Resident Bond Public Works Subcommittee Regular Meeting

October 15, 2024 | 4:00 p.m.

Chandler City Hall 175 S. Arizona Ave., Chandler, AZ or Webex 1-415-655-0001

Access code: 2664 467 3755, password: zyVHCxEs383





Subcommittee Members

Rick Heumann, Chair Chris Dobson Jennifer Hawkins Terri Kimble Spike Lawrence Duane Lidman Heidi Paakkonen

Pursuant to Resolution No. 4464 of the City of Chandler and to A.R.S. § 38-431.02, notice is hereby given to the members of the Resident Bond Public Works Subcommittee and to the general public that the Resident Bond Public Works Subcommittee will hold a REGULAR MEETING open to the public on October 15, 2024, at 4:00 p.m., at Chandler City Hall, 175 S. Arizona Ave., Chandler, AZ. On the 5th Floor Large Conference room or Virtually via Webex by dialing #1-415-655-0001, Access code: 2664 467 3755, Password: zyVHCxEs383

Persons with disabilities may request a reasonable modification or communication aids and services by contacting the City Clerk's office at 480-782-2181 (711 via AZRS). Please make requests in advance as it affords the City time to accommodate the request.

Agendas are available in the Office of the City Clerk, 175 S. Arizona Avenue.

Resident Bond Public Works Subcommittee Regular Meeting Agenda - October 15, 2024

Call to Order / Roll Call

Action Agenda

1. Approval of minutes from the October 1, 2024, Public Works and Utilities Bond Subcommittee Meeting.

Discussion

2. Presentation of Public Works Project Meeting #1

Calendar

 The next Regular Meeting will be held on Tuesday, October 29, 2024, at 4:00 p.m., Chandler City Hall, 175 S. Arizona Ave., Chandler, Arizona. 5th Floor Large Conference room.

Public Comment

Public comments will be heard only for the item(s) on that published meeting agenda. Up to 15 minutes will be allotted for public comments on the agenda item(s) at the end of the agenda and each speaker will be allocated up to three minutes at the discretion of the Presiding Officer or designated parliamentarian.

Adjourn



Resident Bond Exploratory Committee

Date: 10/15/2024

To: Resident Bond Exploratory Committee **From:** Regina Guisto, Management Assistant

Subject: Presentation of Public Works Project Meeting #1

Attachments

Public Works Project Meeting #1



Public Works Subcommittee Project Discussion #1

Citizen Bond Exploratory Committee October 15, 2024







Public Works Project Meeting #1

Agenda:

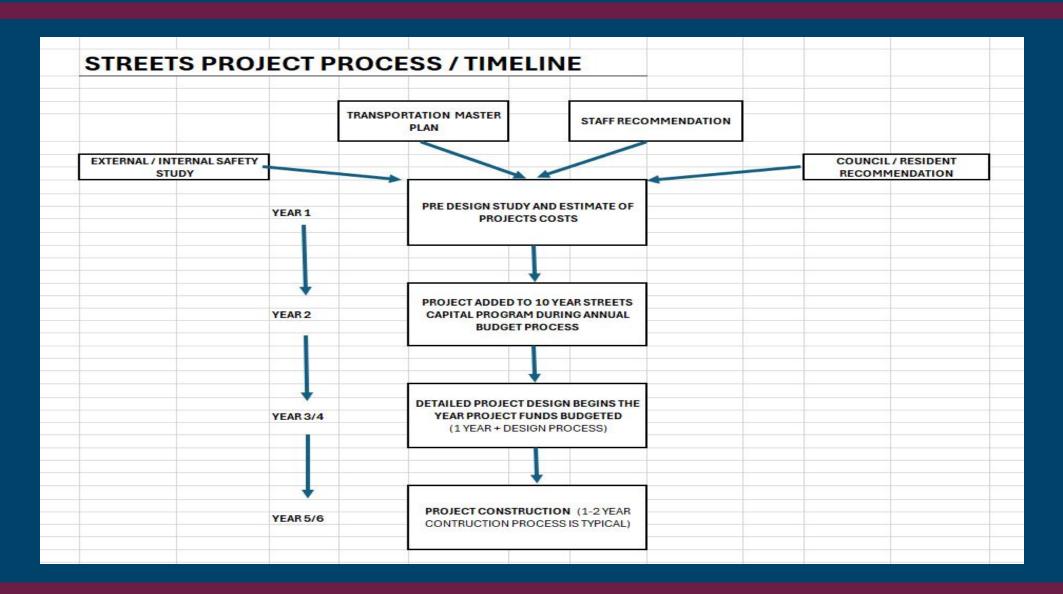
- Large Project Evolution
- o Intersection / Roadway Projects
- o Miscellaneous Programs
- o Next Meeting Preview
- o Questions and Discussion



Large Project Evolution







What Triggers The Need For An Intersection Or Roadway Project?

Reason for Improvement How We Identify It

Safety Concerns Crash History and Severity and Road Safety Audits (RSA)

Capacity & Congestion Traffic Counts, Traffic Flow Quality, Geometric Layout Reviews, Field Observations, Simulation

Operational Efficiency Signal Timing Analysis, Speed, Traffic Volumes, Turning Movement Counts, Intersection Performance, Arrival and Departure Counts

Pedestrian & Bicycle Needs Pedestrian/Bicycle Counts, ADA Compliance Survey/Evaluation, User Feedback

Land Use Changes Trip Generation Analysis and Traffic Impact Study

Key Message: Improvements are based on data-driven assessments to enhance safety, efficiency, and functionality.

What Solutions Can We Build To Fix The Problems?

- Dual Left-Turn Lanes/Right Turn Lanes: Typically requires road widening, relocation of curbs, sidewalks, and utilities to accommodate additional lanes, often necessitating relocation of signal poles, mast arms, and equipment.
- Bicycle Lanes: Expanding the roadway to add bike lanes often involves widening the street, adjusting lane markings, and potentially realigning signals and poles.
- Road Widening for Through Lanes: Adding through lanes increases capacity but necessitates widening the entire
 intersection, which impacts not just the roadway, curbs, sidewalks, and utilities but also the signals, requiring
 longer mast arms and new poles.
- Signal Upgrades to Meet MUTCD Standards: Ensuring proper signal indication alignment and visibility, especially when adding new lanes, often requires longer mast arms, new signal poles/foundations for all directions.
- Flashing Yellow Arrows (FYA): Improves safety but often necessitates longer mast arms and new signal poles to ensure proper coverage for the new lanes.
- ADA Compliance: Installing or relocating audible push buttons and curb ramp upgrades.
- Improved Crosswalk Visibility: High-visibility markings and enhanced signage improve safety but may also involve signal pole realignment and upgraded signage infrastructure.
- Enhanced Lighting: Improving visibility at night or during poor weather conditions involves adding new lighting poles or upgrading existing ones to illuminate the expanded roadway.

Intersection/Roadway Projects



Arizona Ave/Warner Rd Intersection

Page	Program #	Program Name	Current 10 Year CIP	Bond Auth Needed	Funding Source
	6ST786	Arizona Ave/Warner Rd Intersection	\$1,257,300	15,466,700	Streets General Obligation Bonds

The Arizona Avenue and Warner Road intersection was identified by the Maricopa Association of Governments (MAG) as a top 50 intersection for crash incidences in the MAG region. A Road Safety Assessment, RSA recommended adding dual left turn lanes for both northbound and southbound traffic on Arizona Ave at Warner, signal phasing changes to better accommodate traffic flows, installation of dual left-turn lanes on northbound and southbound Arizona Ave to reduce the severity and number crashes. Arizona Avenue is classified as a high-capacity corridor with multiple road users.

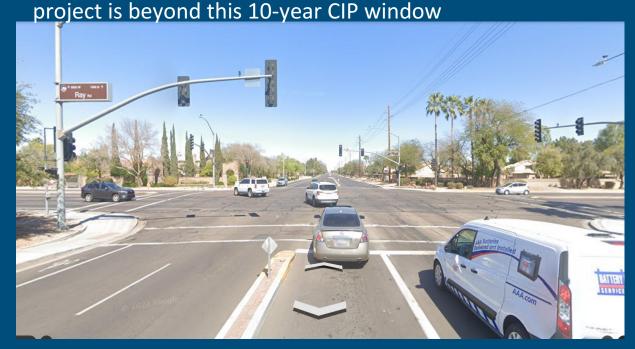




Ray Road / Kyrene Road Intersection

Program #	Program Name	Current 10 Year CIP	Bond Auth. Needed	Funding Source
6ST781	Ray Road / Kyrene Road Intersection	\$5,553,000	\$5,533,000	Streets General Obligation Bonds, Capital Grants

The Ray Road/Kyrene Road program includes intersection includes reconstruction of the intersection to three thru lanes, dual left turn lanes, right turn lanes, and bike lanes in each direction as well as sidewalks, curb and gutter, street lighting, traffic signals, storm drainage, landscaping, right-of-way acquisition, and utility relocations. Construction funding for this



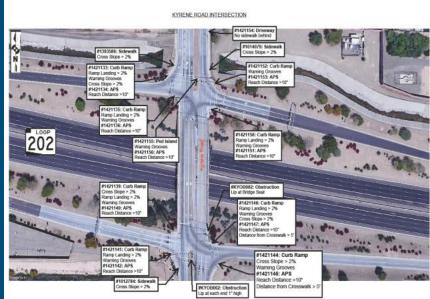


Kyrene Road (Chandler Boulevard to Santan 202)

Program #	Program Name	Current 10 Year CIP	Bond Auth Needed	Funding Source
6ST737	Kyrene Road (Chandler Boulevard to Santan 202)	\$45,403,100	\$11,906,000	Streets General Obligation Bonds, Capital Grants

This program includes widening Kyrene Road from Chandler Boulevard to the Santan (Loop 202) Freeway from four to six thru lanes (widening to outside), traffic signal modifications, street lighting, storm drainage, landscaping, ROW acquisition and utility relocations. This program also includes intersection improvements at Kyrene Rd and Chandler Blvd consisting of dual left turn lanes and single right in all directions per study that was completed in 2021.







Warner Rd. (Price to Arizona Ave)

Program #	Program Name	Current 10 Year CIP	Bond Auth. Needed	Funding Source
6ST774	Warner Rd. (Price to Arizona Ave)	\$13,911,000	\$13,911,000	Streets General Obligation Bonds, Capital Grants

Warner Road will be widened from 4 to 6 lanes between Price Rd and Arizona Ave, including intersection improvements at Dobson Rd, Alma School Rd, and Arizona Ave. Improvements will consist of thru lanes, turn lanes, bike lanes, sidewalks, curbs and gutters, street lighting, Intelligent Transportation System (ITS), traffic signals as warranted, storm drainage, landscaping, right-of-way acquisition, and utility relocation. Construction funding for this project is beyond this 10-year CIP window



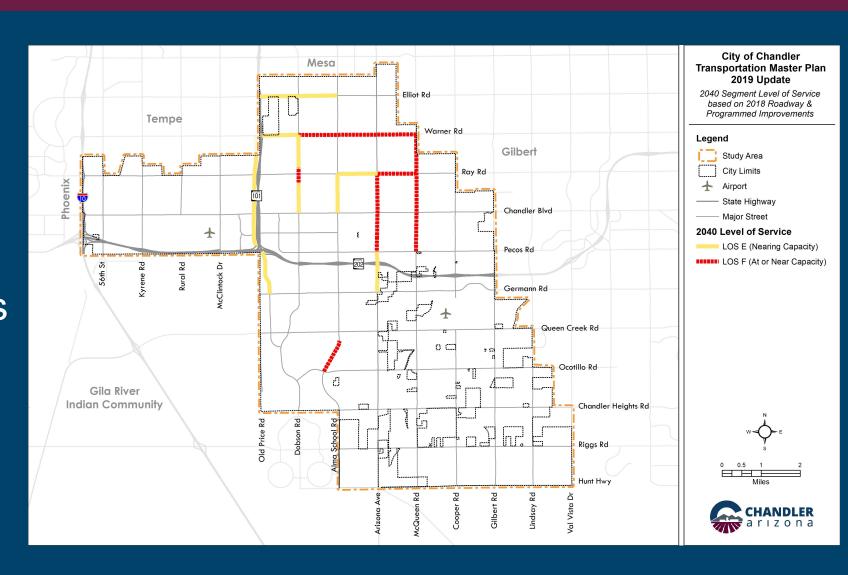




2040 Level of Service Without Improvements

Capacity constraints primarily north of Loop 202

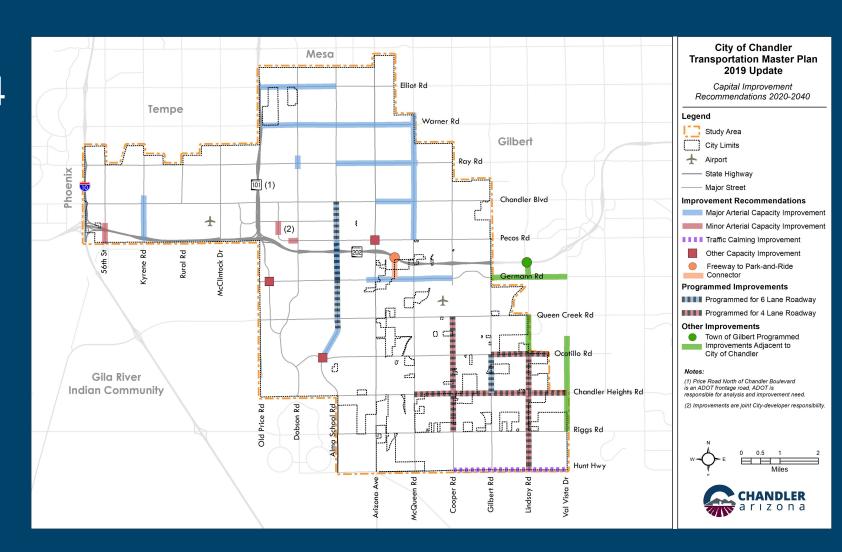
 Programmed projects accounted for in analysis



Roadway Recommendations (2020-2040)

- Network of primarily 4

 lane and 6-lane
 roads
- Several 4-lane roads with 6 lanes at intersections north of Loop 202 and east of Loop 101

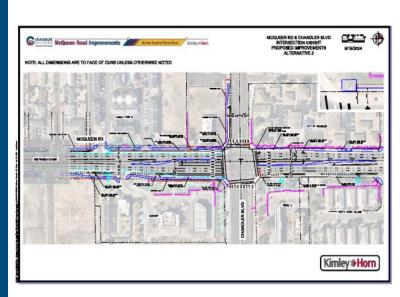


McQueen Road Improvements (Warner to Pecos)

Program #	Program Name	Current 10 Year CIP	Bond Auth. Needed	Funding Source
6ST793	McQueen Road Improvements (Warner to Pecos)	\$84,885,000	\$26,631,000	Streets General Obligation Bonds, Capital Grants

McQueen Road improvements will consist of thru lanes, turn lanes, bike lanes, sidewalks, curbs and gutters, street lighting, ITS, traffic signals, storm drainage, landscaping, right-of-way acquisition, and utility relocation. A study began in FY 2023-24 to provide recommended intersection improvements, roadway alignment modifications, and inner/outer widening requirements.







Miscellaneous Programs



Street Construction - Various Improvements

Program #	Program Name	Current 10 Year CIP	Bond Auth Needed	Funding Source
6ST303	Street Construction - Various Improvements	\$12,000,000	\$4,800,000	Streets General Obligation Bonds, Capital Grants

This program provides funding for small safety related projects and developer agreements that arise outside of the normal budget cycle. The program also provides budget appropriation for "year-end closeout" federal grants for various projects and for other federal, state, or county grants. The notification of these grants is often received after the budget has been finalized. The program includes \$4 million in grant appropriation for these unforeseen grant awards.







Traffic Signals Improvements and Repairs

Program #	Program Name	Current 10 Year CIP	Bond Auth Needed	Funding Source
6ST322	Traffic Signals Improvements and Repairs	\$16,019,500	\$10,038,500	Streets General Obligation Bonds

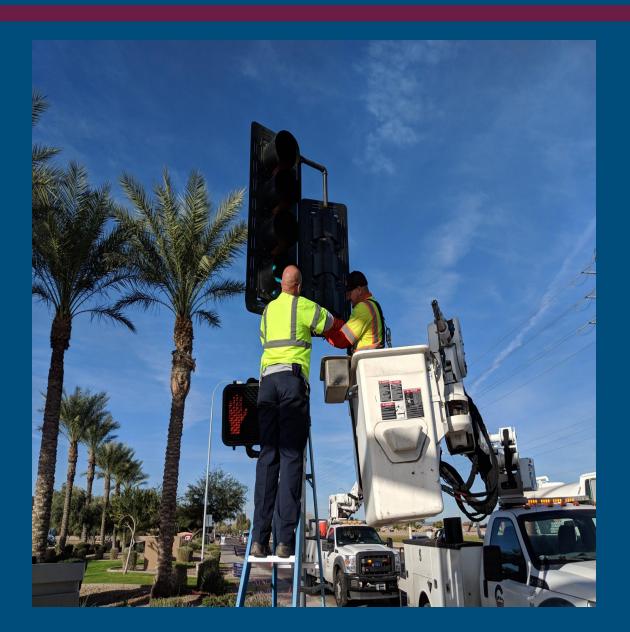
This program will provide traffic signal equipment for ongoing operations, maintenance, and rehabilitation of existing traffic signals, rewiring of intersections, replacement of illuminated street name sign faces, and pole painting. Equipment ranges from signal poles and heads, cameras, controllers, pedestrian signal audibles, speed reader boards, timers, and cabinets. Funding includes upgraded cabinets with the capacity to fit all required equipment necessary including cameras and allows for access to parts of the cabinet making it easier and more efficient for staff.





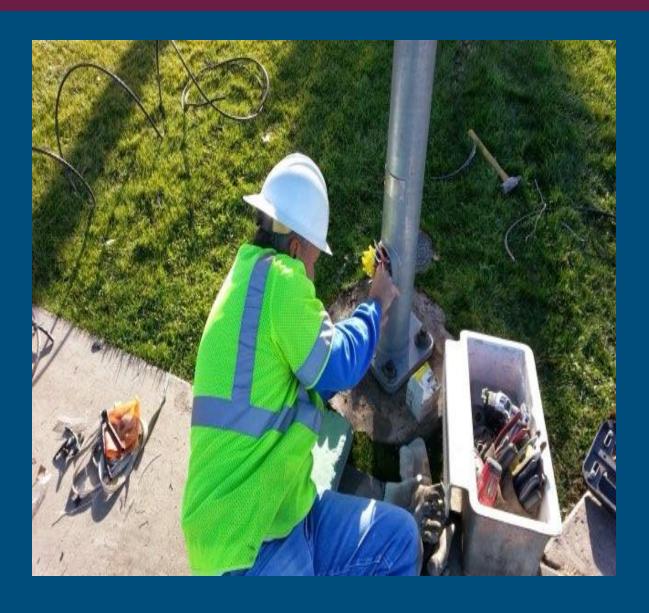


Traffic Signal and Street Light Maintenance





Managing the Wiring and Electronic Systems





Repair of Damaged Poles and Wiring





Sharing the Beauty of Chandler From a Streets Guy!!



Collector Street Improvements

Program #	Program Name	Current 10 Year CIP	Bond Auth Needed	Funding Source
6ST719	Collector Street Improvements	\$7,270,000	\$1,425,000	Streets General Obligation Bonds

This request is to improve collector streets to city standards. Improvements will occur on the following collector streets: South half of Armstrong Way (from Hamilton Street to approximately 1,250 feet east) and the west half of Hamilton St (from Armstrong St to approximately 420 feet north) to collector roadway. This collector is included in the transportation plan. Willis Road (Vine Street to 1,700 feet east) El Monte Place (from Cheri Lynn Drive to 1,000 feet east)







Armstrong Way and Hamilton Street



Willis Road (Vine Street to 1,700 feet east)



El Monte Place (from Cheri Lynn Drive to 1,000 feet east)



Preview of Project Meeting #2 October 29, 2024



2025-2034 CIP - Streets

Program #	Program Name	Current 10 Year CIP	Bond Auth Needed	Funding Source
6ST248	Street Repaving	\$185,940,000	\$88,008,000	HURF, General Government Capital Projects, Streets General Obligation Bonds

Chandler maintains about 2,090 lane miles of streets. The Streets Division inventories all streets on a four-year cycle to evaluate pavement condition. Pavement Quality Index (PQI) is tracked to determine maintenance priority. Streets with a PQI of 40 or less (scale of 1 to 100) are scheduled for repaving. Asphalt seals and ADA related concrete sidewalk replacement are also part of this program.







2025-2034 CIP - Streets

Page	Program #	Program Name	Current 10 Year CIP	Bond Auth Needed	Funding Source
	6ST702	Washington Street Improvements	\$12,841,000	\$9,833,000	Streets General Obligation Bonds

Waiting On Kim







2025-2034 CIP - Streets

Pro	ogram #	Program Name	Current 10 Year CIP	Bond Auth. Needed	Funding Source
65	ST753 Ocotillo Rd. Sha	ared Use Path	\$21,911,000	\$21,911,000	Streets General Obligation Bonds, Capital Grants

This program will add a ten to twelve-foot-wide shared use path on one side of Ocotillo Road between Dobson Road and 148th Street. (6.7 miles)





