A: Bus service continues to operate along the current 26-mile alignment providing much needed connections between modes, especially at routes that intersect with light rail and at transit centers and park-and-rides along the alignment. Buses offer connections across the region where light rail doesn't operate, and provides opportunities to stop on a more frequent bases – in the Phoenix region, that's usually every quarter-mile.

Q: Can light rail and bus connections be better timed and coordinated? (9/4/18)

A: Regional planners analyze transit schedules every six months and make changes as needed. Due to the regional nature of the transit system, bus and rail routes have different start- and end-times, and (more importantly) different operating frequencies. Transit route frequencies also change from peak times to non-peak times; the bi-annual changes are developed based on historical ridership trends and overall route changes.

Q: What is the plan for transit on Baseline? (8/30/18)

A: Any decision to modify transit service will be made closer to the planned opening of the South Central light rail extension in 2023. As with any route in the region, ridership is the determining factor for any changes made to a route, including changes to frequency, the hours of operation, and changes to the route itself. On the Proposition 104 ballot in 2015, Baseline Road was shown as an area to be studied for a Bus Rapid Transit (BRT) line as part of the T2050 program.

Q: What does the future Bus Rapid Transit system look like? (9/4/18)

A: The City of Phoenix is currently working to develop Bus Rapid Transit routes and concepts as part of the city's T2050 program. As the program is developed, design concepts will be shared with the community to seek input on routes, modes of operation, and other design elements.

Q: How many bus pullouts are already in place in the existing corridor? (9/13/18)

A: There are 7 bus pullouts in the existing corridor.

Q: Do you have statistics regarding the ridership on buses? (9/15/18)

A: Today, the three north-south operating bus routes within 1/2 mile of Central Avenue (Route 0 – Central Avenue, Route 7 – 7th Street, and Route 8 – 7th Avenue), pick up approximately 2,700 passengers each weekday in the area south of downtown, but not including downtown.

Q: What was the tipping point for having a new transportation system put in place related to the volume of buses? (9/15/18)

A: One purpose for initiating the 2012 study for a new transportation system for South Phoenix was based on the performance of the existing bus system. Despite frequent bus service in the corridor in 2012 and today (every 10 minutes during rush-hour), local buses on Central Avenue (Route 0) provide some passengers with a standing-room only ride during peak travel hours. Existing ridership data shows that some bus trips during rush-hour regularly experience overcrowding. Furthermore, the projected growth in population and employment in the South Central Avenue corridor will increase the need for more transit service. While increasing the volume of buses on Central Avenue was a consideration, it would have also required purchasing more buses, which need to be replaced more frequently than light rail trains and increasing the number of bus operators, which directly relates to an increase in operating costs.

Q: In terms of buses, is the light rail worth the cost benefit? (9/15/18)

A: The operating cost of light rail is more efficient than the operating cost of bus. As reported in the Valley Metro 2017 Transit Performance Report, the operating cost per passenger boarding for light rail was \$2.51. The operating cost per passenger boarding for bus was \$5.02. The Transit Performance Report is available on Valley Metro's website: [https://www.valleymetro.org/sites/default/files/uploads/event-resources/2017\\_transit\\_performance\\_report\\_0.pdf](https://www.valleymetro.org/sites/default/files/uploads/event-resources/2017_transit_performance_report_0.pdf)

Q: I have not yet found/seen clarification of the plans of bus scheduling on South Central Avenue with light rail. It was my understanding of preliminary plans that headways between local buses on Central would be almost doubled - to 20 minutes during peak and 30 minutes for the rest of the time. Valley Metro should clarify how this reduction in local bus service will affect South Central's usage of light rail. (9/15/18)

A: Any decision to modify transit service will be made closer to the planned opening of the South Central light rail extension in 2023. As with any route in the region, ridership is the determining factor for any changes made to a route, including changes to frequency, the hours of operation, and changes to the route itself.

## Questions Related to Business Assistance and Jobs

Q: Has business outreach/tech assistance considered cash payments to businesses instead of technical assistance like 911 or hurricane relief? (9/4/18)

Q: Are there other non-restrictive funds that can be used for business support? (9/6/18)

Q: Why can't we provide funds to businesses during construction? (9/6/18)

Q: Is there any financial assistance programs for the businesses that are tenants (non-land owners)? (9/6/18)

A: If the South Central light rail extension is constructed using federal funding, federal guidelines do not allow the City of Phoenix or Valley Metro from providing actual dollars to businesses. However, the City and Valley Metro will work with local organizations and nonprofits to determine the forms of assistance that can be provided.

Q: Will these, business assistance and jobs, remain if light rail does not go through? (9/4/18)

A: Valley Metro's Business Assistance Program and job opportunities specific to the construction of the South Central Extension are contingent on the project being constructed.

Q: How are you mentoring small and disadvantaged business owners? (9/6/18)

Q: Are you mentoring small and disadvantaged business owners? (9/6/18)

A: The City of Phoenix will offer business owners the opportunity to work with experienced consultants, prior to construction, to meet their business needs and future plans. This offering is made possible by the Transit Oriented Development Grant sponsored by the Federal Transit Administration. Services available include:

- Accounting and Bookkeeping
- Marketing
- Website Development
- Finance & Loan Packaging
- Information Systems
- Procurement
- Human Resources

Q: Have there been studies to show how businesses fared during the light rail construction? (9/6/18)

Q: How did businesses fare downtown as part of the original systems construction? (9/6/18)

A: Valley Metro has found that businesses who took part in the assistance programs offered fared better than those who did not.

Q: How are you being transparent in regards to business assistance? (9/6/18)

A: Businesses can contact Valley Metro's Business Assistance Coordinator Flor Mason at [fmason@valleymetro.org](mailto:fmason@valleymetro.org) or Markus Coleman with the City of Phoenix at [markus.coleman@phoenix.gov](mailto:markus.coleman@phoenix.gov) for any questions related to the business assistance programs available.

For more information on the business assistance and construction support, please visit Valley Metro's website:

[https://www.valleymetro.org/sites/default/files/uploads/event-resources/south\\_central\\_extension\\_business\\_assistance.pdf](https://www.valleymetro.org/sites/default/files/uploads/event-resources/south_central_extension_business_assistance.pdf)

Q: What is the City doing to assist businesses for noise abatement on windows? (9/6/18)

Q: Is there a program to assist businesses and residents with double paned windows for noise abatement?

A: As part of the environmental analysis required for the project, a 'Noise and Vibration Technical Report' was conducted. The analysis includes a review of "noise concerns associated with a light rail system (to) include light rail operations; effects from special track work, track curvature, audible warnings and traction power substations (TPSS) and construction of the system," and mitigation efforts where required. The analysis found that "with implementation of mitigation where needed, the proposed project would not result in exceedances of the applicable noise criteria thresholds. Therefore, the project would have no significant adverse noise impact." The complete report can be found at: [https://www.valleymetro.org/sites/default/files/uploads/event-resources/south\\_central\\_appendice\\_e\\_noise\\_vibration\\_report.pdf](https://www.valleymetro.org/sites/default/files/uploads/event-resources/south_central_appendice_e_noise_vibration_report.pdf)

Q: Are low interest loans available for businesses? (9/6/18)

Q: Does the City have relationships or programs with financial institutions? (9/6/18)

A: The City and Valley Metro are exploring opportunities to partner with organizations to provide businesses with loans as part of the business assistance program.

Q: Can Community Reinvestment Act money be used? (9/6/18)

A: The City and Valley Metro will explore any methods that can be utilized for investment in the community – of note is that Community Reinvestment Act is specific to financial institutions and "intended to encourage depository institutions to help meet the credit needs of the communities in which they operate, including low- and moderate-income neighborhoods, consistent with safe and sound banking operations."

Q: What is the City Council meeting update from 8/29/18 whether you must attend one of the schools on the alignment to participate in STEM program?

A: Please provide more information on your question, as there were no South Central light rail extension items for approval on the 8/29/19 agenda. Please contact Jesus Sapien at [jesus.sapien@phoenix.gov](mailto:jesus.sapien@phoenix.gov) to inquire further.

Q: How many people are you hiring for the project (Kiewit)? (9/6/18)

A: Kiewit intends to hire approximately 200 craftsmen and expects subcontractors and vendors to employ another 200 with a total of 400 craftsmen being employees on the project.

Q: What is the City of Phoenix doing in terms of jobs and workforce development? (9/12/18)

A: There are job and workforce development opportunities available as part of the design and construction of the South Central light rail extension. Opportunities include jobs and internships for individuals in engineering fields, training and craft development in the construction industry, and college mentoring as part of the 'Engineers of the Future' program. Please contact Flor Mason at [fmason@valleymetro.org](mailto:fmason@valleymetro.org) for more information.

Q: How are businesses impacted? (9/13/18)

A: Any form of construction within a roadway can impact nearby businesses. Regardless of the roadway configuration (2-lane design or 4-lane concept), nearby businesses could be impacted by the related construction.

Q: How are you going to keep businesses from going under during construction? (9/13/18)

Q: Are there plans in place to mitigate the impact on businesses on Central Avenue during construction? Lessons learned? (9/13/18)

Q: What are you going to do for businesses along Central Avenue when light rail comes? (9/13/18)

Q: What type of business assistance are you providing? (9/15/18)

Q: What types of business assistance are available to businesses along the alignment? (9/15/18)

A: Valley Metro requires the construction contractor to maintain access during construction. Notice and coordination will be provided prior to any work adjacent to a business. Additionally, Valley Metro and the City of Phoenix provides business assistance before and throughout construction, in the form of business assessments, special events, customized signage, marketing/social media assistance, and accounting/financial planning.

Valley Metro has staff available 24/7 to answer questions from business owners and to respond rapidly to any emergencies that may arise from construction.

Alexis Hermosillo at 602.523.6039 or [ahermosillo@valleymetro.org](mailto:ahermosillo@valleymetro.org) (Broadway – Baseline)

Julie Smith at 602.744.5563 or [jmsmith@valleymetro.org](mailto:jmsmith@valleymetro.org) (Lincoln – Broadway)

Julie Cruz Gilfillan at 602.495.8274 or [jcruz@valleymetro.org](mailto:jcruz@valleymetro.org) (Downtown – Lincoln)

Flor Mason at 602.523.6032 or [fmason@valleymetro.org](mailto:fmason@valleymetro.org) (Business Assistance Coordinator - entire alignment)

Q: Why do we need the light rail if businesses don't need help? (9/13/18)

Q: Why do we need light rail? (9/12/18)

Q: Are we building light rail to solve a current or future problem? Why do we need it if there is no current problem? (9/13/18)

A: Families and individuals along the South Central corridor need and deserve infrastructure improvements and additional public transportation options for convenient access to work, school and more. Voters approved the extension in 2000, 2004 and in 2015. Prop 104, known as Transportation 2050 plan, received 75% approval from voters who live along the South Central line. The Phoenix City Council approved the route and design in 2014, and acceleration of the project in 2016.

Q: What opportunities will there be for businesses along the corridor and larger South Phoenix area? (9/15/18)

A: For businesses along Central Avenue, Valley Metro and the City of Phoenix provides business assistance before and throughout construction, in the form of business assessments, special events, customized signage, marketing/social media assistance, and accounting/financial planning. Subcontracting opportunities with the construction contractor are also available.

Q: How many businesses closed during previous light rail projects? (9/15/18)

A: Valley Metro does not track that information.

Q: What are the statistics in hiring community members for past light rail construction? (9/15/18)

A: The South Central Extension is the first to encompass a focused workforce development plan, so the number of community members hired on previous projects were not tracked. However, the overall number is. During peak construction, 700 jobs were generated on the Central Mesa Extension and 600 on the Northwest Extension in Phoenix.

Q: How much funding will be reserved for T2050 grant and business assistance? (9/12/18)

A: The Federal Transit Administration (FTA) awarded the City of Phoenix a transit oriented development (TOD) planning grant to implement an early action business assistance program and to plan for future development along the South Central light rail extension. The city received funding of \$2 million, which is further supported by a \$400,000 local (T2050) match. As the grant is focused on early business assistance and TOD planning, the city and Valley Metro will provide further assistance closer to, and during, the construction period.

## Questions Related to Community Beautification – Landscape, Sidewalks, Shade, Bus

### Pullouts

Q: Will side streets and sidewalks be improved with this project? (9/6/18)

Q: Will there be enhancements on side streets/streetscape?

A: Area side streets, sidewalks and streetscapes are not included as part of the scope of the light rail project. However, the City of Phoenix has established the T2050 Mobility Improvements Program to improve mobility safety and connectivity of all roadway users. The program will identify opportunities for new sidewalk construction, bicycle facilities and connections to existing transit stops. Of the 11 areas currently being looked at city-wide, two overlap with the proposed light rail alignment. More information can be found at: <https://www.phoenix.gov/streetssite/Pages/Mobility-Improvements-Program.aspx>

Q: At bus pullouts can we add 2 to 3 feet of bike lane and reduce lane width on the 2-lane scenario – striping only? (9/4/18)

A: Widening the pullouts up to an additional 2 to 3 feet will extend outside of the environmentally cleared project area, and in some areas it is not be feasible due to how close some buildings are to the roadway.

Q: Are you putting in mature shade trees at bus stops (downtown is ugly)? (9/4/18)

A: The type and size of trees installed will be determined by the lane configuration, sidewalk widths, and available landscaping areas.

Q: Can we keep bus pullouts at Central Avenue and Southern in both directions? (8/30/18)

A: The 2-lane design is able to accommodate bus pullouts in both directions (northbound and southbound) at Central Avenue and Southern Avenue. The wider roadways in the 4-lane concept do not provide the same opportunities as the 2-lane design to include bus pullouts.

Q: Can landscape areas be used for bus pullouts? (9/6/18)

A: In the 2-lane design, bus pullouts are located in areas that would have otherwise been landscaped. The wider roadways in the 4-lane concept do not provide the same opportunities as the 2-lane design to include bus pullouts.

Q: What will be done to improve Central Avenue? (9/6/18)

A: Improvements on Central Avenue will include new sidewalks, new landscaping between the roadway and sidewalk, new buffered bicycle lanes, new bus stops, and new roadway pavement.

Q: How do we make sure we have trees and shade on Central Avenue so that sidewalks have shade in the 2-lane and 4-lane designs? (9/12/18)

A: Both the 2-lane design and 4-lane concept include shade and landscaping. However, with the wider roadway required for the 4-lane concept, there would be less shade and landscaping than the 2-lane design.

Q: Who is going to maintain landscaping? (9/12/18)

Q: Who will manage the upkeep of the street landscaping? (9/13/18)

A: Landscaping will be jointly maintained by the City of Phoenix and Valley Metro.

Q: Would there be new landscape without light rail? (9/12/18)

A: There are no plans currently place for additional landscaping along Central Avenue without light rail.

Q: Why are there no trees with the 4-lane concept at LoLo's? (9/12/18)

A: In the 4-lane concept the roadway is widened on both sides of Central Avenue to include two lanes in each direction. The additional roadway width does not leave enough space to have a landscape planter that is wide enough to allow trees to be planted and survive.

Q: Why were lane design, landscaping and alignment decisions made without the community of South Phoenix agreeing completely? (9/13/18)

A: Community members have been and will continue to be invited to provide input on the design of the project. Community meetings were held in early in the planning process when lane design and alignment recommendations were made. With the project in final design now, additional opportunities to provide input on the design of project features like landscaping are available by meeting one-on-one with Valley Metro and City of Phoenix staff as well as at future community meetings specifically related to the design of the light rail extension.

Q: What will the density be of shade trees and shade structures? (9/13/18)

A: Approximately 370 shade trees, including trees on light rail passenger platforms and in the light rail guideway, are being planned throughout the corridor where space allows. Shade structures will be placed at station platforms only.

## Questions Related to Community Meetings (2-lane and 4-lane comparison)

Q: Can you show landscaping on the concepts? (9/6/18)

A: Landscape plans are being evaluated now as part of the project’s design process. In April 2018, Valley Metro held workshops to gather input from the community on the types of trees, shrubs and plants that could be utilized as landscaping along the corridor. A comparison of the landscaping areas between the 2-lane and 4-lane designs is being presented at the meetings or is available to view on Valley Metro’s website: [valleymetro.org/southcentral](http://valleymetro.org/southcentral)

Q: I would like comparison information for existing roadway configuration: landscape, trees, bicycles, bus pullouts, auto and light rail speeds, Salt River Bridge, roundabouts, dedicated left turn lanes, travel time, cost/cost difference. (9/6/18)

Q: To better understand the impact of the South Central light rail extension on South Central Avenue traffic, for every traffic engineering metric associated with South Central light rail extension, I seek apples-to-apples comparison of two-lane with light rail, four-lane with light rail, and current four-lane without light rail configurations of Central Avenue. (9/15/18)

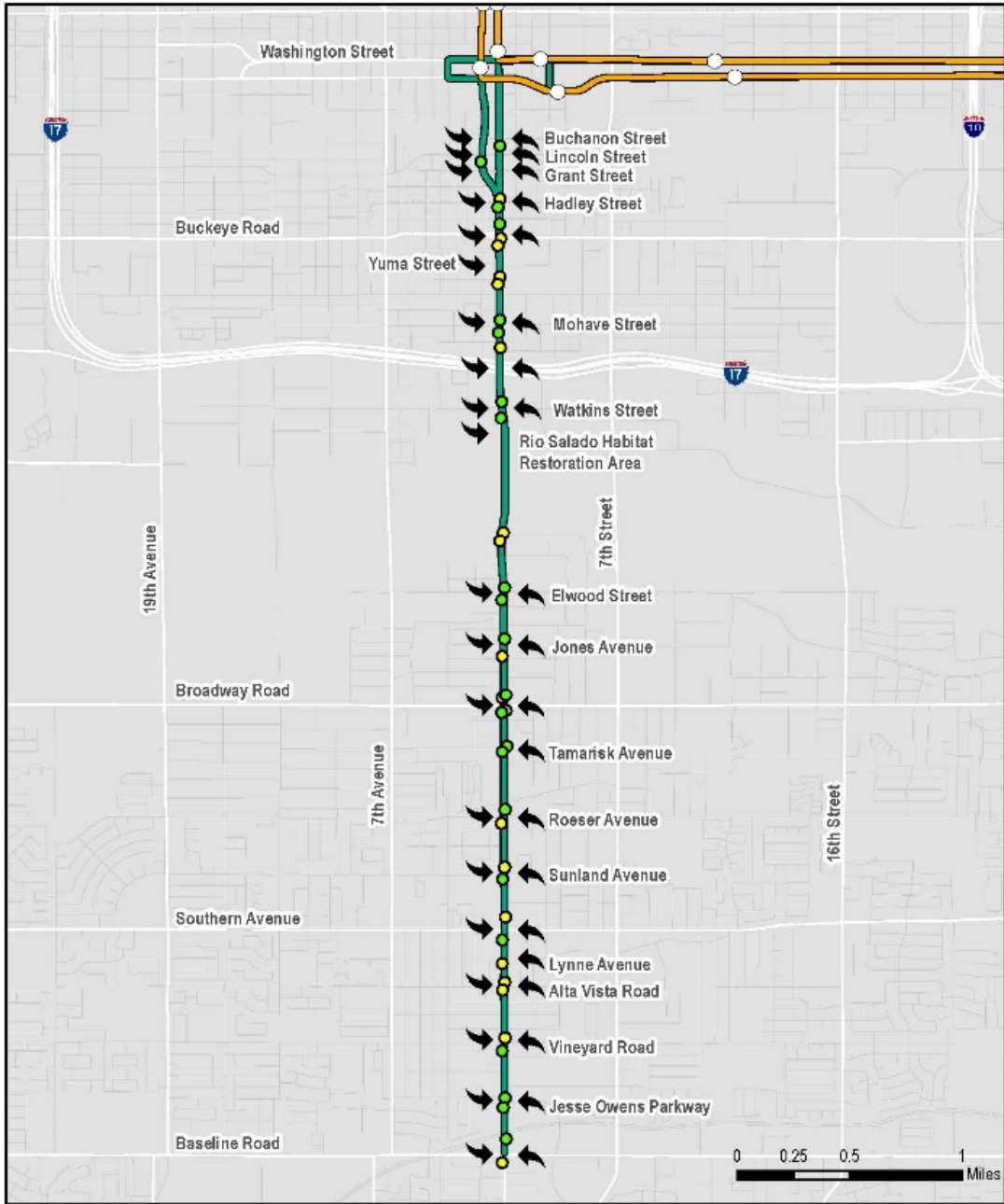
A: Existing roadway configuration was not included in the 2-lane and 4-lane comparison because action directed by the Phoenix City Council was to complete an analysis of a 4-lane roadway configuration within the environmental footprint of the 2-lane design. However, the table below provides the requested information.

	<b>Existing</b>	<b>2-Lane</b>	<b>4-Lane</b>
Landscape - Trees	132 total trees with 69 located on the side of the roadway and 63 in the median	4,400 linear feet of 4-foot wide tree areas, estimated 160 trees	2,000 linear feet of 4-foot wide tree areas, estimated 65 trees
Bicycles	Dedicated lanes north of Southern Avenue, mixed with automobile traffic south of Southern Avenue	Dedicated buffered lanes	Mixed with automobile traffic
Bus Pullouts	7	21	None
Automobile and Light Rail Speed Limits	35 MPH	35 MPH	30 MPH
Salt River Bridge and Roundabouts	4 travel lanes	2 travel lanes	2 travel lanes
Dedicated Left-Turn Lanes	At 29 collector and neighborhood streets; only 4 are signalized	All 17 signalized collector and neighborhood streets	At 4 of the 17 signalized collector and neighborhood streets
Travel Time (Baseline - Broadway)	4 – 5 minutes	4.5 minutes	7.5 minutes
Cost	Not applicable	No change	Approximately \$7 Million







4-lane concept remains within environmental limits of 2-lane design; no additional properties or buildings would be purchased.

Q: Can you bring a map with locations of all bus stops? (9/6/18)

A: The map below shows where bus stops are currently planned along Central Avenue in the 2-lane design between downtown Phoenix and Baseline Road.



SOUTH CENTRAL LIGHT RAIL EXTENSION/DOWNTOWN HUB: 2-LANE DESIGN (BASED ON DRAFT 60% PLANS) September 12, 2018

<b>Legend</b>	<b>Bus Stops</b>	<b>Dedicated Left Turn Lanes</b>	
 Valley Metro Rail/Station	 Pullout	 Left Turn Lane in Northbound Direction	
 South Central Extension	 No Pullout	 Left Turn Lane in Southbound Direction	

Q: Will the same information be presented at the six meetings? (8/30/18)

A: Yes. The same meeting information is also available on the Valley Metro's website: [valleymetro.org/southcentral](http://valleymetro.org/southcentral)

Q: I missed the presentation. How can I get the information? (9/4/18)

A: Visit Valley Metro's website [valleymetro.org/southcentral](http://valleymetro.org/southcentral). All meeting materials are posted on the South Central Extension page.

Q: When will public get to review questions and answers from the six open houses before going to council – maybe online? (9/4/18)

A: Questions and answers from the six meetings will begin to be posted starting on September 12. All questions and answers will be included as part of the independent facilitator's report to council summarizing the feedback received. The report will be posted on the [Valley Metro's website](http://valleymetro.org) prior to the Phoenix City Council Meeting tentatively scheduled for Wednesday, September 26, 2018. Mr. Eric Bailey serves as the independent meeting facilitator.

Q: Who made these videos? They are slanted towards 2 lanes for light rail, such as “as you can see” or “safety”?

A: The videos were produced by the South Central project team based on information from the technical analysis on the 2-lane design and 4-lane concept. The project team continues to evaluate the meeting materials to ensure clear and accurate information is being presented.

Q: Why can't we ask questions as a group and not as individuals? (9/6/18)

A: The goal is to answer as many questions as possible during the meeting, whether presented to staff as group or individual questions. City of Phoenix, Valley Metro, and design and consultant staffs were on hand at each meeting to answer as many questions as possible in person.

Q: Why pay Eric Bailey to present? (9/13/18)

A: The community meetings that were held were done so at the Phoenix City Council's direction to conduct a full, comprehensive community engagement process facilitated by an independent facilitator to specifically discuss the impacts of a 4-lane design.

## Questions Related to Construction

Q: What will be done to keep access open during construction? (9/6/18)

A: Valley Metro requires the construction contractor to maintain access during construction. Notice and coordination will be provided prior to any work adjacent to a business.

Q: What is the difference in construction time between 4-lane and 2-lane? (9/4/18)

A: Staff currently estimates that there is no difference in construction time, although changes may result if the project undergoes a redesign.

Q: What is the construction phasing plan? Is it built in segments starting from the north end? (9/6/18)

Q: Where will construction begin? Will it all be torn up at the same time? (9/13/18)

Q: What is going to happen with construction on Broadway and Central Avenue? (9/15/18)

A: A construction schedule and phasing plan has not yet been determined. Concurrent construction activities, in different phases, will occur throughout the entire alignment and not in segments. A plan will be developed between the 60% and 90% percent design milestones and will be shared with the community prior to the start of construction.

Q: What happens to the bus service during construction? (9/6/18)

A: Bus service will continue during construction. All schedules will be maintained, but some bus stops may be moved to accommodate the construction work in that area. All bus stops are required to remain ADA accessible.

Q: When will construction start and how long will it last? (9/15/18)

A: Construction will begin on Central Avenue in late 2019/early 2020. The extension is expected to open in 2023.

Q: If there is a problem or issue that occurs due to construction, who is the contact for the businesses? (9/12/18)

A: Valley Metro has staff available 24/7 to answer questions from business owners and to respond rapidly to any emergencies that may arise from construction.

Alexis Hermosillo at 602.523.6039 or [ahermosillo@valleymetro.org](mailto:ahermosillo@valleymetro.org) (Broadway – Baseline)

Julie Smith at 602.744.5563 or [jmsmith@valleymetro.org](mailto:jmsmith@valleymetro.org) (Lincoln – Broadway)

Julie Cruz Gilfillan at 602.495.8274 or [jcruz@valleymetro.org](mailto:jcruz@valleymetro.org) (Downtown – Lincoln)

Flor Mason at 602.523.6032 or [fmason@valleymetro.org](mailto:fmason@valleymetro.org) (Business Assistance Coordinator - entire alignment)

## Questions Related to Emergency Vehicles

Q: Concerned about emergency vehicles serving people – 2 lanes will slow vehicles. If there is a crash that closes the street then what happens? (9/4/18)

A: The 2-lane design is specifically planned to provide access to emergency vehicles. When an emergency vehicle travels on Central Avenue, cars and trucks will be able to move to the right and stop in the bicycle lane to allow emergency vehicles to pass. In the event that the roadway becomes blocked on either side of the light rail tracks, emergency vehicles can enter the light rail trackway and proceed to the emergency. Emergency vehicles can enter the light rail trackway at openings located at intersections or by driving over the curb.

Q: What if a car breaks down on the bridge and an emergency vehicle needs to get through? (8/30/18)

A: If a car breaks down on the Salt River Bridge, emergency vehicles will be required to utilize the remaining automobile lane and bike lane width on the bridge. If the roadway becomes completely blocked, emergency vehicles will utilize the automobile lane on the other half of the bridge, driving in opposite direction to normal traffic flow.

Q: What's the difference between 4-lane vs 2-lane and emergency vehicle/bus pullouts? (9/4/18)

A: The 2-lane design is specifically planned to provide clear access to emergency vehicles. When an emergency vehicle travels on Central Avenue, cars and trucks will be able to move to the right and stop in the bicycle lane to allow emergency vehicles to pass. The overall roadway area in the 4-lane concept is 2 feet wider in most places than the 2-lane design. For the 4-lane concept, cars in the left lane will need to maneuver to the right lane to safely move to the curb to stop for emergency vehicles. In the event that the roadway becomes blocked on either side of the light rail tracks in both the 2-lane and 4-lane, emergency vehicles can enter the light rail trackway and proceed to the emergency. Emergency vehicles can enter the light rail trackway at openings located at intersections or by driving over the curb.

## Questions Related to Funding

Q: What consultants are assigned to the light rail project and what is the budget for them? (9/6/18)

A: The project is currently in the final design and pre-construction phase. To complete final design, Valley Metro has contracted with a final design consultant team, systems design firm, a program management firm, and construction management team. The budget for this phase of the project is \$50 million. Additionally, the City of Phoenix has initiated an early business assistance program and an equitable transit oriented development planning program. Approximately \$2.5 million, which is primarily funded by a federal grant, is budgeted for these activities.

Q: Does the T2050 plan include enough funds to operate the light rail system through 2050? (8/30/18)

A: Yes. The T2050 plan includes enough funds to operate the light rail system through 2050.

Q: How does the Proposition 400 money get split between modes? (8/30/18)

A: Regional Proposition 400 Sales Tax are split between modes as follows:

Highways/Freeways 56.2%

Arterial Streets 10.5%

Transit 33.3%

Q: Were all alternatives evaluated based on Federal Transit Administration (FTA) funds? (8/30/18)

A: Twenty-three (23) criteria were used to evaluate the final alternatives. Some of the criteria are similar to criteria used by FTA to determine federal grant eligibility. An evaluation of the project's potential FTA rating for a Federal New Starts Grant was conducted on the preferred alternative prior to advancing to the FTA grant process. The evaluation criteria are provided in the Locally Preferred Alternative Report available on Valley Metro's website:

<https://www.valleymetro.org/sites/default/files/uploads/event-resources/southcentral-locallypreferredalternativereport.pdf>

Q: Why will 4-lane cost more? (9/4/18)

Q: Why are the costs for 4-lanes higher? (9/6/18)

Q: Why does 4-lane increase the cost of 7 million? (9/6/18)

A: The 4-lane concept is estimated to cost at least \$7 million more than the 2-lane design because there will be additional costs associated with re-doing some design work already completed for the 2-lane design.

Q: Does current funding consider upgrades to system to increase capacity? (9/6/18)

A: No. Funding is not specifically reserved for future system upgrades to increase capacity.

Q: How many riders are needed to sustain light rail before it goes to the red? (9/6/18)

A: No light rail system or other form of transit service in the United States operates without subsidies. Light rail passengers pay for approximately 32% of the operating and maintenance costs, while bus passengers pay for approximately 15%.

Q: What happens to the funding? (9/6/18)

Q: Where does the T2050 money component project go to if the light rail doesn't happen? (9/13/18)

A: If the South Central Light Rail Extension does not get built, a majority of the project funding would not be directly eligible for reinvestment into the South Central Corridor. A description of each fund source and its potential use is provided below:

Phoenix Transportation 2050 funds (23% of funding) could be used for other transportation projects throughout the entire City as approved by the City Council.

Regional Proposition 400 Sales Tax (16% of funding) would be returned to the region to reallocate among transit projects within the County. This will require approval from the Maricopa Association of Governments.

Federal funds (61% of funding) would not be available.

Q: How does the cost per mile for the South Central Extension compare to other light rail extensions to be completed in 2023?

A: Compared to the Northwest Light Rail Extension Phase II (NWEII), which is scheduled to open in 2023, the total project cost per mile is similar. The NWEII is a 1.5-mile extension with an estimated cost of \$318 million. The cost per mile is \$212 million.

Q: What happens when cost overruns schedule delays?

A: The impacts of potential cost overruns and schedule delays are mitigated by the extensive project reviews completed by the Federal Transit Administration (FTA) throughout planning, design, and construction of the project. The FTA's reviews include a cost and schedule risk assessment, value engineering, and ongoing project oversight. Through these procedures, the FTA develops and assigns an appropriate level cost and schedule contingency.

Q: If we start over with design to provide design that is similar to the Camelback Road and 19<sup>th</sup> Avenue would have more competitive project for the future?

A: No. If we were to restart the design following a similar approach as Camelback Road and 19<sup>th</sup> Avenue, the region would not have a more competitive project for the future. The project would have higher costs resulting from the purchase of additional land and buildings, relocation of residents and businesses with no improvement in light rail ridership.

Q: How much money would it cost to have trolleys similar to Scottsdale run from South Phoenix to Downtown? (9/12/18)

A: The operating and capital cost of a service similar to the Scottsdale trolleys, which are custom buses, would be similar to existing bus service on Central Avenue. In 2017, the average operating cost per passenger boarding for bus was \$5.02, while the average operating cost per passenger boarding for light rail was \$2.51.

Q: Isn't one billion dollars ridiculous for a five-mile stretch? (9/12/18)

A: The 5.5-mile South Central light rail extension not only includes building light rail within the roadway but also includes rebuilding the roadway and adjacent sidewalks, new traffic signal systems, new street lights, landscaping, relocation and replacement of utilities throughout the corridor, reinforcing or building new bridges, purchasing 17 light rail vehicles, and modifications at the light rail operations and maintenance center to accommodate the additional trains.

Q: Is the current light rail system being subsidized? (9/12/18)

A: Yes. Light rail, and all other forms of transit, is subsidized. Approximately 32% of the operating costs for light rail are paid for by passenger fares.

Q: Is the federal government eventually going to pay maintenance and operations costs for the long term and how does it work within the existing system? (9/12/18)

A: The federal government provides a small amount of capital funding that can be used to offset capital related maintenance costs. The availability of these funds is anticipated to continue when the South Central light rail extension opens. For the existing light rail line, a majority of the operations and maintenance costs are funded by the three cities in the region that have light rail: Phoenix, Mesa and Tempe.

Q: Why not budget more for South Central so we have 4 lanes? The land costs less compared to up north where it costs more. Did you budgeted for it? (9/13/18)

A: To construct the South Central light rail extension with four lanes, dedicated bike lanes, dedicated left turn lanes and the same level of landscaping as the 2-lane design, additional land and budget would be required. However, the recommendation in 2014 to construct a 2-lane design was based more on the desire to avoid demolishing, either fully or partially, up to 60 buildings along Central Avenue, than it was to increase the amount of funding for buying additional land.

Q: Is the cost of the rail efficient? Is it a wise use of money? (9/13/18)

A: The operating cost of light rail is more efficient than the operating cost of bus. As reported in the Valley Metro 2017 Transit Performance Report, the operating cost per passenger boarding for light rail was \$2.51. The operating cost per passenger boarding for bus was \$5.02. The Transit Performance Report is available on Valley Metro's website:  
[https://www.valleymetro.org/sites/default/files/uploads/event-resources/2017\\_transit\\_performance\\_report\\_0.pdf](https://www.valleymetro.org/sites/default/files/uploads/event-resources/2017_transit_performance_report_0.pdf)

Q: Will the federal funds go away with the 4-lane configuration? (9/15/18)

A: Yes. The federal funds are contingent upon meeting federally specified deadlines. Advancing a 4-lane design and completing environmental documentation to a level acceptable for submittal to the Federal Transit Administration in the time to meet grant milestones is not feasible.

Q: Does the funding for this project affect the funding for the Capitol/I-10 West Extension if the South Central Extension does not occur? (9/15/18)

A: No. Funding for the Capitol/I-10 West light rail extension is budgeted separately from the South Central light rail extension.

Q: Will project money go towards affordable housing? (9/15/18)

A: No. All current funding identified for the project are eligible for transportation purposes only.

## General Questions

Q: Is there a way to connect Broadway to the neighborhood north of Broadway and west of Central – possibly connect through extension of 2<sup>nd</sup> or 3<sup>rd</sup> Avenue? (9/6/18)

A: 3<sup>rd</sup> Avenue terminates at Pueblo Avenue on the south end; the land parcels along the south side of Pueblo Avenue are owned by multiple private parties and are not planned for acquisition as part of the light rail project. However, 6<sup>th</sup> Avenue provides a direct connection to Broadway Road approximately 800 ft. to the west of 3<sup>rd</sup> Avenue. 2<sup>nd</sup> Avenue does not exist on the north side of Broadway Road in this area.

Q: How is the neighborhood improvement plan being formed to include the 114 adjacent roads that are not to current city standards? (8/30/18)

A: Street conditions and infrastructure needs will be analyzed throughout the city as part of the T2050 program. Specific to the South Central light rail extension, the city's Street Transportation Department is currently undertaking a 'Mobility Improvements Program' which will evaluate and improve mobility safety and connectivity for all roadway users. Of the 11 areas currently being looked at city-wide, two overlap with the proposed light rail alignment. More information can be found at: <https://www.phoenix.gov/streetsite/Pages/Mobility-Improvements-Program.aspx>

Q: What is the relationship between the light rail project and the South Mountain Village plan? (9/6/18)

Q: Why is light rail being planned separate from the village plan for South Phoenix? (9/13/18)

A: The city and the South Mountain Village planning committee utilizes several plans and overlays to guide the character, land use and development of the area. For the plans and overlays specific to the South Mountain Village, visit <https://www.phoenix.gov/villages/South-Mountain> for more information; for information on the city's transit-oriented development (TOD) framework, visit [https://www.phoenix.gov/villagesite/Documents/pdd\\_pz\\_pdf\\_00380.pdf](https://www.phoenix.gov/villagesite/Documents/pdd_pz_pdf_00380.pdf). All documents on both links are searchable (i.e., search for 'light rail' using the 'find' function) to find information on how transit complements the long-term vision for specific areas and the city as a whole.

Q: What is the City's sensitivity to the issues? (9/4/18)

A: Without knowing the specific issues posed for this question, the City of Phoenix and Valley Metro have conducted, and continue to conduct, outreach for the South Central light rail extension in order to continue obtaining input on the project and any potential impacts it may have.

Q: Will the City of Phoenix have sensitivity to variances and can there be a designated staff person to assist with small property improvements – streamlining, fees, landscaping and drainage requirements? (9/4/18)

Q: How will the city deal with variances to accommodate the businesses on the alignment? (9/6/18)

A: There are different types of variances the city would evaluate/can consider based on the request from a particular property owner, business owner, or resident. City staff are actively working with property owners to address challenges such as parking, access and business operations to accommodate the specific needs of properties. We would encourage anyone with specific information on a variance to reach out to city staff so that more detailed information can be provided and evaluated per city ordinances and other guidelines. A good starting point would be the city's Office of Customer Advocacy (602.534.7344), where city staff are assigned to assist property and business owners along the light rail alignment.

Q: Can we get a reduction in permits fees for property improvements? (9/6/18)

A: The city has programs in place to assist and guide business and property owners through the permitting process. The city also partners with community organizations who may have programs in place to assist business and property owners, depending on the improvements the owner is proposing. Please contact the city's Office of Customer Advocacy (602.534.7344), where city staff are assigned to assist property and business owners along the light rail alignment.

Q: When will a decision be made on the number of lanes? (9/6/18)

Q: When will the City Council vote take place? What are we voting on? Will I get a chance to vote? (9/13/18)

A: The item is tentatively scheduled for a City Council meeting on Wednesday, September 26, 2018.

The public may request to address the Council regarding an agenda item by submitting a yellow Request to Speak card at the meeting, or may submit a white card to state their support or opposition to an item for the record without speaking. Individuals should arrive and submit a card by the beginning of the meeting, before action is taken on the item. After action has been taken on an item, cards will not be accepted.

Q: What if South Phoenix residents don't want light rail? (9/6/18)

Q: How can we terminate the project? (9/6/18)

Q: How can I stop light rail? (9/12/18)

Q: Can we stop the light rail project? (9/12/18)

A: The community meetings that were held were done so at the Phoenix City Council's direction to conduct a full, comprehensive community engagement process facilitated by an independent facilitator to specifically discuss the impacts of a 4-lane design. The item is tentatively scheduled for a City Council meeting on Wednesday, September 26, 2018, that is open to the public.

Q: Who makes the final decision? (9/6/18)

Q: When will the City Council make the final decision on the light rail extension? (9/12/18)

Q: How will 2-lane and 4-lane decision be made? (9/15/18)

A: The item is tentatively scheduled for a City Council meeting on Wednesday, September 26, 2018.

Q: Is light rail a done deal and coming for sure? (9/12/18)

Q: Is this definitely going ahead? (9/13/18)

A: The item is tentatively scheduled for a City Council meeting on Wednesday, September 26, 2018. The project is also contingent on receiving federal funding which accounts for a portion of project costs.

Q: What can I do to make this project start as soon as possible? (9/12/18)

A: The item is tentatively scheduled for a City Council meeting on Wednesday, September 26, 2018, that is open to the public.

Q: Are you having these meetings with your answer/choice set and not prepared to cancel the light rail project? (9/4/18)

A: The community meetings currently that were held were done so at the Phoenix City Council's direction to conduct a full, comprehensive community engagement process facilitated by an independent facilitator to specifically discuss the impacts of a 4-lane design, although residents can provide any input they would like.

Q: If businesses and residents along South Central want 4-lanes how will the City Council address this? (9/6/18)

A: The community meetings that were held were done so at the Phoenix City Council's direction to conduct a full, comprehensive community engagement process facilitated by an independent facilitator to specifically discuss the impacts of a 4-lane design. The item is tentatively scheduled for a City Council meeting on Wednesday, September 26, 2018, that is open to the public.

Q: What are the impacts of last week's City Council vote? (9/4/18)

A: If this question is in relation to Item #130 at the August 29, 2018 Phoenix City Council meeting, that item, as approved by Council, requests “approval for staff from the Street Transportation Department to spend in excess of eight hours of staff time, per City Council Rule 12, to examine street repair options using Transportation 2050 (T2050) revenues.” The potential delay of light rail projects, as discussed by City Council at the time, is specific to projects not already in the stages of planning or design. If this is in reference to a difference City Council action, please let us know.

Q: Can I have more information on property taxes? (9/12/18)

Q: Can low income residents and senior citizens property taxes be grandfathered in? (9/12/18)

A: Property taxes are assessed and collected by the Maricopa County Assessor’s Office. Under the Light Rail Valuation Relief Program, eligible property owners could receive partial property tax relief during light rail construction. Contact Tracy Johnston with the Assessor’s Office at 602.372.9213 or [mcassessor@maricopa.gov](mailto:mcassessor@maricopa.gov) for more information.

Q: Can we do tax incentive and reinvestment zones (TIFS)? (9/12/18)

A: The City and Valley Metro will explore any methods that can be utilized for investment in the community.

Q: What is the purpose of the report once it is completed? (9/12/18)

A: The purpose of the report is for the independent meeting facilitator to summarize the feedback received. The report will be posted on the [Valley Metro’s website](#) prior to the Phoenix City Council Meeting tentatively scheduled for Wednesday, September 26, 2018. Mr. Eric Bailey serves as the independent meeting facilitator.

Q: Will there be public opinions opportunities at the City Council meeting? (9/12/18)

Q: How will there be public participation for the City Council meeting? (9/12/18)

A: The public may request to address the Council regarding an agenda item by submitting a yellow Request to Speak card at the meeting, or may submit a white card to state their support or opposition to an item for the record without speaking. Individuals should arrive and submit a card by the beginning of the meeting, before action is taken on the item. After action has been taken on an item, cards will not be accepted.

In addition, Citizen Comments are heard for up to 15 minutes at the start of the regular formal meeting and, if necessary, for up to 15 minutes (unless extended by the Chair) before adjournment or recess provided a quorum of the Council is present. Any member of the public will be given three minutes to address the Council on issues of interest or concern to them. Speakers will be called in the order in which requests to speak are received. As mandated by the Arizona Open Meeting Law, officials will not discuss matters raised during the Citizen Comment session, but may respond to personal criticism, and may direct staff to follow-up with the citizen.

Q: How much time does the public have to respond to the report once it is published? (9/12/18)

A: The item is tentatively scheduled for a City Council meeting on Wednesday, September 26, 2018, that is open to the public.

Q: What is the procedure for the public to respond if they do not agree with an answer given? (9/12/18)

A: The item is tentatively scheduled for a City Council meeting on Wednesday, September 26, 2018, that is open to the public.

Q: Is South Phoenix property costs lower than North Phoenix? (9/13/18)

A: Property values are based on various factors specific to a particular parcel (location, zoning, size, existing buildings or facilities, etc.). The Maricopa County Assessor's office, which is responsible for property valuations, states: "To establish market value, the Assessor's Office gathers information from a number of sources, including previous sales from the area, zoning, topography, view, livable square footage, lot size and other component information, just to name a few. The valuation is determined by a computer analysis of the information gathered. Although properties may look alike on the surface there may be subtle differences. In mass appraisal those are not always obvious, even though they result in different values."

Source: <https://www.mcasessor.maricopa.gov/faq/faq-property-values.php>

Q: Where there be additional improvements to the streets besides Central Avenue? (9/13/18)

A: Three roadway improvements on 7<sup>th</sup> Street and 7<sup>th</sup> Avenue are included with the South Central light rail extension. These improvements include additional right turn lanes 7<sup>th</sup> Street and I-17 and 7<sup>th</sup> Avenue and I-17 additional. The third improvement, which also includes additional turn lanes is located at 7<sup>th</sup> Avenue/Southern Avenue.

Street conditions and infrastructure needs will be analyzed throughout the city as part of the T2050 program. Specific to the South Central light rail extension, the city's Street Transportation Department is currently undertaking a 'Mobility Improvements Program' which will evaluate and improve mobility safety and connectivity for all roadway users. Of the 11 areas currently being looked at city-wide, two overlap with the proposed light rail alignment. More information can be found at: <https://www.phoenix.gov/streetssite/Pages/Mobility-Improvements-Program.aspx>

Q: Who pays for non-project costs such as extra landscaping and art? (9/13/18)

A: The City of Phoenix is responsible for paying for any concurrent non-project activities that may occur during light rail construction.

Q: How much will properties appreciate once construction is complete?

Q: How will light rail affect property values for tax purposes? (9/12/18)

A: Changes in property values are unknown, as they are subject to various factors and economic cycles. The Phoenix City Council has also appointed the South Central Transit Oriented Development (TOD) Steering Committee. This committee is charged with review of specific community inputs to formulate the transit oriented development policy plan which will serve as a guide for future investment in the corridor. The planning process will yield a TOD policy plan specific to the South Central corridor, which will serve to attract, guide, and prioritize strategic investments in infrastructure, housing, economic development, and other areas to realize a shared vision for the future. The plan will include actionable strategies for achieving long-range community goals and identify appropriate partners (city, business, or community) for implementation. For more information, please contact Mailen Pankiewicz at [mailen.pankiewicz@phoenix.gov](mailto:mailen.pankiewicz@phoenix.gov).

Q: Has there been outreach to property owners to protect their investment (taxes, gentrification) or the renters who have been there for decades?

A: The city's business assistance team is currently meeting with business and property owners to conduct business assessments to determine the tools necessary to assist them with meeting their business needs and future plans. Please contact Markus Coleman at [markus.coleman@phoenix.gov](mailto:markus.coleman@phoenix.gov).

Q: So as a transit user/not a South Phoenix resident, how do you ensure that corporate entities do not take over small businesses or homes? (9/6/18)

A: Any decisions regarding the disposition of a business or home, such as the sale of a business or rezoning process, would be done only with the consent of the owner.

Q: How are we ensuring that we continue to have affordable housing for current and future residents of South Phoenix? (9/4/18)

A: Infrastructure projects such as the South Central light rail extension provide the opportunity to expand the number of affordable housing units using federal, state, city, private, and non-profit organizations' programs and policies; today, there are approximately 1600 affordable housing units throughout the corridor. The Phoenix City Council has also appointed the South Central Transit Oriented Development (TOD) Steering Committee. This committee is charged with review of specific community inputs to formulate the transit oriented development policy plan which will serve as a guide for future investment in the corridor. The planning process will yield a TOD policy plan specific to the South Central corridor, which will serve to attract, guide, and prioritize strategic investments in infrastructure, housing, economic development, and other areas to realize a shared vision for the future. The plan will include actionable strategies for achieving long-range community goals and identify appropriate partners (city, business, or community) for implementation. For more information, please contact Mailen Pankiewicz at [mailen.pankiewicz@phoenix.gov](mailto:mailen.pankiewicz@phoenix.gov).

Q: Are there any homes being displaced by the light rail project? (9/12/18)

A: No.

Q: Why does light rail have to force families out of their homes because of gentrification? (9/4/18)

A: This has not been shown to be the case along the existing 26-mile light rail alignment in the Valley. Any decisions regarding the disposition of a home, such as the sale or rezoning process, would be done only with the consent of the owner.

Q: How do we ensure that there is no down zoning? (9/6/18)

A: The City has no plans to rezone property along the corridor without the consent of the property owner. Rather, the process to rezone property is initiated by the property owner.

Q: How can I be a part of land use planning for the South Central light rail extension? (9/6/18)

Q: What is the time table for the TOD Planning Study? (9/15/18)

A: The Phoenix City Council has appointed the South Central Transit Oriented Development (TOD) Steering Committee. This committee is charged with review of specific community inputs to formulate the transit oriented development policy plan which will serve as a guide for future investment in the corridor. The planning process will yield a TOD policy plan specific to the South Central corridor, which will serve to attract, guide, and prioritize strategic investments in infrastructure, housing, economic development, and other areas to realize a shared vision for the future. The plan will include actionable strategies for achieving long-range community goals and identify appropriate partners (city, business, or community) for implementation. For more information, please contact Mailen Pankiewicz at [mailen.pankiewicz@phoenix.gov](mailto:mailen.pankiewicz@phoenix.gov).

Q: Is the design efforts considering current or future homes and people living in South Central? (9/13/18)

A: The Phoenix City Council has appointed the South Central Transit Oriented Development (TOD) Steering Committee. This committee is charged with review of specific community inputs to formulate the transit oriented development policy plan which will serve as a guide for future investment in the corridor. The planning process will yield a TOD policy plan specific to the South Central corridor, which will serve to attract, guide, and prioritize strategic investments in infrastructure, housing, economic development, and other areas to realize a shared vision for the future. The plan will include actionable strategies for achieving long-range community goals and identify appropriate partners (city, business, or community) for implementation. For more information, please contact Mailen Pankiewicz at [mailen.pankiewicz@phoenix.gov](mailto:mailen.pankiewicz@phoenix.gov).

Q: How do we address gentrification? (9/13/18)

A: The Phoenix City Council has appointed the South Central Transit Oriented Development (TOD) Steering Committee. This committee is charged with review of specific community inputs to formulate the transit oriented development policy plan which will serve as a guide for future investment in the corridor. The planning process will yield a TOD policy plan specific to the South Central corridor, which will serve to attract, guide, and prioritize strategic investments in infrastructure, housing, economic development, and other areas to realize a shared vision for the future. The plan will include actionable strategies for achieving long-range community goals and identify appropriate partners (city, business, or community) for implementation. For more information, please contact Mailen Pankiewicz at [mailen.pankiewicz@phoenix.gov](mailto:mailen.pankiewicz@phoenix.gov).

Q: Can you provide more information on the T2050 Mobility Program? (9/12/18)

A: The city's Street Transportation Department is currently undertaking a 'Mobility Improvements Program' which will evaluate and improve mobility safety and connectivity for all roadway users. Of the 11 areas currently being looked at city-wide, two overlap with the proposed light rail alignment. More information can be found at: <https://www.phoenix.gov/streetssite/Pages/Mobility-Improvements-Program.aspx>

Q: What is the plan for West Phoenix since Glendale cancelled the light rail plans? (8/30/18)

A: Valley Metro will work with the City of Phoenix to discuss next steps and transit options that best fit the needs and future demand for travel in the West Phoenix area.

Q: When is light rail planned for North Phoenix? (8/30/18)

A: Information on the city's Transportation 2050 (T2050) program can be found at <https://www.phoenix.gov/T2050>, including light rail planning elements.

Q: What about the foundation of my home? (8/30/18)

Q: What about the foundation of my home? (8/30/18)

Q: What responsibility does Valley Metro have for cracked basements because of rail? (8/30/18)

A: Valley Metro conducts a noise and vibration analysis as part of the environmental analysis to identify sensitive areas that may exceed Federal Transit Administration (FTA) standards. Where noise and vibration is identified to exceed standards, changes are incorporated into the light rail design to bring the light rail within compliant noise and vibration levels.

Q: How big are the power stations? (8/30/18)

A: The Traction Power Substations (TPSS) are approximately the size of a two car garage.

Q: What about access to South Mountain Park? Uber or Waymo connection? (9/6/18)

A: Access to the South Mountain Park will not be impacted as a result of the light rail project.

Q: Is the project primary for people in South Phoenix or the region? (9/6/18)

A: The project will serve both the residents of South Phoenix and the region.

Q: Will enough people ride light rail? (9/4/18)

Q: How many people would use light rail? (9/12/18)

A: Using the Federal Transit Administration's (FTA) ridership forecasting model, it is estimated that the South Central Light Rail Extension will carry approximately 10,000 passenger trips each day.

Q: Parking downtown for a ball game costs \$10-\$20 and a day pass costs \$4.00 today, 4x5 = \$20.00. How am I saving money? (9/6/18)

A: For a family, there may not be a cost savings of take light rail over paying for parking. However, for traveling to a ball game, light rail offers other benefits, like avoiding traffic.

- Q: How does the light rail save the tradition and heritage of the South Phoenix community? (9/6/18)  
A: As designed, the light rail extension does not hit any buildings along Central Avenue between Buckeye Road and Baseline Road. More than a dozen of the artists selected to design art for the passenger stations and other light rail features will help the extension better integrate into the culture and heritage of the community. In addition, light rail provides a transportation option for community South Phoenix members to more efficiently access education, employment, cultural, and recreation opportunities throughout the region. Likewise, the extension will provide an opportunity for people throughout the region to discover the unique amenities that the South Phoenix Community offers.
- Q: How can light rail help benefit schools? (9/6/18)  
Q: How many schools are there along the light rail that can benefit from the light rail? (9/6/18)  
A: Preschool through 8th grade classrooms are eligible for free rides on local bus and light rail services. Valley Metro can help plan group trips on regular transit service, provide an itinerary and provide a free group field trip pass.
- Q: Who can I talk to get my school (Cesar Chavez) involved in public art on light rail? (9/6/18)  
A: Contact your Community Outreach Coordinator Julie Smith at 602.744.5563 or [jmsmith@valleymetro.org](mailto:jmsmith@valleymetro.org) for more information.
- Q: Can light rail hours be extended later into the night and morning? (9/6/18)  
A: For any routes in the region, ridership is the determining factor for any changes made to a route, including changes to frequency, the hours of operation, and changes to the route itself.
- Q: What is the process for fare changes? (9/6/18)  
A: Fare changes are necessary to preserve service and are planned to occur as needed. The last fare change occurred in 2013. Any proposed future fare changes would include an opportunity for public input and would be a regional decision.
- Q: Can bike racks be lowered on trains? (9/6/18)  
A: If you are unable to rack your bike, you can stand with your bike on the light rail.
- Q: Would an elevated system minimize the conflict between the rail and vehicular traffic? (9/12/18)  
A: An elevated system could minimize the conflict between the rail and vehicular traffic; however, the initial cost to build an elevated system could two times or more than that of a street-level system. Additionally, the ongoing maintenance costs of an elevated system are also higher than a street-level system.
- Q: Would an elevated system increase the area at ground level for 4 lanes and turn signals? (9/12/18)  
A: A design for an elevated system in the South Central corridor has not been prepared, but an elevated system could potentially allow for a 4-lane configuration with dedicated left turn lanes. However, initial construction and ongoing maintenance costs of an elevated system are substantially higher than a street-level design. Additionally, environmental elements such as noise and vibration and visual effects of an elevated system would need to be evaluated and potentially mitigated.
- Q: Why can't someone from the bus system kick out the light rail people? (9/12/18)

A: The regional bus and light rail services are part of a regional transit system. Light rail can move more people with fewer vehicles and operators, while allowing passengers to travel greater distances in a shorter amount of time than buses. However, buses provide connectivity to areas throughout the region that can't necessarily support light rail but still have public transportation needs.

Q: Why is the Capitol/I-10 West Extension a hashed line on a map? (9/12/18)

A: The hashed line for the Capitol/I-10 West Extension indicates that it is a light rail extension on Valley Metro's High Capacity Transit System map. To review the map, which was apart of the display boards at the community meetings, visit [https://www.valleymetro.org/sites/default/files/uploads/event-resources/sce\\_community\\_mtgs\\_boards.pdf](https://www.valleymetro.org/sites/default/files/uploads/event-resources/sce_community_mtgs_boards.pdf)

Q: What is the ridership for light rail? (9/12/18)

A: The annual ridership for light rail in fiscal year 2017 (July 1, 2016 to June 30, 2017) was 16,511,184 passengers.

Q: What is the fare recovery for bus and rail? (9/12/18)

A: For fiscal year 2017 (July 1, 2016 to June 30, 2017), the fare recovery for bus is 15.4% and 32.2% for rail.

Q: Are we going to add another freeway in South Phoenix? (9/13/18)

A: No. For more information on the South Mountain Freeway currently under construction, visit the Arizona Department of Transportation's website at: [https://www.azdot.gov/projects/central-district-projects/loop-202-\(south-mountain-freeway\)](https://www.azdot.gov/projects/central-district-projects/loop-202-(south-mountain-freeway))

Q: How does the light rail differ from the Tempe Streetcar? (9/12/18)

A: The Tempe Streetcar differs from light rail for the following reasons:

- Streetcar can operate with mixed traffic unlike light rail that operates in an exclusive lane
- Streetcar stops are more similar to bus stops and are smaller and less complex than light rail stops
- Streetcar vehicles operate individually, not linked together
- Streetcar uses vehicles that are smaller than light rail vehicles

Q: How will the noise off of the light rail be handled? (9/12/18)

A: Valley Metro conducts a noise and vibration analysis as part of the environmental analysis to identify sensitive areas that may exceed Federal Transit Administration (FTA) standards. Where noise is identified to exceed standards, changes are incorporated into the light rail design to bring the light rail within compliant noise levels.

Q: Will light rail have WiFi charging stations at seats, screens with news or entertainment and/or headphone jacks? (9/13/18)

A: No, that technology is not included on our current light rail vehicles.

Q: Why can't we do an elevated or underground train? (9/13/18)

Q: What about an underground train? (9/13/18)

A: An elevated or underground system would have a substantially higher initial cost to build compared to a street-level system. Additionally, the ongoing maintenance costs of an elevated or underground system are also substantially higher than a street-level system.

Q: How was outreach conducted during the early years of the South Central Extension light rail project? (9/13/18)

Q: What type of outreach was done when the light rail was being planned? (9/13/18)

Q: What was the attendance at early planning meetings? (9/4/18)

Q: What kind of community input was received during the planning process? (9/13/18)

A: During the planning and environmental assessment phase of the project, which began in 2012, public outreach was conducted through open public meetings, one-on-one and small group stakeholder meetings, and a community working group. A summary of the public outreach activities conducted during the planning and environmental assessment phases are documented in the reports available on Valley Metro's website. Please see the links below for the appropriate document:

Planning Phase: <https://www.valleymetro.org/sites/default/files/uploads/event-resources/southcentral-locallypreferredalternativereport.pdf>

Environmental Assessment: [https://www.valleymetro.org/sites/default/files/uploads/event-resources/south\\_central\\_environmental\\_assessment.pdf](https://www.valleymetro.org/sites/default/files/uploads/event-resources/south_central_environmental_assessment.pdf)

Q: Will I have to pay twice to use the light rail, once to get on the bus and once to use the light rail? (9/13/18)

A: With the purchase of all all-day pass or multi-day pass, riders can transfer between local bus and light rail without additional costs. For more information visit Valley Metro's website at: [valleymetro.org/fares](http://valleymetro.org/fares)

Q: Is the fare for the bus cheaper than the one for light rail? (9/13/18)

Q: What is the fare for light rail vs buses? (9/13/18)

A: Local bus and light rail share the same fare structure and pass types. The Express/Rapid bus service has an upgraded costs. For more information visit Valley Metro's website at: [valleymetro.org/fares](http://valleymetro.org/fares)

Q: What is the distance of the downtown alignment and where does it go in comparison to the South Central Extension? (9/13/18)

A: The downtown alignment will include approximately one mile of new light rail track. The new track will be constructed on Washington Street from 1<sup>st</sup> Street to 3<sup>rd</sup> Avenue, on 3<sup>rd</sup> Avenue from Washington Street to Jefferson Street, and on Jefferson Street from 3<sup>rd</sup> Avenue to 1<sup>st</sup> Avenue. The South Central route will connect into the downtown alignment track at Central Avenue/Jefferson Street and 1<sup>st</sup> Avenue/Jefferson Street, allowing passengers to transfer to light rail services destined east or west.

Q: What is the distance and proposed alignment for the Capitol I-10 project? (9/13/18)

A: The 10-mile Capitol/I-10 West light rail extension will connect with the existing Valley Metro Rail system in downtown Phoenix, to the 79th Avenue park-and-ride. In 2016, the Phoenix City Council and Valley Metro Rail Board of Directors approved a phased approach to the project. Phase I will connect downtown Phoenix to the State Capitol area and Phase II will extend light rail along I-10 to 79th Avenue.

Q: I've heard light rail will take us to schools and entertainment. Which ones? (9/13/18)

A: Valley Metro has created a light rail destination guide. Visit Valley Metro's website to view the brochure: [https://www.valleymetro.org/sites/default/files/uploads/event-resources/lrt4700\\_light\\_rail\\_destination\\_guide.pdf](https://www.valleymetro.org/sites/default/files/uploads/event-resources/lrt4700_light_rail_destination_guide.pdf)

Q: How can other schools not on Central Avenue get involved in the Engineers of the Future? (9/13/18)

A: For more information on becoming apart of the Engineers of the Future program contact Athena Sanchez at [athena@torresmulticultural.com](mailto:athena@torresmulticultural.com).

Q: How many people were involved in the process for the project? (9/13/18)

A: Staff and consultants from Valley Metro, City of Phoenix, and the Federal Transit Administration led the planning and environmental assessment. Community members and organizations involved in these processes are documented in reports available on Valley Metro's website. Please see the links below for the appropriate document:

Planning Phase: <https://www.valleymetro.org/sites/default/files/uploads/event-resources/southcentral-locallypreferredalternativereport.pdf>

Environmental Assessment: [https://www.valleymetro.org/sites/default/files/uploads/event-resources/south\\_central\\_environmental\\_assessment.pdf](https://www.valleymetro.org/sites/default/files/uploads/event-resources/south_central_environmental_assessment.pdf)

Q: Is there a rapid bus that goes from 24<sup>th</sup> Street to Downtown? (9/13/18)

A: Yes; the South Mountain East RAPID operates between the 24<sup>th</sup> Street and Baseline park-and-ride and 17<sup>th</sup> Avenue at Jefferson Street. For a full schedule, visit: <https://www.valleymetro.org/maps-schedules/sme>

Q: What studies have been done in the community regarding crime, property values and economic development? (9/13/18)

A: The City of Phoenix Police Department conducts various reports and crime analyses. Please provide more specific information for the first part of this question, or contact the Police Department's Community Relations Bureau at 602.495.5976. As part of the analysis required for the project, an 'Economic Development Technical Memorandum' was provided and can be found at: [https://www.valleymetro.org/sites/default/files/uploads/event-resources/south\\_central\\_appendice\\_b\\_economic\\_dev\\_tech\\_memo.pdf](https://www.valleymetro.org/sites/default/files/uploads/event-resources/south_central_appendice_b_economic_dev_tech_memo.pdf)

Q: What is the carbon footprint of light rail vs vehicles? (9/13/18)

A: According to the Federal Transit Administration's report, "Public Transportation's Role in Responding to Climate Change", an automobile produces 0.96 pounds of CO<sub>2</sub> per passenger mile compared to 0.36 pounds of CO<sub>2</sub> per passenger mile for light rail transit.

Source:

<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/PublicTransportationsRoleInRespondingToClimateChange2010.pdf>

Q: If the power goes out does the train stop running? (9/13/18)

A: If the power goes out in a given area, the system is designed to maintain operations by using power from adjacent substations.

Q: Can you provide an equity review and analysis of the 2-lane and 4-lane options considering low income, mobility challenged, blind and deaf and communities of color? (9/13/18)

A: A federally compliant environmental justice analysis, which evaluates potential impacts to low-income and minority populations was completed as part of the project's Environmental Assessment. The 4-lane concept was not carried forward to the Environmental Assessment; therefore, a complete environmental justice analysis was not completed for this concept. The Environmental Assessment report is available online here:

[https://www.valleymetro.org/sites/default/files/uploads/event-resources/south\\_central\\_environmental\\_assessment.pdf](https://www.valleymetro.org/sites/default/files/uploads/event-resources/south_central_environmental_assessment.pdf)

Q: Can you top the project for a couple of years to do analyze more in depth for the 4 lane configuration? (9/15/18)

A: Direction provided by Phoenix City Council in June 2018 was to continue with the 2-lane design but evaluate and compare the 2-lane design to a 4-lane configuration that would not extend beyond the current environmental foot print. Valley Metro and City of Phoenix staff were also directed to conduct community outreach efforts to obtain community input and communicate the results of the 2-lane and 4-lane evaluation. The community outreach phase ended on September 15, 2018, and Phoenix City Council will provide further direction at a tentatively set meeting on Wednesday, September 26, 2018.

Q: How did you inform the public of the 4-lane configurations? (9/15/18)

A: Alternatives, including 4-lane configurations, were evaluated as part of the planning phase during 2012 and 2013. During this phase of the project, public outreach was conducted through open public meetings, one-on-one and small group stakeholder meetings, and a community working group. A summary of the public outreach activities conducted during the planning phase is documented in a report available on Valley Metro's website.

<https://www.valleymetro.org/sites/default/files/uploads/event-resources/southcentral-locallypreferredalternativereport.pdf>

Q: What age group uses light rail most? (9/15/18)

A: Based Valley Metro's 2015 On-board Origin and Destination Study, the average age of light rail riders is 35.

Q: Any plans for light rail on Baseline? (9/13/18)

A: On the Proposition 104 ballot in 2015, Baseline Road was shown as an area to be studied for a Bus Rapid Transit (BRT) line as part of the T2050 program.

Q: Regarding the initial Transportation Technical Report ("Appendix C") and any recent updates: How have the computer models been validated before their application in these studies? (9/15/18)

A: The 2035 traffic forecasts used in the South Central Transportation Technical Report are based on the Maricopa Association of Governments (MAG) regional travel demand model. The model is validated to several data sources including the regional household travel survey, observed traffic delay information, and observed traffic count information. The MAG travel demand model has been peer reviewed by the Federal Highway Administration and is certified for regional air quality conformity analysis.

The SYNCHRO traffic operations software used in the South Central Transportation Technical Report relies on traffic count and traffic signal information provided by the City of Phoenix. It is validated to observed corridor travel times and delays.

For recent studies, microsimulation models were developed for 2018 existing conditions and for future conditions in the projected opening year 2023 for both the 2-lane design and the 4-lane concept to compare operations. These models were validated using the GEH statistic, compares vehicle inputs to vehicle outputs. In other words, we made sure the number of vehicles that could be accommodated by each signal in the model was equal to the number of vehicles we observed being accommodated by each signal in the field.

## Questions Related to Right-of-Way

Q: Will the light rail cut through the property near Lincoln where the tracks come together and will there be an easement? (9/6/18)

A: The light rail tracks will impact the Queen's Convenience Store. The parcel is currently planned to be acquired. Staff has been in communications with the business owner as design plans progress.

Q: Can we purchase the 50 properties and relocate them to frontage properties on the light rail route? (9/4/18)

A: No. The 50+ buildings that were evaluated early in the project would be impacted by a 4-lane light rail option with bike lanes and dedicated left turn lanes throughout Central Avenue are not included in the project's environmental clearance or project budget – the decision to not take more properties than necessary was made during previous studies and with input from the community.

Q: How much right-of-way is being taken extra in the 4-lane configuration? (9/13/18)

A: The 4-lane concept was analyzed within the same environmental foot print as the 2-lane design. Using the same "foot print" as the 2-lane design, 4 lanes will fit without additional right-of-way, but there are differences. The 4-lane would have less space for shade and landscaping, it would not include dedicated bike lanes, speed limits would be reduced from 35 miles per hour to 30 miles per hour on Central Avenue for cars, delivery trucks, and light rail, and at 13 of the 17 signalized collector and neighborhood streets, left turn lanes would be shared with through auto traffic.

Q: Can I meet with staff to find out what my property near the light rail would look like/be affected due to the light rail? (9/6/18)

A: Yes. Contact the designated Community Outreach Coordinator in your area and they will schedule a meeting with you to share current design plans.

Alexis Hermosillo at 602.523.6039 or [ahermosillo@valleymetro.org](mailto:ahermosillo@valleymetro.org) (Broadway – Baseline)

Julie Smith at 602.744.5563 or [jmsmith@valleymetro.org](mailto:jmsmith@valleymetro.org) (Lincoln – Broadway)

Julie Cruz Gilfillan at 602.495.8274 or [jcruz@valleymetro.org](mailto:jcruz@valleymetro.org) (Downtown – Lincoln)

Flor Mason at 602.523.6032 or [fmason@valleymetro.org](mailto:fmason@valleymetro.org) (Business Assistance Coordinator - entire alignment)

Q: 50 businesses were protected for 2 lanes. What type of businesses were they? (9/15/18)

A: The 50+ buildings that were evaluated early in the project were a variety of businesses and properties.

Q: How does property acquisition take place? (9/13/18)

Q: When will the land acquisition process start and who is responsible for it? (9/13/18)

A: The City of Phoenix is responsible for purchasing any right-of-way needed for the project. The acquisition process typically begins following the 60% design milestone and takes 12-24 months.

Q: If we buy property, do we pay the property owner? (9/13/18)

A: Yes. The City of Phoenix compensates property owners for any land acquisition.

## Questions Related to Roundabouts

Q: Where will roundabouts be? (9/6/18)

A: One roundabout will be located just south of the Salt River Bridge at the entrance to the Audubon Center. The second roundabout will be located two blocks south of the first roundabout at Victory Street.

Q: Can we have roundabout at Yuma instead of an intersection? (8/30/18)

A: Near the intersection of Yuma Street and Central Avenue there are buildings close to Central Avenue. Staff research shows that constructing a roundabout at Yuma Street with light rail in the median would require the need to fully or partially demolish at least one building and relocating the current business.

Q: Why is there only one lane in the roundabouts? How does/would the 2-lane work? (9/4/18)

A: The roundabout width at its narrowest location is only about 24 feet wide. With the tight turning radii, the roundabout width (both north and south bounds) cannot fit two longer vehicles, such as trucks with trailers, at the same time; therefore, only one lane can be accommodated in each direction. The roadway transitions from 4-lanes to 2-lanes north of the Salt River Bridge at Watkins Street, and remains 2-lanes until Elwood Street where the roadway transitions back to 4-lanes.

Q: What is the size of the roundabouts? (9/12/18)

A: Both of the roundabouts (roadway pavement) have a diameter of approximately 150 to 160 feet.

Q: Will roundabouts be big enough to actually work as roundabouts or will they work as stop signs? (9/12/18)

A: Yes. Roundabouts are large enough to hold the largest trucks (WB-67), and therefore will be large enough to function as a true roundabout when the train is not passing through. When the train comes through, a traffic control device will stop vehicles wishing to make a left turn or U-turn, and there will be storage for 2-3 cars during train operations that will allow vehicles wishing to go through to continue on in their direction of travel.

Q: Why are we putting in roundabouts? (9/12/18)

A: Roundabouts are included to provide delivery and freight truck access to industrial/commercial businesses on both sides of Central Avenue. In addition, the roundabouts allow cars to travel along Central Avenue without stopping for train.

Q: Regardless of roundabouts, are there going to be 2 or 4 lanes in that area? (9/13/18)

A: In the area north of Elwood Street and south of Watkins Road, there would be 2 lanes of traffic in both the 2-lane design and 4-lane concept. This area includes the roundabouts and the Salt River Bridge.

Q: Will roundabouts accommodate large turning trucks? (9/13/18)

Q: Are the roundabouts designed for semis and large vehicles? (9/15/18)

Q: Will roundabouts be able to handle large vehicles? (9/15/18)

A: Yes. The roundabouts are designed to handle WB-67 trucks, which are the largest trucks.

Q: How do bike lanes interact in the roundabouts? (9/13/18)

A: Depending on their comfort level, bicyclist can either share the travel lane with vehicles or dismount and use the adjacent sidewalk as a pedestrian while walking with their bike.

Q: How will traffic signals work with roundabouts? (9/13/18)

A: The roundabouts will allow incoming traffic to enter a roundabout by yielding to any traffic already in the roundabout. When a train is traveling through a roundabout, a signal or other device will hold cars in the dedicated left turn pocket, while cars traveling straight on Central Avenue will be allowed to continue traveling.

## Questions Related to Safety/Security

Q: What is being done about people riding light rail and not paying a fare? (9/4/18)

Q: What is the fare violation rate on light rail? (9/4/18)

A: Valley Metro continues to increase security and fare inspection across the light rail system. The fare evasion rate is at 7% which is typical for open light rail systems.

Q: What about crime that light rail will bring? (9/4/18)

A: Since light rail opened in 2008, rider safety and security have always been a top priority at Valley Metro and data shows light rail is safe. Light rail ordinances and policies were created for the safety, security and protection of all riders. Activity on trains and at stations is continuously monitored. Security officers are continually observing the system and interacting with riders on trains or station platforms. Security is increased for special events along the line that increase ridership such as concerts and sporting events. Valley Metro also partners with the police departments in the cities of Phoenix, Tempe and Mesa to provide an additional layer of security and enforcement.

Q: What is the crime associated with light rail? (9/4/18)

A: Valley Metro Rail is a safe system. Valley Metro rail operates daily for up to 20 hours across 26 miles an urban environment carrying an average of 44,000 riders each weekday. Serious safety and crime incidents are rare. Valley Metro understands being safe and feeling safe can differ, which is why a new Respect the Ride Code of Conduct was created to address bad behavior. To learn more about the Respect the Ride Code of Conduct, visit [valleymetro.org/RespectTheRide](http://valleymetro.org/RespectTheRide)

Q: What will be the increase in crime and homelessness? (9/4/18)

A: Data shows that light rail does not increase crime. Valley Metro is actively engaged with local agencies and law enforcement who are addressing longer term solutions for homelessness. Valley Metro values the collaboration of our community partners and will continue to provide support. As a visible and essential part of public travel across the region, our top priority is to provide transit services that are safe and reliable.

Q: Why don't you point out the increase in crime currently all along the light rail now? (9/6/18)

A: Crime in the Valley reached an all-time low about 10 years ago and is now on the increase. While crime on light rail has not increased, the service is a reflection of the community that it serves. It also has a greater concentration of people and the perception may be there that crime is more apparent. Valley Metro is very engaged with law enforcement in each neighborhood that we serve. We partner with police on programs to help reduce crime and support a positive and safe environment for our riders.

Q: Are you considering how to deal with the homeless? (9/6/18)

A: Our staff is actively engaged with local agencies and law enforcement who are addressing longer term solutions for homelessness. Valley Metro values the collaboration of our community partners will continue to provide support. As a visible and essential part of public travel across the region, our top priority is to provide transit services that are safe and reliable.

Q: How will safety be incorporated on the platforms? (9/6/18)

Q: How do we address security at the end-of-line (Baseline)? (9/15/18)

A: Safety is incorporated into the design of the stations, including lighting, cameras, emergency phones and how seats and screen walls are designed and placed. Platforms are monitored by patrolling security and are paid fare zones requiring a valid fare to be on the platform. Park-and-rides, generally at the end-of-line stations, are monitored by patrolling security and cameras.

Q: Is the security personal adequate? (9/6/18)

Q: How is lack of visibility and presence of security being addressed by Valley Metro? (9/15/18)

A: With every project extension, Valley Metro conducts a preliminary hazard assessment and threat and vulnerability analysis. These two assessments are used to develop security staffing. In addition, Valley Metro works with public safety to identify proper staffing models and deployment strategies for the existing 26-mile line and future extensions. Valley Metro has a variety of enforcement and safety specialists. Phoenix Transit Enforcement Unit (TEU) patrols the city's bus and light rail system.

- Sworn officers
- Municipal security guards
- K-9 handlers
- Police assistants
- Valley Metro also employs fare enforcement officers on the light rail system to conduct routine fare checks.

Q: What is being done to address crime issues before light rail stops? (9/12/18)

A: With every project extension, Valley Metro conducts a preliminary hazard assessment and threat and vulnerability analysis. These two assessments are used to develop security staffing. In addition, Valley Metro works with public safety to identify proper staffing models and deployment strategies. Safety is also incorporated into the design of the stations, including lighting, cameras, emergency phones and how seats and screen walls are designed and placed.

Q: What about security on buses? (9/13/18)

Q: What is being done about security on buses? (9/13/18)

A: Valley Metro has a variety of enforcement and safety specialists. Phoenix Transit Enforcement Unit (TEU) patrols the city's bus and light rail system.

- Sworn officers
- Municipal security guards
- K-9 handlers
- Police assistants

Q: Is the train safe for children getting on and off? (9/13/18)

A: Yes. Passengers enter and exit the vehicle at level ground at a light rail station. There is a signalized crosswalk at each light rail station.

Q: Will light rail have a commuter rail experience that has somebody that is always on train checking tickets and providing security? (9/13/18)

Q: Will someone oversee that passengers have paid tickets? (9/13/18)

A: Valley Metro has a variety of enforcement and safety specialists. Phoenix Transit Enforcement Unit (TEU) patrols the city's bus and light rail system.

- Sworn officers
- Municipal security guards
- K-9 handlers
- Police assistants
- Valley Metro also employs fare enforcement officers on the light rail system to conduct routine fare checks.

## Questions Related to System Operations

Q: How many trains will be on South Central? (9/4/18)

Q: How many trains will there be? (9/6/18)

Q: How often will trains run? (9/12/18)

A: During weekdays, passengers will have a train every 12 minutes in both directions throughout most of the day. Early morning, night, and weekend service will be about every 15 to 20 minutes.

Q: What is the train speed on fully developed roadway with train track? (9/4/18)

A: The train speed will be 35 miles per hour in the 2-lane design and 30 miles per hour in the 4-lane configuration. The train will travel at the same speed as automobiles.

Q: Will the new cars be the same design and same bike racks as the current cars? (9/6/18)

A: Valley Metro is purchasing new train cars made by a different manufacturer than the current train cars, and both types of train cars will be used on the South Central light rail extension. Bike racks on the new vehicles will be designed to maximize use and passenger comfort.

Q: Is the design of the new stations the same as the existing stations? (9/13/18)

A: The design of the stations will be similar to the stations along the existing 26-mile alignment. Community input regarding the art concepts and architecture will continue to be sought as the project design advances.

## Questions Related to Traffic

Q: How many left-hand turns will be available if light rail is a go? (9/6/18)

A: The 2-lane design includes dedicated left turn lanes at a total of 21 intersections along the alignment. Four intersections are located at the major intersections (Buckeye Road, Broadway Road, Southern Avenue, and Baseline Road). The other 17 intersections with dedicated left turn lanes will be located at collector and neighborhood streets. In the 4-lane concept, only four of the collector and neighborhood street intersections will be dedicated left turn and U-turn use; all other left turn lanes in the 4-lane concept will be shared with through traffic.

Q: Why are there no left turns and U-turns between Roeser and Sunland? There are six locations where you cannot make a left or right or U-turn in this stretch. (8/30/18)

A: Not including the intersections at Roeser Road/Central Avenue and Sunland Avenue/Central Avenue, there are three locations on Central Avenue between these roadways where traffic can currently make a left turn or U-turn. For safety purposes, automobiles are only allowed to cross light rail tracks at an intersection with a traffic signal or at a roundabout. To maintain traffic flow, light rail flow, and provide automobile access to businesses and neighborhoods, traffic signals are spaced approximately every quarter-mile, which is the distance between Roeser Road and Sunland Avenue.

Q: How far do people have to travel to make left hand turns? (8/30/18)

A: Left hand turn and U-turn locations will be located approximately every quarter-mile along Central Avenue.

Q: The left-hand turn lane will be longer due to more people in line to make U-turns. How long will the turn lane be? (9/4/18)

A: The length of each of the turn lanes varies based on the traffic projections and demand including the additional volumes for vehicles making U-turns.

Q: If I'm traveling northbound on Central and need to get to a business on the west side of the street will I need to go out of my way and make a U-turn? (8/30/18)

A: Yes, if the business is located between two intersections. Left hand turn and U-turn locations will be located approximately every quarter-mile along Central Avenue.

Q: Will U-turns be allowed? (8/30/18)

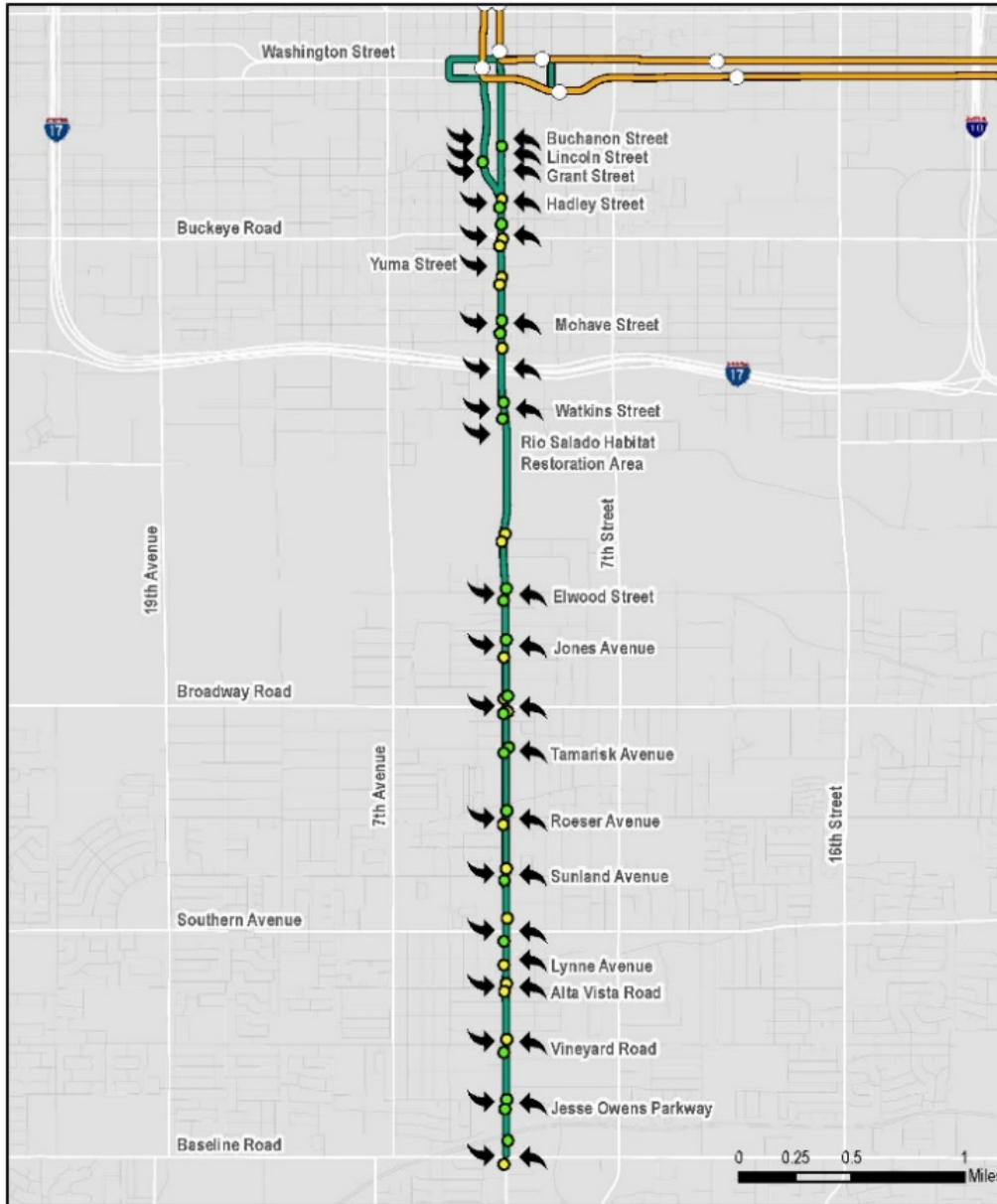
A: Yes, U-turns will be allowed at signalized intersections, which will be located approximately every quarter-mile along Central Avenue.

Q: Suggest that you test the traffic flow making left hand turns to and from the residential streets vs Broadway and Baseline? (9/4/18)

A: The traffic analyses prepared for the different roadway configurations included actual traffic data collected on Central Avenue and other area streets. The traffic data includes the traffic that turned on to and off of Central Avenue from and to residential streets. This data was factored into the traffic analyses completed.

Q: What are the locations of left hand turn lanes? (8/30/18)

A: The map below shows where left turn lanes are currently planned along Central Avenue between downtown Phoenix and Baseline Road. In the 2-lane design, all left turns are dedicated for left turn and U-turn use only. In the 4-lane concept, only four of the collector and neighborhood street intersections will be dedicated left turn and U-turn use; all other left turn lanes in the 4-lane concept will be shared with through traffic.



SOUTH CENTRAL LIGHT RAIL EXTENSION/DOWNTOWN HUB: 2-LANE DESIGN (BASED ON DRAFT 60% PLANS) September 12, 2018

<b>Legend</b>	<b>Bus Stops</b>	<b>Dedicated Left Turn Lanes</b>	
Valley Metro Rail/Station	Pullout	Left Turn Lane in Northbound Direction	
South Central Extension	No Pullout	Left Turn Lane in Southbound Direction	

Q: Can pedestrian bridges be added where there are a lot of children crossing Central Avenue? (9/6/18)  
 Q: Will there be crosswalks for students? (9/6/18)

Q: Will there be crosswalks for students? (9/6/18)

A: Where possible, crosswalks are planned for students to utilize when crossing Central Avenue.

Q: Can a crosswalk be placed at Pima instead of Yuma? (8/30/18)

A: The Yuma Street crosswalk will not be moved to Pima Street because it is at Yuma Street to help passengers safely access the Buckeye Road/Yuma Street light rail station. However, there will continue to be a crosswalk at Mohave Street, two blocks south of Pima Street.

Q: Why can't traffic lights be adjusted to allow traffic to flow smoothly with 4-lanes? (9/6/18)

A: Traffic signals have been synchronized for the 4-lane model to allow auto traffic and trains to flow as smoothly as possible. Similar to previous light rail extensions, the City of Phoenix will adjust the traffic signal system prior to start of light rail service based on current traffic conditions at that time and will continue to monitor traffic flow and adjust the signals as needed. The primary impact to traffic flow in the 4-lane design is not traffic light timing, but rather the elimination of various left-turn lanes along the alignment.

Q: Will it block Central Avenue and First Avenue? (9/6/18)

A: Central Avenue between Jefferson Street and Washington Street will be redesigned to transition automobile access to 1<sup>st</sup> St. However, this segment will remain open to light rail trains, buses, bicyclists, and pedestrians.

Q: Why not 4 lanes and a turn lane? (9/6/18)

Q: Why not purchase more to expand the space under a 4-lane with bus pullouts, bike lanes and landscaping? (9/13/18)

A: Building light rail on Central Avenue with 4-lanes and dedicated turn lanes throughout would extend outside of the environmentally cleared project area and in some areas would require fully or partially demolishing buildings and relocating the current business. This configuration was evaluated early in the planning stages of the project and was not pursued due to the resulting demolition of buildings that would be required in this scenario.

Q: How and where can we turn left? (9/13/18)

Q: Where will intersections be located besides major intersections to cross the tracks? (9/6/18)

A: Signalized Intersections and/or roundabouts, which allow safe movement of vehicles across the light rail tracks, are provided at the following locations.

	<b>Street with Track</b>	<b>Cross Street</b>
1	1st Ave	Washington
2	1st Ave	Jefferson
3	1st Ave	Madison
4	1st Ave	Buchanan
5	1st Ave	Lincoln
6	1st Ave	Grant
7	Central	Washington
8	Central	Jefferson
9	Central	Madison
10	Central	Buchanan
11	Central	Lincoln
12	Central	Grant

13	Central	Sherman
14	Central	Hadley
15	Central	Buckeye
16	Central	Yuma
17	Central	Mohave
18	Central	I-17 North
19	Central	I-17 South
20	Central	Watkins
21	Central	Rio Salado
22	Central	Audubon Roundabout
23	Central	Pioneer St
24	Central	Victory St Roundabout
25	Central	Elwood
26	Central	Jones
27	Central	Broadway
28	Central	Tamarisk
29	Central	Roeser
30	Central	Sunland
31	Central	Southern
32	Central	Lynne
33	Central	Alta Vista
34	Central	St. Anne
35	Central	Vineyard
36	Central	Jesse Owens Parkway
37	Central	Baseline Road
38	3rd Avenue	Washington St
39	3rd Avenue	Jefferson St
40	5th Avenue	Washington
41	5th Avenue	Jefferson
42	1st Avenue	McKinley
43	Central Avenue	McKinley

Q: Why are fewer cars at intersections in 2-lane and more cars stopped on the 4-lane? (9/6/18)

A: In the 2-lane design the northbound and the southbound vehicular traffic get a circular green signal at the same time. The northbound and the southbound through vehicular traffic also get a circular green signal when the light rail vehicle is going through the intersection. Left turn bays are provided at most of the signalized intersections for northbound and southbound left turns across the tracks. These movements are controlled by Red-Yellow-Green arrow signal heads. Due to the ability of the traffic signals in this design to service the northbound and southbound through movements concurrently and with the light rail vehicles these vehicles are less likely to get stopped at the intersections.

The 4-lane concept provides for 2-lanes in each direction. At all the minor intersections the inner lane (close to the light rail guideway curb) is a left and through lane while the outside lane is a through lane (also allowing right turn movements). The northbound and southbound traffic movements are controlled by Red-Yellow-Green circular traffic lights. Since, the left turn movements (northbound and southbound) from the inner lane conflict with the movement of the light rail vehicle and the opposing through vehicle movements each of these cannot operate concurrently. When the northbound signal indication is green the southbound is red and all vehicles are stopped. Similarly, when the southbound signal indication is green the northbound is red. This concept of traffic signal phasing is called "Split Phasing". When the light rail vehicle goes through the intersection all signal indications are red and traffic is stopped. Due to the inability to service through vehicular traffic in the northbound and southbound directions concurrently with the light rail vehicle movement and opposing through movement, northbound and southbound through traffic is more likely to get stopped at the minor intersections in this concept.

Q: How will drivers turn into businesses? (9/6/18)

A: There will be no change for drivers accessing businesses on the right side of the roadway. If a driver wants to access a business located on the left side of the roadway and the business is between two intersections; they will be able to make a U-turn at one of the 21 signalized intersections located approximately every quarter-mile along Central Avenue.

Q: If you take out left turn lanes traffic will get backed up, then what will happen? (8/30/18)

A: Both the 2-lane design and 4-lane concept include left turn lanes at all signalized intersections. The difference is that the 2-lane design has dedicated left turn lanes, while the 4-lane concept has shared left turn lanes (i.e., the lane can be used for either travelling straight through or to make a left turn, depending on a driver's decisions). Traffic studies indicate that the 4-lane concept with shared left turn lanes will result in more traffic delays than the 2-lane, which is one of the reasons the 2-lane design with dedicated left turn lanes was originally recommended.

Q: Was 2-lane traffic model updated recently to compare appropriately with the 4-lane concept? (9/6/18)

A: Microsimulation models using VISSIM was developed for 4 models:

- 2018 Existing Conditions
- 2023 2-Lane Design
- 2023 4-lane Concept without diversion
- 2023 4-lane concept with diversion ( same amount of diversion as the 2-lane design)

The models were developed for the section of the alignment along Central Avenue from Broadway Road to Baseline Road.

If we measure capacity as the number of personal vehicles that can be accommodated in a segment of the roadway, there is less capacity in 2023 2-lane scenario than existing. The 2023 4-lane concept will have the same capacity as existing at segments where two lanes in each direction can be provided.

Q: How does the 2-lane traffic model compare to current operations based upon the current street configuration and how is traffic capacity and flow affected? (9/6/18)

A: Both the 2-lane design and 4-lane concept include left turn lanes at all signalized intersections. The difference is that the 2-lane design has dedicated left turn lanes, while the 4-lane concept has shared left turn lanes (i.e., the lane can be used for either travelling straight through or to make a left turn, depending on a driver's decisions). Traffic studies indicate that the 4-lane concept with shared left turn lanes will result in more traffic delays than the 2-lane, which is one of the reasons the 2-lane design with dedicated left turn lanes was originally recommended.

Q: Why reduced speeds? (8/30/18)

Q: Why is the speed limit in the 4-lane design 30 miles per hour? (9/13/18)

A: The 4-lane concept does not allow enough lane width to safely maintain the 35 miles per hour speed limit. Also, the 4-lane concept provides for a shared bike lane compared to a buffered bike lane in the 2-lane design. Lowering the speed limit allows for safer movement of all traffic modes sharing the lane by reducing the speed differential.

Q: Why is there no option for one rail? (8/30/18)

Q: Why not just one track on Central Avenue? (9/12/18)

Q: Why can't it be one track from Van Buren and Central Avenue to Baseline? (9/12/18)

Q: Can a single track be considered? (9/12/18)

Q: Can this operate like the Sky Train with single track? (9/12/18)

A: A one-rail option has been studied, but is not feasible for safety and operational reasons.

Q: How is Valley Metro addressing residents not being able to get out of their community at Central and Baseline (community at southwest corner)? (8/30/18)

A: The South Central light rail extension will preserve the current traffic access points into and out of the neighborhood not prevent automobile traffic from turning in to or out of the neighborhood at the southwest corner of Baseline Road and Central Avenue. Residents will have the same access as there is today at Central Avenue and Harwell Road and the following four intersections along Baseline Road: 1<sup>st</sup> Drive, 2<sup>nd</sup> Avenue, 3<sup>rd</sup> Avenue, and 4<sup>th</sup> Avenue.

Q: Can engineers do a real "mock up" of the one lane configuration with traffic control to see how traffic flows? (8/30/18)

Q: Can you cone off one lane on Central Avenue now to assess traffic impact? (9/6/18)

A: Validated computer-based traffic models using observed traffic data are used to simulate traffic impacts. Models are used because actual tests to fully simulate traffic operations would require much more than "coning off" lanes. The overall design for 2-lane or 4-lane includes widening major intersections (Buckeye, Broadway, Southern, and Baseline) beyond the current roadway width to include a dedicated left-turn lane, dedicated thru-lane, and dedicated right-turn lane in both directions of travel. In addition, corresponding intersection expansion at 7<sup>th</sup> Street/I-17, 7<sup>th</sup> Avenue/I-17, and 7<sup>th</sup> Avenue/Southern Avenue along with traffic signal adjustments along multiple roadways would be required to adequately simulate the 2-lane design or 4-lane concept.

Q: How does 2-lanes vs 4-lanes work? (8/30/18)

Q: What is the difference between the 2-lane and 4-lane at the intersections? (9/4/18)

A: At signalized neighborhood and collector street intersections, like Central Avenue and Roeser Road, both the 2-lane design and 4-lane concept include left turn lanes. The difference is that the 2-lane design has dedicated left turn lanes, while the 4-lane concept has shared left turn lanes. With dedicated left turn lanes, traffic traveling on Central Avenue will be able to travel through an intersection at the same as trains. In the 4-lane concept, traffic in all directions of travel will be required to stop at an intersection when a train travels through. For additional graphics and traffic simulations, please visit Valley Metro's website: [valleymetro.org/southcentral](http://valleymetro.org/southcentral)

Q: What will be done to accommodate traffic at 7<sup>th</sup> Street and 7<sup>th</sup> Avenue? (8/30/18)

Q: Will there be improvements on 7<sup>th</sup> Street and 7<sup>th</sup> Avenue and what are the improvements? (9/13/18)

Q: Will 7<sup>th</sup> Street and 7<sup>th</sup> Avenue be improved? (9/13/18)

Q: What happens to traffic on 7<sup>th</sup> Avenue after light rail is complete? (9/13/18)

A: Traffic studies completed for the light rail extension have indicated that some through traffic could divert from Central Avenue to other roadways including 7<sup>th</sup> Street and 7<sup>th</sup> Avenue. The studies indicated that three intersections could be affected more than others; therefore, specific roadway improvements on 7<sup>th</sup> Street and 7<sup>th</sup> Avenue are included as part of the light rail extension. These improvements include additional right-turn lanes 7<sup>th</sup> Street and I-17 and 7<sup>th</sup> Avenue and I-17 additional. The third improvement, which also include additional turn lanes is located at 7<sup>th</sup> Avenue/Southern Avenue.

Q: Is the 2-lane configuration anywhere else in the Valley, such as downtown Mesa or by Sun Devil Stadium? (8/30/18)

A: Yes. The 2-lane configuration currently exists in the following locations:

- Veterans Way – College Avenue to 6<sup>th</sup> Street
- Terrace Road – Rural Road to Apache Boulevard
- Main Street – Country Club Drive to Mesa Drive

The Gilbert Road light rail extension is currently under construction. This new extension will be constructed as a 2-lane roadway from Mesa Drive to Gilbert Road.

Q: Will there be traffic signals surveys on Baseline and Southern before construction? (9/4/18)

A: The most recent traffic surveys at Baseline and Southern occurred in April 2018. If needed, additional traffic surveys will be completed prior to construction.

Q: How many trains/signals? (9/4/18)

A: During weekdays, passengers will have a train every 12 minutes in both directions throughout most of the day. Early morning, night, and weekend service will be about every 15 to 20 minutes.

The current two lane design provides for 33 signalized intersections from Hadley Street to Baseline Road. Some of these signalized intersections are for providing signalized pedestrian crossings across Central Avenue.

Q: Will you adjust signal system for 4-lanes? (9/6/18)

A: The primary impact to traffic flow in the 4-lane design is not traffic light timing, but rather the elimination of various left turn lanes along the alignment. Traffic signals have been synchronized for the 4-lane model. The signal system will be adjusted based on the model prior to opening day.

Q: What will traffic in South Phoenix be like without light rail in 10-20 years? (9/4/18)

A: Traffic operations can be compared based on Level of Service (LOS) for an intersection. The Highway Capacity Manual defines level of service based on the delay experienced by vehicles at the intersection and assigns a letter grade A-F ( "A" being the best and "F" being the worst operationally). The Transportation Technical Report for the South Central Extension compared the intersection LOS without light rail for 2035, with projected traffic volumes based on traffic growth. Several, intersections are anticipated to operate at a LOS of "E" and "F" without light rail.

The Environmental Assessment Transportation Technical Report for the South Central Extension is on Valley Metro's website:

[https://www.valleymetro.org/sites/default/files/uploads/event-resources/south\\_central\\_appendice\\_c\\_transportation\\_report.pdf](https://www.valleymetro.org/sites/default/files/uploads/event-resources/south_central_appendice_c_transportation_report.pdf)

Q: Can you guarantee that future traffic volumes will be accommodated with only one through lane per direction? (9/4/18)

Q: What happens to future auto capacity needs in the Central corridor? (9/4/18)

A: Estimates of traffic growth have been developed based on Maricopa Association of Government's regional traffic demand model and traffic data collected during the design and planning process. The models developed demonstrate that future traffic volumes will be served with the 2-lane design.

Q: In school zones, will the light rail slow down to school zone speeds? (9/12/18)

A: The light rail vehicle will travel at the same speed limit as the roadway traffic. It will have to comply with all regulatory traffic signs. Light rail will slow down at school zones when a slower speed is posted.

Q: Was a one-way couplet considered for light rail (7<sup>th</sup> Avenue, Central, 7<sup>th</sup> Street)? (9/12/18)

A: Eleven different combinations of roadways between 7<sup>th</sup> Avenue and 7<sup>th</sup> Street were evaluated for transit improvements. Due to the half-mile spacing and associated long walk distance between 7<sup>th</sup> Avenue, Central Avenue, and 7<sup>th</sup> Street a one-way couplet using these roadways was not considered. In downtown Phoenix and on east Washington and Jefferson streets where light rail operates on a one-way couplet, the spacing between the roadways/tracks is approximately 400 feet. Having the tracks close together is important because many riders who get on a train at one location; for example, near their home, will return to the same location after their work day, errand, etc., is complete.

Q: Can we move the station at Rio Salado and add an intersection there? (9/12/18)

A: The station at Rio Salado Drive, between Pioneer Street and the Salt River Bridge, was located at its current location based on a number of factors including community input, impacts to nearby properties and buildings, and light rail track alignment constraints. Right turns on to Rio Salado and right turns out will be provided on both sides of Central Avenue and the two roundabouts located just north and south of Rio Salado Drive will allow traffic to turn around if desired.

Q: Why do 4 lanes of traffic have to stop when the train comes through? (9/12/18)

A: The 4-lane concept provides for 2-lanes in each direction. At all the minor intersections the inner lane (close to the light rail guideway curb) is a left and through lane while the outside lane is a through lane (also allowing right turn movements). The northbound and southbound traffic movements are controlled by Red-Yellow-Green circular traffic lights. The signalization is based on the Manual on Uniform Traffic Signal Devices (MUTCD) which provides for standardized traffic signal operation throughout the United States. Since, the left turn movements (northbound and southbound) from the inner lane conflict with the movement of the light rail, these movements have to stop when the train goes through the intersection.

Q: Will there be a traffic signal at Alta Vista? (9/12/18)

A: Yes. There will be a traffic signal at Alta Vista.

Q: When did you do your surveys of traffic to prepare the traffic simulations? (9/12/18)

A: The turning movement counts were completed during the Environmental Assessment portion of the project in August 2015. Tube counts (not counts at intersections), including truck percentages were last collected on April 25-26, 2018 (Wednesday-Thursday). Supplemental volumes are also taken from the most recent available data on the City of Phoenix and Arizona Department of Transportation (ADOT) websites. For projections, historical data is drawn from City and ADOT websites, and comparative growth projections are drawn from the Maricopa Associations of Governments regional travel demand model.

Q: Which option is more efficient at moving traffic, 2 or 4 lanes? (9/13/18)

A: The two lane design is more efficient in moving traffic through the intersection. This is evidenced by lower average travel times (compared to the 4-lane concept) for a northbound or southbound vehicle moving through the corridor.

Q: Which option is preferable if a crash blocks traffic? (9/13/18)

A: If a crash fully blocks traffic in either the 2-lane design or 4-lane concept, through traffic will be unable to pass the crash at the point of the incident until cleared by first responders. The 2-lane design is specifically designed to provide enough space for vehicles to move to the right curb (bike lane) for emergency vehicles to pass traffic and respond to crashes or other incidents.

Q: Can traffic lights change quickly after a train has passed so cars can move quickly? On Washington Street near 16<sup>th</sup> Street the lights take too long to change after the train has passed. (9/13/18)

A: The City of Phoenix signal timing standards provides guidance for calculating the yellow time and all-red time at intersections, both with and without a train. The purpose of the yellow time is to allow vehicles moving through to clear the intersection. All-red time is meant to provide final clearance for any vehicle that may be already in the intersection for it to clear the intersection (as a safety measure). We will time the signals to meet these guidelines and safety standards. We also will be prioritizing pedestrian safety, and making sure that pedestrians have ample time to clear the intersection before a conflicting traffic phase is allowed to begin.

Q: Will the traffic get heavier on 7<sup>th</sup> Street and 7<sup>th</sup> Avenue after this project is finished? (9/13/18)

A: Yes, this is anticipated. As recommended in the Environmental Assessment, improvements are being designed at the following intersections to accommodate the additional traffic volumes prior to construction on Central Avenue.

- 7th Avenue and Southern
- 7th Avenue and I-17
- 7th Street and I-17

Q: How many signals will be added to South Central and how many current signals are there now? (9/13/18)

A: Between Lincoln Street and Baseline Road, the 2-lane design includes 22 signalized intersections. Within this same area, there are currently 9 signalized intersections.

Q: Have traffic models accounted for mid-block driveways, entrances and exits? (9/13/18)

A: Yes. The traffic models developed for comparing the 2-lane design and 4-lane concept using VISSIM accounts for the traffic from mid-block driveways (entrances and exits). This is also seen in the video simulations that were generated from the model.

Q: Will the traffic be better with 2 lanes? (9/13/18)

A: Traffic flow will be better in the 2-lane design.

Q: Does the light rail have to reduce the current flow of traffic? Can you come up with a solution that keeps the current flow or improves it? (9/13/18)

A: It will not be possible to maintain the same number of lanes on the roadway while also building the light rail line within the footprint of the environmentally cleared right-of way. The concept of “flow” on the corridor is generally dictated in an urban arterial by the function of the signals on that arterial. The City and Valley Metro are working diligently to ensure that signals are working optimally to maximize flow on the corridor. As part of this effort, simulation models will be developed with light rail operations to develop the signal timings for each intersection that minimizes impacts to vehicular flow. An advanced traffic signal system is being designed which allows for passing of information from upstream intersections to downstream intersection that alerts the intersection of the arrival of the light rail vehicle and helps prepare the intersection to make a decision regarding allowing for the passage of the train while minimizing impacts to vehicular traffic.

Q: Are cars safe traveling next to the train? (9/13/18)

A: Yes, cars are safe travelling next to trains. Valley Metro has 10 years of experience operating light rail service adjacent to cars.

Q: What will happen to the 30 miles per hour vs 35 miles per hour speed limit during rush hour? Will 30 miles per hour be slower? Also, with the reduced speed limits to accommodate school crossings, will that put a strain on the 30 mile per hour speed limit? (9/13/18)

A: Speed limits will remain 35 miles per hour in a 2-lane scenario and 30 miles per hour in a 4-lane scenario. This will be true throughout the day. Under either circumstance, vehicles will accelerate to meet the speed limit whenever they have space to do so comfortably. During rush hour, it is highly likely that the speed limit would not be reached, especially in a scenario with more congestion.

The presence of school zones will remain with reduced speed limits and the light rail will have to operate at the lower speed limit in these areas. The light rail vehicle will not have any congestion limiting its acceleration, and will therefore likely be able to accelerate to meet the speed limit.

Q: Can you add a green light to the curb lane of the 4-lane alternative? (9/15/18)

A: The northbound and southbound traffic movements are controlled by Red-Yellow-Green circular traffic lights in the 4-lane option. These signals are based on the standards set forth in the Manual on Uniform Traffic Control Devices (MUTCD). Since both lanes of traffic allow for through traffic movement and are controlled by same type of signals (Red-Yellow-Green balls) we cannot operate these independently.

Q: Will businesses be impacted by 4-lane design? (9/15/18)

A: Any form of construction within a roadway can impact nearby businesses. Regardless of the roadway configuration (2-lane design or 4-lane concept), nearby businesses could be impacted by the related construction.

Q: Can you provide different signalization for turning vs through traffic in the 4-lane option? (9/15/18)

A: In the 4-lane option the inner lane (close to the light rail guideway curb) is a shared left and through lane while the outer lane is a through lane (also allows right turns). We cannot provide separate signals for turning versus through traffic in the 4-lane concept as per the requirements set forth in the MUTCD. Since both lanes of traffic allow for through traffic movement and are controlled by same type of signals (Red-Yellow-Green balls) we cannot operate these independently.

Q: Is there a travel time difference between 2-lane and 4-lane? (9/15/18)

A: The traffic analysis completed for the 2-lane and 4-lane comparison projects that the 4-lane concept would take 2 to 3 minutes of additional travel time compared to the 2-lane design, during the PM rush hour in the segment evaluated (Baseline Road to Broadway Road).

Q: Please clarify and quantify the impact of (presently unsignalized) reconfigured (for 2-lane with light rail and for 4-lane with light rail) left turns (into driveways) and U-turns versus the functionality and flow of the present configuration of South Central Avenue. (9/15/18)

A: The existing corridor has a two-way left turn lane median which generally allows for left turn ingress and egress movements at unsignalized accesses along the corridor. The construction of light rail will essentially create a median that will prevent all left turn movements along the corridor outside of signalized intersections. This will induce new U-turn movements as left turn ingress and egress movements will be displaced to downstream signalized intersections. U-turns affect capacity at signalized intersection and should be accounted for. The impact is quantified in terms of the delay and level of service (LOS) of the signalized intersections.

For the 2-lane and 4-lane comparison, a traffic analysis was completed using the VISSIM traffic modeling application for a segment of Central Avenue between Baseline Road and Broadway Road. The 4-lane with diversion assumes the same diversion as the 2-lane model to adjacent parallel arterials while the 4-lane without diversion assumes no diversion to parallel arterials. Comparative models were developed for the section between Broadway Road and Baseline Road along Central Avenue. Results of the analysis indicate that 3 of 11 signalized intersections in the 2-lane design would operate at a LOS of D – F, while 4 of the 11 intersections in the 4-lane concept would operate at a LOS of D – F.

Q: As I understand it, the plans close all medians and channelize all left and U-turns into left turn lanes controlled by (some new) traffic signals. If future traffic forecasts are low -- at all -- construction will again be needed to lengthen the turn lanes so the car queues don't spill over into the through lane. This task, if having to be undertaken at one of the major intersections with a train station on it, would be quite difficult to accomplish. (9/15/18)

A: We agree and as part of the design effort we have gone through quite a rigorous process with the 2-lane design to make sure that turn lanes will accommodate future turning traffic (including U-turns and taking into account projected traffic growth). We based our left turn lane bay lengths on several different estimates from different methodologies. The actual turn bay length designed was based on a conservative calculation or estimate (longer length) that could be accommodated, unless it's impacting existing buildings or getting into adjacent intersections. In the existing system there are several locations where turn lane lengths cannot accommodate the existing turning queue and our goal is to design to prevent that in the future.

Q: The road capacity factors used within the initial two-lane computer model are derived from the 2010 National Highway Capacity Manual/Software. That manual was completely updated for 2016. The new National Highway Capacity Model update (HCM 2016) now, for the first time, explicitly takes into account the slowing effect on traffic caused by unsignalized driveway movements entering the adjacent through lane. City and Valley Metro project computer models presumably by now are updated so as to be able to evaluate proposed new private and public sector projects for their traffic impact. How do the two-lane and four-lane plans compare with the current configuration for traffic performance when all are assessed with HCM 2016? (9/15/18)

A: The initial traffic analysis was performed using HCM 2010 standards. For new traffic analyses, including the 2-lane and 4-lane comparison analysis, a VISSIM microsimulation model is used to directly measure the delay and density on the roadway, then applying that delay and density to the most updated tables in HCM to output the level of service. Because VISSIM is a microsimulation model, the effect of each vehicle entering the system on all other vehicles in the system is accounted for. We then take the delay that results from the combined effect of all vehicles, and prescribe the level of service (LOS) recommended by HCM for that level of delay.

In general, the HCM recognizes that the LOS on signalized urban arterials, like Central Avenue, is controlled by the LOS at the signalized intersections. HCM takes into account traffic caused by unsignalized driveways but this is more appropriate for a long stretch of unsignalized roadway where these flows are what impede flow of through traffic. On an urban arterial like Central Avenue, with signalized intersections, flow is impeded at the signalized intersections and vehicular delay at the intersections (basis for LOS) is the appropriate measure.

**Q:** Will the number of related collisions increase with the 4-lane design? (9/13/18)

**A:** A final design has not been prepared yet; however, any design created, 2-lane or 4-lane, will be evaluated by Valley Metro, the City of Phoenix, and the State Safety Oversight Office for compliance with local and national roadway safety standards.

## Questions Related to Why Light Rail?

Q: Can buses handle the demand? (8/30/18)

Q: Why not use buses? (9/4/18)

Q: What can light rail do that a bus can't? (9/6/18)

Q: Why can't the bus system and shuttle buses be improved, or 24<sup>th</sup> Street?

Q: Why would we need both buses and light rail? (9/12/18)

Q: Isn't it better to have more bus service instead of the light rail? (9/13/18)

Q: Can we have more bus service in place of the rail? (9/15/18)

A: Despite frequent bus service in the corridor today (every 10 minutes during rush-hour), local buses on Central Avenue (Route 0) provide some passengers with a standing-room only ride during peak travel hours. Existing ridership data shows that some bus trips during rush-hour regularly experience overcrowding. Furthermore, the projected growth in population and employment in the South Central Avenue corridor will increase the need for more transit service.

For serving the same number of passengers, light rail is more efficient than bus service. For example, operating a three-car train, which has nearly 200 passenger seats requires just one train operators, while operating three (3) 60-foot buses, which has less than 180 passengers seats requires three bus operators. Increasing the number of buses on Central Avenue requires purchasing more buses, which need to be replaced more frequently than light rail trains and increasing the number of operators, which directly relates to an increase in operating costs.

Furthermore, light rail offers the quickest and most reliable travel times from Baseline Road to Downtown Phoenix and can be fully integrated with existing light rail system.

Q: What percentage of people actually take the bus now and will later when light rail is completed? (9/12/18)

A: Today, the three north-south operating bus routes within 1/2 mile of Central Avenue (Route 0 – Central Avenue, Route 7 – 7th Street, and Route 8 – 7th Avenue), pick up approximately 2,700 passengers each weekday in the area south of downtown, but not including downtown. Past experience with the introduction of light rail in other parts of the region, indicates that intersecting bus routes generally experience increases in passenger use, while bus routes on the same roadway or nearby roadways travelling in the same direction experience decreases in passenger use.

The Federal Transit Administration's validated ridership forecasting model estimates that overall regional bus passenger use will increase by two percent with the implementation of the South Central light rail extension. Similar to local past experience, local bus routes intersecting the light rail line along Central Avenue generally show increases in passenger use, while passenger use on north-south routes decrease once the South Central light rail extension is implemented. These decreases are due to the increase in light rail service frequency in the corridor and the reduction in service frequency on bus Route 0 (Central Avenue).

## **Citizen Comments provided on the flip charts:**

- I want pullouts for buses.
- Improve bus pullouts for the whole city.
- I want improved street lighting.
- Please answer all of our questions.
- I am in favor.
- Should have been done a long time ago.
- Don't need light rail because we already have the bus.
- Object to bus bays, support 4 lanes – pullouts not needed.
- Need established trees – cluster around bus areas, shaded areas – provide in proper location.
- People do not want the train.
- 4-lanes shared bike lanes.
- Prefer bike lanes be moved to 7<sup>th</sup> Street and 7<sup>th</sup> Avenue – most bikes used are not from south Phoenix.
- 7<sup>th</sup> Avenue – Broadway to Southern – there are bike safety and pedestrian concerns and also bike and sidewalk concerns.
- Transparency in regards to business assistance.
- Consider an option for public transit: sky train pod system = coming to Middle East and Florida.
- These discussions have been very helpful, but should have been done before the Proposition 104 vote.
- I argue against the whole project but fervently oppose the 4-lane option as presented.
- 1<sup>st</sup> choice – no train, 2<sup>nd</sup> choice 2-lane, 3<sup>rd</sup> choice 4-lane.
- Liked dedicated left turn lanes.
- ADA compliance on all facilities.
- Recommendation – inform business owners that access to businesses will remain/participate in modification.
- Concern - maintenance of landscaping old and new.
- Recommendation – have entire alignment on one map – 2 lanes and 4 lanes.
- Add more shade and trees.
- Add electric route signage at bus stops.
- Add more shading and trees.
- Keep traffic flowing while train passes in same directions.
- More community outreach.
- Propaganda/boards are slanted to make 2-lane option more favorable.
- Need to show “sharrow” on all 4-lane segments/boards for consistency.
- Info is slanted to 2 lane bias.
- Alternative methods to get around, Uber, Lyft or taxi used on occasions instead of every day.
- The light rail will be a ghost train or a constant reminder of a moving money pit.
- The elderly should not drive. I can only speak for my siblings and family, but before my 94.5 young mother passed away, my siblings and I would take my mother to appointments, church, shopping and visit family. When there is a will, there is a way.
- I would not expect an elderly person to walk from their home. For example, 2<sup>nd</sup> Avenue to Central Avenue and then a .25 to .50 mile to the next major intersection, to get on the light rail or bus. Our parents may have been poor but they were blessed with children who cared for them.
- If you build it they will come.
- The buses are not packed now. Would riders come out of the woodwork just to ride the light rail? I have ridden the light rail three times to see how it was.

- Add no smoking signs to bus stops.
- All traffic stops when light rail train passing through intersection for safety.
- Boundaries should follow streets grid, not necessarily a circle.
- Building heights should step down as distance from station increase.
- Stations too far apart.
- Concerns about added traffic signals on Central.
- Traffic calming measures south of Baseline to reduce cut through traffic.
- Want truck access for businesses in South Phoenix.
- Clarify travel time more succinctly in traffic flow info – show on comparison table but does not stand out.
- Teach all the bus riders how the buses run. For example, the 24<sup>th</sup> Street bus picks up at 24<sup>th</sup> Street and Baseline and rides to Glendale. People need to know this. Another example is 7<sup>th</sup> Street bus goes to Deer Valley from the south side.
- Small electric busses to run from Baseline to Watkins more frequently than the larger buses that would go from Van Buren from Dobbins St. Catherine’s church. On Fridays students (250 students) cross Central at Alta Vista. Need enough time for students to safely cross Central between 7:30 - 8:00 am and 9:00 - 9:30 am.
- In morning parents drop off kids at St. Catherine’s school. Training drivers to move over safely to the right (bike) lane during emergency vehicle operation. Provide additional signage.
- Don’t need light rail because we already have bus.
- Need to accommodate this traffic 7:30 – 8:00 am and 3:00 – 3:30 pm after school.
- Concern about crime due to light rail.
- Need data on businesses lost during north Central and Mesa 2 lane construction.
- W. Pueblo Ave. dead ends; restricts fire department access and residential egress.
- Trash in alley is resident’s problem - alley access restricted by trash.
- Street lights out between 12<sup>th</sup> and 7<sup>th</sup> Avenue and Baseline.
- We were not clear about plan in T2050 and Proposition 400 when votes occurred.
- “T2050 may go away” is an incorrect statement.
- Nearly empty train passing by our favorite restaurant and business closed down.
- The light rail forces families to move out of their homes because of gentrification.
- Light rail forces families to move out of their homes because of gentrification.
- Nearly empty trains passing by our closed down businesses.
- The light rail forces families to move out of their homes because of gentrification.
- I am in favor.
- Should have been done a long time ago.
- People do not want the train.
- The train is a good thing. Others want it.
- Two lanes is bad – 4 lanes is worse – horrible plan.
- I want community to vote on 4-lane/2-lane or no train initiatives.
- Please present info at South Mountain Village Planning Committee.
- Concern: security and homelessness.
- Community should vote on light rail, 2-lanes, 4-lanes and no train
- Business owners in the Warehouse District is very much in favor of light rail and the 2-lane option.
- I like the idea of community enhancements.
- One million for new buses is better than one billion for light rail.
- Path from St. Catherine School to mass.
- Set parents into St. Catherine’s School.

- No one contacted us about the meeting (funeral home).
- Get new buses because we have old buses that are always breaking down and light rail will just add to the congestion.
- Should consider ADA compliance and bike lanes.
- Prefer no light rail.
- Concern about light rail forcing residents and businesses owners out.
- 100% public transportation user: bus system is slow and takes two hours to get to South Phoenix.
- Expects the light rail to come because of dedicated guideway.
- Light rail is faster.
- I want South Phoenix to be connected to the rest of the city.
- Want to be connected to restaurants, galleries and parks.
- Look at opportunities to provide access to businesses through public alleyways.
- Include signage to help guide customers to alternate entry (example: Pulsipher Dentistry).
- We need to build this segment - it is core service.
- Spending 1 billion on light rail is a waste of money.
- Concern about properties becoming unaffordable with light rail.
- I travel from Tempe and take light rail and transfer to South Phoenix using Route 0 – please build the extension.
- I like the 2-lane option.
- The rail and the buses running together is a waste of money.
- Do not think that running buses on light rail after light rail opens makes sense.
- Prefer 2 lanes instead of 4 lanes due to traffic flow and mix of 4/2 lane at roundabouts and the Salt River Bridge.
- Prefer 2 lanes based on bus pullouts, bike lanes and shade.
- Consider striping at bus pullouts on 2-lane design to maintain exclusive bike lane.
- It would nice to have trains with a schedule similar to the airport.
- Without the train traffic is already at a standstill. With the 4-lane and no bus pullouts traffic will be stopped, so 2-lane is preferred.
- Keep traffic moving.
- Stand still starting at 3:00 pm.
- At I-10 and 24<sup>th</sup> Street is the worst exit. Transition between the ramp and the street is uneven and needs to be fixed.
- We need cash assistance for local businesses to keep them open during construction and beyond construction.
- Trains have more room for bicycles and less seats for riders.
- Concerns about emergency vehicles getting to house.
- Doesn't want light rail but if it is coming, would prefer the 2-lane option.
- I don't think people use it.
- Traffic is congested on 7<sup>th</sup> Avenue – improvements needed.
- Need more pedestrian crossings on Central Avenue.
- 2-lane design is more efficient than the 4-lane.
- The 4-lane design should have a lower speed limit than the 2-lane because it is not safe as the 2- lane.
- Want to have a crosswalk at Alta Vista and 7<sup>th</sup> Avenue for kids getting to bus stops.
- Wants the light rail because currently use the bus and the bus is not always on time and sometimes dirty.
- Prefers “sharrows” over bike lanes (as a 10 year cycling instructor).
- Supports train and 2-lane.

- This type of outreach should have happened in the beginning.
- Concerns of losing passengers because of required transfers in downtown Phoenix.
- Valley Metro is doing the right thing and needs to keep moving forward.
- Our existing bus service is good and it works.
- We want to access businesses during construction.
- The freight train stops buses at 24<sup>th</sup> Street and Jefferson.
- Roundabouts shown on board are a good way to handle the type of traffic in the area.
- No need for light rail with buses and cars.
- Why are people so against the light rail?
- The initial transportation technical study states that the greatest impact would be felt during the late afternoon PM peak - typically during the commuter “rush hours.” There is the morning rush hour with its school traffic followed by returning school traffic in the early earlier afternoon. These primary school children returning to their neighborhood homes have to rely on adult crossing guards to cross Central. These crossings of children made at minor intersections stop are not achieved in one signal cycle but as many as are needed. As Central could only have one travel lane, car queues for that period will necessarily be longer (and yet the four-lane with train would appear to be worse).
- Keeping in mind always that slower speeds on Central mean fewer cars clearing intersections and longer queues left behind at the signals backing up traffic, there may have to be a “workaround” for the condition here of a high number of closely-spaced lower-volume driveways in place of a low-number of higher-volume driveways provided for by the highway capacity model. There are additionally a number of side streets without traffic signals that must turn onto Central. Cars entering those streets have to slow to make the customary 90-degree turn too. Tailoring the model to the unique road conditions here is an effort that needs to be made.)