PUBLIC MEETING AGENDA

Transportation Commission

MEETING DATE
Tuesday, May 12, 2020
7:30 a.m.

MEETING LOCATION
Join Via Cisco Webex Meeting – link below
https://tempe.webex.com/tempe/onstage/g.php?MTID=ea35b0e2de3819ddafe17039cf75d369e
Event password: tfJAaWtP559
Or call +1-408-418-9388 Tempe (toll)
Conference ID# 967 436 156

AGENDA ITEM	PRESENTER	ACTION or INFORMATION
1. Public Appearances The Transportation Commission welcomes public comment for items listed on this agenda. There is a three-minute time limit per citizen.	Brian Fellows, Commission Chair	Information
2. Approval of Meeting Minutes The Commission will be asked to review and approve meeting minutes from the March 10, 2020 meeting.	Brian Fellows, Commission Chair	Action
3. Bike Hero Staff will request the Commission select a recipient for the City's 2020 Bike Hero Award.	Sue Taaffe, Engineering & Transportation Department	Action
4. Traffic Management Strategic Performance Measure Staff will present the measures and strategies related to managing traffic in Tempe as part of a City strategic performance measure.	Shelly Seyler, Engineering & Transportation Department	Information and Possible Action
5. Tempe/Mesa Streetcar Extension Feasibility Staff will provide an update on the Tempe/Mesa Streetcar Feasibility Study Tier 2 Analysis.	Eric Iwersen, Engineering & Transportation Department	Information and Possible Action
6. Proposed Route Changes for FLASH Staff will present proposed route changes to the Flash route for August 2020.	Eric Iwersen, Engineering & Transportation Department	Information and Possible Action
7. Department & Regional Transportation Updates Staff will provide updates and current issues being discussed at regional transportation and transit agencies.	Engineering & Transportation Department Staff	Information

8. Future Agenda Items Commission may request future agenda items.	Brian Fellows, Commission Chair	Information and Possible Action

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
March 10, 2020

Minutes of the meeting of Tempe Transportation Commission held on Tuesday, March 10, 2020, 7:30 a.m. in the Tempe Transportation Center, Don Cassano Community Room located at 200 E. Fifth Street, Tempe, Arizona.

(MEMBERS) Present:

Susan Conklu (via phone)
JC Porter
Paul Hubbell
Ryan Guzy (via phone)
David A. King (via phone)
Christina Pucci
Pam Goronkin
Mary Harriman
John Federico
Peter Schelstraete
Brian Fellows
Lloyd Thomas (via phone)
John Christoph
Jeremy Browning

(MEMBERS) Absent: None

City Staff Present:

Shelly Seyler, Deputy Engineering & Transportation Director
Robert Yabes, Principal Planner
Chase Walman, Planner II
Joe Clements, Transportation Financial Analyst
Eric Iwersen, Transit Manager
Vanessa Spartan, Planner II
Sue Taaffe, Senior Management Assistant
TaiAnna Yee, Public Information Officer
Laura Kajfez, Neighborhood Services Specialist
Amanda Nelson, Public Information Officer
Sam Stevenson, Senior Planner
Bonnie Richardson, Principal Planner

Guests Present:

Ray Yparraguire
Jason Simmers
Mike James

Commission Chair Brian Fellows called the meeting to order at 7:31 a.m.

Agenda Item 1 – Public Appearances

None

Agenda Item 2 – Minutes

Brian Fellows introduced the minutes of February 11, 2020 meeting of the Transportation Commission and asked for a motion for approval.

Motion: Commissioner Pam Gornokin
Second: Commissioner Peter Schelstraete

Decision: Approved by Commissioners:

Susan Conklu (via phone)
JC Porter
Paul Hubbell
Ryan Guzy (via phone)
David A. King (via phone)
Christina Pucci
Pam Goronkin
Mary Harriman
John Federico
Peter Schelstraete
Brian Fellows
Lloyd Thomas (via phone)
John Christoph
Jeremy Browning

Agenda Item 3 – Commission Business
Brian Fellows introduced the newest Transportation Commissioner, Mary Harriman.

Agenda Item 4 – Proposed Projects for Prop 400
Shelly Seyler presented the proposed projects to be submitted to the Maricopa Association of Governments as part of the Regional transportation Plan. Topics included:

- Strategic priorities
- Background
- Prop 400 funded and unfunded projects in Tempe
- Prop 400 extension value mapping
- Regional Transportation Plan call for projects
- Studies and plans
- Congestion reduction strategies
- Active transportation project examples
- Roadway and intersection project examples
- Transit project examples
- Set aside project examples
- Timeline
- Next steps

Discussion included project prioritization and bus frequencies.

Agenda Item 5 – Country Club Way Bike/Ped project
Chase Walman and Ray Yparraguire provided an update on the project. Topics included:

- Overview
- 15% design
- Segment along the corridor
    - Watson Dr. to US-60
    - Guadalupe Rd. to Watson Dr.
    - Western Canal to Guadalupe Rd.
    - Elliot Rd. to Western Canal
    - Elliot Rd. to Warner Rd.
- Next steps

Discussion included equestrian usage and adding physical barriers in the roadway for bicyclists.

Agenda Item 6 – Orbit Earth Proposed Changes
Sam Stevenson provided information about proposed changes to the Orbit Earth route. Topics included:

- Overview

- Ridership trends
- Comparison of existing route
- Proposed changes
- Public outreach

Discussion included travel times and real-time information apps.

Agenda Item 7 – Department & Regional Transportation Updates

Shelly Seyer informed the Commission that Cathy Hollow, the new City new Traffic Engineer, started her new position on March 2.

Brian Fellows informed the Commission that Phoenix recently built three miles of the Grand Canal MUP.

Agenda Item 8 - Future Agenda Items

The following future agenda items have been previously identified by the Commission or staff:

- April 14
  - Tempe/Mesa Streetcar Extension Feasibility Study
  - Paid Media Plan
  - Priest Drive Bike Lanes
  - Speed Limits
  - Traffic Management
- May 12
  - Bike Hero
  - MAG Design Assistance Grants
  - Capital Improvements Project Update
  - Transit System and Security Update
  - Transit Shelter Designs
- June 9
  - Orbit Paint Scheme
- July 14
- August 11
  - Priest Drive Bike Lanes
  - Country Club Way Streetscape
  - Ash and University Intersection
  - Entitled Development Projects
  - Transportation Demand Management
- September 8
  - Scottsdale Road Bike Lanes
  - Valley Metro Outreach Plan for I-10 Corridor Construction
  - Vision Zero Update
  - BRT Study
- October 13
- November 10
- December 8
- TBD: Starship
- TBD: North/South Rail Spur MUP
- TBD: Commuter Rail Study

The next meeting is scheduled for April 14, 2020.

The meeting was adjourned at 8:27 a.m.

Prepared by: Sue Taaffe
Reviewed by: Shelly Seyler

MEMORANDUM

TO: Transportation Commission

FROM: Sue Taaffe, Senior Management Assistant (480-350-8663)

DATE: May 12, 2020

SUBJECT: 2020 Bike Hero Award

AGENDA ITEM #: 3

PURPOSE:
The purpose of this memo is to request that the Commission select a recipient for the city's annual Bike Hero Award.

RECOMMENDATION OR DIRECTION REQUESTED:
Select a 2020 Bike Hero recipient.

BACKGROUND
The purpose of the Tempe Bike Hero Award is to celebrate bicycling in Tempe, increase awareness of bicycling as an alternative mode of transportation, promote bicycling as an environmentally-friendly recreational activity and illustrate the dedication of Tempe residents and organizations to bicycling. Unfortunately, staff did not receive many nominations this year. As a result, the applications from 2019 are also attached for your consideration should the Commission choose to select a recipient from last year's submittals.

Award criteria include:

- Individuals who live or work in Tempe.
- Tempe-based organizations.
- Demonstration of how the nominee promotes bicycling in Tempe including listing his/her or the organization's achievements and contributions to bicycling along with specific instances of bicycle advocacy. Contributions that could qualify for the award include, but aren't limited to, the following:
    - demonstration of using a bicycle as a significant mode of transportation
    - consistent implementation of bike-friendly facilities at a business site
    - organization of bike events
    - bike-friendly elements in facility design
    - bike safety advocacy
    - youth involvement in bicycling
    - advocacy for bicycle-friendly roads

The recipient will be presented with the award at a future Tempe City Council meeting. Nominees include:

1. Jenny Lucier & Dan O'Neill (2020)
2. Julian Dresang (2020)
3. John Jacobsen (submitted in 2020)
4. Victoria Ehmann (submitted in 2020)
5. Tim McKinstry
6. Joel Terry
7. Jared Eisenhower
8. Gillian Gile
9. Dr. Carmen Bastek
10. Kelly Nelson
11. Steve Bass

FISCAL IMPACT
$125 for the award, which is budgeted in cost center 3916-6629.

ATTACHMENTS
Nominations

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2020 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Jenny Lucier & Dan O'Neill

Street Address: 1104 S. Ash

City: Tempe State: AZ Zip Code: 85281

Phone: 602-579-9310 E-mail: jll@djt-enterprises.com

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [ ] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: Shirley McKean

Street Address: 569 S. Roosevelt St

City: Tempe State: AZ Zip Code: 85281

Phone: 602-697-2246 E-mail: shirleyannmckean@gm

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

I would like to nominate Tempe residents, Jenny Lucier and Dan O'Neill as 2020 Bicycle Heroes. I'm nominating both because most of their bicycle adventures have been as a couple. Jenny and Dan not only use their bikes as a means of local transportation, they have traveled across the United States, Vietnam, Europe, Chile and Argentina. They have also catered meals for the bicycle touring organization, Adventure Cycling. Dan recently led an Adventure Cycling tour from Virginia to Oregon. Jenny and Dan are part of the "Warm Showers" Community, a free hospitality exchange for touring cyclists. They've opened their home to traveling cyclists and stayed with others when they traveled cross-country.

The following is a partial list of Jenny's and Dan's cycling adventures, starting with the most recent:

Patagonia Plus, January - March 2020
Started in Santiago, Chile, visited small towns, enjoyed dramatic scenery, staying in hostels, motels and campgrounds. Jenny had 2 non-bike related falls during this trip, requiring 12 rehab sessions and rental car travel for several days. They were able to visit Argentina but had to cut their trip short, heading home in March instead of May due to COVID-19.

New Orleans, Louisiana to Charleston, South Carolina, September - October 2019
Natchez Trace Plus. Jenny and Dan started the 36-day ride from New Orleans, then cycled through Mississippi, sometimes in 95-degree heat. On to Nashville and the Music City Trail to the Smokey Mountains. Next to the South Carolina Lowlands to Aiken, SC, and Charleston.

ACA TransAm Express, Coast to Coast from Virginia to Oregon, May to July 2019
Dan was solo on this trip, co-leading the tour for Adventure Cycling. Starting the ride with rear bike tire dipped in the Atlantic Ocean, ending it with front tire in the Pacific. In between, 14 states and Washington, D.C., a Tornado Warning near Dayton, Ohio that caused the group to make a speedy evacuation of their campground to shelter in a hallway of a nearby motel, leaving all belongings and bikes. There were over 50 tornado touchdowns within a 100 radius, one death and serious damage in Dayton and some surrounding communities. Fortunately, all their bikes and gear were still intact at the campsite.

DJT Enterprises Catering for Adventure Cycling Tours in Lake Tahoe, Nevada area, September 2018 and September 2017
Jenny is a chef and caterer. She and Dan did not participate in this bike tour but provided delicious, nutritious meals for the participants.

DJT Enterprises Catering for Adventure Cycling, Southern Arizona, March 2018 and October 2017
Jenny and Dan also catered two Adventure Cycling Tours in Tucson, Patagonia Lake State Park, Bisbee and Sierra Vista.

Pacific Coast to Atlantic Coast on a tandem bicycle, named "Molly", May – July 2017
On this adventure, Jenny and Dan dipped the rear tire of their tandem bike in the Pacific Ocean at Santa Monica and the front tire in Atlantic Ocean at Bar Harbor, Maine. They rode historic Route 66 from Santa Monica through the heat of Mohave Desert and cold, wet Flagstaff to Chicago. Eastward for a total of 4,443 miles, through 15 states and one Canadian Province. Their nights spent in tents, airbnbs, with warm shower hosts, friends and family.

This is a story about their cross-country tandem trip:

http://www.rightthisminute.com/video/rtmtv-epic-bike-adventure-takes-couple-cross-country?=rtmsoc&fbclid=IwAR1paVbeS4mCk-1QZg9uuQmuZyUc9aWV3E-D606Oco-SEOxoYCVMRxdLcZQ

Coast News article about Jenny and Dan's trip:
https://www.thecoastnews.com/twosome-takes-tandem-cross-country-bikeride/

Dan and Jenny toured Vietnam with a group in 2000, traveling from Hanoi to Ho Chi Minh City. Joining them was their then 8-year old son, Tre.

In the early 1980's, Jenny and Dan biked through Ireland, England, France, Italy and Yugoslavia.

As I said earlier, this is not a complete list of Jenny's and Dan's bike adventures. They love the journey; they love getting to know people and places along the way; they travel and live sustainably.


Carretera
Austral
Coyhaique 577
itén 155
iornopirén 55

Nachaez Trail

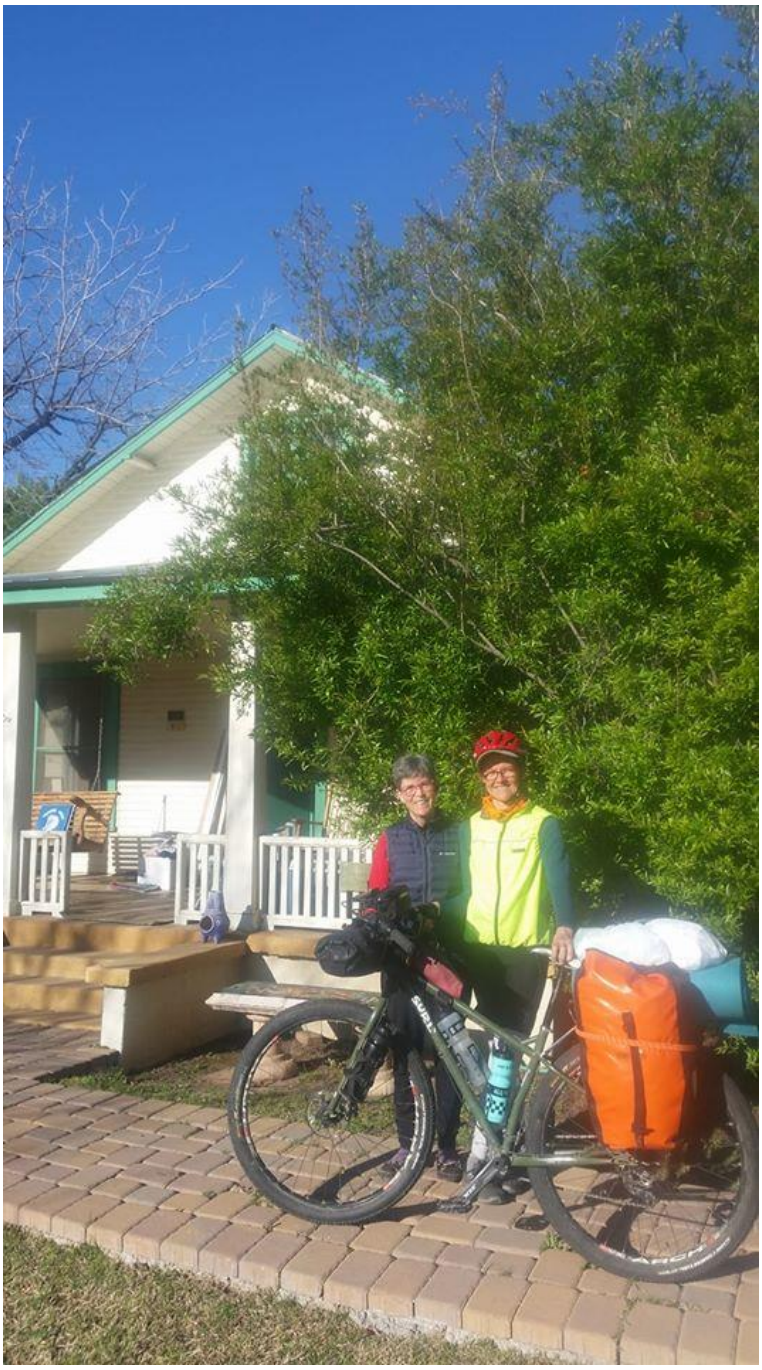
Charleston, S. Carolina 10/19

New Orleans to S. Carolina 10/19

Tennessee

Dan and Jenny making friends in Argentina

On the road in Chile



Jenny with Warm Showers guest in front of Jenny's and Dan's Tempe home.

Dipping rear tire in Pacific Ocean, heading to Maine

its misery.
I'm a little more
respectful of
ants.

Douglas Hofstadter

Online
www.bristownews.com
bristownews@sbcglobal.net

Like us on
Facebook:
Bristow News

Follow us on
Twitter:
@bristow_news

Vol. MMXV No. 232

J. D. Meisner photo

Members of Boy Scout Troop 157 presented the colors to begin the ceremony. Pictured from left are Markcus Hawkins and Jett Ables.

Samantha Smart photo

Pedal power X2

Jenny Lucier and Dan O'Neiil, of Tempe, Arizona spent the night in Bristow Sunday after pedaling for 10 hours and 39 minutes and traveling 64 miles from Edmond along Route 66. The couple began their journey May 1, in Santa Monica, California. They plan to end it in Bar Harbor, Maine. The couple said their bucket list item is to meet new people along the route and discover why people think the way they do. Lucier said, "The country is so divided right now. We like getting to know others and learning why they think the way they do."

"All of the cemeteries and flags along the way made for a moving... and moving Memorial Day," said O'Neill.

County eas
mobile hom
restrictions

by Shirley Todd
news@bristownews.com

On Tuesday, May 30, the
County Commission hel
weekly meeting in Sapulpa.

The commission approv
amending of the text for A-
ing on manufactured homes

Nikki White with the pl
office said this will change t
rent acreage requirements fo
ing a home from eight acres
and half. She said as long
two and half acres are agricu
zoned, a manufactured ho
be moved on the property.

The commission accept
bids for janitorial services f
the Bristow and Sapulpa
Department offices for the
cal year. Bids were submi

See County, Pag

Newspaper Article in Bristow News, Bristow, OK

Front tire dipped in Atlantic Ocean, Bar Harbor, Maine.

Jenny and assistant preparing Moroccan Dinner in Zephyr Cove, Nevada

Adventure Cycling Tour leaving Virginia after dipping rear tire in Atlantic Ocean.

Dan at Oregon Coast

Natchez Trace Parkway, Kosciosko, Mississippi, 9/19

When not riding themselves, they've catered bike tours. This one is near Lake Tahoe, Nevado, 9/20

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2020 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Julian Dresang

Street Address: 1746 E. La Vieve Ln

City: Tempe State: AZ Zip Code: 85284

Phone: 480-243-5904 E-mail: Jessica.dresang@gmail

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [ ] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: Jessica Dresang

Street Address: (same as above)

City: _____ State: _____ Zip Code: _____

Phone: _____ E-mail: _____

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

City of Tempe
Tempe Bike Hero Award Application

Thank you for the opportunity to nominate my husband, Julian Dresang, as the 2020 City of Tempe Bike Hero. Prior to his current position as the City Engineer, Julian served the City of Tempe's Transportation Division for over 13 years as a Traffic Engineering Analyst, Civil Engineer, Senior Civil Engineer and City Traffic Engineer. During that time, I watched him serve the Tempe community through his dedication to providing safe streets for everyone, including bicyclists. I can't tell you how many times we've driven down streets and he has proudly pointed out to me and the kids the projects that he was a part of. These have included large projects like the Western Canal path, the Highline Canal Path, and the College Avenue, University Drive, and Broadway Road streetscape projects. These have also included smaller projects like a bike box on 10th Street, green bike lanes on Warner Road, and sharrows in the downtown and on Knox Road. His most recent source of pride are the new bike lanes on Rural Road which he says were added by just narrowing the car lanes. Some of the projects haven't been that easy and have caused him stress, like the Bike Boulevard "Seat Route" and the McClintock Road bike lanes. He always persevered though. Julian spent a considerable amount of time leading the City's Vision Zero program, which is the first in the State of Arizona. He says that the safety of road users, especially bicyclists and pedestrians, must always be the priority. It's been fun to see him interviewed on some of the local news stations. The kids say he's famous. While he's not an avid bicyclist, he does have a "beach cruiser" that he rides with the family in the evenings after work. Both of our daughters now ride without training wheels and we are teaching them to make safe decisions like always wearing a helmet, using lights at dusk, and riding on the right side of the street. For his dedication over the years to the City and its residents, I ask that you please consider him as the City of Tempe's 2020 Bike Hero.

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2020 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: John Jacobsen / Honeywell

Street Address: 1324 E Divot Dr.

City: Tempe State: AZ Zip Code: 85283

Phone: 602-284-1458 E-mail: _____

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [ ] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: Traci Jacobsen

Street Address: 1324 E Divot Dr

City: Tempe State: AZ Zip Code: 85283

Phone: 480-200-4282 E-mail: tracilynjacobsen@gmail.com

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

City of Tempe
Tempe Bike Hero Award Application

My husband, John is not one who enjoys exercise. Last year when he was transferred to a different Honeywell work location in Tempe his life changed. We now lived just over 3 miles from his work, which I found it quite exciting. Him not so much as he loved riding his 11 mile commute on his motorcycle to Phoenix on 60 & I-10 which for years has made me very nervous. I would comment that his commute would be a perfect bike ride; he simply rolled his eyes. He finally took me up and we found an amazing path that limited street access and ran along City of Tempe's awesome bike paths. On his way to work he passes parks, golf course, canal and dog park. He has been getting faster and faster in his time and has felt much better about his fitness and helath. We take bike rides 2-3 times a week and love riding to Kiwanis park and out to breakfast. The bike paths and canal paths are a great asset for the City of Tempe and we are thankful we live in such a great city!

I now call him Lance and am so very proud.

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2012 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Victoria ~~Kim~~ Ehmann

Street Address: 310 E. Dunbar Dr.

City: Tempe State: AZ Zip Code: 85281

Phone: 480/309.5332 E-mail: (if available) victoria.ehmann@yahoo.com

The nominee (check all that apply):

- ☐ Lives and/or works in Tempe
- ☑ Lived and/or worked in Tempe at time of contribution
- ☐ Is a Tempe based organization

Describe in no more than two pages why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

Nominated by: Kim Ehmann

Street Address: 6515 S Bonarden Ln

City: Tempe State: AZ Zip Code: 85283

Phone: 602/499.4469 E-mail: (if available) _____

March 24, 2020

6515 S. Bonarden Lane
Tempe, AZ 85283

City of Tempe
2020 Tempe Bike Hero Award Application

Dear Nomination Committee:

It is a wonderful opportunity to nominate my daughter Victoria Ehmann for the Tempe Bike Hero Award. It's not just because she's my daughter it's because I think she fits the criteria.

Victoria Ehmann is a native of Tempe and last year purchased a house in Tempe. While in college at ASU we went through some difficult times and the only transportation was the bus, walking and the option to bike. Having a mild physical disability I talked her into riding her bike that it would be easier on her bones. She spent most of her four years riding her bike all over campus and sometimes home. One summer she got a job at Lifetime Fitness in Tempe and she even rode her bike to work in the double digit heat. Very concerning to a Mom of a child with a congenital heart disease.

She really began to love biking. She even took a bike class elective at ASU so she could learn bike laws, repairs and a co-op. She has partaken in Tempe bike ride events. After graduating from ASU in 2018 she started working at Honeywell on Washington. Until the most recent country crisis she rode her bike on a daily basis to work. At work she was on a bike to work team and they were awarded for winning.

Recently she was hit by a driver on Mill in Tempe. She was knocked off her bike and blacked out. We took her to the hospital to have her head checked. She had a concussion. Though, on the way driving home she

said to me, Mom please don't get mad at me but I am going to keep riding my bike to work. My reply was I already knew that. She loves biking and her bike is very special to her. I have learned don't touch her bike.

In closing, I ask for you to consider Victoria for Tempe's Bike Hero Award! She has know idea that I have written this letter. Thank you for your most valued time.

Very Sincerely,

Kim Ehmann

Kim Ehmann

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2019 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Timothy A McKinstry

Street Address: 4512 S. Kachina Dr.

City: Tempe State: AZ Zip Code: 85282

Phone: 480-209-9269 E-mail: timmckinstry@hotmail.c

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [x] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: (Self) Timothy A McKinstry

Street Address: 4512 S. Kachina Dr.

City: Tempe State: AZ Zip Code: 85282

Phone: 480-209-9269 E-mail: timmckinstry@hotmail.

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

City of Tempe
Tempe Bike Hero Award Application

I am nominating myself for Bike Hero because I participate in several group rides in the city throughout the week. I attend cycling events in support of the participants. Papago Mtn bike race, IRON Man, Tour De Fat. I have served as ride leader for several "Loops" bike rides from the State Bicycle Rideshop in Tempe. I participate in TFR a weekly road bike ride starting in Tempe and riding to Camelback mountain on Friday mornings. I also attend TBL (The beginners Lane) a group ride leaving from Landis Cyclery in South Tempe. I join other riders from Tempe to ride in to Phoenix Thursdays to attend a weekly ride in Downtown Phoenix from Crescent Ballroom led by Heavy Pedal. I often hear people say "WOW you rode here from Tempe" I work Tuesday nights, but every time I have a Tuesday off I join the TIP ride (Tempe Inclusive Pedaling) I ride Tour De Tempe every year. I can only think of two years when I did NOT ride in Tour De Tempe; last year when I flew back East for my Fathers funeral and the year it was canceled 2012. I attend Tour De Fat every year and volunteer by serving beer or doing bike valet. I bike valet for various events during the year. I also shop local helping Tempe and local businesses (Landis on Southern, State Ride Shop on Apache an Bicycle Cellar at the Tempe Transit building). Please whoever is selected do NOT give it to a person who works for the city. Thanks, Tim

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2019 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Timothy A McKinstry

Street Address: 4512 S. Kachina Dr.

City: Tempe State: AZ Zip Code: 85282

Phone: 480-209-9269 E-mail: timmckinstry@hotmail.c

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [x] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: Dennis J Becker

Street Address: _____

City: _____ State: AZ Zip Code: _____

Phone: _____ E-mail: _____

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

City of Tempe
Tempe Bike Hero Award Application

Tim is my Bike Hero because he participates in several group rides in the city throughout the week. He attends cycling events in support of the participants like Papago Mtn bike race, IRON Man, Tour De Fat. He has served as ride leader for several "Loops" bike rides from the State Bicycle Rideshop in Tempe. He participates in TFR a weekly road bike ride starting in Tempe and riding to Camelback mountain on Friday mornings. He is also a TBL (The beginners Lane) a group ride participant leaving from Landis Cyclery in South Tempe. HE joins other riders from Tempe to ride in to Phoenix Thursdays to attend a weekly ride in Downtown Phoenix from Crescent Ballroom led by Heavy Pedal. He normally works Tuesday nights, but every chance he gets he joins the TIP ride (Tempe Inclusive Pedaling) He rides Tour De Tempe every year. He only missed two of the last 20 years. ; last year when he flew back East for his Fathers funeral and the year it was canceled 2012. He attends Tour De Fat every year and volunteers by serving beer or bike valet. He bike valet for various events during the year. He also shops local helping Tempe and local businesses (Landis on Southern, State Ride Shop on Apache an Bicycle Cellar at the Tempe Transit building).

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2019 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Joel Terry

Street Address: 1903 E. Velvet Dr.

City: Tempe State: AZ Zip Code: 85284

Phone: 480-329-0881 E-mail: mandenbar@gmail.com; joel.terry@asu

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [ ] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: Tehrina Terry

Street Address: 1903 E. Velvet Dr.

City: Tempe State: AZ Zip Code: 85284

Phone: 928-308-1171 E-mail: tehrina@me.com

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

City of Tempe
Tempe Bike Hero Award Application

I'm nominating my husband, Joel Terry, for the Tempe Bike Hero Award. He is a total Bike Hero and very dedicated to bike commuting. We began bike commuting in April 2017 from our home in South Tempe 7.5 miles to work at ASU, and Joel has commuted to work every day since then whether it's triple digit heat or below freezing. When he occasionally has to go to the ASU Downtown campus for training, he finds a bike friendly route and continues to bike. Since beginning bike commuting for work, he has also incorporated it into his errands. He bikes to the library regularly, as well as quick trips to the grocery store. If he can find a bike trailer big enough, his next biking goal is his Costco trips!

When Joel first mentioned biking to work I was hesitant due to safety concerns. One Saturday evening I stayed up late reading about bike safety and the next morning I told Joel I would be open to bike commuting if we could find a safe route. Joel mapped a route out that day and we took a test ride to work. It was great, thanks to living in such a bike friendly community as Tempe. The next day was Monday and we drove to work for the last time. That evening after work we went to Landis Cyclery in Tempe and got bike lights for the front and back of our bikes, and we've bike commuted ever since. When I left ASU and we were looking for office space for me, being able to continue to bike commute was a priority, so when we first came to look at my space, Joel again mapped out a route along Tempe's many bike paths and found a safe route for me.

Joel also promotes bike safety by always wearing a helmet, a florescent reflective vest, daytime and nighttime bike lights, and following bike safety laws.

As a mental health counselor for the students at ASU, through his committment to bike commuting, he is able to model a healthy lifestyle and promote the mind/body connection to overall health. Joel is also highly respected among his colleagues and so his biking to work has led to other colleagues biking occassionally as well.

Joel enjoys watching the odometer on our car very slowly creep up and always gives me updates. Just today he told me we've averaged 330 miles a month on our car over the past 12 months, and that is averaging in a road trip to Lake Arrowhead in August and getting married last April when we had to drive more due to having family in town. A typical month for us is about 150 miles. In this way, Joel is also reducing our carbon footprint and doing his part to reduce air pollutants in Tempe.

For all these reasons, and I'm sure many more I'm not even thinking of at this moment, Joel Terry is a Bike Hero.

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2019 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Joel Terry

Street Address: 1903 E Velvet Drive

City: Tempe State: AZ Zip Code: 85284

Phone: 480-329-0881 E-mail: Mandenbar@gmail.com

The nominee (check all that apply):

- ☐ Lives and/or works in Tempe
- ☐ Lived and/or worked in Tempe at time of contribution
- ☐ Is a Tempe based organization

Nominated by: Lynda Weddle

Street Address: 2400 Renwick Avenue

City: Oklahoma City State: Ok Zip Code: 73128

Phone: 405-639-8849 E-mail: Dixiechicklv@sbcgloba

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2019 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Joel Terry

Street Address: 1903 E Velvet Dr

City: Tempe State: Az Zip Code: 85284

Phone: (480) 329-0881 E-mail: mandenbar@gmail.com

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [ ] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: Kit Halloff

Street Address: 1760 E Tyson St

City: Gilbert State: Az Zip Code: 85295

Phone: 480-559-9662 E-mail: kithalloff@gmail.com

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

City of Tempe
Tempe Bike Hero Award Application

I'm nominating my friend, Joel Terry, for the Tempe Bike Hero Award. He is a total Bike Hero and very dedicated to bike commuting. He began bike commuting in April 2017 from his home in South Tempe 7.5 miles to work at ASU, and Joel has commuted to work every day since then whether it's triple digit heat or below freezing. When he occasionally has to go to the ASU Downtown campus for training, he finds a bike friendly route and continues to bike. Since beginning bike commuting for work, he has also incorporated it into his errands. He bikes to the library regularly, as well as quick trips to the grocery store. If he can find a bike trailer big enough, his next biking goal is his Costco trips! In the past, Joel has biked from his house in Tempe to my house in Gilbert.

Joel promotes bike safety by always wearing a helmet, a florescent reflective vest, daytime and nighttime bike lights, as well as following bike safety laws.

As a mental health counselor for the students at ASU, through his commitment to bike commuting, he is able to model a healthy lifestyle and promote the mind/body connection to overall health. Joel is also highly respected among his colleagues and so his biking to work has led to other colleagues biking occasionally as well.

For all these reasons, and I'm sure many more I'm not even thinking of at this moment, Joel Terry is a true Bike Hero.

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2019 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Joel Terry

Street Address: 1903 E. Velvet

City: Tempe State: AZ Zip Code: 85284

Phone: 480-329-0881 E-mail: mandenbar@gmail.com

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [ ] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: Art Blinick

Street Address: 3716 S. Grandview Ave.

City: Tempe State: AZ Zip Code: 85282

Phone: 480-244-9640 E-mail: alblinick@gmail.com

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

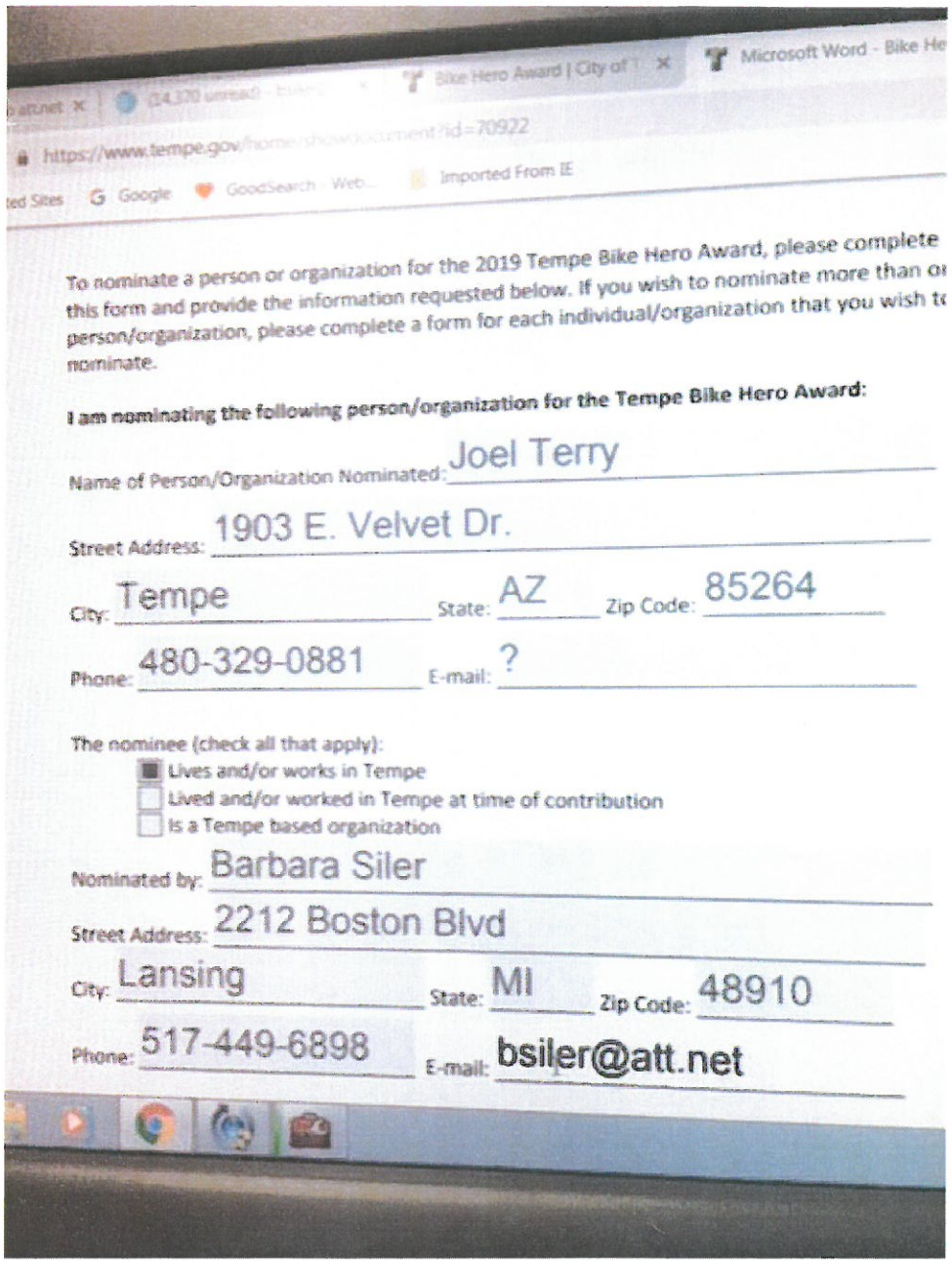
City of Tempe
Tempe Bike Hero Award Application

I nominate Joel Terry for Tempe's Bike Hero Award. Joel personifies someone who demonstrates devotion to cycling and models cycling as a primary mode of transportation. Joel is a manager at the ASU Student Counseling Services and has ridden his bike to work both at ASU Tempe and ASU Downtown, for two years, through cold rain, sweltering heat, and vicious monsoons, without driving his car once to work. He demonstrates to others, how to make use of bike-friendly facilities at work, and models how to make cycling to work doable. He also models for other counselors, how to integrate the meditative, mindfulness aspects of cycling into clinical practice and how counselors can use it as part of self-care, which is so important in that profession. Joel's quiet leadership serves as a role model for others to take up cycling for its many benefits.

Delete Junk Block ···

First page

B bsiler@att.net
Tue 4/30/2019 8:56 PM
You



To nominate a person or organization for the 2019 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than o person/organization, please complete a form for each individual/organization that you wish t nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Joel Terry

Street Address: 1903 E. Velvet Dr.

City: Tempe State: AZ Zip Code: 85264

Phone: 480-329-0881 E-mail: ?

The nominee (check all that apply):

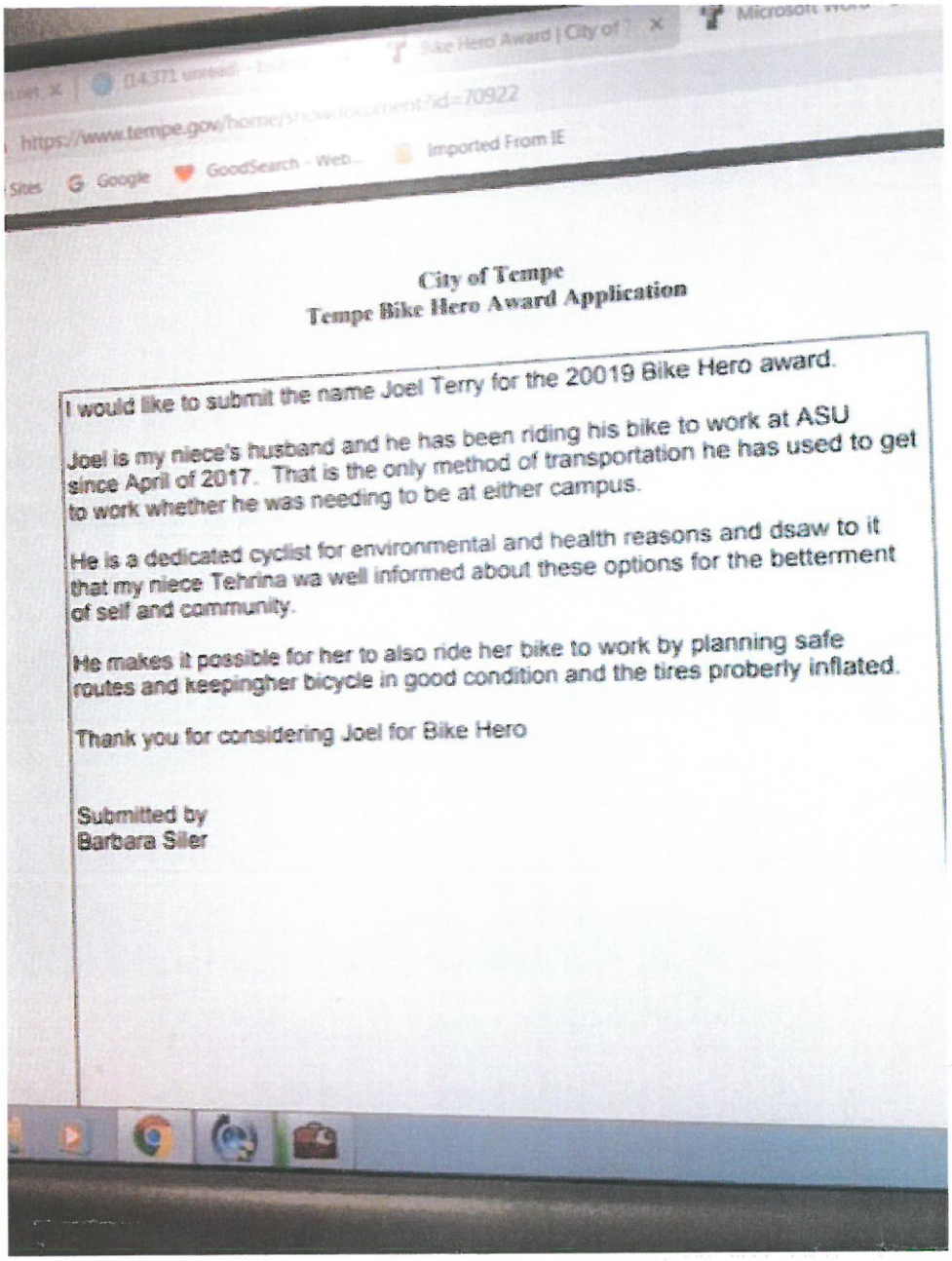
- [x] Lives and/or works in Tempe
- [ ] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: Barbara Siler

Street Address: 2212 Boston Blvd

City: Lansing State: MI Zip Code: 48910

Phone: 517-449-6898 E-mail: bsiler@att.net



City of Tempe
Tempe Bike Hero Award Application

I would like to submit the name Joel Terry for the 20019 Bike Hero award.

Joel is my niece's husband and he has been riding his bike to work at ASU since April of 2017. That is the only method of transportation he has used to get to work whether he was needing to be at either campus.

He is a dedicated cyclist for environmental and health reasons and dsaw to it that my niece Tehrina wa well informed about these options for the betterment of self and community.

He makes it possible for her to also ride her bike to work by planning safe routes and keepingher bicycle in good condition and the tires proberly inflated.

Thank you for considering Joel for Bike Hero

Submitted by
Barbara Siler

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2019 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Jared Eisenhower

Street Address: 3700 S. Cottonwood Dr.

City: Tempe State: AZ Zip Code: 85282

Phone: 602-803-0490 E-mail: jared.m.eisenhower@gmail.com

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [ ] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: Simon Holzapfel

Street Address: 2346 E. Pecan Rd.

City: Phoenix State: AZ Zip Code: 85040

Phone: 423-329-3038 E-mail: simon.holzapfel@gmail.com

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

City of Tempe
Tempe Bike Hero Award Application

Dear Award Selection Committee,

Jared Eisenhower does at least 85% of his trips by bike. He lives near Southern Ave. and the 101 and he works at 2343 W Medtronic Way, Tempe, AZ 85281. This means his commute cuts all the way across Tempe from East to West. He does his 7.5 mi (one way) commute by bike every day which means that he commutes 75 mi each week by bike. In addition to that, he likes to make detours across Southmountain where he likes to ride his bike on the trails and he will ride on the Western Canal on his way home from Southmountain. He also rides every weekend by joining group road rides or by riding his mountain bike with buddies. I also ride with him on weekends and we discovered that the Rio Salado riverbed path now goes all the way from Alma School Rd. in Mesa to at least Central Ave. in Phoenix. This path serves as scenic and safe connection between us that is also good for some tempo work (i.e., intervals). Jared also completes his trips to the grocery store at Southern Ave. and McClintock Dr. by bicycle with a big backpack strapped to his back. All together, Jared rides between 150 and 200 mi every week.

In 2010, Jared was hit by a car while riding his bike near Tempe Market Place. He sustained a traumatic brain injury and was in the hospital for several weeks, followed by several months of outpatient therapy. He says it has permanently changed him and he has never quite been the same. It took him almost one year to start riding his bicycle again and needless to say he was very anxious in the beginning. However, his biking prowess returned and I first met him in October of 2013 at one of the hardest and fastest group rides in Scottsdale. His resilience and love for biking certainly make him my bike hero. In 2015, Jared and I completed our first Ironman together at Ironman Arizona in Tempe.

Jared has also participated in volunteer work to promote biking. The Chances for Children Triathlon was an afterschool program designed to teach kids that fitness is fun and to help them learn healthy habits. Jared volunteered for the triathlon and also helped build a custom storage area for the bikes used in the program. In 2017, Jared, myself, and another friend also participated in a Townhall meeting in Tempe regarding the bike lanes on McClintock drive in order to advocate for save biking routes for cyclists.

Thank you for considering Jared Eisenhower for the Tempe Bike Hero Award.

Sincerely,
Simon Holzapfel

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2019 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Gillian Gile

Street Address: 125 E. Vista Del Cerro Drive

City: Tempe State: AZ Zip Code: 85224

Phone: 480-809-7337 E-mail: ggile@asu.edu

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [ ] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: Kristín Ólafs

Street Address: 2970 W. Comstock Drive

City: Chandler State: AZ Zip Code: 85224

Phone: 602-509-7888 E-mail: kristin.olafs@asu.edu

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

City of Tempe
Tempe Bike Hero Award Application

For several years my husband and I have noticed Gillian Gile picking up her kid from KidZone at Broadmor Elementary where our son goes. We travel the same road down College from ASU to Broadmor and we have noticed her while cycling as well as during pickup at Broadmor when we arrive at a similar time. Something about her made us think about her when I heard the advertisement about nominating a bike hero, deciding that she was a worthy candidate.

Gillian's bike is hitched to a two-seat trailer where her kids can be secured during their trips. I think we noticed her because she always has a smile on her face and her kids seem to enjoy riding together very much. I also thought what a clever and sustainable idea it was to be able to bike around the neighborhood with your kids in tow.

We do not know Gillian and did not formally meet her until earlier this month when I (Kristín) introduced myself to her to learn more about her sustainable transportation for the family.

I found out from our talk that Gillian has been biking her kids to daycare/school every day since August 2015. At first it was both of them to Bright Horizons over on Rural & Terrace. Now, her youngest goes to preschool on the ASU Tempe campus and the oldest is at Broadmor.

Gillian is not the only biker in the family as her husband bikes their son to school in the morning while she picks up both their boys with the bike trailer. In addition to transfers to and from school, the family bikes to the library and around the neighborhood. The family was unfortunate enough to have their car stolen in December and were without a car for 3 weeks. They did not let that misfortune affect them and utilized the bike and the trailer for grocery shopping.

Gillian cares about sustainability and her bike choice is a logical one for her family and much more economical. "The real heroes are the ones who bike even though it takes longer than driving".

Gillian is an assistant professor at ASU with the School of Life Science. By commuting from home to her kids' schools and to her work, Gillian not only utilizes an environmentally friendly transportation option but also creates a fun experience for her family. We believe she is a worthy candidate for a Bike Hero in Tempe.

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2019 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: Dr Carmen Bastek

Street Address: 128 W Cottage Ln

City: Tempe State: AZ Zip Code: 85282

Phone: 4809674721 E-mail: carmenbastek@msn.com

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [ ] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: Fairly Dickinson

Street Address: 18 W Cottage Ln

City: Tempe State: AZ Zip Code: 85282

Phone: 4808941424 E-mail: fairlyd@cox.net

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

City of Tempe
Tempe Bike Hero Award Application

Dr Carmen Bastek is a person who is passionate about bicycles! Weather permitting, Carmen rides her bicycle to work most days of the week even if we are having over 100-degree weather. She is a highly recognized Tempe veterinarian totally devoted to her job and the care of her patients yet despite difficult days in surgery or very long periods of work beginning before 6 or 7 AM, she is seen coming and going on our little street riding her bicycle to and from her office.

Evenings after hours of work at her clinic, Carmen's travels to local restaurants and establishments is also on one of her bicycles. On her days off, Carmen will be seen working on her bicycles within her garage.

Not only does Carmen utilize her bikes as transportation but also for recreation. Most weekends, she and her wife are on the hills around Phoenix Metro or within and without Arizona dirt biking for fun and exercise.

In the fourteen years that we have been neighbors with Carmen Bastek, she is typically seen on a bicycle and not in a four-wheel vehicle. This is a person who deserves recognition for not only being a good community member, but for being a great human being and caring enough about our environment and world to be a bicycle HERO!

City of Tempe
Tempe Bike Hero Award Application

To nominate a person or organization for the 2019 Tempe Bike Hero Award, please complete this form and provide the information requested below. If you wish to nominate more than one person/organization, please complete a form for each individual/organization that you wish to nominate.

I am nominating the following person/organization for the Tempe Bike Hero Award:

Name of Person/Organization Nominated: KELLY NELSON

Street Address: 3710 SOUTH WILSON STREET

City: TEMPE State: AZ Zip Code: 85282

Phone: (602) 402-7259 E-mail: KELLY.NELSON@ASU.EDU

The nominee (check all that apply):

- [x] Lives and/or works in Tempe
- [ ] Lived and/or worked in Tempe at time of contribution
- [ ] Is a Tempe based organization

Nominated by: ROBERT MOORE

Street Address: 507 EAST DEL RIO DRIVE

City: TEMPE State: AZ Zip Code: 85282

Phone: (480) 709-2710 E-mail: RMOORE@ACCESSGEOGRAPHIC.COM

Describe on the next page why this person or organization should receive this award. Up to three additional supplemental pages are permitted. Supplements can include photos, newspaper articles, flyers or recommendations. Nominations will not be returned.

City of Tempe
Tempe Bike Hero Award Application

I am really honored to nominate Kelly Nelson for the 2019 Tempe Bike Hero Award. Not only is she a personal inspiration of mine but her dedication and creative spirit towards encouraging 'biking culture' within our community is highly commendable and worthy of this award.

It is difficult to describe Kelly Nelson without reference to a bicycle. It would be out of place for her to arrive at any meeting or event without a bike helmet on her head. It is more or less a signature fashion point, and she wears it proudly.

Impressively, Kelly has been making this visual statement consistently for some time, as she has strategically not owned a car for the past TWO DECADES. Following graduate school and accepting an instructor job at ASU, she opted to begin a long-term experiment of living life without a car - which was pretty brave for a New York transplant considering our Summers. Moreover, she had her bike stolen once on campus and again on Mill, which made her a regular customer at Domenic's bike shop, but did not detour her mission. And, from this experience, not only has Kelly personally explored the realities and challenges of using a bike as a primary source of transportation, but has also helped others, including me, realize that if she can do it - maybe they can too.

Along the same lines, Kelly Nelson stays active with local events, activities and projects to help Tempe grow as a bike friendly community. Kelly helped coordinate Tempe's first 'Bike to Art Tour' in 2017 and has participated in every Tempe bike count (until it was discontinued this year). She uses her community representation on the Tempe Municipal Arts Commission to make sure bicycle culture was effectively represented within public art initiatives and has participated in various transportation and public works projects with an eye on encouraging better integration of bike friendly elements.

On a literary level, Kelly has also contributed to bike positive awareness through her own projects. She is a contributing writer for Carbusters Alternative Transportation Journal and created a regular series called "No-Car Oscar" that ranked Oscar nominated movies for the positive incorporation of biking culture and alternative transportation into their cinematic narrative and visualization. Needless to say, 'Wolf of Wall Street' didn't fare very well, while movies such 'American Hustle' was recognized for its use of alternative forms of transportation. She also penned 10 book reviews with an emphasis on biking culture including "Joyride: Pedaling Toward a Healthier Planet" (Mia Birk, 2010), "On Bicycles: 50 Ways the New Bike Culture Can Change Your Life" (Amy Walker, 2011), and "Bicycle: A Repair and Maintenance Manifesto" (Sam Tracy, 2013).

On a personal note, I have known Kelly Nelson for almost ten years now and her dedication to biking has had a direct impact on my awareness and decision-making when it comes to alternative transportation. Kelly's passion and leadership has inspired me to use biking for daily trips to the grocery store and post office. More recently, I started longer bike rides across the Valley exceeding 30 miles, which for many experienced bikers might not seem like much, but for me it is a new frontier and again have Kelly to thank for the inspiration.

Overall, it is people like Kelly Nelson that dedicate themselves to biking, work to make Tempe a more bike friendly community, and use creativity to spread bike culture awareness while inspiring everyday people, like me, to expand their biking horizons. For these reasons, I sincerely recommend Kelly Nelson for the 2019 Tempe Bike Hero Award and appreciate the opportunity to share her story as my community bike hero!

Tempe Bike to Art Tour

Steve Bass lives in tempe and lived in Tempe while he biked to work to his work in Mesa.
His e-mail is steve.bass@mesacc.edu

My name is Jaime H. Herrera; I teahc at MCC. My e-mail is jaime.herrera@mesacc.edu
I live in Mesa at 2603 S. Playa. Mesa, Az 85202.

Steve Bass retired last year from teaching Geology at Mesa Community College, where he taught for over twenty years. His focus in his classes, to his students, to the college community, and to the larger community was always about sustainability and about lessening one's footprint. But he did not just talk the talk, he walked the walk (or biked it). He rode his bike to school everyday for the majority of his career at MCC, and he even rode cross country one time to help rais awareness for sustainability. And just like a mail carrier, there was not a day he did not ride. He encouraged others to ride, both with his word and through his actions. In great part because of him and his example, I now ride to work a couple of times a week, and I often think of Steve as I meander my way from home to campus and back again. He is an excleent example of a Bike hero to me. Thank you. Jaime H. Herrera Mesa Community College

MEMORANDUM

TO: Transportation Commission

FROM: Shelly Seyler, Deputy Engineering and Transportation Director (480-350-8854)

DATE: May 12, 2020

SUBJECT: Traffic Management

AGENDA ITEM #: 4

PURPOSE:
The purpose of this memo is to provide an update to Commission on the traffic delay performance measure and strategies to reduce congestion in Tempe.

RECOMMENDATION OR DIRECTION REQUESTED:
For information.

CITY COUNCIL STRATEGIC PRIORITY:

- Quality of Life – 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.

BACKGROUND INFORMATION:
As the City continues to develop strategies to improve travel time, it is important to recognize the factors and causes of congestion. Below is information that breaks down the causes.

Causes of Congestion:

- Special Events – A special case of demand fluctuations where traffic flow in the vicinity of the event will be radically different from "typical" patterns. Special events occasionally cause "surges" in traffic demand that overwhelm the system.
- Work Zones – Construction activities on the roadway that result in physical changes to the roadway environment. These changes may include a reduction in the number or width of travel lanes, lane "shifts", lane diversions, reduction, or elimination of shoulders, and even temporary roadway closures.
- Weather – Environmental conditions can lead to changes in driver behavior that affect traffic flow. Due to reduced visibility, drivers will usually lower their speeds and increase their headways when precipitation, bright sunlight on the horizon, fog, dust, or smoke are present.
- Traffic Incidents – Events that disrupt the normal flow of traffic, usually by physical impediments in the travel lanes. Events such as vehicular crashes, breakdowns, and debris in travel lanes are the most common form of incidents.
- Roadway design – Capacity is determined by a number of factors including the number and width of lanes. There is also a wild card in the mix of what determines capacity – driver behavior. Research has shown that drivers familiar with routinely congested roadways space themselves closer together than drivers on less congested roadways. This leads to an increase in the amount of traffic that can be handled.
- Poorly Timed Signals – Signals that are not timed to efficiently move traffic can result in increased congestion on roadways.

With the known causes of congestion and having the necessary data to identify those corridors that perform poorly, the City can focus on and identify the resources necessary to improve traffic delay. By advancing the performance measured discussed below, staff will be able to keep the community informed on advances we are making.

PERFORMANCE DATA:

Data is an important piece in tracking how the City is doing. Over the last few years, staff have been working to refine the data collection to ensure it was accurate. The City currently has 57 Bluetooth readers across 152 segments that measure travel time and allow the City to calculate and track the performance measure discussed in further detail below. This information is then used to identify corridors where we can focus on strategies including investments and resources.

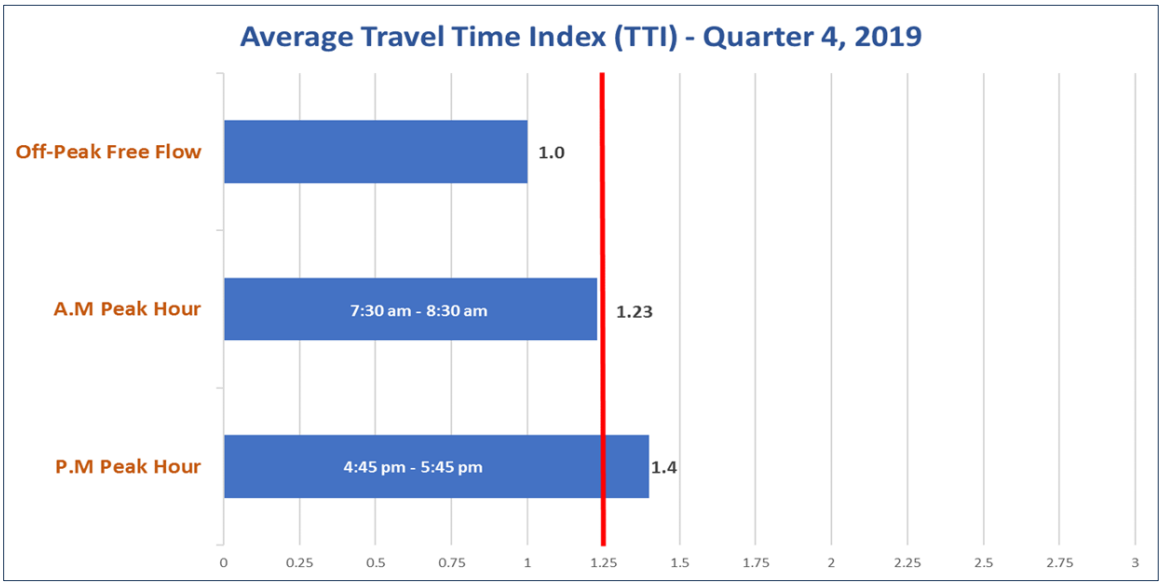
PROPOSED PERFORMANCE MEASURE:

In working with the office of Strategic Management, the following performance measure has been identified as a way to measure traffic delay in the City. The measurement is a comparison or ratio of the time it takes to travel a corridor in the City during peak times to non-peak free flow times – also known as the Travel Time Index. The performance measure includes the collection and reporting of travel time data along corridors individually and as a whole system.

> 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.

As an example, a value of 1.3 indicates that a 20-minute free-flow trip requires 26 minutes during the peak period (20 minutes x 1.3 = 26 minutes).

The following chart provides the current baseline measurement for the average travel time index in the morning and evening peak hours over the fourth quarter of 2019. It is important to recognize that the travel time index may vary over the 3-month period and the following reports the average. This is done to normalize the data as extreme highs and lows are due to conditions that the City cannot control.



The second target is that no individual segment will exceed a travel time index of 2.0. In the fourth quarter of 2019, there was one segment in the morning peak hour and 15 segments in the evening peak hour that did not meet the target identified.

STRATEGIES:

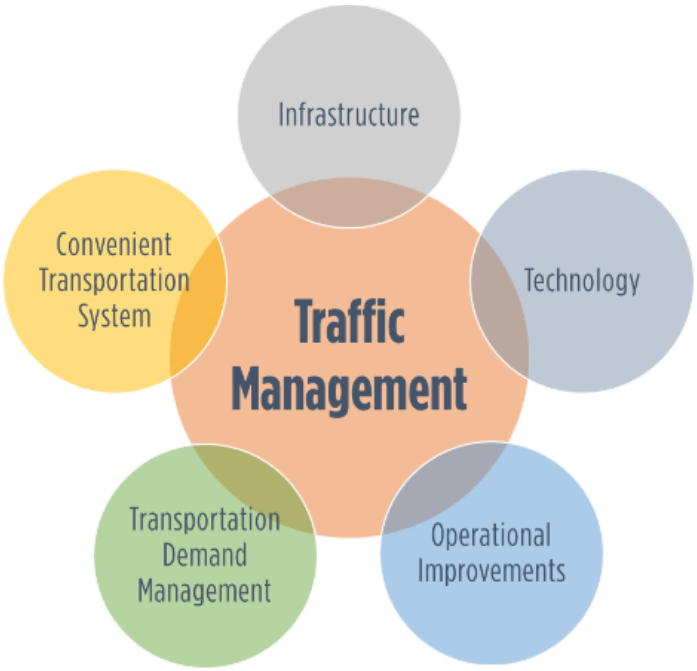
The following graphic shows that one strategy alone will not solve the issues that many cities, including Tempe, face regarding traffic congestion. Within each category, staff identified specific improvements, programs and techniques to address the rapidly changing conditions in Tempe.

Infrastructure Improvements:

- Intersection Improvements
  - Roundabout 1st St./Ash Ave./Rio Salado Pkwy. (complete)
  - Rural Rd. and Southern Ave. (under construction)
  - Rural Rd. and Rio Salado Pkwy. (start of construction Spring 2020)
  - Rural Rd. and University Dr. (anticipate construction Spring 2021)
  - Rural Rd. and Baseline Rd. (CIP Request for FY22/23 and FY23/24)
  - Loop 202 and Scottsdale Rd. On-Ramp Extension (CIP Request FY24/25)
  - Loop 202 and McClintock TI Feasibility Study
  - ASU-Tempe Pedestrian/Bicycle Grade Separation Analysis (underway)

- Bus Pullouts
  - 2019 – two bus pullouts completed
  - 2020/2021 and 2021/2022 – 20 bus pullouts programmed for construction

Congestion Reduction Strategies



Technology Improvements:

- Update Intelligent Transportation System (ITS) Strategic Plan
- Signalized Intersection Detection
  - Adaptive Signal Control
- Streetcar EMTRAC
- Signalized Intersection Detection
- ITS Closed-Circuit Television (CCTV) Cameras
- ITS Signal Controller Upgrades
- Expansion of fiber communications network (Priest Dr., Southern Ave.)
- Traffic Management Center Upgrade

Operational Improvements:

- Incident Response
- Minimize peak hour barricade restrictions
- Active Traffic Management through staffing the Transportation Management Center

Transportation Demand Management:

- Sustainable Mobility Action Group (Commute Options)
  - New development requirement for Trip Reduction Program
- Support Existing Businesses in developing commute options
  - Scoop
  - Shift Work Schedules
- Review City employee trip reduction and parking
- Transportation Management Association (TMA)

Convenient Transportation System:

- Multi-Modal
  - Service available near residences and businesses
  - Bike and Pedestrian Infrastructure
  - First – Last mile connections

- Efficient
  - Dedicated Infrastructure
- Convenient
  - Frequent Transit Service
  - Extended Operating Hours
- Sustainable

COMMUNICATION:
Communication is a key factor in assisting the public with decisions on how they travel in Tempe. Staff continue to communicate regularly with Tempe residents and the community regarding:

- Closures – planned (events, construction) and emergency (crashes)
- Alternative transportation options (bus • bike • walk • rail)
- Larger infrastructure improvement projects

Communication tools include:
- Tempe Today
- Facebook, Twitter, Nextdoor
- tempe.gov/TempeinMotion
- Press releases: e-blasts and website
- Media: print, radio, and TV

FISCAL IMPACT or IMPACT TO CURRENT RESOURCES:
To be determined based on strategies implemented.

ATTACHMENTS:
1. PowerPoint

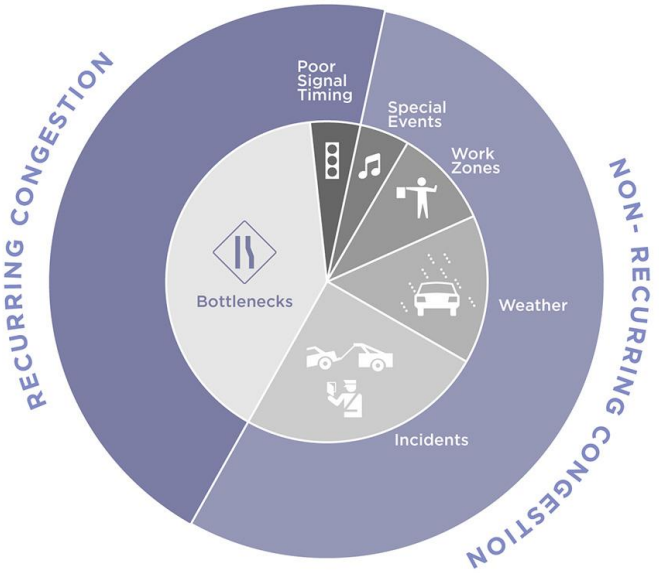
Traffic Management

Transportation Commission
May 12, 2020

Tempe

Causes of Congestion and Challenges

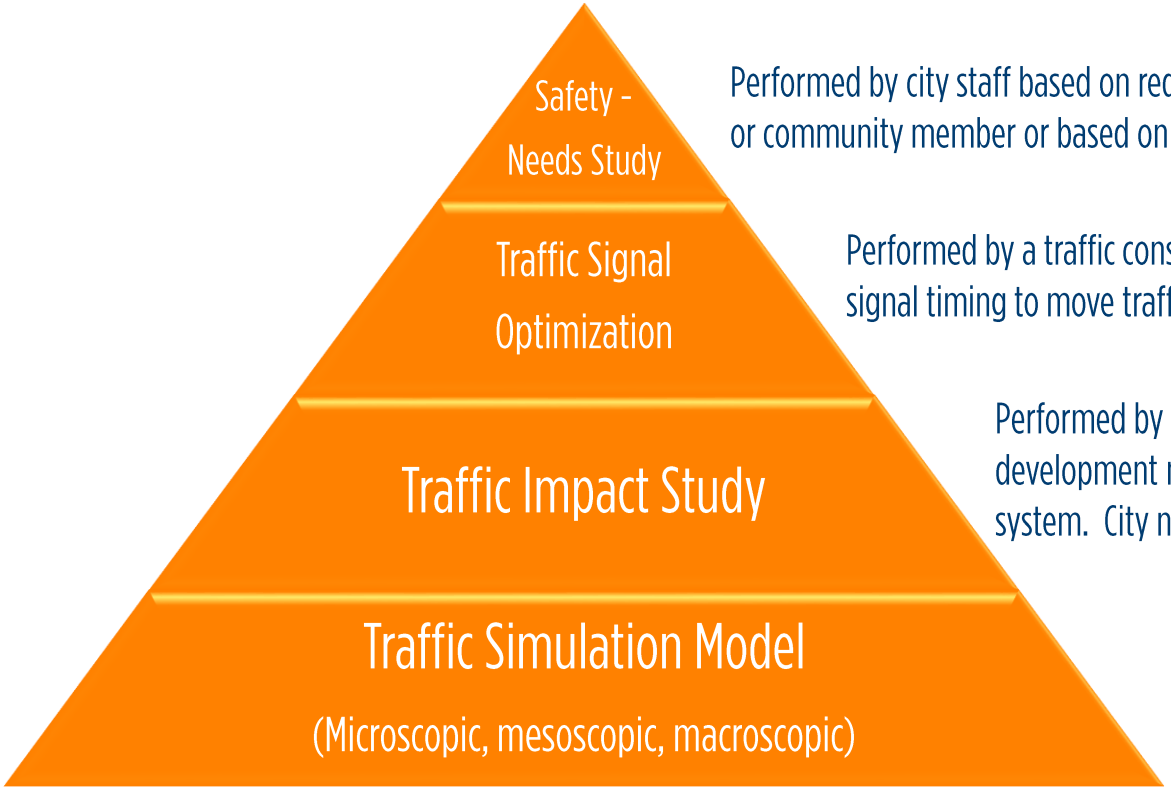
- Causes
  - Special Events
  - Work Zones
  - Weather
  - Incidents
  - Roadway Design
  - Poorly timed signals



Source: FHWA Office of Operations

- Challenges
  - Demand exceeds capacity
  - Solution involves multiple parties
  - Conflicts with other priorities
  - Rapidly changing technology
  - Costs
  - Complexity of movement
  - Construction Projects

Traffic Studies and Analysis Tools



Performed by city staff based on requests from a resident or community member or based on city staff observations

Performed by a traffic consultant to optimize signal timing to move traffic on a corridor

Performed by a traffic consultant to identify how a development might impact the transportation system. City now requires a TRP as part of study

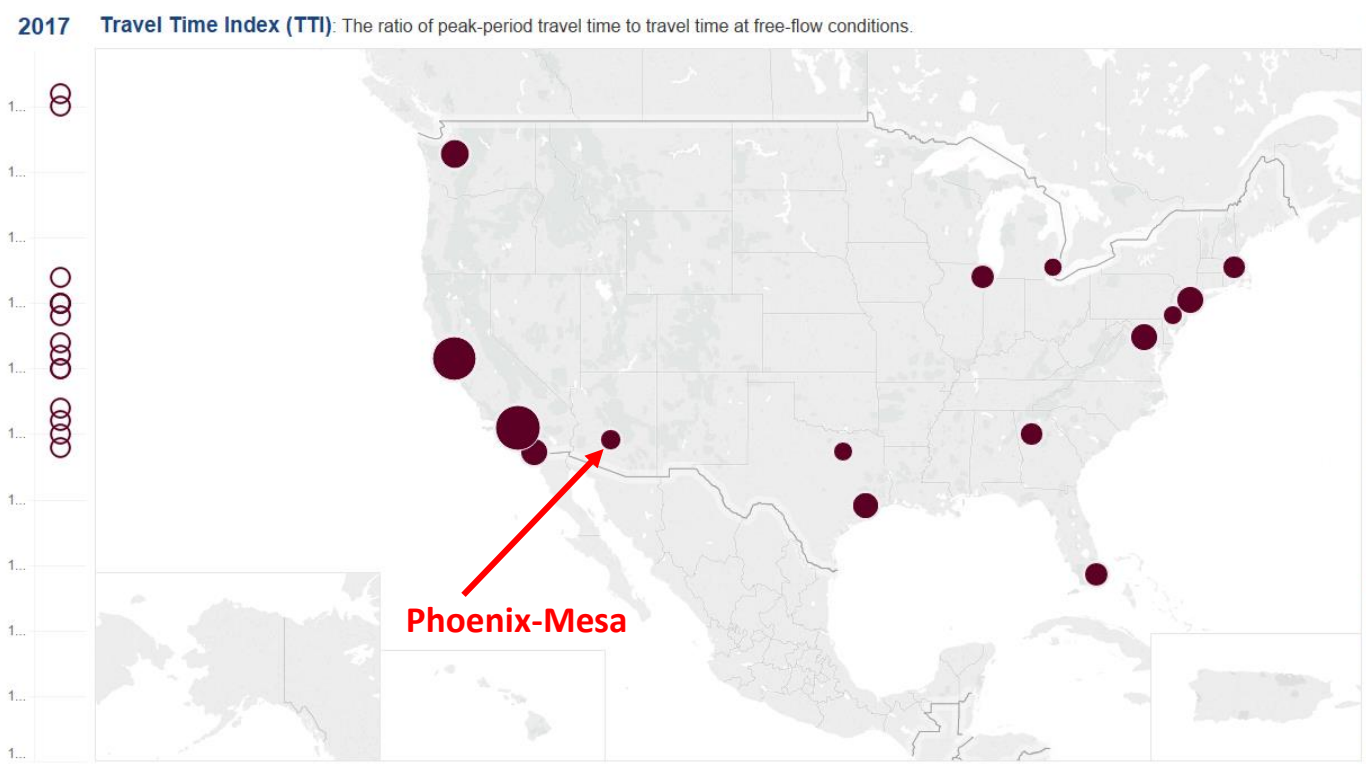
Typically created by a traffic consultant to model traffic movements sometime in the future. Snapshot in time and assumes underlying conditions and assumptions are accurate

URBAN MOBILITY REPORT 2019

THE STORY: TRAFFIC IS BAD AND GETTING WORSE.

Texas A&M Transportation Institute

INRIX



1. See your urban area:
Very Large (>3M People)

2. Performed based on:

- ◯ Annual Hours of Delay
- ◯ Delay per Commuter
- ◯ Planning Time Index (PTI)
- ◉ Travel Time Index (TTI)
- ◯ Commuter Stress Index (CSI)
- ◯ Annual Congestion Cost
- ◯ Congestion Cost per Commuter
- ◯ Annual Excess Fuel Consumed
- ◯ Excess Fuel Consumed per Commuter
- ◯ Annual Truck Delay
- ◯ Annual Truck Congestion Cost
- ◯ Annual Excess Fuel from Trucks
- ◯ Freeway Vehicle Miles of Travel (VMT)
- ◯ Arterial Vehicle Miles of Travel (VMT)

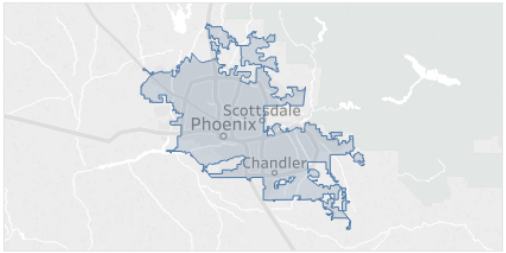
3. Over time:
2017
☐ Show history

URBAN MOBILITY REPORT 2019

Texas A&M Transportation Institute

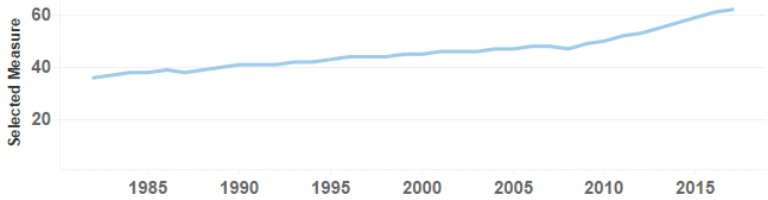
Phoenix--Mesa, AZ

Year: 2017

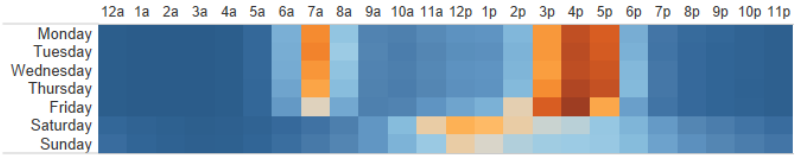


Measure: Delay per Commuter

Delay per Commuter

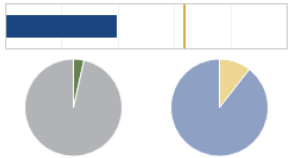


When Does Congestion Happen?



Delay Split

Cost Comparisons



2017 Congestion

Annual Total Delay:	163,247,000 Hours
Delay National Rank:	14
Annual Delay per Auto Commuter:	62 Hours
Delay per Auto Commuter National Rank:	18
Congested Weekday Hours:	4.1

Planning Time Index (PTI):	1.97
PTI National Rank:	17
Travel Time Index (TTI):	1.27
TTI National Rank:	22

Truck-Based

Annual Truck Delay:	6,856,000 Truck Hours
Annual Truck Delay National Rank:	14
Annual Congestion Cost (Trucks):	$348M
Congestion Cost (Truck) National Rank:	14

Economic

Annual Congestion Cost:	$3,300,000,000
Annual Congestion Cost National Rank:	14
Congestion Cost per Commuter:	$1,089
Congestion Cost per Commuter National Rank:	30

Cost Components

Value of Time:	$18.12/Hour
Commercial Value of Time:	$52.14/Hour
Avg State Gasoline Cost:	$2.23/Gallon
Avg State Diesel Cost:	$2.42/Gallon

Environmental

Annual Excess Fuel Consumed:	67,117,000 Gallons
Wasted Fuel National Rank:	12
Annual Wasted Fuel per Auto Commuter:	26.0 Gallons
Wasted Fuel per Commuter National Rank:	15

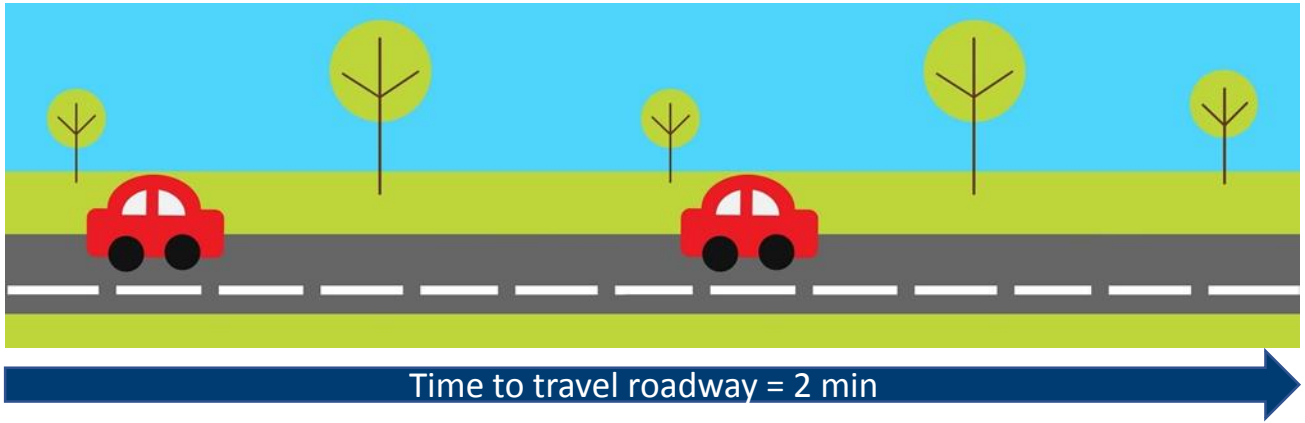
National Congestion Table – Urban Areas

Population over 3 million

Urban Area	Yearly Delay per Auto Commuter		Travel Time Index	
	Hours	Rank	Value	Rank
Very Large Average (15 areas)	**83**		**1.35**	
Los Angeles-Long Beach Anaheim CA	119	1	1.51	1
San Francisco-Oakland CA	103	2	1.50	2
Washington DC-VA-MD	102	3	1.35	7
New York-Newark NY-NJ-CT	92	4	1.35	7
Boston MA-NH-RI	80	6	1.30	19
Seattle WA	78	7	1.37	5
Atlanta GA	77	8	1.30	19
Houston TX	75	9	1.34	11
Chicago IL-IN	73	10	1.32	16
Miami FL	69	12	1.31	17
Dallas-Fort Worth-Arlington TX	67	13	1.26	23
San Diego CA	64	16	1.35	7
Philadelphia PA-NJ-DE-MD	62	18	1.25	25
Phoenix-Mesa AZ	62	18	1.27	22
Detroit MI	61	20	1.24	28

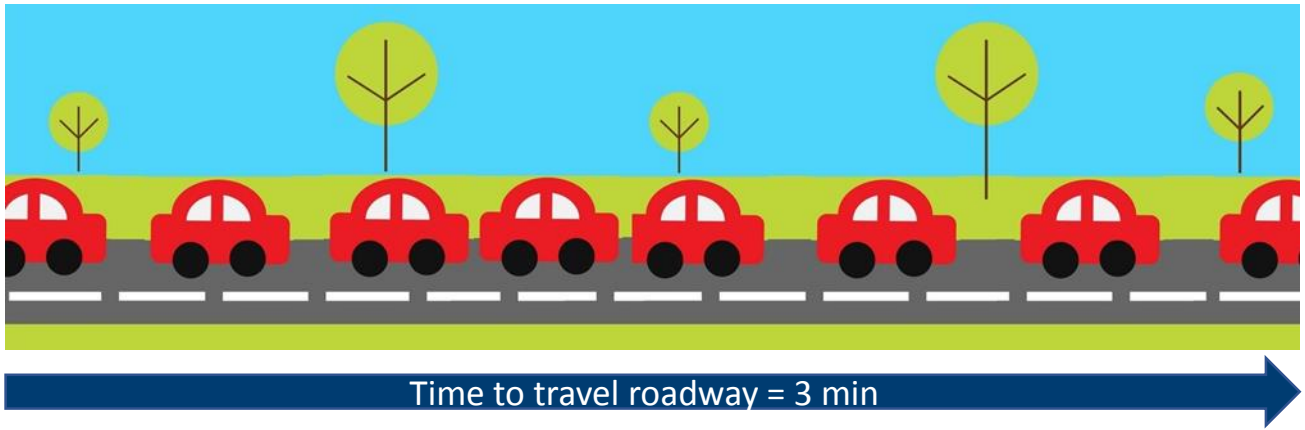
Source: 2019 Urban Mobility Report – Texas A&M Transportation Institute

What is Travel Time Index



Non-peak free flow

Travel Time Index = 2 min / 2 min = 1.0

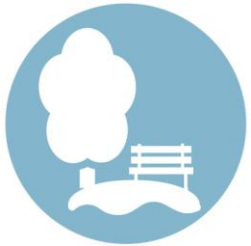


Peak flow

Travel Time Index = 3 min / 2 min = 1.5

Performance Measure

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.

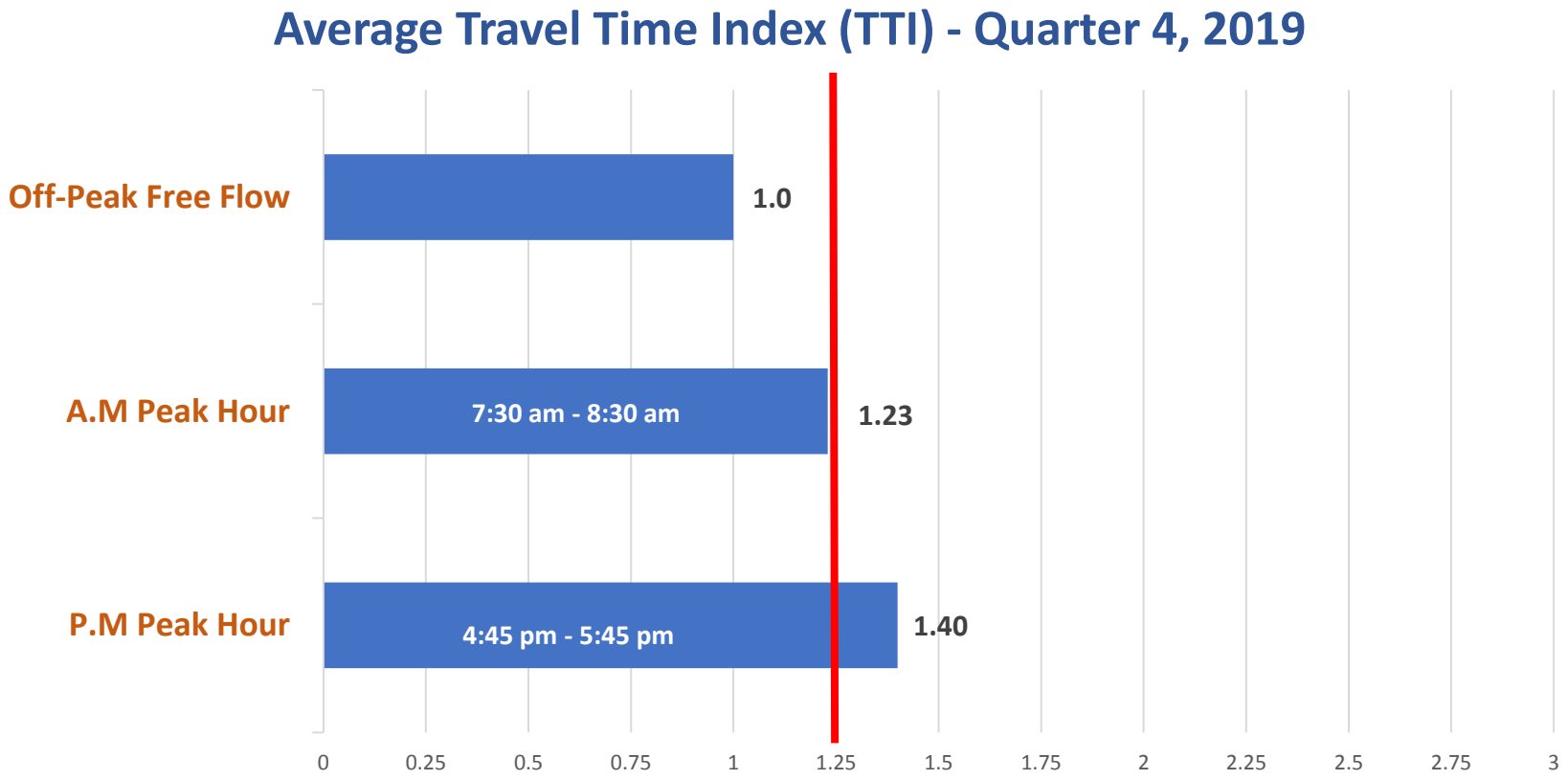


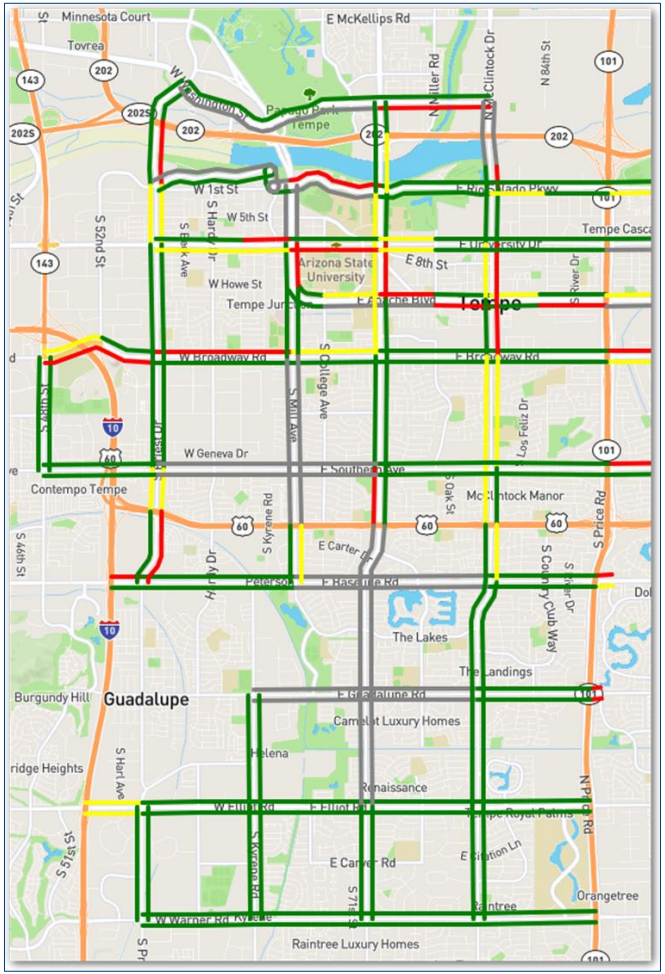
Quality of Life

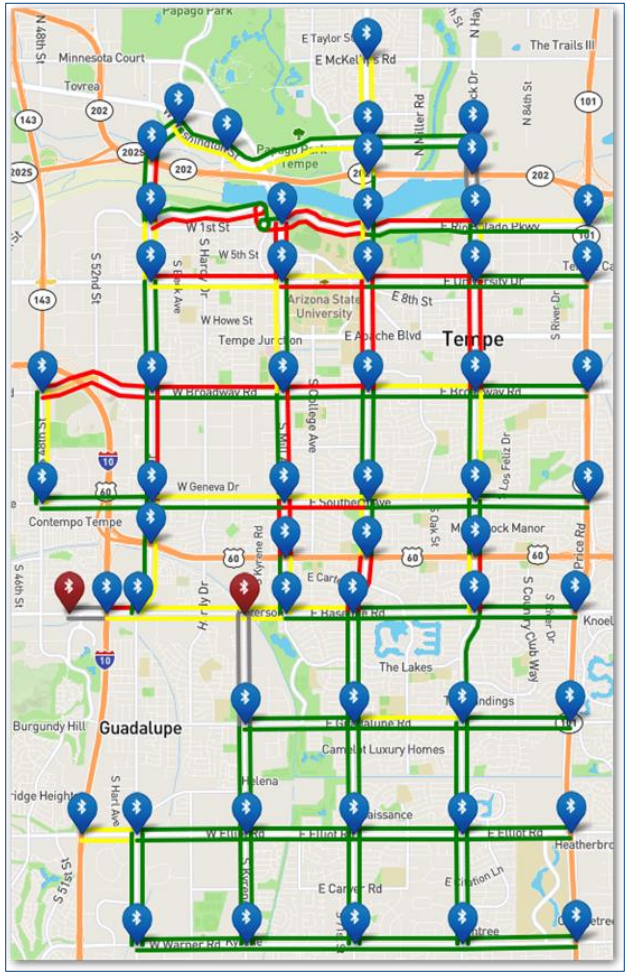
BASELINE:	A.M.	P.M.
City average	1.23	1.40
Segments > 2.0	1	15

TARGET:	A.M.	P.M.
City average	1.25	1.25
Segments > 2.0	0	0

Performance Data







Performance Data

- 152 Segments
  - 88 North Tempe
  - 64 South Tempe
- 57 Bluetooth Readers

Travel Time Mobility Report (A.M. Peak Hour)

2019 Q4 (Oct-Dec) – Tue, Wed, Thu (7:30 AM-8:30 AM)

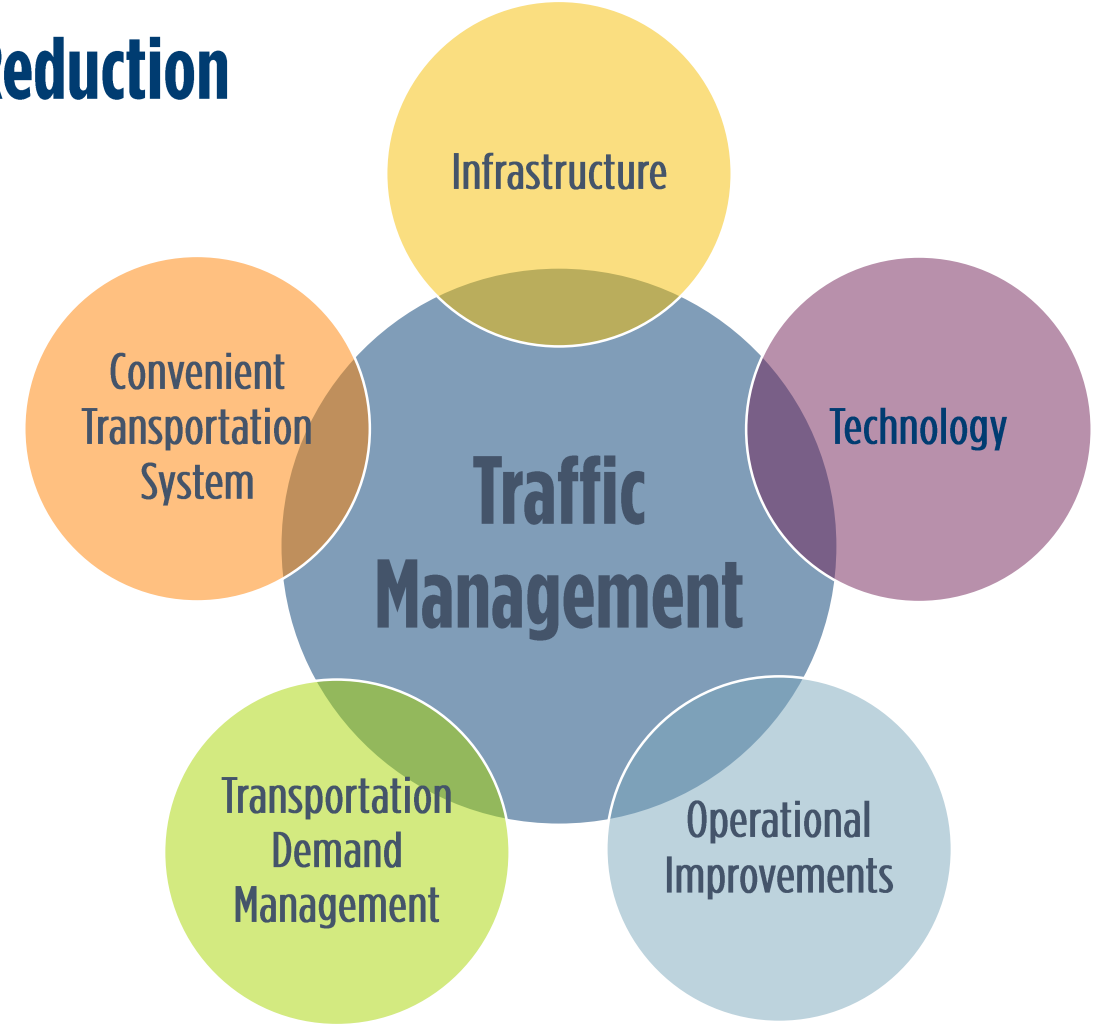
From/To	Distance (Miles)	Normal Flow (mm:ss)	Average (mm:ss)	Travel Time Index
Broadway from McClintock to Rural	1	2:05 (29 mph)	3:25 (18 mph)	1.64
Rural from Guadalupe to Baseline	1	1:43 (35 mph)	2:30 (24 mph)	1.46
Rio Salado from Rural to Mill	0.84	2:14 (23 mph)	3:12 (16 mph)	1.43
Baseline from McClintock to Rural	1.12	2:01 (33 mph)	2:51 (24 mph)	1.41
McClintock from Southern to Broadway	1	1:53 (32 mph)	2:32 (24 mph)	1.35
Elliot from McClintock to Rural	1	1:35 (38 mph)	2:03 (29 mph)	1.29
McClintock from Warner to Elliot	1	1:36 (38 mph)	1:53 (32 mph)	1.18
Priest from Broadway to University	1	1:41 (36 mph)	1:57 (31 mph)	1.16
Warner from McClintock to Rural	1	1:38 (37 mph)	1:50 (33 mph)	1.12
Rural from Broadway to University	1	3:25 (18 mph)	N/A	N/A
Southern from Mill to Priest	1.22	2:18 (32 mph)	N/A	N/A
Summary				**1.71**

Travel Time Mobility Report (P.M. Peak Hour)

2019 Q4 (Oct-Dec) – Tue, Wed, Thu (4:45 PM-5:45 PM)

From/To	Distance (Miles)	Normal Flow (mm:ss)	Average (mm:ss)	Travel Time Index
Priest from Broadway to Southern	1	2:02 (30 mph)	7:26 (8 mph)	3.66
University from Mill to Rural	0.79	2:36 (18 mph)	7:11 (7 mph)	2.76
Rio Salado from Mill to Rural	0.84	2:35 (20 mph)	5:33 (9 mph)	2.15
Guadalupe from Rural to McClintock	1	1:54 (32 mph)	3:04 (20 mph)	1.61
Rural from Baseline to Guadalupe	1	1:35 (38 mph)	2:19 (26 mph)	1.46
Elliot from Kyrene to Rural	1	1:28 (41 mph)	1:48 (33 mph)	1.23
McClintock from Elliot to Warner	1	1:36 (38 mph)	1:54 (32 mph)	1.19
Warner from Kyrene to Rural	1	1:31 (40 mph)	1:48 (33 mph)	1.19
Priest from Elliot to Warner	1	1:52 (32 mph)	2:11 (27 mph)	1.17
Scottsdale from Rio Salado to SR202L	0.5	1:27 (21 mph)	1:37 (19 mph)	1.11
McClintock from University to Broadway	1	2:29 (24 mph)	N/A	N/A
Southern from Mill to Rural	0.77	1:30 (31 mph)	N/A	N/A
Summary				**2.47**

Congestion Reduction Strategies



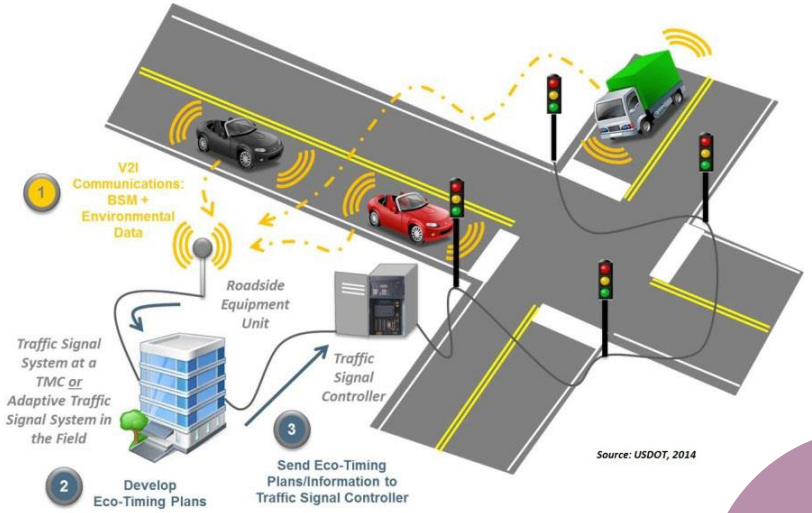
Infrastructure Improvements

- Roundabouts, Intersections, and Interchanges
  - Two roundabouts (Rio/Ash and McKellips/College)
  - Four Rural Road intersections (Southern Ave., Rio Salado Pkwy., University Dr., and Baseline Rd.)
  - Two Loop 202 interchanges (Scottsdale Rd. On-Ramp Extension and McClintock TI Feasibility Study)
  - ASU-Tempe Pedestrian/Bicycle Grade Separation Analysis
- Bus Pullouts
  - 2019 – two bus pullouts completed
  - 2020-2022 – 20 additional bus pullouts programmed

Infrastructure

Technology Improvements

- Update ITS Strategic Plan
- Signalized Intersection Detection
  - Adaptive Signal Control
- Streetcar EMTRAC
- ITS CCTV Cameras
- ITS Signal Controller Upgrades
- Expansion of fiber communications network (Priest Dr., Southern Ave.)
- Traffic Management Center Upgrade



Technology

Operational Improvements

- Incident Response
- Minimize Peak Hour Barricade Restrictions
- Active Traffic Management through staffing the Transportation Management Center

Operational Improvements

Transportation Demand Management

- Sustainable Mobility Action Group
  - New development requirement for Trip Reduction Program (TRP)
  - Support existing businesses in developing commute options
    - Scoop
    - Shift work schedules
  - Review city employee trip reduction and parking strategies
  - Transportation Management Association (TMA)

Transportation Demand Management

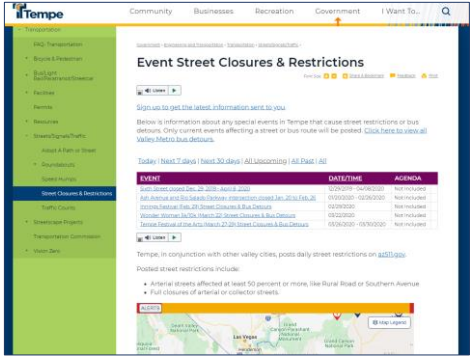
Convenient Transportation System

- Multi-Modal
  - Service available near residences and businesses
  - Bike and pedestrian Infrastructure
  - First – Last mile connections
- Efficient
  - Dedicated infrastructure
- Convenient
  - Frequent Transit Service
  - Extended Operating hours
- Sustainable

Convenient Transportation System

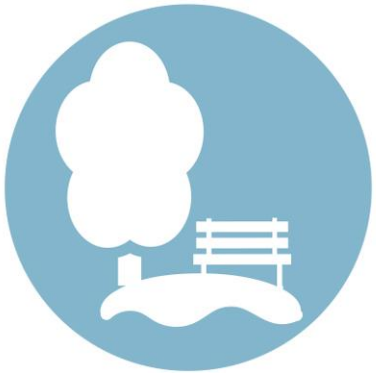
Communication Efforts

- What we communicate:
  - Closures - planned (events, construction) and emergency (crashes)
  - Alternative transportation options (bus • bike • walk • rail)
  - Larger infrastructure improvement projects
- How we communicate:
  - Tempe Today
  - Facebook, Twitter, Nextdoor
  - tempe.gov/TempeinMotion
  - Press releases: e-blasts and website
  - Media: print, radio and TV



Performance Measure

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.



Quality of Life

MEMORANDUM

TO: Mayor and Council

FROM: Shelly Seyler, Deputy Engineering & Transportation Director (480-350-8854)
Eric Iwersen, Transit Manager (480-350-8810)

DATE: May 12, 2020

SUBJECT: Tempe Mesa Streetcar Extension Feasibility Study

AGENDA ITEM #: 5

PURPOSE:
The purpose of this memo is to provide Commission with information and an update on the status of the Tempe Mesa Streetcar Extension Feasibility Study.

RECOMMENDATION OR DIRECTION REQUESTED:
Staff seeks feedback from the Commission on the results and recommendations of the Tempe Mesa Streetcar Extension Feasibility Study.

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 INFORMATION:
Through a partnership between the City of Tempe, City of Mesa and Valley Metro, the Tempe/Mesa Streetcar Feasibility Study evaluated the potential of a future streetcar system to connect the current Tempe Streetcar route with other points of interest, planned development and emerging transit corridors. The budget for the study is $600,000 and is co-funded by Tempe and Mesa. The study, which identifies potential corridors as part of a future streetcar system to serve Tempe and Mesa, will inform a future regional funding initiative for transit capital investments.

The study area is bounded by State Route 202 (Loop 202) to the north, Country Club Drive to the east, Baseline Road to the south and Priest Drive to the west. Over the next 20 years, population in the study area is projected to increase 50 percent with a 34 percent increase in employees, emphasizing the importance of continuing to expand and invest in public transit options.

STUDY PROCESS & RESULTS:
The study began in 2018 and included the following:

- Corridor Identification – identify potential corridors that meet the study's purpose and have high potential to improve public transit in the study area
- Tier 1 Evaluation – qualitative high-level analysis of potential corridors
- Tier 2 Evaluation – quantitative in-depth analysis
- Corridor Recommendation – recommendation for future regional transit funding and City Council approval

Tier 1 criteria helped identify the most feasible corridors, while Tier 2 criteria provided further quantitative, in-depth analysis that helped rank the feasibility of the five corridors identified in Tier 1: Rio Salado East (Marina Heights to Dobson), Rural (Marina Heights to Southern/Mill avenues), Dobson/Southern/Country Club (in Mesa),Mill (Apache to Southern/Rural), and Rio Salado West (Ash to Priest).

Tier 2 Evaluation included identifying potential design configurations that could be used when potentially constructing streetcar in the corridor options. These include:

- Semi-exclusive streetcar guideway – streetcar crosses at-grade with other roadway traffic at intersections and requires repurposing automobile lanes or widening the road for guideway right-of-way

- Mixed-flow guideway – automobiles and streetcar share lanes either in the median or curb lanes
- Mixed-flow turn lanes – left-turning automobiles share lanes with streetcar

The study considers how streetcar extensions would integrate with other current regional high-capacity transit studies, including the Fiesta District Alternatives Analysis, Arizona Avenue Alternatives Analysis and Maricopa Association of Government's Regional Bus Rapid Transit Study. The TMSFS ties in with other Valley Metro studies and is complementary to other MAG initiatives, including projects submitted to MAG for inclusion in the Regional Transportation Plan and Prop 400 Extension.

NEXT STEPS:

- Continue to coordinate with MAG regarding Prop 400 Extension submittals
- Continue to coordinate with Valley Metro and neighboring cities on regional transit solutions

FISCAL IMPACT or IMPACT TO CURRENT RESOURCES:

To be determined based on City Council direction and regional funding/approval.

ATTACHMENTS:

1. PowerPoint
2. Tempe/Mesa Streetcar Extension Feasibility Study Tier 2 Evaluation Report

The City of Tempe and its employees are governed by Arizona law prohibiting the use of city resources to influence an election. A.R.S. § 9-500.14. Nothing in these materials are or should be construed as an attempt to influence the result of any election, and are provided solely for informational purposes for consideration by the Tempe City Council.

Tempe/Mesa Streetcar Extension Feasibility Study

Transportation Commission

May 12, 2020

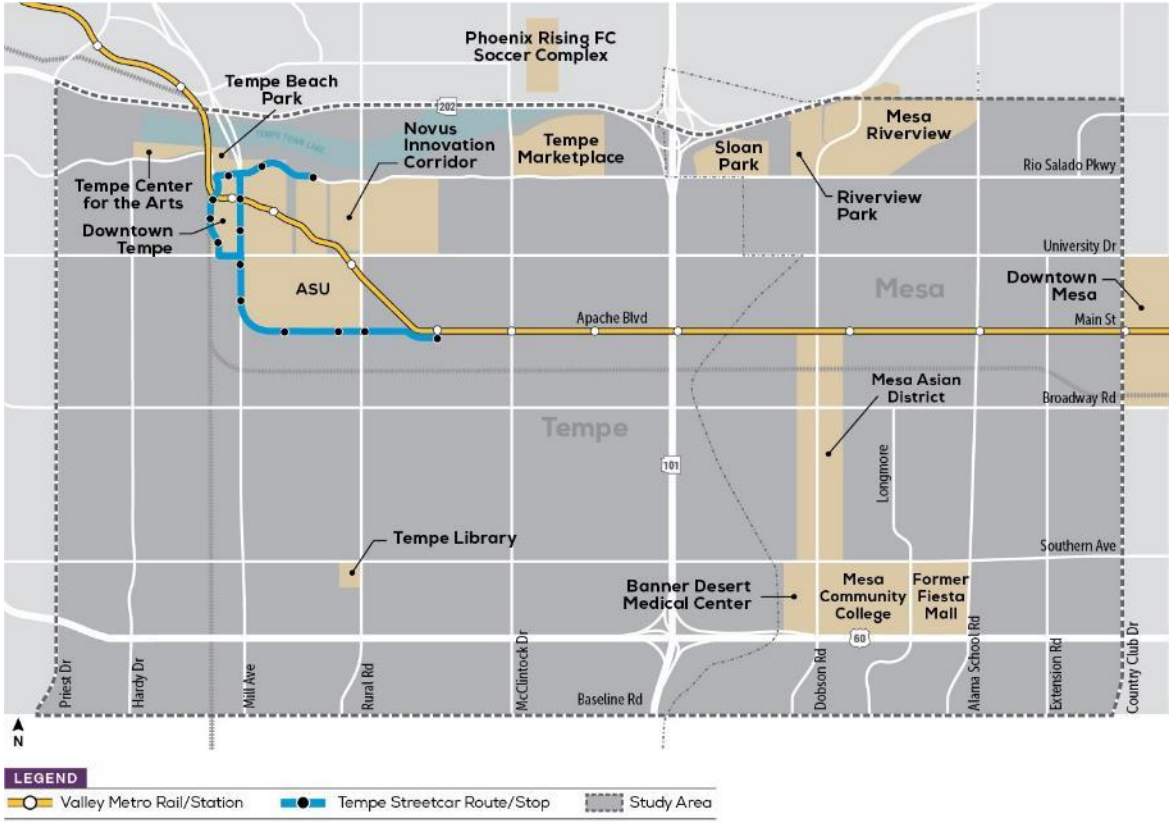
Performance Measures

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.

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.

Overview & Agenda

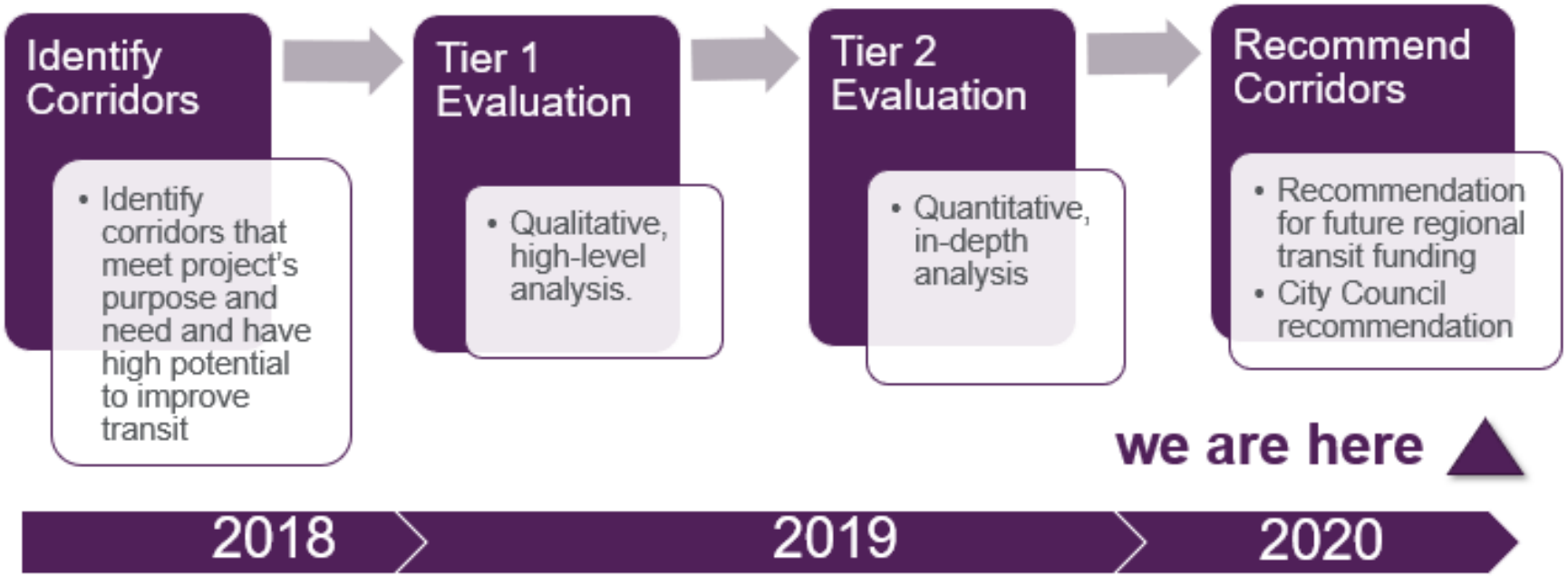


- Purpose: Evaluate possible streetcar extensions in Tempe & Mesa
- Study Area: Loop 202, Baseline Road, Priest Drive, Country Club Drive
- Partners: Tempe, Mesa, Valley Metro
- Budget: $600,000 (Tempe & Mesa)
- Council Support for Study Results/Corridor Recommendations & Next Steps

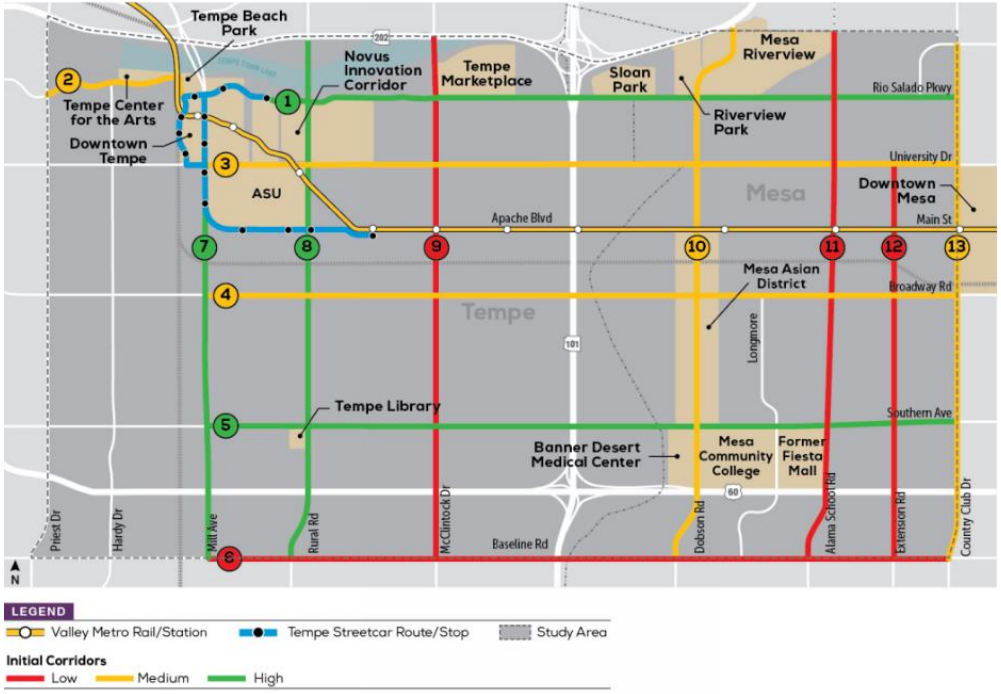
Public Outreach

- Boards & Commissions (Arts & Culture, Design Review, Disability Concerns, Historic Preservation, Neighborhood Advisory, Parks/Rec/Golf, Sustainability, Transportation)
  - December 2018 – January 2019 presentation series to introduce study
  - January – February 2020 presentation series to share preliminary study results
- Public Meetings
  - Tempe Streetcar Public Meetings: June 2018, November 2018, February 2019
  - City of Tempe Urban Core Master Plan Public Meetings: September 2018, May 2019, January 2020
- Tempe City Council Meetings
  - May 2019 / Tier 1 Study Results
  - February 2020 / Tier 2 Study Results
  - May 2020 / Study Results

Process


Identify Corridors
• Identify corridors that meet project's purpose and need and have high potential to improve transit
Tier 1 Evaluation
• Qualitative, high-level analysis.
Tier 2 Evaluation
• Quantitative, in-depth analysis
Recommend Corridors
• Recommendation for future regional transit funding
• City Council recommendation
we are here
2018
2019
2020

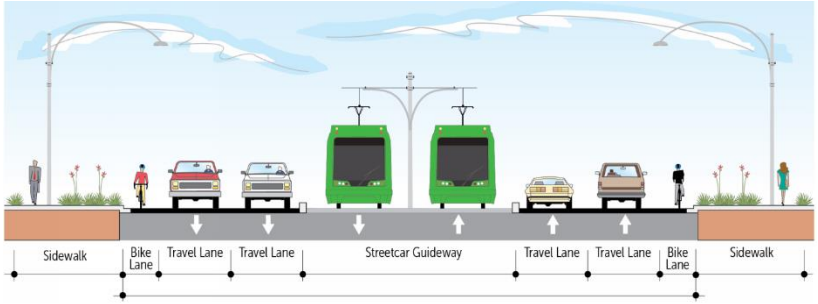
Tier 1 Evaluation Results



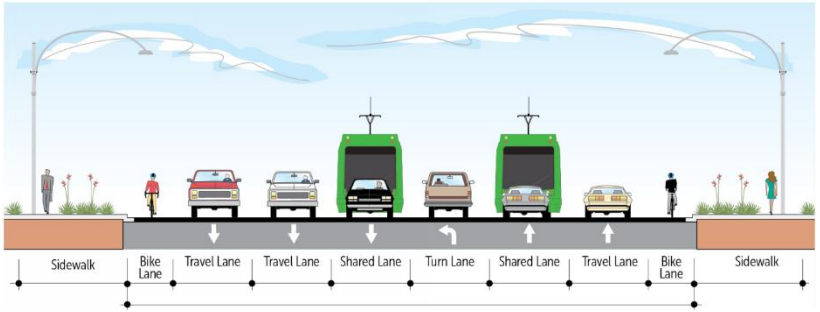
- Review of High Level Population, Employment Data & Major Destinations
- Potential Future Streetcar Corridors Ranked (arterial streets)
- Presented at May 2019 City Council Meeting

Tier 2 Evaluation Criteria

- Detailed Data & Corridor Review
  - Available right-of-way / street design
    - Rio Salado Parkway 14' Transit Easement
  - Utility conflicts
  - Existing transit & bike/ped access
  - Cost
  - Long range land use
    - Population & employment density
    - Growth opportunity
  - Ridership potential

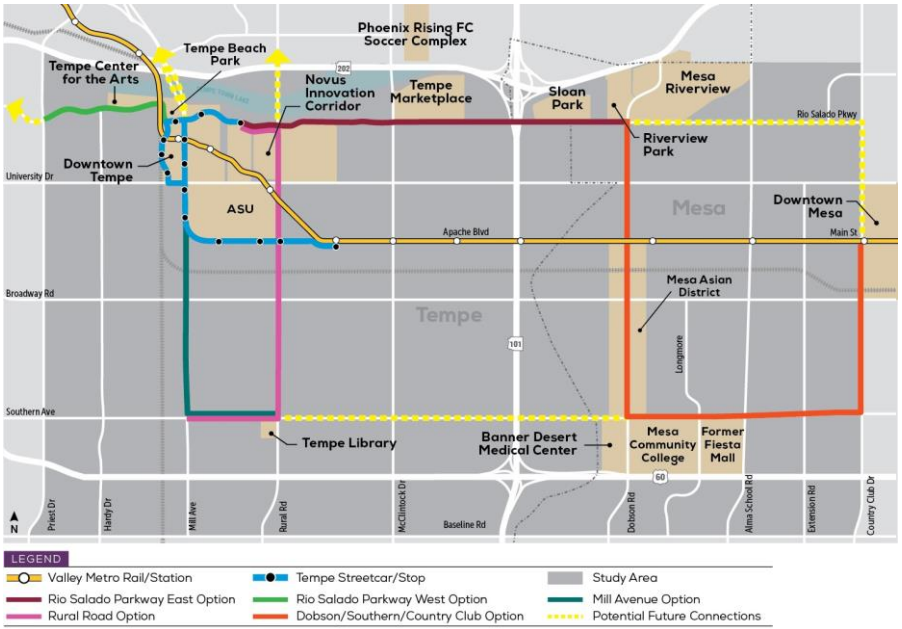


Semi-exclusive streetcar guideway (ex. Rio Salado)
Center running



Mixed-flow streetcar guideway (ex. Southern)
with mixed-flow turn lanes

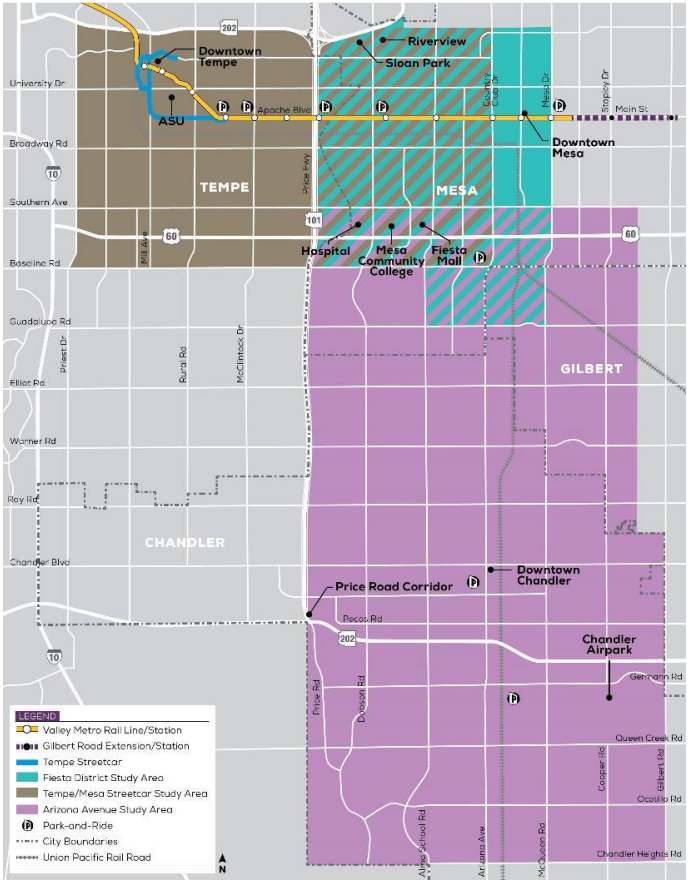
Tier 2 Study Results



- Deeper analysis of corridor & ridership potential & prioritization
- Some corridors drop off, low performing
- Highest potential high capacity transit corridors/routes emerge
- Presented at February 2020 City Council Meeting

1. **Rio Salado East:** Marina Heights to Dobson
2. **Rural:** Marina Heights to Southern/Mill
3. **Dobson, Southern, Country Club**
4. **Mill:** Apache to Southern/Rural
5. **Rio Salado West:** Ash to Priest

Future Regional Transit Plans & Prop 400E



How does future Streetcar integrate with other future possible regional high capacity transit

- Mesa Fiesta District Alternatives Analysis
  - Central Mesa High Capacity Transit options
  - Includes Southern Ave as possible Streetcar corridor
- Chandler/Mesa Arizona Avenue/Country Club Drive Alternatives Analysis
  - Link Downtowns Chandler & Mesa
- Regional Bus Rapid Transit Study (MAG)
  - Baseline Road & Rural Road (Tempe & Mesa)
  - BRT Rural Road/Not Streetcar

To compete for regional & federal funds, projects must be in Regional Transportation Plan for Prop 400E.

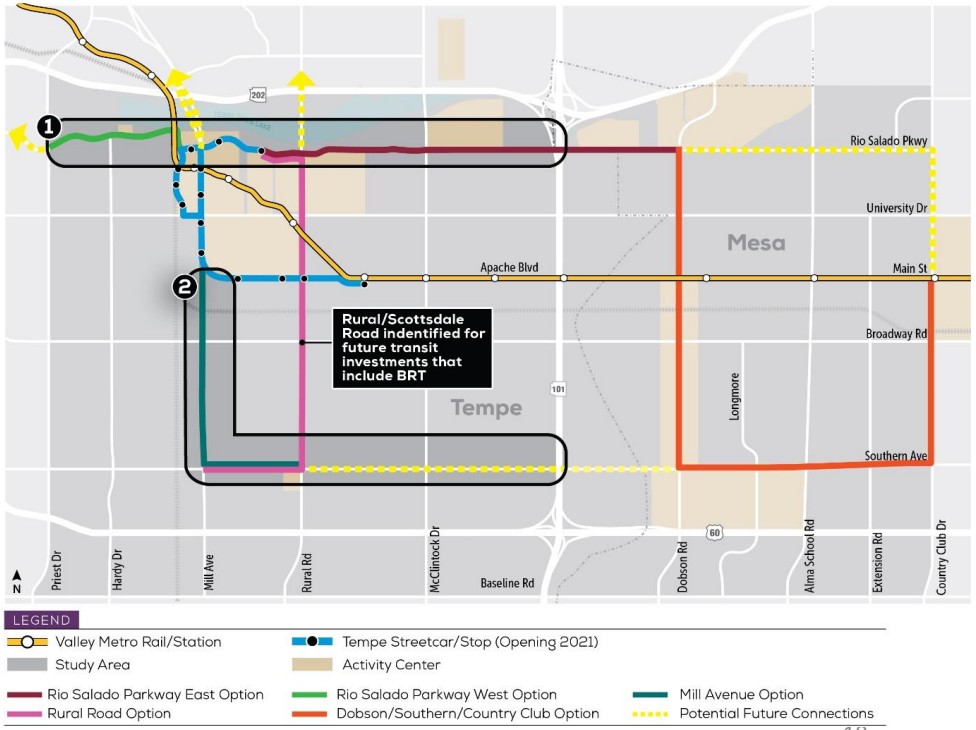
Recommendation

Support Recommendation of Two Preferred Routes in Tempe (highest performing routes) & Include in Final Study Report

- Rio Salado, Priest to Price
- Mill – Apache to Southern; Southern – Mill to Price/Southern

No Funding Commitment

Future Council Direction for Funding and Detailed Planning



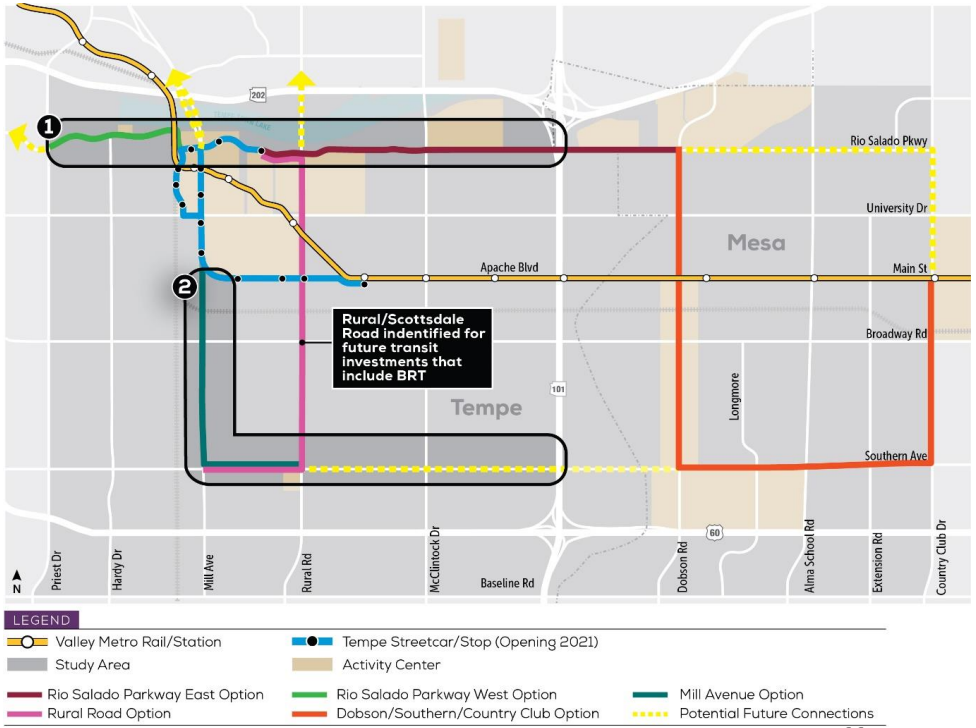
Next Steps

Continue Prop 400E Coordination with Maricopa Association of Governments, Valley Metro & Neighbor Cities (Mesa)

- Prop 400 expires 12/31/25
- Prop 400E Vote 2022 proposed

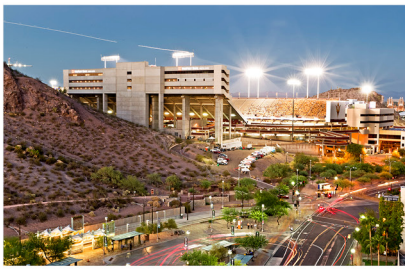
Future Council Direction for Funding and Planning

The City of Tempe and its employees are governed by Arizona law prohibiting the use of city resources to influence an election. A.R.S. § 9-500.14. Nothing in these materials are or should be construed as an attempt to influence the result of any election, and are provided solely for informational purposes for consideration by the Tempe City Council.



TEMPE/MESA STREETCAR FEASIBILITY STUDY

Tier 2 Evaluation Report



APRIL 2020

VALLEY METRO

TABLE OF CONTENTS

LIST OF TABLES

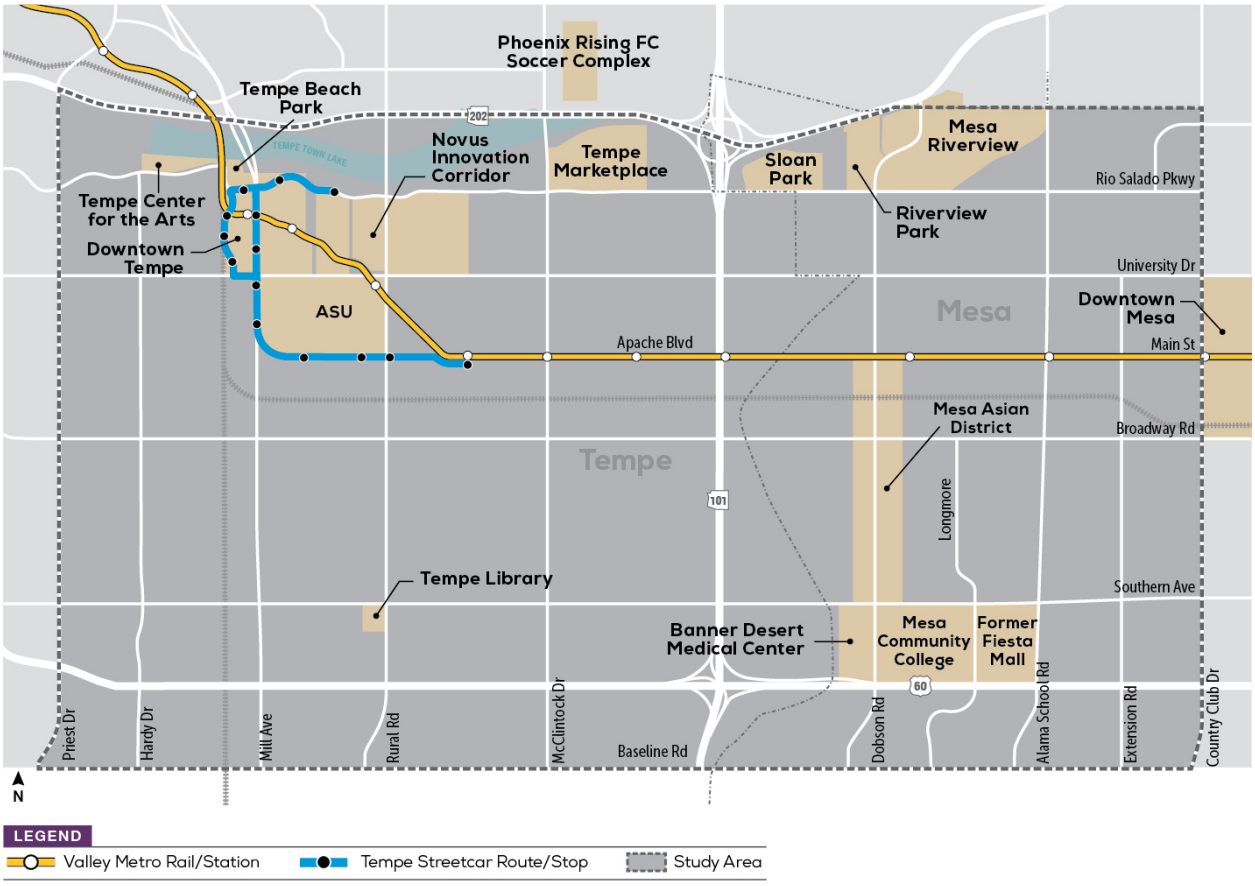
LIST OF FIGURES

1.0 INTRODUCTION

Valley Metro, with the cities of Tempe and Mesa, is evaluating the potential of a future streetcar system to connect the current Tempe Streetcar route in downtown Tempe with other points of interest, planned development and emerging transit corridors.

This Tempe/Mesa Streetcar Feasibility Study (TMSFS) identifies potential corridors as part of a future streetcar system to serve Tempe and Mesa, and informs a future regional funding initiative for transit capital investments. The study area for TMSFS is defined as the area bounded by State Route 202 (Loop 202) to the north, Country Club Drive to the east, Baseline Road to the south and Priest Drive to the west (**Figure 1**).

FIGURE 1: TEMPE/MESA STREETCAR FEASIBILITY STUDY AREA MAP



This report summarizes the Tier 1 and Tier 2 Evaluation results and provides recommendations for potential streetcar investments in the study area.

2.0 PURPOSE AND NEED

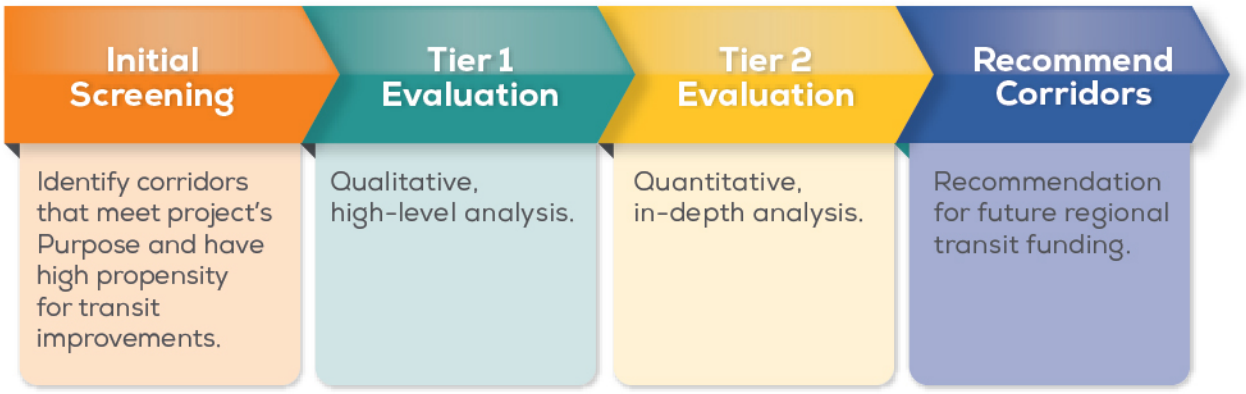
The purpose of the streetcar system extension is to improve mobility by providing a dependable and efficient transit option that serves employment and activity centers, educational facilities and residential areas in and around Mesa Riverview, Fiesta District, Tempe Marketplace, Marina Heights, Arizona State University, downtown Tempe, downtown Mesa, Tempe Public Library and the developing Novus Innovation Corridor. Expansion of the streetcar system in the study area would:

- Extend the streetcar system from downtown Tempe and Arizona State University to additional residential areas and destinations.
- Connect major regional destinations, downtowns, public facilities, university/community college campuses, employment cores and multi-unit residential areas.
- Aid mobility of transit-dependent populations.
- Assist with travel demand within the study area and between downtown Tempe and downtown Mesa.
- Support growing population and employment in the study area, along with the local planning priorities for transportation, land use and economic development.
- Further the momentum of economic and transit-oriented development in the study area.
- Enhance high-capacity transit connectivity by interfacing with existing light rail and potential future projects in the Fiesta District and along the Arizona Avenue corridor in Chandler.
- Enhance multi-modal connectivity between streetcar, high-ridership bus and circulator routes, and pedestrian and bicycle facilities.
- Identify potential improvements that can be adopted to make the corridors more competitive for future transit investments.
- Support regional efforts for congestion mitigation and air quality improvement.

3.0 EVALUATION METHODOLOGY

The feasibility study process includes a two-tiered evaluation approach to assess potential streetcar corridors identified to meet the Purpose and Need of the project. The TMSFS will conclude by prioritizing options to Tempe and Mesa city staff for further consideration and study. **Figure 2** illustrates the overall structure of the evaluation methodology.

FIGURE 2: EVALUATION METHODOLOGY



During initial screening, the study team identified major north/south and east/west roadways in the study area with potential for segmentation at logical terminus points, including major intersections and freeways. The evaluation also examined potential corridors outside roadway footprints, particularly the Tempe Town Lake south bank as an alternative to a portion of Rio Salado Parkway.

Corridors were then divided into logical segments for the Tier 1 Evaluation, developed in accordance with the Purpose and in collaboration with the Project Management Team (PMT). The Tier 1 Evaluation assessed general impacts to the physical environment, cost assumptions, ridership potential and operating characteristics affiliated with streetcar as the assumed transit mode.

The Tier 2 Evaluation entailed developing conceptual designs of the streetcar alignment alternatives, including corresponding stop/station locations. Stops/stations were generally based on typical spacing affiliated with streetcar, access to activity centers and connections to existing transit service. The Tier 2 Evaluation assessed right of way and historical impacts, cost estimates, land use potential and operating efficiencies.

The Tier 2 Evaluation will result in a recommended prioritization of corridors for future regional transit funding.

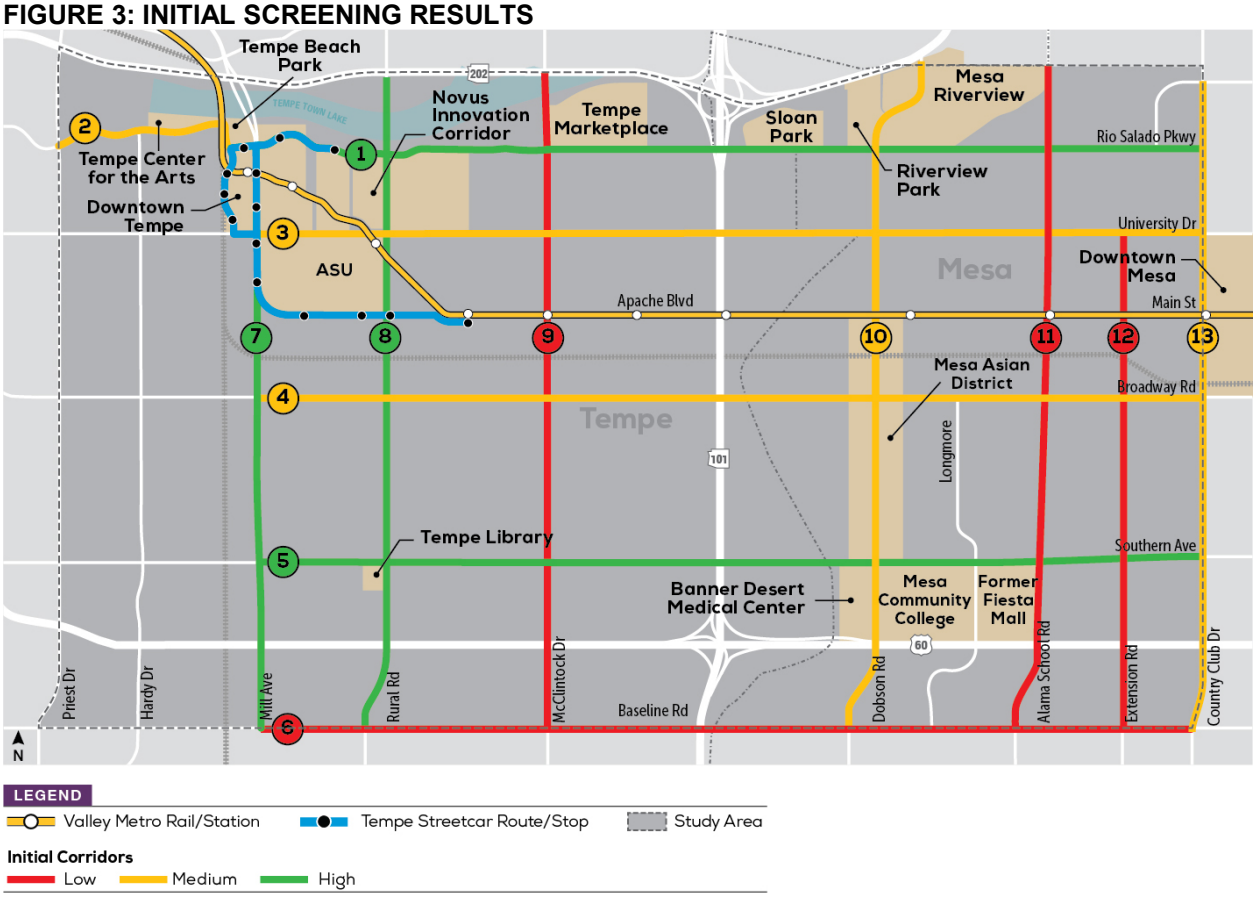
4.0 PREVIOUS EVALUATION RESULTS

4.1 INITIAL SCREENING AND RESULTS

After the identification of preliminary corridors based on major roadways, transit propensity was assessed based on input from the Initial Screening Results from the MAG Regional Transit Framework Study (RTFS) completed in February 2018 (*azmag.gov/programs/transportation/transit/regional-transit-framework-study*), the Valley Metro Transit Standards and Performance Measures Transit Propensity Tool and compatibility to local transportation or transit master plans.

Figure 3 shows the results of the initial screening. Each corridor was assigned a qualitative assessment describing its compatibility with the project's goals and objectives (low, medium or high). The four corridors with the poorest performance in the initial screening (Baseline Road, McClintock Drive, Alma School Road and Extension Road) received an evaluation of "Low" and were removed from consideration for the Tier 1 analysis. A segment running along the south bank of Tempe Town Lake (Segment 1C in **Figure 4**) was also identified by the PMT to advance to the Tier 1 Evaluation.

FIGURE 3: INITIAL SCREENING RESULTS



4.2 TIER 1 EVALUATION AND RESULTS

After completing the initial screening of arterials, the remaining corridors were subdivided into smaller segments. The segments were generally of similar length, using major arterials to divide the corridors. Each corridor was split into three segments, with the exceptions of Mill Avenue (two segments) and Rio Salado Parkway (one segment west of Ash Avenue). The Tier 1 Evaluation was generally a qualitative analysis of the segments. **Table 1** identifies the Tier 1 Evaluation criteria and associated elements. This set of criteria determined whether the alternatives met the goals and objectives of the TMSFS, as well as the Purpose Statement.

TABLE 1: TIER 1 EVALUATION CRITERIA

Criteria	Elements of Criteria
Ridership Potential	Population Density
	Low-Income Population Density
	Zero-car Household Density
	Employment Density
	Activity Center Destinations Served
	Existing and Future Transit Connections
	Existing Transit Ridership
Land Use and Economic Development	Consistency with Land Use Plans and Policies
	Redevelopment Opportunities
Physical and Engineering Constraints	Railroad Crossings
	Freeway Crossings
	Potential Right of Way Issues
	Potential Environmental Issues
Transportation Network Integrity and Functionality	Traffic Congestion of Segment
	Transit Speed and Reliability Impediments
	Transportation Plan Consistency
	Volume to Capacity

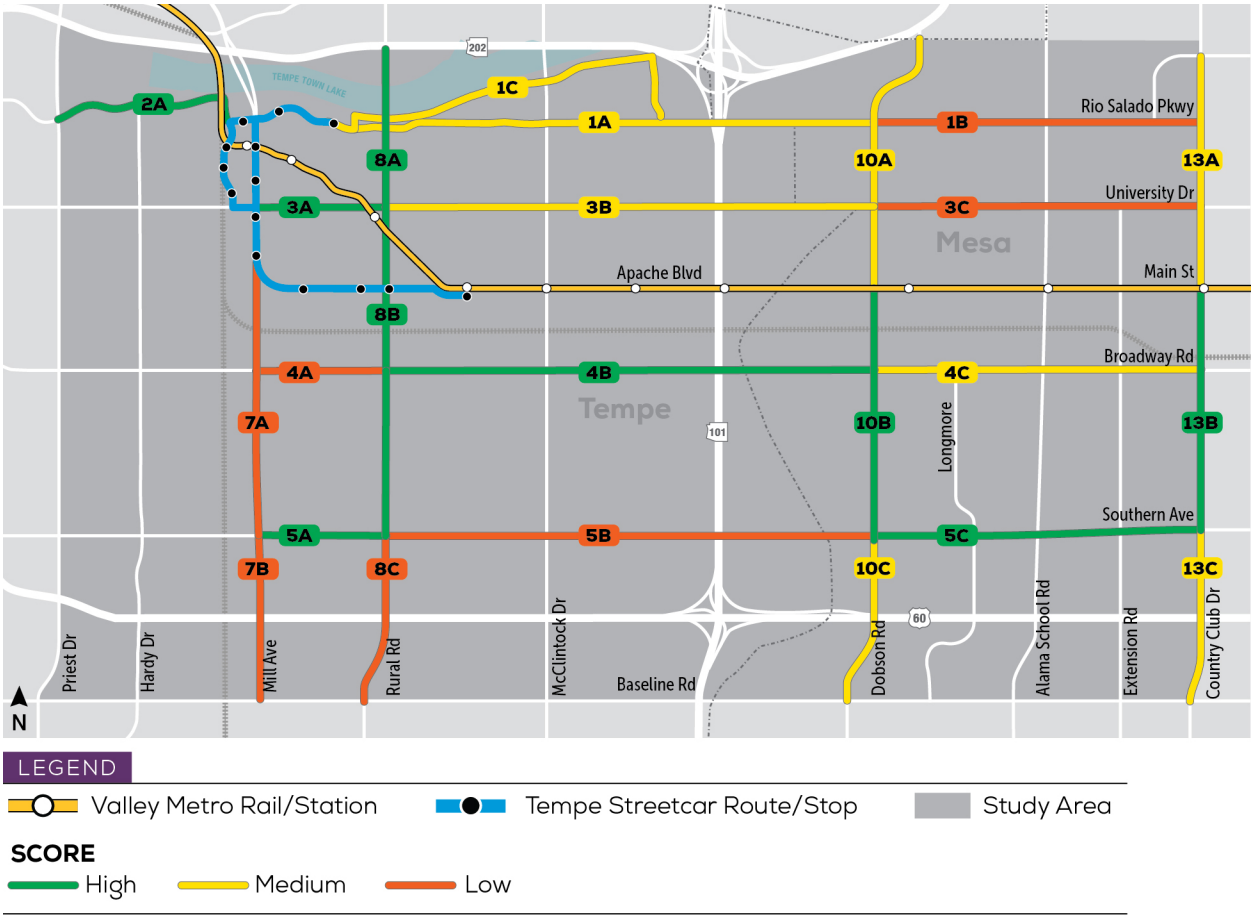
Each segment was analyzed and assigned a score for each of the 17 criteria elements. Seven of the elements were selected in collaboration with the PMT to have a higher weighted score because they aligned with the Purpose of the TMSFS. The criteria elements that were assigned higher weights included:

- Low-income population density

- Zero-car household density
- Activity center destinations served
- Land use plan/policy consistency
- Potential right of way issues
- Transportation plan consistency
- Volume to capacity

For each segment, individual scores for each criterion were totaled to produce an overall score. The segments' scores were ranked to determine which options would be most compatible for future streetcar service and justify further analysis in the Tier 2 Evaluation. **Figure 4** shows how each segment performed by ranking. Generally, the segments with higher scores were recommended to advance to Tier 2. The added segment along Tempe Town Lake's south bank (Segment 1C) was not advanced to Tier 2 due to extremely difficult technical challenges and resulting impacts associated with this option.

FIGURE 4: TIER 1 RESULTS



5.0 DEFINITION OF TIER 2 OPTIONS

5.1 OPTIONS DEFINITION

Given the results of the Tier 1 Evaluation, the PMT identified five potential options to advance to Tier 2 Evaluation for further analysis (**Figure 5**). The proposed options contain one or more segments from the Tier 1 Evaluation as follows:

Rio Salado Parkway East is composed of segment 1A beginning at the end of the Tempe Streetcar line at Marina Heights and running east along Rio Salado Parkway to Dobson Road. This option is approximately 3.4 miles and connects downtown Tempe, Arizona State University, Tempe Marketplace and Mesa Riverview District. This option also runs along the planned Novus Innovation Corridor and can be phased with the Dobson/Southern/Country Club option to connect to additional activity centers in Mesa.

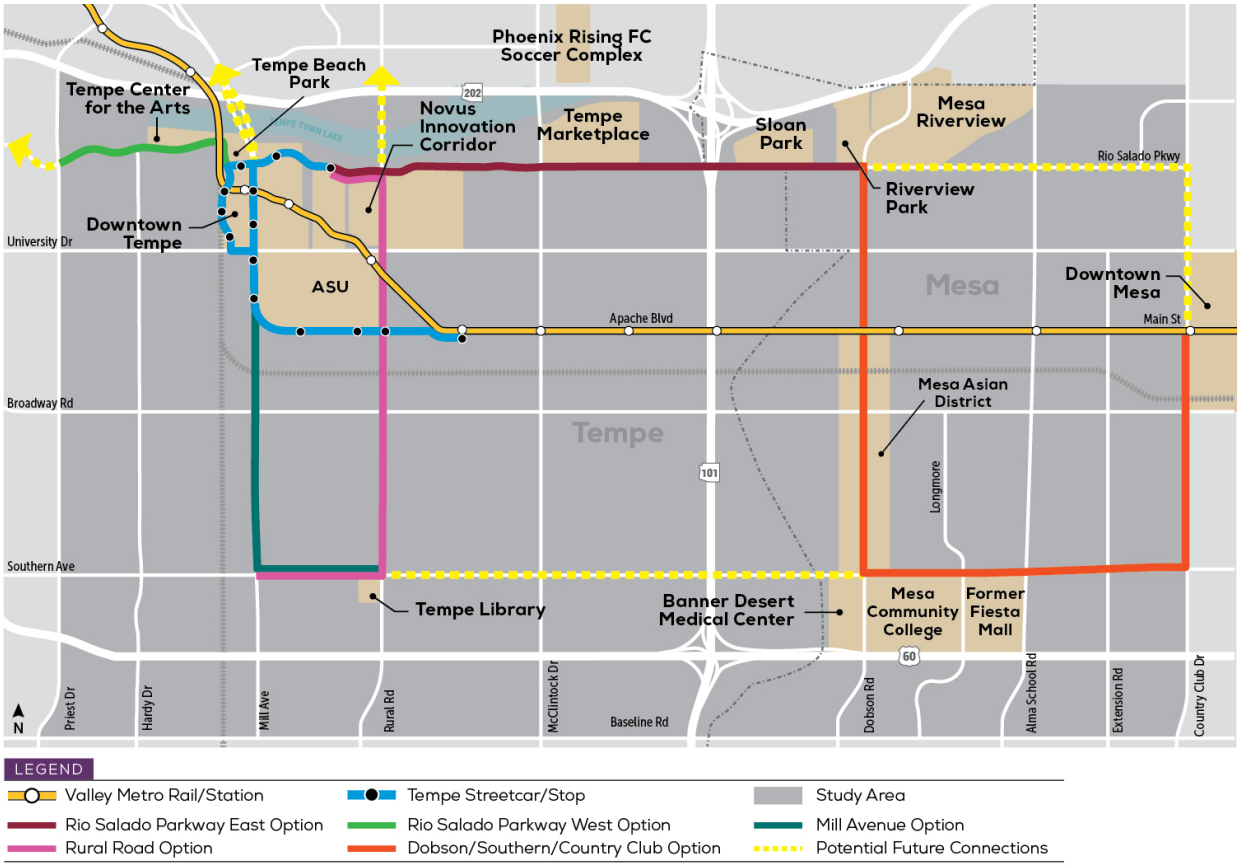
Dobson/Southern/Country Club is composed of segments 10A, 10B, 5C and 13B. This option begins at Dobson Road/Rio Salado Parkway where Rio Salado Parkway East ends, travels south on Dobson Road to Southern Avenue, then travels east to Country Club Drive where it turns north and ends at Country Club Drive/Main Street. This option is approximately 6.0 miles and connects Mesa Riverview District, East Valley Institute of Technology, Dobson Business Corridor, Fiesta District and downtown Mesa.

Mill Avenue is composed of segments 7A and 5A, beginning at Apache Boulevard/Mill Avenue and going south to Southern Avenue. The option then heads east before ending at Southern Avenue/Rural Road. This option is approximately 2.5 miles and connects downtown Tempe, Arizona State University and the Tempe Public Library and History Museum.

Rural Road is composed of segments 8A, 8B and 5A. Beginning at the end of the Tempe Streetcar line at Marina Heights, this option travels south on Rural Road to Southern Avenue, turning west and ending at Southern Avenue/Mill Avenue. This option is approximately 3.2 miles and connects Arizona State University, Novus Innovation Corridor and the Tempe Public Library and History Museum.

Rio Salado Parkway West is composed of segment 2A, running along Rio Salado Parkway from Priest Drive to Ash Avenue. This option is approximately 1.2 miles and connects the Tempe Center for the Arts, Tempe Beach Park and I.D.E.A. Tempe.

FIGURE 5: TIER 2 OPTIONS AND FUTURE CONSIDERATIONS



Despite the elimination of certain segments resulting from the Tier 1 Evaluation, unanticipated future circumstances may warrant reevaluation of these corridors. For example, future development or activity centers in the study area could drive a desire to serve these areas with a streetcar travel mode. **Figure 5** illustrates the segments that could warrant future streetcar consideration:

- Rio Salado Parkway between Dobson Road to Country Club Drive
- Southern Avenue between Rural Road and Dobson Road
- Country Club Drive between Rio Salado Parkway and Main Street
- Rio Salado Parkway west of Priest Drive
- Mill Avenue north of Rio Salado Parkway
- Rural Road north of Rio Salado Parkway

5.2 CONCEPTUAL DESIGN CROSS SECTIONS

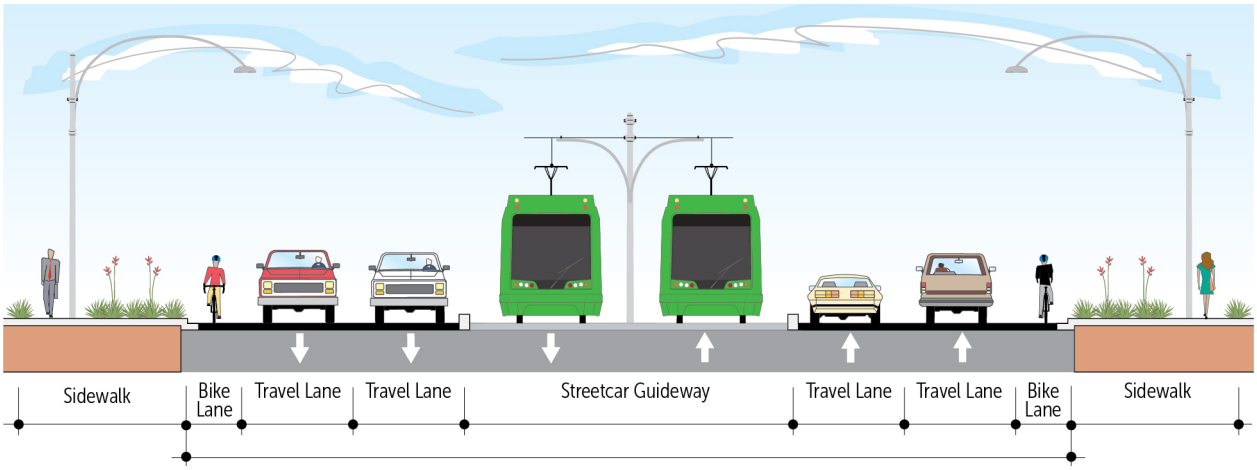
For the five Tier 2 options, conceptual designs were developed for a preliminary understanding of potential impacts to street and traffic lane configurations, right of way needs and potential stop locations. Several different configurations could be used when potentially constructing streetcar in these corridor options, including:

- Semi-exclusive streetcar guideway where the streetcar crosses at-grade with other roadway traffic at intersections and requires repurposing automobile lanes or widening the road for guideway right of way.
- Mixed-flow guideway where automobiles and streetcar share lanes either in the median or curb lanes.
- Mixed-flow turn lanes where left-turning automobiles share lanes with streetcar.
- Turn lanes between streetcar guideway for left-turning automobiles.
- Roundabouts with rail where typical four-way intersections are converted into roundabouts to allow all turning movements with less turn lanes for automobiles.

Based on direction from the PMT, the following streetcar configurations were selected for purposes of this study for each of the Tier 2 Evaluation options. These configurations were selected because they represent good “exhaustive options” for the purpose of this comparative feasibility analysis.

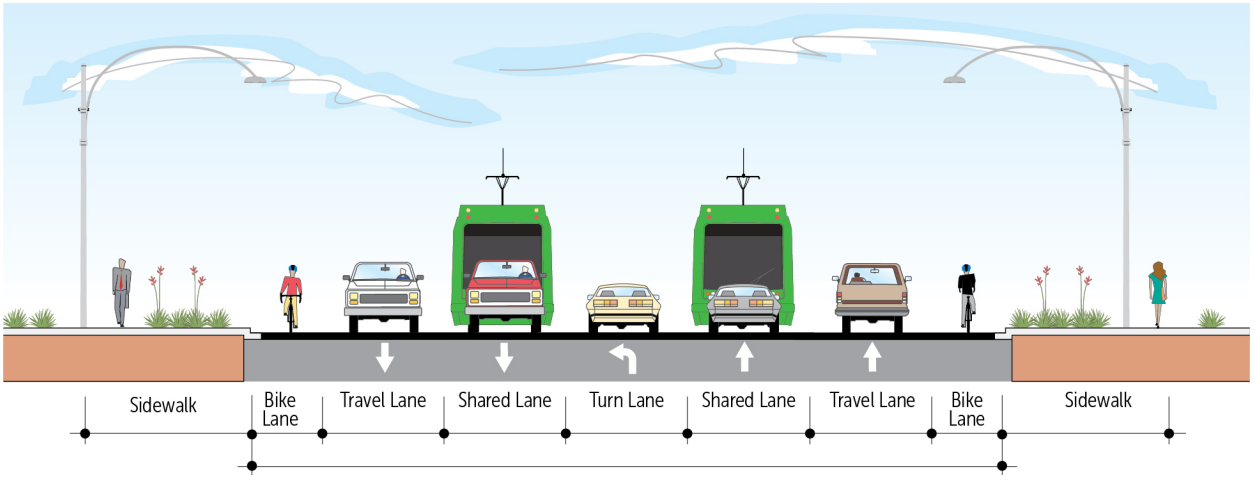
Rio Salado Parkway East concept would operate streetcar in a semi-exclusive, median-running guideway along the alignment. This alignment would be at-grade since there are no railroad or canal crossings. **Figure 6** illustrates the cross section with streetcar running east along Rio Salado Parkway between McClintock Drive and Loop 101.

FIGURE 6: RIO SALADO EAST OPTION SEMI-EXCLUSIVE CONCEPTUAL CROSS SECTION



Dobson/Southern/Country Club concept features two configurations. Along Dobson Road, streetcar would operate similarly to the Rio Salado Parkway East option (**Figure 6** above), with semi-exclusive, median-running guideway. This section would require an elevated structure between Main Street and Broadway Road to pass over the Union Pacific Railroad. On Southern Avenue, the right of way may be limited due to the recent streetscape improvements in the Fiesta District area. This section would operate streetcar in a mixed through lane with left turns allowed in a separate center turn lane. This mixed-flow configuration illustrated in **Figure 7** shows Southern Avenue between Dobson Road and Alma School Road.

FIGURE 7: DOBSON/SOUTHERN/COUNTRY CLUB OPTION MIXED-FLOW CONCEPTUAL CROSS SECTION

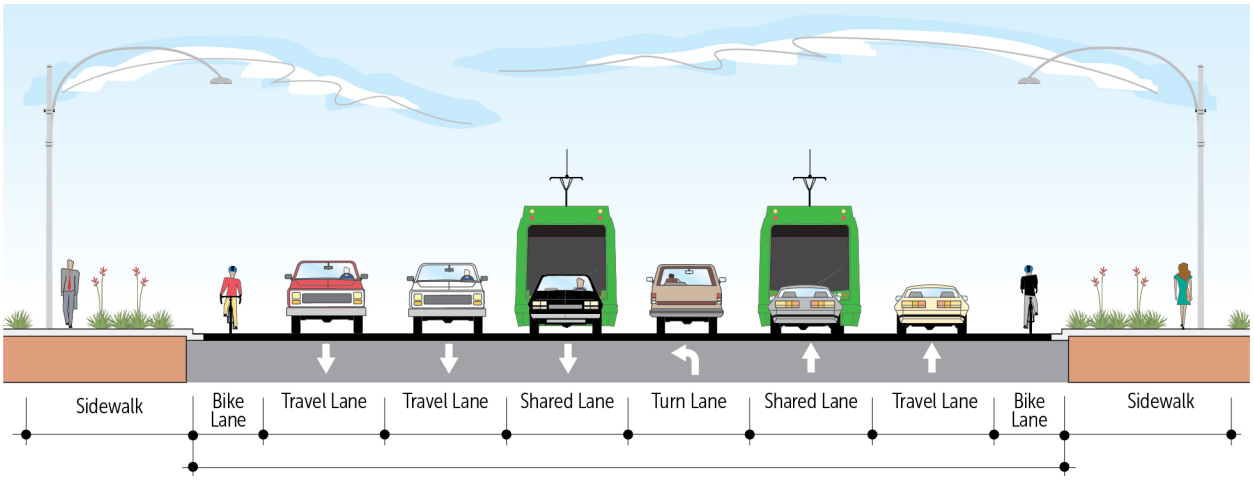


The configuration for the rest of the option's alignment on Southern Avenue from Alma School Road to Country Club Drive and on Country Club Drive would be similar to the configuration shown in **Figure 7**, with the exception of an additional vehicular lane in both

directions. The alignment along Country Club Drive passes below grade of the Union Pacific Railroad, so no structure is needed for this section.

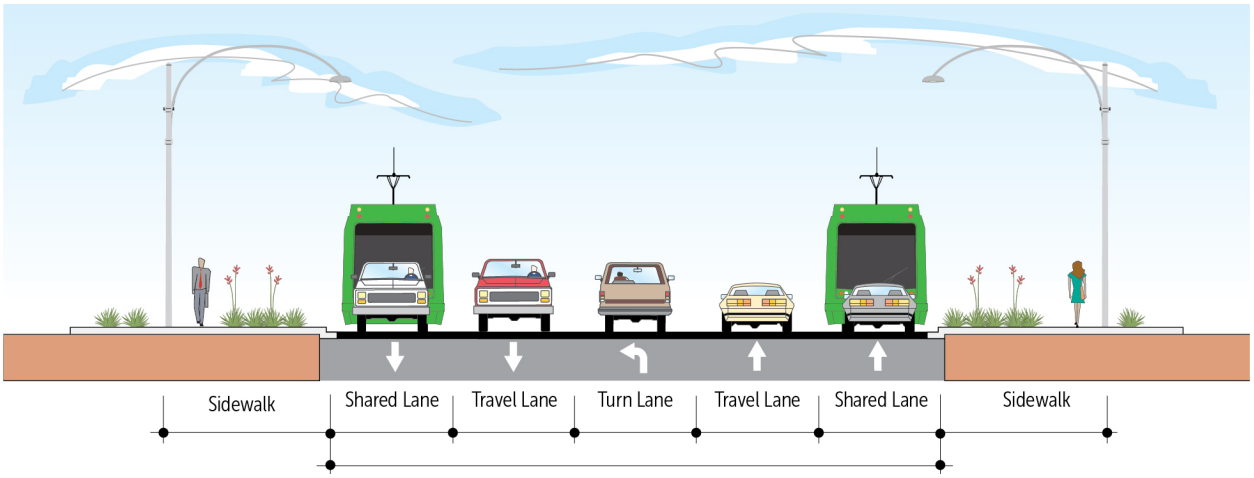
Rural Road concept features two configurations. Along Rural Road, streetcar would operate mixed-flow in the left through lane with left turns allowed in a separate center turn lane, similar to Country Club Drive (shown in **Figure 7**), with an additional vehicle lane in each direction. This section would require an elevated structure between Apache Boulevard and Broadway Road to pass over the Union Pacific Railroad. Along Southern Avenue, streetcar would also operate mixed-flow in the left through lane with left turns allowed in a separate center turn lane, with the exception being one fewer eastbound vehicular lane (**Figure 8**).

FIGURE 8: RURAL ROAD OPTION MIXED-FLOW CONCEPTUAL CROSS SECTION ON SOUTHERN AVENUE



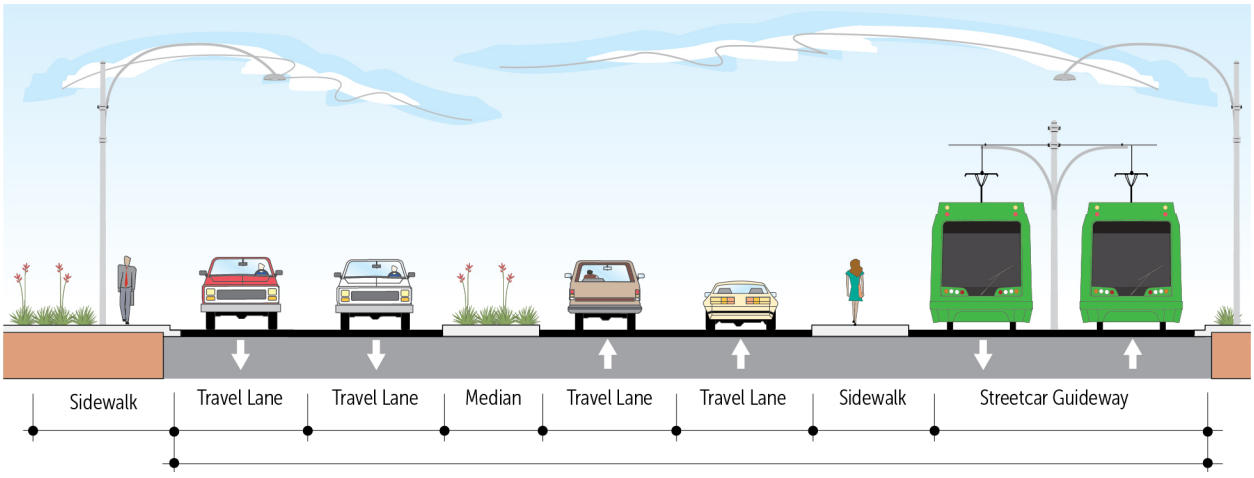
Mill Avenue concept features two configurations. Along Mill Avenue, streetcar would operate mixed-flow in the right through lane with left turns allowed in a separate center turn lane, as shown in **Figure 9**. The alignment along Mill Avenue passes below grade of the Union Pacific Railroad, so no structure is needed for this section. Along Southern Avenue, streetcar will operate mixed-flow in the left through lane with left turns allowed in a separate center turn lane, similar to the configuration shown in **Figure 8**.

FIGURE 9: MILL AVENUE OPTION MIXED-FLOW CONCEPTUAL CROSS SECTION



Rio Salado Parkway West concept would operate in a semi-exclusive, side-running guideway along the north side of Rio Salado Parkway. This alignment would be at-grade, passing below the elevated tracks of Valley Metro Light Rail and the Union Pacific Railroad. **Figure 10** illustrates the streetcar configuration running west on Rio Salado Parkway between Lakeside Drive and Hardy Drive.

FIGURE 10: RIO SALADO PARKWAY WEST OPTION EXCLUSIVE CONCEPTUAL CROSS SECTION



6.0 TIER 2 EVALUATION AND RESULTS

6.1 EVALUATION CRITERIA

The Tier 2 Evaluation is the secondary screening of potential streetcar options identified in Tier 1. The recommended options underwent a detailed, generally quantitative analysis. **Table 2** identifies the Tier 2 Evaluation criteria and associated elements. The PMT identified three criteria (*Mobility Improvements*, *Access* and *Land Use/Economic Development*) to be of greater importance in the analysis, and assigned those elements a criteria weight of two. The other three criteria groups were assigned a weight of one.

TABLE 2: TIER 2 EVALUATION CRITERIA

Criteria	Elements of Criteria	Description (Sources)
Mobility Improvements	Daily Transit Trips	Forecasted daily transit trips on project per stop. Assumed 15 mph operating speed with a transfer to Tempe Streetcar (FTA STOPS Ridership Forecasting).
	Zero-car Transit Trips	Forecasted percent of trips on project by zero-car households. Assumed 15 mph operating speed (FTA STOPS Ridership Forecasting Model).
	Connectivity with other High-capacity Transit (HCT)	Connectivity with existing and potential future HCT (Tempe Streetcar, Light Rail, Fiesta District Alternatives Analysis, proposed commuter rail).
Access	Population in Study Area	Future population density (population per square mile) within half-mile of stop areas (MAG 2040 Population).
	Employment in Study Area	Future employment density (employees per square mile) within half-mile of stop areas (MAG 2040 Employment).
	Publicly-supported Housing in Study Area	Number of publicly-supported low-income housing units within half-mile of stop (Low-Income Housing Tax Credit and National Housing Preservation Database).
	Connection with Bus Transit	Connections to existing bus routes (local bus routes, circulators, Express buses).
	Connection with Bikeways	Connections to bikeways and multi-use paths (parallel and intersecting).
Potential Impacts	Vehicular Traffic Capacity Impact	Change in number of non-transit vehicle (car-only) through lanes (non-turning lanes) as a measure of change in corridor car capacity.
	Right of Way	Square feet per mile (length of each respective option) of right way and land acquisition based on conceptual drawings for each alignment.
	Historical and Cultural Resources	Number of resources with potential right of way impacts within one-half mile of each corridor (Tempe Streetcar Environmental Assessment, National Historic Register, Mesa and Tempe city websites).
	Section 4(f) Resources	Number of Section 4(f) resources within one-quarter mile of options (Tempe Streetcar Environmental Assessment, National Historic Register, Mesa and Tempe city websites).
	Environmental Issues	List of environmental and archaeological issues that may need impact assessment to determine if mitigation is needed (outside of historic and cultural resources and Section 4(f) resources) along each alignment.
	Utilities	Existing utilities along each corridor based on preliminary field assessment.

Criteria	Elements of Criteria	Description (Sources)
Land Use/Economic Development	Land Use Plan Consistency	Consistency with adopted land use plans/policies, identifying HCT-compatible land uses such as multi-family, mixed-use and commercial/office uses (Tempe 2040 General Plan, Mesa 2040 General Plan, Tempe Urban Core Master Plan).
	Development Potential	Potential for redevelopment and/or transit-oriented development opportunities within half-mile of stop areas. Total number of acres of commercial, public and vacant lands from Maricopa County Assessor data.
	Development Integration	Potential opportunities for integration with existing and planned developments along the alignments.
Costs	Total Capital Cost	Rough order-of-magnitude capital cost estimates that assume top range of 2019 dollars with 40% contingency and includes all FTA Standard Cost Category elements (vehicles, maintenance facility, etc.).
	Operations and Maintenance Cost	Rough order of magnitude gross operating cost estimate per year, assuming Tempe Streetcar's operating plan from April 2018 in 2018 dollars.
	Cost Effectiveness	Annual cost per rider based on annualized capital and operations and maintenance costs divided by annual ridership.
	Potential Opportunities for Financial Partnerships/Shared Costs	Identify and list potential opportunities for financial public-private partnerships (capital and/or operating), based on number of large-scale private (or quasi-private) institutions that are (or are anticipated to be) near or along each corridor.
Efficiencies	Operating Efficiency	Transit operational efficiencies including number of turns, end of line placement, compatibility with Tempe Streetcar, etc.
	Transit Speed/Reliability	Obvious transit speed and reliability impediments (signaled intersections, special events, curb cuts/turning conflicts, etc.).
	Scalability	Ability for an option to be sensibly split into phases.

6.2 TIER 2 EVALUATION RESULTS

The five streetcar options were compared to each other across all criteria and given a rating that indicated "high," "medium" or "low" performance in each criterion. The outcomes for each option were summarized and used to rank the options.

Table 3 summarizes the Tier 2 Evaluation results for the five options shown in **Figure 5**. The ratings for each criteria element are summarized and the overall ranking of the options are indicated. The full Tier 2 Evaluation Matrix is provided in **Appendix A**, which provides the details and data for each criterion.

TABLE 3: TIER 2 EVALUATION SUMMARY

Rank	Corridor Option	Mobility Improvements	Access Opportunities	Potential Impacts	Land Use/ Development	Costs	Efficiencies
1	Rio Salado Parkway East	▲	▲	●	●	▲	●
2	Rural Road	●	●	●	◆	▲	◆
3	Dobson/ Southern/ Country Club	▲	◆	◆	●	◆	●
4	Mill Avenue	▲	◆	▲	◆	●	●
5	Rio Salado Parkway West	◆	◆	●	◆	●	◆

● High Performance; ▲ Medium Performance; ◆ Low Performance

Overall, each option has unique opportunities and challenges to be feasible for streetcar extension.

Rio Salado Parkway East is the leading alternative (outright or tied) in three of the six criteria categories (*Potential Impacts*, *Land Use/Development* and *Efficiencies*) and also performs strongly in *Access Opportunities* and *Mobility Improvements*. This option has high potential for future ridership given the planned mixed-use and multi-family developments along Rio Salado Parkway, especially between Rural Road and McClintock Drive. Rio Salado Parkway also features a 14-foot transit easement along both sides of the road from Marina Heights to Loop 101, a required condition in the planned area development approval process, greatly decreasing the potential right of way impacts and their associated costs.

Rural Road is the leading alternative in *Mobility Improvements* and *Access Opportunities* and performs strongly in *Potential Impacts*. The Rural Road option was identified by MAG (2019 RTFS Update) as a regional target for HCT investment due to the corridor's existing transit market and large population and employment densities. Although there are fewer opportunities for redevelopment, the existing built environment and transit market are supportive of additional HCT investment.

Dobson/Southern/Country Club is the leading alternative in the *Efficiencies* category and performs strongly in *Mobility Improvements* and *Land Use/Development*. This option has been identified as the recommended alternative in the Fiesta District Alternatives Analysis, serving large activity centers such as Mesa Riverview, Mesa Asian District, Mesa Community College and downtown Mesa. Although this is the longest and most expensive option, it has multiple opportunities for phasing to connect large activity centers.

Mill Avenue is the leading alternative in *Costs* and also performs strongly in *Mobility Improvements* and *Efficiencies*. The Mill Avenue option was initially an option considered for the Tempe Streetcar project, designated as a streetcar focus area. This corridor serves a large residential population while avoiding significant right of way impacts. The Mill Avenue option would also provide service to Arizona State University and Tempe High School. However, similar to the Rural Road option, Mill Avenue has fewer opportunities for redevelopment.

Rio Salado Parkway West performs strongly in *Potential Impacts* and *Costs* due to its minimal impact to private properties and short length. This area is prime for redevelopment, as multiple multi-family and destination projects have recently been constructed or planned, including the I.D.E.A. Tempe campus. This option could later be farther extended west on Rio Salado Parkway or north on Priest Drive. Design challenges for this option include a major underground utility line generally along Rio Salado Parkway in the vicinity of the light rail and Union Pacific bridges. Additionally, this option could potentially encroach on Tempe Beach Park.

7.0 STAKEHOLDER OUTREACH

In early 2020, Valley Metro and the cities of Tempe and Mesa conducted community outreach through a series of meetings that provided a high-level review of the study including information about process, corridor evaluation to date and next steps to advance options.

The project team provided updates at local board and commission meetings and partnered with other project/study teams to present streetcar extension study information at their public meetings within the study area (**Table 4**). Community members reviewed the evaluated corridors, including a preliminary ranking of potential corridors for investment based on the Tier 2 Evaluation.

TABLE 4: LIST OF KEY STAKEHOLDER MEETINGS

Stakeholder	Meeting Date
Public Meeting: Tempe Urban Core Master Plan	January 23, 2020
Public Meeting: Tempe Urban Core Master Plan	January 23, 2020
City of Tempe: Commission on Disability Concerns	February 3, 2020
City of Tempe: Neighborhood Advisory Commission	February 5, 2020
City of Tempe: Development Review Commission	February 11, 2020
City of Tempe: Sustainability Commission	February 12, 2020
City of Tempe: Historic Preservation Commission	February 12, 2020
City of Tempe: City Manager's Update to City Council	February 13, 2020
City of Tempe: Arts and Culture Commission	February 18, 2020
City of Tempe: Parks, Recreation, Golf and Double Butte Cemetery Advisory Board	February 19, 2020
City of Tempe: Transportation Commission	TBD

Discussion at the commission and board meetings focused on understanding the study process and results at this phase. Questions from attendees included the projected duration of the study and anticipated timelines for potential decision-making and construction. Attendees were interested in how past studies' results were incorporated and considered in this study. Several groups expressed support for a more regional view of transit and appreciated the coordination in this study between the cities of Tempe and

Mesa. Several groups also shared concerns that this study did not address the gap in transit connectivity between north and south Tempe. There were several discussions about the various criteria used to evaluate the recommended corridors and why some corridors were removed from further evaluation earlier in the study. In general, commissions and boards seemed to view the study's methodology and results favorably. *Note: the Transportation Commission presentation occurs after the publication of this report and will be incorporated into documents at a later date.* Future presentations will provide details from the final report to community members and city leadership to determine potential next steps.

8.0 NEXT STEPS

Based on direction from the PMT, the feasibility study will proceed with land use evaluations and identification of opportunities for transit-supportive enhancements for all five of the remaining streetcar options.

A final report will share those results and provide a recommended prioritization for each of the five options. The report will include potential actions the cities of Mesa and Tempe could take to prepare for future streetcar system extensions, including potential interim transit enhancements and identifying opportunities for transit-supportive development.

APPENDIX A:
TIER 2 EVALUATION MATRIX

Tempe/Mesa Streetcar Feasibility Study
Tier 2 Evaluation - 1 of 4

SCORING
3 = Optimal Performance, **2** = Moderate Performance, **1** = Substandard Performance

		Evaluation Criteria	Description	Assumptions	Evaluation Criteria Weight	A Rio Salado Pkwy East 3.37 miles 3.94 sq.mi.		B Dobson/Southern/CClub 6.01 miles 6.44 sq.mi.		C Mill Avenue 2.47 miles 3.15 sq.mi.		D Rural Road 3.58 miles 4.19 sq.mi.		E Rio Salado Pkwy West 1.21 miles 1.78 sq.mi.	
						Score	Detail	Score	Detail	Score	Detail	Score	Detail	Score	Detail
1	Mobility Improvements	**Daily Transit Trips**	Forecasted daily transit trips on project per stop. STOPS model; 2040 forecast	Total trips at 15mph (assumed operating speed, with a transfer to TSC) per total number of stops Under 200 = 1; 200-400 = 2; Over 400 = 3	**2**	1	70	2	378	3	430	3	507	1	140
2		**Zero-car Transit Trips**	Forecasted zero-car transit trips. STOPS model, 2040 forecast	Percent zero-car trips at 15mph (assumed operating speed) Under 50% = 1; 50%-60% = 2; Over 60% = 3	**2**	3	79%	2	58%	1	46%	1	50%	2	58%
3		**HCT Connectivity**	Connectivity with other regional high capacity transit (current and future)	No direct connections = 1; 1-2 connections = 2; 3 or more connections = 3	**2**	2	FDAA, Tempe Streetcar	2	Intersects LRT, FDAA, Commuter rail Does not connect to Tempe Streetcar on its own	2	Commuter rail, Tempe Streetcar	3	Intersects LRT, Commuter rail, Tempe Streetcar	2	Commuter rail, Tempe Streetcar
					Subtotal	**12**		**12**		**12**		**14**		**10**	
4	Access	**Population**	Future population density in half-mile stop areas. MAG TAZ data - 2040 Total Population	Population per square mile within stop areas (1/2-mile buffer); Under 8,000 = 1; 8,000-10,000 = 2; Over 10,000 = 3	**2**	2	8,608	1	7,932	2	9,715	3	15,313	1	7,213
5		**Employment**	Future employment density in half-mile stop areas. MAG TAZ data - 2040 Total Employment	Employment per square mile within stop areas (1/2-mile buffer) Under 7,000 = 1; 7,000-9,000 = 2; Over 9,000 = 3	**2**	2	8,113	1	4,836	1	6,295	2	7,196	3	11,608
6		**Affordable Housing**	Affordable housing in half-mile stop areas. Source: 2019 NHPD and LIHTC low-income data (if an address is listed in both, defer to LIHTC data)	Total units within stop areas; 0 units = 1; 1-100 units = 2; Over 100 units = 3	**2**	1	0	3	410	2	48	2	45	2	57
7		**Other Transit Connectivity (Bus)**	Connections with other existing transit routes (local and express buses)	5 or less connections = 1; 6-10 connections = 2; Over 10 connections = 3	**2**	2	5 local bus routes 2 circulators	2	7 local bus routes 1 circulator	2	1 Express route 5 local bus routes 3 circulators	3	1 Express route 8 local bus routes 4 circulators	1	3 local bus routes
8		**Bike/Ped Connectivity**	Connections with bikeways or multi-use paths (parallel and intersecting)	Poor/Limited connections/infrastructure = 1; Some path proximity/ infrastructure = 2; Good infrastructure and path proximity = 3	**2**	3	Close proximity to Rio Salado Pathway; Bike lane along entire alignment	2	Intersects Tempe Canal Trail; Partial bike lane coverage along Dobson and Southern	2	Bike lane and paved shoulder along most of Mill; None on Southern	1	Close proximity to Rio Salado Pathway; No bike lanes	2	Close proximity to Rio Salado Pathway; Paved shoulder along Rio Salado
					Subtotal	**20**		**18**		**18**		**22**		**18**	

Tempe/Mesa Streetcar Feasibility Study
Tier 2 Evaluation - 2 of 4

SCORING
3 = Optimal Performance, **2** = Moderate Performance, **1** = Substandard Performance

		Evaluation Criteria	Description	Assumptions	Evaluation Criteria Weight	A Rio Salado Pkwy East 3.37 miles 3.94 sq.mi.		B Dobson/Southern/CClub 6.01 miles 6.44 sq.mi.		C Mill Avenue 2.47 miles 3.15 sq.mi.		D Rural Road 3.58 miles 4.19 sq.mi.		E Rio Salado Pkwy West 1.21 miles 1.78 sq.mi.	
						Score	Detail	Score	Detail	Score	Detail	Score	Detail	Score	Detail
9	Impacts	**Vehicular Traffic Capacity Impact**	Change in number of non-transit vehicle (car-only lanes) thru-lanes (not turn lanes) as a measure of change in corridor car capacity	Over 40% reduction in car thru lanes=1; Moderate change (20%-40%) = 2; All car lanes preserved = 3	**1**	3	All car lanes preserved: 4 to 4 car-only lanes; Rio Salado: 4 to 4 car	2	16 to 10 car-only lanes; Dobson: 6 to 2 strcr+4 car; Southern: 4 to 2 shared+2 car; CClub: 6 to 2 shared+4 car	1	Least amount of car lanes preserved. 9 to 5 car-only lanes; Mill: 4 to 2 shared+2 car; Southern: 5 to 2 shared+3 car	2	11 to 7 car-only lanes; Rural: 6 to 2 shared+4 car; Southern: 5 to 2 shared+3 car	3	Most car lanes preserved: 4 to 4 car-only lanes Rio curve: 4 to 1 shared+3 car; Rio Salado: 4 to 4 car
10		**Right of Way**	Right of Way (ROW) and land acquisition based on conceptual drawings. ROW square feet per mile for each alignment (totals in parentheses)	20,000+ sq.ft/mi = 1; 20,000 - 10,000 sq.ft/mi = 2; <10,000 sq.ft/mi = 3 (Excludes city property and transit easement along Rio Salado Pkwy)	**1**	1	30,958 sq.ft./mile (104,328 sq.ft.)	1	20,321 sq.ft./mile (122,128 sq.ft.)	3	189 sq.ft./mile (465 sq.ft.)	2	18,119 sq.ft./mile (64,865 sq.ft.)	3	3,276 sq.ft./mile (3,963 sq.ft)
11		**Historical Resources**	Number of resources with potential ROW takes within 1/2 mile of corridors. Source: Tempe Streetcar EA Section 4(f) Chapter (2015), National Historic Register, Cities of Mesa/Tempe	Qualitative assessment based on the presence of historic properties and potential for impact Higher presence/potential for impacts = 1; Moderate presence/potential for impacts= 2; Low presence/potential for impacts = 3	**1**	3	No properties.	3	Some historic districts within half mile of Main/Country Club intersection	1	18 properties along Mill from 10th Street to UPRR; University Park Historic District & houses; Date Palm Manor District; Tempe History Museum (likely eligible, 50 yrs. old)	2	Elias-Rodriguez House (8th St/Rural); Tempe History Museum (likely eligible, 50 yrs. old); Possible unlisted historic properties along corridor	2	5 properties at Ash/Rio Salado; Gonzales-Martinez House (1st Ave/Farmer); Baseball field in TB Park
12		**Section 4(f) Resources**	Number of resources with potential ROW takes within 1/4 mile of corridors. Source: Tempe Streetcar EA Section 4(f) Chapter (2015), Cities of Mesa/Tempe website	Qualitative assessment based on the presence of Section 4(f) Resources and potential for impact Higher presence/potential for impacts = 1; Moderate presence/potential for impacts= 2; Low presence/potential for impacts = 3	**1**	2	ASU Sun Devil Stadium Hayden Butte Preserve Park Riverview Park Sloan Park	2	Mesa Riverview Park, Guerrero Rotary Park; Rose Garden	3	Birchett Park	3	ASU Sun Devil Stadium	1	Tempe Beach Park - requires ROW from park
13		**Environmental Issues**	List environmental and archaeological issues that may need impact assessment to determine if mitigation is needed (outside of historic/cultural and section 4(f))	3+ overarching issues = 1 2 issues = 2; 1 issue = 3	**1**	2	Archaeological (Hayden Butte 'OidbD Do'ag, archaelogical potential in area of Sloan Park/ Riverview Park/ Mesa Riverview)	1	Tempe Canal crossing; Noise/ vibration; Significant archaeological potential near Riverview	2	Noise/vibration; Archaeological (Hudson Cotton Camp @ Rural & Southern likely an archaeological site)	2	Noise/vibration; Archaeological (Hudson Cotton Camp @ Rural & Southern likely an archaeological site)	2	Noise/vibration; Archaelogical
14		**Utilities**	Existing utilities along corridor of alternative	Qualitative assessment based on preliminary utilites survey See Utilities Survey map in the "Utilities" tab	**1**	3	Least utilities to mitigate	1	Most utilities to mititgate	2	Several utilities to mitigate	2	Several utilities to mitigate	2	Several utilities to mitigate
					Subtotal	**14**		**10**		**12**		**13**		**13**	

Tempe/Mesa Streetcar Feasibility Study
Tier 2 Evaluation - 3 of 4

SCORING
3 = Optimal Performance, **2** = Moderate Performance, **1** = Substandard Performance

		Evaluation Criteria	Description	Assumptions	Evaluation Criteria Weight	A Rio Salado Pkwy East 3.37 miles 3.94 sq.mi.		B Dobson/Southern/CClub 6.01 miles 6.44 sq.mi.		C Mill Avenue 2.47 miles 3.15 sq.mi.		D Rural Road 3.58 miles 4.19 sq.mi.		E Rio Salado Pkwy West 1.21 miles 1.78 sq.mi.	
						Score	Detail	Score	Detail	Score	Detail	Score	Detail	Score	Detail
15	Land Use / Economic Development	**Land Use Plan Consistency**	Consistency with adopted land use plans/policies. Sources: Tempe 2040 General Plan, Mesa 2040 General Plan, Tempe Urban Core Master Plan	Qualitative assessment of HCT-compatible land uses (multi-family,mixed use, commercial, office); Non-HCT-friendly land use/not planned HCT corridor = 1; Somewhat HCT-friendly land use/future HCT corridor = 2; HCT-friendly land use/future HCT corridor = 3	**2**	3	Heavy presence of multi-use, commercial, and activity districts; streetcar focus area corridor	3	Commercial and residential with activity centers; planned transit corridor	2	Heavy presence of residential with some commercial; streetcar focus area corridor	2	Half mixed-use, half residential with some commercial; high capacity transit corridor	1	Mixed-use, commercial and public open space; not designated transit corridor
16		**Development Potential**	Redevelopment / TOD opportunities Acres of land compatible for redevelopment (commercial, public, vacant) within 1/2 mile stop areas. Current County Assessor parcels	Under 1,000 acres = 1; 1,000 acres - 1,500 acres = 2; Over 1,500 acres = 3	**2**	3	1,529 acres High potential between ASU and Tempe Marketplace	3	1,647 acres High potential, especially along Southern Ave and Country Club Dr	1	270 acres Lower potential	1	269 acres Some potential around ASU	2	568 acres Moderate potential around I.D.E.A. Tempe campus and TCA
17		**Development Integration**	Identify and list opportunities to intergrate with existing and planned developments along alignment.	3 or more opportunities = 3; 2 opportunities = 2; 1 or none = 1	**2**	3	Highest potential for integration into Novus, Tempe Marketplace and Mesa Riverview	2	Mesa Riverview and former Fiesta Mall	1	No significant planned developments	1	Potential at ASU/Novus	2	Potential for integration into I.D.E.A. Tempe campus and other future developments
					Subtotal	**18**		**16**		**8**		**8**		**10**	
18	Cost	**Total Capital Cost**	Rough order-of-magnitude capital cost; Assumes top range of estimate. 2019 dollars; 40% contigency and all FTA SCC items (vehicles, basic O&M facility, etc.) included	$ (under $500M) = 3; $$ ($500M - $900M) = 2; $$$ (over $900M) = 1	**1**	2	$$	1	$$$	3	$	2	$$	3	$
19		**Operations and Maintenance Cost**	Rough order-of-magnitude gross operating cost per year estimates. Assumes Tempe Streetcar operating plan (April 2018) - peak 10mins at $28.49 per rev. mile; 2018 dollars.	$ (under $5m) = 3; $$ ($5m-$10m) = 2; $$$ (over $10m) = 1	**1**	2	$$	1	$$$	3	$	2	$$	3	$
20		**Cost Effectiveness**	Annual cost per rider: annualized capital and O&M divided by annual ridership. Assumes cost reduction factor based on Tempe Streetcar (0.040)	$ (under $25) = 3; $$ ($25-$75) = 2; $$$ (over $75) = 1	**1**	1	$$$	2	$$	3	$	3	$	2	$$
21		**Potential Opportunities for Financial Partnerships/ Shared Costs**	Identify and list potential opportunities for financial public-private partnerships (capital and/or operating)	Scored based on the number of large scale private (or quasi-private) insitutions that are (or anticipated to be) near or along corridor	**1**	3	ASU/Novus; Mesa Riverview; Chicago Cubs	2	Mesa Riverview; Mesa CC	1	ASU	1	ASU/Novus	1	I.D.E.A. Tempe Campus
					Subtotal	**8**		**6**		**10**		**8**		**9**	

Tempe/Mesa Streetcar Feasibility Study
Tier 2 Evaluation - 4 of 4

SCORING
3 = Optimal Performance, **2** = Moderate Performance, **1** = Substandard Performance

		Evaluation Criteria	Description	Assumptions	Evaluation Criteria Weight	A Rio Salado Pkwy East 3.37 miles 3.94 sq.mi.		B Dobson/Southern/CClub 6.01 miles 6.44 sq.mi.		C Mill Avenue 2.47 miles 3.15 sq.mi.		D Rural Road 3.58 miles 4.19 sq.mi.		E Rio Salado Pkwy West 1.21 miles 1.78 sq.mi.	
						Score	Detail	Score	Detail	Score	Detail	Score	Detail	Score	Detail
22	Efficiencies	**Operating Efficiency**	Transit operational efficiencies - turns, end of line (EOL) placement, compatibility with Tempe Streetcar (TSC), etc.	Scored based on the combo of number of turns and EOL conditions. Fewer turns, higher score; Better EOL, higher score	**1**	3	No turns; Good EOL opportunities	2	2 turns; Good Rio Salado EOL; Poor downtown EOL - no tail track space	2	1 turn; Constrained space EOL at Southern/ Rural	1	2 turns; Constrained space for EOL at Southern/Mill	1	2 turns; Inefficient operations to integrate w/ TSC; Suitable EOL opportunity
23		**Transit Speed / Reliability**	List obvious transit speed and reliability impediments (# of signaled intersections; Qualitative assessment of curb cuts/turning conflicts; special events)	More intersections and events = 1; Some intersections and events = 2; Fewer intersections and events = 3	**1**	1	20 signal intersections; ASU sporting events, RnR marathon, spring training; High traffic volumes at Rural	1	21 signal intersections 2 RR crossings (over and under); Spring training, events at Mesa CC, events in downtown Mesa; High traffic volumes at Cclub	2	12 signal intersections RR crossing (under); Events at ASU and Tempe HS; High traffic volumes along Southern	2	18 signal intersections RR crossing (over); Events at ASU; High traffic volumes along Rural	3	2 signal intersections; 1 roundabout; RR crossing (under); Events in downtown Tempe and Beach Park
24		**Scalability**	Identify and list the option's ability to split into sensible phases	3 segment opportunities = 3; 2 segment opportunities = 2; No opportunity for multiple phases = 1	**1**	2	2 segments: Marina Heights to Tempe Marketplace; Tempe Marketplace to Riverview	3	3 segments: Dobson (Riverview to Southern), Southern (Dobson to Country Club), and Country Club (Southern to Main)	2	2 segments: Mill (Apache to Southern); Southern (Mill to Rural)	2	2 segments: Rural (Marina Heights to Southern); Southern (Rural to Mill)	1	1 segment; No opportunity for multiple phases
		Subtotal			**3**	**6**		**6**		**6**		**5**		**5**	
		Total				**78**		**68**		**66**		**70**		**65**	
		Rank				**1**		**3**		**4**		**2**		**5**	

APPENDIX B:
OPERATIONS MEMO

Memo

To: Project File

From: Nathan Chadwick, Valley Metro

Date: September 2019

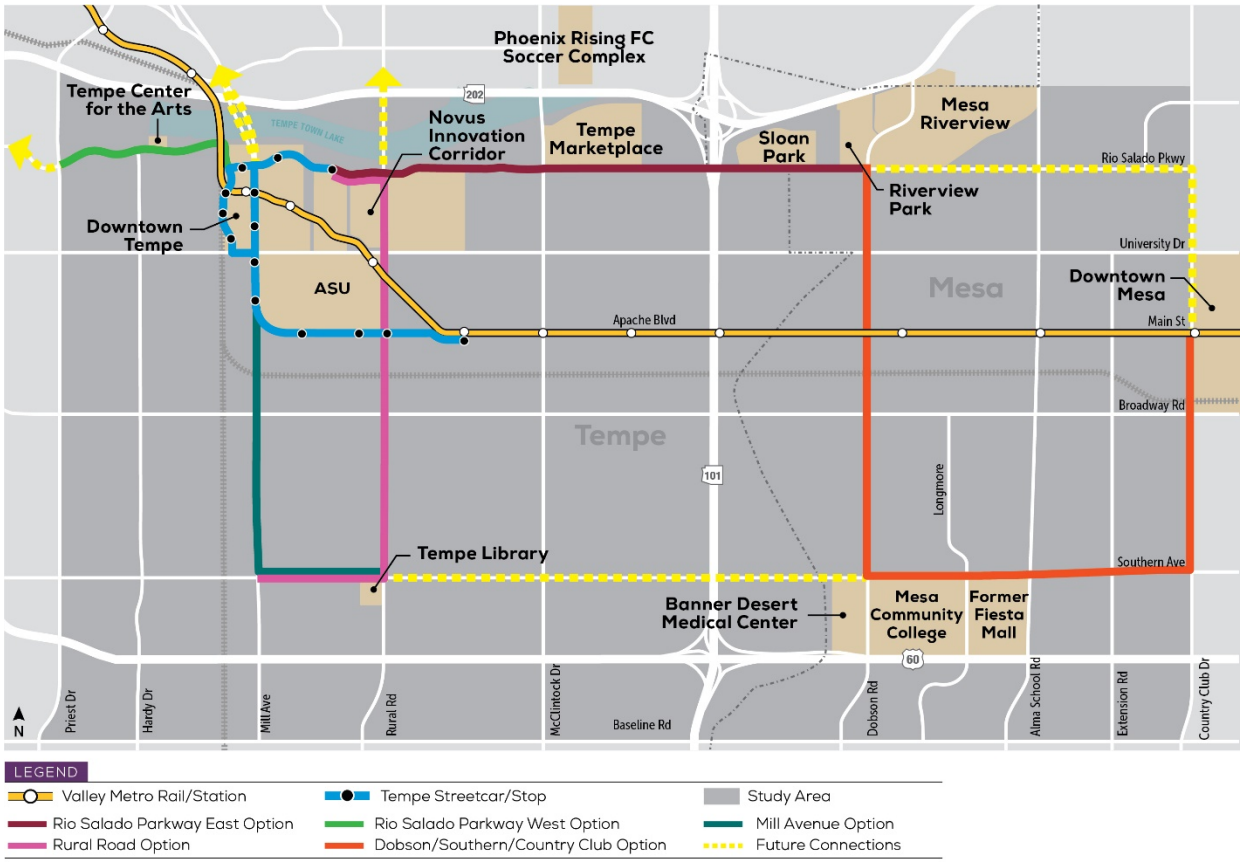
Re: Tempe/Mesa Streetcar Feasibility Study Operating Cost Estimate Memo

Background:

Valley Metro, with the cities of Tempe and Mesa, is evaluating the potential of a future streetcar system to connect the Tempe Streetcar route in downtown Tempe with other points of interest, planned development and emerging transit corridors. The Tempe/Mesa Streetcar Feasibility Study (TMSFS) will identify potential corridors as part of a future streetcar system to serve Tempe and Mesa and inform future regional funding initiatives for transit capital investments. The study area for TMSFS is defined as the area bounded by State Route 202 (Loop 202) to the north, Country Club Drive to the east, Baseline Road to the south and Priest Drive to the west.

The TMSFS is currently in the second tier of a two-tier evaluation process analyzing potential streetcar corridors. Results from the Tier 1 Evaluation narrowed potential options down to five options to move onto the Tier 2 Evaluation. **Figure 1** shows the final options being considered for advancement.

Figure 1: TMSFS Tier 2 Options



Preliminary Operating Plan and Cost Estimates:

As part of the Tier II analysis, the Project Team is developing preliminary capital and operating costs based on the preliminary alignment concepts. **Table 1** shows the preliminary costs in 2018 dollars. This scenario is based on the Tempe Streetcar Operating and Maintenance Plan, April 2018 (**Table 2**).

Table 1: TMSFS Preliminary Operating Cost Estimates (2018 $)

Option	One-way Trip Length (miles)	Annual Revenue Miles	Gross Operating Cost
Rio Salado Parkway East	3.4	230,700	$6,567,000
Dobson/Southern/Country Club	9.4	637,900	$18,156,000
Mill Avenue	2.5	169,700	$4,829,000
Rural Road	3.6	244,300	$6,953,000
Rio Salado Parkway West	1.2	81,400	$2,318,000

The Gross Operating Costs indicate the additional cost to operate the streetcar option in addition to the costs to already operate the Tempe Streetcar. A cost per mile of $28.46 was assumed for the Gross Operating Costs.

Table 2: TMSFS Service Levels

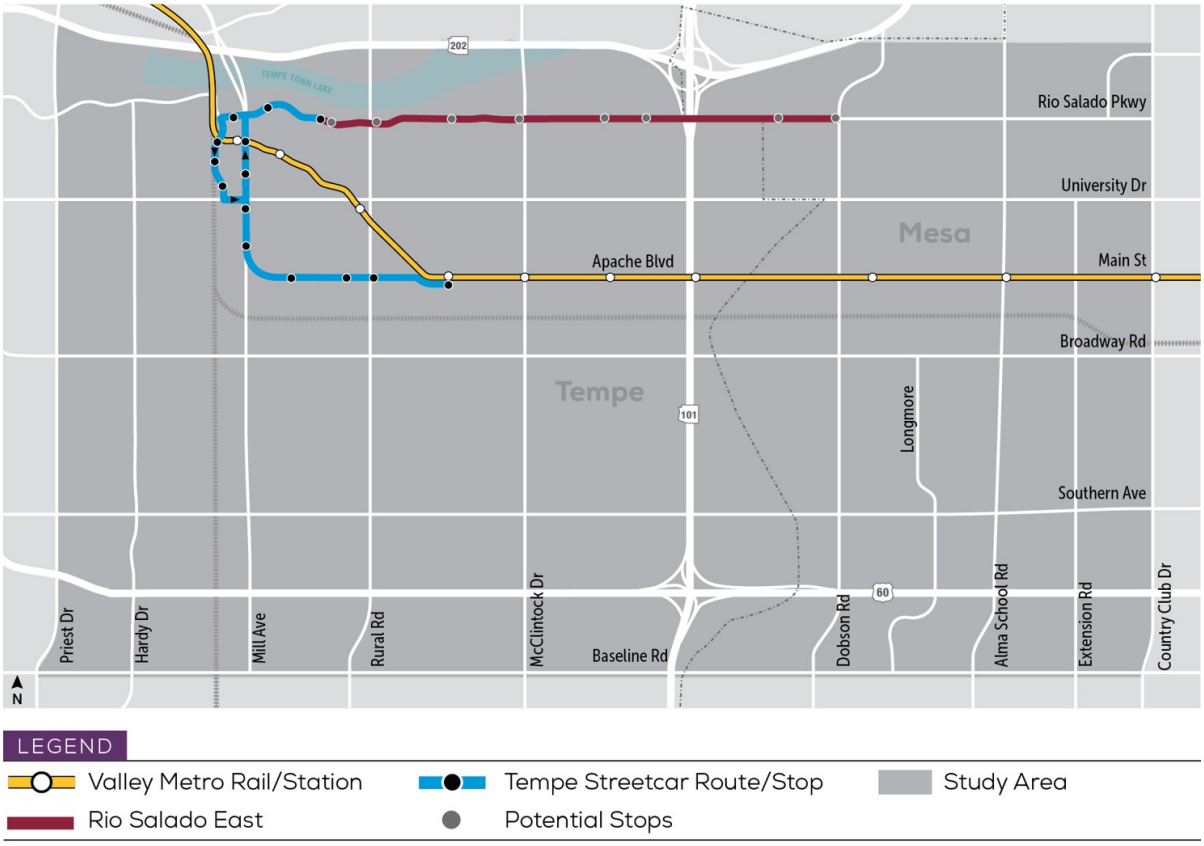
Service Element	Monday to Thursday	Friday	Saturday	Sunday
Headway in Minutes (peak / off-peak)	10 / 20	10 / 20	15 / 20	20 (all-day)
Service Hours (peak / off-peak)	15 / 4	15 / 7	15 / 7	19 (all-day)
Daily Trips (one-way)	102	111	81	57

Based on Tempe Streetcar Operating and Maintenance Plan (OMP), April 2018

To develop the operating costs, preliminary assumptions were made about the operation of each option. The section below describes how each option was assumed to operate.

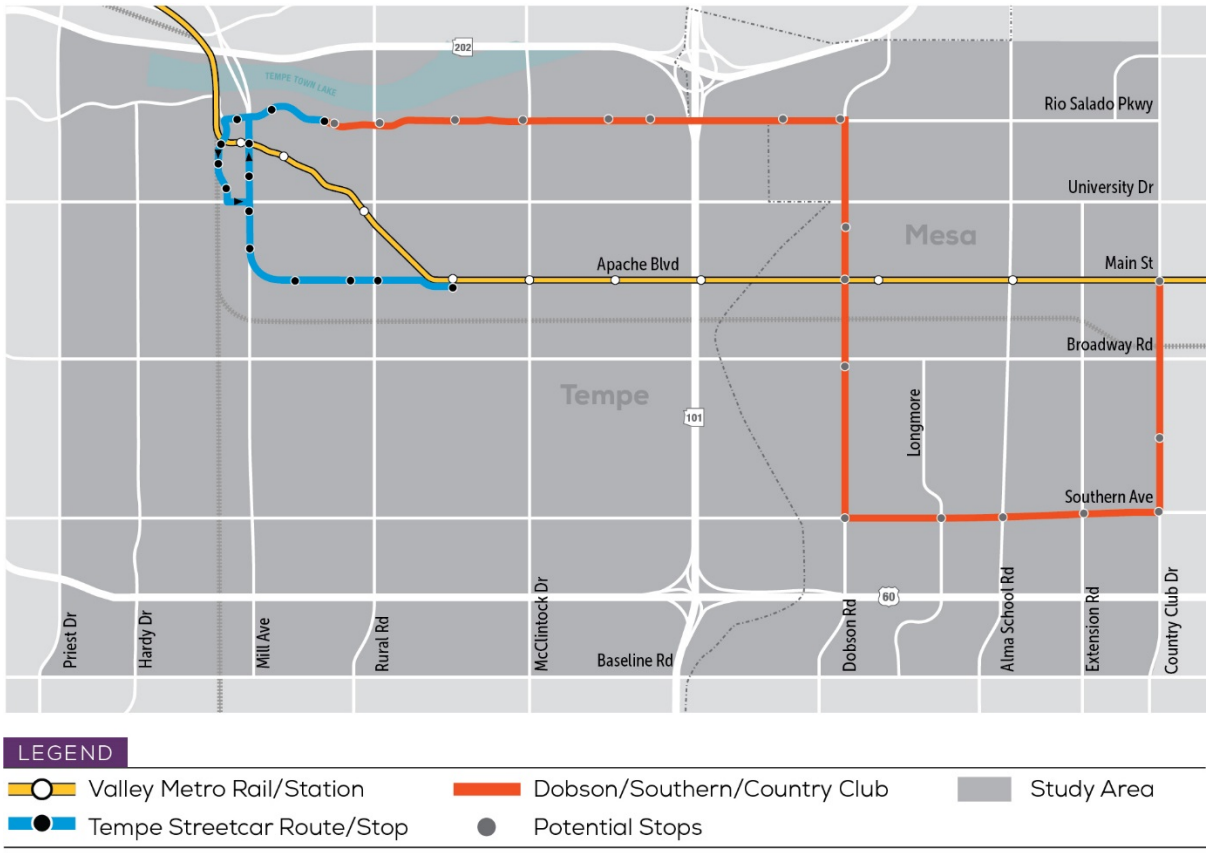
Rio Salado Parkway East would operate bi-directionally along Rio Salado Parkway from the end of the Tempe Streetcar line at Marina Heights to Dobson Road. **Figure 2** shows the Rio Salado Parkway East option.

Figure 2: Rio Salado Parkway East Option



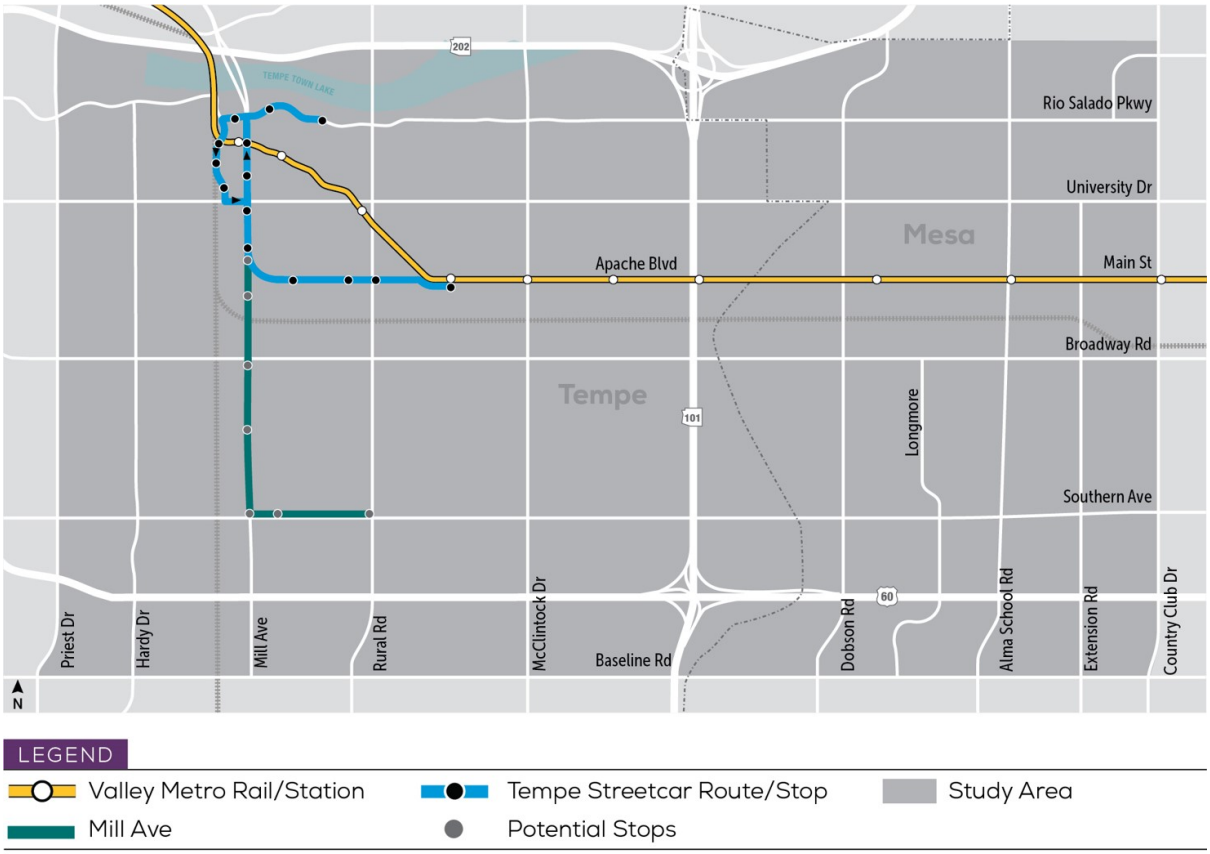
Dobson/Southern/Country Club would continue operating bi-directionally from the end of the Rio Salado Parkway East option. This option would begin at Dobson Road/Rio Salado Parkway, travel south on Dobson Road to Southern Avenue, then travel east to Country Club Drive where it would turn north and end at Country Club Drive/Main Street before heading back along the same route. **Figure 3** shows the Dobson/Southern/Country Club option.

Figure 3: Dobson/Southern/Country Club Option



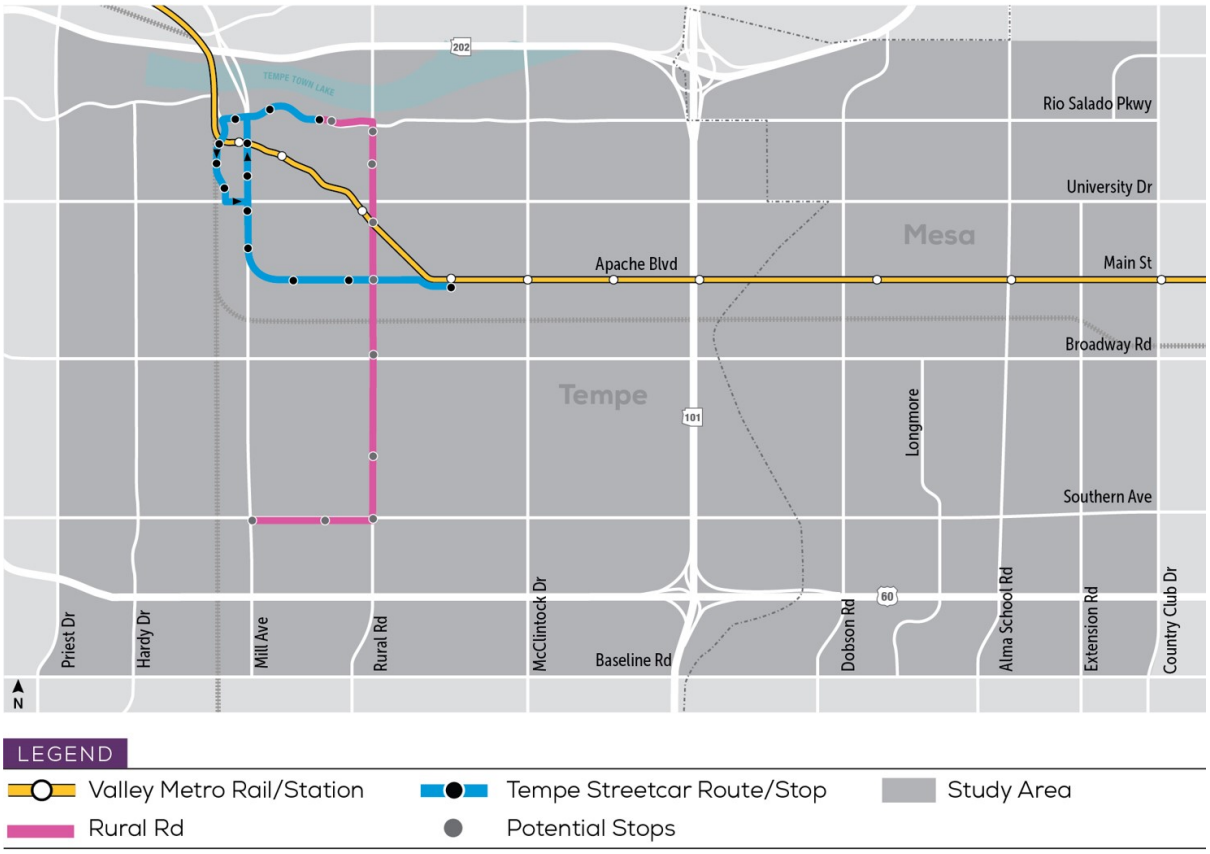
Mill Avenue would begin operating bi-directionally from the Tempe Streetcar line at Apache Boulevard/Mill Avenue. This option would head south on Mill Avenue to Southern Avenue, then travel east to Southern Avenue/Rural Road. From there the option would turn around and head back along the same route. **Figure 4** shows the Mill Avenue option.

Figure 4: Mill Avenue Option



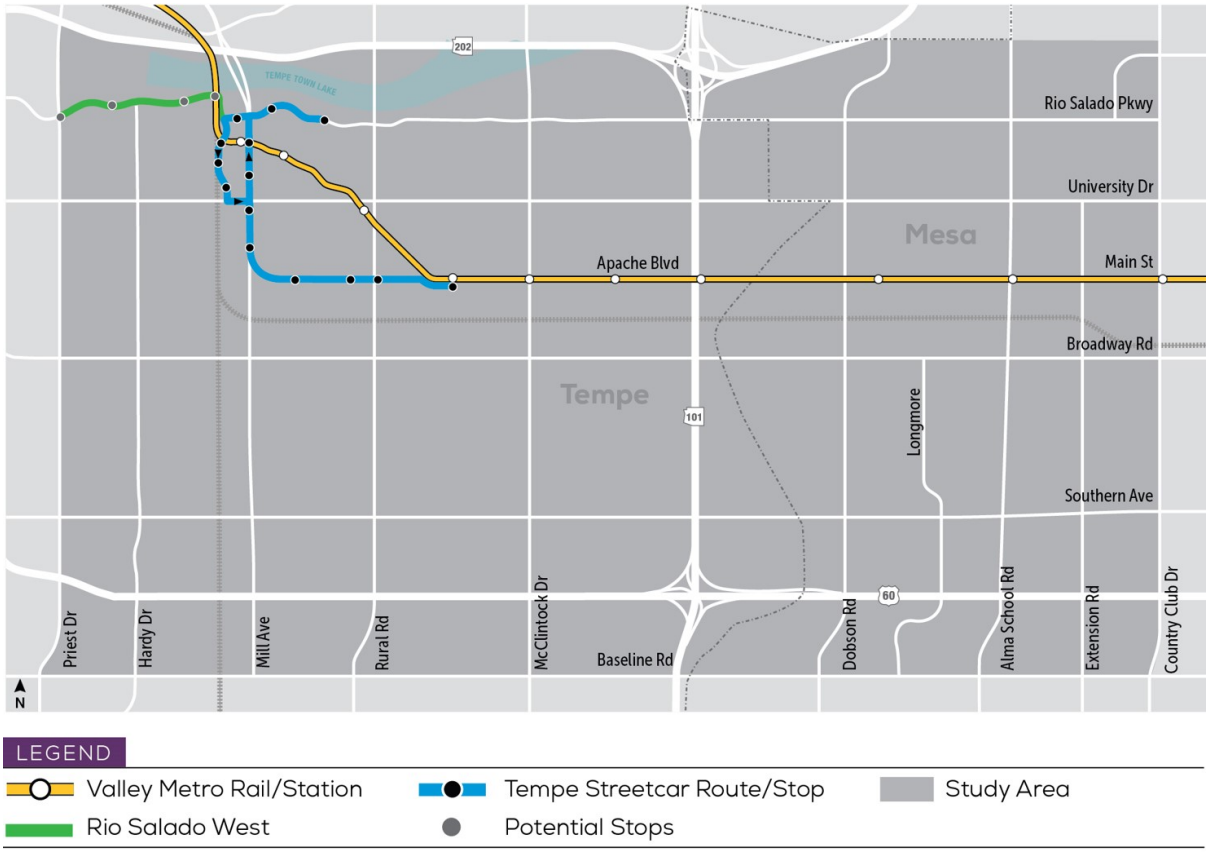
Rural Road would operate bi-directionally from the end of the Tempe Streetcar line at Marina Heights heading east on Rio Salado Parkway, turn south on Rural Road and then west on Southern Avenue to Southern Avenue/Mill Avenue. From there the option would turn around and head back along the same route. **Figure 5** shows the Rural Road option.

Figure 5: Rural Road Option



Rio Salado Parkway West would interline with the Tempe Streetcar. From Marina Heights, it will travel westbound on Rio Salado Parkway through Rio Salado Parkway/Ash Avenue to continue travelling to Rio Salado Parkway/Priest Drive. From there the option would turn around and head back along the same route. At Rio Salado Parkway/Ash Avenue, the streetcar would continue south on Ash Avenue continuing the Tempe Streetcar route – east on University Drive, south on Mill Avenue, east on Apache Boulevard to Apache Boulevard/Dorsey Lane. This option's return trip will turn around west on Apache Boulevard, north on Mill Avenue and west on Rio Salado Parkway. This operating scenario would impact Tempe Streetcar by creating a deviation to serve Rio Salado Parkway West. This could be mitigated by adding multiple trip patterns as part of a streetcar overlay. **Figure 6** shows the Rio Salado Parkway West option.

Figure 6: Rio Salado Parkway West Option



Next Steps:

These preliminary operating cost estimates are for the purposes of the Tier 2 Evaluation of the five corridor options. The Tier 2 Evaluation will continue to progress to evaluate how each option performs. The assumed operating plan for each option was for evaluation purposes only. The operating assumptions can be further refined for operating and ridership forecasting efficiencies.

APPENDIX C:
TRAVEL FORECASTING MEMO

TEMPE/MESA STREETCAR FEASIBILITY STUDY

Travel Forecasting Results Report

SEPTEMBER 2019

VALLEY METRO

TABLE OF CONTENTS

LIST OF TABLES

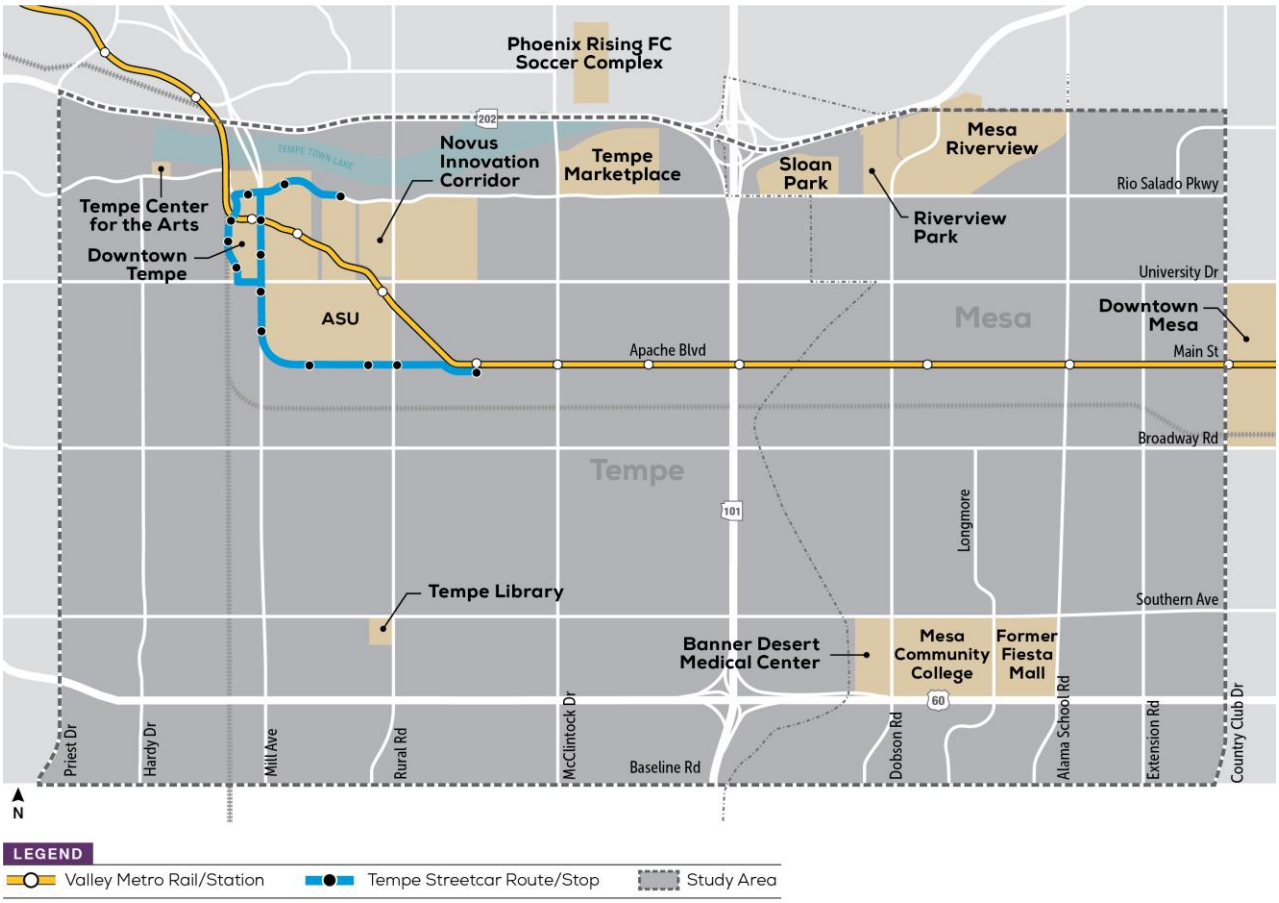
LIST OF FIGURES

1.0 INTRODUCTION

Valley Metro, with the City of Tempe, City of Mesa and Maricopa Association of Governments (MAG), is conducting the Tempe/Mesa Streetcar Feasibility Study (TMSFS). The TMSFS is evaluating potential corridors as part of a future streetcar system to serve Tempe and Mesa and inform future regional funding initiatives for transit capital investments. The TMSFS study area is bounded by State Route 202 (Loop 202) to the north, Country Club Drive to the east, Baseline Road to the south, and Priest Drive to the west (**Figure 1**).

The TMSFS is currently in the second tier of a two-tier evaluation process analyzing potential streetcar corridors. Results from the Tier 1 Evaluation narrowed potential options down to five options to move onto the Tier 2 Evaluation. This technical memorandum discusses the TMSFS options and ridership forecasts. Ridership was estimated using an existing Simplified Trips-On-Project Software (STOPS) application that was developed for the Valley Metro service area. The following sections will discuss the STOPS model used, the options and ridership results.

FIGURE 1: TEMPE/MESA STREETCAR FEASIBILITY STUDY AREA



2.0 STOPS OVERVIEW

The ridership forecast for the TMSFS was estimated using a travel modeling software called STOPS (Simplified Trips-on-Project Software). The STOPS application is a stand-alone ridership forecasting software package developed by the Federal Transit Administration (FTA). The software applies a set of travel models to predict detailed travel patterns on fixed-guideway systems. STOPS was specifically developed to support New Starts and Small Starts projects.

STOPS utilizes a modified four-step (trip generation, trip distribution, mode choice, and trip assignment) model structure to quantify total transit ridership by trip type, mode of access, and auto ownership. It also computes the change in person miles travelled (PMT) that is attributable to the proposed transit project. STOPS version 2.5 dated April 12, 2018 was used for estimating ridership for this study.

2.1 STOPS INPUTS

Following the installation of STOPS, several inputs were required to successfully complete the model run. This section will provide detailed information on the following inputs:

- Census Data/On-Board Survey
- LRT/Bus Boarding Data
- Population and Employment Data
- Highway Skims
- Transit Agency Data
- Additional Inputs

Table 1 identifies the inputs that were used in STOPS for the TMSFS ridership forecasts.

TABLE 1: STOPS INPUTS

Inputs Used	Source	Source Year
GTFS Files	Valley Metro	2017 (April)
On-Board Survey Data	Valley Metro	2015 (April)
LRT Boarding Data	Valley Metro	2017 (April)
Bus Boarding Data	Valley Metro	2017 (April)
Population/Employment Data	MAG	2017, 2040
AM Peak Highway Skims	MAG	2017, 2040
GTFS Files	Valley Metro	2017 (April)

2.2 CENSUS DATA/ON-BOARD SURVEY

STOPS has the ability to calibrate to year 2000 Journey-to-Work (JTW) trip flow data, year 2010 American Community Survey (ACS) trip flow data, or a recent on-board transit survey. In April 2015, Valley Metro completed an on-board survey and the transit trips from this survey (by trip purpose and household auto occupancy) were used as an input for calibration.

2.3 LRT/BUS BOARDING DATA

April 2017 light rail and bus boarding data were provided by Valley Metro for use in the calibration process.

2.4 POPULATION AND EMPLOYMENT DATA

Table 2 shows the MAG 2017 and 2040 population growth for Maricopa County and the study area. Study area population is projected to grow at a faster rate than county population. However, study area employment is projected to grow at a slower rate than county employment.

TABLE 2: POPULATION AND EMPLOYMENT GROWTH

Area	MAG 2017	MAG 2040	Percent Change 2017-2040
Population			
Study Area	190,100	275,900	45
Maricopa County	4,563,000	6,483,000	42
Employment			
Study Area	102,600	131,900	29
Maricopa County	1,763,000	2,476,000	40

2.5 HIGHWAY SKIMS

Highway skims were prepared from the MAG travel model for the years 2017 and 2040 for estimated peak highway travel times.

2.6 TRANSIT AGENCY DATA

General Transit Feed Specification (GTFS) is a standardized format for public transportation schedules used by transit agencies throughout the world. GTFS is a collection of text files that, together, provide data necessary for trip planners, schedules and mobile phone applications. STOPS utilizes GTFS for estimating ridership in the existing, no-build, and build scenarios. GTFS files from April 2017 were provided by Valley Metro to be used as inputs into STOPS. These files were used for calibration and as a foundation for the no-build and build scenarios.

2.7 ADDITIONAL INPUTS

There are several inputs that are optional in STOPS, including::

- Weekday Unlinked Transit Trips: 224,144
- Weekday Home-Based Work (HBW) Linked Transit Trips: 62,059

Table 3 shows the linked transit trips by household auto ownership used in STOPS for the TMSFS.

TABLE 3: POPULATION AND EMPLOYMENT GROWTH

Auto Ownership	HBW	HBO	NHB
0-Car HH	32,313	42,685	11,995
1-Car HH	17,750	18,917	4,584
2-Car HH	11,996	16,546	3,317
All-Car HH	62,059	78,147	19,896

3.0 STOPS SERVICE SCENARIOS

There are three service scenarios required by STOPS: Existing Transit, No Build, and Build. This section explains each of the scenarios and assumptions used for estimating ridership.

3.1 EXISTING SCENARIO

The existing transit scenario is a critical element of the ridership estimation process because it builds the foundation for all future model runs. This study uses an existing STOPS application that was previous developed for the Valley Metro region for all projects. The transit system (April 2017), district definition, and station boardings used for calibration were unchanged. The total daily unlinked trips used in calibration is 224,144.

3.2 NO BUILD SCENARIO

In the No-Build scenario, the transit system was modified to reflect anticipated 2040 conditions. This includes the following:

- Light Rail: Metrocenter to Central Ave/Baseline Rd
- Light Rail: Central Station between Washington/Jefferson to Main St/Gilbert Rd
- Tempe Streetcar added
- Service reduced on Route 0 (Central Avenue)
- Baseline Express bus added between 27th Avenue to 24th Street
- Central South Mountain East/West RAPID service removed

3.3 BUILD SCENARIOS

Each Build Scenario is comprised of the transit system used in the No Build Scenario, plus one of the five streetcar options:

- Rio Salado Parkway East Option: Operate bi-directionally along Rio Salado Parkway from the end of the Tempe Streetcar line at Marina Heights to Dobson Road.
- Dobson/Southern/Country Club Option: Operate bi-directionally from the end of the Rio Salado Parkway East option. This option would begin at Dobson Road/Rio Salado Parkway, travel south on Dobson Road to Southern Avenue, then travel east to Country Club Drive where it would turn north and end at Country Club Drive/Main Street before heading back along the same route.
- Mill Avenue Option: Operate bi-directionally from the Tempe Streetcar line at Apache Boulevard/Mill Avenue. This option would head south on Mill Avenue to Southern Avenue, then travel east to Southern Avenue/Rural Road. From there the option would turn around and head back along the same route.

- Rural Road Option: Operate bi-directionally from the end of the Tempe Streetcar line at Marina Heights heading east on Rio Salado Parkway, turn south on Rural Road and then west on Southern Avenue to Southern Avenue/Mill Avenue. From there the option would turn around and head back along the same route.
- Rio Salado Parkway West Option: Interlining with the Tempe Streetcar, it will travel westbound from Marina Heights on Rio Salado Parkway through Rio Salado Parkway/Ash Avenue to continue travelling to Rio Salado Parkway/Priest Drive. From there the option would turn around and head back along the same route. At Rio Salado Parkway/Ash Avenue, the streetcar would continue south on Ash Avenue continuing the Tempe Streetcar route – east on University Drive, south on Mill Avenue, east on Apache Boulevard to Apache Boulevard/Dorsey Lane. This option will turn around west on Apache Boulevard, north on Mill Avenue and west on Rio Salado Parkway.

Note that forecasts for all options, but the Rio Salado Parkway West Option assume that passengers transfer between Tempe Streetcar and the new service. This was done for analytical purposes to isolate the ridership on the option.

3.4 TRAVEL TIMES

The travel times were calculated for each option by using an average speed of 15 miles per hour.

3.5 SERVICE SPAN AND FREQUENCY

The service span and frequency was the same of for all of the options. The service span is 18 hours with 10-minute frequency until 7:00 PM and 20 minutes after 7:00 PM (similar to the service span and frequency assumed for Tempe Streetcar) **Table 4** shows the service span and frequency that applies to all five options.

TABLE 4: SERVICE SPAN AND FREQUENCY

Time of Day	Start	End	Frequency (Min)
Early AM	6:00 AM	6:59 AM	10
AM/Midday/PM	7:00 AM	6:59 PM	10
Evening	7:00 PM	11:59 PM	20

3.6 RESULTS

A key STOPS model output is weekday trips on project. **Table 5** shows the total trips on project for each option and average project trips per station. The ridership forecasts range from 560 to 5,074 average weekday trips on project.

TABLE 5: 2040 OPTION PERFORMANCE

Option	Number of Stations	Total Trips on Project	Average Project Trips per Station
Rio Salado Parkway East	8	560	70
Dobson/Southern/Country Club	18	4,839	269
Mill Avenue	7	3,100	430
Rural Road	10	5,074	507
Rio Salado Parkway West	4	575	140

Figure 2 to **Figure 6** show the build option alignments and station locations. **Table 6** to **Table 10** show the 2040 station boarding forecasts by mode of access for each build option alignment.

FIGURE 2: RIO SALADO PARKWAY EAST OPTION

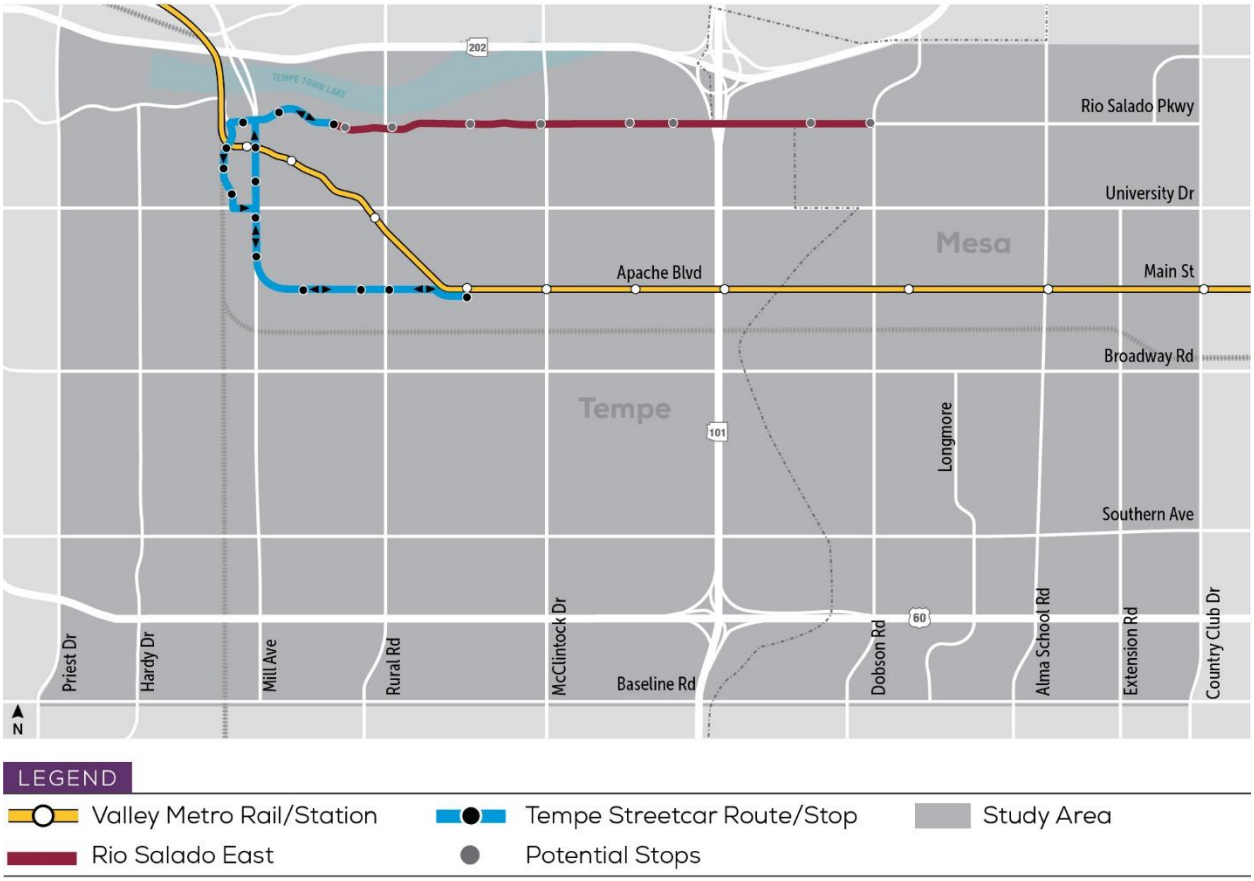


TABLE 6: RIO SALADO PARKWAY EAST OPTION 2040 STATION BOARDING ESTIMATES BY MODE OF ACCESS

Station	Walk	Kiss-and-Ride	Park-and-Ride	Transfer	Total
Marina Heights	14	2	0	136	152
Rio Salado Parkway/Scottsdale Road	24	0	0	47	71
Rio Salado Parkway/Pier Drive	54	1	0	0	55
Rio Salado Parkway/McClintock Drive	0	0	0	6	6
Tempe Marketplace	14	0	0	4	18
Rio Salado Parkway/Rockford Drive	95	0	0	0	95
Rio Salado Parkway/Clark Street	131	1	0	0	132
Rio Salado Parkway/Dobson Road	5	2	0	24	31
Total	**337**	**6**	**0**	**217**	**560**
Average	**42**	**1**	**0**	**27**	**70**

FIGURE 3: DOBSON/SOUTHERN/COUNTRY CLUB OPTION

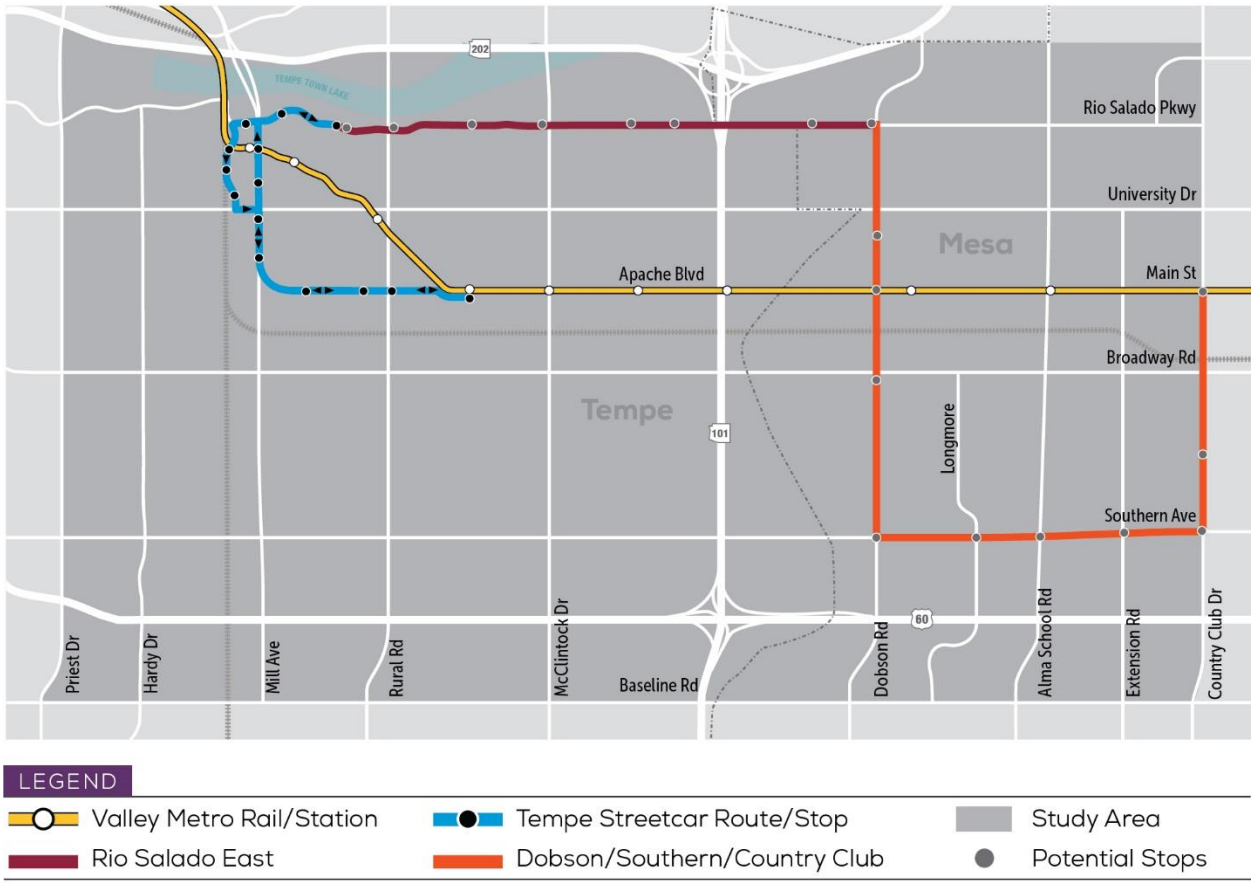


TABLE 7: DOBSON/SOUTHERN/COUNTRY CLUB OPTION 2040 STATION BOARDING ESTIMATES BY MODE OF ACCESS

Station	Walk	Kiss-and-Ride	Park-and-Ride	Transfer	Total
Marina Heights	27	6	0	86	119
Rio Salado Parkway/Scottsdale Road	70	12	0	53	136
Rio Salado Parkway/Pier Drive	63	1	0	0	65
Rio Salado Parkway/McClintock Drive	5	0	0	14	19
Tempe Marketplace	8	0	0	5	13
Rio Salado Parkway/Rockford Drive	76	2	0	0	78
Rio Salado Parkway/Clark Street	81	0	0	0	81
Rio Salado Parkway/Dobson Road	21	4	0	24	49
Dobson Road/University Drive	72	0	0	33	104
Dobson Road/Main Street	66	3	0	592	661
Dobson Road/Broadway Road	159	0	0	31	190
Dobson Road/Southern Avenue	222	17	0	38	277
Southern Avenue/Longmore	665	2	0	0	667
Southern Avenue/Alma School Road	110	0	0	56	166
Southern Avenue/Extension Road	87	6	0	42	135
Southern Avenue/Country Club Drive	314	6	0	253	572
Country Club Drive/8th Avenue	483	3	0	7	493
Country Club Drive/Main Street	89	3	0	922	1,014
Total	**2,618**	**65**	**0**	**2,156**	**4,839**
Average	**145**	**4**	**0**	**120**	**269**

FIGURE 4: MILL AVENUE OPTION

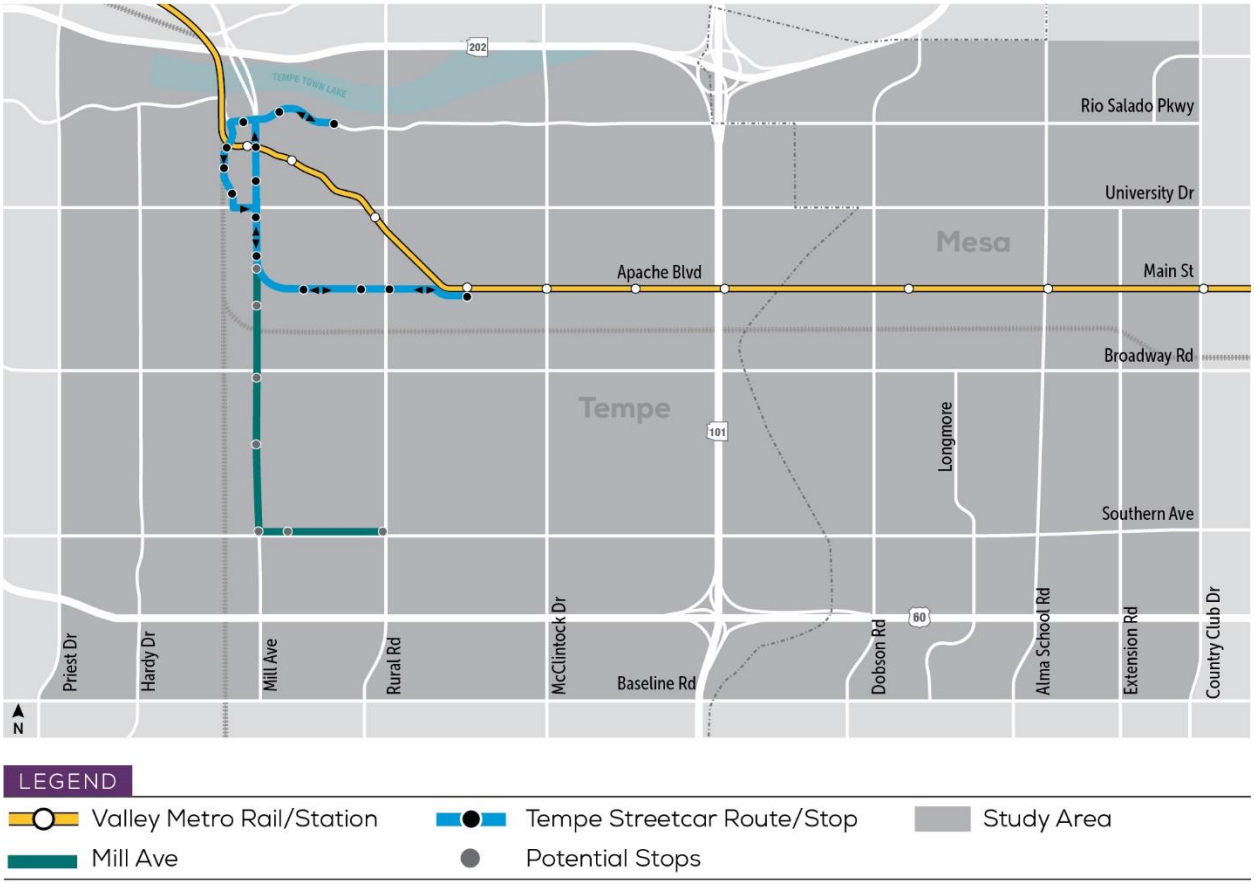


TABLE 8: MILL AVENUE OPTION 2040 STATION BOARDING ESTIMATES BY MODE OF ACCESS

Station	Walk	Kiss-and-Ride	Park-and-Ride	Transfer	Total
Mill Avenue/11th Street	924	1	0	279	1,204
Mill Avenue/Hudson Lane	128	1	0	0	129
Mill Avenue/Broadway Road	24	0	0	63	87
Mill Avenue/Alameda Drive	457	1	0	12	470
Mill Avenue/Southern Avenue	395	4	0	2	401
Southern Avenue/College Avenue	356	0	0	19	375
Southern Avenue/Rural Road	181	8	0	205	394
Total	**2,465**	**15**	**0**	**580**	**3,060**
Average	**352**	**2**	**0**	**83**	**437**

FIGURE 5: RURAL ROAD OPTION

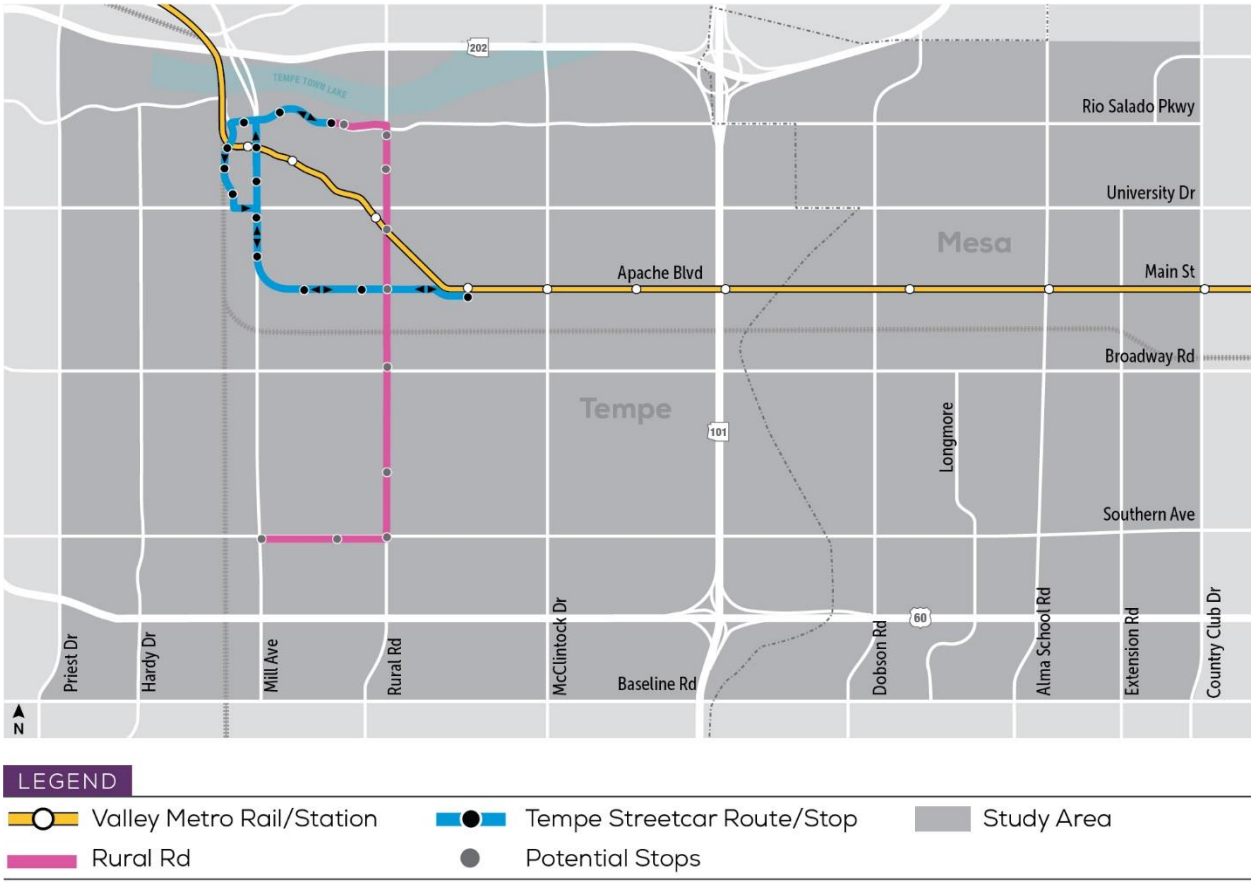


TABLE 9: RURAL ROAD OPTION 2040 STATION BOARDING ESTIMATES BY MODE OF ACCESS

Station	Walk	Kiss-and-Ride	Park-and-Ride	Transfer	Total
Marina Heights	107	2	0	3	112
Rio Salado Parkway/Scottsdale Road	18	1	0	80	99
Rural Road/6th Street	180	1	0	29	209
Rural Road/Terrace Road	1,544	1	0	521	2,066
Rural Road/Apache Boulevard	75	1	0	71	147
Rural Road/Broadway Boulevard	79	0	0	98	177
Rural Road/Alameda Drive	627	2	0	12	641
Southern Avenue/Rural Road	629	10	0	146	785
Southern Avenue/College Avenue	271	3	0	7	280
Mill Avenue/Southern Avenue	329	19	0	210	558
Total	**3,859**	**40**	**0**	**1,177**	**5,074**
Average	**386**	**4**	**0**	**118**	**507**

FIGURE 6: RIO SALADO PARKWAY WEST OPTION

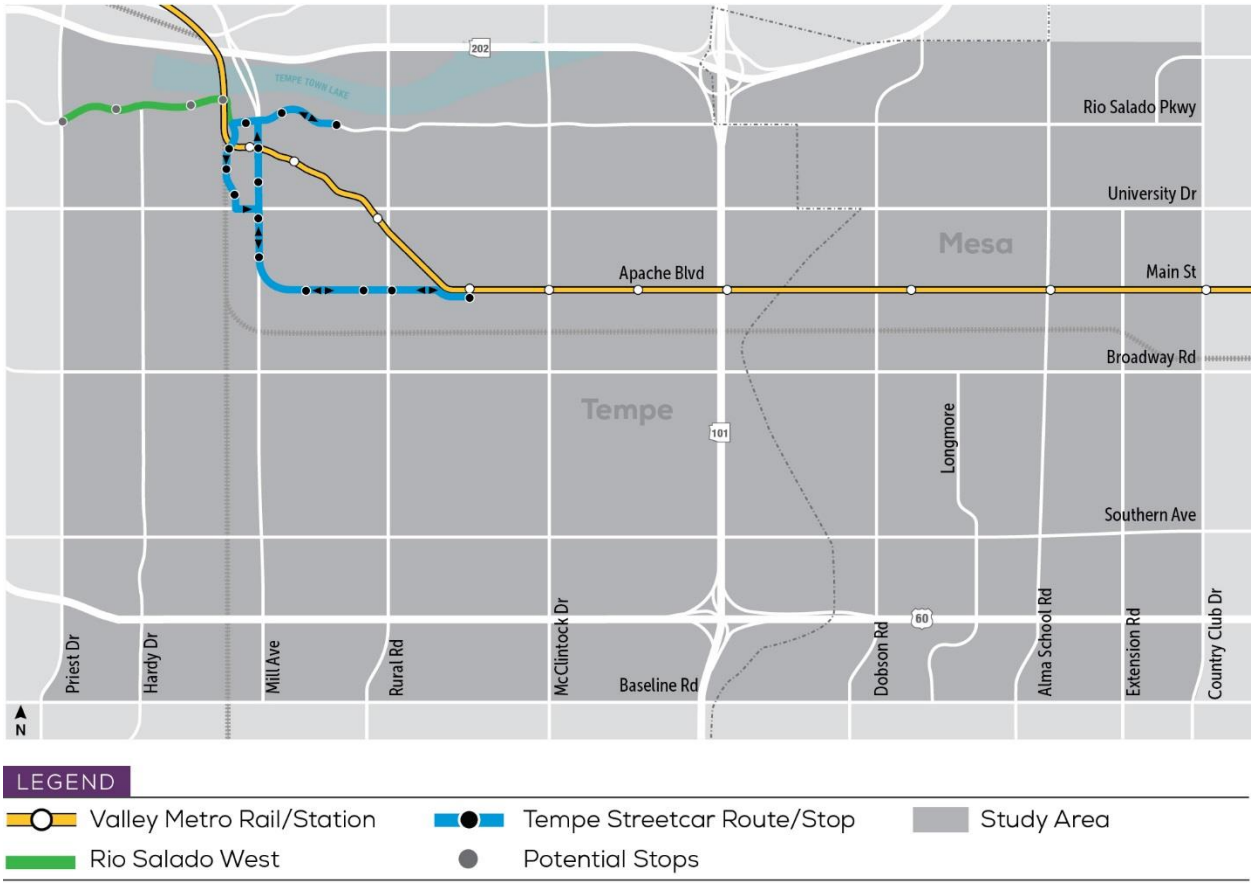


TABLE 10: RIO SALADO PARKWAY WEST OPTION 2040 STATION BOARDING ESTIMATES BY MODE OF ACCESS

Station	Walk	Kiss-and-Ride	Park-and-Ride	Transfer	Total
Rio Salado Parkway/Priest Drive	528	2	0	35	565
Rio Salado Parkway/Hardy Drive	6	0	0	4	10
Rio Salado Parkway/Lakeside Drive	0	0	0	0	0
Tempe Beach Park	0	0	0	0	0
Total	**534**	**2**	**0**	**39**	**575**
Average	**134**	**1**	**0**	**10**	**144**

APPENDIX D:
CAPITAL COST MEMO

Memo

To: Project File

From: Omar Peters and Nathan Chadwick, Valley Metro

Date: January 2020

Re: Tempe/Mesa Streetcar Feasibility Study (TMSFS) Capital Cost Estimates Memo

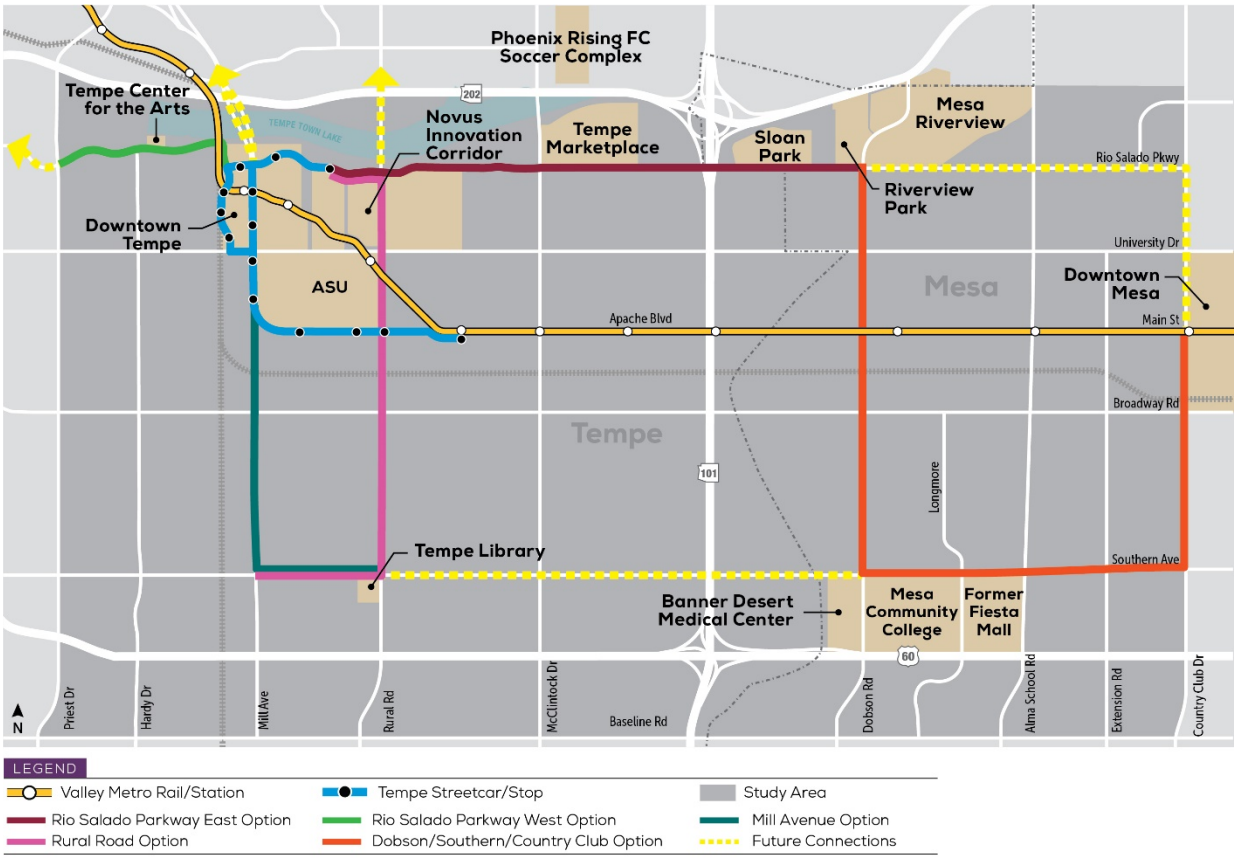
Background:

Valley Metro, with the cities of Tempe and Mesa, is evaluating the potential of a future streetcar system to connect the current Tempe Streetcar route in downtown Tempe with other points of interest, planned development and emerging transit corridors. The Tempe/Mesa Streetcar Feasibility Study (TMSFS) will identify potential corridors as part of a future streetcar system to serve Tempe and Mesa and inform a future regional funding initiative for transit capital investments.

The TMSFS is currently in the second tier of a two-tier evaluation process to analyze potential high-capacity transit (HCT) corridors. Results from the Tier 1 Evaluation narrowed potential options down to five options to advance into the Tier 2 Evaluation. **Figure 1** shows the options being considered in the Tier 2 Evaluation.

As part of the Tier 2 Evaluation, the Project Team is developing preliminary capital and operating costs for analytical purposes. These costs are developed at a high-level for purposes of this analysis and not for programming purposes. This memo summarizes cost estimates and the methodology used to develop the estimates.

Figure 1: TMSFS Tier 2 Options



Capital Cost Estimates:

The capital costs were developed using a rough order-of-magnitude (ROM) approach.

First, base unit cost per mile were assumed for each modern streetcar option. These were developed based on the Tempe Streetcar project currently being constructed. The base unit cost per mile was adjusted with the understanding that the conceptual projects are located in Tempe and Mesa, Arizona and factored for local conditions. For this analysis, the base unit cost per mile was estimated to be $91 million.

Additionally, the costs were based on assuming Construction Manager at Risk (CMAR) project delivery method. The base cost per mile includes professional services, design, basic funding for operations and maintenance (O&M) facility and vehicles. Although a basic cost is included for O&M facility and vehicles, further analyses are required to understand the O&M facility needs and number of vehicles.

Second, specific costs were developed for the elevated bridge and crossing structures planned for each option, where necessary. These costs are in addition to the base cost per mile. The costs assumed for each structure are listed in **Table 1**.

Table 1: Assumed Structure Costs

Structure	Added Cost to Project
Grade Separation over Union Pacific Railroad (Dobson Road)	$24,790,000
Grade Separation over Union Pacific Railroad (Rural Road)	$23,310,000

Both cost assumptions were combined to develop a capital cost range for each option. The costs were estimated in current year (2019) dollars and did not account for inflation. Therefore, it should be expected that when the project is actually realized for construction, the assumed cost would be higher due to inflation.

Two costs were developed to create a range of costs: 1) the "Likely Forecast," and 2) the "Wary Forecast." Both costs include a 30 percent contingency to account for unforeseen conditions and risk of scope growth after this planning level of cost estimating. An additional 10 percent contingency was added for a total 40 percent contingency due to the zero percent level of design at this point of the analysis.

Table 2 summarizes the total costs used for analysis for each option.

Table 2: Summary of Capital Costs Used for Analysis (2019 $)

Option (Route Length)	Likely Forecast	Wary Forecast
Rio Salado Parkway East 3.35 miles	$427,000,000	$555,100,000
Dobson/Southern/ Country Club 6.32 miles	$840,000,000	$1,092,000,000
Mill Avenue 2.41 miles	$308,000,000	$400,400,000
Rural Road 3.59 miles	$490,000,000	$637,000,000
Rio Salado Parkway West 1.31 miles	$167,000,000	$217,100,000

Annualized Capital Cost:

An understanding of the annualized capital costs for each option is necessary to conduct an analysis of the option's cost effectiveness (i.e.: comparing the annual forecasted ridership to the annual operating and maintenance cost and the annualized capital cost). The capital "Wary" costs assumed for the analysis in **Table 2** were used to develop annualized capital costs. A cost reduction factor (CRF) of 0.04 was assumed for each option, but because of the early planning-level phase of this project, the assumed CRFs were estimated by identifying CRFs from the FTA's Standard Cost Categories (SCC) workbooks of the Tempe Streetcar project, then applying the CRF to the total capital cost. It should be noted that this method of estimating capital costs and the CRF is reasonable for a study in this early phase, but that cost estimating at this stage has a very high level of uncertainty and variability.

Table 3 summarizes the annualized capital costs assumed for the cost effectiveness analysis.

Table 3: Summary of Annualized Capital Costs Used for Analysis (2019 $)

Option	Likely Forecast	Wary Forecast
Rio Salado Parkway East	$17,080,000	$22,204,000
Dobson/Southern/ Country Club	$33,600,000	$43,680,000
Mill Avenue	$12,320,000	$16,016,000
Rural Road	$19,600,000	$25,480,000
Rio Salado Parkway West	$6,680,000	$8,684,000

Assumes Streetcar CRF of 0.040 (based on Tempe Streetcar Standard Cost Categories worksheet, May 2019).

Reporting Capital Cost:

The capital costs developed for this project are rough order-of-magnitude estimates at a very early level of planning with no substantial design. At this level of planning, there is very high uncertainty and variability in the project scope. Because of this uncertainty, capital costs for this project will be reported in a single cost per mile range from low-to-high for all options – using the likely forecast as the "low" cost and wary forecast as the "high" cost. To develop the cost per mile range, the total project costs used for analysis were divided by the length of the project route (**Table 2**). In addition to the cost per mile range, reports will note the various project elements in the project scope that could influence where within the range the project may cost.

Table 4 shows an example of how capital cost may be reported.

Table 4: Illustration of Capital Cost Reporting (2019 $)

Mode Considered
Modern Streetcar
Capital Cost Range per Mile (in 2019 dollars)
Low: $127,000,000 High: $177,000,000
Project Elements That Could Impact Capital Cost
• Upgraded and relocated public and private utilities • New pavement, curb and gutter • New sidewalks and bicycle facilities • New traffic signal technology • New landscaping • Number of automobile lanes preserved • Right-of-way acquisition • Business or residence relocation • Environmental mitigation • Structure costs

To reiterate, these cost forecasts and the established capital cost range per mile are rough order-of-magnitude estimates for the purposes of early planning and analyses for the TMSFS. The total estimated costs depend on various factors, such as inflation, street improvements, structure construction and changing scope of work.

MEMORANDUM

TO: Tempe Transportation Commission

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

DATE: May 12, 2020

SUBJECT: Proposed Flash Changes

ITEM #: 6

PURPOSE:
To provide the Commission with an update and next steps for the FLASH circulator.

RECOMMENDATION OR DIRECTION REQUESTED:
For information and possible action.

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 INFORMATION:
The Tempe FLASH service has historically served as a circulator for ASU's Tempe campus, connecting numerous ASU buildings and facilities to parking areas, nearby transit services, and downtown Tempe. The service is fare-free, and currently operates Monday – Friday every 12 – 15 minutes. The operating costs for the route are funded by ASU. The City maintains ownership of the alternatively-fueled 40' transit buses which are funded through a combination of regional (Proposition 400) funds and federal dollars.

Staff presented an update to the Transportation Commission in December, 2018 in advance of a FLASH route change scheduled for May, 2019. Based on survey data, the 2019 change expanded the reach of the FLASH route to provide service between campus and several facilities external to the core of campus. Although the change continued to provide a level of accessibility between campus and ASU's Lot 59, staff documented numerous comments and concerns regarding the removal of service from Packard Drive, which connects further north into Lot 59 – and Lot 59 access was further impacted by multiple construction projects on 6th Street, causing frequent detours for the service and inhibiting pedestrian access. Other feedback noted the additional travel time between parking areas and campus. Considering these factors, and despite the service's expanded reach, passenger boardings declined to 205,308 in 2019, a 26% reduction from 2018.

In time for the Fall, 2020 semester, ASU has requested additional changes for the service. The proposed route concept aims to improve connectivity to campus parking locations including Lot 59, while maintaining connectivity to some of ASU's facilities external to campus (including the USB building near Rural/Spence and nearby residence halls), downtown Tempe, and transit connections at the Tempe Transportation Center. Additionally, daytime frequency will be improved, with buses running every 10 minutes. The 15-minute evening frequency, and span of service (7 a.m. – 10 p.m.), will remain unchanged.

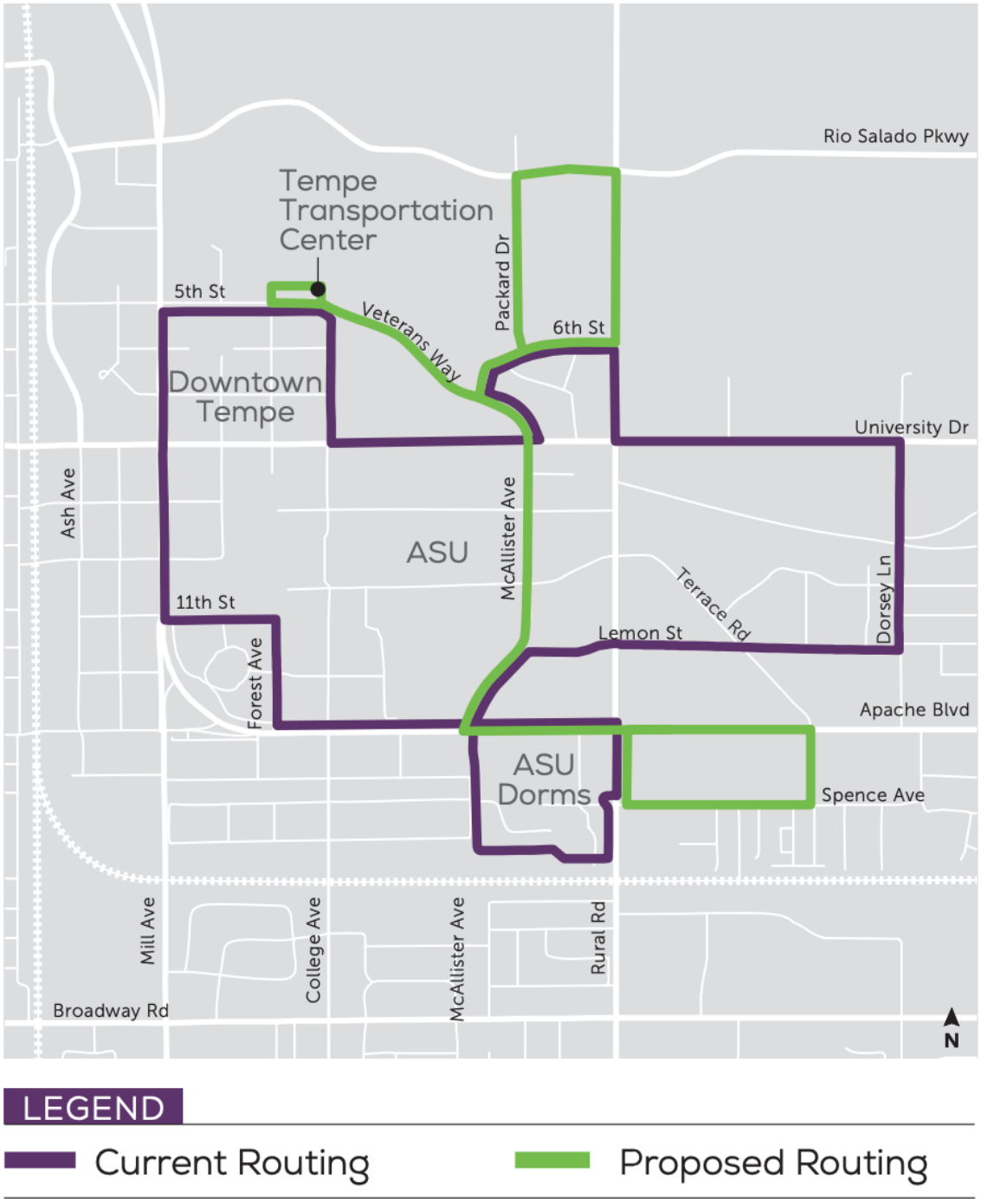
Outreach for the proposed change is currently being conducted in partnership with Valley Metro as part of the regional October, 2020 service change process. The change is included online at www.tempe.gov/flash and also at www.valleymetro.org/october-2020-proposed-service-changes. Postcards will be mailed to residents adjacent to the existing and proposed routes, and the public comment period is scheduled to take place between May 4 and June 5. The change will

also be included in Valley Metro's public hearing on May 20, 2020, which is being conducted in an online/webinar format in response to the current COVID-19 related social distancing guidelines.

FISCAL IMPACT or IMPACT TO CURRENT RESOURCES:
Annual operating costs for the new service are estimated at around $765,000 – reduced from $1,147,000 compared to the current route, due to a decrease in annual revenue miles operated. Furthermore, for FY21, a significant operating subsidy is expected to offset FLASH and other transit service costs by approximately 30% as part of the region's allocation of Coronavirus Aid, Relief, and Economic Security (CARES) Act. Additionally, the route proposed for August, 2020 reduces the service's vehicle operating requirements from 6 buses to approximately 4 buses.

ATTACHMENTS:
1. FLASH Proposed August 2020 Route Map
2. PowerPoint

FLASH Proposed August, 2020 Route Map



FLASH Update

Transportation Commission
May 12, 2020

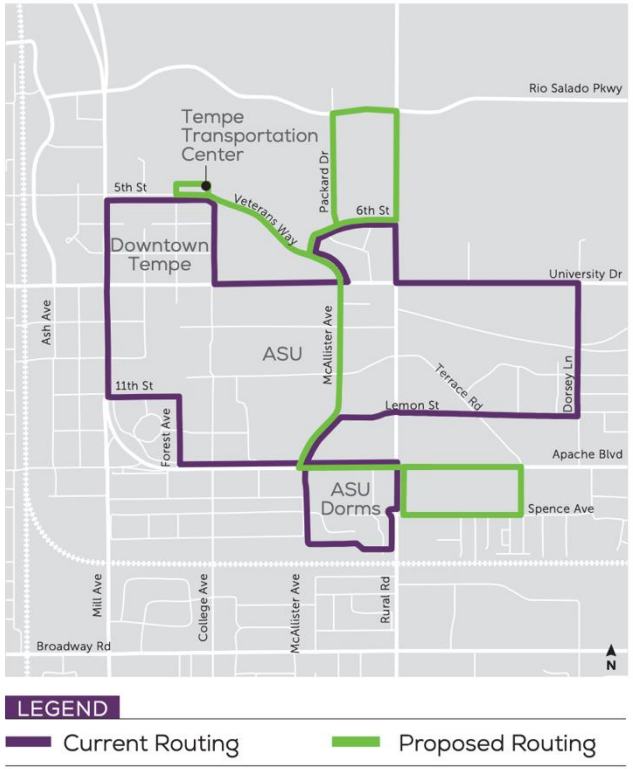
Tempe

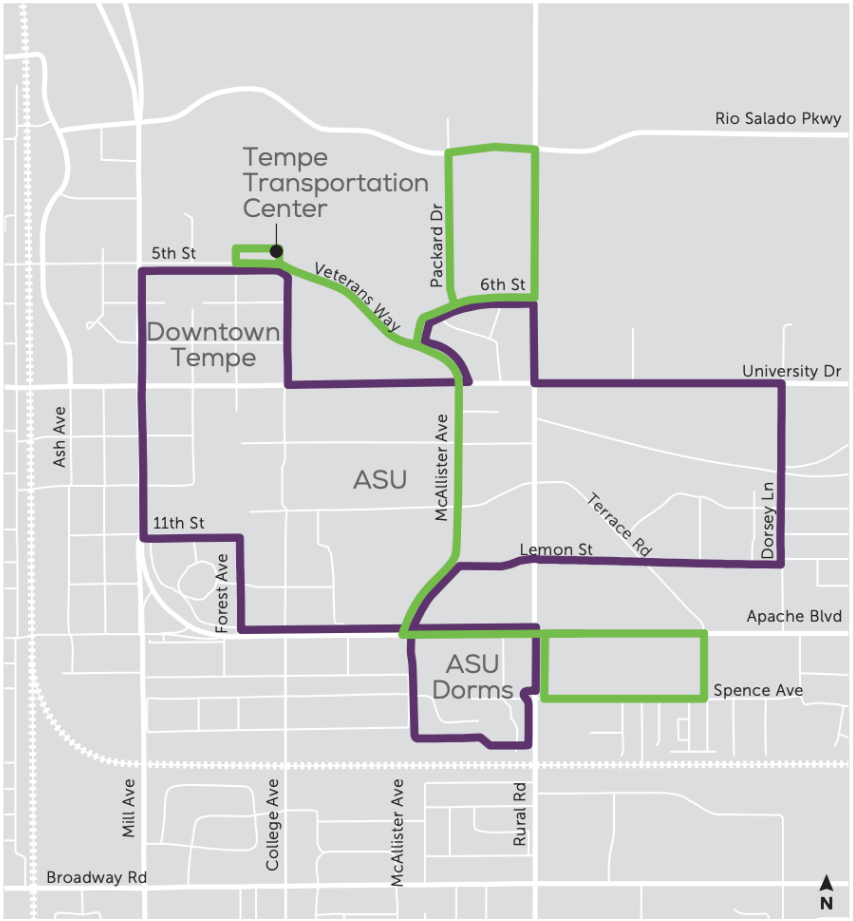
FLASH Overview

- ASU Tempe Campus/Downtown Tempe Circulator
- Fare-Free
- Operates Monday – Friday
  - Every 12 minutes from 7 a.m. to 6 p.m.
  - Every 15 minutes from 6 p.m. to 10 p.m.
  - Reduced service during semester breaks
- Operating Budget: $1.15 million (FY 2020)
  - Operations – ASU Funded
- Tempe-owned, regionally & federally funded fleet
  - 40-foot, alternatively fueled (CNG/LNG) buses
- 205,308 passenger boardings (2019)
  - 26% decrease from 2018

FLASH Proposed Route

- Improves connectivity between campus parking locations and the center of campus
- Improved frequency – every 10 minutes daytime
- Maintains connections to other transit routes and TTC
- Maintains connectivity to some external ASU facilities, ie. University Services Building
- Eliminated sections will continue to be served by Orbit, local bus routes, and (in future) Tempe Streetcar
- Reduced operating cost - $765,000 (approx. 33% ↓)
  - Additional subsidy expected for FY21 (CARES Act)




Rio Salado Pkwy
Tempe Transportation Center
5th St
Veterans Way
Packard Dr
6th St
Downtown Tempe
University Dr
Ash Ave
McAllister Ave
ASU
Terrace Rd
Dorsey Ln
11th St
Lemon St
Forest Ave
Apache Blvd
ASU Dorms
Spence Ave
Mill Ave
College Ave
McAllister Ave
Rural Rd
Broadway Rd
N
LEGEND
Current Routing
Proposed Routing

Outreach Efforts and Looking Ahead

- May 1st – Postcards to all residents adjacent to existing and future FLASH routes
- May 12th – Transportation Commission
- May 20th - Public Meeting @ 3 p.m.
  - Online/Webinar format with Valley Metro for all proposed October, 2020 regional service changes
- Online Information and Comments: www.tempe.gov/flash
  - Comment period May 4th – June 5th
- Summer 2020 – Valley Metro October, 2020 Service Change Process and Outreach
- August 20, 2020 – Service Changes Implemented (if advanced)

Questions

Eric Iwersen
Transit Manager
Eric_Iwersen@tempe.gov
480-350-8810

Sam Stevenson
Sr. Transit Planner
Sam_Stevenson@tempe.gov
480-858-7765

Tempe

MEMORANDUM

TO: Tempe Transportation Commission

FROM: Shelly Seyler, Deputy Engineering & Transportation Director, 350-8854

DATE: May 12, 2020

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.

CITY COUNCIL STRATEGIC PRIORITY: N/a

BACKGROUND INFORMATION:

- May 19
  - Setting Speed Limit
  - McClintock Drive Improvements between Apache Boulevard and Del Rio Drive
- June 9
  - Transit Budget/Capital Improvements Project Update
  - Transit System and Security Update
  - Priest Drive Bike Lanes
- July 14
- August 11
  - Country Club Way Streetscape
  - Ash and University Intersection
  - Transportation Demand Management/Association
- September 8
  - Scottsdale Road bike lanes
  - Valley Metro Outreach Plan for I-10 Corridor Construction
  - Vision Zero Update
  - BRT Study
- October 13
  - October Transit Service Changes
  - Entitled Development Projects
  - Priest Drive Bike Lanes
- November 10
- December 8
- TBD: Starship Project
- TBD: North/South Rail Spur MUP Phase I
- TBD: Commuter Rail Study
- TBD: Transit Shelter Design

FISCAL IMPACT or IMPACT TO CURRENT RESOURCES: N/a

ATTACHMENTS: None