Tempe Transportation

East Valley Partnership

August 27, 2019



Overview



Streetcar

- Tempe/Mesa Streetcar Feasibility Study
- Projects Under Design and Under Construction
- Urban Core and Development in the downtown area
- Pavement Management Program Performance Measure
- Challenges & Priorities
- Questions

Streetcar Project



















General Construction Timeline



CONSTRUCTION SCHEDULE

| Construction Elements | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|------|------|------|------|------|
| Utility Relocation (water & sewer) | | | | | |
| Street Work | | | | | |
| Track Guideway Installation | | | | | |
| Stop Platforms | | | | | |
| Electrical Systems Installation | | | | | |
| Operations Training Vehicle & System Testing | | | | | |
| Opening | | | | | |

Streetcar Project Overview





Streetcar Vehicle

ADA Accessible

- Bicycle Accessible
- Level Boarding
- 125 person capacity
- Hybrid/Battery
- 12 minute frequency, matches rail

Streetcar Project Overview



Typical Streetcar Stop on Rio Salado

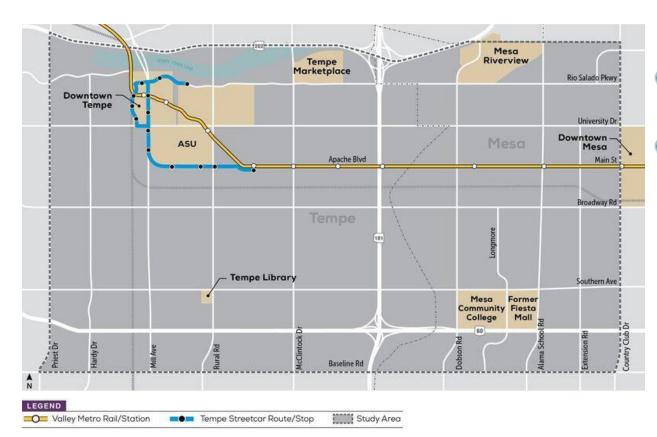


Timeline & Construction Expectations



To the extent possible, the contractor will maintain two lanes in each direction during peak hours

Tempe/Mesa Streetcar Feasibility Study



- 2018 Study with Mesa, Valley Metro, Tempe
- Long range highcapacity transit options for region

Future Bike & Pedestrian Projects

- Alameda Drive Streetscape
- Highline Canal Multi-use Path
- North/South Railroad Multi-use Path
- 8th Street Streetscape
- 5th Street Streetscape
- Rio Salado Northbank Multi-use Path
- Rio Salado Underpass at McClintock Drive
- Western Canal Multi-use Path Extension





RAY RD

MARCH 20 19 REVISION



NOTE: CONSTRUCTION START ESTIMATES SUBJECT TO CIP APPROVAL



MARCH 20 19 REVISION

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Canada

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RAY RD

MARCH 20 19 REVISION



CAPITAL IMPROVEMENT PROGRAM FY 2018-23 MAP TRANSIT PROGRAM

------BIKE & PED PROJECTS: ESTIMATED CONSTRUCTION START DATES -

MULTI-USE PATH

 GRAND CANAL MUP CONNECTION & EXTENSION

 6008570 (1)
 EARLY 2020

 NORTH SOUTH RAIL SPUR PATH
 6007080 (2)
 SUMMER 2020

 NORTH SOUTH RAIL SPUR PATH
 6007080 (2)
 SUMMER 2020

 NORTH SOUTH RAIL SPUR PATH
 BARKY 2023
 BARKY 2023

 RID N. BARK LINDIAN BEND WASH - MCCLINTOCK
 6008571 (4)
 FALL 2019

 WESTERN CANAL-HIGHLINK MUP - PATH LINK
 6008671 (5)
 SPRING 2019

 HIGHLING CANALT PATH GASELINE - KNOX RDJ
 6008671 (6)
 MORE ROSTRUCTION

S T R E E T S C A P E

 SCOTTSDALE BIKE AND PED IMPROVEMENT

 GUNTRY CLUB WAY BIKE AND PED IMPROVEMENT

 GOUNTRY CLUB WAY BIKE AND PED IMPROVEMENT

 GOODSOL (1)

 ALMEDA DB BIKE/PED/STBEETSCAPE

 GOOD790 (1)

 GOT 136 (10)

 GOT 136 (10)

 GOT 136 (10)

GRADE SEPARATED CROSSING

WESTERN CANAL MUP/ BASELINE RD UNDERPASS 60-New (1) EARLY 2021 Alameda DRIVE 61-10 PRDESTRIAN BRIDGE 6007768(2) TBD BY ADDT, 2023+ RIO SALADD UNDERPASS AT MCCLINTOCK DRIVE 6007788(3) FALL 2019

OTHER IMPROVEMENTS

TEMPE GREEN 5TH STREET 54-NEW (a) LATE 2023 1ST/RIO SALADO & ASH AVE ROUNDABOUT 6000409(6) LATE 2019 TEMPE BIKESHARE EXPANSION PROJECT 6007199 € EXPANSION ● NEW EARLY 2022

BICYCLE BOULEVARD SIGNAGE PHASE I

600779 PHASE I SIGNS INSTALLED. ADDN'L Signage with future projects. (H) Handlebars (S) Spoke

B BRAKE PPEDAL * US-60 TO CORNELL DRIVE: FALL 2019

NOTE: CONSTRUCTION START ESTIMATES SUBJECT TO CIP APPROVAL



MARCH 20 19 REVISION



CAPITAL IMPROVEMENT PROGRAM FY 2018-23 MAP TRANSIT PROGRAM

BIKE & PED PROJECTS: ESTIMATED CONSTRUCTION START DATES

MULTI-USE PATH

 GRAND CANAL MUP CONVECTION & EXTENSION

 6008370 (1)
 EARLY 2020

 NORTH SOUTH RAIL SPUR PATH

 6007069 (2)
 SUMMER 2020

 NORTH SOUTH RAIL SPUR PATH

 6007069 (2)
 SUMMER 2020

 NORTH SOUTH RAIL SPUR PATH

 6007069 (2)
 SUMMER 2020

 NORTH SOUTH RAIL SPUR PATH PHASE II

 600-FEW (3)
 SARIV 2023

 RID N. BANK (INDIAN BEND WASH - MCCLINTOCK

 6008573 (4)
 FALL 2019

 WISTERN CANAL-HIGHLINK KMUP - PATH LINK

 600871 (5)
 SPRING 2019

 HIGHLINK CANAL PATH (BASELINE - KNOX RD)
 GO0073 (6)

 WIGHER CONSTRUCTION
 WORE CONSTRUCTION

S T R E E T S C A P E

SCOTTSDALE BIKE AND PED IMPROVEMENT 60-IKU (2) EARLY 2021 COUNTRY CLUB WAY BIKE AND PED IMPROVEMENT 6000590 (6) EARLY 2021 ALAMEDA DIR BIKE/PED/STREETSCAPE 60005793 (6) LATE 2019 81H ST MULT-USE PATH-CREAMERY BRANCH RAIL 60007138 (6) LATE 2022

GRADE SEPARATED CROSSING

WESTERN CANAL MUP/ BASELINE RD UNDERPASS 60-New (1) EARLY 2021 ALAMEDA DRIVE 61-10 PEDESTRIAN BRIDGE 6007768(12) TBD BY ADDT, 2023+ IN SALADD UNDERPASS AT MCCLINTOCK DRIVE 6007788(13) FALL 2019

OTHER IMPROVEMENTS

 TEMPE GREEN 5TH STREET

 54-NEW
 (a)
 LATE 2023

 1ST/RIO SALADO & ASH AVE ROUNDABOUT
 6008409 (b)
 LATE 2019

 TEMPE BIKESHARE EXPANSION PROJECT
 6007199
 Expension Provided to the second secon

BICYCLE BOULEVARD Signage Phase I 600779 Phase I Signs Installed. Addn'l

| SIGNAGE WITH | FUTURE PROJECTS. |
|--------------|------------------|
| H HANDLEBARS | SSPOKE |
| BBRAKE | PPEDAL |

NOTE: CONSTRUCTION START ESTIMATES SUBJECT TO CIP APPROVAL

* US-60 TO CORNELL DRIVE: FALL 2019

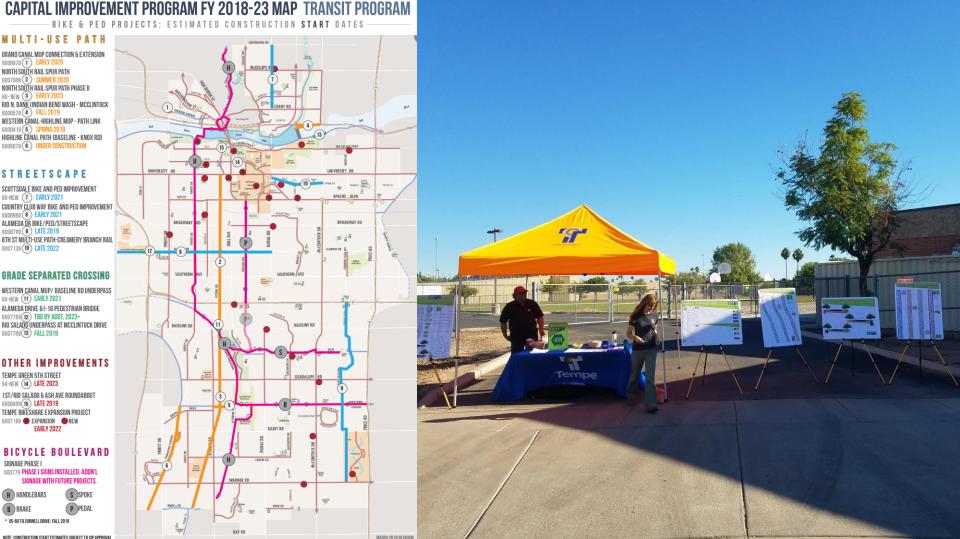




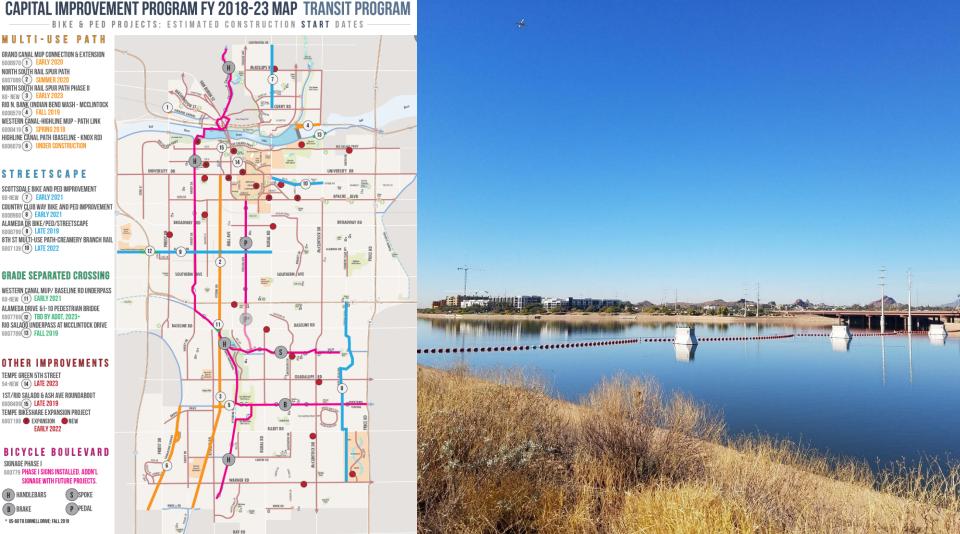
RIO SALADO SUP AT MCCLINTOC

SHARED USE PATH

MARCH 20 19 REVISION



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MARCH 20 19 REVISION

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Urban Core Master Plan (UCMP)



Projections for Urban Core (2040)

| People, Housing, Jobs | Current Position | Net Growth 2040 | Total 2040 | % Growth |
|---------------------------|---------------------|--------------------|---------------|-------------|
| Population | 43,053 | 45,978 | 89,031 | 106% |
| Households | 15,187 | 14,328 | 29,515 | 94% |
| Jobs | 35,130 | 16,683 | 51,813 | 47% |
| Development | | | | |
| Housing Units | 17,809 | 14,294 | 32,103 | 80% |
| Office Space: Base | 5,389,796 | 2,143,321 | 7,533,117 | 39% |
| Office Space: Accelerated | 5,389,796 | 3,574,668 | 8,964,464 | 66% |
| Retail Space (sf) | 2,788,038 | 1,370,149 | 4,158,187 | 49% |
| Hotel (Rooms) | 4,260 | 2,208 | 6,468 | 51% |

| Census | Pop | % Increase |
|--------|---------|------------|
| 1880 | 135 | - |
| 1890 | 897 | 564.4 |
| 1900 | 885 | -1.3 |
| 1910 | 1,473 | 66.4 |
| 1920 | 1,963 | 33.3 |
| 1930 | 2,495 | 27.1 |
| 1940 | 2,906 | 16.5 |
| 1950 | 7,684 | 164.4 |
| 1960 | 24,897 | 224.00 |
| 1970 | 63,550 | 155.3 |
| 1980 | 106,919 | 68.2 |
| 1990 | 141,865 | 32.7 |
| 2000 | 158,945 | 12.0 |
| 2010 | 161,719 | 1.7 |
| 2017 | 185,038 | 14.4 |

Market Analysis by Consultants

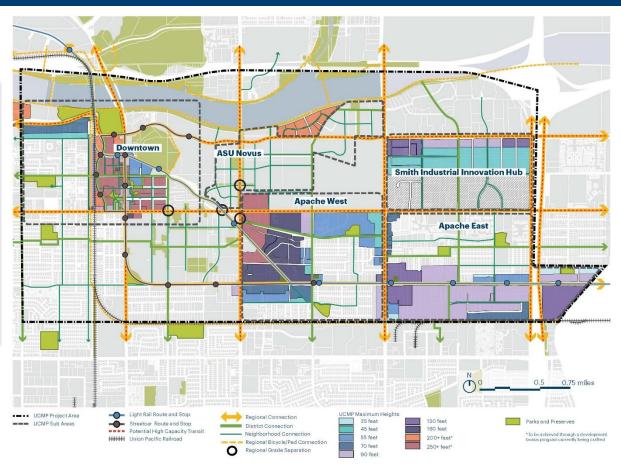
Tempe Historic Population Levels

Urban Core Master Plan (UCMP)



Connectivity Strategies

| Accessible Land Uses | Compact and mixed development Connected road networks Pedestrian enhancements in site design and development Reduced parking requirements |
|--------------------------|--|
| Mobility Options | Improved walking and cycling options High quality public transit services Ridesharing, carsharing, bike-sharing, and micro-mobility |
| Mode Shift Incentives | HOV (high occupancy vehicle) priority on highways Trip reduction strategies |



Urban Core Master Plan (UCMP)



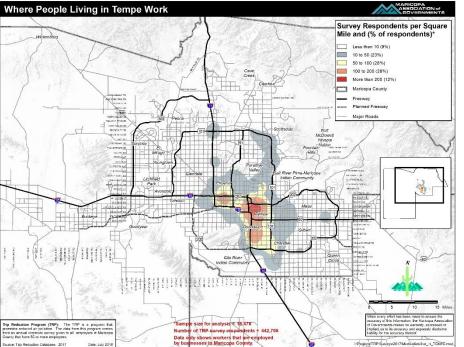
Trip Reduction

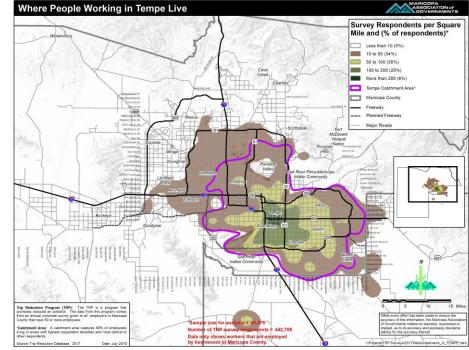
Intent

- Accommodate growth and development while reducing automobile trips overall, but especially during the peak periods of traffic congestion.
- Focused on reducing single-occupancy vehicle trips, through the encouragement of walking, biking, transit and carpool trips as well as alternative work schedules.
- Two Major Strategies
 - Create a Transportation Management Association to support properties, businesses, and other stakeholders in implementing and retaining commute solutions.
 - Require Trip Reduction Plans in development approval processes.

Commute Patterns

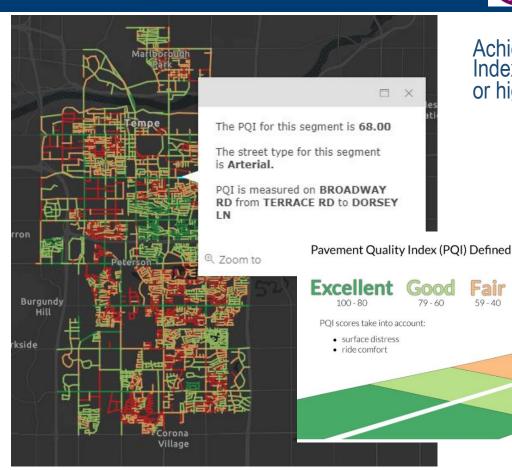






Pavement Management





Achieve adopted standards for Pavement Quality Index (PQI) equal to a citywide average rating of 70 or higher.

Safe & Secure Communities

79-60

59-40



Challenges & Priorities

Challenges

- Rate at which downtown is growing
- Reactive nature of traffic engineering
- Competing modes on the system pedestrians vs bikes vs vehicles
- Lack of participation/transit ridership

Priorities

- Invest in strategies to manage congestion
- Invest in alternative modes and provide convenient connection to transit service
- Increase transit service
- Maintain infrastructure investments

Questions?