Report on Deferred Maintenance and Infrastructure Backlog

and

Report on Pavement Maintenance Conditions, Funding and Program Delivery Strategy

March 12, 2019 City Council Items 3.7 and 3.8



Workplan to Address Backlog Needs

- This is a continuous, on-going process
- Building on previous reports
- Quantifying the assets
- Documenting the unfunded needs
- Refining, clarifying for accuracy
- Developing a strategy for each asset class
- Increased focus on Building/Park Facilities



Impacts of Measure T

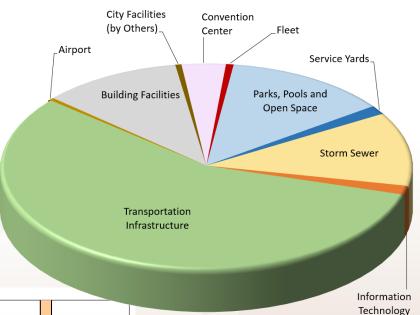
- Reduces future (2028) Pavement backlog by \$500M from the \$1.1B previously reported
- Reduces Storm backlog by \$35M
- Provides \$20M funding to repair or replace vulnerable bridges
- Reduces backlogs in streetlights and outdoor lights by \$20M
- Addresses other infrastructure backlogs



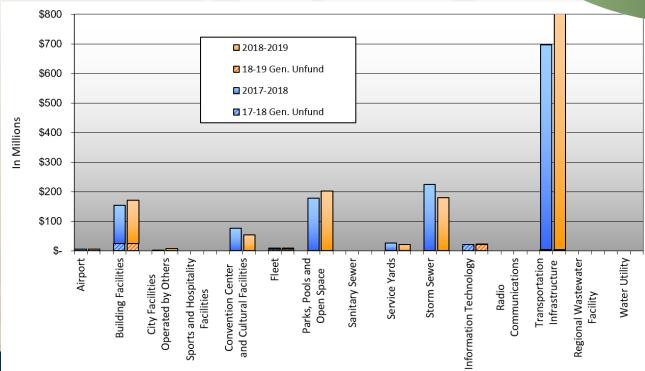
Program	Current Backlog of Deferred Needs	Annual Ongoing Unfunded Needs
Airport	\$5,900,000	NONE
Building Facilities	\$171,491,000 🔺	\$18,912,000
City Facilities Operated by Others (OCA)	\$7,550,000 •	\$1,510,000 🔺
Sports and Hospitality Facilities	TBD	TBD
Convention Center and Cultural Facilities (TSJ)	\$54,100,000 ▼	TBD
Fleet	\$9,300,000 🔺	\$1,300,000 ▼
Parks, Pools and Open Space	\$201,410,000 •	\$33,431,000 🔺
Sanitary Sewer	TBD	\$3,600,000 ▲
Service Yards	\$21,600,000 ▼	\$3,835,000 ▼
Storm Sewer	\$180,000,000 ▼	TBD
Information Technology	\$21,600,000 •	\$381,000
Radio Communications	NONE	NONE
Transportation Infrastructure	\$876,070,000	\$23,850,000 ▼
Regional Wastewater Facility	NONE	NONE
Water Utility	NONE	NONE
Total	\$1,549,041	\$86,819,000



Infrastructure Backlog



One-Time Unfunded Needs





Building Facilities - \$256M



Over 400 Buildings – 5M SF

- PRNS \$131M
- TSJ \$54M
- Service Yard \$22M
- Police \$16M
- City Hall \$8M
- Fire \$8M
- Cultural Facilities \$8M
- Library \$7M
- Misc Fac. \$2M



Building Facilities - \$256M

Roofing

Outdoor Lighting

Elevators

Plumbing

Electrical Systems

Emergency Generator



Exterior Shell

HVAC Systems

Fire Alarm

Solar Systems

Pavement/ Hardscape

> Interior Shell

Over 400 Buildings, comprising over 5 Million Square Feet



Parks, Trails & Community Facilities
Infrastructure

204 Neighborhood and Regional Parks, 3 golf 100 courses and Open Space - 3,534 Acres **Athletic Fields** 61 Trail & Park-Related Bridges **Miles of Paved Trails** 82 **Basketball Courts 17 Community Gardens** 85 **Tennis Courts** 20 **Park Service Yards Bocce Courts** 283 **Outdoor Fitness Areas Playgrounds Aquatic Facilities Dog Parks Skate Parks** San José Family Camp



PRNS Backlog Estimates

Park Component	Estimated Backlog 2018 \$
Park Grounds	\$ 89,836,000
Playgrounds	TBD
Sport Courts / Fields	TBD
Pools	TBD
Bridges	TBD
Park Yards	TBD
Trails	\$ 12,571,000
Regional Facilities	\$ 99,003,000
Park Component SubTotal	\$ 201,410,000
Community Buildings	\$ 57,632,000
Other Buildings	\$ 70,793,000
Restrooms	\$ 2,566,000
Building Component SubTotal	\$ 130,991,000
TOTAL PRNS BACKLOG	\$ 332,401,000



Ongoing Playground Evaluation

Forestdale Tot Lot





											Total
Playgrounds	CD 1	CD 2	CD 3	CD 4	CD 5	CD 6	CD 7	CD 8	CD 9	CD 10	Citywide
≤ 10 Years	2	11	12	12	8	7	22	6	6	3	89
11 - 14 Years	0	1	6	1	3	4	2	6	1	9	33
15 - 19 Years*	13	17	13	15	14	12	11	4	15	19	133
≥ 20 Years*	4	5	6	0	2	0	0	7	2	2	28
Total	19	34	37	28	27	23	35	23	24	33	283

^{*} Meets or exceeds the target lifespan of playground equipment



Storm Sewer Infrastructure

- High Priority Projects: \$180M
- System Improvements
 - Alviso PS Construction
 - Charcot PS Funded by Measure T
- Master Planning
 - Capacity Assessment City-wide
 - Condition Assessments
- System Rehabilitations
 - Outfalls
 - Pump Stations





Scope of Transportation Infrastructure

29,907

Street Name Signs

242 Acres

Street Landscaping

65,029

Street Lights

90,495

Traffic Signs

256

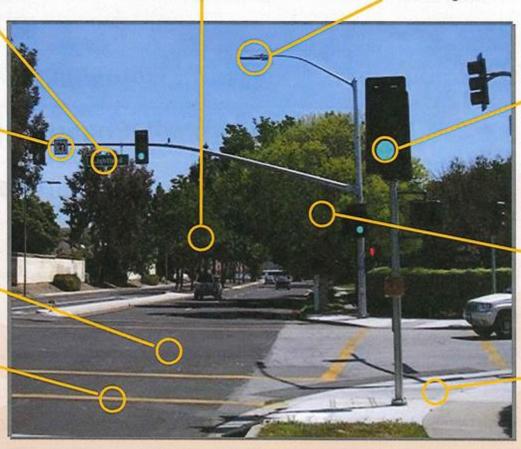
Bridges

2,434 Miles

Paved Streets

5,700,000 Square Ft.

Roadway Markings



956

Traffic Signals

232 Miles

Traffic Signal
Communication Cable

252,564

Street Trees

4,800 Miles

Sidewalks, Curbs & Gutters



Existing System Condition Needs

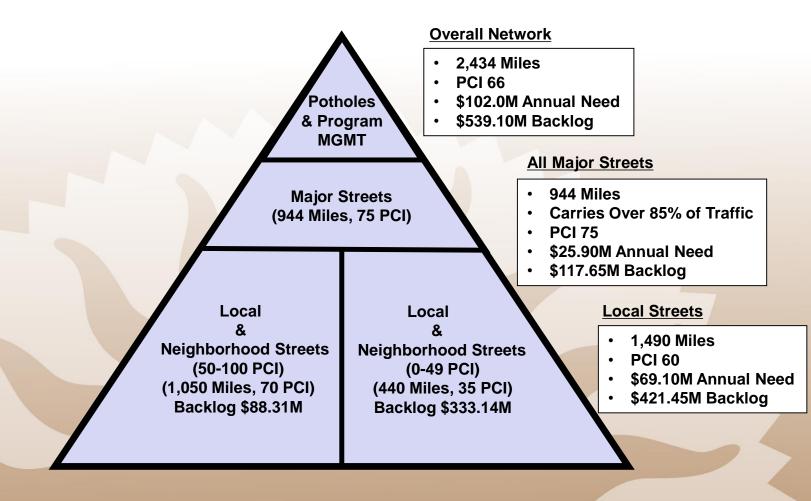
Deferred Maintenance and Infrastructure Backlog

Item	Backlog (\$ M)
Pavement	539.1
ADA Curb Ramps	162.0
Signals/Signs/Markings/Streetlights	44.2
Bridge Rehabilitation	111.0
Trees/Landscaping	19.8
Total	876.1

Note: Doesn't include property owner responsibilities for street trees, curb, gutter, and sidewalk

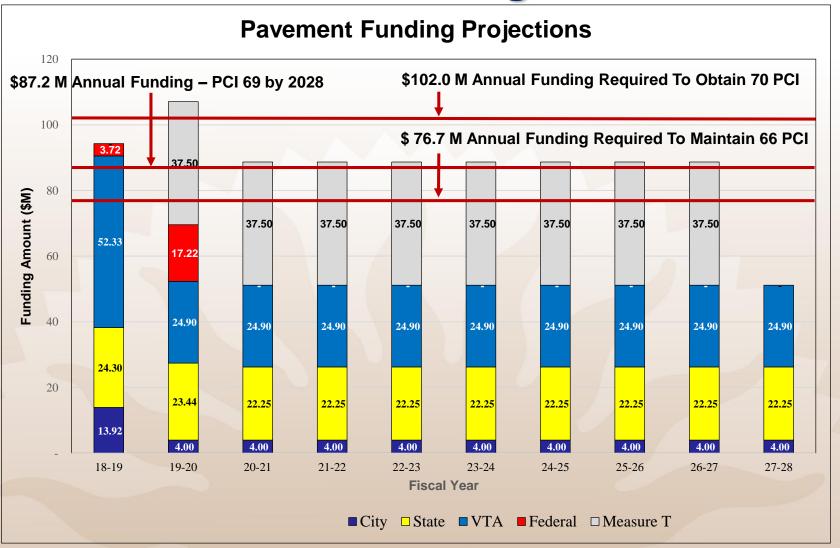


Pavement Needs and Funding



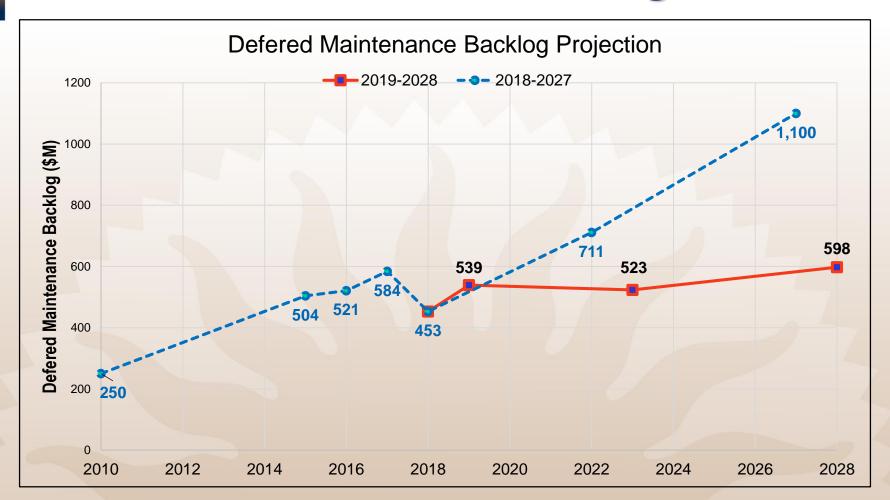


10-Year Funding Status





Cost to Recover Based on Current Funding Level





Pavement Production History





Pavement Pipeline: 2019 Season

Major Streets Award Date	Project	
February 26	Concrete and ADA Ramps # 1 (Sealing Prep)	
March 5	Concrete and ADA Ramps # 2 (Sealing Prep)	
March 26	Asphalt Concrete Remove Replace (Sealing Prep)	
April (early)	Arterial Resurfacing # 1	16
April (mid)	Arterial Resurfacing # 2	14
April (late)	Street Sealing	58
	Total Major Streets	88

Local & Neighborhood Streets Award Date	Project	Miles
May (mid)	Concrete and ADA Ramps (Sealing Prep)	
	Local Streets Sealing #1	97
	Local Streets Resurfacing (North)	14
May (late)	Local Streets Sealing #2	73
	Local Streets Resurfacing (South)	12

Total Combined Major + Local & Neighborhood 284

Total Local & Neighborhood Streets



196

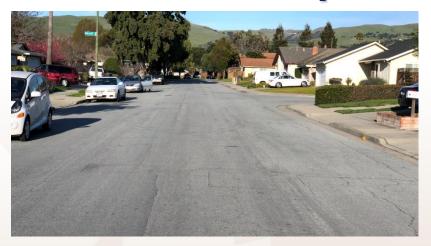
Local & Neighborhood Streets - Examples



Chris Dr: PCI 90, 2010 2" Overlay



St Lawrence Dr: PCI 43, 2003 Chip Seal



Babe Ruth Dr: PCI 66, 2011 Cape Seal



Santa Ana Ave: PCI 21, 1990 Chip Seal

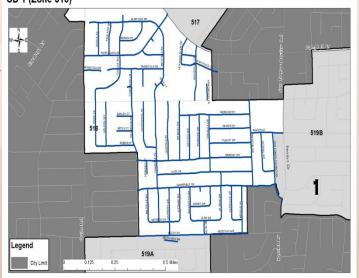


Pavement Maintenance: 2019-2028

- Avg. Citywide PCI projected to increase from 66 to 69 by 2028
- Major Streets kept in "Good" Condition (PCI 70 or above) each year
- Local and Neighborhood Streets 2019
 - Two years of accumulated funding and maintenance on L & N streets
 - Focused on zones in overall "at risk" condition to maximize cost-effective treatments but all
 streets treated in a selected zone

Local and Neighborhood Streets - 2020-2028

- Commence in 2020 first year with Measure T funds
- 1,294 miles in 116 zones not maintained in 2019
- Maintain all remaining L &N streets by 2028
- Continue to factor:
 - Street condition
 - Planned Development and safety projects
 - Community and council feedback
 - Multi-year geographic equity across the City and Street Network





T & E Follow Up Items

Improved Forecasting

- Three-year tentative maintenance forecast possible for L & N streets
- First release in January 2020, updated each successive January

Outreach

- Annual informational memo for all streets (January)
- Council Office literature on street selection and maintenance plans (ongoing)
- Rolling two-week construction schedules on website (March-December)
- "Cone Zone" report updates (March-December)
- Construction notifications (March-December) to include:
 - Mailed Notices
 - Changeable Message Boards
 - Collaboration with stakeholders (Council Offices/Schools/Hospitals)
- Evaluate 2019 construction season and determine if website or outreach improvements required



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