#### FISCAL SUSTAINABILITY – FACILITIES CONDITION & MAINTENANCE

#### March 19, 2013

Tom Adams, Public Works Department Faithful+Gould - Consultant



# FISCAL SUSTAINABILITY WORK SESSIONS

Session #1

Work Plan and Process (July 2012)

Session #2

Options Tool (August 2012)

Session #3

Department Reviews (Sept 2012)

Session #4

Department Reviews (Oct 2012)

Session #5

Revenue (Dec 2012)

Session #6

• Economic Development (Jan 2013)

Session #7

Employee Compensation (March 2013)

Session #8

Facilities (March 2013)

Section #9

• Infrastructure (March 2013)

Session #10

Core Staffing (April 2013)

Session #11

Options Tool Review (April 2013)



### **PURPOSE**

# **Facilities Condition Assessment and Maintenance Analysis**

- Analyze Condition of City-owned Buildings
- Establish Baseline Building/Asset Inventory
- Establish Baseline Data on Building Conditions
- Estimate Short and Long Range Repair Needs
- Develop Long-Term Capital Expenditure Plan



# **BACKGROUND**

# **Facilities Included in the Analysis**

- City Council Chambers
- Police Department
- Downtown Recreation Center (Gymnastics)
- Margaret Todd Senior Center
- > Hill Gymnasium & Community Room
- Corporation Yard Building and Maintenance Buildings
- Lu Sutton Child Care Trailers
- Postmaster's House (History Museum)
- Carlile House (Chamber of Commerce)
- ➤ Hamilton Community Center
- Hamilton Pool & Bath House
- ➤ Hamilton Gym & Bowling Alley
- New Hamilton Gym
- Hamilton Firehouse
- Hamilton Arts Center Complex



# **BACKGROUND**

# Facilities **Not** Included in this Analysis

- ➤ Hamilton Vacant Buildings
  - Hospital, Theater, BOQ, Officer's Club
- Downtown Vacant Buildings
  - Simmons, Hanen, Scott, Community House
- Facilities City Does Not Maintain
  - Morning Star, Miwok Museum
- Park Bathrooms and Other Structures
- New City Administrative Offices
- Infrastructure
  - Roads, Storm Drains, Retaining Walls, Lights, etc.

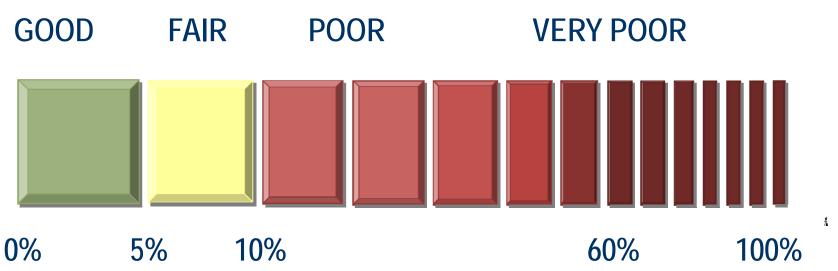


# **BACKGROUND ON FCI**

#### **Facilities Condition Index**

Maintenance, Repair, and Replacement Deficiencies of the FCI = Facility(s) (DM) Deficiencies

Current Replacement Value of the Facility(s) (CRV)





# **BACKGROUND ON FCI**

### **Facilities Condition Index**

Condition	Definition	Score	Percentage Value
GOOD	In a new or well maintained condition, with no visual evidence of wear, soiling or other deficiencies	0.00 to 0.05	0% to 5%
FAIR	Subject to wear, and soiling but is still in a serviceable and functioning condition	0.05 to 0.10	5% to 10%
POOR	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	Greater than 0.10	Greater than 10%
V-POOR	Subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal now necessary	Greater than 0.60	Greater than 60%



# **BACKGROUND ON CONSULTANT**

### Faithful+Gould - Firm Background

- International Condition Assessment, Construction Cost and Project Management Consultant with over 2,500 Employees Worldwide
- F& G has Performed Over 500 Condition Assessments for Federal, State,
  & Local Agencies
- Faithful Gould was Selected as the Most Qualified Firm with the Best Proposal from 13 Firms that Responded to City's RFP
- Dean Leonard, MRICS, Project Manager & Technical Director
- John Mahoney, PE, LEED AP BD + C, Operations Director



# RESULTS OF FACILITIES ANALYSIS – POLICE DEPT. EXAMPLE



# **Building Description**

City of Novato Police Department is located at 909 Machin Avenue and was originally built in circa 1979. We understand that there has been minor improvements to the building since construction that include the replacement of the roof coverings, chiller unit, domestic and building heating water boiler, light fixture upgrades and generator replacements.

The building has concrete columns supporting structure and is encapsulated with concrete masonry unit walls at basement level and wood stud walls with a stucco finished surface at the first floor level. The roof covering consists of a low-sloped built-up roof with stone gravel surface and also a steep-sloped standing seam metal panel roof. The floor consisted of a cast-in-place reinforced slab-on-grade concrete floor slab at the basement floor level and a suspended cast-in-place concrete slab at the first floor level. Windows systems consisted of aluminum single pane units. Doors consisted of swing operated glazed entrance doors, hollow metal personnel doors and roll up overhead vehicle doors.





# **Summary of Building Expenditures by Type over 20 Years**





### **Summary of Key Findings**

#### **Key Findings**

- B Shell: Replace exterior window units at an estimated cost of \$172,700 in year 2027
- B Shell: Replace BUR covering at an estimated cost of \$38,400 in year 2025
- C Interiors: Repaint interior wall & ceiling surfaces at an estimated cost of \$49,559 in years 2018 & 2026
- C Interiors: Replace carpet floor covering at an estimated cost of \$80,880 in years 2016 and 2026
- D Services: Renovate restrooms at a combined estimated cost of \$51,000 in year 2014
- D Services: Replace AHU's at a combined estimated cost of \$141,284 in year 2017
- D Services: Installation of a building automation system at an estimated cost of \$106,873 in year 2017
- D Services: Replace major electrical equipment at a combined estimated cost of \$38,537 in year 2022
- D Services: Replace telephone, fire alarm, security, CCTV and data systems at a combined estimated cost of \$381,238 in year 2022
- G Building Sitework: Replace emergency generator and transfer switch at a combined estimated cost of \$77,700 in year 2029



# **Building Systems Description and Condition Analysis**

#### **CONDITION**

#### **B3010 ROOF COVERINGS**

B3011 Roof Finishes

Faithful+Gould walked the entire field of the low-sloped roof level and observed the condition of the steep-sloped roof from the low-sloped roof and ground level, taking particular attention of the coverings, seams, parapet membrane and flashings, roof drains and scuppers, rooftop mechanical equipment and plumbing vents/stacks.

The roof coverings both appeared to be in fair to good condition having been installed in 2004 and therefore eight-years of age. The BUR has a typical EUL of twenty-years and the standing seam thirty-years therefore we anticipate a requirement for the replacement of the BUR mid-term in the study period to maintain the integrity of the building structure. The standing seam roof covering will last beyond the study period with regular maintenance being performed.

The mineral cap sheet at the base of the parapets has started to show cracking (reference Photograph 12 in Appendix B). We recommend that this is monitored until the roof covering replacement is scheduled and if it progresses undertake as-needed necessary roof repairs.



# **Sample of Facility Inventory**

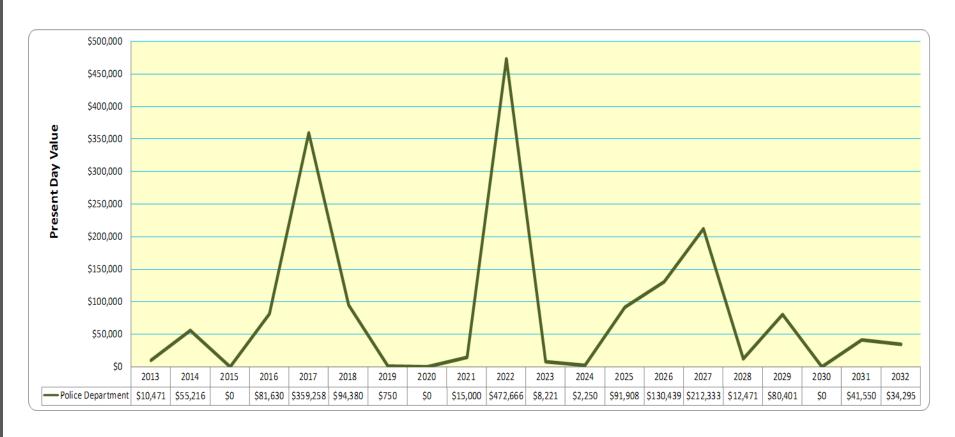
Location	Equipment Type	Manufacturer	Model No.	Serial No.	Capacity / Rating	Fuel Type	Year
Basement Boiler Room	Boiler	Bryan Boiler	DR650-W- FDG	95807	543 MBH Output	Natural Gas	2008
North Side of Building	Air Cooled Chiller	Carrier	30RAP0255 FA0111J	1811Q42230	23.4 Tons	Electric	2011
Roof Level	Split-System Complete System	Carrier	38TH02430 0	2290E69044	2 Tons	Electric	Unknown
Roof Level	Split-System Complete System	Bryant	661CJ036 E	3202E30611	3 Tons	Electric	2003
Roof Level	Split-System Complete System	Fujitsu	A0U18CL	DCN605652	1.5 Tons	Electric	Unknown
Basement Vehicle Area (Serves Reporting Room)	Split-System Complete System	Fujitsu	A0U24RML	GNN010111	2 Tons	Electric	Unknown

# **Sample of Facility Maintenance Recommendations**

Element No.	Building Element	Recommendation	Qty	Unit	Rate	Cost	Year	Priority Code
D2011	Water Closets	Rebuild flush valves (water closets)	7	EACH	\$238	\$1,666	2029	3
D2022	Hot Water Service	Replace domestic hot water circulation pumps	2	EACH	\$750	\$1,500	2027	3
D3021	Boiler	Overhaul the boiler	1	LS	\$3,500	\$3,500	2018	3
D3021	Boiler	Overhaul the boiler	1	LS	\$3,500	\$3,500	2028	3
D3031	Chilled Water Systems	Overhaul the chiller	1	LS	\$15,000	\$15,000	2021	3
D3031	Chilled Water Systems	Replace chiller	24	TONS	\$1,700	\$40,800	2031	3
D3032	Direct Expansion Systems	Replace Bryant split- systems (complete system)	3	TONS	\$1,812	\$5,436	2022	3



# **Summary of Building Expenditures by Year**





# **Summary of Building Condition and Expenditures**

Building Name	FCI	Gross Square Foot (GSF)	CRV per GSF	Current Replacement Value (CRV)	Deferred Maintenance Value (DM)	FCI Ratio	Property Condition Rating
Police Dept	Current FCI Ratio	32,884	\$346	\$11,364,694	\$9,346	0.1%	GOOD
Police Dept	Year 20 FCI Ratio	32,884	\$346	\$11,364,694	\$1,703,238	15.0%	POOR



# **Building Condition without Investment and Maintenance**



# **Priority Categories & Expenditures over 20 Years**

#### **Priority 1**

Life Safety/Code Compliance/ADA:

#### **Priority 2**

**Currently Critical:** 

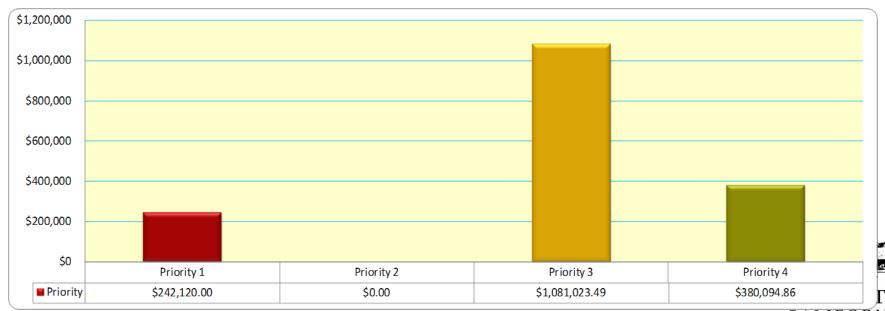
#### **Priority 3**

Necessary / Not Critical:

#### **Priority 4**

Image/Reputation:

- Compromises public safety or when a system requires to be upgraded to comply with current codes and standards
- A system or component is inoperable or compromised and requires immediate action
- Maintain the integrity of the facility or component and replace those items, which have exceeded their expected useful life
- Used to maintain the appearance of a system due to image/reputation



# **Plan Categories and Expenditures over 20 Years**

# Plan Type 1

**Deferred Maintenance** 

#### Plan Type 2

**Routine Maintenance** 

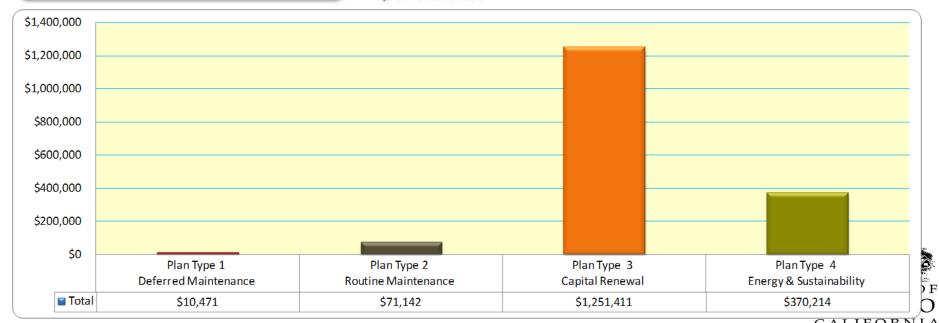
#### Plan Type 3

Capital Renewal

#### Plan Type 4

**Energy & Sustainability** 

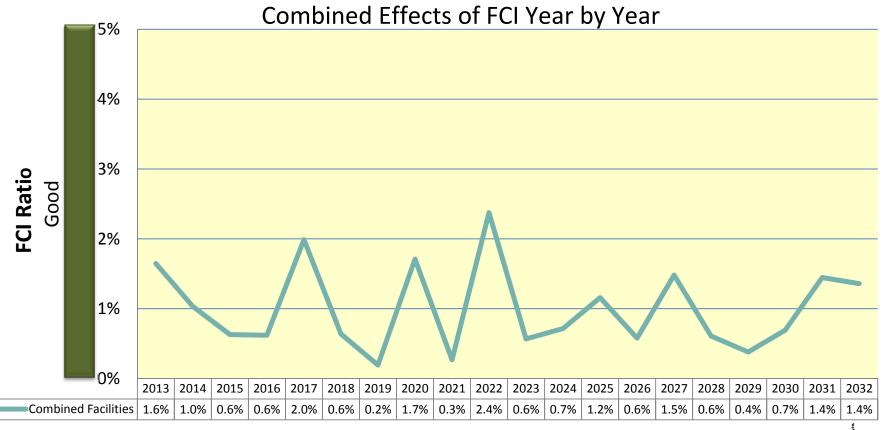
- Maintenance that was not performed when it was scheduled or past its useful life – needs immediate repair or replacement
- Maintenance that is planned and performed on a routine basis to maintain and preserve the condition
- Planned replacement of building systems that have reached the end of their useful life
- When the repair or replacement of equipment or systems are recommended to improve energy and sustainability performance



# COMBINED RESULTS OF FACILITIES ANALYSIS



### Facilities Condition Index – with Recommended Investments



# RESULTS (1 OF 2)

# **Summary of Building Conditions and 20 Year Expenditures**

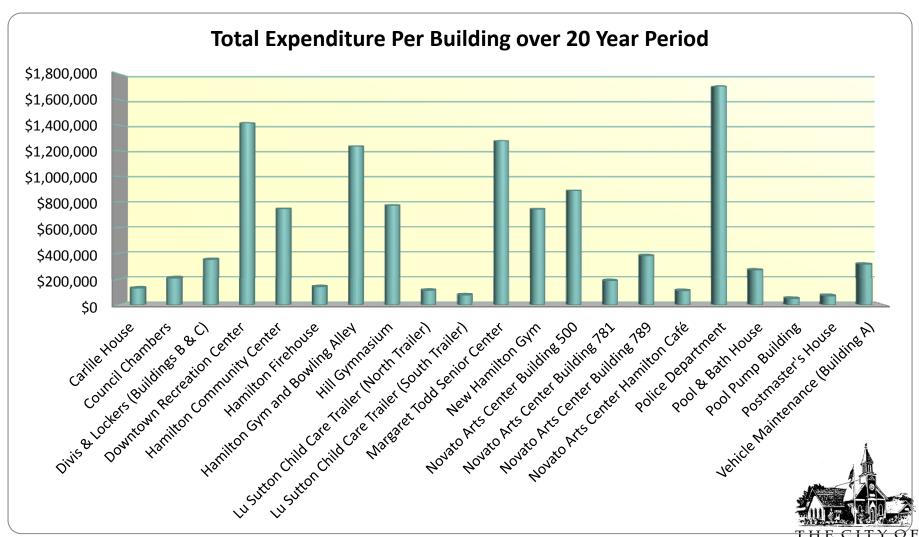
Building Name	Square Feet	Current - Deferred Maintenance	Year 20 - Deferred Maintenance	Year 20 FCI Ratio	Current Property Condition	Year 20 Property Condition
Council Chambers	4,475	\$ 500	\$ 210,305	8.2%	GOOD	FAIR
Carlile House	2,927	\$ 5,500	\$ 133,048	28.7%	GOOD	POOR
Downtown Recreation Center	24,516	\$ 12,363	\$ 1,417,384	16.8%	GOOD	POOR
Margaret Todd Senior Center	13,412	\$ 46,078	\$ 1,277,415	32.6%	GOOD	POOR
Hill Gymnasium	9,280	\$ 2,920	\$ 687,071	31.0%	GOOD	POOR
Trailer (North)	1,370	\$ 1,050	\$ 116,240	42.4%	GOOD	POOR
Trailer (South)	840	\$ 500	\$ 79,960	47.6%	GOOD	POOR
Corp Yard Vehicle Maint	5,525	\$ 14,600	\$ 316,703	48.2%	GOOD	POOR
Corp Yard New Buildings	6,000	\$ 2,250	\$ 220,743	11.5%	GOOD	POOR
Police Department	32,884	\$ 10,471	\$ 1,703,238	15.0%	GOOD	POOR

# RESULTS (2 OF 2)

# **Summary of Building Conditions & 20 Year Expenditures (cont.)**

Building Name	Square Feet	Current - Deferred Maintenance	Year 20 - Deferred Maintenance	Year 20 FCI Ratio	Current Property Condition	Year 20 Property Condition
Postmaster's House	1,247	\$ 2,859	\$ 73,040	27.5%	GOOD	POOR
Hamilton Community Center	13,283	\$ 53,727	\$ 748,513	28.3%	GOOD	POOR
Hamilton Firehouse	4,000	\$ 11,315	\$ 144,616	8.9%	GOOD	FAIR
Hamilton Gym & Bowling Alley	19,273	\$ 671,862	\$ 1,236,703	40.4%	POOR	POOR
Pool & Bath House	1,800	\$ 518	\$ 270,747	17.7%	GOOD	POOR
Pool Pump Building	2,000	\$ 14,230	\$ 52,350	8.1%	GOOD	FAIR
New Hamilton Gym	16,640	\$ 4,244	\$ 746,762	10.7%	GOOD	POOR
Building 500	13,887	\$ 2,510	\$ 850,841	24.3%	GOOD	POOR
Building 781	3,712	\$ 500	\$ 190,461	16.4%	GOOD	POOR
Building 789	8,347	\$ 1,288	\$ 383,410	18.9%	GOOD	POOR
Hamilton Cafe	1,830	\$ 500	\$ 112,477	20.9%	GOOD	POOR

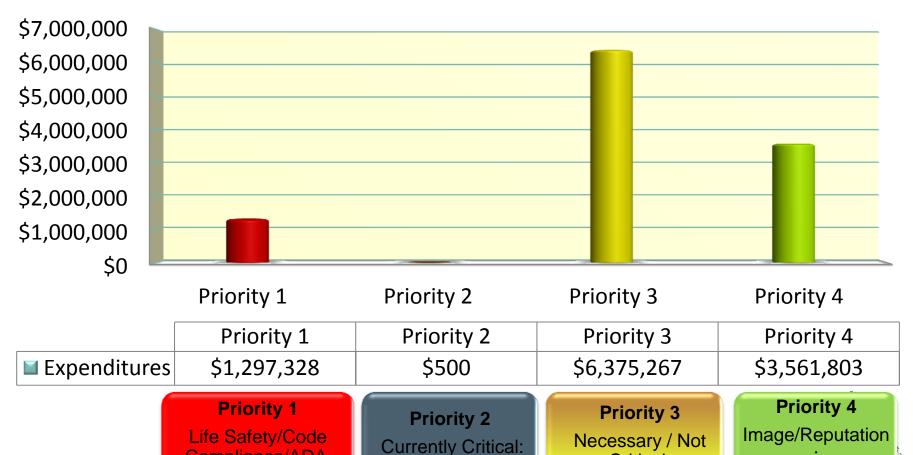
# **Overview of City Buildings**



# **Combined Expenditures for City Buildings**

Compliance/ADA:

# **Expenditure by Priority Over 20 Year Period**



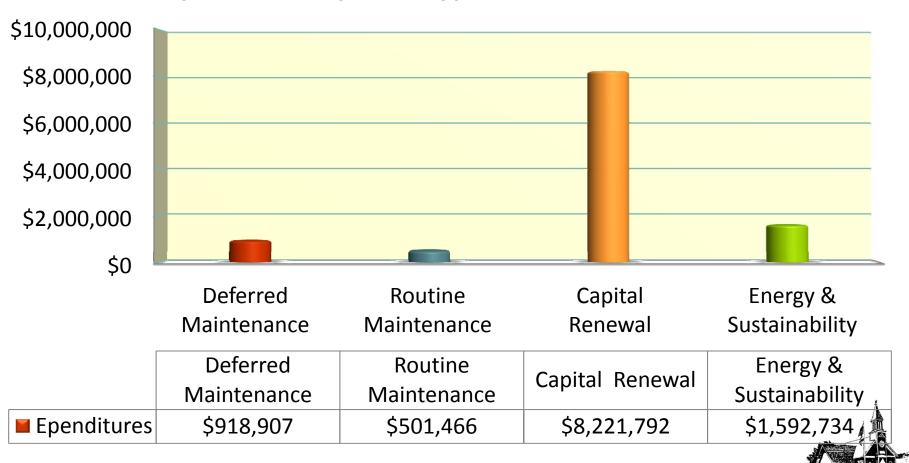
THE CITY OF NOVATO

CALIFORNIA

Critical:

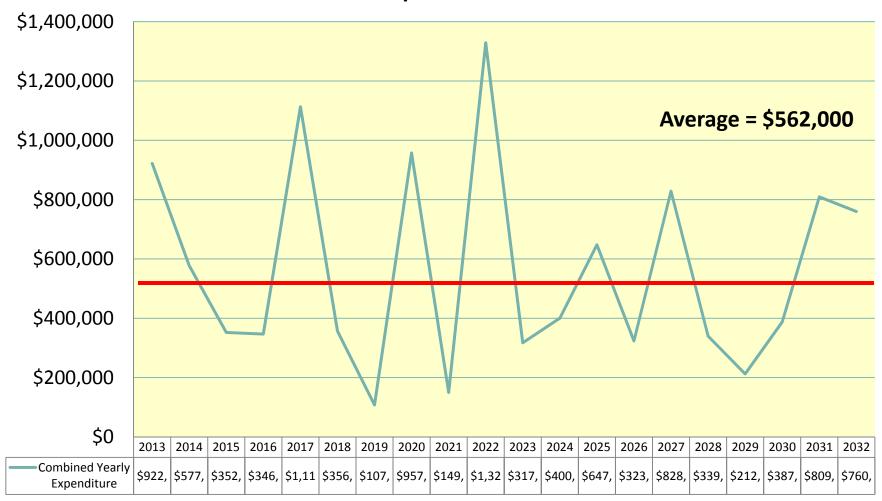
# **Combined Expenditures for City Buildings**

### **Expenditure by Plan Type over 20 Year Period**



# **Summary of Combined City Building Expenditures**

#### **Combined Expenditure Forecast over 20 Years**



# SUMMARY AND OPTIONS



### WHAT DOES DATA MEAN?

#### **Summary of Facilities Analysis**

- \$11,235,000 recommended over 20 Years to keep facilities in good condition
- Most expenditures (\$8.7M of \$11.2M) in 8 largest facilities
- Deferred Maintenance expenditures up front are \$919,000 and an average of approximately \$550,000 per year upkeep thereafter



# **Option #1 – Full Funding Approach**

- Total expenditure of \$11,235,000 over 20 year time period
- Invest \$920,000 in FY 2013/14 for deferred maintenance
- Establish policy to invest \$540,000 per year for the following years in facilities maintenance (adjusted for CPI)



# Option #2 – Remove Hamilton Gym & Bowling Alley

- Remove Hamilton Gym & Bowling Alley from the analysis and treat it as a separate process
- This removes \$672,000 in Year 1 deferred maintenance costs and \$1,237,000 in total expenditures
- Total expenditures become \$10 million over 20 years
- Establish policy to invest \$500,000 per year starting in FY 13/14 in facilities maintenance (plus CPI)



#### **Option #3 – Maintain Current Policy**

- Continue recent budget forecast policy of investing \$300,000 per year in facilities maintenance
- Fund additional major items with infusion of \$1 million funding in years 2017, 2020, 2022, and 2027 (grown by CPI)
- Assumes Hamilton Gym a separate process (costs not included)



# Option #4 – Remove Hamilton Gym & Bowling Alley, Arts Center, Carlile House, & Include ½ of New Hamilton Gym Costs

- Treat Hamilton Gym & Bowling Alley as a separate process
- Remove Arts Center & Carlile House, which have their own maintenance funds and only include half of the New Hamilton Gym costs – this reduces \$2 million
- Total expenditures become \$8 million over 20 years
- Establish policy to invest \$400,000 per year starting in FY 13/14 in facilities maintenance (plus CPI)



# QUESTIONS

**Public Works Department** 

