# San Francisco Fire Department

FY21-22 and FY22-23 Capital Budget Request

| Project                          | FY21-22          | FY22-23          |
|----------------------------------|------------------|------------------|
| Roof Replacements                | \$<br>3,666,230  | \$<br>3,758,350  |
| Exterior Envelope                | \$<br>9,520,000  | \$<br>6,080,000  |
| Windows                          | \$<br>396,000    | \$<br>663,000    |
| Showers                          | \$<br>825,000    | \$<br>1,375,000  |
| Mechanical/HVAC                  | \$<br>6,087,529  | \$<br>7,530,000  |
| Emergency Generators             | \$<br>2,550,000  | \$<br>2,550,000  |
| Exhaust Extractor                | \$<br>750,000    | \$<br>750,000    |
| Electrical                       | \$<br>14,605,000 | \$<br>25,385,000 |
| Sitework/Sidewalk                | \$<br>208,068    | \$<br>649,021    |
| Kitchens                         | \$<br>2,480,000  | \$<br>1,647,414  |
| Apparatus Bay Door Maintenance   | \$<br>750,000    | \$<br>750,000    |
| Data Infrastructure Upgrades     | \$<br>5,553,000  | \$<br>3,804,000  |
| Chief's Residence                | \$<br>1,369,166  | \$<br>-          |
| Boiler Maintenance               | \$<br>750,000    | \$<br>750,000    |
| SFFD Bureau of Equipment Study   | \$<br>500,000    | \$<br>-          |
| SFFD Electrical and Wiring Study | \$<br>500,000    | \$<br>-          |
| Buliding Certifications          | \$<br>200,000    | \$<br>200,000    |
| TOTAL                            | \$<br>50,709,993 | \$<br>55,891,785 |

# **Roof Replacements**

| Station          | FY21-22         | FY22-23         |
|------------------|-----------------|-----------------|
| Station 8        | \$<br>658,210   |                 |
| Station 9        | \$<br>896,000   |                 |
| Station 14       |                 | \$<br>826,000   |
| Station 19       |                 | \$<br>805,000   |
| Station 24       | \$<br>753,620   |                 |
| Station 25       |                 | \$<br>613,900   |
| Station 33       | \$<br>472,500   |                 |
| Station 34       | \$<br>410,900   |                 |
| Station 37       |                 | \$<br>526,750   |
| Station 48       | \$<br>475,000   |                 |
| DOT Folsom/Tower |                 | \$<br>986,700   |
| TOTAL            | \$<br>3,666,230 | \$<br>3,758,350 |

Roofs at numerous fire stations are leaking due to deferred maintenance, causing multiple health and safety issues at many of the stations. Without this much-needed attention and repair, roofs will continue to leak, resulting in numerous other issues at the facility, including water damage, dry rot, and leaks throughout all areas of the building. Many roofs are in need of repair beyond simple patching. A number of roofs were/will be repaired as part of the ESER bond focused-scope program.

### **Exterior Envelope**

| Station    | FY21-22         | FY22-23         |
|------------|-----------------|-----------------|
| Station 7  | \$<br>2,350,000 |                 |
| Station 9  | \$<br>2,130,000 |                 |
| Station 12 |                 | \$<br>1,680,000 |
| Station 19 |                 | \$<br>1,920,000 |
| Station 21 |                 | \$<br>1,360,000 |
| Station 25 | \$<br>1,460,000 |                 |
| Station 33 |                 | \$<br>1,120,000 |
| Station 37 | \$<br>1,250,000 |                 |
| Station 43 | \$<br>1,830,000 |                 |
| Station 48 | \$<br>500,000   | ·               |
| TOTAL      | \$<br>9,520,000 | \$<br>6,080,000 |

Due to much deferred maintenance, the status of many of the fire station exteriors is deteriorating. The cracks in the concrete need to be painted and active leaks need to be addressed in order to prevent further damage throughout the building. Repair also includes fixing the epoxy injection and elastic water barrier paint. Damage can run from cosmetic improvements to complete painting of the exterior to substantial repair. Many of the exteriors of the Department's facilities have not been painted in years and have seen the impacts of weather as well as regular wear and tear.

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#### Windows

| Station    | FY21-22       | FY22-23       |
|------------|---------------|---------------|
| Station 8  | \$<br>90,000  |               |
| Station 9  |               | \$<br>175,000 |
| Station 10 |               | \$<br>96,000  |
| Station 12 |               | \$<br>105,000 |
| Station 17 |               | \$<br>110,000 |
| Station 18 | \$<br>91,000  |               |
| Station 19 |               | \$<br>125,000 |
| Station 24 | \$<br>110,000 |               |
| Station 34 | \$<br>46,000  |               |
| Station 37 | \$<br>59,000  |               |
| Station 41 | •             | \$<br>52,000  |
| TOTAL      | \$<br>396,000 | \$<br>663,000 |

Due to much deferred maintenance, the status of many of the fire station exteriors is deteriorating, including windows. Active leaks need to be addressed in order to prevent further damage. Further damage could result in major health and safety issues such as rot and mold, as well as energy loss and inefficiencies. Furthermore, window failure has resulted in several workers' compensation claims from windows falling out of their frames. The Department would like to implement an annual replacement program to address the needs of stations with failing window systems.

#### **Showers**

| Station           | FY21-22       | FY22-23         |
|-------------------|---------------|-----------------|
| Station 2         | \$<br>275,000 |                 |
| Station 11        |               | \$<br>275,000   |
| Station 12        | \$<br>275,000 |                 |
| Station 21        |               | \$<br>275,000   |
| Station 23        |               | \$<br>275,000   |
| Station 31        |               | \$<br>275,000   |
| Station 37        | \$<br>275,000 |                 |
| 1415 Evans Avenue |               | \$<br>275,000   |
| TOTAL             | \$<br>825,000 | \$<br>1,375,000 |

Showers at fire stations are used quite frequently. Fire Station members must be able to wash after being exposed to environmental hazards. Due to many years of deferred maintenance, showers and shower pans have leaks and are not properly sealed, which is leading to further damage throughout the building and could result in rot, mold or pests.

## Mechanical/HVAC

| Station           | FY21-22         | FY22-23         |
|-------------------|-----------------|-----------------|
| Station 8         | \$<br>500,000   |                 |
| Station 9         | \$<br>450,000   |                 |
| Station 12        |                 | \$<br>790,000   |
| Station 14        |                 | \$<br>500,000   |
| Station 17        | \$<br>910,000   |                 |
| Station 18        | \$<br>910,000   |                 |
| Station 19        |                 | \$<br>890,000   |
| Station 20        |                 | \$<br>630,000   |
| Station 23        |                 | \$<br>600,000   |
| Station 24        |                 | \$<br>840,000   |
| Station 25        | \$<br>680,000   |                 |
| Station 26        | \$<br>570,000   |                 |
| Station 29        |                 | \$<br>300,000   |
| Station 32        |                 | \$<br>270,000   |
| Station 33        |                 | \$<br>520,000   |
| Station 34        |                 | \$<br>460,000   |
| Station 37        |                 | \$<br>590,000   |
| Station 39        |                 | \$<br>590,000   |
| Station 43        | \$<br>850,000   |                 |
| 1415 Evans Avenue |                 | \$<br>550,000   |
| DOT Folsom        | \$<br>715,892   |                 |
| SFFD Headquarters | \$<br>1,001,637 |                 |
| TOTAL             | \$<br>6,087,529 | \$<br>7,530,000 |

HVAC systems throughout the Department are extremely old and in frequent need of repair. Due to their age, they are also extremely inefficient from an energy perspective. Because of a lack of funding in the past, HVAC systems have not been maintained (or repaired) to appropriate levels. In addition, the SFFD relies primarily on boilers for heat. The boiler inventory has a very small number of energy efficient boilers - the remainder are outdated and inefficient, resulting in increased costs for the City. Poor distribution and/or control systems also contribute to high energy costs and greenhouse gas emission. The Department must restore heat within 48 hours of break-down of the heating system.

### **Emergency Generators**

| Station    | FY21-22     |         | FY22-23   |
|------------|-------------|---------|-----------|
| Station 20 | \$<br>850   | ,000    |           |
| Station 22 | \$<br>850   | ,000    |           |
| Station 24 | \$<br>850   | ,000    |           |
| Station 26 |             | \$      | 850,000   |
| Station 28 |             | \$      | 850,000   |
| Station 41 |             | \$      | 850,000   |
| TOTAL      | \$<br>2,550 | ,000 \$ | 2,550,000 |

Back-up power is an integral part of emergency response. Each fire station has a backup generator. Many of these generators are inefficient and cannot power many of the current systems in the fire houses, including the apparatus doors. Station generators are being replaced as part of the ESER bond program. However, the Department is in need of generator repair and maintenance funds to maintain the current inventory to ensure they are working properly as well as address any repair issues that come up during the year.

#### **Exhaust Extractor Maintenance**

| Station          | FY21-22       | FY22-23       |
|------------------|---------------|---------------|
| Various Stations | \$<br>750,000 | \$<br>750,000 |
| TOTAL            | \$<br>750,000 | \$<br>750,000 |

The Department recently upgraded the exhaust extractors at its stations as part of a Federal Emergency Management Agency (FEMA) grant. The Department is currently requesting an allocation of funding for regular and on-going maintenance and repair of these systems.

### **Electrical**

| Station           | FY21-22          | FY22-23          |
|-------------------|------------------|------------------|
| Station 2         | \$<br>2,340,000  |                  |
| Station 6         |                  | \$<br>2,200,000  |
| Station 8         | \$<br>1,570,000  |                  |
| Station 9         | \$<br>2,130,000  |                  |
| Station 10        |                  | \$<br>2,060,000  |
| Station 11        | \$<br>2,450,000  |                  |
| Station 12        |                  | \$<br>1,680,000  |
| Station 14        |                  | \$<br>1,970,000  |
| Station 15        | \$<br>2,070,000  |                  |
| Station 17        |                  | \$<br>2,020,000  |
| Station 18        |                  | \$<br>1,950,000  |
| Station 19        |                  | \$<br>1,920,000  |
| Station 20        |                  | \$<br>1,720,000  |
| Station 23        |                  | \$<br>1,290,000  |
| Station 26        |                  | \$<br>1,220,000  |
| Station 31        | \$<br>1,740,000  |                  |
| Station 32        |                  | \$<br>1,000,000  |
| Station 33        |                  | \$<br>1,120,000  |
| Station 38        | \$<br>1,135,000  | \$<br>1,135,000  |
| Station 40        | \$<br>1,170,000  |                  |
| Station 41        |                  | \$<br>1,110,000  |
| Station 42        |                  | \$<br>1,160,000  |
| Station 43        |                  | \$<br>1,830,000  |
| 1415 Evans Avenue | \$<br>2,500,000  |                  |
| TOTAL             | \$<br>14,605,000 | \$<br>25,385,000 |

The electrical systems at most Department fire stations are in need of major upgrades. As currently existing, the systems cannot handle the electrical load required for present-day operations, nor can they completely support the systems and technologies used by the Department on a daily basis. For example, for many of the stations targeted for installation of heavy-duty washer extractors for the cleaning of personal protective equipment, electrical upgrades are required in order to support the operation of the washing machines. Upgrades of current electrical distribution systems are required to support safety and reliability of the stations themselves. This includes Station 49/Evans facility, where additional electrical infrastructure is needed to ensure all vehicles and equipment at the facility are being charged appropriately.

# Sitework/Sidewalk

| Station           | FY21-22       | FY22-23       |
|-------------------|---------------|---------------|
| Station 9         | \$<br>62,000  |               |
| Station 10        |               | \$<br>177,146 |
| Station 22        |               | \$<br>74,902  |
| Station 23        |               | \$<br>70,699  |
| Station 25        |               | \$<br>69,229  |
| Station 32        |               | \$<br>67,910  |
| Station 33        |               | \$<br>55,237  |
| Station 37        |               | \$<br>57,898  |
| Station 40        | \$<br>97,825  |               |
| Station 42        |               | \$<br>76,000  |
| 1415 Evans Avenue | \$<br>110,243 | •             |
| TOTAL             | \$<br>208,068 | \$<br>649,021 |

Numerous fire stations have damage to concrete and sidewalks surrounding the stations. In most cases, these areas are accessed by the public on a daily basis. This is a liability for the Department and the City, as there is the potential for claims of injuries and damages if an accident were to occur. The State Highway Code and the local Public Works Code require property owners to maintain the sidewalk adjacent to their property to a condition acceptable to the Director of Public Works. This responsibility includes making repairs as needed when a sidewalk is damaged. Damage on the sidewalk for which the Department is responsible for include missing pavement, uneven pavement, holes or cracks in the pavement, and

#### **Kitchens**

| Station    | FY21-22         | FY22-23         |
|------------|-----------------|-----------------|
| Station 2  |                 | \$<br>310,000   |
| Station 3  |                 | \$<br>310,000   |
| Station 6  |                 | \$<br>310,000   |
| Station 7  | \$<br>310,000   |                 |
| Station 8  | \$<br>310,000   |                 |
| Station 9  | \$<br>310,000   |                 |
| Station 10 |                 | \$<br>310,000   |
| Station 11 | \$<br>310,000   |                 |
| Station 15 | \$<br>310,000   |                 |
| Station 21 | \$<br>310,000   |                 |
| Station 31 |                 | \$<br>275,000   |
| Station 38 | \$<br>310,000   |                 |
| Station 40 | \$<br>310,000   |                 |
| Station 43 |                 | \$<br>132,414   |
| TOTAL      | \$<br>2,480,000 | \$<br>1,647,414 |

Fire Stations are staffed by members on a 24-hours-a-day/7-days-a-week basis, and therefore need to have fully functional kitchens. Due to many years of deferred maintenance, the quality of many of the fire station kitchens is quite poor. Damage ranges from rot from leaks throughout the facility that have not been addressed to broken and unstable cabinetry. A third of the stations no longer have doors on their cabinets and a number of stations need new flooring because existing linoleum has peeled away due to heavy use and cleaning.

# **Apparatus Bay Door Maintenance**

| Station          | FY21-22       | FY22-23       |
|------------------|---------------|---------------|
| Various Stations | \$<br>750,000 | \$<br>750,000 |
| TOTAL            | \$<br>750,000 | \$<br>750,000 |

SFFD apparatus doors are anticipated to be replaced as part of the 2014 ESER bond program. However, the need for maintenance and repair still exists on an annual basis for the Department, given the amount of use for apparatus doors. The Department is currently requesting an allocation of funding for regular maintenance and repair of doors to resolve issues that may occur throughout the year.

# **Data Infrastructure Upgrades**

| Station         | FY21-22         | FY22-23         |
|-----------------|-----------------|-----------------|
| Fire Station 2  | \$<br>527,000   |                 |
| Fire Station 6  | \$<br>381,000   |                 |
| Fire Station 8  | \$<br>272,000   |                 |
| Fire Station 9  | \$<br>370,000   |                 |
| Fire Station 10 | \$<br>357,000   |                 |
| Fire Station 11 | \$<br>424,000   |                 |
| Fire Station 12 | \$<br>292,000   |                 |
| Fire Station 14 | \$<br>341,000   |                 |
| Fire Station 15 | \$<br>358,000   |                 |
| Fire Station 17 | \$<br>349,000   |                 |
| Fire Station 18 | \$<br>337,000   |                 |
| Fire Station 19 | \$<br>332,000   |                 |
| Fire Station 20 |                 | \$<br>297,000   |
| Fire Station 21 |                 | \$<br>235,000   |
| Fire Station 22 |                 | \$<br>175,000   |
| Fire Station 23 |                 | \$<br>224,000   |
| Fire Station 24 |                 | \$<br>311,000   |
| Fire Station 25 |                 | \$<br>253,000   |
| Fire Station 26 |                 | \$<br>211,000   |
| Fire Station 28 |                 | \$<br>203,000   |
| Fire Station 29 |                 | \$<br>238,000   |
| Fire Station 31 | \$<br>301,000   |                 |
| Fire Station 32 |                 | \$<br>174,000   |
| Fire Station 33 |                 | \$<br>195,000   |
| Fire Station 34 |                 | \$<br>170,000   |
| Fire Station 37 |                 | \$<br>217,000   |
| Fire Station 38 | \$<br>393,000   |                 |
| Fire Station 39 |                 | \$<br>219,000   |
| Fire Station 40 | \$<br>202,000   |                 |
| Fire Station 41 |                 | \$<br>193,000   |
| Fire Station 42 |                 | \$<br>200,000   |
| Fire Station 43 | \$<br>317,000   |                 |
| Fire Station 44 |                 | \$<br>289,000   |
| TOTAL           | \$<br>5,553,000 | \$<br>3,804,000 |

The technology infrastructure currently supporting fire stations is quite outdated and in need of upgrade and/or replacement. This project would modernize the Department's fire stations with new wiring and equipment to support industry-standard Fire Station Alerting and notification capabilities. This will include new electrical wiring, emergency lighting, PA and Speaker Systems in all Fire Stations. By doing these upgrades, the Department's goal is to improve Fire and EMS response times.

# **Chief's Residence**

| Station           | FY21-22         | FY22-23 |  |  |
|-------------------|-----------------|---------|--|--|
| Roofing           | \$<br>83,349    |         |  |  |
| Exterior Envelope | \$<br>7,998     |         |  |  |
| Windows           | \$<br>170,988   |         |  |  |
| Showers           | \$<br>26,483    |         |  |  |
| Mechanical (HVAC) | \$<br>369,779   |         |  |  |
| Electrical        | \$<br>299,173   |         |  |  |
| Sitework/Sidewalk | \$<br>51,687    |         |  |  |
| Kitchen           | \$<br>135,000   |         |  |  |
| Interior Work     | \$<br>75,869    |         |  |  |
| Specialties       | \$<br>11,725    |         |  |  |
| ADA Upgrades      | \$<br>137,115   |         |  |  |
| TOTAL             | \$<br>1,369,166 | \$ -    |  |  |

The Chief's Residence serves as a secondary Operations Center in the event of a disaster. The electrical system at the facility needs to be upgraded. The windows leak and are starting to rot, and the building needs to be weatherproofed. The kitchen has not been upgraded since the 1950's and there are no exhaust fans in the bathrooms.

### **Boiler System Maintenance & Replacement**

| Station          | FY21-22 |         | FY22-23 |         |
|------------------|---------|---------|---------|---------|
| Various Stations | \$      | 750,000 | \$      | 750,000 |
| TOTAL            | \$      | 750,000 | \$      | 750,000 |

In addition to complete boiler replacement that is needed at a number of stations (covered in the HVAC/Mechanical project), the Department has annual needs for regular maintenance and repairs on its existing boiler systems.

### SFFD Bureau of Equipment Study

| Station           | FY21-22 |         | FY22-23 |   |
|-------------------|---------|---------|---------|---|
| Facility Planning | \$      | 500,000 | \$      | - |
| TOTAL             | \$      | 500,000 | \$      | - |

The Department's longer term plan includes a relocation of the Department's Bureau of Equipment to the space currently occupied by the EMS Division at 1415 Evans once the move to the new EMS facility is complete. This allocation would assist in establishing the needs of the Bureau from a programmatic perspective and see what re-purposing of the current facility/property is needed.

# **SFFD Electrical and Wiring Study**

| Station           | FY21-22       |    | FY22-23 |  |
|-------------------|---------------|----|---------|--|
| Facility Planning | \$<br>500,000 | \$ | -       |  |
| TOTAL             | \$<br>500,000 | \$ | -       |  |

This allocation would fund an in-depth study of the Departmental needs for IT and electrical infrastructure at Department stations, including electrical and cabling/wiring upgrades that are needed to meet the current demands of station operations and make use of current technologies.

### **SFFD Building Certifications**

| Station          | FY21-22 |         | FY22-23 |         |
|------------------|---------|---------|---------|---------|
| Various Stations | \$      | 200,000 | \$      | 200,000 |
| TOTAL            | \$      | 200,000 | \$      | 200,000 |

This allocation would fund annual maintenance requirements for such items as fire alarm certifications, sprinkler testing, and emergency lighting, as well as additional requirements due to elevators or other building systems as a result of facility enhancements.