

4/24/18

Study Session

City of Santa Clara

Public Infrastructure Assessment and Priorities

Council Study Session (18-303)

April 24, 2018



Agenda

- Overview of City Infrastructure
- Department Presentations (Public Works, Water and Sewer, Parks and Recreation)
 - Unfunded infrastructure needs
 - Funding options
- Summary of Needs
- Council Feedback – for May Council Action



Infrastructure Overview

Storm

- 194 miles of storm pipeline
- 22 storm pump/lift stations
- 197 storm outfalls
- 2 retention basins

Transportation

- 590 lane miles
- 144 traffic signals
- 54 bridges
- 34.6 miles of bike lanes
- 9 miles of off-street trails

Parks and Recreation

- 1 Community Park (Central)
- 26 Neighborhood Parks
- 5 Mini Parks
- 3 Public Open Spaces (Ulistac)
- 14 Recreational Facilities + trails
- 10 Joint Use Facilities
- 2 Public Cemeteries

Buildings

- Police Station
- 10 Fires Stations
- 3 Libraries
- Civic Center
- Triton Museum
- 5 Historic Homes
- Convention Center



Enterprise Infrastructure

Water

- 335 miles water mains
- 24 groundwater wells
- 7 water storage tanks
- 34 miles recycled water mains

Sanitary

- 167 MGD San Jose/Santa Clara Regional Wastewater Facility
- 277 miles of sewer mains
- 7 sewer pump stations

Infrastructure Funding Sources

- Dedicated Revenues by Utility
- Developer Contributions (capacity assessment and connection fees)
- Infrastructure (Capacity & Condition Assessment) regulated or mandated

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Public Works



Infrastructure Assessment

- Pavement Management
- Storm Drain System
- Traffic Signal Infrastructure
- Bicycle Facilities
- Public Buildings





Pavement Management

Funding Sources

Pavement Funding	Expected 19/20 Revenue
Gas Tax	\$1,670,000
Vehicle Registration Fee	\$350,000
SB1 RMRA	\$2,050,000
Measure B	\$2,300,000
Total Annual Funding	\$6,370,000



Pavement Management

Funding Options

Funding Level	No Constraints	Increase PCI by 5 points	Current Funding	Current Funding w/o Meas. B & SB 1
Annual Budget	\$14.17	\$12.50	\$6.37	\$2.02
PCI after 5 years (Change)	83 (+7)	81 (+5)	77 (+1)	72 (-4)
Backlog after 5 years	\$0	\$6.5	\$29.3	\$53.8 million



Storm Drain/Flood Protection

- 194 Miles of Pipeline
- 22 Pump/Lift Stations
- 197 Outfalls
- 2 Retention Basins

Priority	Service Level Goal	CIP Cost*
Highest	Eliminate significant 2-yr flooding and flooding near critical facilities	\$14,400,000
High	Eliminate remaining 2-yr flooding and significant 10-yr flooding	\$43,000,000
Moderate	Eliminate 10-year flooding and significant 100-year flooding	\$105,200,000
Low	Eliminate 100-yr flooding (does not include creek overflow)	\$127,700,000
Total		\$290,300,000



Storm Drain/Flood Protection

Funding Sources

- Storm Drain Outlet Charge (Development only) – Minimal
- New Development Releases Less Storm Water
- Majority of Funds Come From General Fund
- Possible Funding Options
 - Parcel Tax
 - Bond Measure
 - Senate Bill 231





Storm Drain/Flood Protection

Unfunded Projects

- Laurelwood Pump Station Rehab.* (\$5 M)
- Eastside Retention Basin Desilting* (\$3 M)
- Westside Retention Basin Pump Replacement* (\$.8 M)
- SCADA Installation (\$3 M)
- Additional Unfunded Needs (\$300 M)
 - Approximately \$20-\$30 M as highest priority

*Proposed in 18/19 Budget



Traffic Signal Infrastructure

Funding Sources

- Traffic Mitigation Impact Fee
- Possible Competitive Grants
- Total of All Sources Approximately \$.5 M to \$1 M Annually
- Measure B - Competitive

Unfunded Projects

- Adaptive Traffic Signals (\$3 M)
- Traffic Signal Infrastructure Replacement (\$50 M)
 - Underground conduits
 - Traffic signal poles
 - Controller cabinets and communications
- Uncontrolled Crosswalks (\$20-30 M)



Bicycle Facilities

Funding Sources

- Traffic Mitigation Impact Fee
- Possible Competitive Grants
- Total of All Sources Approximately \$.2 M to \$.35 M Annually
- Measure B (Competitive)

Unfunded Projects

- Bicycle Plan Implementation (\$10-15 M)
- Creek Trail Master Plan Implementation (\$37 M)
 - Calabazas Creek/Saratoga Creek/Hetch-Hetchy
- Bicycle Parking Infrastructure (\$1.5 M)
- Bicycle and Pedestrian Education Program (\$.15 M Annually)
- Maintenance and Resurfacing Creek Trails (\$.2 M Annually)



Public Buildings

- 553,000 SF Buildings
- 586,000 SF Parking Garage
- City Hall Complex
- Police Station
- Fire Stations (10 Stations)
- 3 Libraries
- Maintenance Facilities
- Triton Museum
- 5 Historic Houses





Public Buildings

Unfunded Major Facilities Projects

- City Hall Complex (\$150-\$200 M)
- Fire Stations (\$25-30 M)
- Corporation Yard (\$TBD)
- Convention Center (\$TBD)
- Historic Buildings (\$2 M)
- Number of Smaller Needs/Repairs Included in Budget
- No Identified Funding Sources for Larger Projects

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Water & Sewer





Water and Sewer Utilities Assets

- 335 Miles Water Pipeline
- 7 Storage Tanks – Capacity 28.8 Million Gallons
- 24 Active Groundwater Wells
- 27,000 Customer Services
- 277 Miles of Sewer Pipeline
- 7 Sewer Pump Stations
- 34 Miles Recycled Water Pipeline
- Co-owner - San Jose-Santa Clara Regional Wastewater Facility

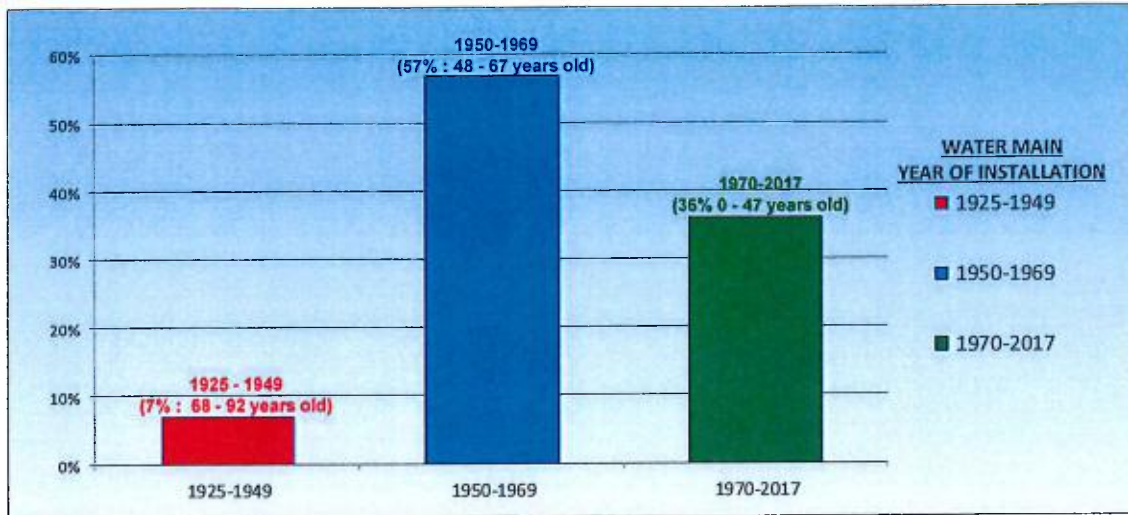


Water Distribution

Infrastructure

- Replacement, relocation, or rehabilitation of water mains
- Construction of new wells and rehabilitation of existing wells
- Design, construction, inspection and rehabilitation City water tanks to improve safety, reliability and water quality





Sanitary Sewer Projects

- **Capacity Improvements (\$11 million)**
 - Cabrillo Ave., Tasman Drive, Los Padres Blvd. and Saratoga Ave. Sewer Diversion, & Calabazas Creek
- **System Improvements (\$13 million)**
 - Pipeline Defects Identified by Condition Assessments
- **Pump Station Improvements (\$2.5 million)**
 - Upgrades at Rabello & Northside Pump Stations and RWF Outfall Structure

San Jose-Santa Clara Regional Wastewater Facility

2018-19: \$15.8 M
5-Year CIP: \$146.6 M

- \$2.0B (over 20 years) project
- Managed by City of San Jose
- City is 17% facility co-owner



Active Projects:

- Nitrification Mag. Meter and Meter Valve Replacement
- Digester Gas Compressor Upgrade
- Emergency Diesel Generators
- Fiber Optic Connection
- Construction Enabling Improvements
- Iron Salt Feed Station
- Digester and Thickener Facilities Upgrade

FUTURE PROJECTS:

- Cogeneration Facility Design
- Blower Improvements



Future Projects Not Yet Funded

- Advanced Meter Infrastructure (AMI) Implementations (\$9M-\$12M)
- Increase Water Main Replacement to 3 Miles per year (\$3M-\$5M)
- Water Transmission Main Replacement (\$25M-50M)
- Sewer Force Main Capacity Upgrades, Rehabilitation, or Replacement (\$10 M-20 M)
- Unknown Additional Water & Sewer Infrastructure Needs Based on Asset Management Program Development in FY 18/19 (\$TBD)
- Unless New Funding Source – Unfunded Projects will Require Higher Rates and/or Debt Financing

City of Santa Clara

Parks and Recreation



Park System

Inventory

- 1 Community Park (45.04 acres),
- 26 Neighborhood Parks (123.58 acres),
- 5 Mini Parks (2.59 acres)
- Public Open Space (41.71 acres),
- 5 Aquatic Facilities (11 pools)
- 65 Park Buildings (305,000 sq.ft.)
- Joint Use Facilities (47.52 acres)
- 42 Playgrounds (approx. 135,000 sq. ft.)
- 16 Athletic Fields (32.9 acres)
- 48 Sports Courts (approx. 272,500 sq.ft.)





Park System

- **Issues**
 - Aged Infrastructure
 - Increased Demand
- **Future Growth Needs**
 - 97-115 Acres Parkland
 - 30 Acres Athletic Facilities
 - Creek Trail Expansion
 - 35 Acre Community Park (City Place)
- **Limited Funding Sources**
 - QuimbyAct/Mitigation Fee Act
 - Developer Contributions
 - Donations
 - Endowments
 - Grants



Facility Condition Assessment

- Completed April to December 2017 by Kitchell CEM
- Kitchell Report on Council Agenda Tonight
- Facility Condition Index (Current Needs/Total Replacement Cost x 100)
- Higher FCI = poorer condition; Lower FCI = better condition
- Index and Grade Description:
 - **Critical** (31-100) obvious deterioration, frequent failure, areas shutdown, end of useful life
 - **Poor** (11-30) worn, increased failure, extensive repairs, frequent user complaints
 - **Fair** (5-10) wear, system or components need replacement, additional personnel/time to fix
 - **Good** (0-4) clean, functional, normal maintenance, few failures; preventative repairs



Site Conditions

- **Critical:** 6 park sites (13%)
 - Rotary Park, Agnew Park, Senior Center grounds, Homeridge Park, Westwood Oaks Park, Bowers Park
- **Poor:** 16 park sites (34%)
 - Central Park West, Warburton, Machado Park, Mission City Memorial Park, Central Park East, Earl Carmichael Park, Maywood Park, Mary Gomez Park, Caril Park, Schmidt Park, Fremont Park, Montague Park, Lick Mill Park, Jenny Strand Park, City Plaza Park, Elmer Johnson Field
- **Fair:** 8 park sites (17%)
- **Good:** 17 park sites (36%)
- **Critical:** 3 buildings (7%)
 - International Swim Center, Montague Swim Center, Larry Marsalli Park
- **Poor:** 7 buildings (20%)
 - Homeridge Park, Westwood Oaks Park, Machado Park, Maywood, Mary Gomez Park, Washington Ball Field, Elmer Johnson Field
- **Fair:** 8 buildings (20%)
- **Good:** 22 buildings (53%)



Park Grounds Needs

PARK GRADE	CURRENT NEEDS YEARS 1-5	CURRENT NEEDS YEARS 6-10	CURRENT NEEDS YEARS 11-20	TOTAL
Critical (>30)	\$2,231,364	\$450,564	\$415,706	\$3,097,634
Poor (11-30)	\$8,985,463	\$4,327,757	\$9,448,664	\$22,761,884
Fair (5-10)	\$992,541	\$579,188	\$8,829,306	\$10,401,035
Good (0-4)	\$263,915	\$1,276,973	\$10,498,016	\$12,038,904
TOTAL	\$12,473,283	\$6,634,482	\$29,191,692	\$48,299,457

The table above show parks cost of current needs without cost escalation.



Park Building Needs

BUILDING GRADE	CURRENT NEEDS YEARS 1-5	CURRENT NEEDS YEARS 6-10	CURRENT NEEDS YEARS 11-20	TOTAL
Critical (>30)	\$27,411,404	\$265,828	\$174,969	\$27,852,201
Poor (11-30)	\$3,024,971	\$2,867,767	\$125,438	\$6,018,176
Fair (5-10)	\$3,107,386	\$6,400,890	\$328,018	\$9,836,294
Good (0-4)	\$2,442,032	\$1,884,136	\$4,364,714	\$8,690,882
TOTAL	\$35,985,793	\$11,418,621	\$4,993,139	\$52,397,553

The table above shows park buildings' cost of current needs without cost escalation.



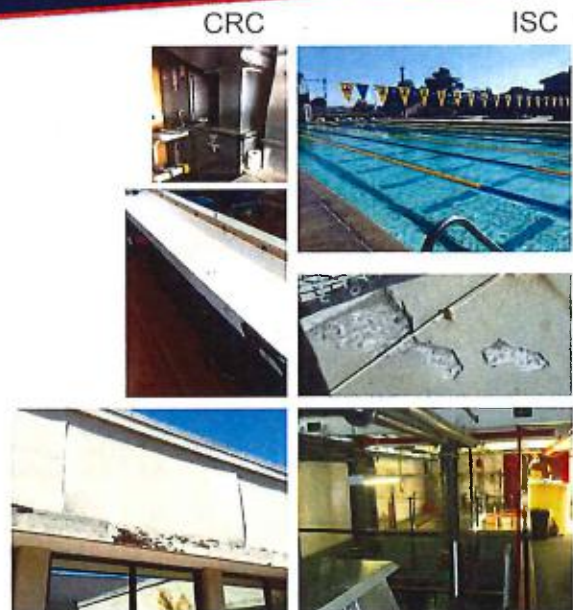
SUMMARY	CURRENT NEED YEARS 1-5	CURRENT NEED YEARS 6-10	CURRENT NEED YEARS 11-20	TOTAL NEEDS YEARS 1 - 20
PCI	\$12,473,283	\$6,634,482	\$29,191,692	\$48,299,457
BCI	\$35,985,793	\$11,418,621	\$4,993,139	\$52,397,553
TOTAL PCI + BCI (no ce)	\$48,459,076	\$18,053,103	\$34,184,831	\$100,697,010
with cost escalation	\$53,516,874	\$26,401,077	\$75,915,705	\$155,833,656

- **Near-term needs (five year horizon):**
 - Parks \$12.5 million, Buildings \$36 million.
 - Combined \$48.5 million without escalation; \$53.5 million with cost escalation.
- **Life Cycle needs (twenty year horizon) with cost escalation:**
 - Parks \$90 million, Buildings \$65.8 million.
 - Combined \$155.8 million.



ISC and CRC

- International Swim Center
 - Replace "in kind", as-is cost estimates
 - Kitchell Report (8-18-2017): approx. \$30 million, fix existing
 - Currie & Brown (11-22-2017): approx. \$70 million, replacement
- Community Recreation Center
 - Kitchell Report
 - Existing CRC building – Good Condition
 - \$1.0 million of near term needs





Parks Funding Sources

Existing

- Developer Contributions
- Grants
- Quimby Act—restricted, major park rehabilitation (expanded/increased use)
- Mitigation Fee Act—restricted, new parkland acquisition & facilities development
- Quimby and Mitigation Fee
 - Developers get credit for land dedication and park improvements
 - Not enough history to reasonably project future years
 - After credits expected to collect approximately \$2.0 to \$4.0 million a year for the next few years
 - Reed and Grant Soccer Fields - \$7.0 million over estimate (use future fees)

Potential New Sources

- Tax Measure

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Summary



Council Consideration

Funding

- A \$300 million property tax measure would mean approximately \$200 million today (February 20 Study Session)
- How would that funding be prioritized?
- We want input on a strategy for advancing recommendation to Council in May

Items For Consideration

- Transportation and Pavement Has Multiple Funding Sources – Gas Tax, Grants, Measure B, SB-1, Traffic Impact Fee
 - Trail funding is limited
- Water and Sewer – Funded by user rates and developer fees



Council Consideration

Items For Consideration

- Storm System/Flood Protection
 - Approximately \$300 million in needs – Some are low need/priority
 - No significant funding sources outside of General Fund
 - Approximately \$20-\$30 million needed for priority projects
- Buildings
 - Large unfunded projects – most not feasible without own financing
 - Approximately \$20-\$30 million to upgrade fire stations
 - Library expansion?



Council Consideration

Items For Consideration

- Parks
 - Approximately \$150 million need for existing parks
 - Additional \$30 million needed for CityPlace park
 - Quimby and Mitigation Fee Act have funding and use limitations
 - Some projects are near-term needs
- ISC and CRC
 - CRC in good condition – Addition instead of demolition?
 - ISC needs to be replaced - \$50-\$70 million to replace in kind
 - Does not include a 2nd 50 mtr pool, warm water natatorium, gymnasium
 - If \$200 million is available how much funds would be dedicated to ISC and CRC – Develop a project to funds available?



Next Steps

- Receive Council input on the state of infrastructure assessment and priorities
- Use input to develop an inventory of projects for May 22 City Council meeting
- May 22 -- Review inventory of proposed projects for consideration of a measure for the November 2018 General Election.



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The Center of What's Possible

