



ONESF

Building Our Future

onesanfrancisco.org

There's only one San Francisco. Let's take care of it.

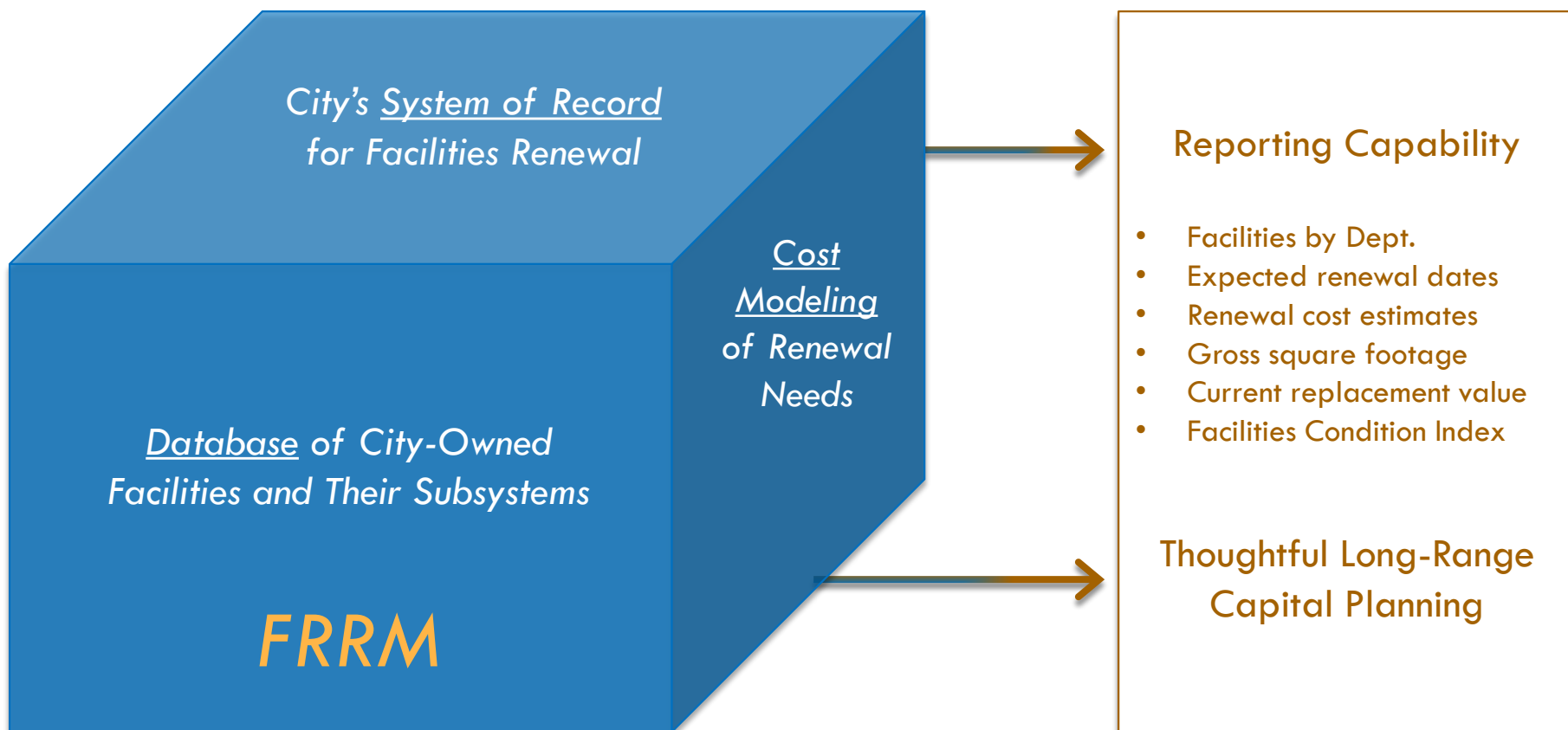


FRRM Data Improvement Update

February 22, 2016

What is FRRM?

2

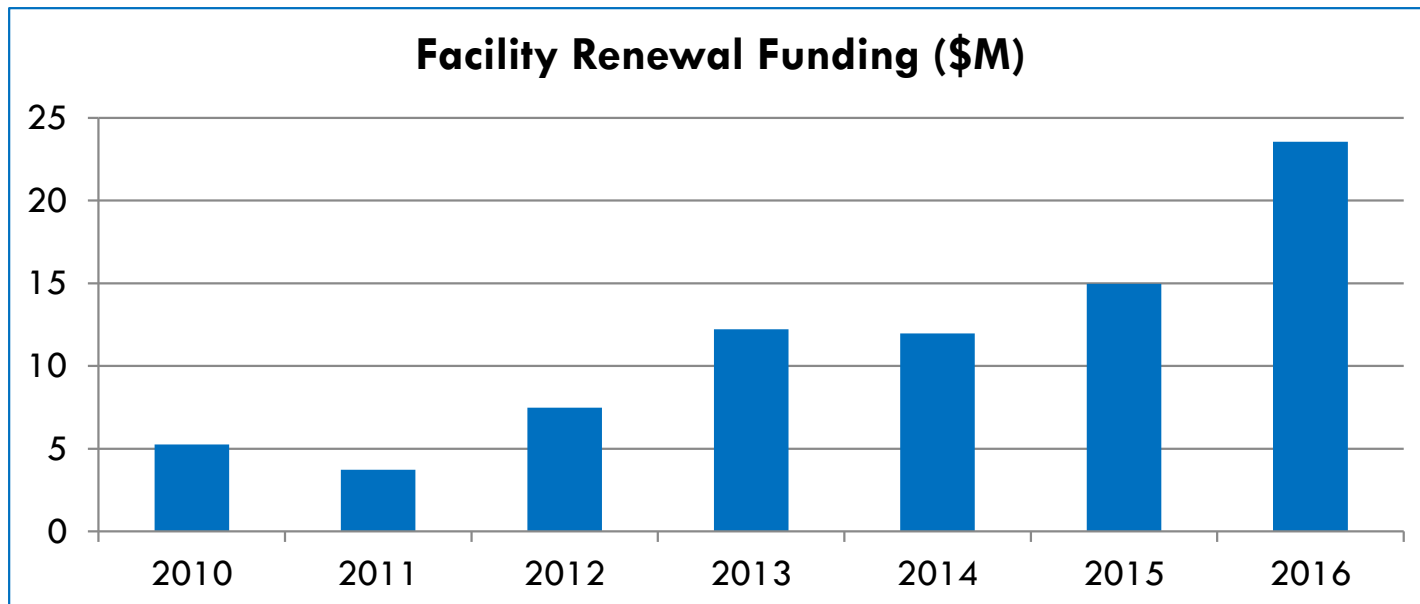


Why is FRRM Important for Capital Planning?

3



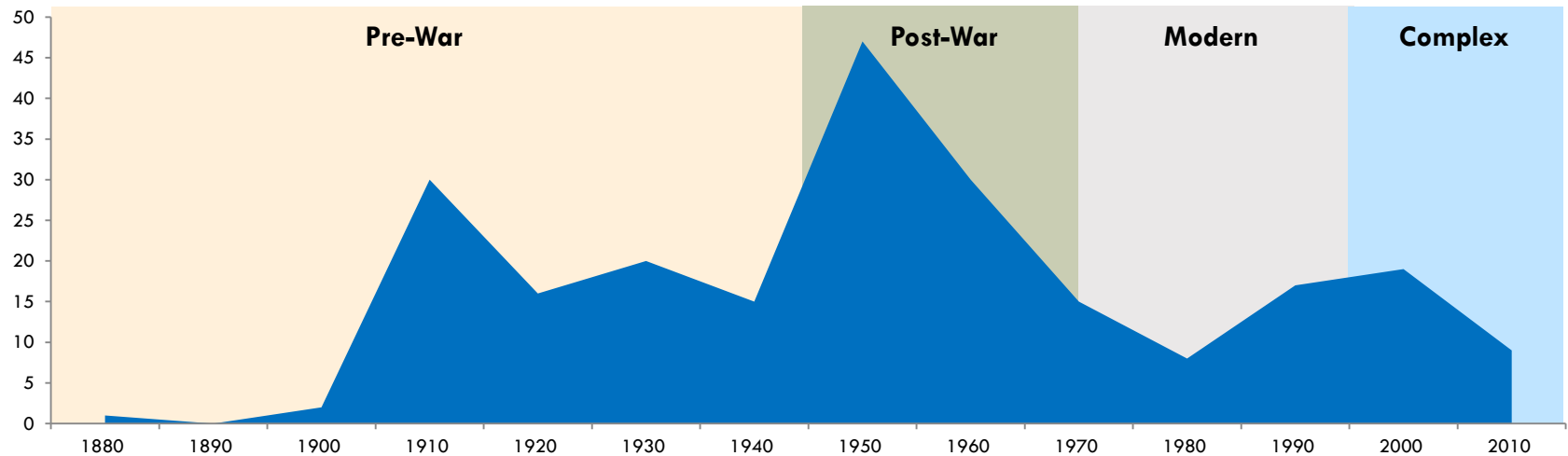
All dependent on the data provided and updated by departments



General Fund Facility Age and Renewal Needs

4

Number of GF Facilities Constructed
(by decade)



Pre-War

- Durable construction
- Older but typically lasts longer

Post-War

- Lower quality
- Need more repair and renovation

Modern

- Quick-flash construction
- Low quality building components

Complex


- Higher quality, but more expensive to maintain and repair

New FRRM Interface

5

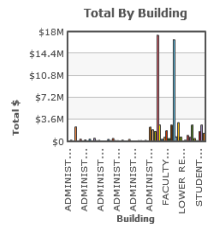

Hi, CR Campus ▾

Home
Dashboards
Benchmarks & Analytics
Campus Story
Campus Profile
Data Updates
Documents
Support

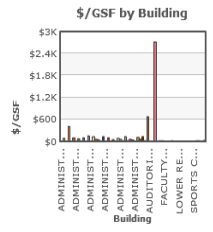


Begin Renewal

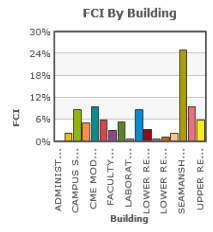
Backlog Total \$ by building



\$/GSF by building



FCI by building



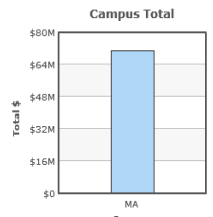
Renewal Total \$




GSF by building type



Campus Total




Hi, CR Campus ▾

Home
Dashboards
Benchmarks & Analytics
Campus Story
Campus Profile
Data Updates
Documents
Support

1 ————— 2 ————— 3 ————— 4 ————— 5

Update Inventory Reset Renewal Data Update Infrastructure Review Results Submit Profile

Reset Renewal Data

Building List Order by Building No. Building Name

002 CLASSROOM BLDG 5 year forecast 10 year forecast

Backlog and 5 year Renewal Forecast (in \$000's)							
Subsystem Name	Backlog	2015	2016	2017	2018	2019	Total
a.1 Roofing - Bull-up, etc.	\$ 0	\$ 0	\$ 0	\$ 121	\$ 0	\$ 0	\$ 121
e.1 HVAC - Distribution Systems	\$ 275	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 275
f.1 Electrical - Equipment	\$ 302	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 302
h.1 Fire Protection	\$ 70	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 70
i.1 Built-in Equipment and Specialties	\$ 75	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 75
j.1 Interior Finishes: Walls, Floors, Doors	\$ 154	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 154
k.1 Painting - Public Areas	\$ 11	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 11
Building Total	\$ 888	\$ 0	\$ 0	\$ 121	\$ 0	\$ 0	\$ 1,009

Subsystem Name ▾	Subsystem Percent	Life	Percent Renewed	Model Predicted Last	Actual Last	Model Predicted Next	Estimate Next	Action
a.1 Roofing - Bull-up, etc.	100 %	25	100 %	2004		2017	2017	<input type="button" value="Edit"/>
b.1 Building Exteriors (Hard)	100 %	30	100 %	1984		2014		<input type="button" value="Edit"/>
d.1 HVAC - Equipment/Controls	100 %	30	50 %	2008	2008	2038		<input type="button" value="Edit"/>

FRRM DATA IMPROVEMENT PROJECT

FRRM Data Improvement Project

INTRODUCTION

7

PURPOSE

- ▣ Improve the quality of FRRM projections through review and improvement of subsystem-level facilities data

GOALS

- ▣ More accurate representation of current needs
- ▣ More consistent treatment of data across departments
- ▣ Better shared understanding of the FRRM tool and its applications
- ▣ Prepare improved analysis for next year's 10-Year Capital Plan

PROCESS

- ▣ 7 priority departments were selected: ADM, DPH, FIR, POL, JUV, SHF, WAR
- ▣ CPP led hands-on working sessions with facilities staff from each department

FRRM Data Improvement Project

COMMON ISSUES ADDRESSED

8

- “Calendar Years” vs. “Fiscal Years”
- Majority of future needs showing up in first year
- Completed projects still show up as an upcoming need
- Outdated descriptions

FRRM Data Improvement Project

BACKLOG VS. YEAR 1 NEEDS

9

- Some departments were classifying all current needs as “Year 1” while others put them in “Backlog”
 - Neither approach is inherently inaccurate

- Needed to standardize so that we could report progress against the backlog accurately

- CPP guidance was to classify urgent needs as “Year 1”, while leaving less pressing but known needs in “Backlog”
 - As a result, many renewal needs previously classified as “Backlog” moved to “Year 1”

FRRM Data Improvement Project

IMPLICATIONS FOR BACKLOG IN THE CAPITAL PLAN

10

- In the past, the FRRM Backlog has been used for projections in the Capital Plan, but this methodology will have to be updated since many renewal needs have been moved out of the FRRM backlog

- For the FY 2018-27 Capital Plan, CPP proposes defining backlog as:
 - All current needs (i.e. FRRM Backlog + Year 1 needs) that are unfunded in the Capital Plan***
 - Backlog would then capture the total amount of renewal works needed to bring the asset stock up to an acceptable standard
 - This methodology will be further developed as part of the next Capital Plan update

FRRM Data Improvement Project

Overall Impact

11

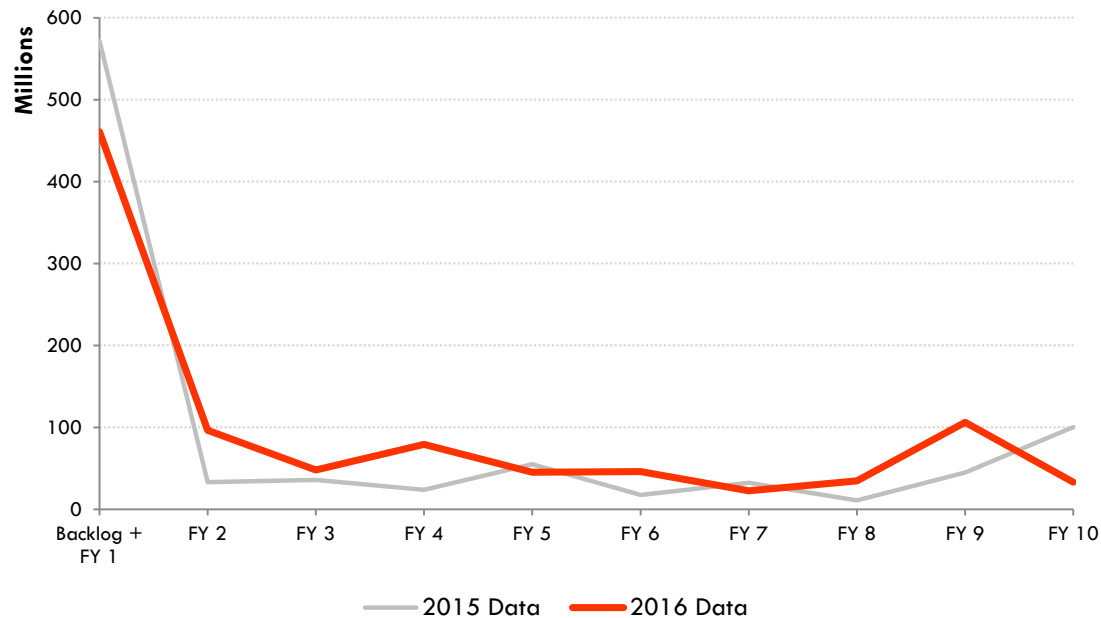
Dept	10-yr need based on 2015 data	10-yr need based on 2016 data	% change
ADM	408 M	378 M	-7%
DPH	275 M	342 M	24%
FIR	100 M	86 M	-14%
POL	14 M	15 M	7%
JUV	33 M	23 M	-29%
SHF	42 M	35 M	-15%
WAR	50 M	91 M	79%
Total	924 M	972 M	5%

- For the departments reviewed, the total 10-yr renewal need only went up by 5% (in line with escalation)
- For departments that saw a reduction in need, it was mostly as a result of updating recently completed or upcoming projects in FRRM
- For departments that saw an increase in need, it was as a result of closer scrutiny to the condition of each subsystem, and reclassifying items as immediate needs

FRRM Data Improvement Project Observations

12

YEAR-ON-YEAR RENEWAL NEED



- ▣ Even after the review, the majority of needs still show up in the first year
 - ▣ Departments are often grappling with subsystems beyond their useful life, sometimes to the point of operational impairment

FRRM Data Improvement Project

Observations

13

	ADM	DPH	FIR	POL	JUV	SHF	WAR	Total
Roofs	1.8 M	1.4 M	0.7 M	0.2 M	0.7 M	0.8 M	0.2 M	5.9 M
Exteriors	11.3 M	10.0 M	1.7 M	0.1 M	0.6 M	0.8 M	0.3 M	24.7 M
Elevators	10.3 M	4.7 M	-	-	-	0.2 M	3.2 M	18.5 M
HVAC	37.2 M	102.3 M	15.7 M	1.4 M	1.8 M	0.9 M	-	159.3 M
Electrical	41.5 M	24.1 M	9.3 M	1.1 M	1.6 M	0.5 M	-	78.0 M
Plumbing	39.5 M	26.3 M	7.6 M	0.3 M	0.9 M	2.6 M	1.8 M	79.0 M
Fire Protection	7.7 M	4.8 M	0.7 M	0.4 M	0.2 M	0.0 M	4.1 M	17.9 M
CCMS	0.3 M	1.5 M	-	-	-	0.9 M	-	2.8 M
Built-in Equipment	3.9 M	2.2 M	3.5 M	-	0.2 M	0.4 M	-	10.2 M
Hospital Equipment	-	1.3 M	-	-	-	-	-	1.3 M
Interiors	24.6 M	16.1 M	5.7 M	1.7 M	0.6 M	3.5 M	7.1 M	59.3 M
Public restrooms	-	-	2.2 M	-	-	-	-	2.2 M

- ▣ HVAC, Electrical, and Plumbing renewal needs are the most pressing across most departments

FRRM Data Improvement Project

Next Steps

14

- Update FRRM policies and training, based on feedback from working sessions
- Vet cost estimates generated by FRRM, to ensure that they align with real world projects
- Conduct a similar data improvement exercise with the remaining departments that use FRRM
- Develop an alternate backlog estimation methodology as part of the next Capital Plan update

QUESTIONS & DISCUSSION

15

onesanfrancisco.org

Brian Strong, Director 558-4558

Heather Green, Assistant Director 558-4515

Nishad Joshi, Senior Administrative Analyst 558-5997

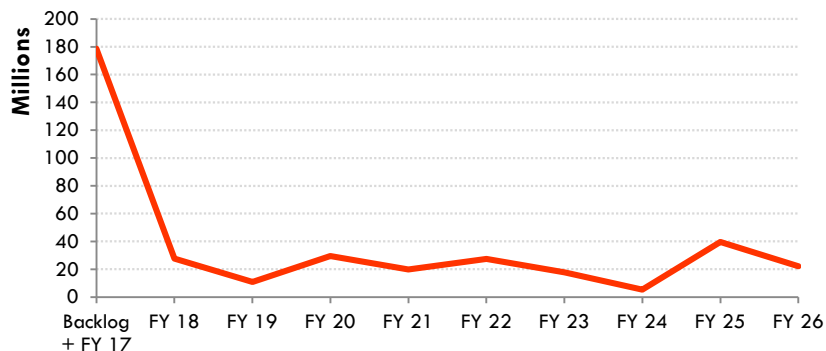
Hemiar Alburati, Senior Business Analyst 558-4003



FRRM Data Improvement Project

Administrative Services

YEAR-ON-YEAR RENEWAL NEED



NOTES FROM WORKING SESSION

- Several recently completed projects were accounted for, reducing overall need
- New facilities added: Public Safety Building, Produce Market

SUBSYSTEMS WITH IMMEDIATE NEED

	Backlog + FY17 Need
Roofs	2 M
Exteriors	11 M
Elevators	10 M
HVAC	37 M
Electrical	41 M
Plumbing	39 M
Fire Protection	8 M
CCMS	0 M
Built-in Equipment	4 M
Hospital Equipment	-
Interiors	25 M
Public restrooms	-

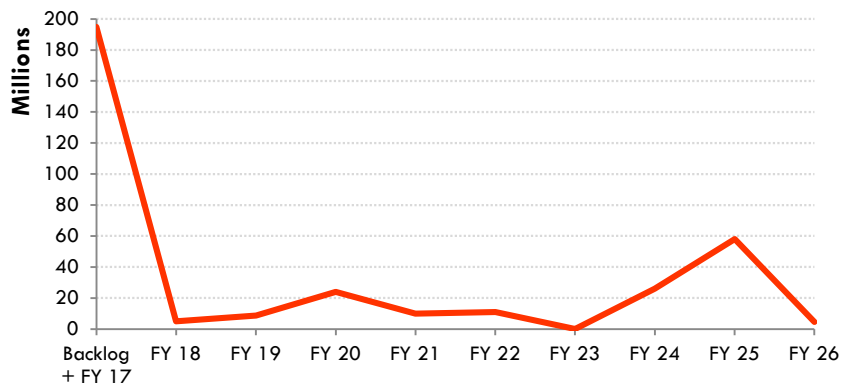
FACILITIES OUTLOOK

- Predictably, the Hall of Justice has the highest immediate (\$94M) and 10-yr need (\$113M)
- Other facilities with a high 10-yr need include the Moscone Convention Centers (\$95M), City Hall (\$48M), and 1 S. Van Ness (\$37M)

FRRM Data Improvement Project

Dept of Public Health

YEAR-ON-YEAR RENEWAL NEED



SUBSYSTEMS WITH IMMEDIATE NEED

	Backlog + FY17 Need
Roofs	1 M
Exteriors	10 M
Elevators	5 M
HVAC	102 M
Electrical	24 M
Plumbing	26 M
Fire Protection	5 M
CCMS	1 M
Built-in Equipment	2 M
Hospital Equipment	1 M
Interiors	16 M
Public restrooms	-

NOTES FROM WORKING SESSION

- Multiple working sessions were needed to cover different campuses
- Dept staff appreciated the training and guidance provided by CPP
- Removed subsystems that were incorrectly entered in original update

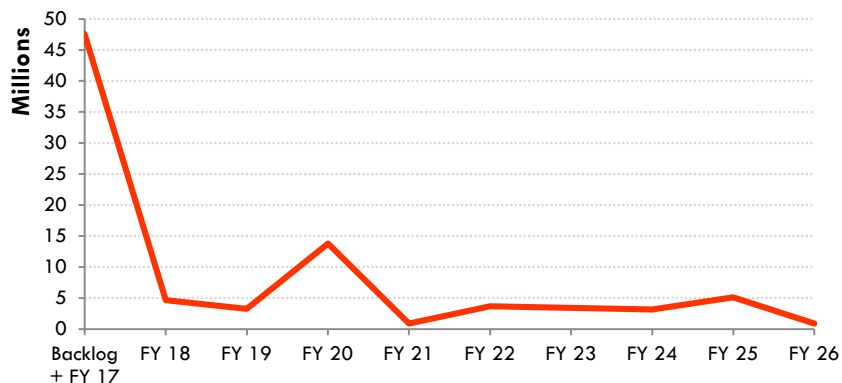
FACILITIES OUTLOOK

- Even after excluding SFGH Bldg 5, the SFGH Campus has the highest 10-yr need (\$165M), followed by Laguna Honda (\$140M), Clinics (\$23M), and 101 Grove (\$14M)
- Many buildings on the SFGH Campus have original subsystems from the early-1900s

FRRM Data Improvement Project

Fire Department

YEAR-ON-YEAR RENEWAL NEED



SUBSYSTEMS WITH IMMEDIATE NEED

	Backlog + FY17 Need
Roofs	1 M
Exteriors	2 M
Elevators	-
HVAC	16 M
Electrical	9 M
Plumbing	8 M
Fire Protection	1 M
CCMS	-
Built-in Equipment	4 M
Hospital Equipment	-
Interiors	6 M
Public restrooms	2 M

NOTES FROM WORKING SESSION

- FIR data was updated to be consistent with a recently completed DPW needs assessment
- Projects covered by the ESER 2014 G.O. Bond were classified as such, reducing overall need
- Critical needs were moved from “backlog” to “year 1” in order to reflect their urgency, and to remain consistent with other departments

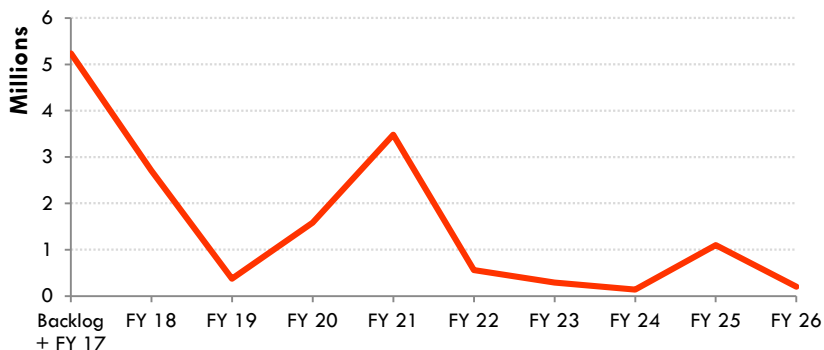
FACILITIES OUTLOOK

- Station 49 and EMS together have the highest 10-yr need (\$7.1M), followed by SFFD HQ (\$6.8M)
- Neighborhood Fire Stations continue to have renewal needs over the 10-yr period (\$70M)

FRRM Data Improvement Project

Police Department

YEAR-ON-YEAR RENEWAL NEED



SUBSYSTEMS WITH IMMEDIATE NEED

	Backlog + FY17 Need
Roofs	0.2 M
Exteriors	0.1 M
Elevators	-
HVAC	1.4 M
Electrical	1.1 M
Plumbing	0.3 M
Fire Protection	0.4 M
CCMS	-
Built-in Equipment	-
Hospital Equipment	-
Interiors	1.7 M
Public restrooms	-

NOTES FROM WORKING SESSION

- POL data was updated to be consistent with a recently completed needs assessment
- Dept staff appreciated the training and guidance provided by CPP, specifically around how to represent partial renewals in the system
- Overall, POL data did not change significantly after the update

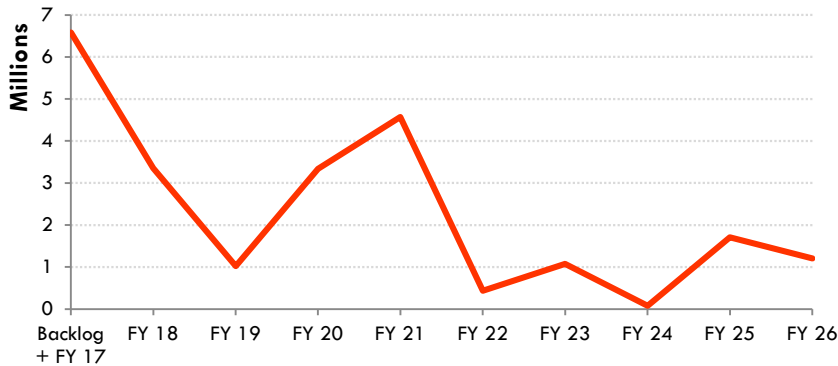
FACILITIES OUTLOOK

- The Police Academy (\$2M) has the highest 10-yr need, followed by Bayview Police Stn (\$1.9M), Mission Police Stn (\$1.8M), and Tenderloin Police Stn (\$1.8M)

FRRM Data Improvement Project

Juvenile Probation

YEAR-ON-YEAR RENEWAL NEED



NOTES FROM WORKING SESSION

- The Hidden Valley Ranch facility was mothballed
- Some renewal needs previously represented as backlog or immediate needs were pushed out to reflect the actual current state
- Although the YGC Admin Bldg is slated for renovation, the data was updated to reflect the current state

SUBSYSTEMS WITH IMMEDIATE NEED

	Backlog + FY17 Need
Roofs	0.7 M
Exteriors	0.6 M
Elevators	-
HVAC	1.8 M
Electrical	1.6 M
Plumbing	0.9 M
Fire Protection	0.2 M
CCMS	-
Built-in Equipment	0.2 M
Hospital Equipment	-
Interiors	0.6 M
Public restrooms	-

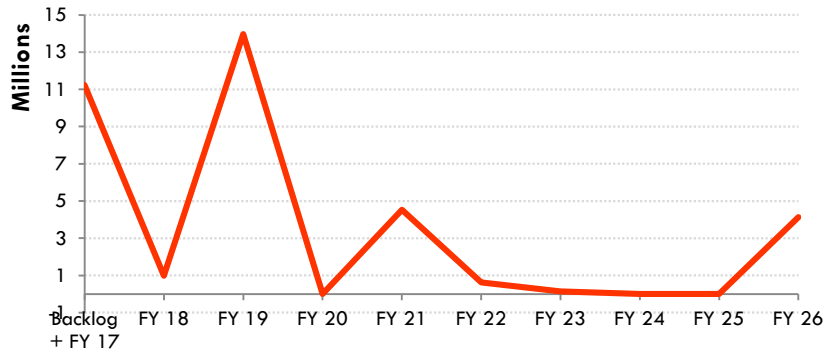
FACILITIES OUTLOOK

- The YGC Admin Bldg (\$7M) has the highest 10-yr need, followed by Juvenile Hall (\$5.5M)
- Log Cabin Ranch has a 10-yr need of (\$3M) which includes roof replacements and exterior work

FRRM Data Improvement Project

Sheriff's Department

YEAR-ON-YEAR RENEWAL NEED



SUBSYSTEMS WITH IMMEDIATE NEED

	Backlog + FY17 Need
Roofs	0.8 M
Exteriors	0.8 M
Elevators	0.2 M
HVAC	0.9 M
Electrical	0.5 M
Plumbing	2.6 M
Fire Protection	0.0 M
CCMS	0.9 M
Built-in Equipment	0.4 M
Hospital Equipment	-
Interiors	3.5 M
Public restrooms	-

NOTES FROM WORKING SESSION

- Several recently completed projects were accounted for, reducing overall need

FACILITIES OUTLOOK

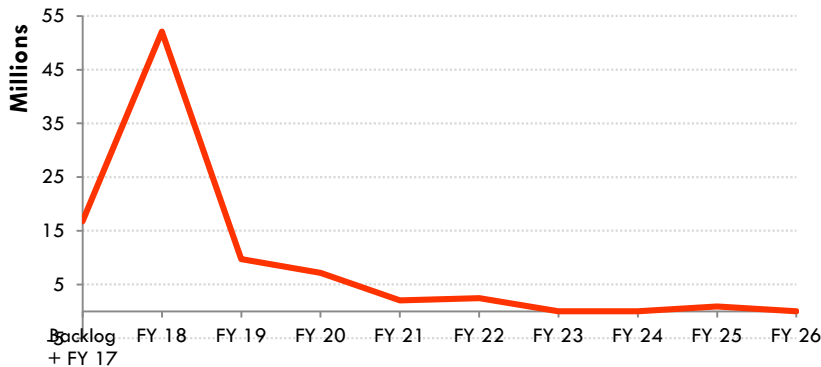
- County Jails 1 & 2 (\$18M) have the highest 10-yr need, followed by County Jail 5 (\$11M)

FRRM Data Improvement Project

War Memorial

22

YEAR-ON-YEAR RENEWAL NEED



NOTES FROM WORKING SESSION

- The majority of WAR needs are related to the Opera House
- Dept staff appreciated the training and guidance provided by CPP

SUBSYSTEMS WITH IMMEDIATE NEED

	Backlog + FY17 Need
Roofs	0.2 M
Exteriors	0.3 M
Elevators	3.2 M
HVAC	-
Electrical	-
Plumbing	1.8 M
Fire Protection	4.1 M
CCMS	-
Built-in Equipment	-
Hospital Equipment	-
Interiors	7.1 M
Public restrooms	-

FACILITIES OUTLOOK

- The Opera House (\$72M) has the highest 10-yr need, which consists of HVAC and Electrical work in FY18