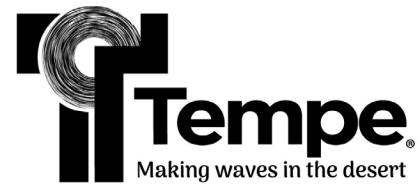


PUBLIC MEETING AGENDA



Sustainability Commission

MEETING DATE

Monday, February 08, 2021
4:30 p.m.

MEETING LOCATION

Virtual Meeting

[Join Microsoft Teams Meeting](#)

[+1 480-498-8745](tel:+14804988745) United States, Phoenix (Toll)

Conference ID: 596 204 660#

| AGENDA ITEM | PRESENTER | ACTION or INFORMATION |
|--|--|-----------------------|
| 1. Public Appearances The Sustainability Commission welcomes public comment for items listed on this agenda. There is a <i>three-minute time limit</i> per citizen. | Kendon Jung, Commission Chair (4:30 – 4:33 pm) | Information |
| 2. Approval of Meeting Minutes The Commission will be asked to review and approve meeting minutes from the January 6 & January 11, 2021 meetings. | Kendon Jung, Commission Chair (4:33 – 4:35 pm) | Action |
| 3. 30% Country Club Way & Transportation Demand Management Update Staff will provide updates. | Robert Yabes, Vanessa Spartan, Chase Walman (4:35 – 5:00 pm) | Information |
| 4. International Green Building Code Staff will provide updates. | Donna Sullivan Hancock, Dino Accardo (5:00 – 5:20 pm) | Information |
| 5. Proposed Transit Changes Staff will provide updates. | Sam Stevenson, (5:20 – 5:35 pm) | Information |
| 6. Resilient Energy Hubs Staff will provide updates. | Braden Kay, Sustainability Director (5:35– 5:40 pm) | Information |
| 7. Housekeeping Items | Kendon Jung, Commission Chair (5:40 – 5:45 pm) | Action |
| 8. Future Agenda Items Commission may request future agenda items. | Kendon Jung, Commission Chair (5:50 – 5:55 pm) | Information |

According to the Arizona Open Meeting Law, the Sustainability Commission may only discuss matters listed on the agenda. The City of Tempe endeavors to make all public meetings accessible to persons with disabilities. With 48 hours advance notice, special assistance is available at public meetings for sight and/or hearing-impaired persons. Please call 350-2775 (voice) or 350-8400 (TDD) to request an accommodation to participate in a public meeting.

DRAFT Minutes
Joint Meeting
Neighborhood Advisory Commission
and Sustainability Commission
January 6, 2021



Minutes of the Neighborhood Advisory Commission (NAC) and Sustainability Commission (SUSTY) held on Wednesday, January 6, 2021, virtual meeting using Microsoft Teams platform

NAC (MEMBERS) Present: Hannah Moulton Belec (Chair), Maureen Eastty, Jana Lynn Granillo, Diane Harden, Barb Harris, Matt Heil, Melanie Larimer (Vice Chair), Christopher McCabe, Michael McLendon, Daniel Schugurensky, Joel Stern, Kevin Sweeney and Nicholas Weller.

NAC (MEMBERS) Absent: Richelle Miller, Zoe Stein

SUSTY (MEMBERS) Present: Kendon Jung (Chair), Ryan Mores (Vice Chair), Barbie Burke, Gretchen Reinhardt, Anna Melis, Sukki Jahnke

SUSTY (MEMBERS) Absent: John Kane, Steve Russell, Katja Brundiars, Stephanie Milam-Edwards

City Staff: Elizabeth Thomas, Neighborhood Services Specialist; Shauna Warner, Neighborhood Services Manager; Grace Kelly, Energy Management Coordinator; Braden Kay, Sustainability Director

Guests: Mitchell, Marlborough Park Estates resident

Agenda Item 1 – Call to Order

The joint meeting was called to order at 6:15 p.m. by NAC Chair Belec

Agenda Item 2 – Attendance Roll Call

NAC (MEMEBERS) Present: Hannah Moulton Belec, Maureen Eastty, Diane Harden, Barb Harris, Matt Heil, Melanie Larimer, Christopher McCabe, Joel Stern, Kevin Sweeney and Nicholas Weller.

NAC (MEMBERS) Absent: Jana Lynn Granillo (during roll call), Michael McLendon (during roll call), Richelle Miller, Daniel Schugurensky (during roll call) and Zoe Stein

SUSTY (MEMBERS) Present: Kendon Jung, Ryan Mores, Barbie Burke, Gretchen Reinhardt, Anna Melis, Sukki Jahnke

SUSTY (MEMBERS) Absent: John Kane, Steve Russell, Katja Brundiars, Stephanie Milam-Edwards

Agenda Item 3 – Public Comment

None.

Agenda Item 4 – Neighborhood Engagement for Climate Action Plan Update

Sustainability Director Braden Kay affirmed Tempe's first Climate Action Plan was approved by Council in 2019, the result of a three-year process after Mayor and Council signed on with Global Covenant of Mayors on Climate and Energy. Braden then provided an update on the Climate Action Plan 2021.

The purpose of the second climate action plan is to:

- Provide space and listen to build collaboration with the community and improve upon the Climate Action Plan 2019
 - Co-create a process to engage stakeholders
 - Co-create actionable items that are important to stakeholders
 - Tempe's Climate Action Plan was the second in Arizona. We promised we would do an update and improve upon what is important to schools, youth, faith-based community and businesses.
- Outcomes:
 - Partnerships for decarbonization and resilience to extreme heat
 - 99% community carbon emissions come from energy and transportation
 - Working with our community to reduce emissions from energy and transportation
 - Resilience to extreme heat is another component of Climate Action Plan
 - Extreme heat is going to get worse
 - Equitable climate actions

What is equitable climate action?

- Advocates for justice, people and the planet
- Identifies ways in which injustices between marginalized communities and the earth are interconnected
 - Important to advocate for those hit hardest by climate change
 - We came to realize that social justice is climate justice and climate action
 - In case of emergency, if community members don't trust the police, they are not going to be able to get through climate challenges.

Some of the discussion highlights included:

- NAC Commissioner Harden asked: what does advocates for justice, people and the planet mean? What is a social justice issue? What is an energy resilience hub?
- Braden Kay replied not addressing poverty and not addressing racism. Braden remarked that the Office of Sustainability has been working for years to message this and there are aspects that are confusing.
- NAC Chair Belec - Resilience hubs are fire stations, community centers, schools and churches that are outfitted with solar panels and battery storage. In the event of an emergency that compromises the electrical grid, resilience hubs will ensure that first responders and evacuees have access to electricity.
- Sustainability Commission Chair Jung - Common definition of sustainability is people, profit and planet. There are people that talk about fixing the planet or the environment, but without addressing the social aspects. Communities of color are more likely to be located next to landfills, for example. Having an awareness

that social justice is part of those discussions is important. Climate action seeks to call out social justice as an important element that needs to be seen.

- Susty Commission Vice Chair Mores - I invite you to check out the first Climate Action plan that Tempe approved a year ago.
- NAC Commissioner Harden - We have seen the plan, so I do have a baseline, but the feedback I'm giving you is it's still unclear, to get people's attention there needs to be more specificity. It is very general.
- Susty Commissioner Burke - One example is APS and SRP studies came out and showed that many elderly people were dying of the heat, having to make choices between food and air conditioning. APS and SRP changed their policy to not allow shutoffs in the summer and offered discounts to low income residents, a local example of addressing climate justice.
- Susty Commissioner Reinhardt - Another example is air quality. Important solutions for climate impact those air quality concerns. A lot of air quality issues are not equally distributed around zip codes. So those in underserved communities are impacted more by poor air quality; it is exacerbated in low income areas. The heat changed the ozone, and it is felt more there.
- NAC Vice Chair Larimer - You mentioned trust of law enforcement and government. How would trust in these organizations help?
- Braden - If people are struggling, they would be less likely to go to police because of police action toward people of color; people have come to us and told us these are issues of concern to them.

Equitable Climate Action examples:

- Training childcare organizations to reduce children's exposure to pesticides
- Educating low income families to identify and address environmental hazards in their homes including exposure to extreme heat
- Training residents on how to read their energy bill and lower utility costs
- Neighborhood green infrastructure projects in parks and in rights-of way
- Allergy and asthma testing in economically vulnerable communities
- Cooling stations or shaded bus stops
- Youth Climate Town Hall

The first Climate Action Plan (2019)

- Areas of Focus:
 - Energy
 - Transportation
 - Resilience to extreme heat
- Highlight actions
 - Resilient energy hubs
 - Transportation demand management
 - Green infrastructure
 - Green construction code

Collaborative efforts include:

- Human Services Department is working with Sustainability staff on creation of energy hubs along Apache Boulevard near Dorsey.
- Office of Sustainability is also working with Transportation on demand management.

- Pilot programs around city including those for green infrastructure meaning infrastructure that uses storm water to grow urban forests and vegetation.

Climate Action Plan 2021 Updates – Listening Phase:

The Listening Phase took place in Fall 2020; Office of Sustainability met with business leaders, faith-based organizations, neighborhoods, youth and students. Braden asked Sustainability commissioners to share about what they learned at those sessions.

- Susty Commissioner Burke commented that sessions were very well attended, drawing more people than expected. We heard that people wanted a cleaner Tempe, were concerned with their neighborhoods and growth and what we could do to make it better for them. It led to us wanting to have a meeting with your commission to get your feedback on it.
- Susty Commissioner Reinhardt recalled that there was a lot of conversation about how we reach faith-based organizations and youth and help them understand, what are resilient energy hubs? What goes into it? How may faith-based communities be involved? They need plenty of advance notice.
- Braden shared that Susty Commissioner Sukki Jahnke is with the Chamber of commerce and helps with business communication. In the listening sessions for business community, we talked about how the business community can work with utilities to save energy and work with organizations on tree plantings. In listening sessions, we asked what should we do and who should be involved?

Climate Action Plan 2021 Updates – Planning Phase:

Braden stated that Spring listening sessions are being planned for February, one with youth (middle and high school age), and one with businesses. We'll do a forum to see what climate action should look like and how we develop these specific stakeholder agendas. A Request For Proposal (RFP) has been put out to hire a community-based nonprofit to help reach residents and do training on issues like how to read energy bills and how to manage home during periods of extreme heat. We are looking for neighborhoods we don't usually hear from.

NAC Commissioner Nich Weller commented that it would be helpful if people know how to make better decisions about heat in their home. Braden agreed emphasizing there is a need for action and investment. We want to help these residents have resources so they can be heard by these decision-making bodies like utility boards and Council.

- Another component of our climate action is Story Walks
 - Placement of 8-10 yard signs that tell a story about something that could happen in Tempe during climate action.
 - Dr. Withycombe-Keeler has a class at ASU to help with those stories – tell a story about someone who is taking action now and what that looks like in the future; you can comment on if you think this should happen. We thought this would be an interesting way to do engagement during Covid.
- Guiding principles - When we adopted the climate action plan, the sustainability commission came up with these 5 principles to ensure quality and effective climate action:
 - Equity
 - Engagement

- Enterprise
- Effectiveness and evidence
- Fiscal responsibility
- Next steps:
 - Identify other stakeholders to involve
 - Create and share story walks and social medias
 - Identify specific climate actions to collaborate on
 - Adopt policy to highlight actions
- Moving Forward:
 - Grant applications
 - ASU
 - Policy development
 - Pilot projects: green infrastructure and neighborhood grants

Some of the dialogue and feedback included:

- NAC Commissioner Granillo - For the Maryanne Corder neighborhood grants, it would be great to have a category for shade, using water. We're aware that some neighborhoods apply for grants and other don't because they are not organized. I could help those neighborhoods so they could apply for grants. When you come up with your recommendations, having citywide surveys would be helpful. ADOT is working on Broadway curve, I don't know what the impact to neighborhoods will be, there may be increased traffic. I don't know how that ties into transportation goals.
- Braden - Transportation Demand Management is working with businesses and commuters and is a really important part of the equation with dealing with the Broadway curve. There is a lot of important tools that can be used such as flex day schedules and varied work hours to minimize impact on neighbors and traffic safety. I need to follow up with group that is working on that.
- Braden confirmed we will work with ALL neighborhoods; we're just putting extra effort in working with the marginalized neighborhoods.
- NAC Member Harden noted that some example Braden and SUSTY commissioners offered are very good examples of real-world things that are going on. That is positive energy put toward positive energy. Go back to beginning of presentation. Systemic racism doesn't fit in the last few examples you gave. It's very general. It seems too lofty of a goal. Then you go down to the level of a story walk. There's a disconnect between things we can do, more parks, more trees, it can dilute any of these activities.
- NAC Chair Belec - I think it could help to refine the presentation for other audiences. In terms of our involvement, we'll stick to the concrete examples.

Additional Feedback included:

- NAC Vice Chair Larimer offered that she works for a Tempe based nonprofit and will be happy to be contacted and to help connect with her HR Representative.
- NAC Chair Belec requested. the date and info. regarding the 3rd Sustainability Summit be shared for NAC members to help push out
- Commissioner Harden noted that helping to get the word out ties in and is a good example of NAC's goal to assist the dissemination of information and seek

feedback (more thoroughly across the community). She added that representation should include members of the at risk population.

- NAC Member Schugurensky asked if the planning phase is going to end with clear goals, targets, indicators, timelines, policy proposals, and the like? He was advised that is the plan and hopefully some budget allocations as well.
- This entire topic needs to be split up to 1 year goals/tasks and then 5-10 year targets.
- The suggestion was made by SUSTY Chair Jung to have a joint meeting at least once a year to explore collaboration opportunities. There was general agreement to meet together at least once a year.
- The commissions should have connected and complimentary goals, bought off by the council's direction.

Agenda Item 5 – 2021 State of the Neighborhoods Planning Update

The discussion included:

- NAC Chair Hannah Moulton Belec brought attention to discussion in meeting chat specifically comments about the Maryanne Corder Neighborhood Grant categories. Are there projects that NA or HOAs could do that are \$15K or less to contribute to climate action? Are there other projects in addition to shading and shade structures that neighborhoods could do?
- Braden offered that Richard Atkins, the City's new Urban Forester, has been helping to lead green infrastructure projects that we'd like to see more of. Two NAs recently did private property tree programs and several others have done them prior. We've also seen projects around water conservation and neighborhood leaders have expressed interest in doing more projects like these.
- NAC Chair Belec asked about a webinar that could be featured at the State of the Neighborhoods Awards and Workshops event in April. Is there anything that you as a commission would like to get in front of the commission – like tree upkeep? Want to collaborate with us on a workshop session that has to do with climate action and neighborhoods?
- Susty Commission Chair Jung - Yes, we'll work with staff on how that may look; if it is commissioner, staff or other. In prior conversations about increasing flow of conversation between residents and city council, this is a unique strategy in pursuit of that.
- Braden - We could put something together with our Urban Forester. Given the event may be a hybrid, we could explore doing our story walk at the event and have green infrastructure, neighborhood tree planting project type engagement.
- NAC Commissioner Granillo - Years ago, I attended a story walk; at each point of interest there was a sign, you could call in, and hear the story about the historical value of that location. I found it to be a good experience.
- Susty Commission Vice Chair Mores: Hannah, you asked what neighborhoods could do to support climate action. In addition to shade projects in neighborhoods, it would be good to have more community advocacy, commissioners speaking to council, to say we want these types of projects, and increased budget for these projects.

Braden suggested that maybe we meet again this summer to provide your commission the opportunity to be on this process with us. In Fall, you could write a letter in support of the Climate Action Plan.

Agenda Item 6 – Cook Kids, Cool Places, Cool Futures Grant

Braden provided a brief overview of the Cool Kids Grant noting that in concert with the Climate Action Plan, staff has been working to bring in additional grant projects to the city. Some of the challenges include:

- Climate urgency
- Collective ownership and identify – Over 45 days in summer with over 120 degree temperatures but there is a lack of ownership and action surrounding extreme heat
- Amplifying action
- Social cohesion and connectivity - sprawl

Susty Commissioner Melis said we're going to have to deal with the consequences of extreme heat, a lot of people can't move away. Our youth understand the strength in unity and numbers and the importance of caring for one another. During covid, many are focusing on mutual aid like urban gardens to provide assistance to others.

Braden shared the results of collaborating with a New Zealand expert specializing in emergency management. The Cool kids proposal is to build two youth councils, one in Escalante and another in Gilliland. This two-year school program will have ten students from each of the two neighborhoods participating. Cool Kids youth will have access to ASU heat researchers to do neighborhood work around cooling. They will help translate the work the school is doing with the work the city is doing in terms of resilience to extreme heat.

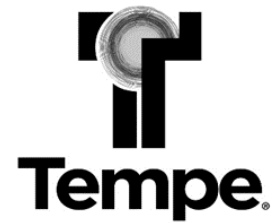
Year one is a capacity building phase leading up to year three which is translating that work into city-wide and regional works. Braden offered to forward a video with the grant basics and to have Cool Kids grant youth members come talk to the commission in the Fall.

Members expressed appreciation for the joint meeting opportunity.

Agenda Item 7 - Adjournment

Meeting was adjourned at 7:30 p.m.

Prepared by: Grace Kelly & Elizabeth Thomas



Minutes City of Tempe Sustainability Commission January 11, 2021

Minutes of the Tempe Sustainability Commission meeting held on Monday, January 11, 2021, 4:30 p.m. at a virtual meeting on MS Teams, through City Hall, 31 E. 5th Street, Tempe, Arizona.

(MEMBERS) Present:

Kendon Jung (Chair)
Ryan Mores (Vice Chair)
Barbie Burke
Sukki Jahnke

John Kane
Steven Russell
Gretchen Reinhardt
Stephanie Milam-Edwards
Anna Melis

(MEMBERS) Absent:

Katja Brundiers

City Staff Present:

Braden Kay
Grace DelMonte Kelly
Ausette Anderies
Marilyn DeRosa
Steven Methvin
Ed Bond

Guests Present:

David Sokolowski
Lauren Kuby, Council member
Rubben Lolly, City of Phoenix
Ariane Middel, ASU
Karen Apple, City of Phoenix
Caryn Potter, SWEEP
Catherine O'Brien, SRP
Kathy Knoop, APS

Chair Jung called the meeting to order at 4:30 p.m.

Agenda Item 1 – Public Appearance

Chair Jung asked the guests to introduce themselves. David Sokolowski introduced himself and provided comments on agenda item 5. He said:

- Electric vehicles need a lot of resources (car chargers) to decrease range anxiety. But these new stations may incentivize EV users to drive more miles

- This goes against equity goals
 - EVs are more commonly owned by privileged people
 - Not an equitable solution
 - Reducing car use and reducing congestion is more important

Agenda Item 2 – Approval of Meeting Minutes

Chair Jung introduced the minutes of the December 14, 2020 meeting. Commissioner Burke made a motion to approve the minutes with edits. Commissioner Jahnke seconded.

Motion: Commissioner Burke

Second: Commissioner Jahnke

Decision: Approved 9-0

Voted to Approve:

Kendon Jung (Chair)
Ryan Mores (Vice Chair)
Barbie Burke
Sukki Jahnke
John Kane
Gretchen Reinhardt
Steven Russell
Stephanie Milam-Edwards
Anna Melis

Motion Passed 9-0.

Agenda Item 3 - Cool Pavement

Edward Bond Jr., City of Tempe, Rubben Lolly, City of Phoenix and Ariane Middel, ASU, are working together on a Cool Pavement pilot project in City of Phoenix.

Cool self-pavement

- What is it?
 - High-performance asphalt base seal
 - Lower surface temperatures
 - Reflect heat
 - Increase the life of asphalt 5-7 years
 - Can be used on existing streets
- Why use it?
 - Reducing urban heat island effects
 - Particularly in developed areas with higher temperatures due to surrounding infrastructure
 - Pavement reaches 150 degrees (F)
 - Heat islands can affect dense areas
 - Increased demand for AC
 - Increased pollution

Ruben Lolly, City of Phoenix, said:

- City of Phoenix Pilot Project
 - The first time the City of Phoenix is exploring the use of cool pavement
 - Collaboration between the City of Phoenix, ASU, and other partners
 - Light-colored sealant
- Goal
 - Find a tool that is effective in decreasing the heat island effect and urban heat issues
- Current use
 - It has been installed in the Picasa district
 - On local streets - good condition
 - 36 miles installed in the pilot
- Results
 - Encouraging
 - Measured a 13-degree reduction (average)
 - Solar reflectance 3.5 (versus 1.1)
 - Residents like the product

Ariane Middel, ASU said:

- Impacts of cool pavement
 - Surface temperature
 - Air temperature
 - Durability of pavement
- One year-long project assessment of impacts
 - Measurement tools
 - Electronic 'cart' that measures radiation
 - Air temperature distribution
 - Temperature sensors inside the pavement
 - Resident survey - citizen perspectives

Ruben Lolly - Moving forward in Phoenix:

- Looking for tools to address the urban heat island effect
 - Trees
 - 'Cool Roof' technology
 - Continue looking for tools to address the urban heat island effect
 - Cool Pavement (evaluate effectiveness over one year)
 - If the pilot is successful, further implementation can follow
 - Continue to work with partners
 - No immediate plans to install Cool Pavement in Tempe
 - Monitor results from Phoenix
 - Make decisions based on the results of the pilot program
 - Effectiveness
 - Public perception

Commissioner Questions:

Q. When will the data be available?

- Currently crunching the numbers
- Fieldwork completed in summer
 - Halfway through 'number work'
 - Still doing measurements
 - Continuing throughout the winter and late spring
- Finalization beginning early to mid-summer
 - Concluding in October

Q. Preliminary research - How it is for pedestrians to walk on the cool pavement?

- Essentially converting the road into a concrete sidewalk

- Reflective pavement
 - Almost looks like concrete
 - Like walking on a sidewalk
 - No dark asphalt
- Q. What was the location of the case study?
- 8 districts
 - Garfield
 - Maryvale
 - Close to west campus of ASU
 - (Maps can be forwarded upon request)
- Q. Are test locations residential, commercial, or both?
- Almost All residential

Agenda Item 4 - Sustainability Commission Department Conversation

Deputy City Manager Steven Methvin introduced himself and Engineering & Transportation Direct Marilyn DeRosa.

- Marilyn DeRosa said:
 - Engineering Department
 - Some areas overlap with sustainability efforts
 - Use overlap to find a new way to introduce sustainability
 - Building capital projects
 - Behind the curve with the Fire Station 7 project
 - Challenging to build sustainability into that project
 - Commission has not had an opportunity to collaborate because planning and budget design takes a few years
- Currently in a cycle of projects that aligns with Tempe sustainability timelines
- Moving forward
 - More opportunity to pilot projects
 - Green building code
 - Including design features (sustainability)
 - Current projects
 - Vision zero a public safety
 - Increased communication between sustainability and transportation commission
 - Shade and climate shelter projects

Steven Methvin said:

- Five council priorities (100 performance measures)
- Before the budget process, the city council helps us prioritize a few of these
- Start tool → helped prioritize 10 performance measures and sustainability was included

Braden Kay said:

- Carbon neutrality goals - an opportunity for collaboration
- Clark park pool presentation
 - Engineering played a huge role as to why sustainability was incorporated
 - Engineering matching the sustainability practice can be very powerful

Commissioner Questions/Comments:

Chair Jung said:

- Highlight actions
 - Adoption of IGCC green building code
 - Addition of resilient energy hubs

- Scaling partnerships/pilots
- Transportation demand management
- Options - multimodal and low carbon options
- Clark park
- Culture catalysts
- Pushing programs policies

Commissioner Reinhardt said:

- Mile grid for bicycles
 - Having effective bike lanes
 - Completing half-mile grid - dealing with borders and obstacles
- Bridge upstream of Tempe Town Lake - the Rio Salado plan did not include bicycle and pedestrian infrastructure
- Critical ideas are not being automatically incorporated into places where they are needed
- Disproportionately affect low-income populations

Steven said:

- We have tried very hard to include engineering leaders
- Yes, there will be more collaborative efforts

Commissioner Questions:

Q. With the new builds moving forward - With all the building going on, when will the city start working with the builders on green building codes?

- Some new buildings on ASU campus are LEED certified.
- Community Development is coming to discuss the International Green Building Code in March
- Working towards green building code to be available voluntarily
- We need to experiment with it as a city
- Pilot to policy challenges

Agenda Item 5 - Community Partner Electric Vehicle Updates from City of Phoenix, SRP, APS & SWEEP

Karen Apple, EV program manager at City of Phoenix, said:

- EV Programs
 - In process of developing Climate Action Plan
 - Achievements/Goals
 - Carbon neutral by 2050
 - Waiting for community input
 - Lead by example
 - Improve air quality
 - Affordability and livability
 - Remove barriers to EV adoption
 - Charging stations needed
 - By 2025 - 34,000 EVs registered
 - Where will chargers be needed?
 - 2000 charging stations
 - 2020 EV projects
 - 6 light-duty sedans in the City of Phoenix fleet
 - Take charge Arizona

- Public use chargers exist
 - Education and outreach
 - EV webpage
 - Demos, webinars
 - Increase in EV fleets
- Green sustainable Fleets plan
- Collaborative purchasing plans - lessening upfront costs
 - Leasing options
- EV charging stations
 - Develop a 'city charging study'
 - How to maximize the benefits of charging stations
- Educations and outreach
 - Continue to partner with ASP and SRP
 - A detriment to EV adoption is education and outreach
 - Conduct more EV events
 - National drive electric month (September)
 - Local dealers
 - Train sales staff
 - Not to dissuade buyers from electric cars
- EV equity programs
 - Rebates, vouchers, low-income, minority population
- Implement EV-ready building codes for new properties (families, businesses commercial, and residential)
- Partnering with Tempe
 - Developing an EV charging program in the City of Tempe
 - Ride and drive events
 - EV website information
 - EV ready building codes
 - Use all available resources

Q. How are you removing barriers to EV building codes?

- Getting concerned that we need to reach out to the building organizations
- Needs more backing of industry professionals
- Some to a percentage of EV readiness can be expected

Catherine O'Brien, Electric Vehicle Lead at SRP said SRP Sustainability program:

- EV strategy
 - Enable support of 500,000 EVs
- Different sectors play into how to obtain goals
 - Policy, innovation, and outreach
- Programs and initiatives
 - Charger rebate
 - EV charger rebate for businesses
 - \$500 increased to \$1500
 - Workplace charging
 - EV ready building codes
 - Some customers are becoming 2-3 EV households
 - EV building codes need to be mandated by cities
- Better air quality and environment
 - Homebuilders will start communities that are looking for EVs
- DC fast charging test site
 - SRP owns and operate

- What does it look like for customers? (cost, infrastructure)
 - Needs a better sense of what kind of loading this is and how it might affect the grid?
 - New technology we need to better understand (reliability)
- Dealership training and education is needed
 - Dealerships make more money on the services of engine maintenance
- Education, training, and tools for selling EVs
- Rebates for customers who purchase and register their vehicle
- Municipal technical assistance
 - What does it mean to put in charging infrastructure?
 - Moving infrastructure forward
- Analysis of best areas to implement charging stations
 - Finding gaps and filling them

Kathy Knoop at APS said:

- We need mass transit in addition to EV while reducing miles travel
 - 2030 - carbon-free
- Solve climate issue
 - Transport huge part of pollution
- School busses
- Light-duty electric vehicles

Where to put in charging stations?

- Different use cases - in future
 - More electric cars with higher mileage
 - Charging once a week
 - Will charging stations be outdated in the future?
 - No, the technology will not be
 - 60% reduction in CO2 emission when using electricity
 - Coal power being replaced
 - APS 'Take Charge AZ'
- 8 ports
 - APS installs charging stations and takes care of them for 5 years and then transitions them to the owner
 - Helps people and business owners learn about the technology
 - 88 cites energized
 - Charging plazas added in Northern AZ
 - To reduced range anxiety
- Discounts for home charging stations
- EV ready incentives for construction

Karyn Potter, SWEEP said:

- SWEEP promotes public interest
 - Advancing energy efficiency
 - Transport electrification
- What can we do to reduce greenhouse gas emissions in the transportation sector?
 - Saving money and energy to help consumers
 - EV transition - smart use of transportation systems
 - Reduction in miles traveled
 - Improving multimodal transportation systems (and cycling)
 - Initiatives (AZ corporation commission)
 - AZ legislature
 - Policy actions
 - Incentives - to reduce the cost burden

- EVs are to achieve cost parity - in 2024
 - Charging infrastructure - increase the availability
 - Building codes
 - Actions to help Tempe
 - Transportation-electrification
- Low hanging fruit (actions)
 - EV building codes examples - <https://swenergy.org/transportation/electric-vehicles/building-codes>
 - Equitable and accessible
 - Reduce the cost of implementation
 - Implementing this in existing buildings is more difficult and expensive
 - New buildings are easier
 - Other options
 - Designation for charging station
 - Signs and direction vary significantly, and this can be confusing
 - Streetlight and right of way charging
 - Incorporate EV charging stations into the existing street lights and electric uses
 - City fleet targets for local government
 - Striving towards larger goals
 - Ambitious goals lead to ambitious planning
 - Group buy programs - anyone who wants to make technology cheaper for everyone can
 - Solar energy produced during the day (charging during the day)
- 80 percent of business do not own the building they are in, makes implementation difficult

Agenda Item 6 - Sustainability Awards

Chair Jung said:

- Everyone reach out and call someone they have not reached out to recently and see what they are up to sustainability wise
 - 2 nominations per commissioner - do not worry about duplicate nominations
- Social media post for sustainability award

Agenda Item 7 - Housekeeping Items

Follow up and discussion on last week's joint Neighborhood Advisory Commission Meeting.

Agenda Item 8 - Future Agenda Items

There were none.

A motion was made to adjourn.

Motion: Commissioner Milam-Edwards

Second: Vice Chair Mores

Decision: Approved 9-0

Voted to Approve:

Kendon Jung (Chair)

Ryan Mores (Vice Chair)

Barbie Burke

John Kane

Gretchen Reinhardt

Steven Russell

Stephanie Milam-Edwards

Anna Melis

Motion Passed 9-0.

The meeting was adjourned at 6:30 pm.

Prepared by: Ausette Anderies

Reviewed by: Grace DeMonte Kelly

Transportation Demand Management and Transportation Management Association Plan

Sustainability Commission

February 8, 2021





Quality of Life

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

3.27: Achieve a Travel Time Index average at or below 1.25 along major streets during rush hour traffic with no individual segments exceeding 2.0.



● Transportation Demand Management (TDM):

- TDM is the application of strategies and policies to reduce travel demand, or to redistribute this demand in space or in time.
- A cost-effective alternative to increasing capacity, by maximizing travel choices and reducing single occupancy vehicle trips.

● Transportation Management Association (TMA):

- TMAs provide an institutional framework for TDM Programs and services.
- Public-private partnerships that allow businesses and government agencies to pool resources to support alternative commuter transportation strategies.



● Scope of Work

- Task 1: Management & Stakeholder/Public Engagement
- Task 2: Transportation Demand Management (TDM) Evaluation & Plan
- Task 3: Transportation Management Association (TMA) Evaluation & Plan

● Schedule

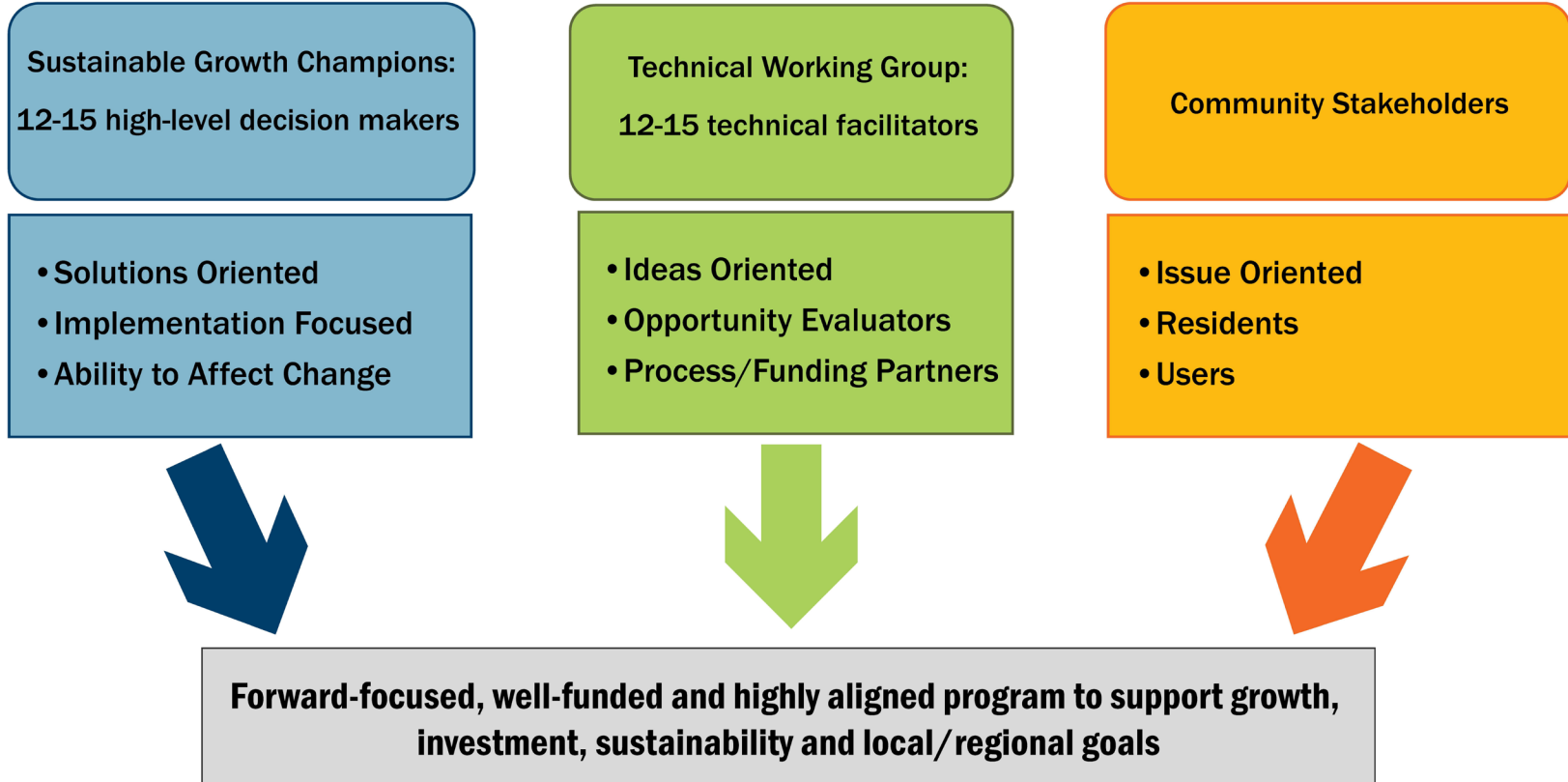
Task 1: Management & Stakeholder/Public Engagement



- Project Management Plan
- Stakeholder/Public Engagement
 - Management Team
 - TDM Working Group
 - Public Engagement
 - Stakeholder Engagement, Interviews or Focus Groups
 - Electronic Survey
 - Fact Sheets
 - Public Meeting 1: at Goals/Objectives subtask
 - Public Meeting 2: at Draft TDM and TMA Plans

Public and Stakeholder Engagement is coordinated with the Mobility Hubs Plan.

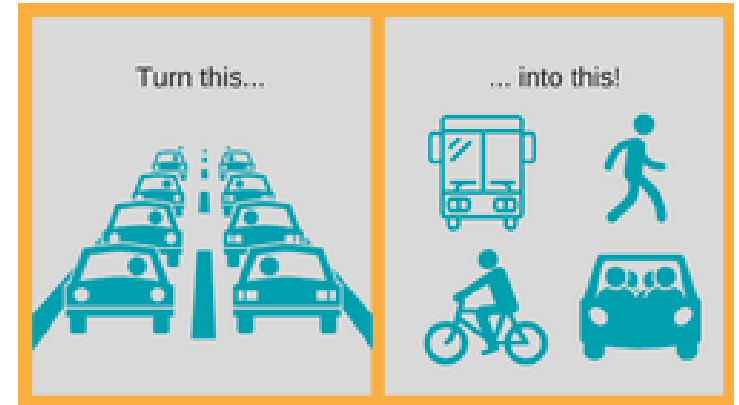
Stakeholder Groups



Task 2: TDM Evaluation & Plan



- 2.1: Background and Analysis
- 2.2: Best Practices and Performance Measures
- 2.3: Goals and Objectives
- 2.4: Strategy Options
- 2.5: TDM Implementation and Monitoring Plan



Source: City of Portland, OR

Task 3: TMA Evaluation & Plan



3.1: TMA Feasibility Analysis

3.2: TMA Implementation Plan



Source: City of Monterrey, CA

Schedule



| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|--------|---|--------|---|---|---|---|--------|--------|----|
| Project Kick-off | █ | | | | | | | | | | | |
| Background & Analysis | █ | █ | █ | █ | | | | | | | | |
| Stakeholder & Public Engagement | | █ | █ ⊗ | █ | █ ⊗ | █ | █ | █ | █ | █ ⊗ | █ ⊗ | █ |
| Best Practices & Performance Metrics | | | █ | █ | | | | | | | | |
| Goals & Objectives | | | | | █ | █ | | | | | | |
| Strategy Options | | | | | | █ | █ | █ | | | | |
| TDM Implementation & Monitoring Plan | | | | | | | | █ | █ | | | |
| TMA Feasibility & Plan | | | | | | | | | | █ | █ | █ |



- **Vanessa Spartan**, Transportation Planner, Vanessa_Spartan@tempe.gov
- **Robert Yabes**, Transportation Planning Manager, Robert_Yabes@tempe.gov

MEMORANDUM



TO: Sustainability Commission

FROM: Eric Iwersen, Transit Manager (480-350-8810)
Sam Stevenson, Senior Transportation Planner (480-858-7765)

DATE: February 8, 2021

SUBJECT: October 2021 Proposed Transit Service Changes

PURPOSE

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

CITY COUNCIL STRATEGIC PRIORITY

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

BACKGROUND

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

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

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

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

require. Based upon this projected long-term fund shortfall, the fund will need to institute cuts to the recurring costs of up to \$9.5 million. This is a significant number and the following information is the proposed approach to achieve this Transit Fund reduction to ensure the long-term health of the fund, and its ability to provide City-wide transit, bicycle, and pedestrian services.

SERVICE REDUCTION AND OPTIMIZATION PLAN

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

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

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

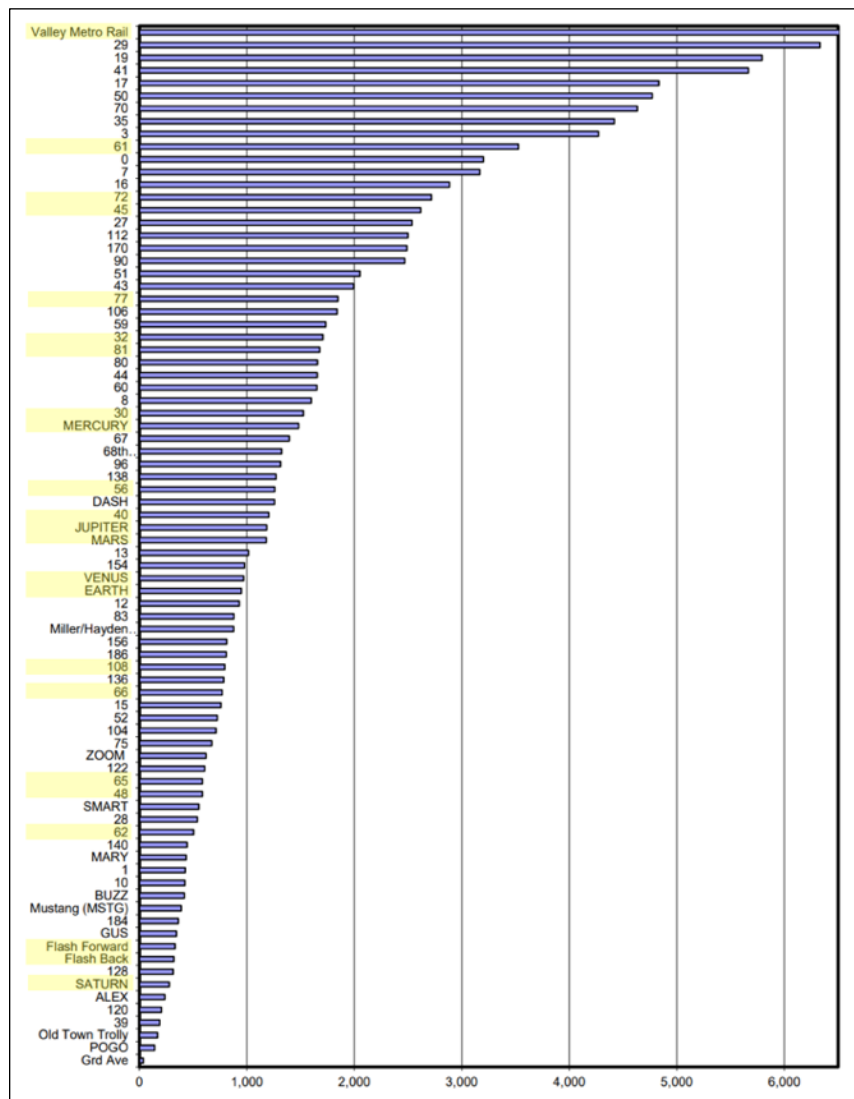
- Tempe Today
- Social media
- Email blasts
- Advertising at major bus stops, Transportation Center
- On-board surveys (when allowed)
- Values mapping survey to determine community needs
- Dedicated web page (tempe.gov/TransitChanges)

Approach to Transit Service Reductions

Because the city's several transit service agreements account for the majority of transit fund expenditures, transit service reduction proposals are being developed in order to achieve the necessary reductions to recurring transit fund expenditures. Transit service change proposals are being developed using transit system performance data and public feedback, in attempt to advance service changes that minimize impacts to the community as much as possible.

During Fall 2020, staff elicited public feedback through a "community values survey" to better ascertain the public's priorities for transit service, and in December 2020 council approved service changes impacting six routes (32, 40, 72, 520, 521, and 522) for implementation in April 2021.

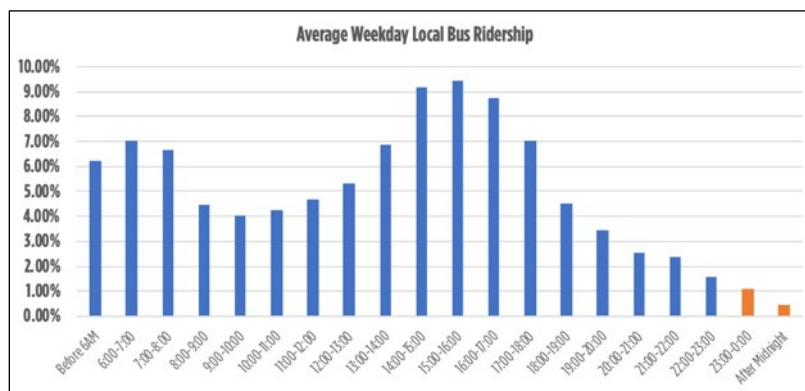
An additional phase of transit service changes has been developed for possible implementation in October 2021. Staff developed these proposals following an analysis of transit system performance/efficiency data to identify the city's least efficient services based on the cost per passenger boarding metric. An excerpt of this data is provided below, along with comments addressing primarily the lower-performing transit services, in addition to a regional comparison of local bus and circulator weekday average boardings per day by route in FY2020, with routes serving Tempe highlighted – providing regional context to the performance of the routes that serve Tempe.

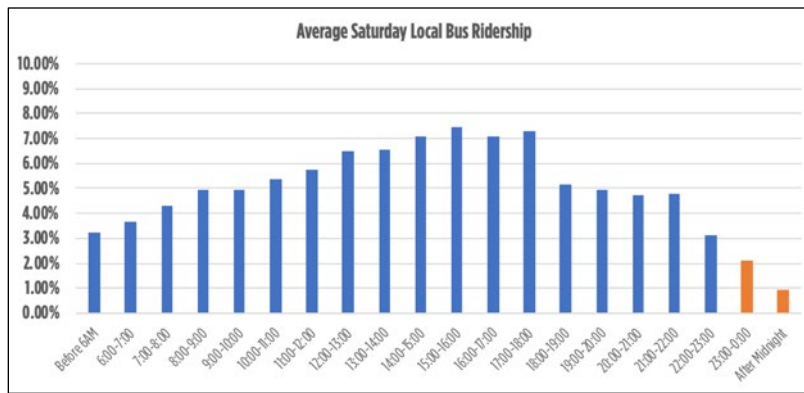


| | Performance Rank | Route | Cost per Boarding (FY20) | Remarks |
|---------------------|------------------|-----------------------|--------------------------|--|
| Lower Performing → | 24 | 520 - Express | \$ 25.35 | Route elimination approved for April, 2021 |
| | 23 | 521 - Express | \$ 21.62 | Route modification approved for April, 2021 |
| | 22 | 522 - Express | \$ 21.36 | Route modification approved for April, 2021 |
| | 21 | Orbit Saturn | \$ 18.96 | Route elimination/modification proposed for October, 2021 |
| | 20 | 62 - Hardy/Guadalupe | \$ 16.72 | Route modification and span of service reduction proposed for October, 2021 |
| | 19 | 40 - Apache | \$ 13.26 | Route elimination approved for April, 2021 |
| | 18 | 48 - 48th/Rio Salado | \$ 10.85 | Span of service reduction proposed for October, 2021. |
| | 17 | 108 - Elliot | \$ 10.16 | Span of service reduction proposed for October, 2021. |
| | 16 | 32- 32nd St | \$ 9.29 | Route elimination approved for April, 2021 |
| | 15 | Orbit Earth | \$ 7.93 | Route modification implemented in October, 2020 to serve additional activity centers |
| ← Higher Performing | 14 | 30 - University | \$ 7.89 | Span of service reduction proposed for October, 2021. |
| | 13 | FLASH | \$ 7.34 | |
| | 12 | 65 - Mill/Kyrene | \$ 7.18 | Route elimination proposed for October, 2021 |
| | 11 | 77 - Baseline | \$ 6.04 | Span of service reduction proposed for October, 2021. |
| | 10 | 72 - Scottsdale/Rural | \$ 5.82 | Route modification approved for April, 2021 |
| | 9 | 81 - McClintock | \$ 5.75 | Span of service reduction proposed for October, 2021. |
| | 8 | 66 - Mill/Kyrene | \$ 5.59 | Span of service reduction and frequency improvement proposed for October, 2021 |
| | 7 | Orbit Venus | \$ 5.34 | |
| | 6 | 56 - Priest | \$ 5.27 | Span of service reduction proposed for October, 2021. |
| | 5 | 61 - Southern | \$ 5.11 | Span of service reduction proposed for October, 2021. |
| | 4 | Orbit Mars | \$ 4.96 | |
| | 3 | Orbit Jupiter | \$ 4.82 | |
| | 2 | 45 - Broadway | \$ 4.68 | Span of service reduction proposed for October, 2021. |
| | 1 | Orbit Mercury | \$ 3.56 | Frequency modification proposed for October, 2021 |

October, 2021 Proposed Transit Service Changes

Local Bus Span of Service Reduction: As part of the community outreach efforts conducted during Fall 2020, a community values survey was conducted in order to inform future iterations of transit service reductions. The results of that survey indicated that span, or hours of service for local bus routes in Tempe, are among one the lower-impact transit service parameters. As a result, ridership data by time of day was analyzed in order to identify periods of lowest ridership. The figures below, based on February 2020 data prior to the impacts of COVID-19, outline the distribution of boarding based on the scheduled trip time for weekday and Saturday service, respectively. As a result of this analysis, staff intends to propose a two-hour reduction in evening service, highlighted in orange on the figures below, at times when ridership is lowest – in effort to minimize impacts to the community. This proposal also protects the quality of transit service during times when the system is most heavily utilized.

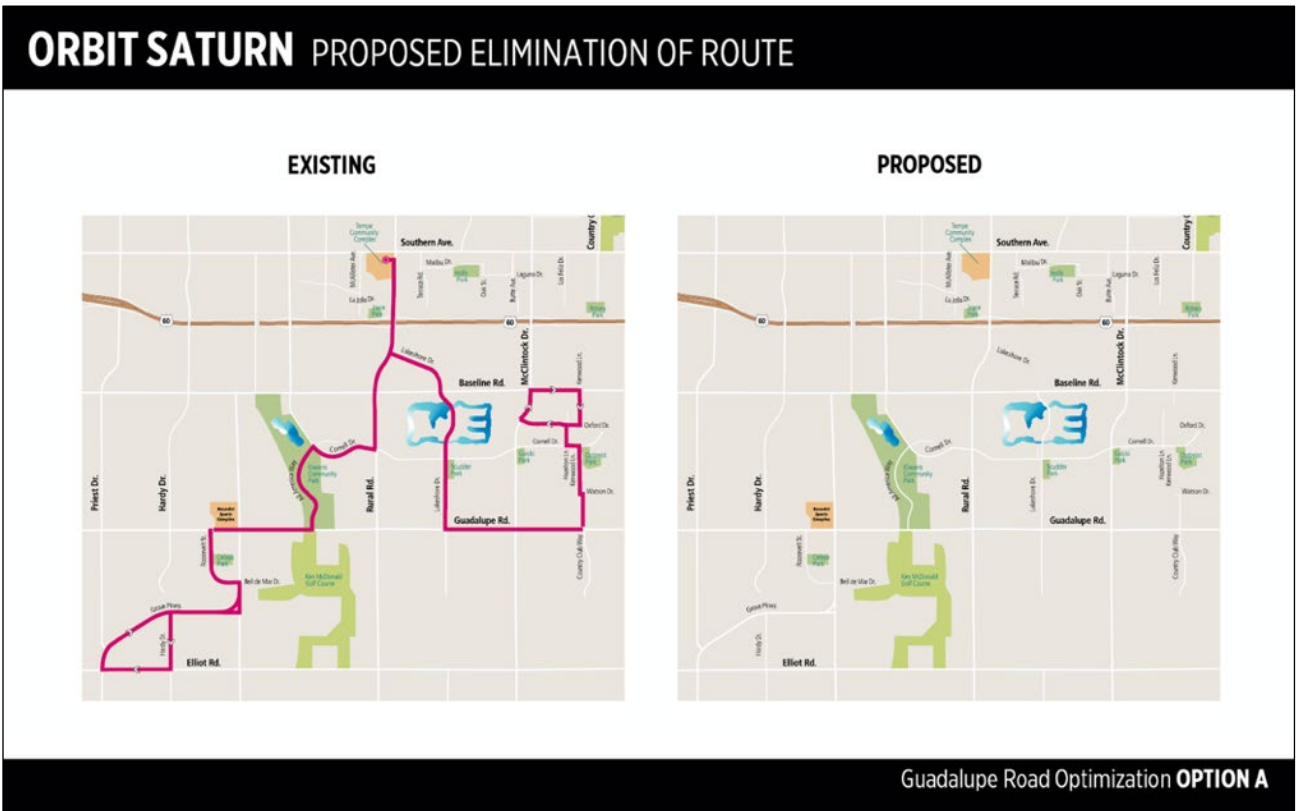




Orbit Mercury Frequency Reduction: Orbit Mercury is ranked as the City’s highest-performing bus route during FY20, and is the highest-frequency Orbit service, running every 10 minutes on weekdays. The frequency enhancements were implemented on Orbit Mercury soon after the route debuted in response to complaints of overcrowding. Since that time, newer, heavy-duty Orbit buses have been phased into service which further increased capacity in a more cost-effective manner. With this in mind, and due to the reduction in ridership observed as a result of COVID-19, staff intends to propose a reduction in frequency to every 15 minutes – aligning the Mercury frequency with the remaining four Orbit routes that provide service to downtown.

Guadalupe Road Service Optimization: Staff noted that Orbit Saturn and Route 62, which both currently provide service to Guadalupe Rd., are among the lower-performing transit routes and were not impacted by any changes proposed in the previous round of service changes planned for April 2021. Staff believes an opportunity may exist to optimize service in this area to reduce costs.

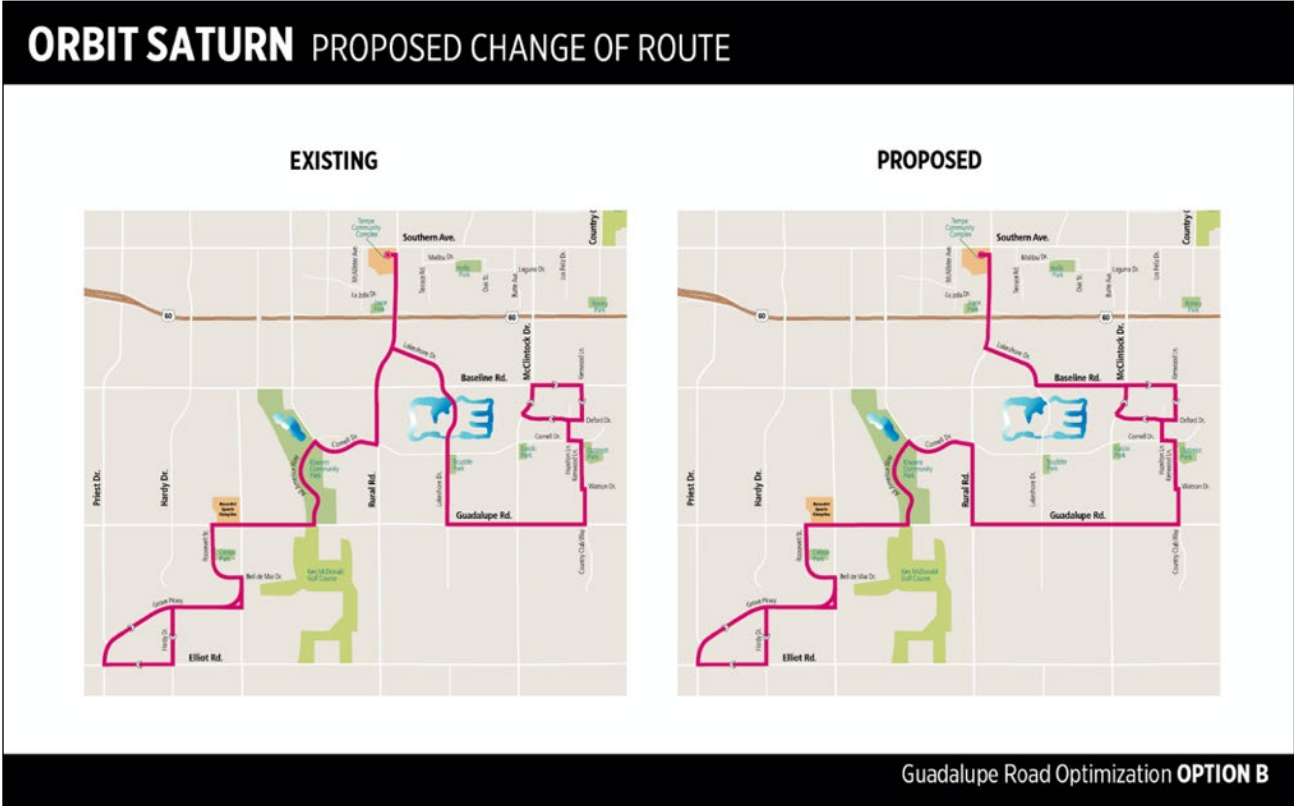
Option A: Eliminate Orbit Saturn; transit service on Guadalupe Road would continue to be maintained by Route 62. Orbit Saturn was implemented in October 2017 as the City’s first Orbit route to serve areas south of US-60. Staff has monitored the route’s performance over time and although ridership has steadily increased since the service debuted, the route remains one of the city’s lowest-performing transit routes.



Guadalupe Road Optimization **OPTION A**

Option B: Eliminate local bus service (Route 62) on Guadalupe Road; transit service on Guadalupe Road would continue to be maintained through a modified Orbit Saturn route in conjunction with modifications to other local bus routes nearby, including Routes 62, 65 and 66, detailed below.

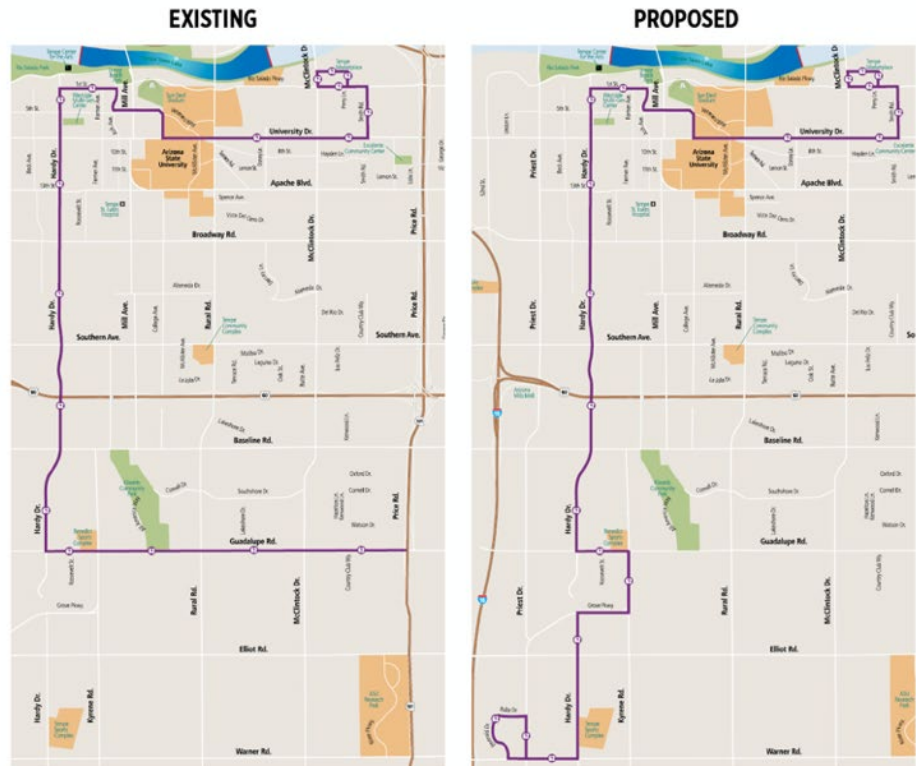
- Modify Orbit Saturn: Modify route to provide more efficient east/west travel along Guadalupe Road, while continuing to serve most nearby neighborhoods and activity centers.
- Modify Route 62: Eliminate local bus service on Guadalupe Road. This area would continue to be served by a modified Orbit Saturn route. Extend route south on Hardy Drive to terminate near Priest Dr./Warner Rd.
- Eliminate Route 65: Areas currently served by Route 65 would continue to be served by an enhanced Route 66 and modified Route 62.
- Enhance Route 66: During weekday morning and afternoon peak hours, improve frequency of service between Elliot Road and Downtown Tempe.



ROUTE 62

PROPOSED CHANGE OF ROUTE

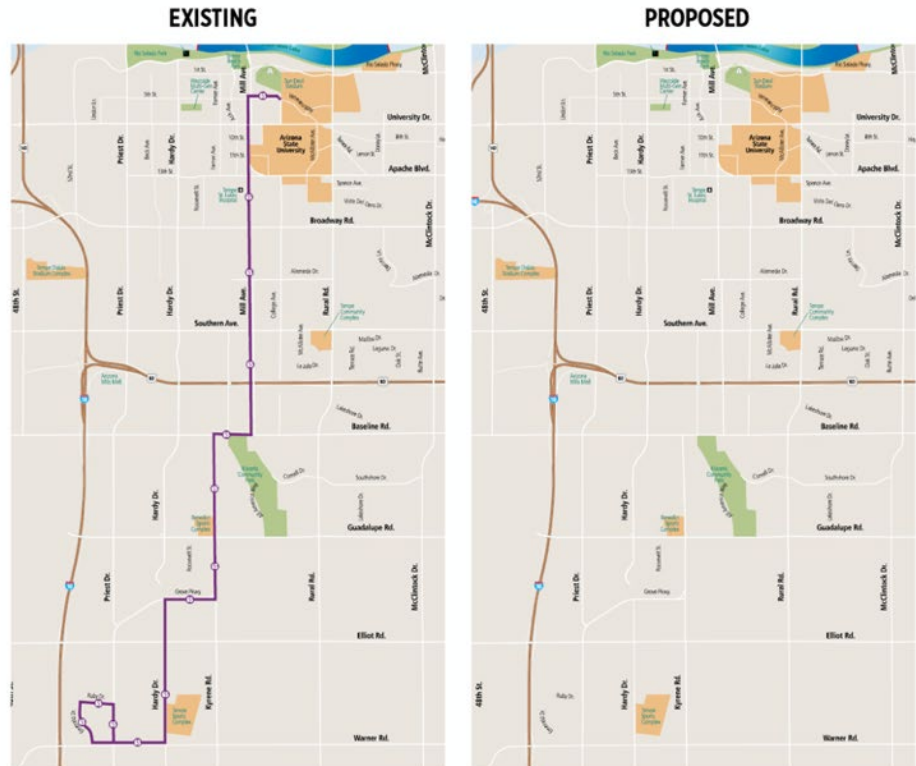
Guadalupe Road Optimization
OPTION B



ROUTE 65

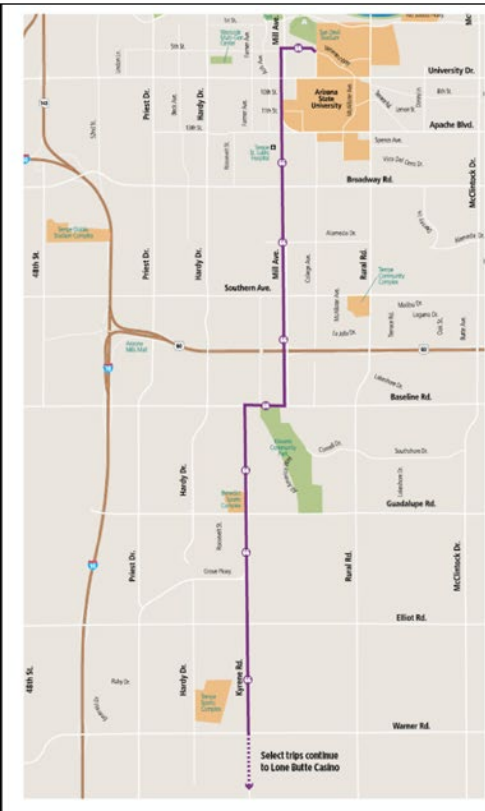
PROPOSED ELIMINATION OF ROUTE

Guadalupe Road Optimization
OPTION B



ROUTE 66
PROPOSED
CHANGE OF
FREQUENCY

Guadalupe Road Optimization
OPTION B



EXISTING
 Frequency: every 30-60 minutes

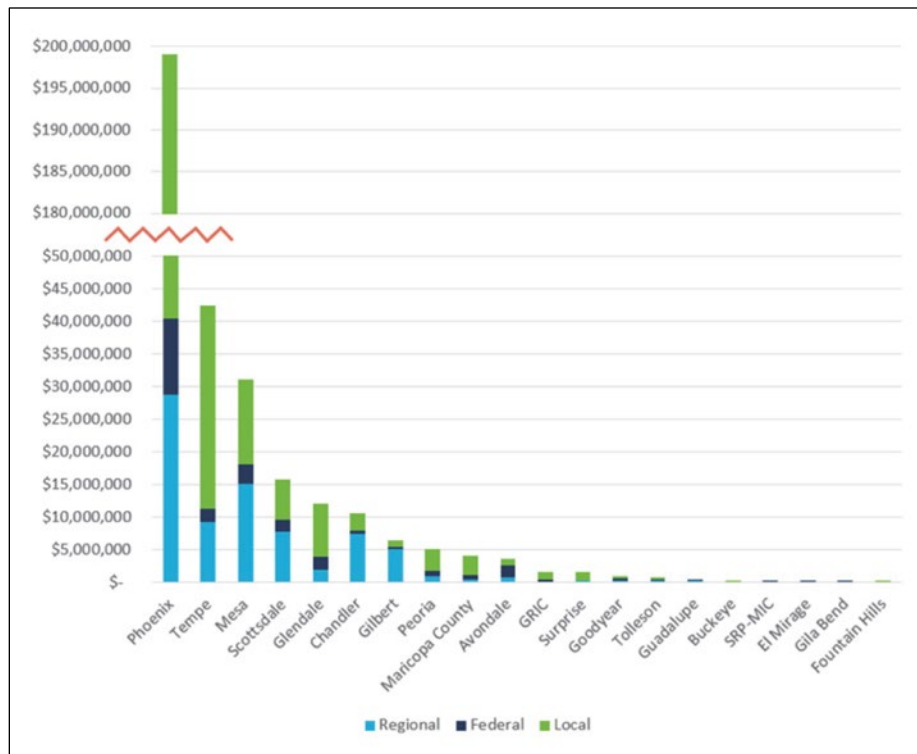
PROPOSED
 Frequency: every 30 minutes, with additional
trips between Elliot Road and Downtown Tempe
during weekday peak.

Long Term Fund Balancing Strategies

In order to ensure the long-term viability of transit service in Tempe, it's necessary for staff to ensure an acceptable alignment between transit expenditures and anticipated transit fund revenues. An update to the city's FY22 revenue forecast is expected to be announced in February, and the results of that forecast may impact the necessity for transit expenditure reductions.

In the near term, staff continues to develop transit service reduction proposals while coordinating the necessary outreach activities to harness the public's response. Outreach for the proposed October 2021 service changes, if accepted by council, would be conducted during February and March. Meanwhile, efforts to ensure the seamless implementation of the previously-approved April 2021 service changes will also be underway, and staff will also be looking ahead to gauge the necessity for any future additional rounds of transit service reductions to become effective in April 2022 and beyond. Although the city has implemented several cost-reduction strategies administratively and to several auxiliary programs, it's recognized that the vast majority of transit fund expenditures are attributed to transit service operation – and therefore any trends impacting the long-term expenditures for the provision of transit service are expected to impact the long-term solvency of Tempe's transit fund.

The figure below provides a breakdown of annual transit funding sources by each regional jurisdiction – highlighting Tempe's significant local investment to the regional system.



RECOMMENDATION OR DIRECTION REQUESTED

Receive Commission direction on the outreach process and service reduction approach for proposed October, 2021 transit service changes.

TIMELINE/NEXT STEPS

- Jan. 12, 2021: Transportation Commission
- Jan. 21, 2021: Council Direction for October, 2021 outreach process and service reduction approach
- Feb. 2021: Commission Meetings (Disability, MYAC, NAC, Sustainability)
- Feb. 20 & 23, 2021: Public Meetings
- Feb. 20 – Mar. 21, 2021: Public Comment Period
- Spring, 2021: Analyze Public Feedback
- Apr. 13, 2021: Transportation Commission
- Apr. 26, 2021: Service Changes Implemented (first round – approved December, 2020)
- May 6, 2021: Council Issue Review Session (for approval)
- Summer, 2021: Valley Metro Outreach
- Oct. 25, 2021: Service Changes Implemented (second round, if approved)

FISCAL IMPACT or IMPACT TO CURRENT RESOURCES

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

ATTACHMENTS

1. PowerPoint

October 2021 Proposed Transit Service Changes

**Sustainability Commission
February 8, 2021**



City Council Strategic Priority Performance Measures

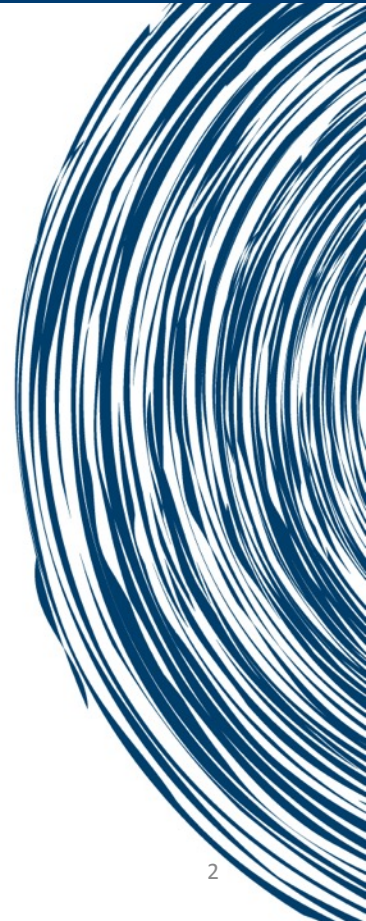


Quality of Life 3.26

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

Quality of Life 3.29

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



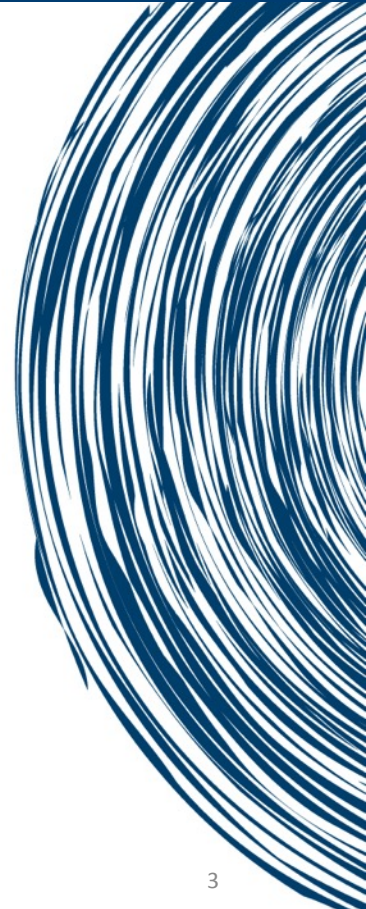
Agenda



- Transit Fund Balancing: Forecast ,Trends, Progress so far
- Proposed October 2021 Transit Service Changes
 - Local Bus Span of Service Reduction
 - Orbit Mercury Frequency Reduction
 - Guadalupe Road – Service Optimization
- Next Steps
 - Advertising RFI
 - Public Outreach
 - Transit Service Efficiencies
 - Transit Fund Forecast Update: February

Council Direction:

- Approval of October 2021 Service Change Approach



Tempe Transit Tax Program Elements



14 arterial bus routes



6 Orbit routes & FLASH



2 Express bus routes



Paratransit



6 miles of light rail with 9 stations



Streetcar



Multi-modal friendly streetscapes



38 miles of shared use paths

Transit Fund and Current Trends



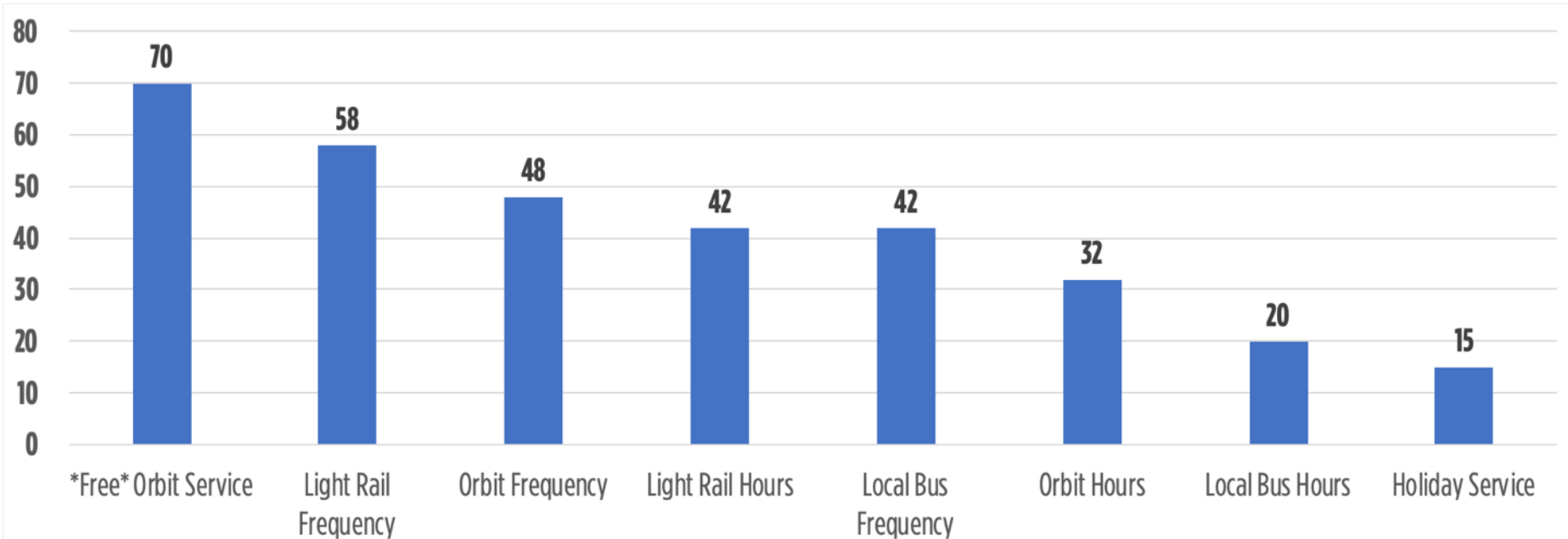
- Significant **local** investment in transit
- Successful – highest utilization per capita
- Current Trends
 - Reduction in farebox recovery: Enforcement of reduced fare, aging equipment, reduced ridership
 - Increasing transit service costs: Security, State of Good Repair, Contract and Overhead costs
 - Uncertain economic climate due to COVID-19
- Near-Term Strategy: Reduce transit service expenditures while striving to minimize public impacts
- Long-Term Strategy: Identify large-scale opportunities to reduce costs and control growth, analyze transit service agreements, maintain control of cost drivers



Community Values Summary (Fall, 2020)



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

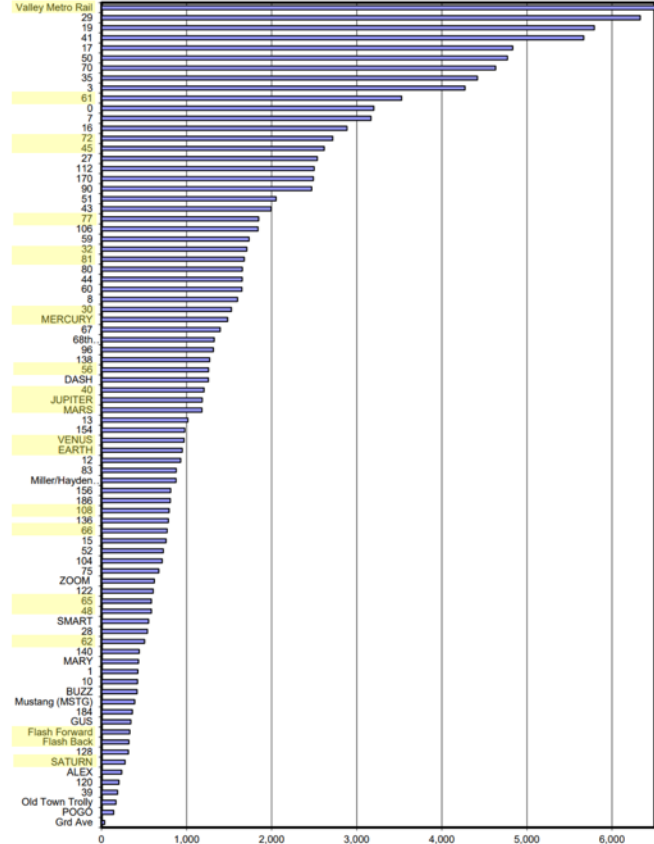


Regional Ridership Data



Weekday Local/Circulator Average Boardings Per Day FY2020

- Regional ridership data
- Local ridership data
 - By Route
 - By Time of Day
- Cost data
- Performance Ranking
- Goal: Identify lower-impact areas; Reduce Costs by proposing reductions that minimize impacts to transit ridership

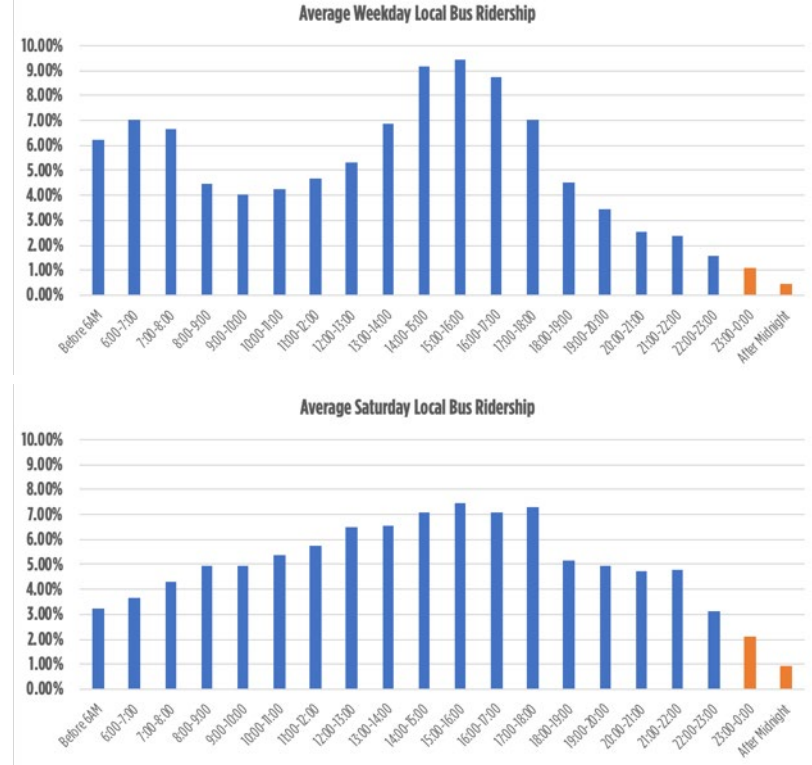


| | Performance Rank | Route | Cost per Boarding (FY20) |
|---------------------|------------------|-----------------------|--------------------------|
| Lower Performing → | 24 | 520 - Express | \$ 25.35 |
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| | 11 | 77 - Baseline | \$ 6.04 |
| | 10 | 72 - Scottsdale/Rural | \$ 5.82 |
| | 9 | 81 - McClintock | \$ 5.75 |
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| | 7 | Orbit Venus | \$ 5.34 |
| | 6 | 56 - Priest | \$ 5.27 |
| | 5 | 61 - Southern | \$ 5.11 |
| 4 | Orbit Mars | \$ 4.96 | |
| 3 | Orbit Jupiter | \$ 4.82 | |
| 2 | 45 - Broadway | \$ 4.68 | |
| 1 | Orbit Mercury | \$ 3.56 | |

Local Bus Span of Service Reduction



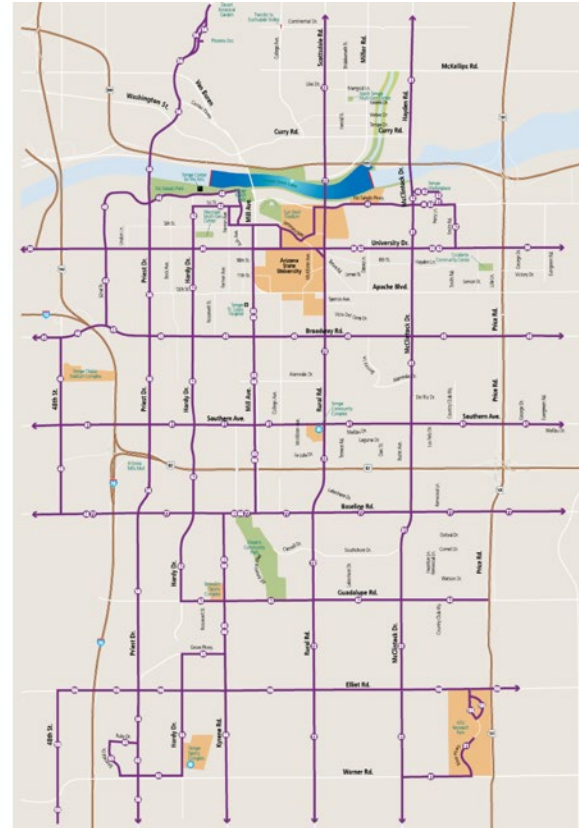
- Existing Span:
 - 5am – 1am (Monday - Saturday)
 - 5am – 10:30pm (Sunday)
- Proposed Span:
 - 5am – 11pm (Monday – Saturday)
 - 5am – 10:30pm (Sunday – no change)
- Proposed based on Community Values Survey
- Impacts to lowest-ridership hours
- Equitable, consistent, city-wide change
- Alignment with most East Valley cities



Local Bus Span of Service Reduction



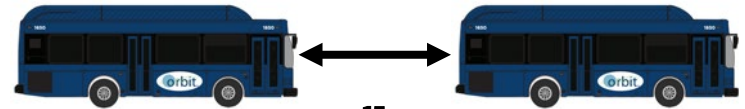
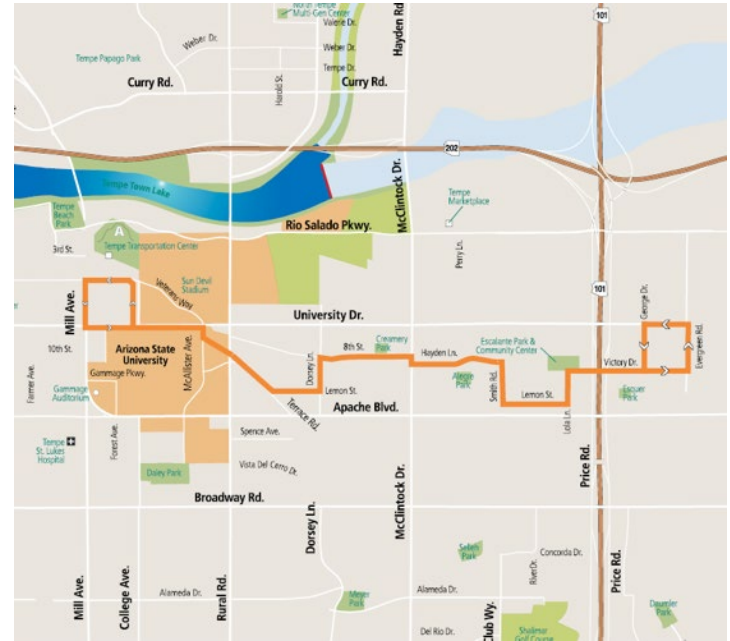
- Existing Span:
 - 5am – 1am (Monday - Saturday)
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- Proposed based on Community Values Survey
- Impacts to lowest-ridership hours
- Equitable, consistent, city-wide change
- Alignment with most East Valley cities



Orbit Mercury Frequency Reduction



- Existing Weekday Frequency:
 - 10-minute weekday daytime
 - 15-minute weekday evening
- Proposed Weekday Frequency:
 - 15-minute all-day
- Consistent with most other Orbit routes
- Higher frequency addressed past capacity issues
- 2017 - New Orbit buses further enhanced capacity
- 2020 - Reduced ridership due to COVID-19
- Will monitor service as ridership returns



15
Minutes

Guadalupe Road (Route 62, Orbit Saturn) Optimization



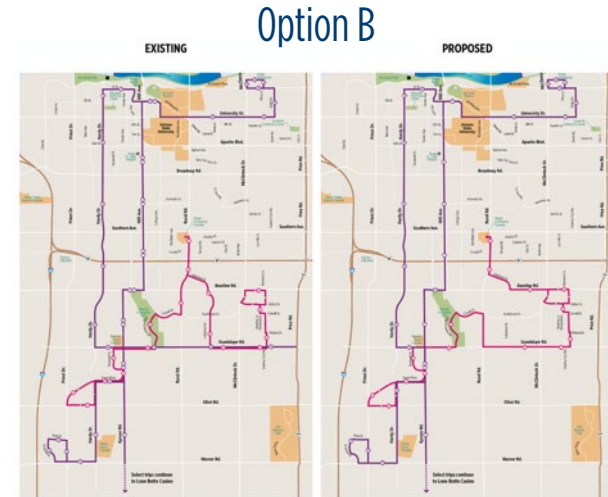
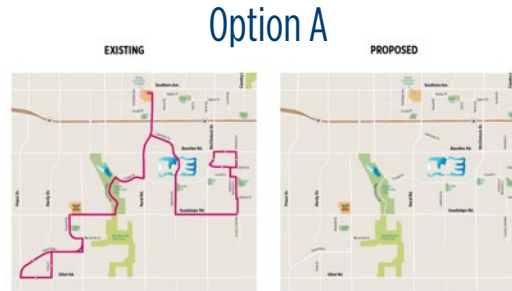
- Options to address low efficiency/high cost per boarding

- Option A:

 - Eliminate Orbit Saturn

- Option B:

 - Realign Orbit Saturn
 - Eliminate Route 65
 - Enhance Route 66
 - Realign Route 62

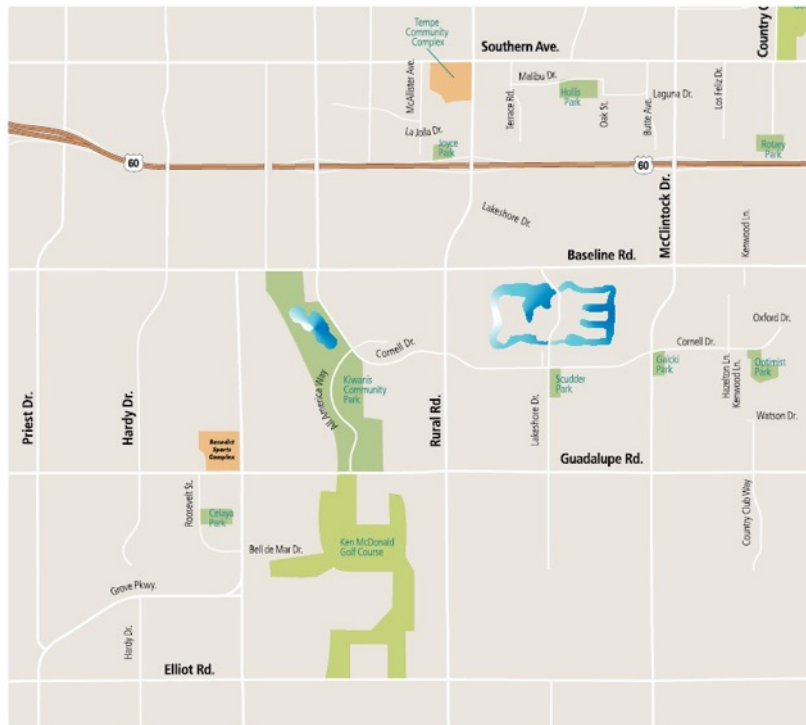
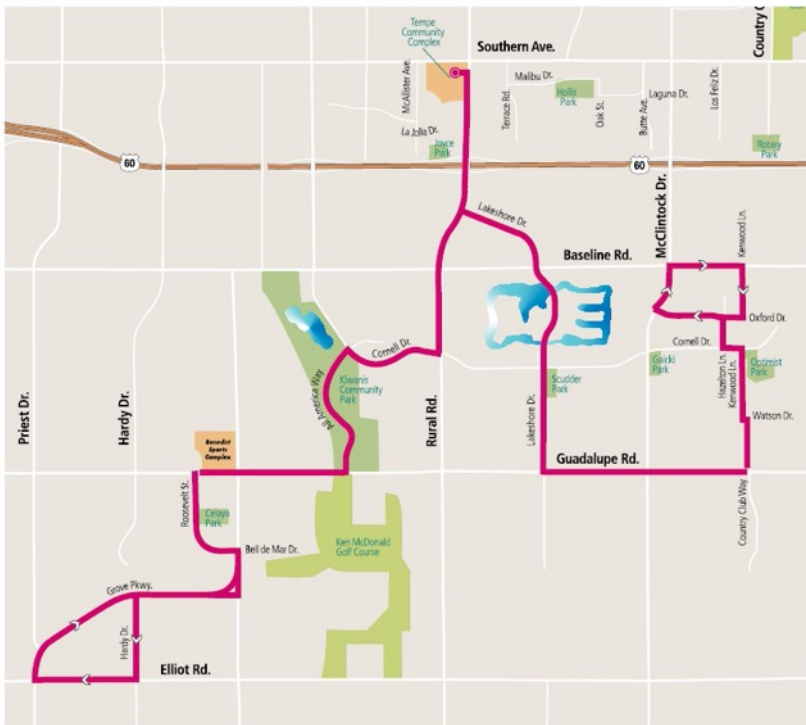


Eliminate Orbit Saturn (Option A)



EXISTING

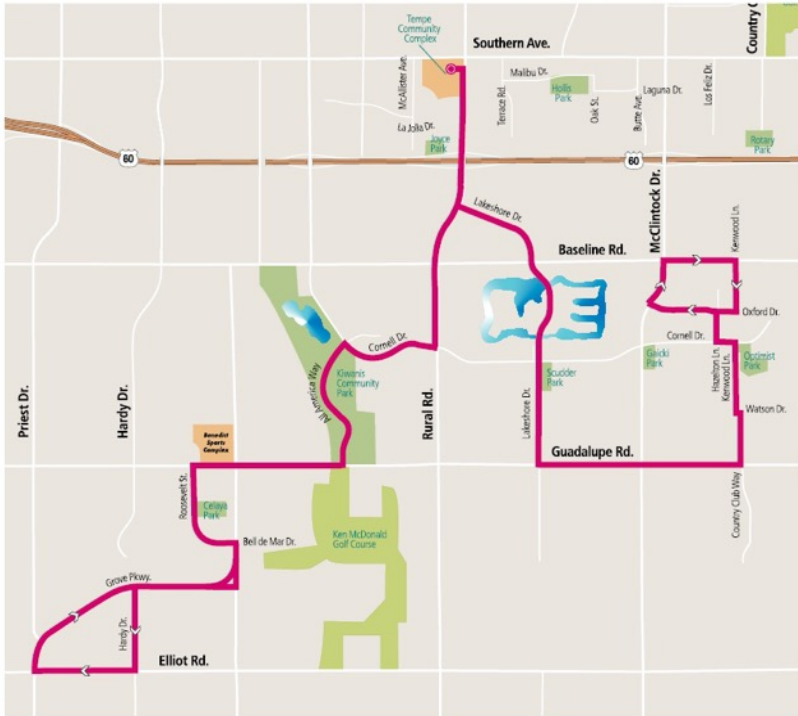
PROPOSED



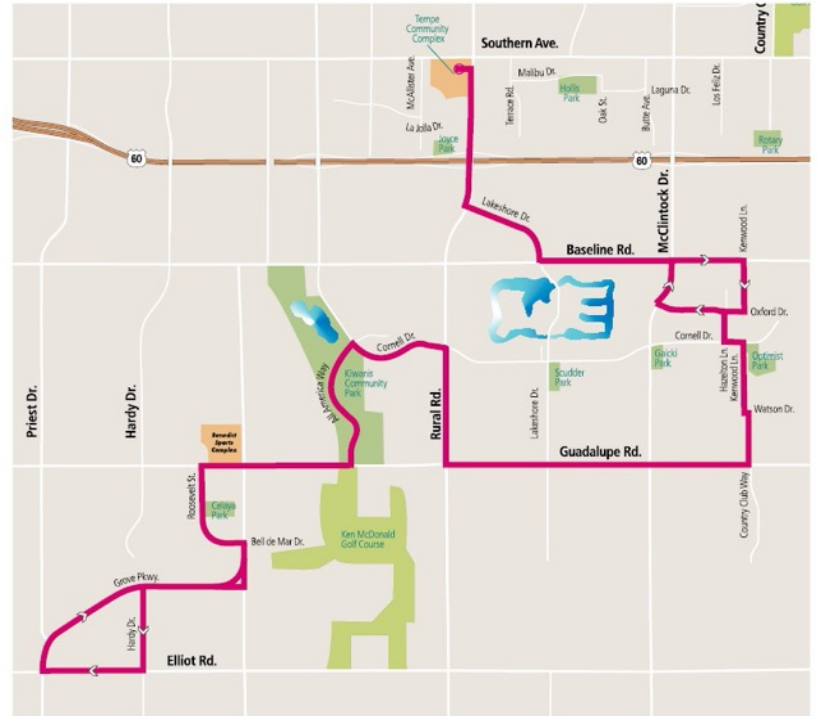
Realign Orbit Saturn (Option B)



EXISTING



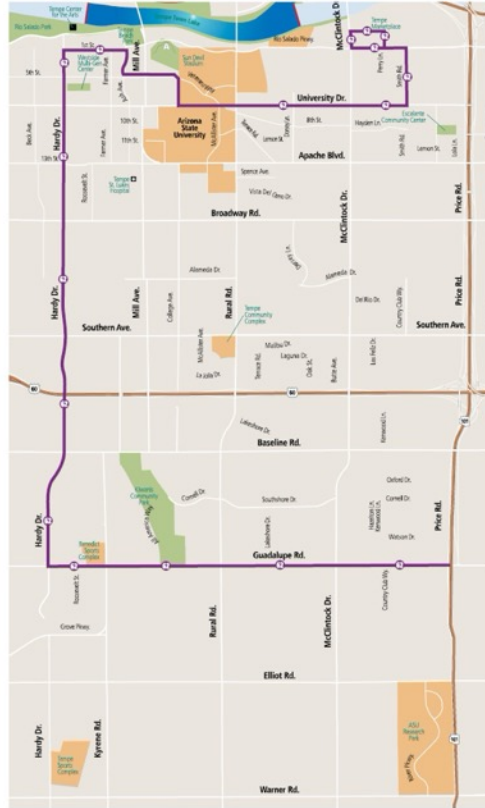
PROPOSED



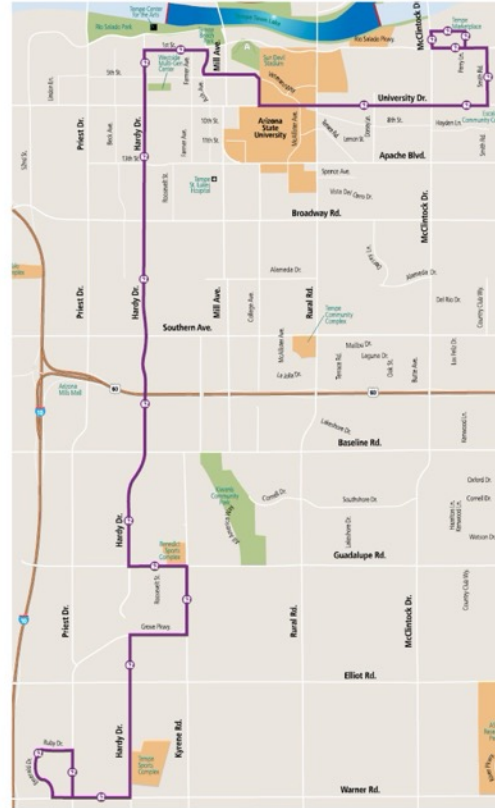
Realign Route 62 (Option B)



EXISTING



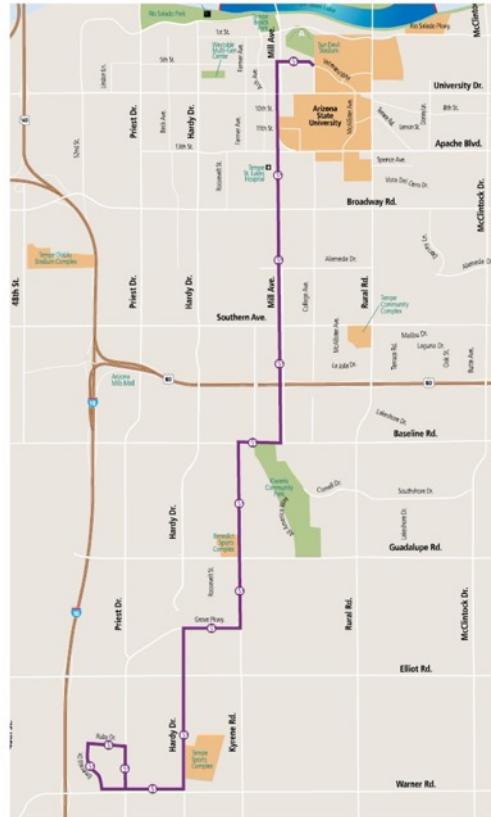
PROPOSED



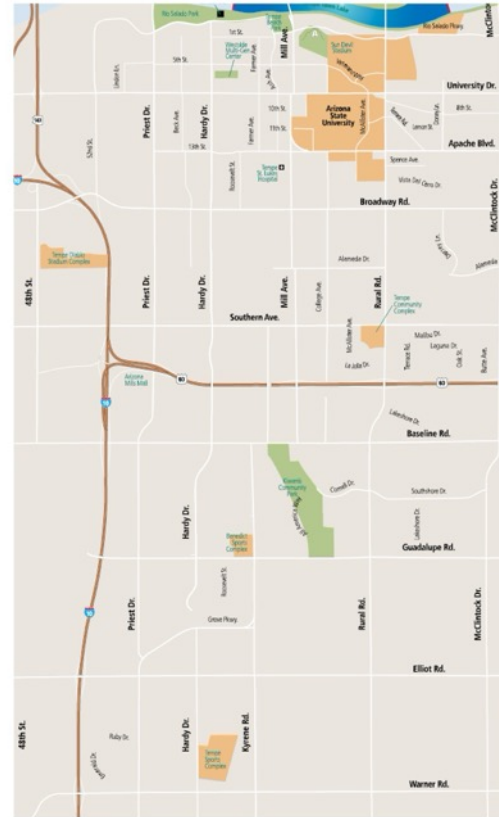
Eliminate Route 65 (Option B)



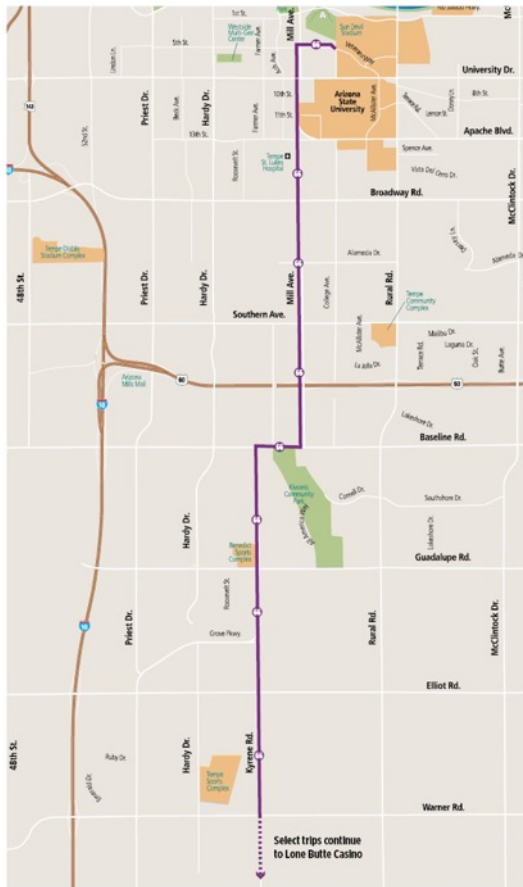
EXISTING



PROPOSED



Enhance Route 66 (Option B)



EXISTING

Frequency: every 30-60 minutes

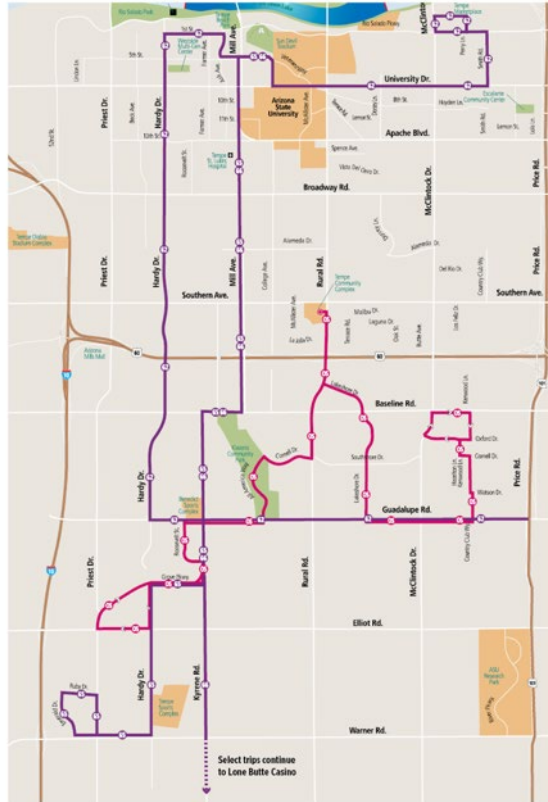
PROPOSED

Frequency: every 30 minutes, with additional trips between Elliot Road and Downtown Tempe during weekday peak.

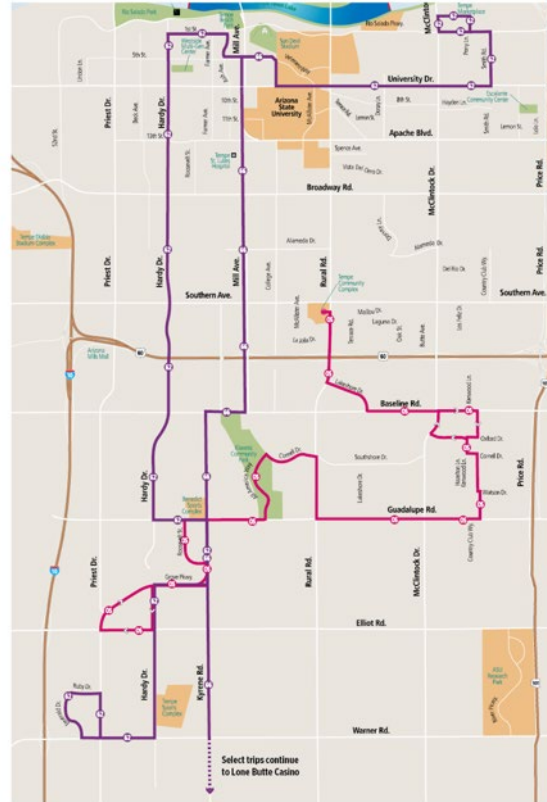
Option B – Orbit Saturn & Routes 62, 65 and 66



EXISTING



PROPOSED



Transit Service Changes – Online Survey



www.tempe.gov/transitchanges

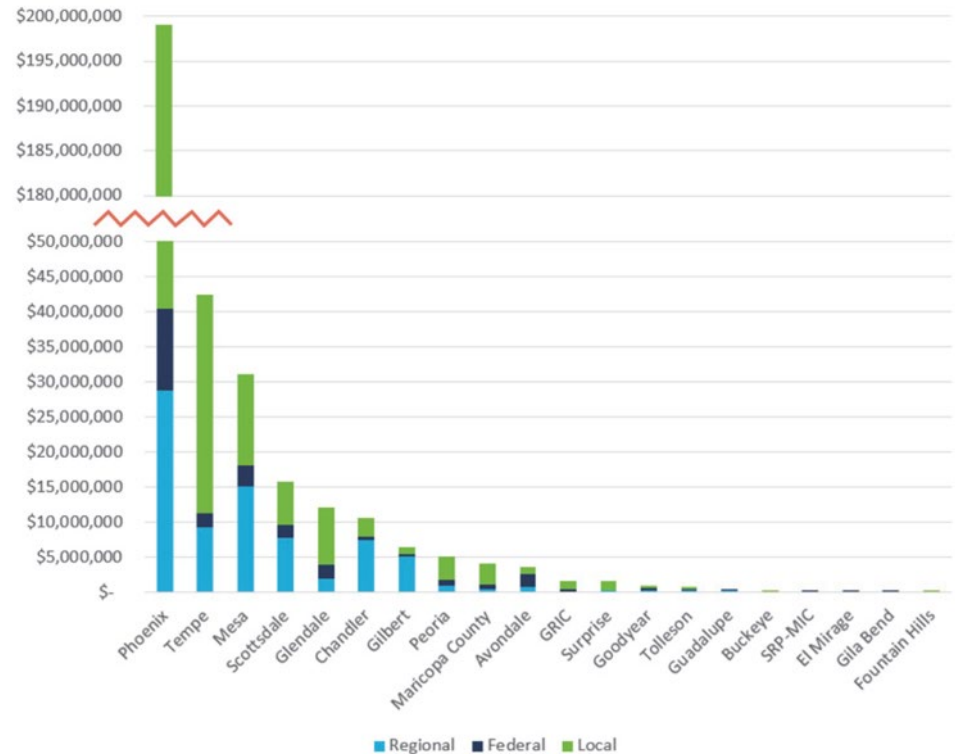
Public Comment: February 20th – March 21st

The screenshot shows the City of Tempe website's 'Transit Service Changes' page. The browser address bar shows the URL: tempe.gov/government/engineering-and-transportation/transportation/bus-light-rail-paratransit-streetcar/transit-service-changes. The page features a navigation bar with 'Community', 'Businesses', 'Recreation', 'Government', and 'I Want To...'. A sidebar on the left lists various transit-related topics, with 'Transit Service Changes' highlighted. The main content area includes a photo of a bus and a text block stating: 'Due to the coronavirus pandemic and anticipated lower Transit Tax revenue, Tempe is exploring cost-saving transit service changes that will strive to minimize service impacts and still provide equitable transit service. Public meetings to discuss proposed changes and gather feedback will be held using Cisco Web Ex.' Below this text is a graphic for 'VIRTUAL PUBLIC MEETINGS' with the following details: 'TRANSIT SERVICE CHANGES', 'Thursday, Sept. 24 at noon', 'Saturday, Sept. 26 at 11 a.m.', 'Online input: Sept. 24-Oct. 25', and the website tempe.gov/TransitChanges. A yellow arrow points to a link at the bottom of the page: [Click here to comment online](#).

Transit Funding and Operating Models



- Tempe's service is majority-locally funded
- FTA Tier-1 Agency
 - Size and Level of Investment
 - Tempe, Phoenix, and Valley Metro



Looking Ahead



- Continue monitoring budget forecasts (February)
 - \$9.5M recurring reductions assumed
- Conduct outreach with Valley Metro for proposed October 2021 service changes
- Develop future (April 2022 and beyond) service change proposals as necessary
- Continue discussions with Valley Metro
 - Monitor costs and growth
 - Tempe Streetcar annual operations costs
- Thorough review of bus service agreements (expires June 30, 2023)



Next Steps for 2021



- Jan. 12th - Transportation Commission
- Jan. 21st - Council Issue Review Session
- Feb. - Commission Meetings (Disability, NAC, MYAC, Sustainability)
- Feb. 20th and 23rd - Tempe Community Public Meetings
- Feb. 20th - Mar. 21st - Tempe Community Comment Period
- Apr. 13th - Transportation Commission
- May 3rd - Jun. 4th: Valley Metro Outreach & Comment Period
- May 6th - Council Issue Review Session (for approval)
 - Advertising Direction
 - Regional context for bus service operations and funding
- May 19th - Valley Metro Virtual Public Hearing (tentative)
- Oct. 25th - Service Changes Implemented