



## PUBLIC MEETING AGENDA

### Transportation Commission

#### MEETING DATE

Tuesday, January 12, 2021 at 7:30 a.m.

#### MEETING LOCATION

Join Via Cisco Webex Meeting – link below

<https://tempe.webex.com/tempe/onstage/g.php?MTID=edb807e9aeb51cd65823612b267e3a9ca>

Event password: pDkMmaPM833

United States Toll+1-408-418-9388

Access code: 146 661 9764

AGENDA ITEM	PRESENTER	ACTION or INFORMATION
<b>1. Public Appearances</b> The Transportation Commission welcomes public comment for items listed on this agenda. There is a three-minute time limit per citizen.	Commission Chair	Information
<b>2. Approval of Meeting Minutes</b> The Commission will be asked to review and approve the December 1, 2020 meeting minutes.	Commission Chair	Action
<b>3. Commuter Bus Study</b> Representatives from the Maricopa Association of Governments will provide information on the status of the regional commuter bus study.	Jennifer Valentine, Maricopa Association of Governments	Information
<b>4. Long-Term Transit Fund Plan and Service Changes</b> Staff will present the proposed transit service reductions as part of the budget saving process.	Eric Iwersen and Sam Stevenson, Engineering & Transportation Department	Possible Action
<b>5. Personal Delivery Devices</b> Staff will provide a verbal update on personal delivery device regulation in Tempe.	Julian Dresang, Engineering & Transportation Department	Information
<b>6. Open Streets</b> Staff will provide a verbal update about potential funding for Open Street designs in Tempe.	Robert Yabes, Engineering & Transportation Department	Information
<b>7. Upcoming Transportation Public Meetings &amp; Announcements</b> Staff and commission members will provide information on relevant meetings and events.	Engineering & Transportation Department Staff and Transportation Commissioners	Information
<b>8. Future Agenda Items</b> Commission may request future agenda items.	Commission Chair	Information

According to the Arizona Open Meeting Law, the Transportation Commission may only discuss matters listed on the agenda. The city of Tempe endeavors to make all public meetings accessible to persons with disabilities. With 48 hours advance notice, special assistance is available at public meetings for sight and/or hearing-impaired persons. Please call 350-4311 (voice) or for Relay Users: 711 to request an accommodation to participate in a public meeting.



**Minutes**  
**City of Tempe Meeting of the Transportation Commission**  
**December 1, 2020**

Minutes of the meeting of Tempe Transportation Commission held on Tuesday, December 1, 2020, 7:30 a.m. via Cisco Webex.

**(MEMBERS) Present:**

Ryan Guzy	John Federico
JC Porter	Peter Schelstraete
John Kissinger	Brian Fellows
Mary Harriman	Jeremy Browning
Paul Hubbell	Pam Goronkin
David A. King	

**(MEMBERS) Absent:**

Susan Conklu	John Christoph
Lloyd Thomas	

**City Staff Present:**

Shelly Seyler, Deputy Engineering & Transportation Director	Sue Taaffe, Senior Management Assistant
Robert Yabes, Principal Planner	TaiAnna Yee, Public Information Officer
Chase Walman, Planner II	Laura Kajfez, Neighborhood Services Specialist
Vanessa Spartan, Planner II	Amanda Nelson, Public Information Officer
Abel Gunn, Transportation Financial Analyst	Bonnie Richardson, Principal Planner
Cathy Hollow, Traffic Engineer	Eric Iwersen, Transit Manager
Jeff Yazzie, Civil Engineer	Julian Dresang, City Engineer
Sam Stevenson, Senior Planner	Tony Belleau, Streetcar Manager
Doreen Garlid, Councilmember	

**Guests Present:**

Mike James	Alexis Tameron
Scott Smith	Brittany Hoffman
Marc Soronson	Madeline Phipps
Jessica Parks	Omar Peters
Jordan Brackett	Hillary Foose
Kathy DeBoer	

Commission Chair Brian Fellows called the meeting to order at 7:34 a.m.

**Agenda Item 1 – Public Appearances**

None

**Agenda Item 2 – Minutes**

Brian Fellows introduced the minutes of November 10, 2020 meeting of the Transportation Commission and asked for a motion for approval.

**Motion:** Commissioner Paul Hubbell

**Second:** Commissioner John Kissinger

**Decision:** Approved by Commissioners

Ryan Guzy  
JC Porter  
John Kissinger  
Paul Hubbell  
David A. King

John Federico  
Peter Schelstraete  
Brian Fellows  
Jeremy Browning  
Pam Goronkin

**Agenda Item 3 – Commission Business**

Brian Fellows acknowledged and thanked outgoing commissioners Ryan Guzy and Lloyd Thomas for their service.

**Agenda Item 4 – Annual Report**

Shelly Seyler presented the 2020 Transportation Commission Annual Report. A motion was made to approve the 2020 Transportation Commission Annual Report.

**Motion:** Commissioner John Kissinger

**Second:** Commissioner JC Porter

**Decision:** Approved by Commissioners

Ryan Guzy  
JC Porter  
John Kissinger  
Paul Hubbell  
David A. King

John Federico  
Peter Schelstraete  
Brian Fellows  
Jeremy Browning  
Pam Goronkin

**Agenda Item 5 – 20-Minute City Survey Results**

Kathy DeBoer presented the findings from the 20-Minute City Survey. Presentation topics included:

- Methodology
- Resident Use of Transportation Services
- Transportation Services - Demographics
- Services Impacting Location of Home
- Services Impact - Demographics
- Importance of Proximity to Locations
- Current Proximity by Mode
- Gap: Importance vs. Current Proximity
- Residents with Disabilities

Discussion included targeting older residents to use transit and ramp replacements/accessibility.

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**Agenda Item 6 – 2020 Transportation Satisfaction Survey Results**

Kathy DeBoer presented the findings from the 2020 Transportation Satisfaction Survey. Presentation topics included:

- Methodology
- Transit Usage
- Frequency of Transit Usage
- Type of Transit Used Among Riders
- Length of Transit Usage Among Riders
- Reasons for Usage Among Riders
- Reasons for Usage Among Riders
- Bus Satisfaction Among Riders
- Suggested Improvements
- Overall Satisfaction with Transit System
- Overall Satisfaction Tracking
- Impact of TIM Advertising
- Bike Usage, Frequency, and Destinations
- Satisfaction with Walking and Bike Paths
- Reasons for Satisfaction Ratings
- Sidewalk Improvement Priorities
- Bikeway Improvement Priorities
- GRID Bikes
- Youth Free Transit Pass
- Conclusions

Discussion included transit ridership trends, reasons for taking transit, overall transit satisfaction, and accessibility.

**Agenda Item 7 – Long-Term Transit Fund Plan and Service Changes**

Eric Iwersen and Sam Stevenson provided an updated and recommendations for balancing the transit fund.

Presentation topics included:

- Program elements
- Public feedback summary
- Community values summary
- Proposed route changes for April 2021(routes 32, 40, 72, 520, 521 and 522)
- Transit fund 5-year forecast
- Long term expenditure reduction strategies
- New revenue generation ideas/advertising
- Next steps

Discussion included the route 72 proposal and advertising.

A motion was made to support the three proposals recommended by staff, which included approving the proposed April 2021 service changes, maintaining Orbit as a free service and issuing an RFP for transit asset advertising.

**Motion:** Commissioner Pam Goronkin

**Second:** Commissioner David King

**Decision:** Approved by Commissioners

Ryan Guzy  
JC Porter  
John Kissinger  
Paul Hubbell  
David A. King

Pam Goronkin  
Peter Schelstraete  
Brian Fellows  
Jeremy Browning  
Mary Harriman

**Abstain:** John Federico

**Agenda Item 8 – Department & Regional Transportation Updates**

Brian Fellows requested that this agenda item be revised to allow for announcements by Commissioners.

**Agenda Item 9 - Future Agenda Items**

Ryan Guzy requested that the topic of crosswalk countdown pedestrian signals be added to a future agenda. John Federico requested that the topic of speeding/street racing be added to a future agenda. The following future agenda items have been previously identified by the Commission or staff:

- January 12
  1. Commission Business
  2. Transit Service Reduction Plan
  3. Personal Delivery Devices (verbal update)
  4. Open Streets (verbal update)
- February 9
  1. Country Club Way Streetscape
  2. Transportation Demand Management Association
  3. Mobility Hubs
- March 9
  1. Outreach Plan for I-10 Corridor Construction
  2. Scottsdale Road Bike Lanes
  3. ADA and sidewalk infrastructure
- April 13
  1. North/South Rail Spur MUP
  2. Transit Service Reduction Plan
  3. Transit Shelter Design
- May 11
  1. Commuter Rail Study/ MAG Commuter Rail Plan
  2. AZ State Rail Plan/AZDOT Phoenix-Tucson Corridor Plan
  3. Ash/University Intersection
  4. Bike Bait Program Update
- June 8
- July 13
- August 10
- September 14
- October 12
  1. Annual Report
- November 9
  1. Annual Report

- December 14

The next meeting is scheduled for January 12, 2021.

The meeting was adjourned at approximately 9:00 a.m.

Prepared by: Sue Taaffe

Reviewed by: Shelly Seyler

January 12, 2021

TO: Tempe Transportation Commission

FROM: Jennifer Valentine, Transportation Planner III

SUBJECT: MAG COMMUTER BUS FEASIBILITY STUDY RECOMMENDATIONS

### **Overview**

The Commuter Bus Feasibility Study (CBFS) was initiated to help determine where demand exists for new or enhanced commuter bus services throughout the MAG Region, and the viability of those services based on ridership, costs, and other factors. The study kicked off in July of 2019 and the final report was completed in October of 2020.

The study expands upon the recommendations made in MAG's Regional Transit Framework Study Update (RTFSU). The RTFSU identified potential high-capacity transit corridors throughout the MAG region and found that while there is not sufficient demand to warrant high-capacity transit in all parts of the Valley, there may be opportunities in other areas for lower-capacity transit services, including commuter bus.

The RTFSU and CBFS were undertaken primarily to inform the development of *MOMENTUM*, the next Regional Transportation Plan (RTP), while reaffirming a commitment from MAG to facilitate strong regional transit investments. The recommendations of the CBFS will help MAG advance a strong regional commuter bus system as a regional investment priority as part of the development of the RTP. Advancing commuter bus as a regional investment priority also provides an opportunity to streamline our regional funding structure, making study recommendations easier to implement and simplifying operations in the future.

### **Recommendations and Implementation**

The CBFS report includes recommendations for traditional commuter bus routes, commuter bus combined with first/last mile solutions, and limited stop routes. Recommended routes would connect a number of cities and towns not currently being served by RAPID and Express routes.



Recommendations include:

- Modifications to improve the efficiency of existing RAPID and Express routes
- New commuter bus service terminating in:
  - o Phoenix North Central
  - o Downtown Tempe
  - o Northwest Tempe/Broadway Innovation Corridor
  - o Deer Valley (with first/last mile solutions)
  - o Price Corridor (with first/last mile solutions)

Although the new routes and modifications to existing routes identified in the study could be viable in the short-term, the focus of the final recommendations is the mid-term (e.g., 5-10 years), to allow time for the adoption and implementation of the next RTP. A longer-term planning horizon is also addressed in the final report, taking into consideration projected population and job growth throughout the region. As recently observed through pandemic impacts, commuter bus market conditions can change rapidly and unexpectedly, rendering it difficult to make long-term recommendations with confidence, making the mid-term the ideal horizon for commuter bus recommendations.

**Contact**

Jennifer Valentine  
Transportation Planner III  
602-900-4807  
jvalentine@azmag.gov



COMMUTER BUS  
FEASIBILITY STUDY

Maricopa Association of Governments

# TEMPE TRANSPORTATION COMMISSION COMMUTER BUS FEASIBILITY STUDY

January 12, 2021

# Study Purpose and Timing

- Follow-up to Regional Transit Framework Study Update (RTFSU)
- Development of our next Regional Transportation Plan (RTP), *MOMENTUM*
- Possible extension of Proposition 400
- Regional funding priorities and structure



# Scope of Work

1

## REVIEW AND ANALYSIS

- Review existing commuter services
- Conduct peer review
- Assess market



2

## EVALUATION FRAMEWORK AND ALTERNATIVES

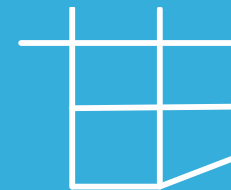
- Develop evaluation criteria
- Develop alternatives
- Evaluate alternatives



3

## RECOMMENDATIONS

- Based on:
  - Technical analysis
  - Stakeholder input



COMMUTER BUS  
FEASIBILITY STUDY

Maricopa Association of Governments

# Overview of Commuter Bus Demand



**Major Employment Centers** with a high number and density of jobs.



**Residential Areas** served mainly by park-and-rides.



**Travel Flows** between a residential area and an employment area.



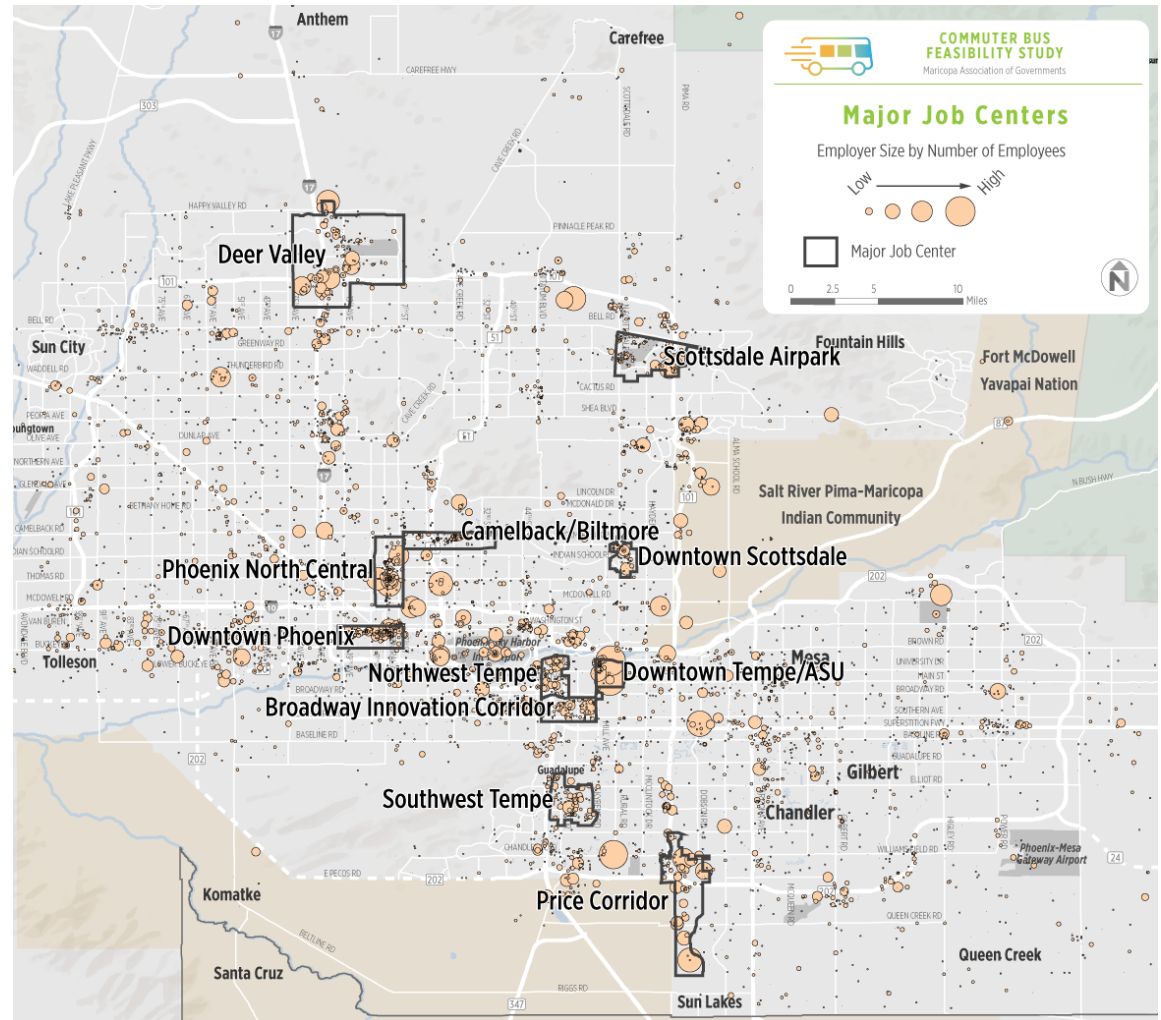
**Cost Competitiveness**, mostly influenced by parking and fare prices.



**Time Competitiveness** as compared to driving alone.

# Major Employment Centers

- Downtown Phoenix
- Phoenix North Central
- Deer Valley
- Camelback\Biltmore
- Scottsdale Airpark
- Downtown Scottsdale
- Downtown Tempe
- Northwest Tempe
- Broadway Innovation Corridor
- Southwest Tempe
- Price Corridor

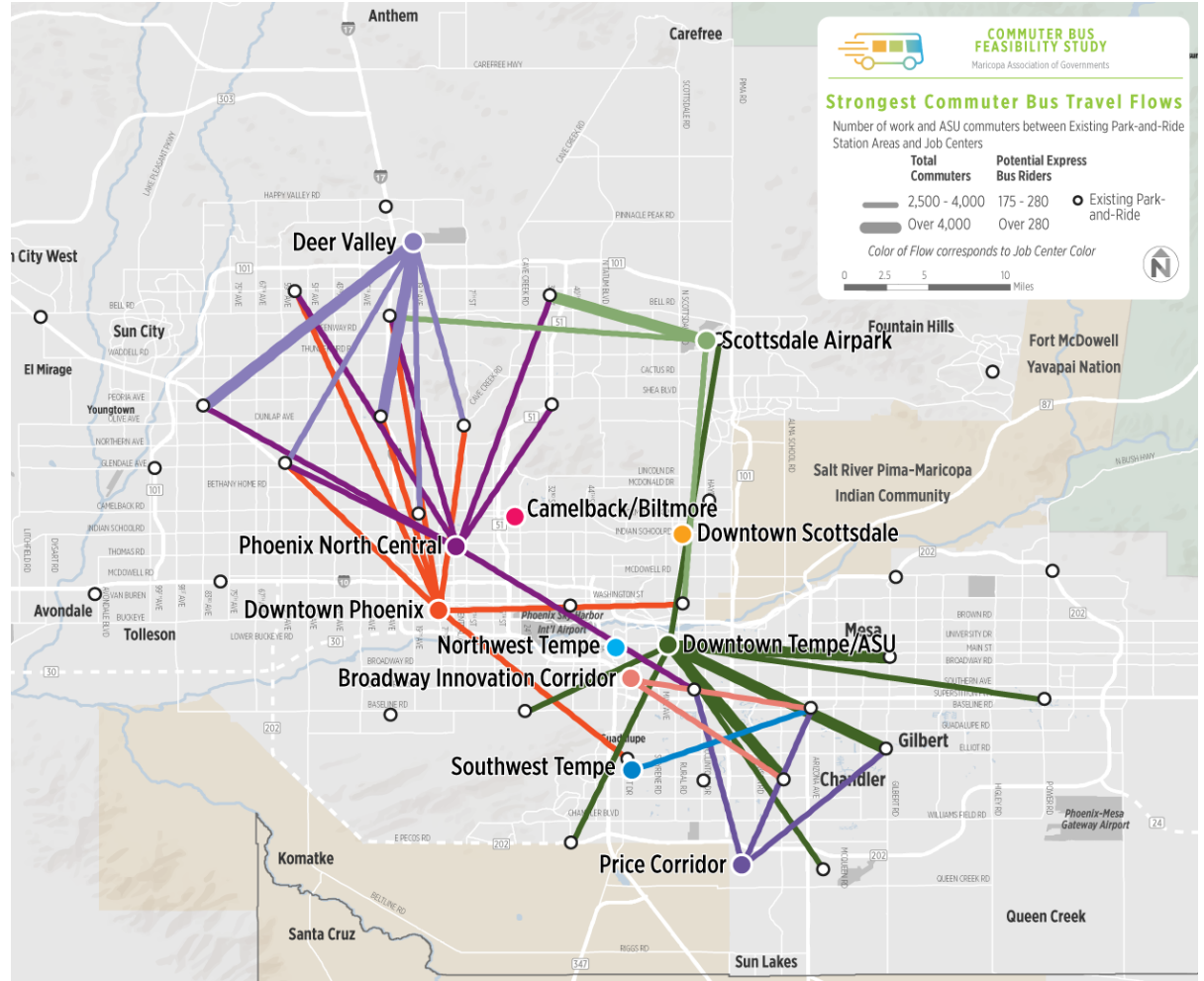


# Travel Flows

Identified using criteria:


- Have at least 2,500 commuters
- Are not served by light rail
- Originate outside of an eight-mile drive threshold

Demand is shown from park-and-rides





# Summary Table

**Suitability for Commuter Bus**



High Medium Low

Job Center	Pedestrian Access at Job Center	Worker/ASU Flows	Cost Competitiveness (Based on Parking Prices)	Time Competitiveness (Based on Congestion)
Phoenix North Central				
Downtown Phoenix				
Downtown Tempe/ASU				
Deer Valley				
Scottsdale Airpark				
Price Corridor				
Broadway Innovation Corridor				
Southwest Tempe				
Downtown Scottsdale				
Northwest Tempe				
Camelback/Biltmore				



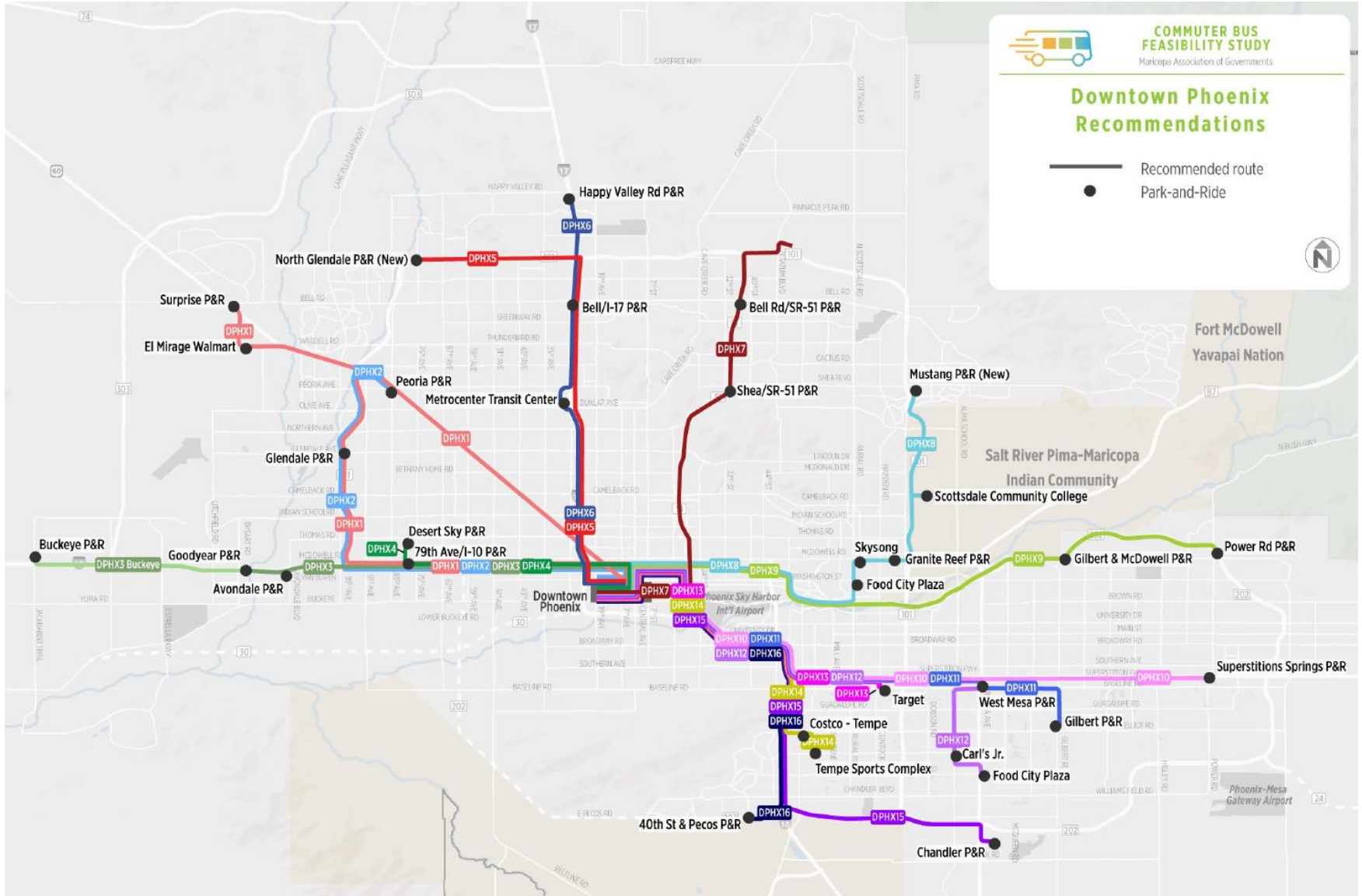
# Types of Service

- Changes to Existing RAPID and Express Routes
- New Commuter Bus Routes
- New Commuter Bus Routes + First/Last Mile Solutions
- New Limited Stop Service



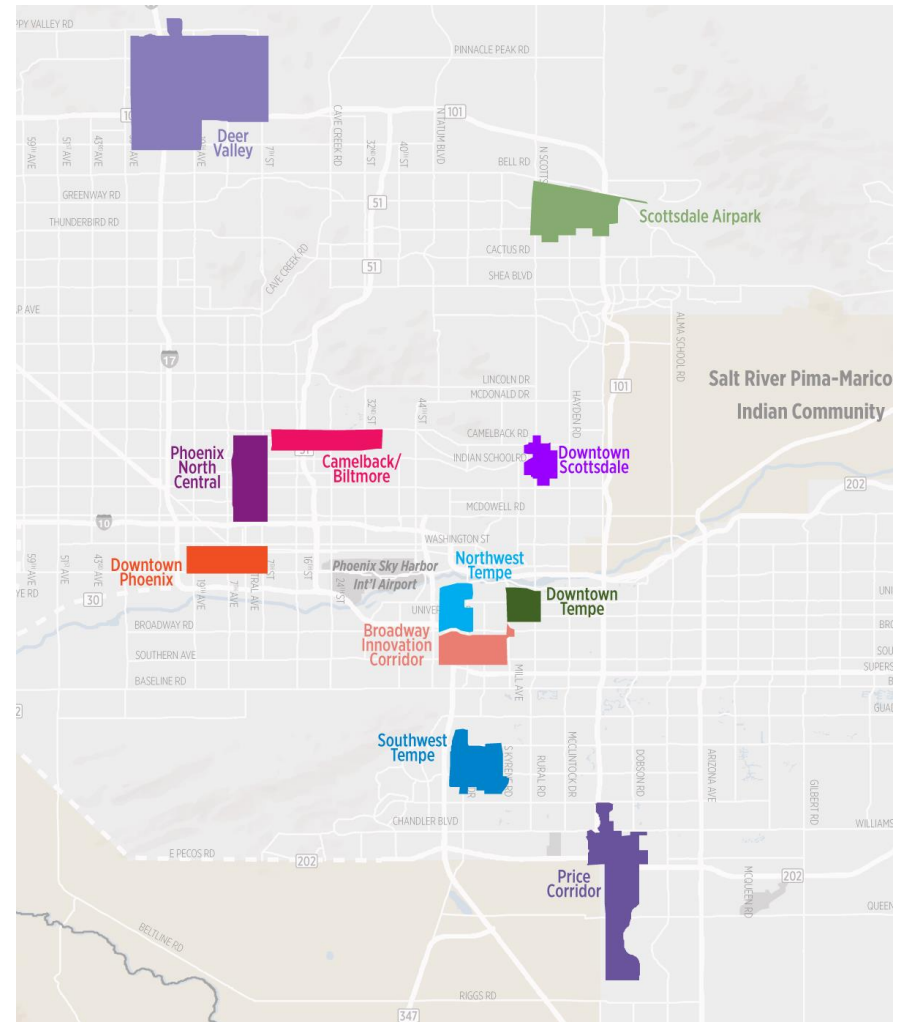


# Downtown Phoenix Alternatives



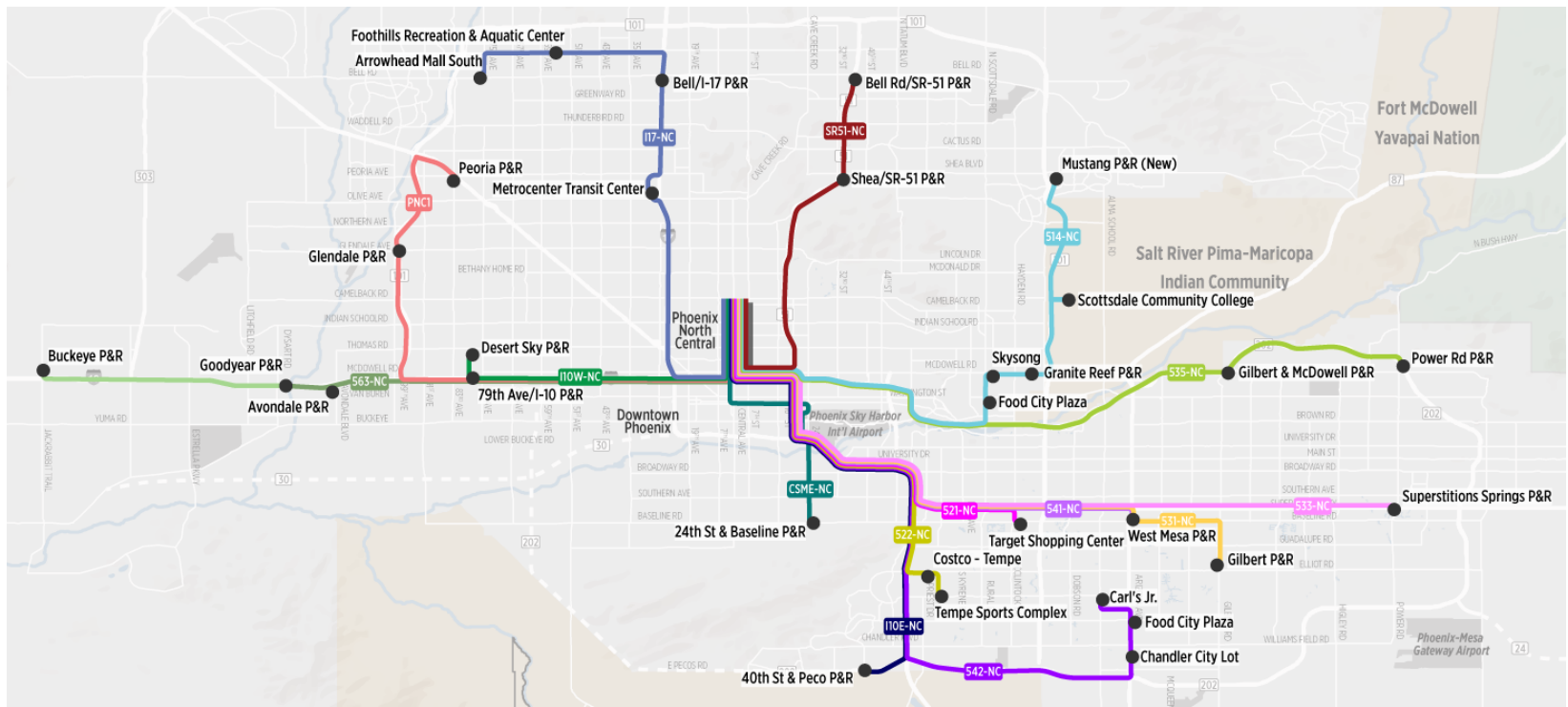
# New Job Center Alternatives

- Phoenix North Central – 15 alternatives
- Deer Valley – 6 alternatives
- Downtown Tempe – 6 alternatives
- Broadway Innovation Corridor/Northwest Tempe – 1 alternative
- Price Corridor – 3 alternatives
- Southwest Tempe – 2 alternatives
- Four limited stop services serving multiple job centers



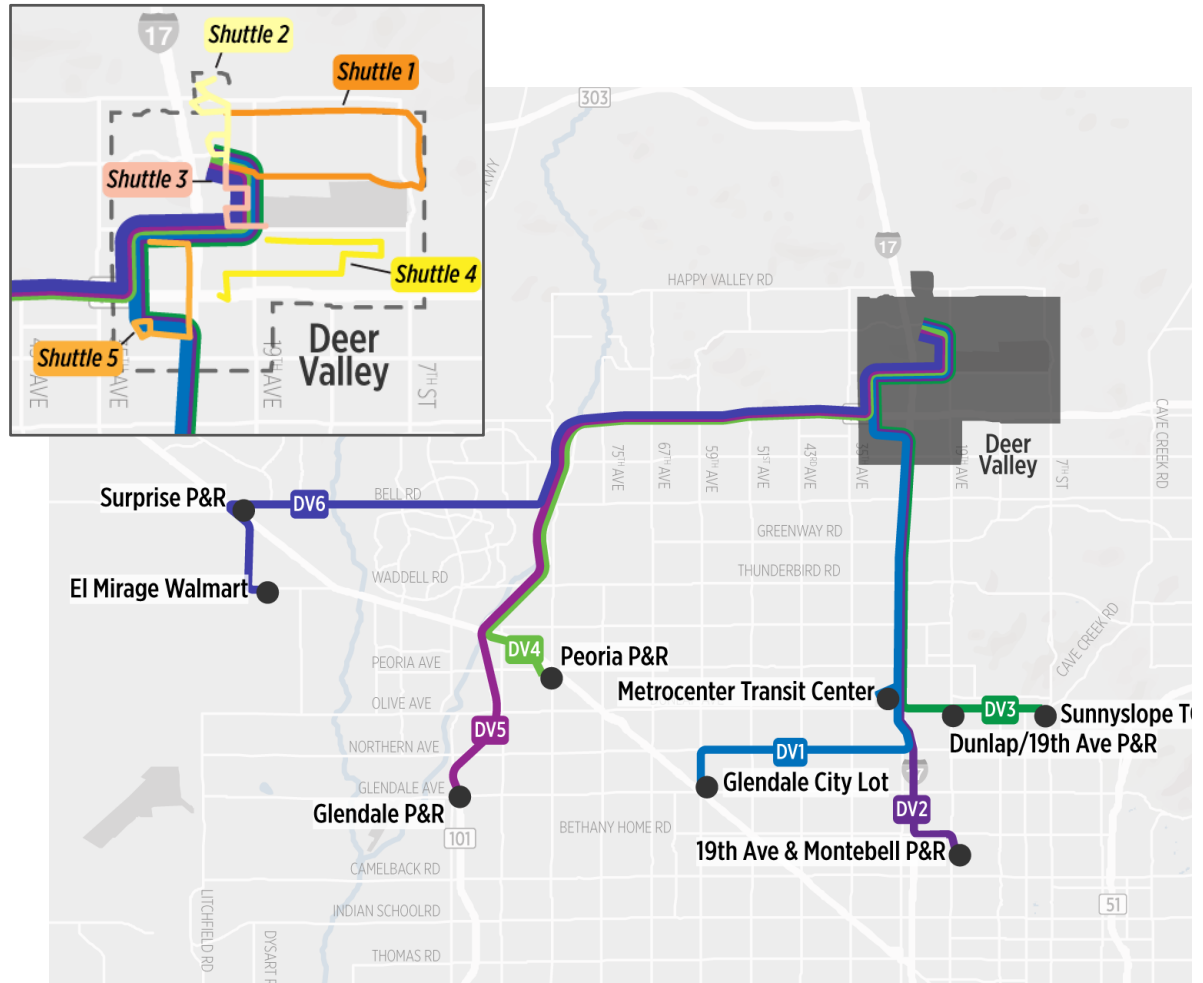
# Phoenix North Central Alternatives

- 15 alternatives, all traditional express bus
- 14 alternatives all based on recommended Downtown Phoenix commuter services
- 1 new unique alternative: Phoenix North Central Alternative 1 serving Peoria and Glendale
- Flows originate all over the Valley
- Many alternatives have larger market sizes than Downtown Phoenix



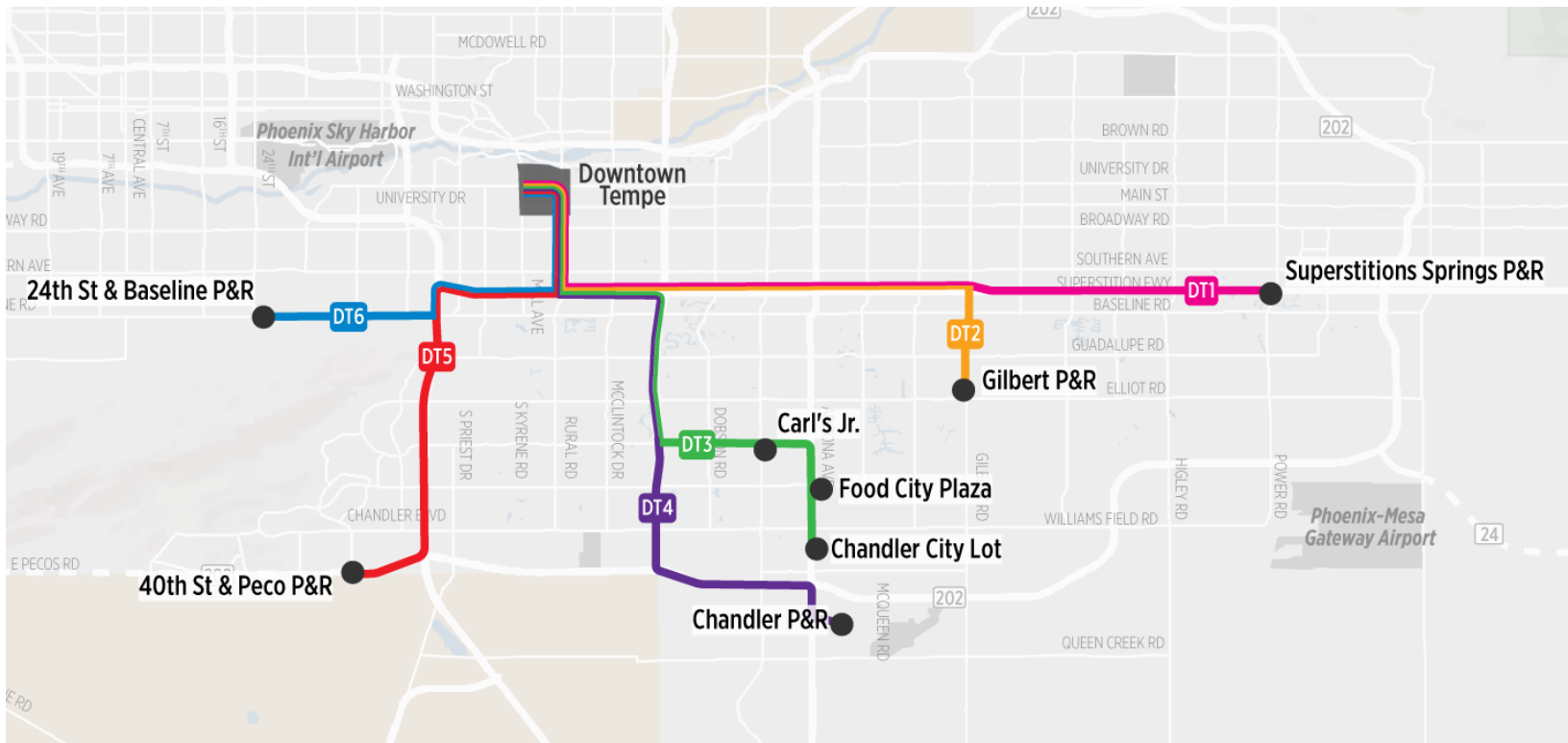
# Deer Valley Alternatives

- 6 alternatives, all express bus with shuttle connections
- 4 shuttles to provide access to the whole job center
- Shuttles greatly expand access but also increase costs and transit time



# Downtown Tempe Alternatives

- 6 alternatives, all traditional express bus
- Accounted for ASU and employee flows
- Most alternatives serve just 1 park-and-ride before running express
- Alternative 3 serves 3 park-and-rides and has enough demand to stop more frequently in a higher density area



# Broadway Innovation Corridor/Northwest Tempe Alternative

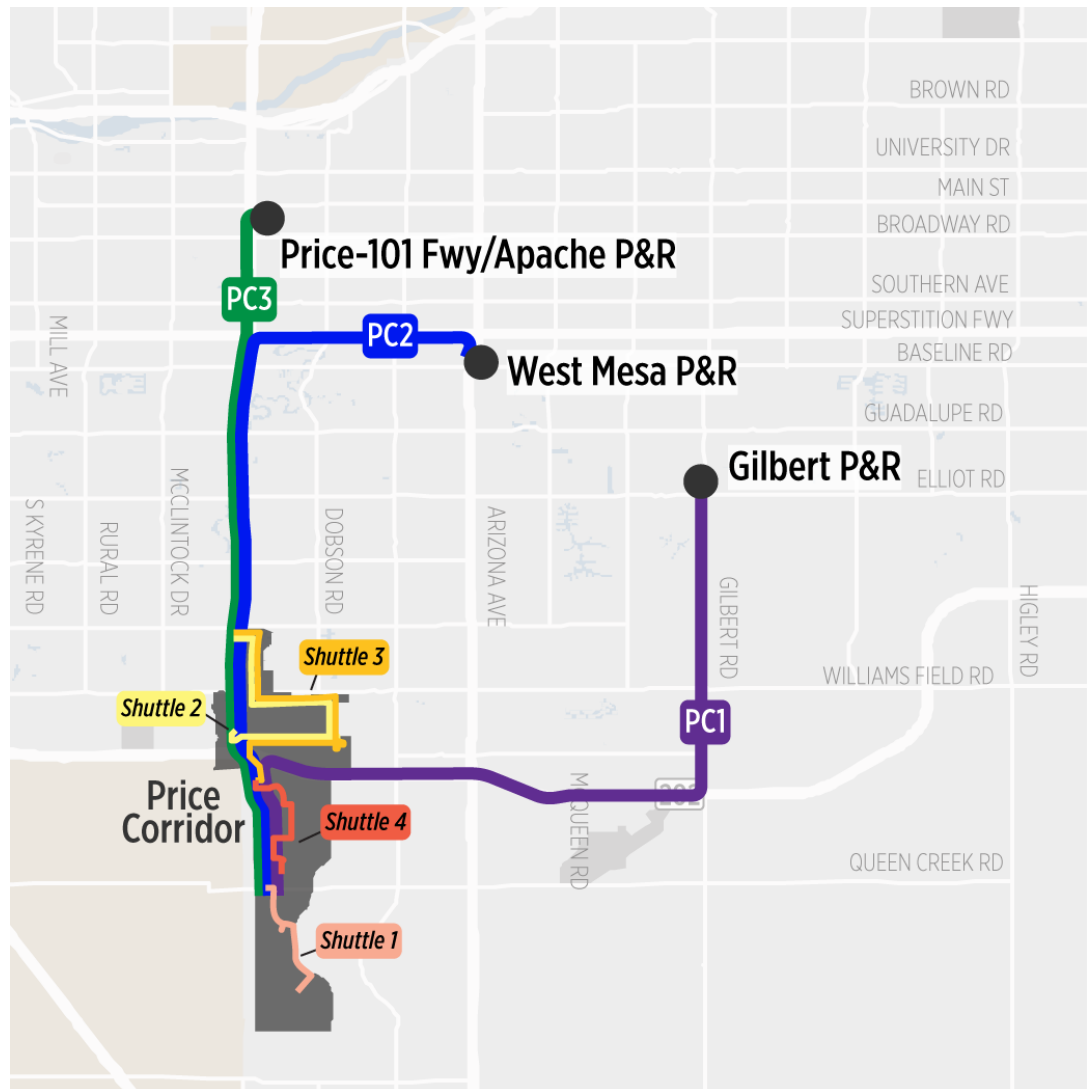
- 1 traditional express route
- Serves high combined demand from Mesa and Chandler





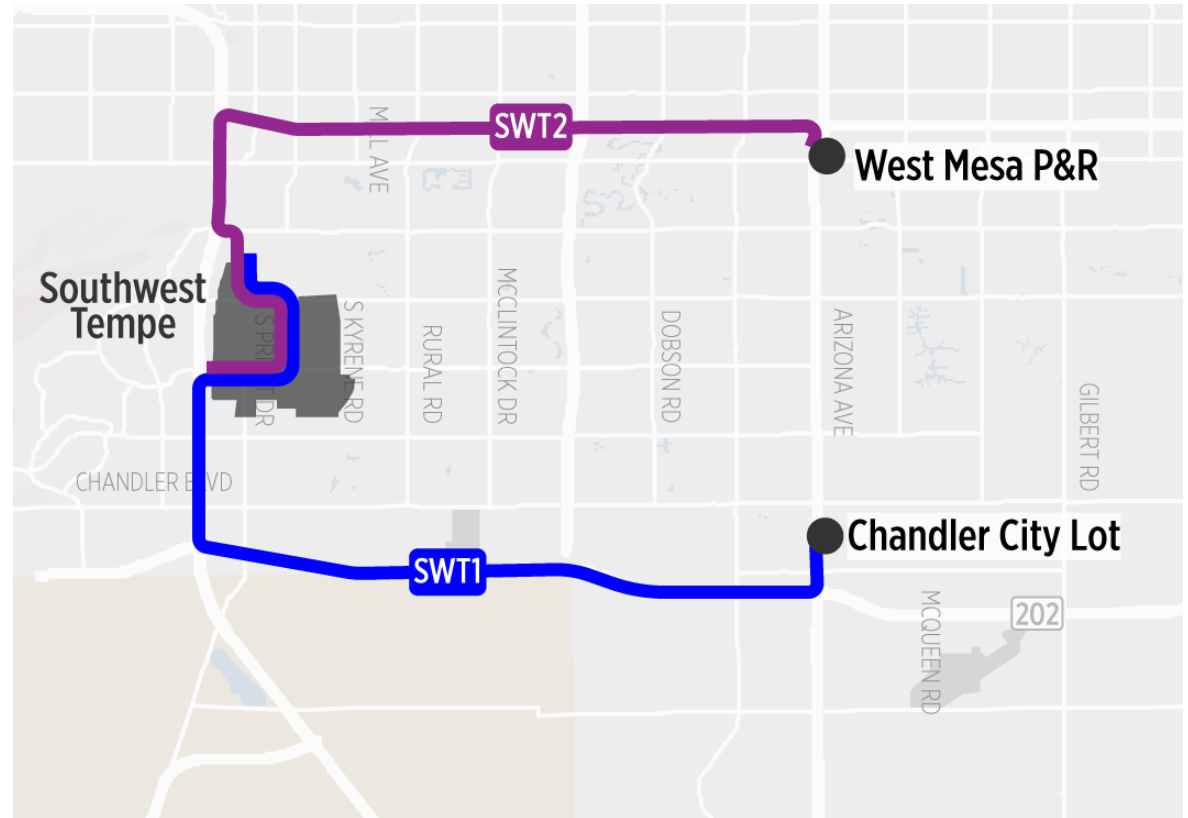
# Price Corridor Alternatives

- 3 alternatives, all express bus with shuttle connections
- 4 shuttles to provide access to the whole job center
- Like Deer Valley, shuttles greatly expand access but also increase costs and transit time



# Southwest Tempe Alternatives

- 2 alternatives, traditional express bus
- Both serve one park-and-ride and head directly to job center
- Service from Mesa and Chandler

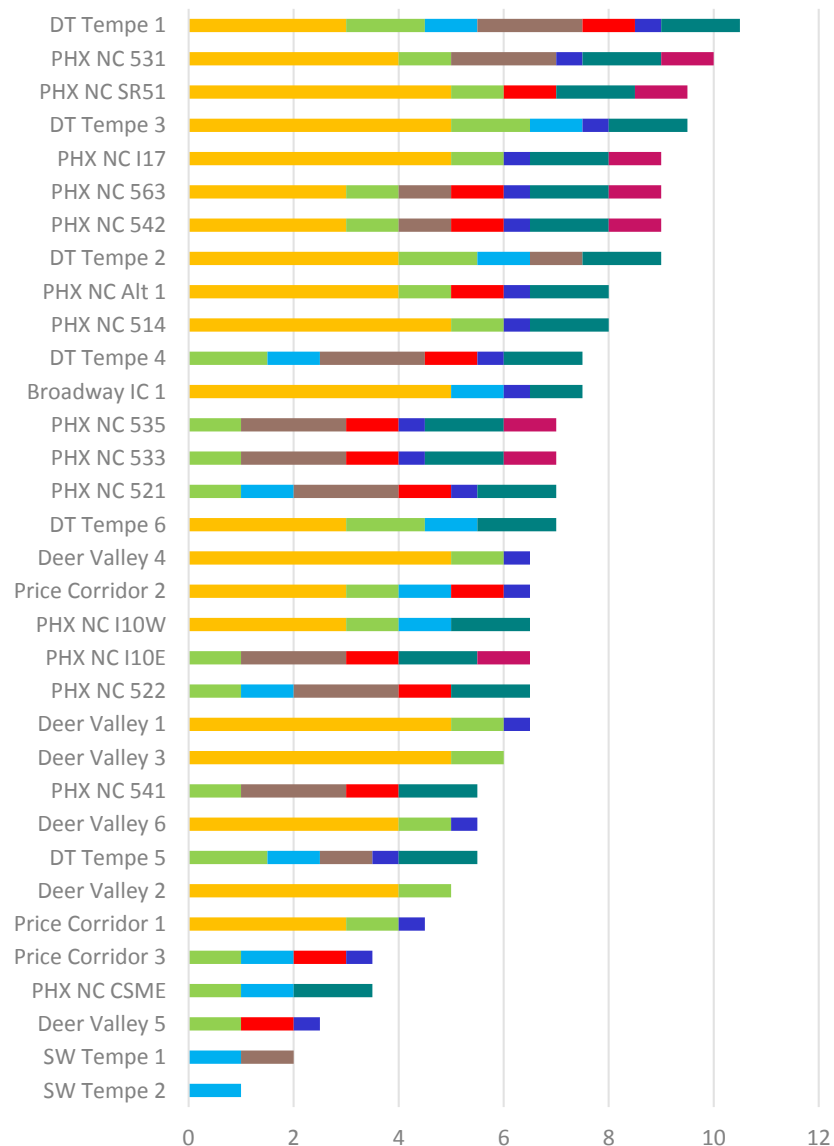


# Evaluation Criteria

- Each alternative was evaluated according to each evaluation criterion
- Many of the categories reflect those used in the market analysis
- Each criterion score compounds to create the final score

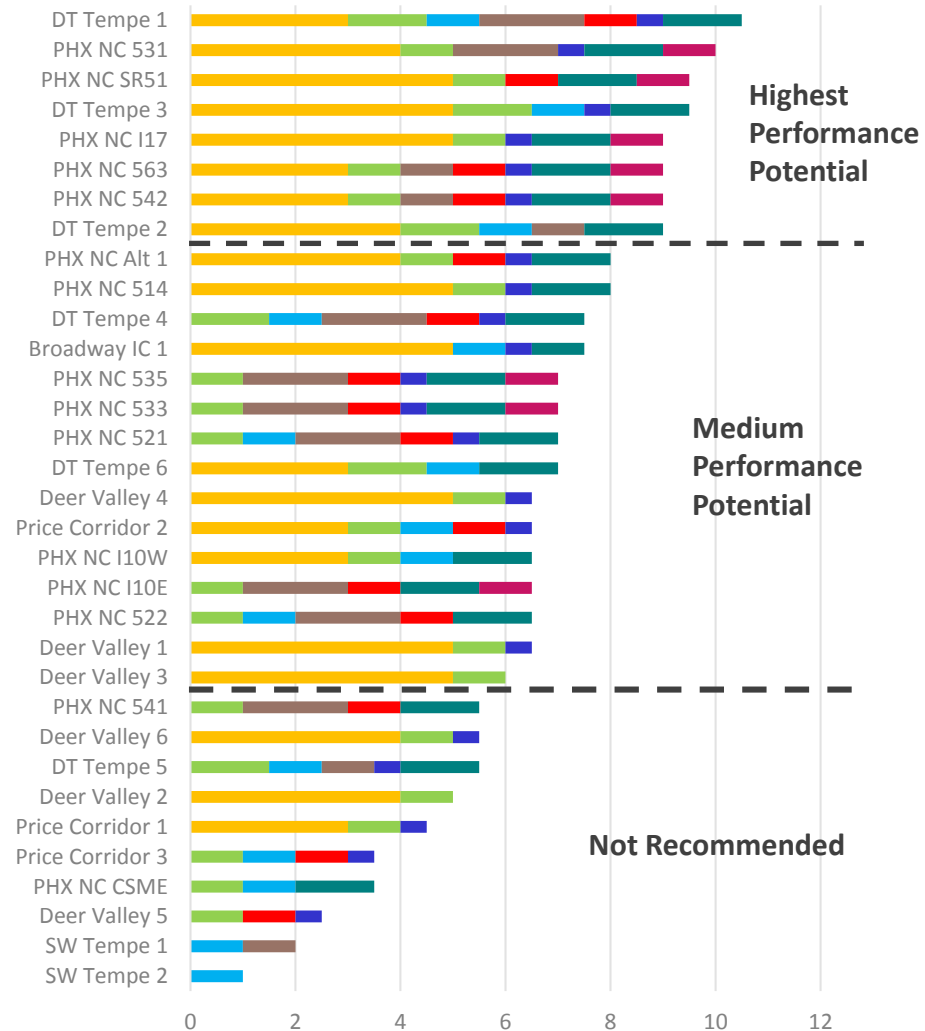
Category	Evaluation Criteria
<b>MARKET SIZE</b>	Travel Flows
<b>COST COMPETITIVENESS</b>	Number of jobs in job center(s) with high potential for subsidized transit passes
	Operating cost per trip (one-way)
<b>TIME COMPETITIVENESS</b>	Commuter bus vs. driving travel time
	Percentage of route running on high occupancy vehicle (HOV) facilities
<b>ACCESSIBILITY</b>	Connection to areas currently not served
<b>JOB CENTER CONDITIONS</b>	Pedestrian environment at job center (square mile within 10-min walk)
<b>CURRENT PERFORMANCE</b>	Phoenix North Central route with high DTPHX route ridership

Total Evaluation Score



# Final Results – Total Evaluation Score

- Out of possible score of 13.5, scores range from 1 to 10.5
- Based on natural breaks, routes were divided into:
  - Highest performance potential
  - Medium performance potential
  - Not recommended for future study



### Scoring Legend

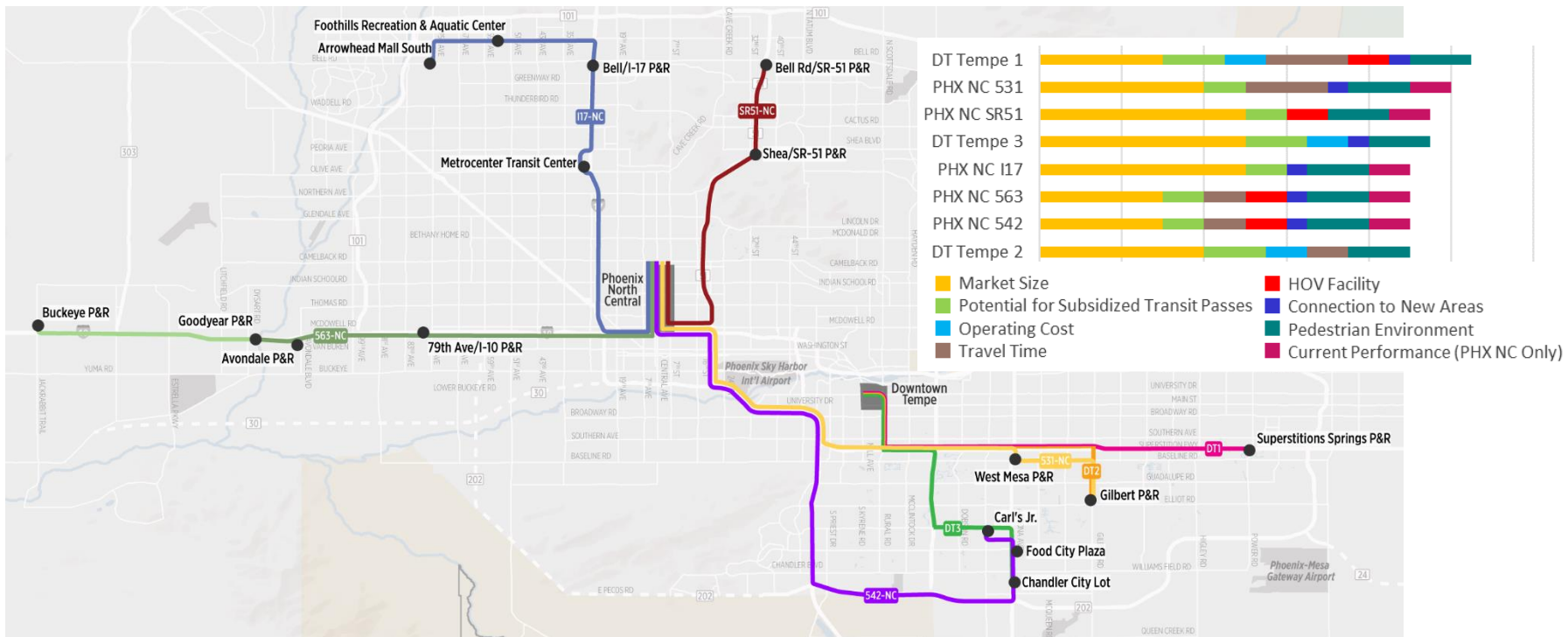
- Market Size
- Potential for Subsidized Transit Passes
- Operating Cost
- Travel Time
- HOV Facility
- Connection to New Areas
- Pedestrian Environment
- Current Performance (PHX NC Only)

# Highest Performance Potential

Eight alternatives with score of 9 or higher:

- Phoenix North Central: 531, 542, 563, SR51, and I17
- Downtown Tempe: Alternatives 1, 2, and 3

Most routes score in most categories, high potential in diversity of areas

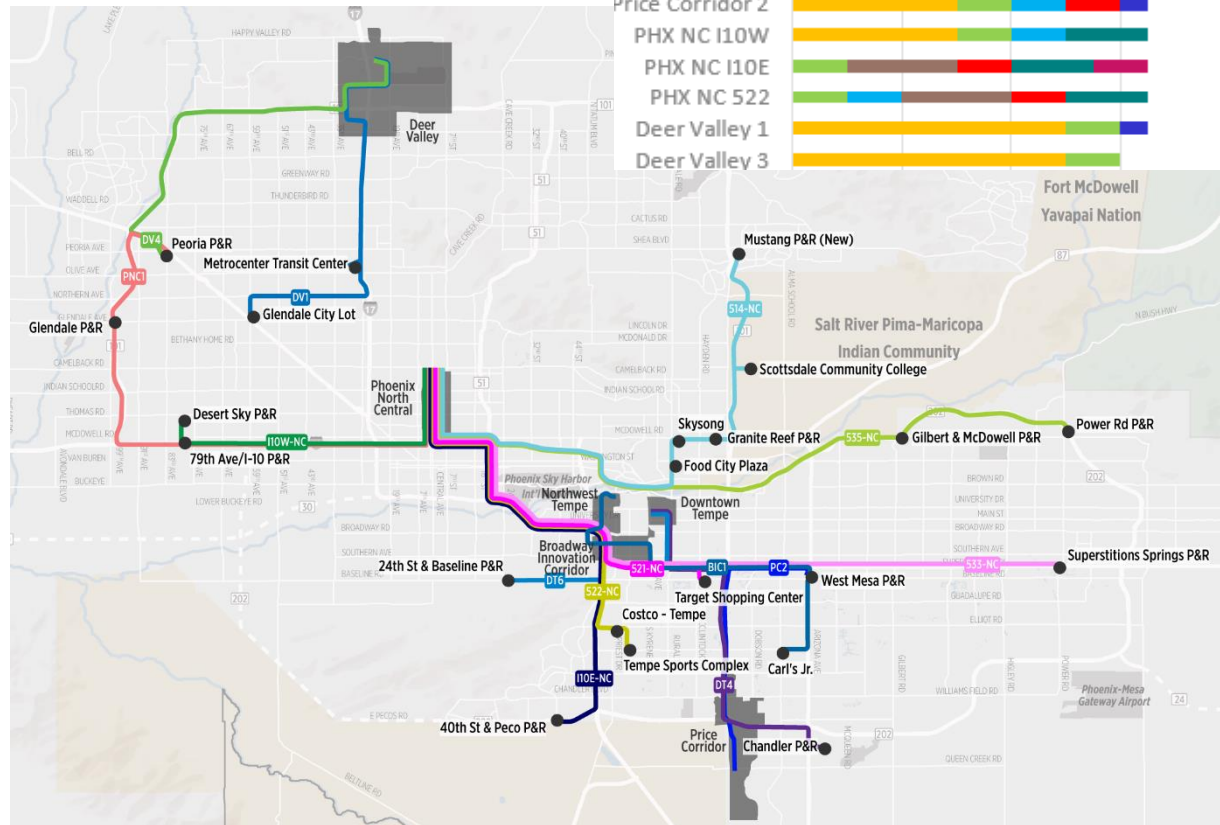
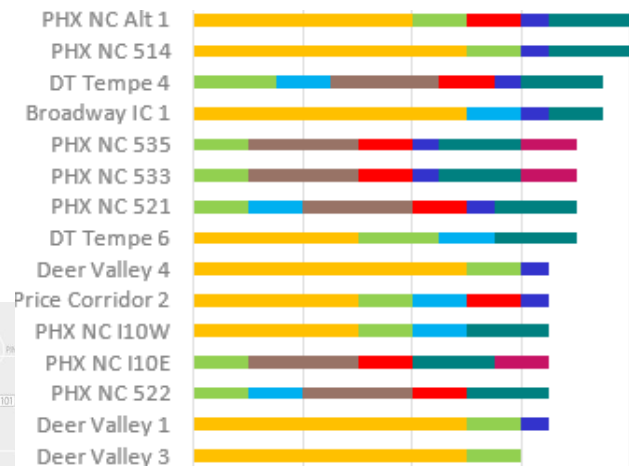
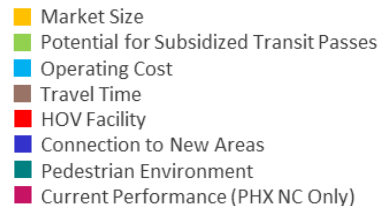


# Medium Performance Potential

Fourteen alternatives:

- Phoenix North Central: 514, 521, 522, 533, 535, I10E, I10W, and PNC1
- Downtown Tempe: Alternatives 4 and 6
- Broadway Innovation Corridor: Alternative 1
- Deer Valley: Alternatives 1 and 4
- Price Corridor: Alternative 2

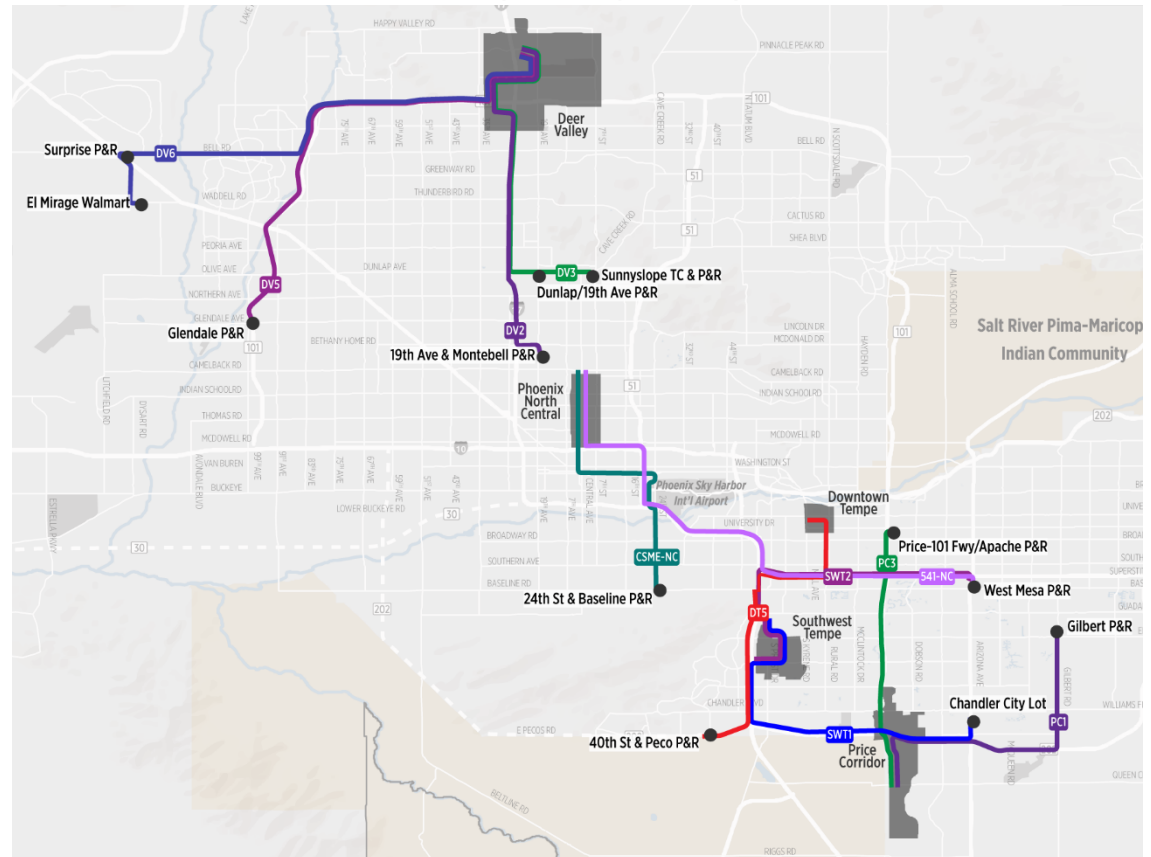
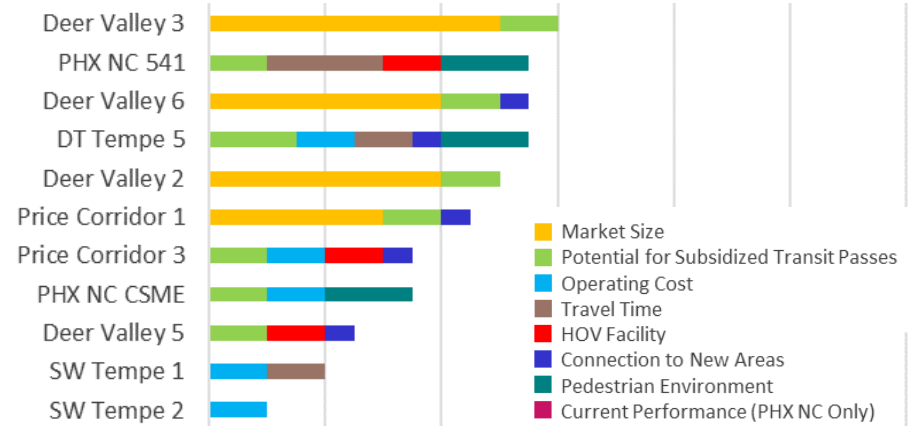
Some score in many categories, while others score high in just a handful



# Not Currently Recommended

Eleven alternatives had a score of 6 or lower and are not recommended for implementation or further analysis in current conditions:

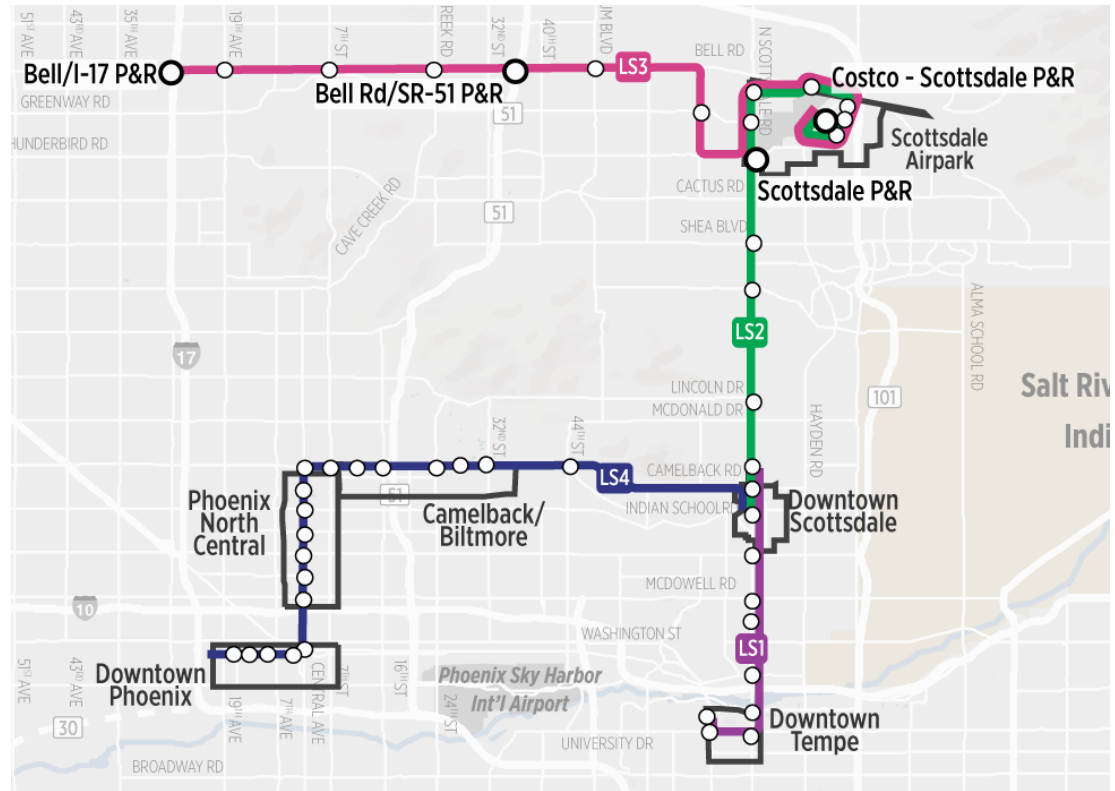
- Phoenix North Central: 541 and CSM East
- Downtown Tempe: Alternative 5
- Deer Valley: Alternatives 2, 3, 5, and 6
- Price Corridor: Alternatives 1 and 3
- Southwest Tempe: All Alternatives (1-2)



# Limited Stop Alternatives

Four Limited Stop Services were evaluated

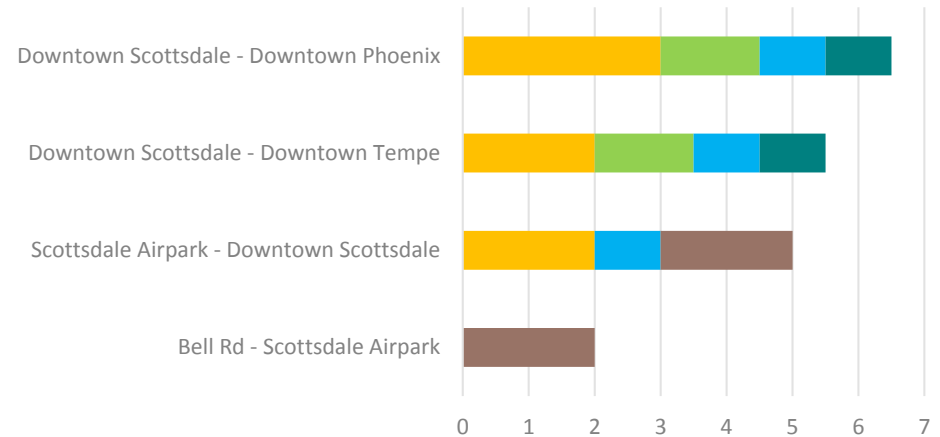
- **Limited Stop Alternative 1** – serving Downtown Tempe and Downtown Scottsdale
- **Limited Stop Alternative 2** – serving Downtown Scottsdale and Scottsdale Airpark
- **Limited Stop Alternative 3** – serving Scottsdale Airpark
- **Limited Stop Alternative 4** – serving Downtown Scottsdale, Camelback/Biltmore, Phoenix North Central, and Downtown Phoenix





# Limited Stop Alternatives

- Evaluated very similarly to other alternatives
- Some differences:
  - Density instead of travel flows
  - Stop spacing instead of HOV facilities
  - Pedestrian environment at all stops instead of just job center



Category	Evaluation Criteria
MARKET SIZE	Composite Density
COST COMPETITIVENESS	Number of jobs in job center(s) with high potential for subsidized transit passes
	Operating cost per trip (one-way)
TIME COMPETITIVENESS	Stop Spacing
ACCESSIBILITY	Pedestrian environment at stops (square mile within 10-min walk)

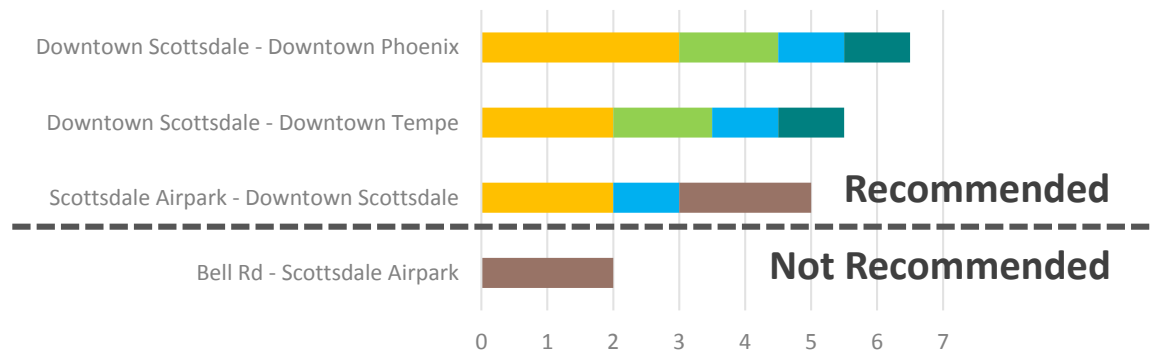
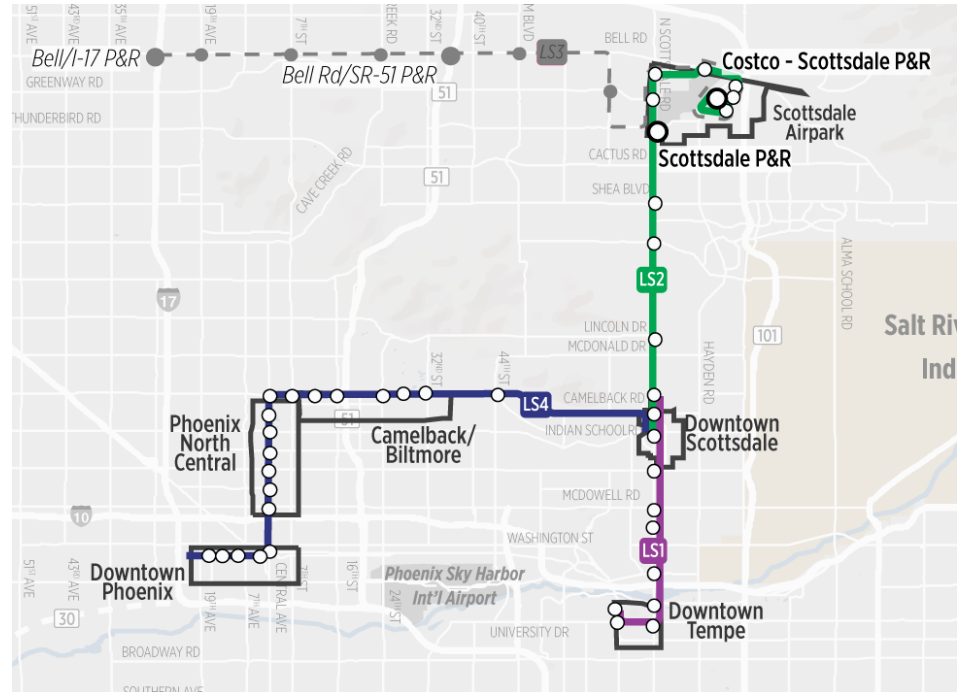
# Final Results – Total Evaluation Score

Three Alternatives are recommended for future study:

- **Limited Stop Alternative 1** – Downtown Tempe to Downtown Scottsdale
- **Limited Stop Alternative 2** – Downtown Scottsdale to Scottsdale Airport
- **Limited Stop Alternative 4** – Downtown Scottsdale to Downtown Phoenix

One alternative is not:

- **Limited Stop Alternative 3** – Scottsdale Airport via Bell Road




# Tempe Takeaways

- The Commuter Bus Feasibility Study was the basis for recommended changes to the 520, 521, and 522 Express routes (April 2021)
- Study recommends ten new routes serving Tempe:
  - Five terminating in Downtown Tempe
  - Two from Downtown Tempe to PHX NC
  - One terminating in the Broadway Innovation Corridor area
  - One limited-stop between Tempe and Scottsdale along Scottsdale/Rural Rd.



# Additional Considerations

- Park-and-ride lot utilization
- Fleet requirements
- Job center growth
- Integration with BRT and LRT
- COVID-19 ridership impacts
  - Commuter bus ridership down 90%
- Behavioral shifts
  - Working from home
  - Trip Reduction Survey



**Maricopa County**  
AIR QUALITY DEPARTMENT

**Travel Reduction Program  
Employee Survey v8**  
To be completed by Employee only

Please do not staple, fold or photocopy. Please print characters using capital letters as shown below. Use black or blue ink only.

1 2 3 4 5 6 7 8 9 0
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

**1** Enter the ONE letter that BEST describes your assigned work schedule at THIS worksite.

<input type="checkbox"/> A - Full Time: 5 days/40 or more hrs/week	<input type="checkbox"/> D - Full Time: 3 days/36 hrs/week	<input type="checkbox"/> G - Part Time: 5 days or more per week
<input type="checkbox"/> B - Full Time: 4 days/40 hrs/week	<input type="checkbox"/> E - Full Time: 3 days (36 hrs)/4 days (48 hrs)	<input type="checkbox"/> H - Part Time: 4 or 3 days per week
<input type="checkbox"/> C - Full Time: 9 days/80 hrs in 2 weeks	<input type="checkbox"/> F - Full Time: 6 days/over 40 hrs/week	

**2** Enter your typical start time and end time. (If times vary, enter your average start time/end time) Example:  :  AM  AM  PM

Start Time — <input type="text" value=""/> : <input type="text" value=""/> <input type="radio"/> AM <input type="radio"/> PM	End Time — <input type="text" value=""/> : <input type="text" value=""/> <input type="radio"/> AM <input type="radio"/> PM
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**3** On average, how many days do you use each of these modes to get to this employer's worksite? Do not include trip home.

Drive Alone <input type="text" value=""/> days per week	Bicycle <input type="text" value=""/> days per week	Light Rail <input type="text" value=""/> days per week
Carpool <input type="text" value=""/> days per week	Vanpool <input type="text" value=""/> days per week	*Telecommute <input type="text" value=""/> days per week
Bus <input type="text" value=""/> days per week	Walk / Run <input type="text" value=""/> days per week	

\*Telecommute means working a scheduled FULL DAY at home for this employer instead of driving to a worksite.

**4** Answer this question ONLY if the vehicle you typically use to drive to this worksite uses one of the Alternative Fuel types listed below.

A - Electric     B - Hybrid     C - CNG / LPG     CNG     LPG

**5** If you ride in a carpool or vanpool, how many other people (age 16 or older) travel with you? Carpool  Vanpool

**6** How many miles (one-way) is it from your home to this worksite?    Miles  
(Enter the distance it takes with your usual mode of travel. No decimals. No fractions. Please round up.)

**7** How many minutes (one-way) does it usually take you to travel from home to this worksite?    Minutes  
(Enter the time it takes with your usual mode of travel. No decimals. No fractions. Please round up.)

**8** If you are willing to make a change to your daily commute, which options interest you the most? (select all that apply)

Alternative Fuel     Compressed Work Week     Transit (Bus/Light Rail)     Telecommute     Electric Vehicle Charging Station  
 Bicycle     Carpool     Vanpool     Walk / Run

**9** Which incentives would motivate you to use an alternative mode? (select all that apply)

Commute subsidy     Carpool parking     Commuter event     Prize drawing     High Pollution Advisory award

**10** Which transportation improvements would make it possible for you to reduce your drive-alone work commute? (select all that apply)

Closer transit service (Bus/Light Rail)     Opportunity to carpool     Safer bike/pedestrian conditions     More HOV lanes  
 More frequent transit service (Bus/Light Rail)     Opportunity to vanpool     More bike facilities or sidewalks     Already use alternative mode(s)

Questions?



# MEMORANDUM



**TO:** Transportation Commission

**FROM:** Shelly Seyler, PE, Deputy Engineering and Transportation Director (480-350-8854)  
Eric Iwersen, Transit Manager (480-350-8810)  
Sam Stevenson, Senior Transportation Planner (480-858-7765)

**DATE:** January 12, 2021

**SUBJECT:** Long-Term Transit Fund Plan and Service Changes

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## 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.

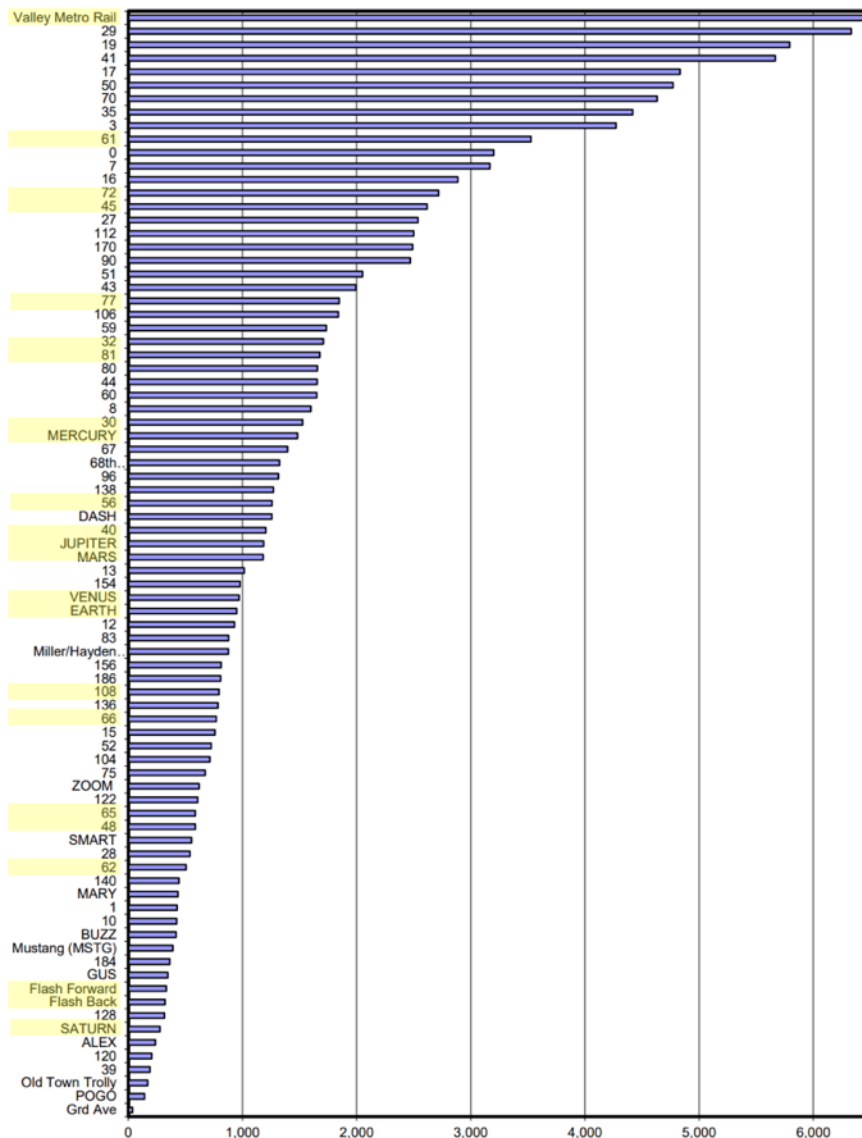
- Tempe Today
- Social media
- Email blasts
- Advertising at major bus stops, Transportation Center
- On-board surveys (when allowed)
- Values mapping survey to determine community needs
- Dedicated web page ([tempe.gov/TransitChanges](http://tempe.gov/TransitChanges))

## 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.

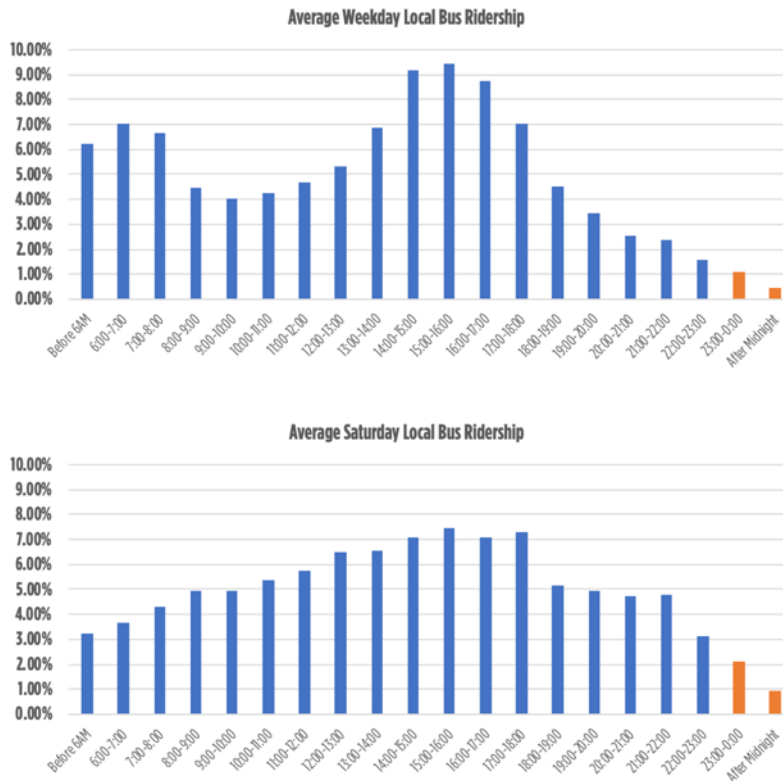




	Performance Rank	Route	Cost per Boarding (FY20)	Remarks
Lower Performing →	24	520 - Express	\$ 25.35	Route elimination approved for April, 2021
	23	521 - Express	\$ 21.62	Route modification approved for April, 2021
	22	522 - Express	\$ 21.36	Route modification approved for April, 2021
	21	Orbit Saturn	\$ 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
	14	30 - University	\$ 7.89	Span of service reduction proposed for October, 2021.
	13	FLASH	\$ 7.34	
	← Higher Performing	12	65 - Mill/Kyrene	\$ 7.18
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.



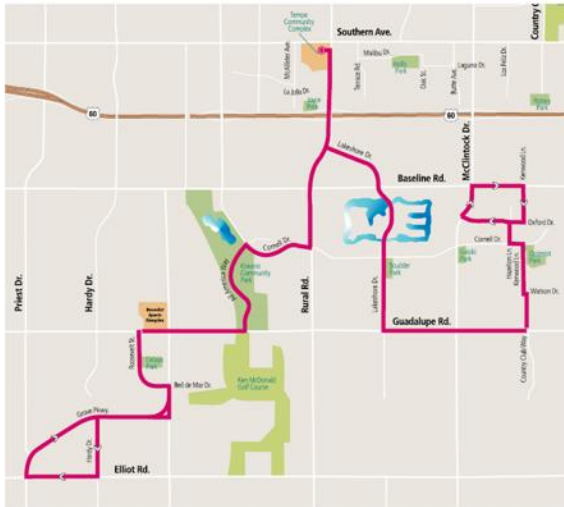
Orbit Mercury Frequency Reduction: Orbit Mercury is ranked as the City’s highest-performing bus route during FY20, and is the highest-frequency Orbit service, running every 10 minutes on weekdays. The frequency enhancements were implemented on Orbit Mercury soon after the route debuted in response to 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.

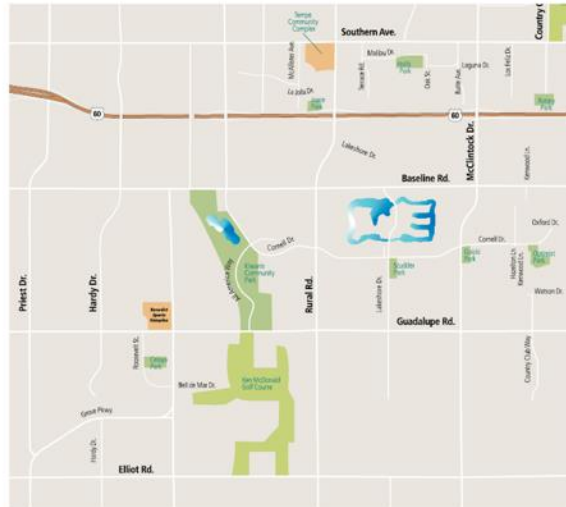
Option A: Eliminate Orbit Saturn; transit service on Guadalupe Road would continue to be maintained by Route 62. Orbit Saturn was implemented in October, 2017 as the City’s first Orbit route to serve areas south of US-60. Staff has monitored the route’s performance over time and although ridership has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

# ORBIT SATURN PROPOSED ELIMINATION OF ROUTE

EXISTING



PROPOSED



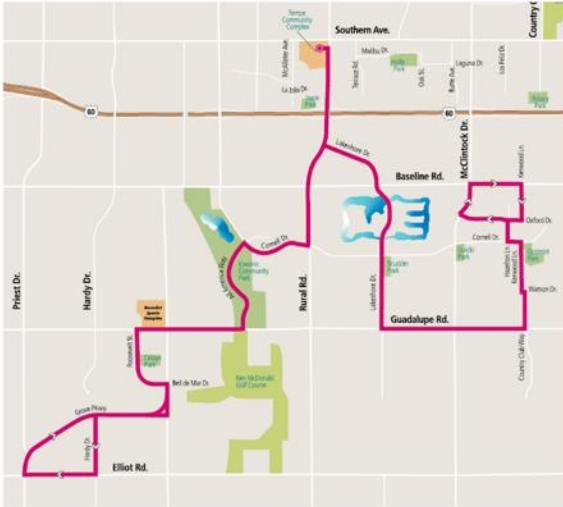
## Guadalupe Road Optimization **OPTION A**

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.

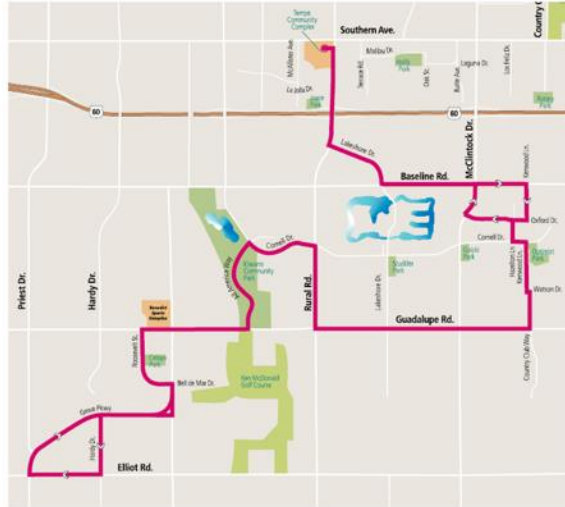
- Modify Orbit Saturn: Modify route to provide more efficient east/west travel along Guadalupe Road, while continuing to serve most nearby neighborhoods and activity centers.
- Modify Route 62: Eliminate local bus service on Guadalupe Road. This area would continue to be served by a modified Orbit Saturn 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.

# ORBIT SATURN PROPOSED CHANGE OF ROUTE

EXISTING



PROPOSED

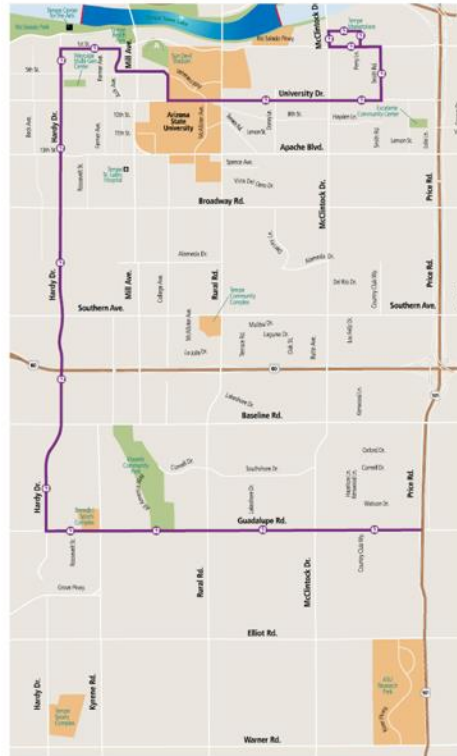


## Guadalupe Road Optimization OPTION B

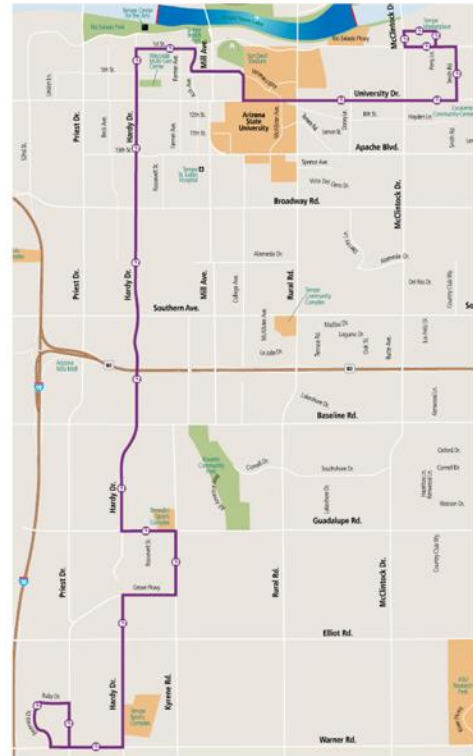
### ROUTE 62 PROPOSED CHANGE OF ROUTE

Guadalupe Road Optimization  
OPTION B

EXISTING



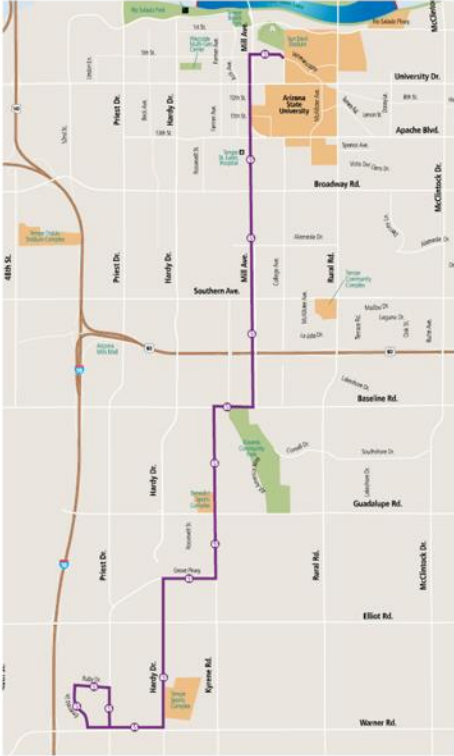
PROPOSED



# ROUTE 65 PROPOSED ELIMINATION OF ROUTE

Guadalupe Road Optimization  
**OPTION B**

**EXISTING**

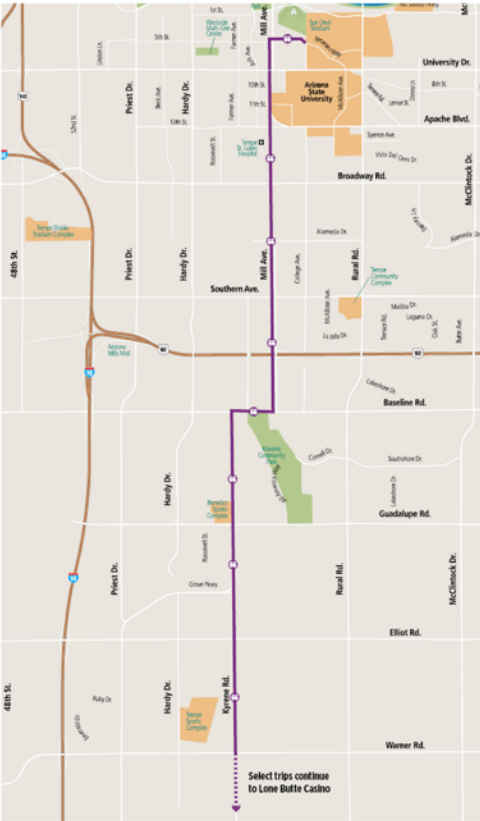


**PROPOSED**



# ROUTE 66 PROPOSED CHANGE OF FREQUENCY

Guadalupe Road Optimization  
**OPTION B**



**EXISTING**  
Frequency: every 30-60 minutes

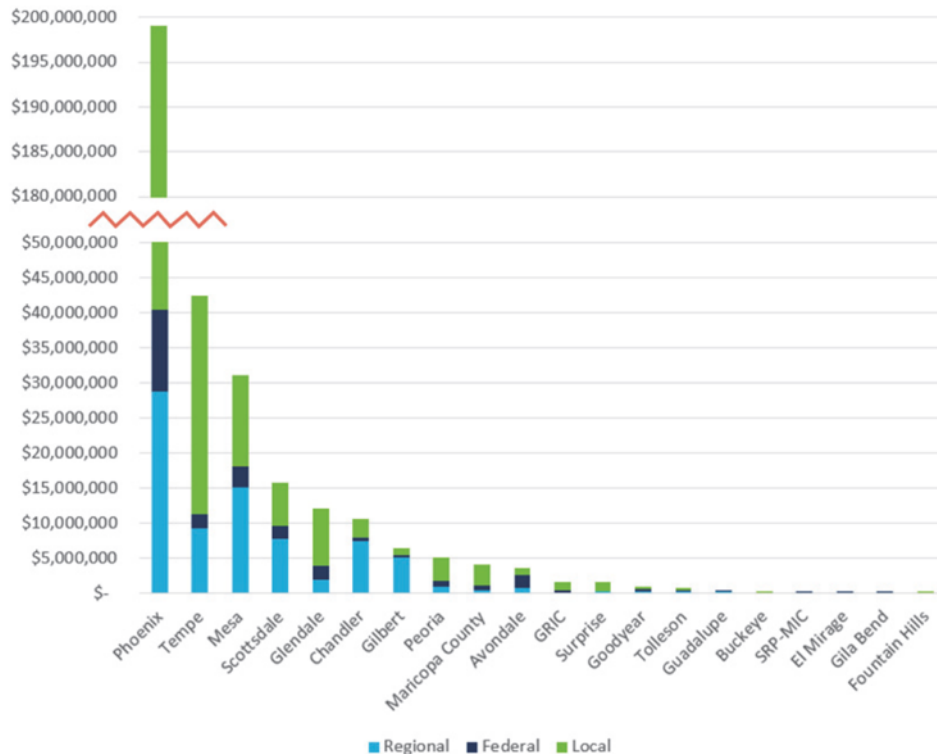
**PROPOSED**  
Frequency: every 30 minutes, with additional trips between Elliot Road and Downtown Tempe during weekday peak.

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

### TIMELINE/NEXT STEPS

- Jan. 21, 2021: Council Direction for October, 2021 outreach process and service reduction approach
- Feb. 2021: Commission Meetings (Disability, NAC, MUAC)
- Feb. 20 & 23, 2021: Public Meetings
- Feb. 20 – Mar. 21, 2021: Public Comment Period
- Spring, 2021: Analyze Public Feedback

- April 13, 2021: Transportation Commission
- April 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

# **Long-Term Transit Fund Plan and Service Changes**

**Transportation Commission  
January 12, 2021**





# City Council Strategic Priority Performance Measures

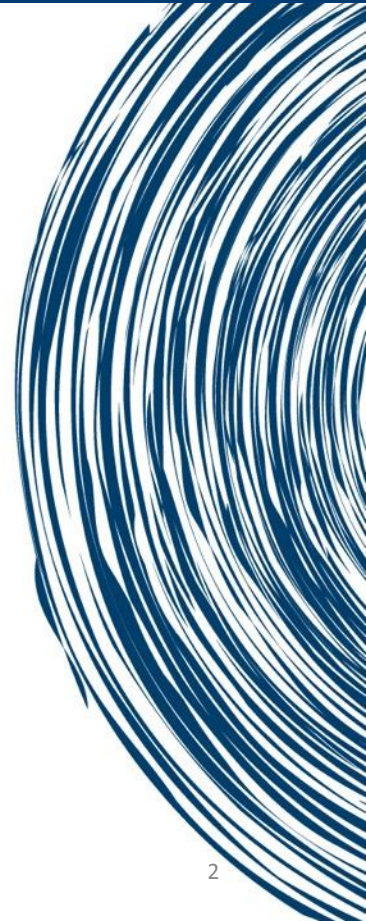


## Quality of Life 3.26

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.



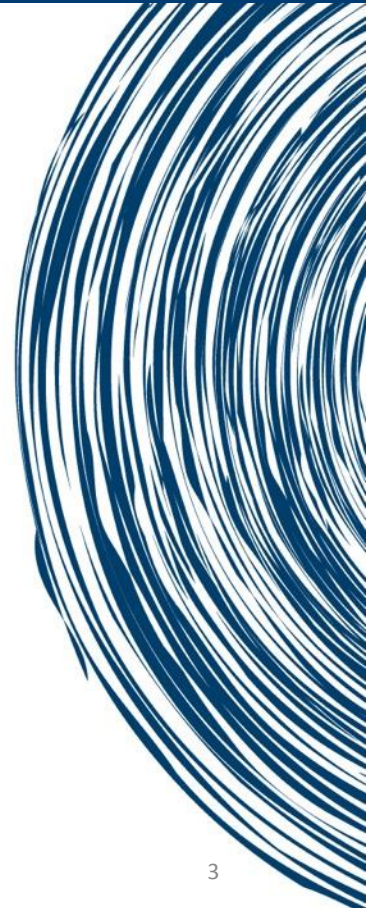
# Agenda



- 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



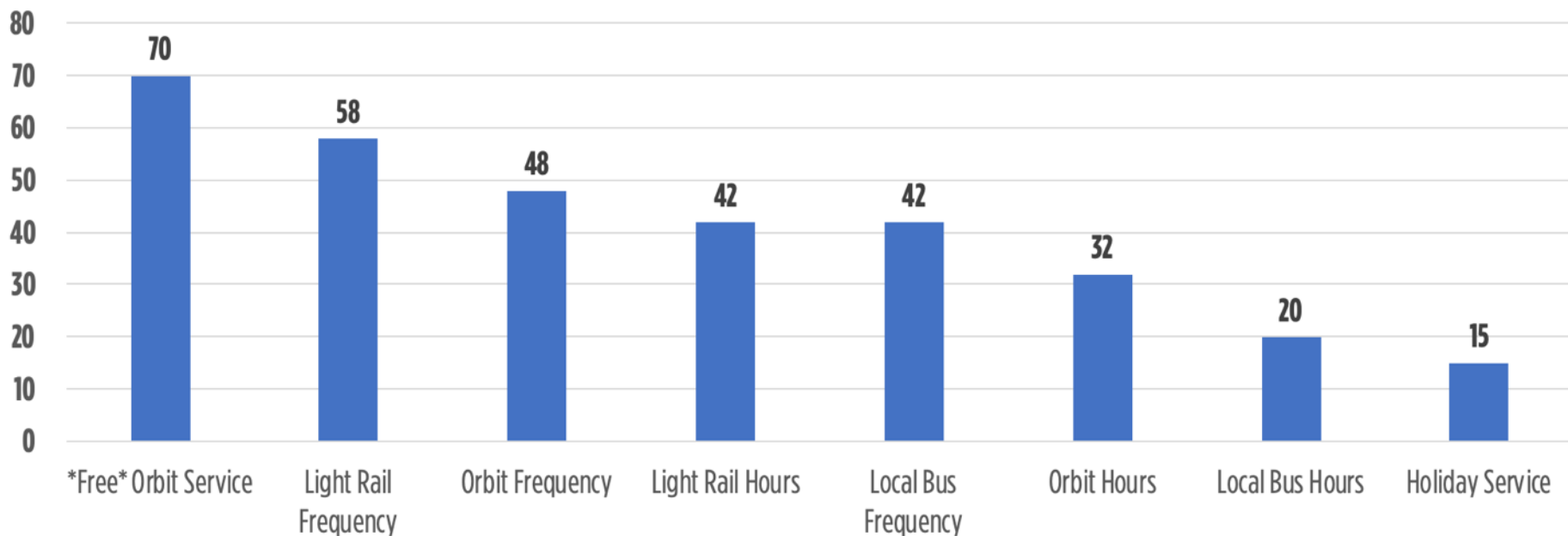
- Significant **local** investment in transit
- Successful – highest utilization per capita
- Current Trends
  - Reduction in farebox recovery: Enforcement of reduced fare, aging equipment, reduced ridership
  - Increasing transit service costs: Security, State of Good Repair, Contract and Overhead costs
  - 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.

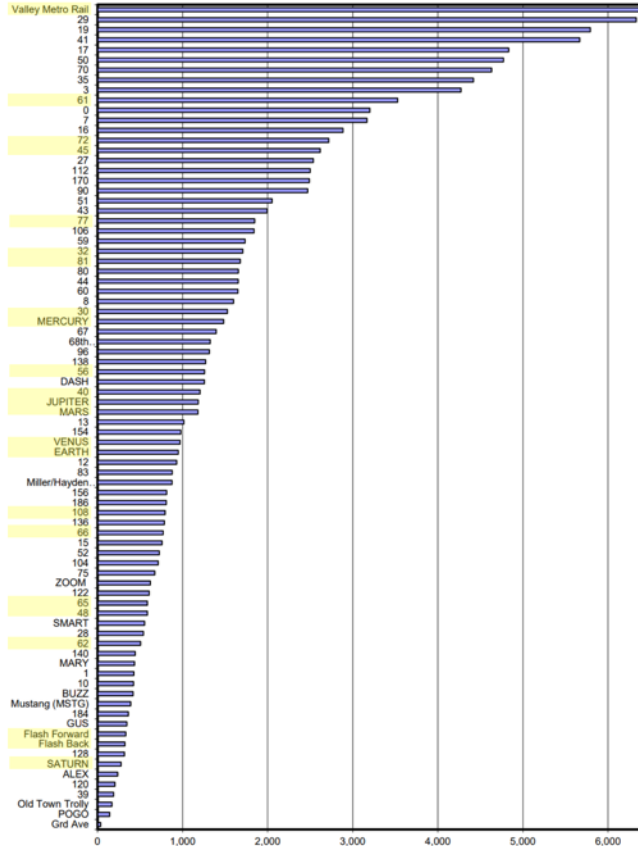


# Regional Ridership Data



- 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

Weekday Local/Circulator Average Boardings Per Day FY2020



	Performance Rank	Route	Cost per Boarding (FY20)
Lower Performing →	24	520 - Express	\$ 25.35
	23	521 - Express	\$ 21.62
	22	522 - Express	\$ 21.36
	21	Orbit Saturn	\$ 18.96
	20	62 - Hardy/Guadalupe	\$ 16.72
	19	40 - Apache	\$ 13.26
	18	48 - 48th/Rio Salado	\$ 10.85
	17	108 - Elliot	\$ 10.16
	16	32- 32nd St	\$ 9.29
	15	Orbit Earth	\$ 7.93
← Higher Performing	14	30 - University	\$ 7.89
	13	FLASH	\$ 7.34
	12	65 - Mill/Kyrene	\$ 7.18
	11	77 - Baseline	\$ 6.04
	10	72 - Scottsdale/Rural	\$ 5.82
	9	81 - McClintock	\$ 5.75
	8	66 - Mill/Kyrene	\$ 5.59
	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:

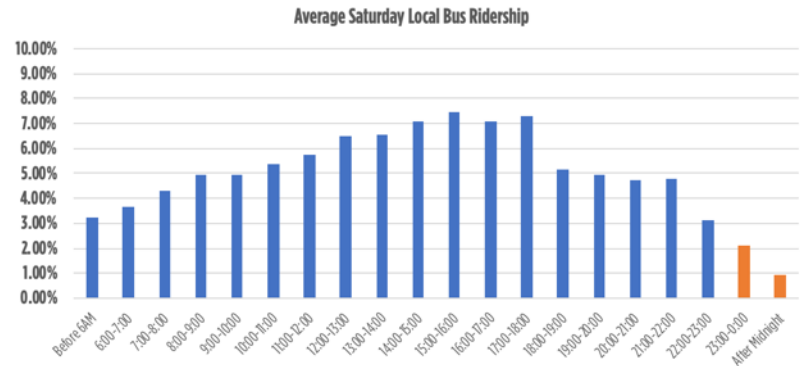
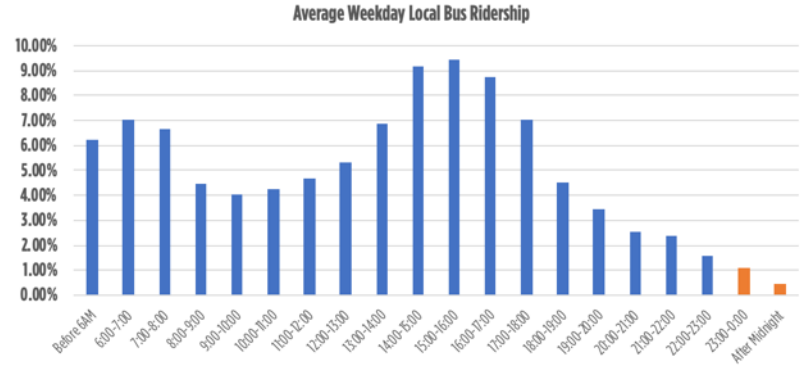
- 5am – 11pm (Monday – Saturday)
- 5am – 10:30pm (Sunday – no change)

## Proposed based on Community Values Survey

## Impacts to lowest-ridership hours

## Equitable, consistent, city-wide change

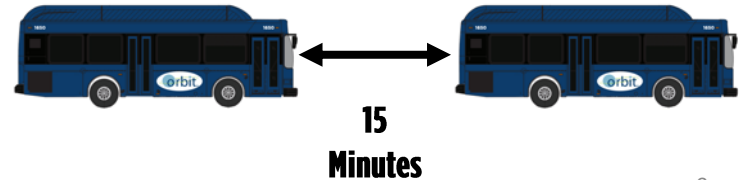
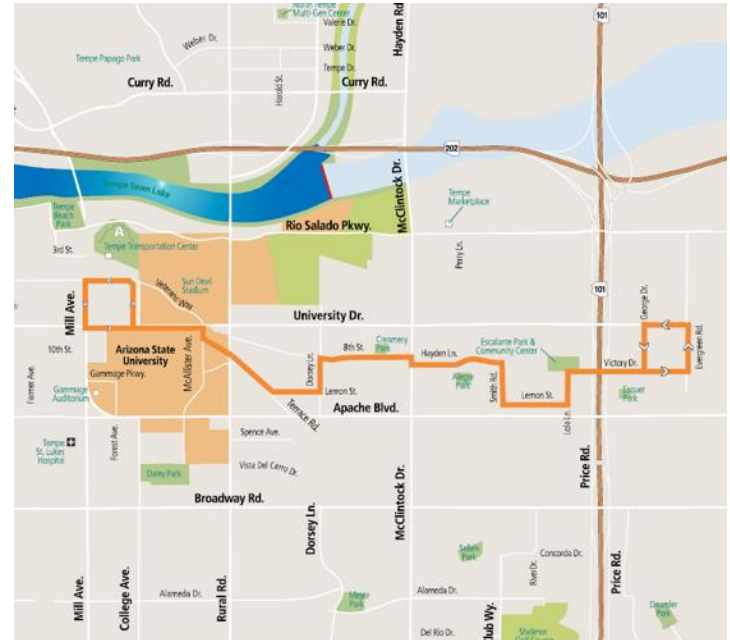
## Alignment with most East Valley cities



# 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





# Guadalupe Road (Route 62, Orbit Saturn) Optimization



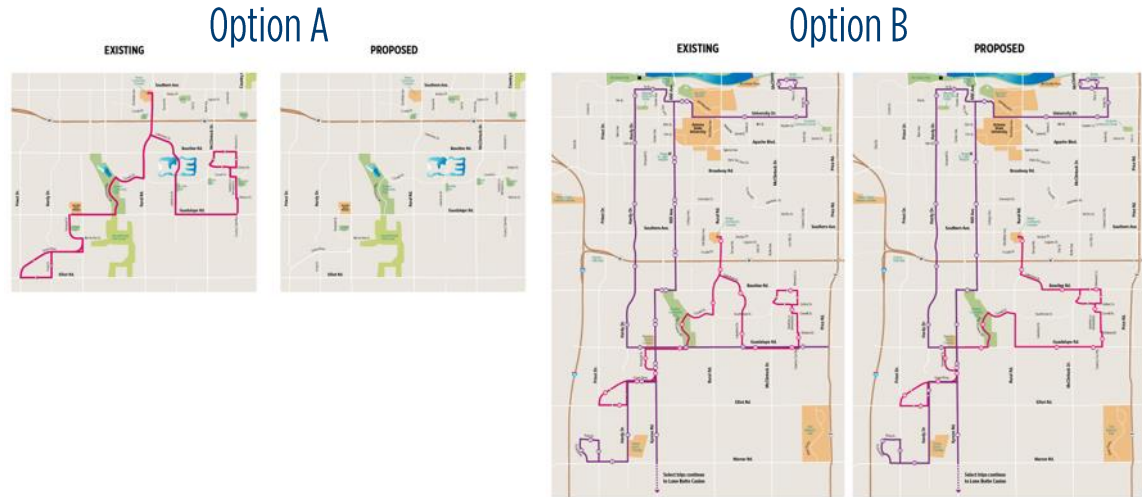
- Options to address low efficiency/high cost per boarding

- Option A:

  - Eliminate Orbit Saturn

- Option B:

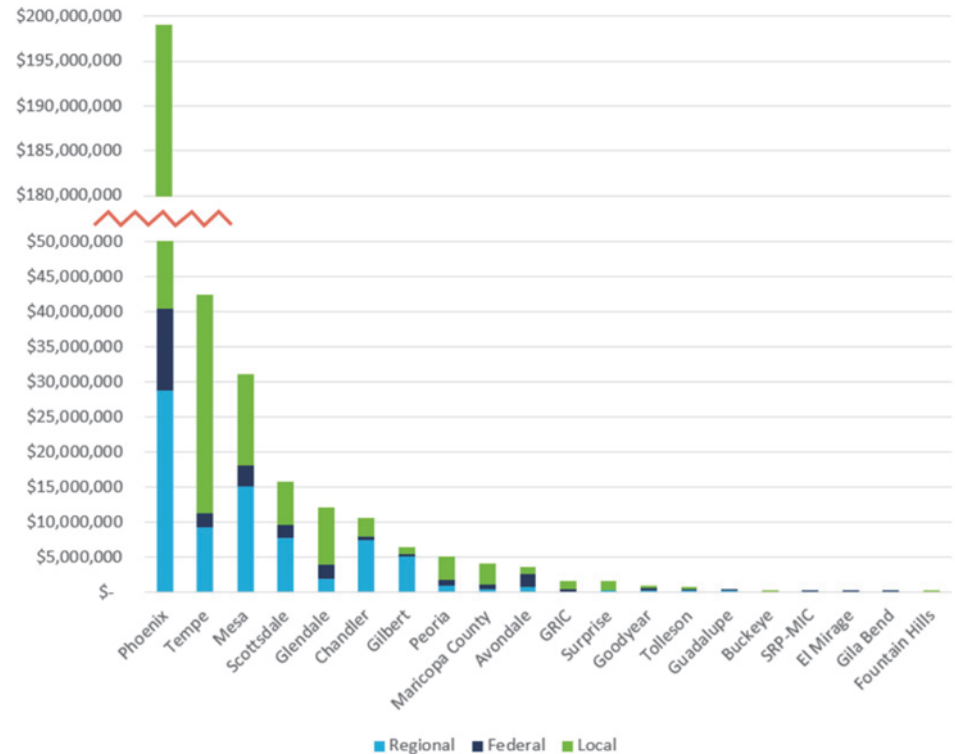
  - Eliminate Route 65
  - Enhance Route 66
  - Realign Route 62
  - Realign Orbit Saturn



# 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 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)



# Direction & Next Steps



## Direction

- Approve outreach process and service reduction approach for proposed October 2021 transit service changes

## Next Steps for 2021

- Feb: Commissions (Disability, NAC, MYAC)
- Feb. 20<sup>th</sup> and 23<sup>rd</sup>: Public Meetings
- Feb. 20<sup>th</sup> – Mar. 21<sup>st</sup>: Comment Period
- Valley Metro outreach (spring, summer)
- April 13<sup>th</sup> – Transportation Commission
- May 6<sup>th</sup>: Council Issue Review Session (for approval)
  - Advertising Direction
  - Regional context for bus service operations and funding

# MEMORANDUM

**TO:** Tempe Transportation Commission  
**FROM:** Shelly Seyler, Deputy Engineering & Transportation Director, 350-8854  
**DATE:** January 12, 2021  
**SUBJECT:** Future Agenda Items  
**ITEM #:** 8

---



## **PURPOSE:**

The Chair will request future agenda items from the Commission members.

## **RECOMMENDATION OR DIRECTION REQUESTED:**

This item is for information only.

- February 9
  1. Country Club Way Streetscape
  2. Transportation Demand Management Association
  3. Mobility Hubs
  4. Potential joint meetings with other boards and commissions
- March 9
  1. Outreach Plan for I-10 Corridor Construction
  2. Scottsdale Road Bike Lanes
  3. Draft Parks and Rec. Master Plan
  4. BRT Study
- April 13
  1. Transit Service Reduction Plan
  2. Transit Shelter Design
  3. North/South Rail Spur MUP
  4. ADA and sidewalk infrastructure
- May 11
  1. Commuter Rail Study/ MAG Commuter Rail Plan
  2. AZ State Rail Plan/AZDOT Phoenix-Tucson Corridor Plan
  3. Ash/University Intersection
  4. Crosswalk signal countdown
- June 8
  1. Bike Bait Program Update
  2. Speed Enforcement
  3. Budget update
  4. Streetcar construction update
- July 13
- August 10
  1. Personal delivery devices follow-up
- September 14
- October 12
  - Annual Report
- November 9
  - Annual Report
- December 14