# Report on Deferred Maintenance and Infrastructure Backlog

February 4, 2019
Transportation & Environment Committee
Item d (1)



## 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

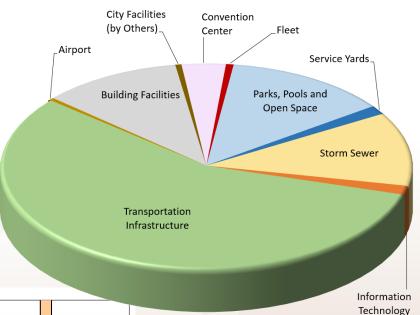
- Reduces future (2028) Pavement backlog by \$500M from the \$1.1B previously reported
- Reduces Storm backlog by \$35M
- Provides \$20M funding to repair or replace vulnerable bridges
- Reduces backlogs in streetlights and outdoor lights by \$20M
- Addresses other infrastructure backlogs



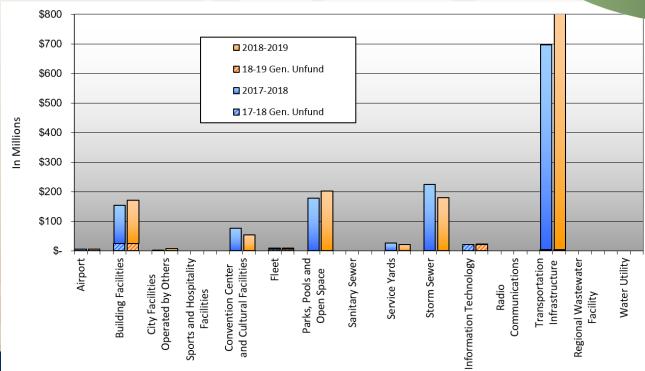
Program	Current Backlog of Deferred Needs	Annual Ongoing Unfunded Needs		
Airport	\$5,900,000	NONE		
Building Facilities	\$171,491,000 🔺	\$18,912,000		
City Facilities Operated by Others (OCA)	\$7,550,000 •	\$1,510,000 🔺		
Sports and Hospitality Facilities	TBD	TBD		
Convention Center and Cultural Facilities (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





## **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	\$ 341,401,000			



## **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

<sup>\*</sup> 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** 

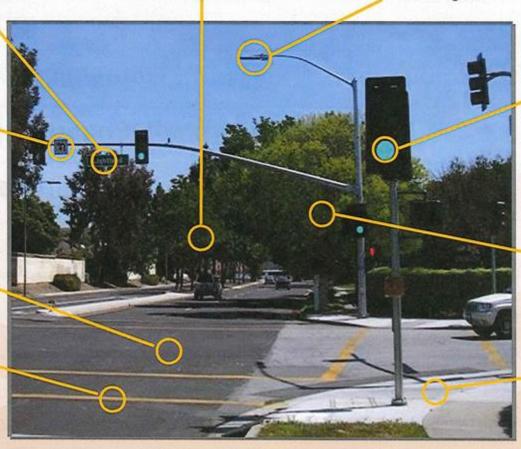
**Bridges** 

**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 Maintenance

- Overall condition rating is fair (66 PCI)
- Pavement backlog has increased,
  - Was \$250M in 2010; \$453.4M in 2017; \$539M in 2018
- 10-year funding level is \$872M
  - \$300 Million from Measure T
  - Exceeds \$767M need to "get no worse"(66 PCI)
  - Does not meet \$1.02B to "improve to good" (70 PCI)
- Projected backlog will decrease
  - \$1.1B in 2027 projected in 2017 report
  - \$598M in 2028 projected in updated report (46% reduction)





## City Streets – PCI Examples



Good (PCI 100 to 70) - Santa Clara St. PCI 91



Poor (49 to 25) - Vista Av. PCI 37



Fair (PCI 69 to 50) - Lava Dr. PCI 67



Failed (Below PCI 25) - Pacific Ave PCI 23



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