



Public Works Department 5-Year Capital Improvement Program

April 11, 2023



Study Session Goals



- Summarize the 2035 General Plan and its relationship to the Capital Improvement Program (CIP)
- Provide a report on CIP progress to date and remaining projects, including projects from other documents
- Review current funding sources and the need for additional revenue sources
- Discuss how staff leverages limited local funds to obtain State and Federal funds to complete large projects
- Present an overview of the Drainage and Stormwater Program
- Present the Traffic Program
- Present the Pavement Management Program and Sidewalk Maintenance Program
- Identify key Major Transportation Projects in the CIP
- Present the Bridge Preventative Maintenance Program
- Summarize the current 5-Year CIP and identify projects not yet started
- Final Thoughts/Questions

Folsom's 2035 General Plan



1. Introduction
2. Land Use
3. Mobility
4. Economic Prosperity
5. Housing
6. Natural and Cultural Resources
7. Public Facilities and Services
8. Parks and Recreation
9. Safety and Noise
10. Implementation



3 Mobility

This Element contains goals, policies, and implementation programs that ensure a safe, efficient, and convenient transportation network for Folsom residents and visitors. Folsom's transportation network is designed to serve all modes, including walking, bicycling, driving, and riding mass transit. A strong transportation road network supports local business and industry, and trails and paths provide facilities for passive recreation.

Mobility Element

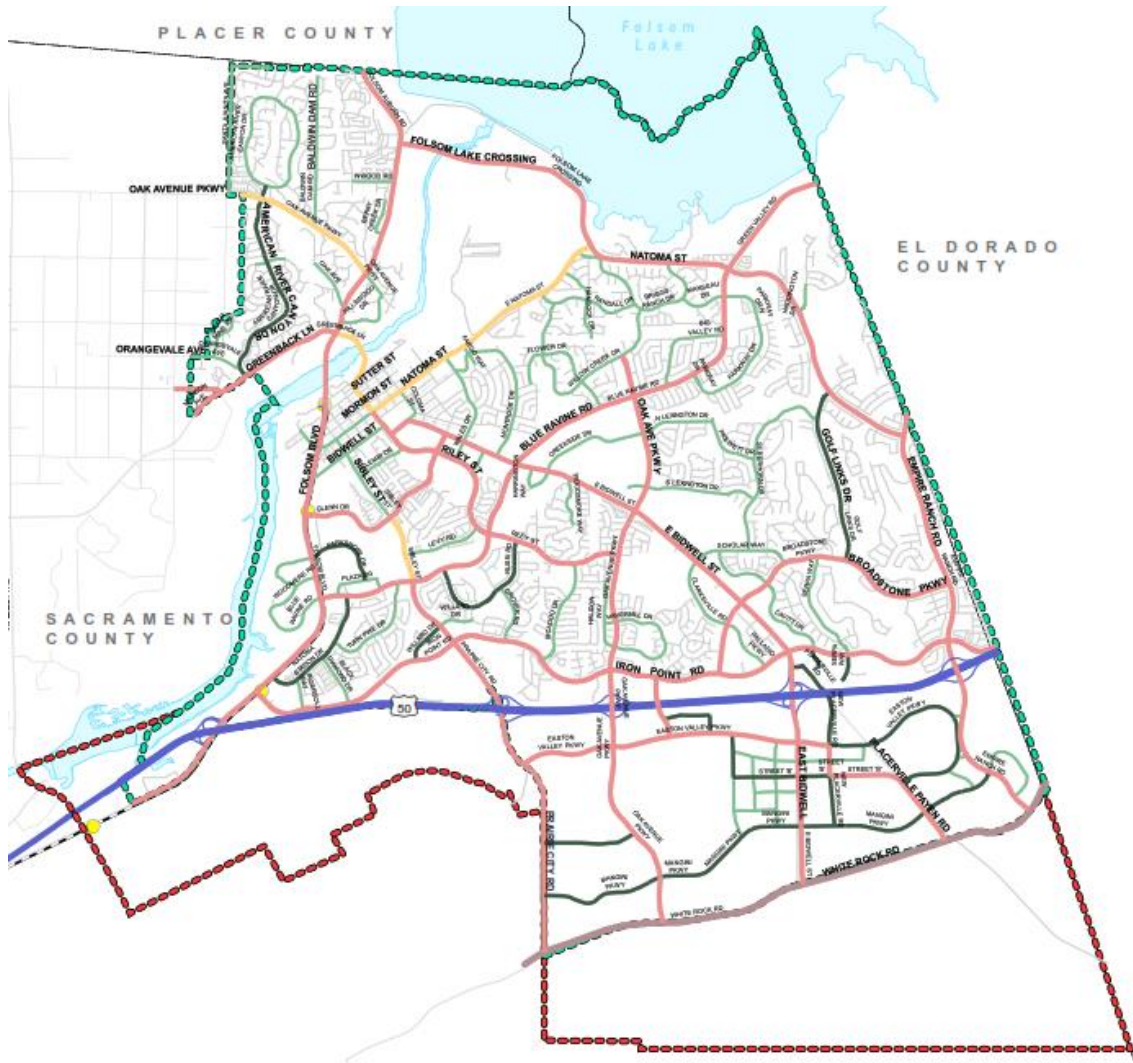


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Goal	
M1.1	Provide a comprehensive, integrated, and connected network of transportation facilities and services for all modes of travel that also incorporates emerging transportation technologies and services to increase transportation system efficiency.
M2.1	Maintain and expand facilities and programs that encourage people to walk and bike in safety and comfort, and support the lifestyle and amenities that Folsom residents value.
M3.1	Support and maintain a comprehensive, safe, and integrated transit system that responds to the needs of all residents and allow frequent and convenient travel throughout the city and region.
M4.1	Ensure a safe and efficient network of streets for cars and trucks, as well as provide an adequate supply of vehicle parking.
M4.2	Provide and manage a balanced approach to parking that meets economic development and sustainability goals.
M5.1	Provide an efficient system of goods movement that aids in the prosperity of industrial and commercial businesses while minimizing potentially adverse impacts to the rest of the community.
M6.1	Maintain and increase regional cooperation between Folsom and neighboring jurisdictions, regional organizations, and relevant State agencies.
M7.1	Provide sufficient funding to construct, maintain, and operate transportation facilities and services needed to achieve the city's mobility goals.

2035 Circulation Diagram



As of March 2023:

- 707 lane miles of public roads
- 30 Bridges
- Approx. 1.7M feet of sidewalks
- 109 traffic signals
- 270 miles of storm drains
- 32 Stormwater basins
- 6,986 Street lights
- Over 25,000 traffic signs

General Plan CIP Roadways



Street	Limits	Project	Status
Oak Avenue Parkway	Folsom-Auburn to Baldwin Dam	Widen from 2 to 4 lanes	In planning
Green Valley Road	East Natoma Street to County line	Widen from 2 to 4 lanes	Completed
Prairie City Road	US-50 to White Rock Road	Widen from 2 to 6 lanes	Not started
East Bidwell Street	US-50 to White Rock Road	Widen from 2 to 4 lanes	In construction
Iron Point Road	Folsom Blvd. to Prairie City Rd	Widen from 4 to 6 lanes	Not started
White Rock Road	Prairie City Road to County Line	Widen from 2 to 4 lanes	Partially completed
Empire Ranch Road	At US-50	Construct Interchange	In design
East Bidwell Street	At US-50	Improve Interchange	In planning
Rowberry Drive	At US-50	Construct 4-lane overpass	In planning
Oak Avenue Parkway	At US-50	Construct Interchange	Not started
Empire Ranch Road	US-50 to White Rock Road	Construct 4-lane arterial	In construction
Oak Avenue Parkway	US-50 to White Rock Road	Construct 4-lane arterial	Not started
Mangini Parkway	Prairie City Rd to Empire Ranch Rd	Construct new roadway	Partially completed
Alder Creek Parkway	Prairie City Rd to Empire Ranch Rd	Construct new roadway	Partially completed

Objective M4.1.3 (Level of Service)



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Level of Service

Strive to achieve at least a traffic Level of Service “D” (or better) for local streets and roadways throughout the City. In designing transportation improvements, the City will prioritize use of smart technologies and innovative solutions that maximize efficiencies and safety while minimizing the physical footprint. During the course of Plan buildout it may occur that temporarily higher Levels of Service result where roadway improvements have not been adequately phased as development proceeds. However, this situation will be minimized based on annual traffic studies and monitoring programs. **Staff will report to the City Council at regular intervals via the Capital Improvement Program process for the Council to prioritize projects integral to achieving Level of Service D or better.**

Level of Service

LOS (Signalized Intersections)

Level of Service is:

- A qualitative measure of the quality of traffic delay at an intersection
- Based on calculated average delay
- Ranked on a scale that ranges from A (best) to F (worst)
- Generally used to assess peak commute hours but can be applied to any time period

Level of Service	Description	Average Delay (sec/veh)
A	Very low delay. Most vehicles do not stop.	≤ 10.0
B	Slight delay. Generally good signal progression.	10.1 – 20.0
C	Increased number of stopped vehicles. Occasional cycle failures.	20.1 – 35.0
D	Noticeable congestion. Large proportion of vehicles stopped.	35.1 - 55.0
E	Operating conditions at or near capacity. Frequent cycle failure.	55.1 – 80.0
F	Oversaturation. Forced or breakdown flow. Extensive queuing.	> 80.0

Source: Transportation Research Board, *Highway Capacity Manual 2010*, Fifth Edition, December 2010.

General Plan CIP Intersections



Intersection	2018 AM	2035 AM	2018 PM	2035 PM	Status
Folsom-Auburn Rd at Folsom Lake Crossing	D	F	E	F	Seeking funding
Folsom-Auburn Rd at Oak Avenue Pkwy	D	E	D	E	Seeking funding
Folsom-Auburn Rd at Greenback Ln	C	E	E	F	Not started
Folsom Blvd at Blue Ravine Rd	D	D	E	E	Not started
Blue Ravine Rd at Sibley/Prairie City	D	F	D	E	Partially built
Folsom Blvd at Iron Point Rd	B	D	C	E	Not started
Oak Avenue Pkwy at Iron Point Rd	C	F	C	F	Not started
East Bidwell St at White Rock Rd	D	C	F	B	Completed
East Bidwell St at Iron Point Rd	C	E	C	E	In design
Empire Ranch Rd at Iron Point Rd	B	D	B	E	Partially built

Other inputs to the CIP

- Active Transportation Plan (ATP) –309 bike/ped projects, \$215M estimated cost
- Pavement Management Program (PMP)
- Sidewalk Inspection and Maintenance Program (SMP)
- Storm Drain Master Plan (DMP)
- Local Road Safety Plan (LRSP) – 10 HSIP eligible safety projects
- Intersection Control Evaluation (ICE) – 18 unfunded intersection projects
- Intelligent Transportation Systems Master Plan (ITS)
- Specific Plans (East Area, Broadstone, Folsom Ranch)
- Strategic Plan Implementation Action Plan

Elements of the 5-Year CIP



Primary Funding Sources

Funding Source	Transportation Impact Fees Fund 446	Drainage Impact Fees Fund 448	Measure A Fund 276	Gas Tax Funds 243, 244, 245, 247	SB-1 (Road Maintenance & Rehabilitation) Fund 235	Light Rail Impact Fees Fund 451
Current Fund Balance	\$3.05M	\$1.06M	\$4.16M	\$4.27M	\$1.01M	\$1.12M
Revenue Received FY21-22	\$1.32M	\$265K	\$3.41M	\$1.96M	\$1.65M	\$122K
Revenue Received FY22-23 (YTD)	\$1.03M	\$217K	\$2.66M	\$1.44M	\$1.22M	\$109K

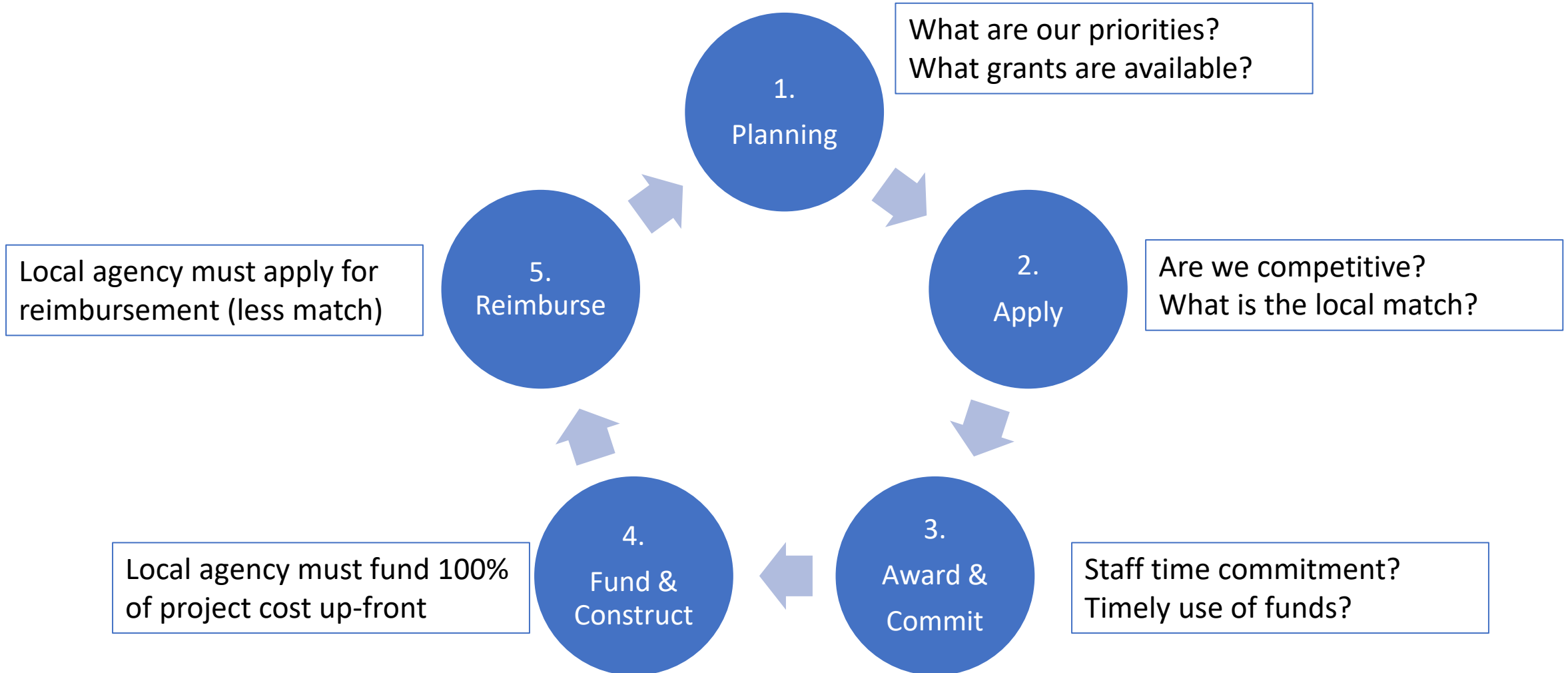
Funding sources not currently available/utilized:

- General Fund (not utilized)
- Local Tax (not implemented)
- Stormwater Utility Fee (not implemented)

Primary Grant Fund Sources

- State Programs
 - SB-1 Gas Tax Competitive Funding
 - Highway Safety Improvement Program (HSIP)
 - Congestion Management Air Quality (CMAQ)
 - State Transportation Improvement Program (STIP)
 - Active Transportation Program (ATP)
- Federal Programs
 - Bridge Preventative Maintenance Program (BPMP)
 - Congressionally-Directed Funds
 - Safe Streets for All (SS4A)
 - Strengthening Mobility and Revolutionizing Transportation (SMART)
 - Loan programs (TIFIA, TIGER, etc.)

Local Match Grant Fund Strategy



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Drainage and Stormwater Program

- Program components dictated by the City's NPDES permit requirements from the State
 - Stormwater Facilities Operations and Maintenance
 - Storm Drain Maintenance
 - Creek Maintenance
 - Drainage Basin Maintenance
 - Street Sweeping
 - Stormwater Quality Improvement Activities
 - Construction Inspections
 - Commercial/Industrial Compliance
 - Municipal Operations
 - Illicit Discharge Control
 - Public Outreach and Education
 - New Development Review
 - Target Pollutant Reduction
 - Drainage and Stormwater Capital Improvement Projects



Sacramento Stormwater Quality Partnership

including the County of Sacramento and the cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova

The City of Folsom is the only municipality among the Sacramento Areawide NPDES co-permittees without an established stormwater utility fee

5-Year CIP: Drainage & Stormwater

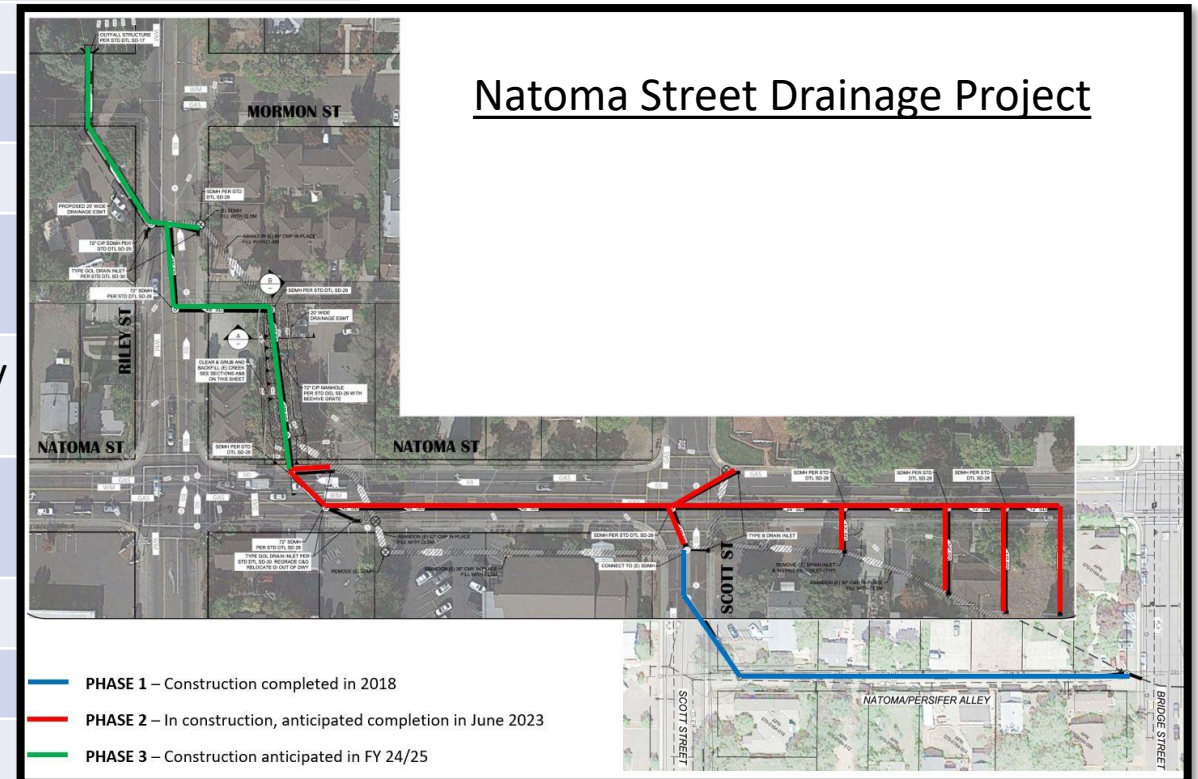
Capital Improvement Projects Developed Based Upon:

- Maintenance Needs
 - Proactive – Routine Inspections; CCTV Investigations
 - Reactive – Sinkholes; Localized Flooding
- Unfunded State Mandates



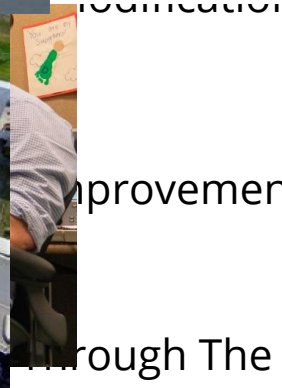
5-Year CIP: Drainage & Stormwater

Project	Status	Estimated Cost
Natoma Street Drainage Ph 2	Construction	\$1.3M
Natoma Street Drainage Ph 3	Planning	\$1.5M
Willow Creek Estates SD Lining	Final Design	\$500K
Glenn Drive Storm Drain Lining	Planning	\$300K
Sibley Street Drainage Rehabilitation	Planning	\$500K
Storm Water Basins Rehabilitation	Construction/ Ongoing	\$150K annually
American River Canyon Subsurface Drainage	Planning	\$250K
Natomas Ditch Spillway Repair	Final Design	\$100K
NPDES Full Trash Capture	Planning	\$500K
Riley Street at Scott Street Drainage Upgrade	Planning	\$200K



5-Year CIP: Traffic

1.



CIP PROJECTS IN DESIGN

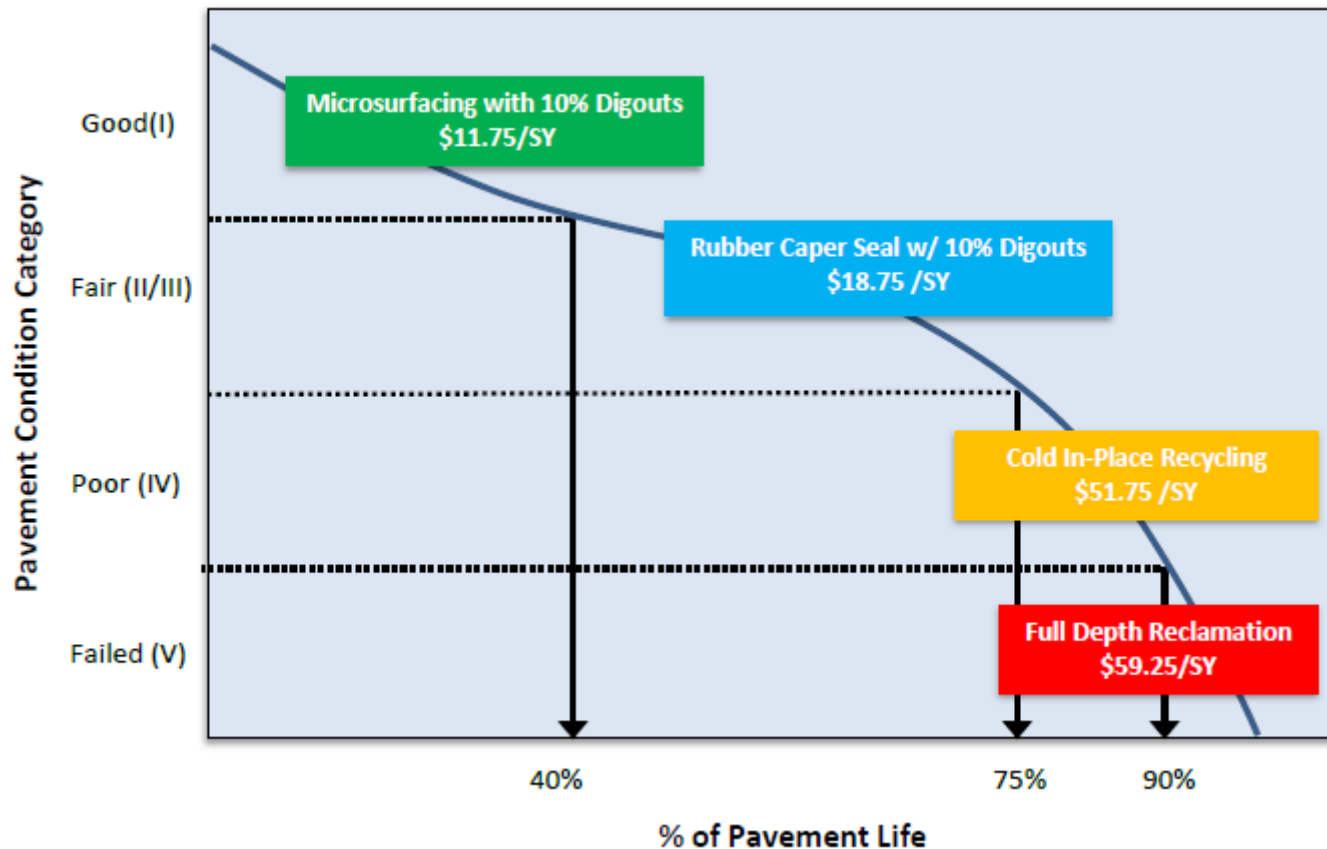
- Historic District Parking Management Project (ARPA)
- East Bidwell & Iron Point / US50 On Ramp Improvement Project (Local - 446)
- HSIP Cycle 10 Traffic Signal Safety Improvement Project (HSIP –State)
- ITS Master Plan Implementation Project (SACOG – M&M)

Pavement Management Program



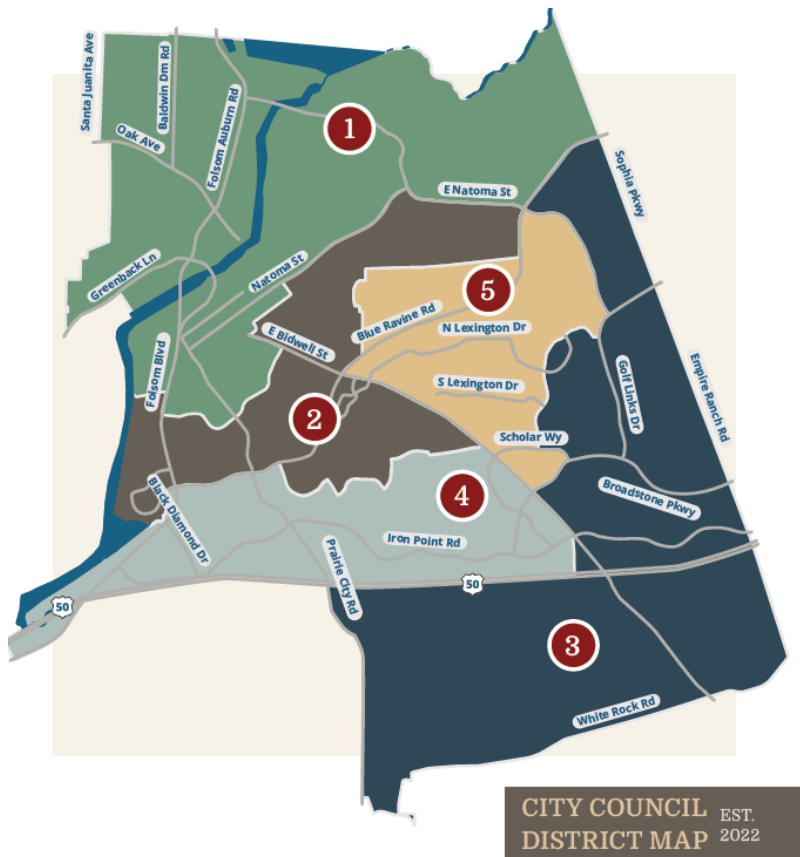
- Pavement Management Program
 - 707 Lane Miles of Roadways
 - 37 Miles of Bike Paths
 - 46 Parking Lots
 - Historically funded approx. \$2M per year for roadway maintenance
 - Perform network inspection and PMP Report update every 5 years
 - Utilize StreetSaver for program analysis
 - Current overall roadway average PCI of 70

Pavement Management Program



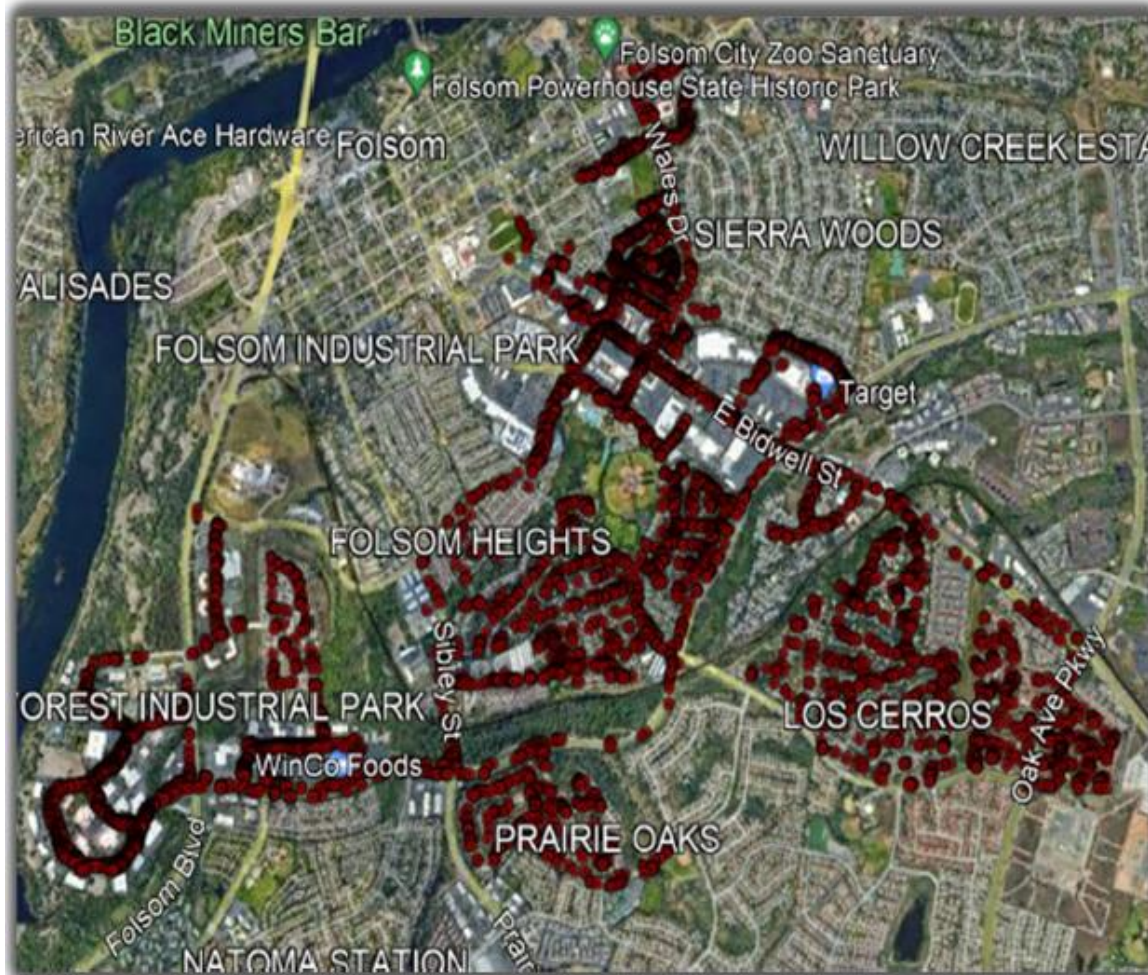
- Roadway Needs Analysis
 - Maintain PCI 75
 - 2015 - PCI 77 - \$8M per year
 - 2020 - PCI 74 - \$10M per year
 - 2023 - PCI 70 - \$12.5M per year
 - Deferred Maintenance
 - 2015 - \$ 30.5M
 - 2020 - \$ 52.5M
 - 2023 - \$ 74.2M
 - 2044 - \$ 398M

Sidewalk Maintenance Program



- In 2022 Public Works implemented a Sidewalk Inspection & Maintenance Program
- FY 2022-23 Inspected Council District 2
- Rotating 5-year inspections and resulting repair projects (Zones 2, 4, 5, 1, 3 Based on Severity)
- Majority of sidewalk uplifts are caused by tree roots from adjacent properties
- FY 2022-23 Funding of \$550,000

Sidewalk Maintenance Program



This sidewalk uplift repair project includes:

- Uplifted sidewalk panels to be repaired by saw-cutting: **5,574**
- Remove & Replace locations identified: **48**
- Total Cost **\$418,025.81**

* **Assessment still in progress**

The specifications for this project are as follows:

- Inspect area for uneven sidewalks $\frac{1}{4}$ inch and greater
- Take site photographs
- Inventory and Document all locations that require removal and replacement

All work to be completed in **50-55** working days using our patented saw cutting technique resulting in an edge to edge repair of the sidewalk with a completely planar slope and in accordance with the Americans with Disabilities Act of 1990.

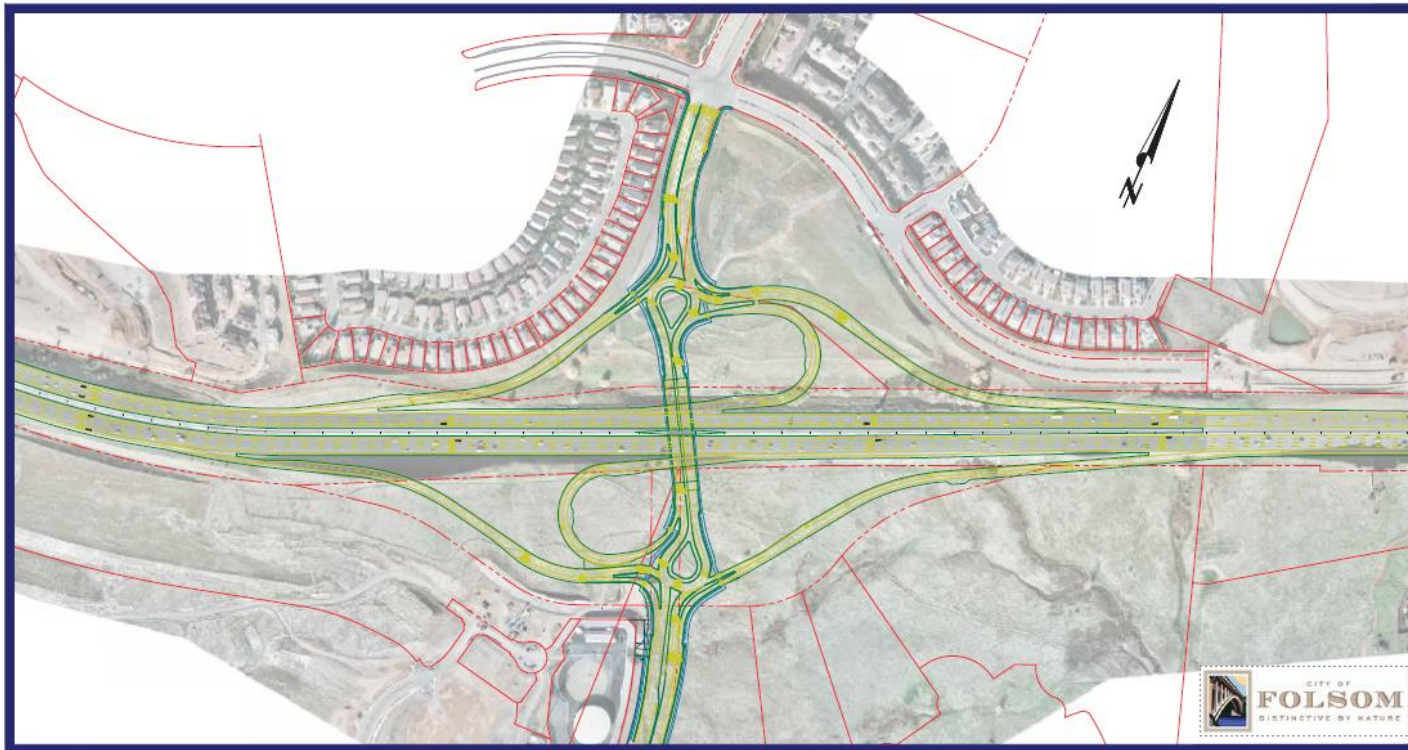
Conventional Repair \$2.5M

Sidewalk Maintenance Program

Section 5610:

The owners of lots or portions of lots fronting on any portion of a public street or place when that street or place is improved or if and when the area between the property line of the adjacent property and the street line is maintained as a park or parking strip, shall maintain any sidewalk in such condition that the sidewalk will not endanger persons or property and maintain it in a condition which will not interfere with the public convenience in the use of those works or areas save and except as to those conditions created or maintained in, upon, along, or in connection with such sidewalk by any person other than the owner, under and by virtue of any permit or right granted to him by law or by the city authorities in charge thereof, and such persons shall be under a like duty in relation thereto.

Empire Ranch Interchange



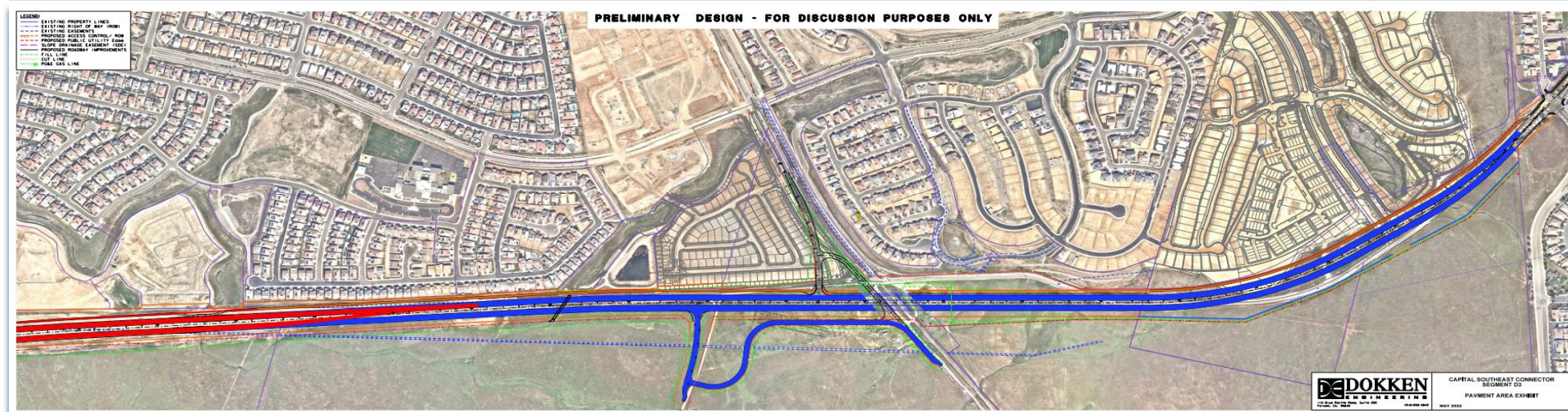
EMPIRE RANCH ROAD/ROUTE 50 INTERCHANGE
ROUNDBOUT INTERSECTION ALTERNATIVE

- Currently in Project Approval & Environmental Document (PA&ED) Stage
- Staff ready to move into Final Design and Right of Way Acquisition upon approval of the Project Report and Circulation of Environmental
- Submitted several Grant Program Applications
 - Congressionally Directed Spending
 - SACOG Transformative
 - STIP
- Projected Construction Cost \$75 Million

5-Year CIP: Major Projects

Southeast Connector Segment D3(B)

- Staff working with Southeast Connector Joint Powers Authority to acquire funding for Final Design, Right of Way Acquisition, and Construction. \$4 million of funding has been provided for Class 1 Bike Trail. \$0 for Road to date.
- Utility Relocation also required. (PG&E High Pressure Gas Main underground, and Aerial Joint Utilities)
- Decommission of existing Rail Crossing or Grade Separation Required. (\$15 Million at Grade/\$25 Million Grade Separation)
- Coordination with El Dorado County recommended to combine with Segment E1



5-Year CIP: Bridge Program



- Caltrans Inspects All City Bridges in and over City of Folsom Right of Way, Biannually
- Reports based on the Caltrans Inspection provide Condition Assessment and Recommendations
- Folsom Bridge Inventory includes 30 bridges, Orangevale Ave Bridge 1915 to Alder Creek Dr 2023
- The Highway Bridge Program provides Federal Funding for Rehabilitation or Replacement
 - Orangevale Bridge Rehabilitation Project completed in 2017
- The Bridge Preventative Maintenance Program Provides Funding for specific maintenance items
 - Rainbow Bridge Maintenance Project completed in 2018
 - Staff submitted Bridge Preventative Maintenance Priority List in 2022 for future projects. The projects will be considered in 2024 Tier 4 per Caltrans.
 - Relevant current Capital Improvement Program Projects include:
 - Lake Natoma Crossing Deck Treatment
 - Folsom Lake Crossing Deck Treatment

5-Year CIP: Bridge Program



CITY OF FOLSOM

Federal Fiscal Year 2022/2023 Bridge Preventive Maintenance Program

Priority (Lowest Number Is Top Priority)	Bridge Number from Inspection Report	Facility Carried	Feature Intersected	Location	Work Description	Federal Share	Local Share	Total Particip. Cost
1	24C0546	Folsom Lake Crossing	American River	By Folsom-Auburn Rd and Dam	• Treat Bridge Deck and Approach Slab with methacrylate	\$451,503	\$58,497	\$510,000
2	24C0504	Folsom-Auburn Boulevard	American River/Lake Natoma	0.3 mi S of Greenback	• Spot Clean and Paint Bridge Railing • Place Polyester Concrete Overlay	\$3,010,020	\$389,980	\$3,400,000
3	24C0531L	East Natoma St. WB	Humbug Creek	Near Blue Ravine Rd.	• Treat Bridge Deck with methacrylate	\$66,398	\$8,603	\$75,000
4	24C0531R	East Natoma St. EB	Humbug Creek	Near Blue Ravine Rd.	• Treat Bridge Deck with methacrylate	\$66,398	\$8,603	\$75,000
5	24C0630	Parkshore Drive	Willow Creek	0.2 mi E of Folsom Blvd.	• Treat Bridge Deck with methacrylate • Joint seal replacement	\$82,333	\$10,667	\$93,000
6	24C0510	Riley Street	Humbug Creek	East of Ravine Road	• Treat Bridge Deck with methacrylate	\$89,769	\$11,631	\$101,400
7	24C0511	Riley Street	Willow Creek	East of Ravine Road	• Treat Bridge Deck with methacrylate	\$107,121	\$13,879	\$121,000
8	24C0627	Prewett Dr	Willow Creek	North of Newington Way	• Replace deteriorated bridge railing post blocks	\$49,134	\$6,366	\$55,500
9	24C0505	Leidesdorff St, LRT	Folsom Blvd	0.6 mi SW of Gold Lake Rd	• Place Polyester Concrete Overlay • Repalce Joint seal	\$115,974	\$15,026	\$131,000
10	24C0387	Oak Ave Parkway	Humbug Creek	200' S of Blue Ravine	• Inject Crack (Epoxy) culvert walls	\$48,692	\$6,309	\$55,000
11	24C0628	Flat Rock Rd	Linda Creek Tributary	Just S of Alpine Falls Dr	• Inject Crack (Epoxy) culvert soffit	\$51,347	\$6,653	\$58,000
12	24C0629	Alpine Falls Drive	Linda Creek Tributary	Just E. of Feather Falls Rd.	• Repair Spalled Surface Area • Inject Crack (Epoxy) culvert walls	\$51,347	\$6,653	\$58,000
13	24C0632	Parkway Drive	Humbug Creek	Just N of Pond View Dr	• Remove and replace portion of concrete channel lining	\$34,527	\$4,473	\$39,000
14	24C0067	Greenback Lane	American River	0.2 mi E Folsom-Auburn Rd	• Repair spalled and delaminated concrete	\$35,412	\$4,588	\$40,000
15	24C0068	Orangevale Avenue	Gold Creek	0.1 mi W American River Cyn	• Replace Joint seal	\$54,889	\$7,111	\$62,000
16	24C0585	Pedestrian Walkway	East Bidwell	0.1 mi SE Blue Ravine Rd	• Spot Clean and Paint Structural Steel	\$53,118	\$6,882	\$60,000
						\$4,367,982	\$565,918	\$4,933,900

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Current 5-Year CIP Project List



Project	Status	Estimated Cost	Notes
US50/Empire Ranch Interchange	Final design	\$75M (City/Developer)	Partial construction funding available
US50/East Bidwell Interchange	Planning	\$8M (Developer)	Funding not identified
US50/Rowberry Overcrossing	Planning	\$10M (Developer)	Funding not identified
Oak Avenue Parkway Widening	Planning	\$4M (City)	Seeking grant funding
Empire Ranch Road Extension	Construction	n/a	
East Bidwell St Widening	Construction	n/a	
Mangini Parkway Extension	Construction	n/a	
Alder Creek Parkway Extension	Construction	n/a	
Capital Southeast Connector	Partially built	\$20-25M (City/Developer/Others)	Seeking grant funding
Folsom-Auburn/Folsom Lake	Planning	\$6M (City)	Seeking grant funding
Folsom-Auburn/Oak Ave Pkwy	Planning	\$4M (City)	Seeking grant funding
East Bidwell/Iron Point/US50	Final design	\$500k (City)	Construction FY2023
ITS Master Plan Implementation	Construction	\$4M (City)	
Riley Street Sidewalk Project	Final design	\$4M (City)	Seeking additional grant funding

Long-Term CIP Projects

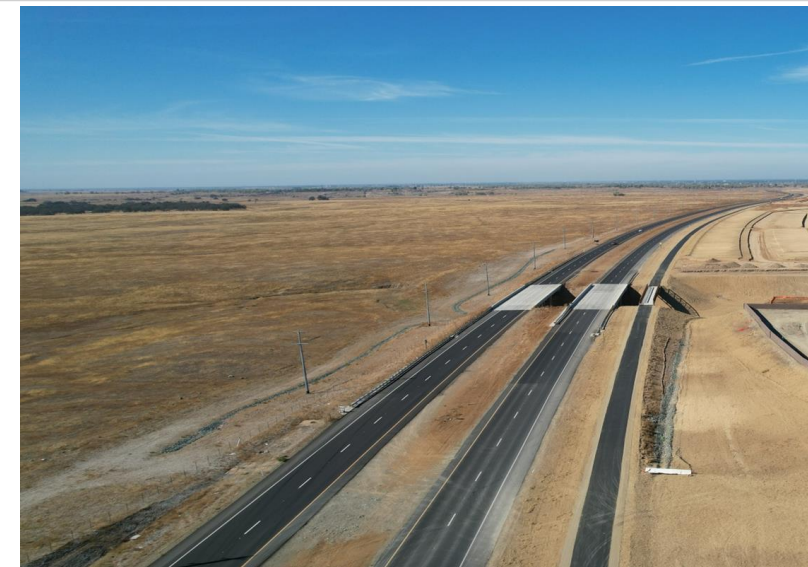


Project	Status	Estimated Cost
Santa Juanita Avenue Realignment	Seeking funds	\$3M (City and others)
Iron Point Road Widening	Not started	\$20M (City)
Riley Street Corridor Project	Not started	\$10M (City)
Oak Avenue Parkway Extension	Not started	n/a (Developer responsibility)
Prairie City Road Widening	Not started	n/a (Developer responsibility)
Folsom-Auburn/Greenback Intersection Improvements	Not started	\$6M (City)
Folsom Bl/Blue Ravine Rd Intersection Improvements	Not started	\$2M (City)
Folsom Bl/Iron Point Rd Intersection Improvements	Not started	\$2M (City)
Oak Avenue Pkwy/Iron Point Rd Intersection Improvements	Not started	n/a (linked to interchange project)






































CIP issues remaining

- Approximately \$250M in unfunded transportation projects
- Approximately \$500M in Deferred Maintenance
- Consideration of Stormwater Utility Fee
- Participation in possible Local Sales Tax
- Re-consideration of Sidewalk Ordinance
- ICE Project List Funding
- ATP Project List Funding
- Future State/Federal mandates
- Emergency/Safety Projects


























Thank you. Any questions?



Intersection Control Evaluation

Intersection Control Alternative Summary					
Intersection		Existing Control	Evaluated Alternatives		Recommendation
			Option A	Option B	
INT 1	Folsom Blvd at Woodmere Rd				
INT 2	Natoma St at Hancock Dr/Folsom				
INT 3	Natoma St at Randall Dr				
INT 4	Broadstone Pkwy at Scholar Way				 
INT 5	Broadstone at Serpa Way				 
INT 6	Iron Point Rd at Black Diamond Dr				
INT 7	Riley St at Lembi Dr				
INT 8	Riley St at Timson Dr				
INT 9	Riley St at Orchard Dr				

Intersection Control Evaluation

Intersection Control Alternative Summary					
Intersection		Existing Control	Evaluated Alternatives		Recommendation
			Option A	Option B	
INT 10	Glenn Dr at Walmart Driveway				
INT 11	Folsom-Auburn Rd at Oak Ave/ Vance Ln				
INT 12	Riley St at Cruickshank Dr				
INT 13	Folsom-Auburn Rd at Berry Creek Dr				
INT 14	Oak Ave Pkwy at Baldwin Dam Rd				 
INT 15	Clarksville Rd at Bundrick Dr				
INT 16	Riley St at Kohl's Main Driveway				
INT 17	Riley St at Walmart Main Driveway				
INT 18	Riley St at Glenn Dr	