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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

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

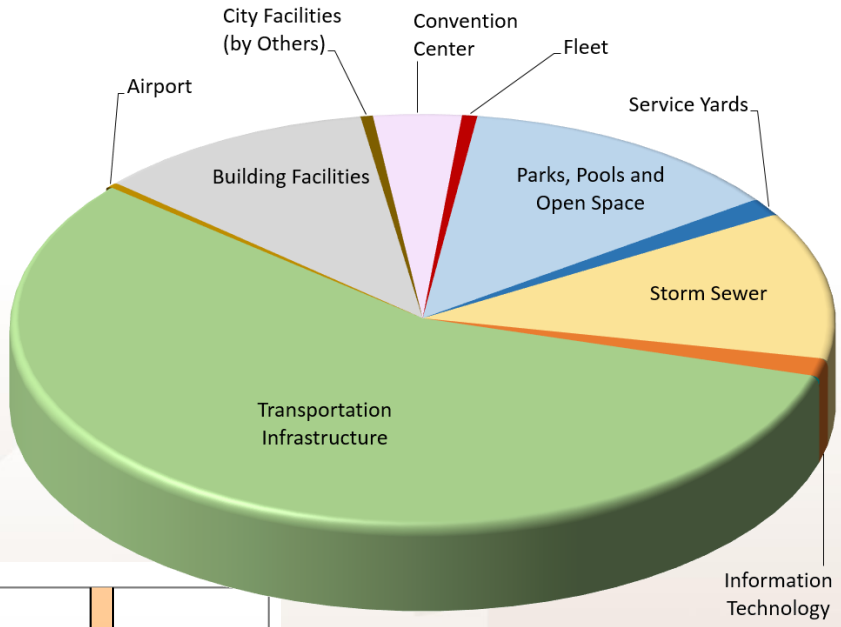
Impacts of Measure T

- 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

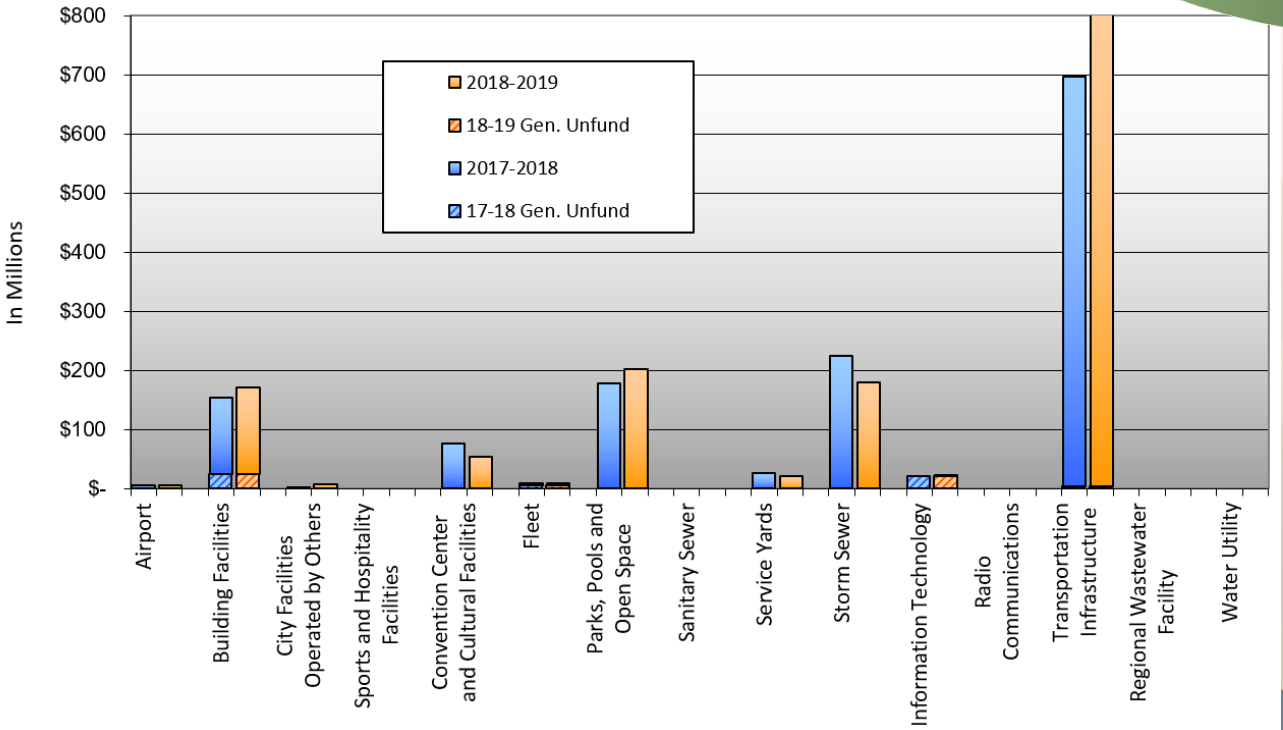
Program	Current Backlog of Deferred Needs	Annual Ongoing Unfunded Needs
Airport	$5,900,000	NONE
Building Facilities	$171,491,000 ▲	$18,912,000
City Facilities Operated by Others (OCA)	$7,550,000 ▲	$1,510,000 ▲
Sports and Hospitality Facilities	TBD	TBD
Convention Center and Cultural Facilities (TSJ)	$54,100,000 ▼	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**

Measure T investment included

Infrastructure Backlog



One-Time Unfunded Needs



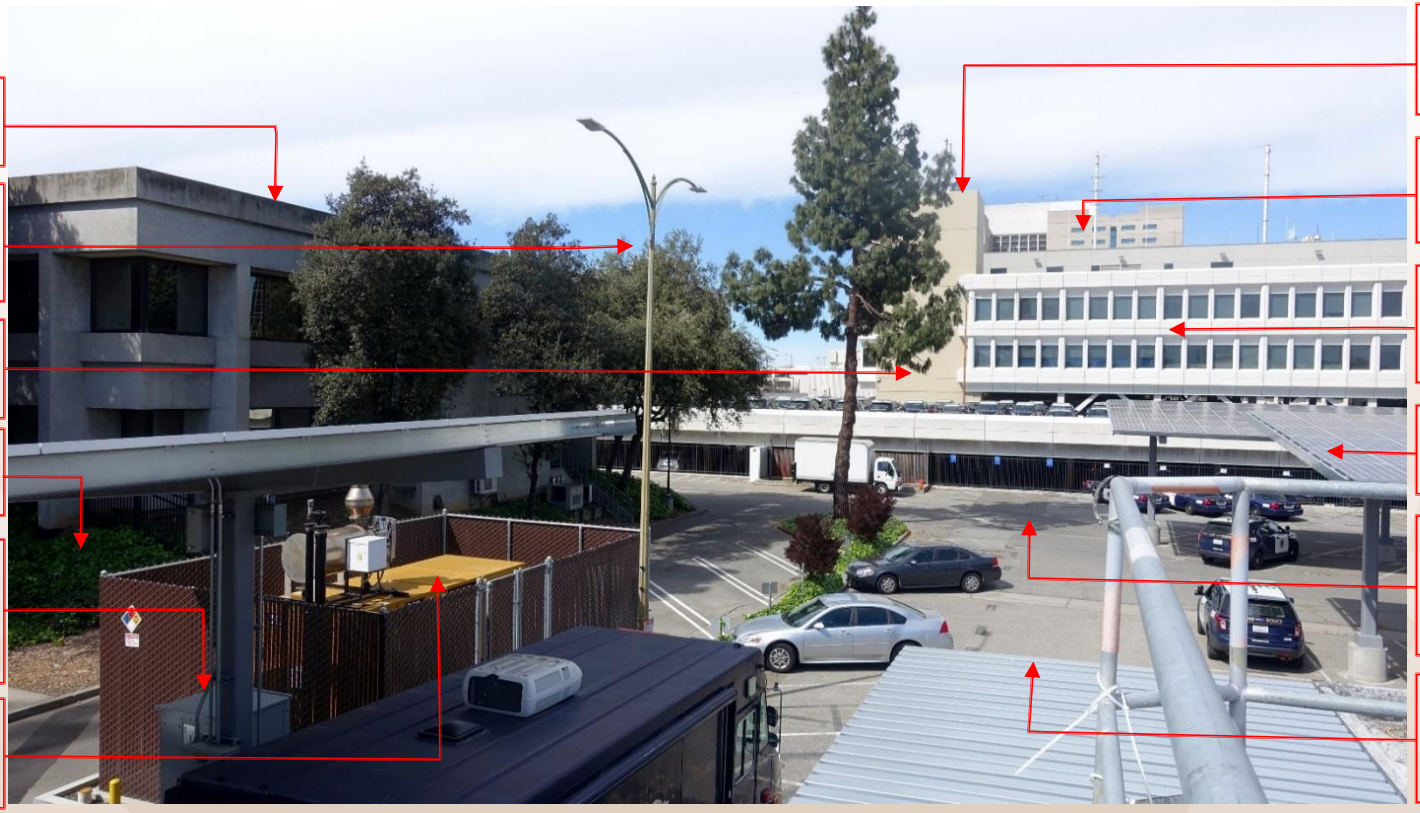
Building Facilities - $256M



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 courses and Open Space - 3,534 Acres

100
Athletic Fields

61
Miles of Paved Trails

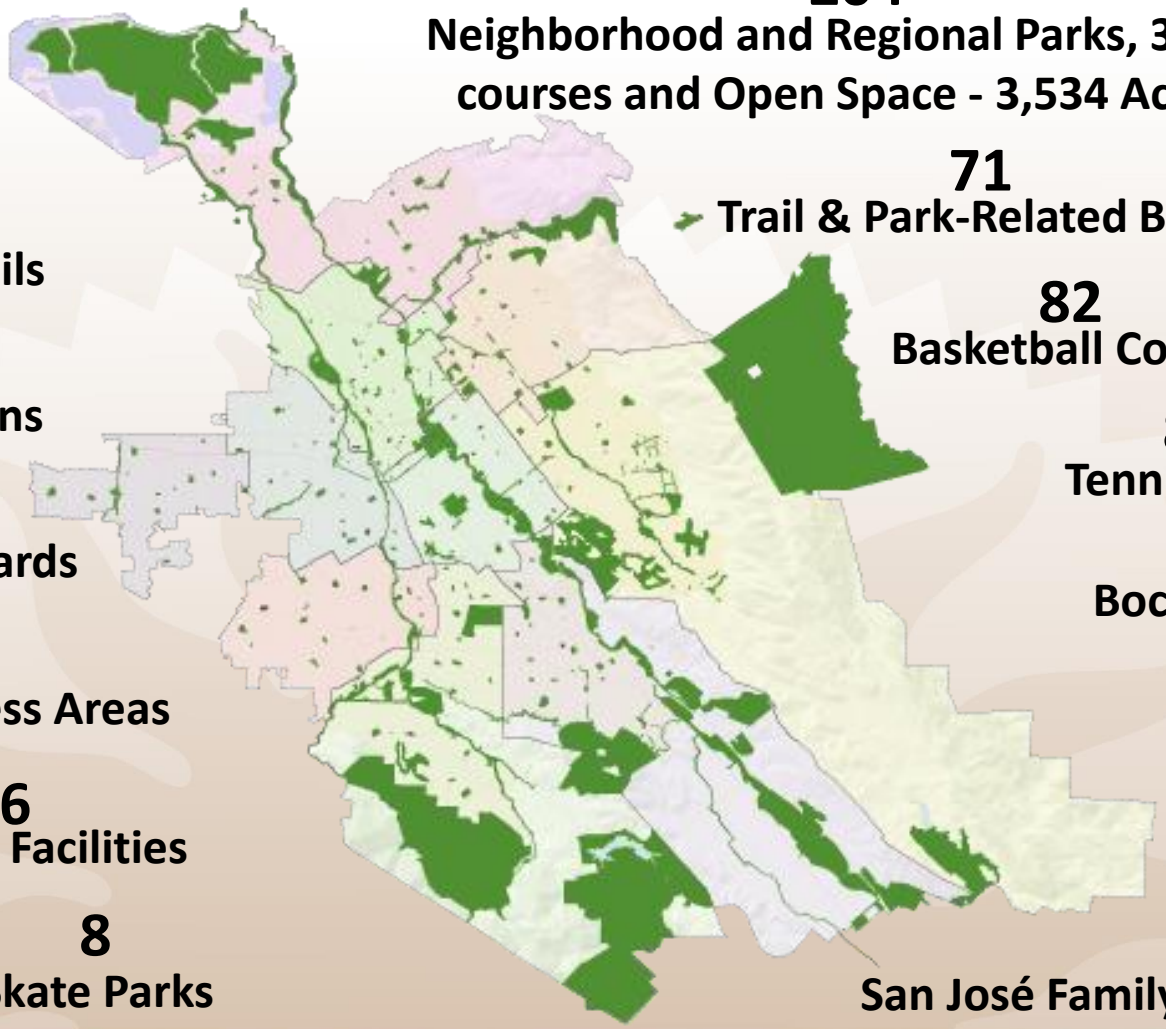
17
Community Gardens

6
Park Service Yards

7
Outdoor Fitness Areas

6
Aquatic Facilities

8
Skate Parks



71
Trail & Park-Related Bridges

82
Basketball Courts

85
Tennis Courts

20
Bocce Courts

283
Playgrounds

11
Dog Parks

San José Family Camp

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

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





Playgrounds	CD 1	CD 2	CD 3	CD 4	CD 5	CD 6	CD 7	CD 8	CD 9	CD 10	Total 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

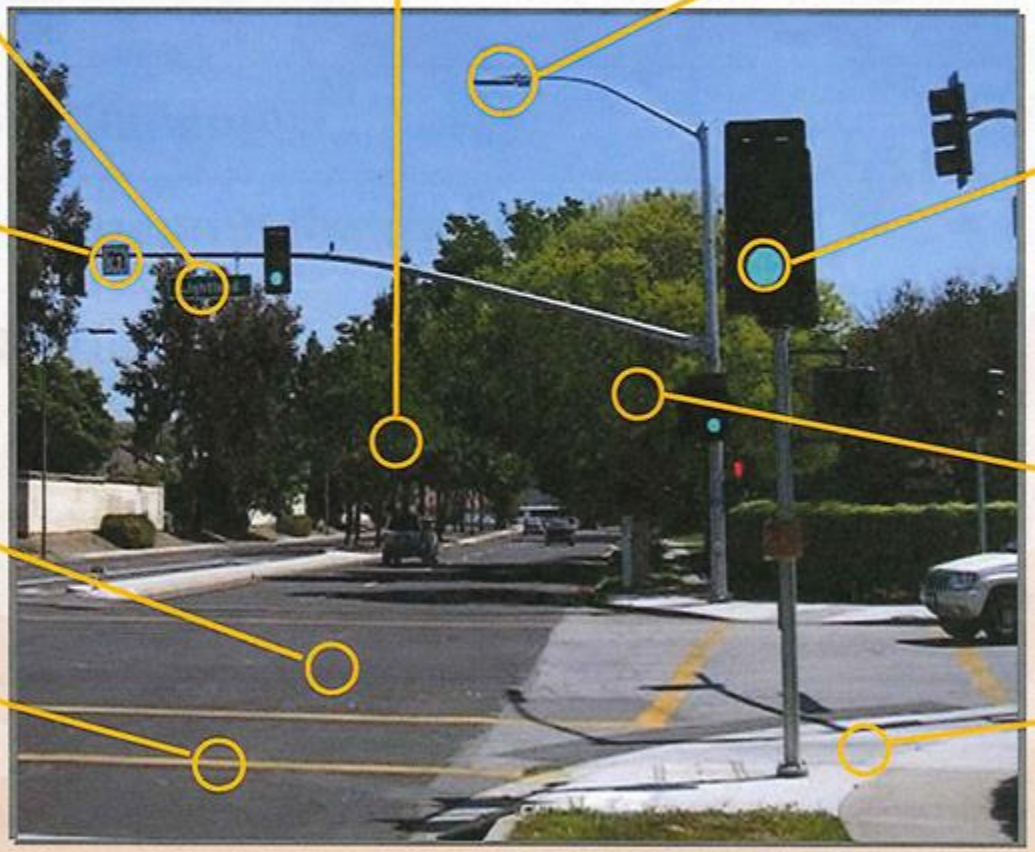


Scope of Transportation Infrastructure

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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Existing System Condition Needs

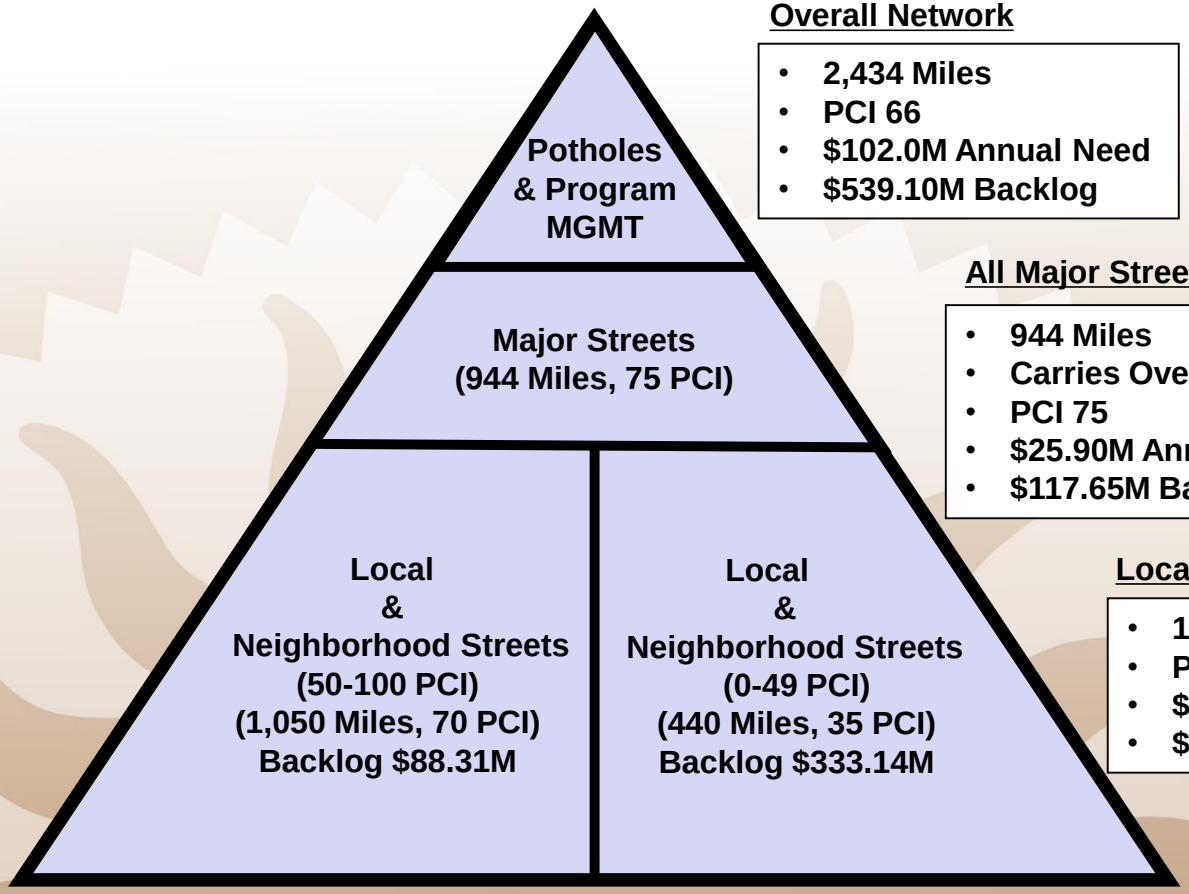
Deferred Maintenance and Infrastructure Backlog

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

Measure T investment included

Pavement Needs and Funding



Overall Network

- 2,434 Miles
- PCI 66
- $102.0M Annual Need
- $539.10M Backlog

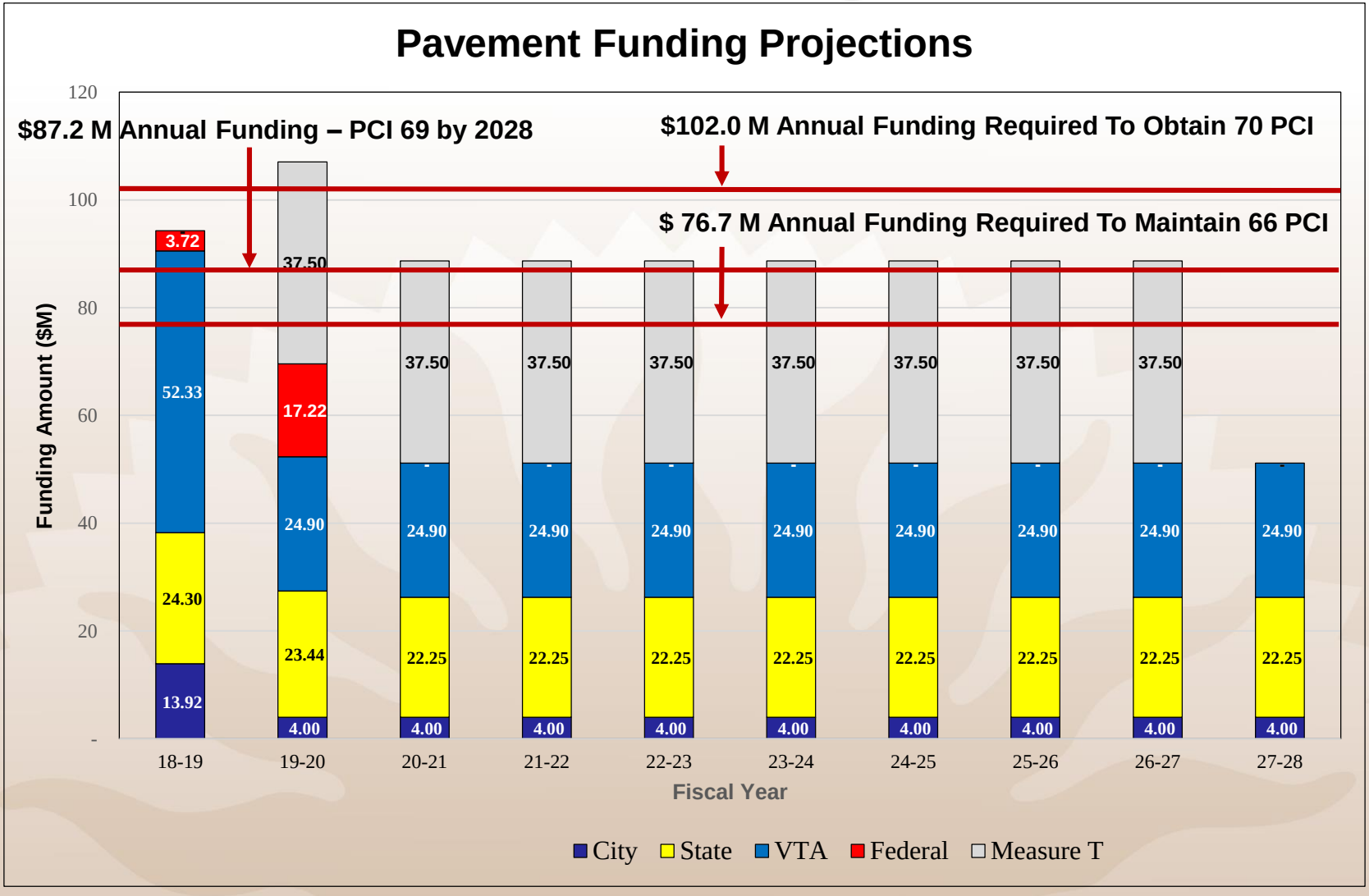
All Major Streets

- 944 Miles
- Carries Over 85% of Traffic
- PCI 75
- $25.90M Annual Need
- $117.65M Backlog

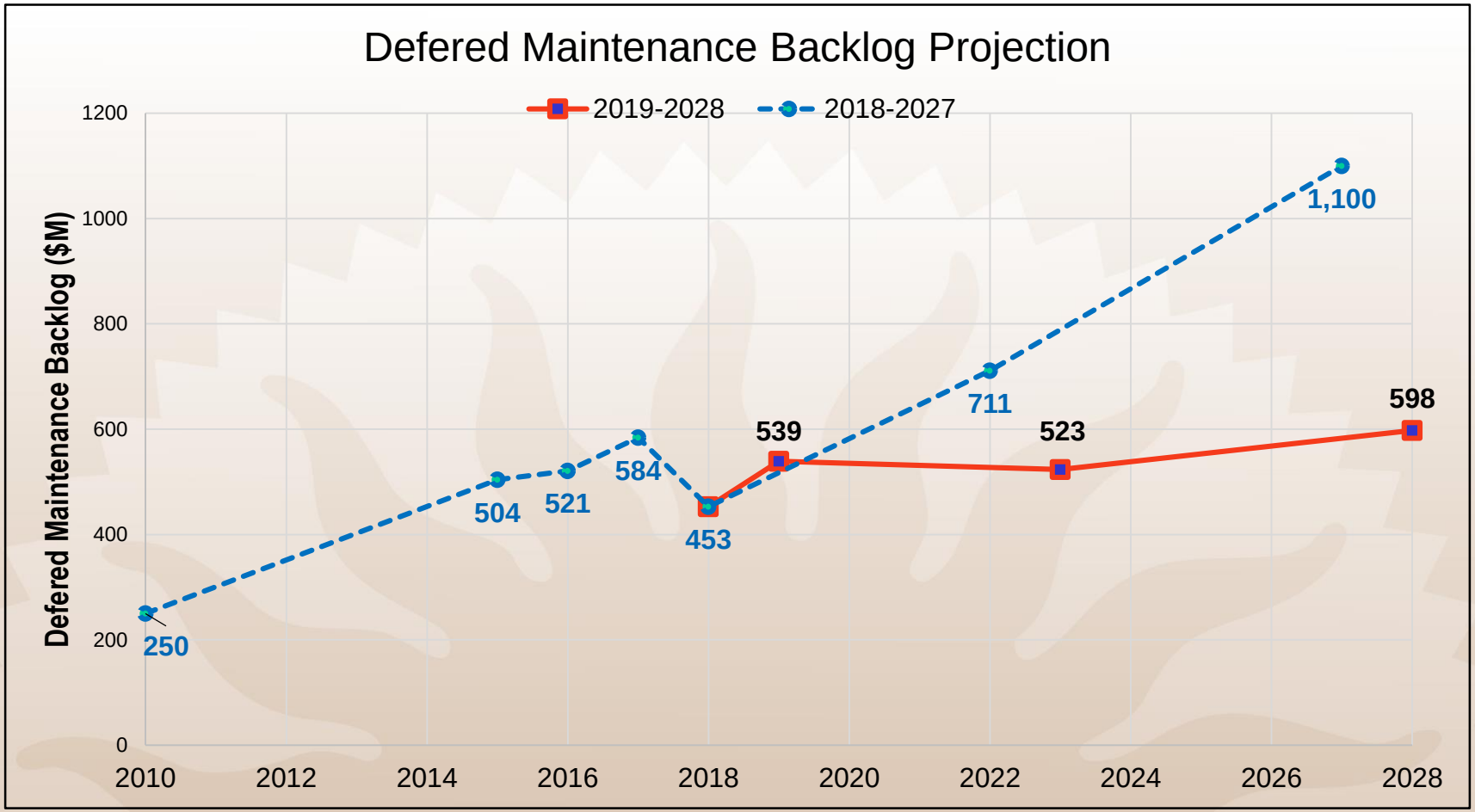
Local Streets

- 1,490 Miles
- PCI 60
- $69.10M Annual Need
- $421.45M Backlog

10-Year Funding Status



Cost to Recover
Based on Current Funding Level



Pavement Production History



CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Pavement Pipeline: 2019 Season

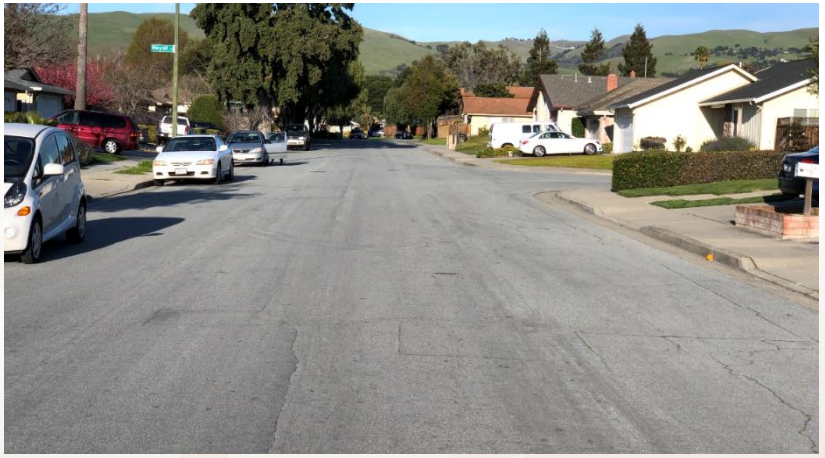
Major Streets Award Date	Project	Miles
February 26	Concrete and ADA Ramps # 1 (Sealing Prep)	
March 5	Concrete and ADA Ramps # 2 (Sealing Prep)	
March 26	Asphalt Concrete Remove Replace (Sealing Prep)	
April (early)	Arterial Resurfacing # 1	**16**
April (mid)	Arterial Resurfacing # 2	**14**
April (late)	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 Local & Neighborhood Streets	**196**
	Total Combined Major + Local & Neighborhood	**284**

Local & Neighborhood Streets - Examples



Chris Dr: PCI 90, 2010 2” Overlay



Babe Ruth Dr: PCI 66, 2011 Cape Seal



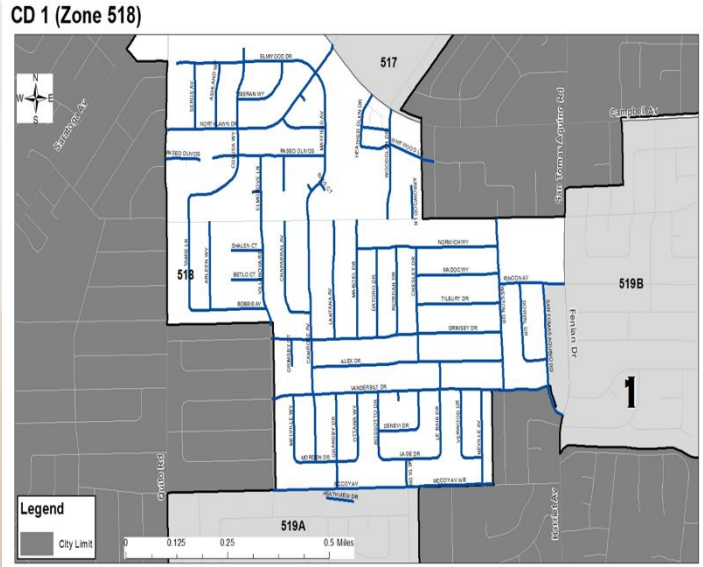
St Lawrence Dr: PCI 43, 2003 Chip Seal



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

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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY