



2014 Earthquake Safety and Emergency Response Bond: **Safeguarding San Francisco**



City and County of San Francisco

Executive Summary

The City and County of San Francisco is proposing a \$400 million Earthquake Safety and Emergency Response Bond (ESER 2014) for the June 2014 ballot. The purpose of ESER 2014 is to fund repairs and improvements that will allow San Francisco to more quickly and effectively respond to a major earthquake or disaster.

ESER 2014 builds on the Earthquake Safety and Emergency Response Bond approved by San Francisco voters in 2010. ESER 2010, with an overwhelming support of 79 percent of San Francisco voters, has funded critical seismic upgrades to the City's deteriorating emergency and first response infrastructure, helping achieve the highest level of health, safety and welfare for all San Franciscans.

ESER 2014 continues the \$412 million investment of ESER 2010, the first phase of essential improvements to the City's public safety facilities.



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What will this voter-backed bond do?

The ESER 2014 bond addresses San Francisco’s emergency response capital shortcomings. The proposed projects and programs are the result of a citywide assessment of essential infrastructure improvement needs.

ESER 2014 will:

Seismically upgrade neighborhood fire stations

- rehabilitate and seismically upgrade selected neighborhood fire stations throughout the City

Seismically upgrade the emergency firefighting water system

- construct additional cisterns that provide an emergency source of water for firefighting
- repair, replace and improve the most vulnerable components of the emergency firefighting water system pipe and tunnel network to withstand a major earthquake
- address safety and seismic reliability concerns at the core facilities

Seismically upgrade district police stations and other infrastructure

- rehabilitate and seismically upgrade selected police district stations throughout the City
- address a broad range of deficiencies, including the possible renovation and/or the replacement of up to nine of the ten district stations

Relocate the motorcycle police and crime lab facilities from the seismically deficient Hall of Justice at 850 Bryant Street

- design and construct seismically safe structures, professional work environments and the facilities necessary for the San Francisco Police Department to function effectively during and after natural disasters and other calamities when emergency response capabilities will be critical

Relocate the medical examiner’s facility from the seismically deficient Hall of Justice at 850 Bryant Street

- provide a seismically safe structure, professional work environments and morgue necessary for citywide emergency response capabilities by the medical examiner

Projects and Programs	Budget (millions)
Neighborhood Fire Stations	\$85
Emergency Firefighting Water System	\$55
District Police Stations and Infrastructure	\$30
Motorcycle Police and Crime Lab	\$165
Medical Examiner Facility	\$65
Total	\$400



Why now?

San Francisco is located in earthquake country, which means timing and preparation are everything. There is a 63 percent chance of a 6.7 or greater magnitude earthquake striking the Bay Area in the next 25 years, according to the United States Geological Survey. A quake of that size could prove devastating to life and property.

With this investment, planning today for tomorrow's emergencies will:

- reduce injuries, deaths and property damage by providing first responders with equipment and infrastructure they need to respond to emergencies and help safeguard our communities;
- save money as we address needed repairs and upgrades before inflation makes them more expensive;
- expedite our recovery after an emergency – reducing crime, preserving jobs and ensuring the rapid recovery of San Francisco in the weeks and months immediately following a disaster;
- create more than 2,600 jobs in San Francisco to boost our economy and put San Franciscans to work.¹



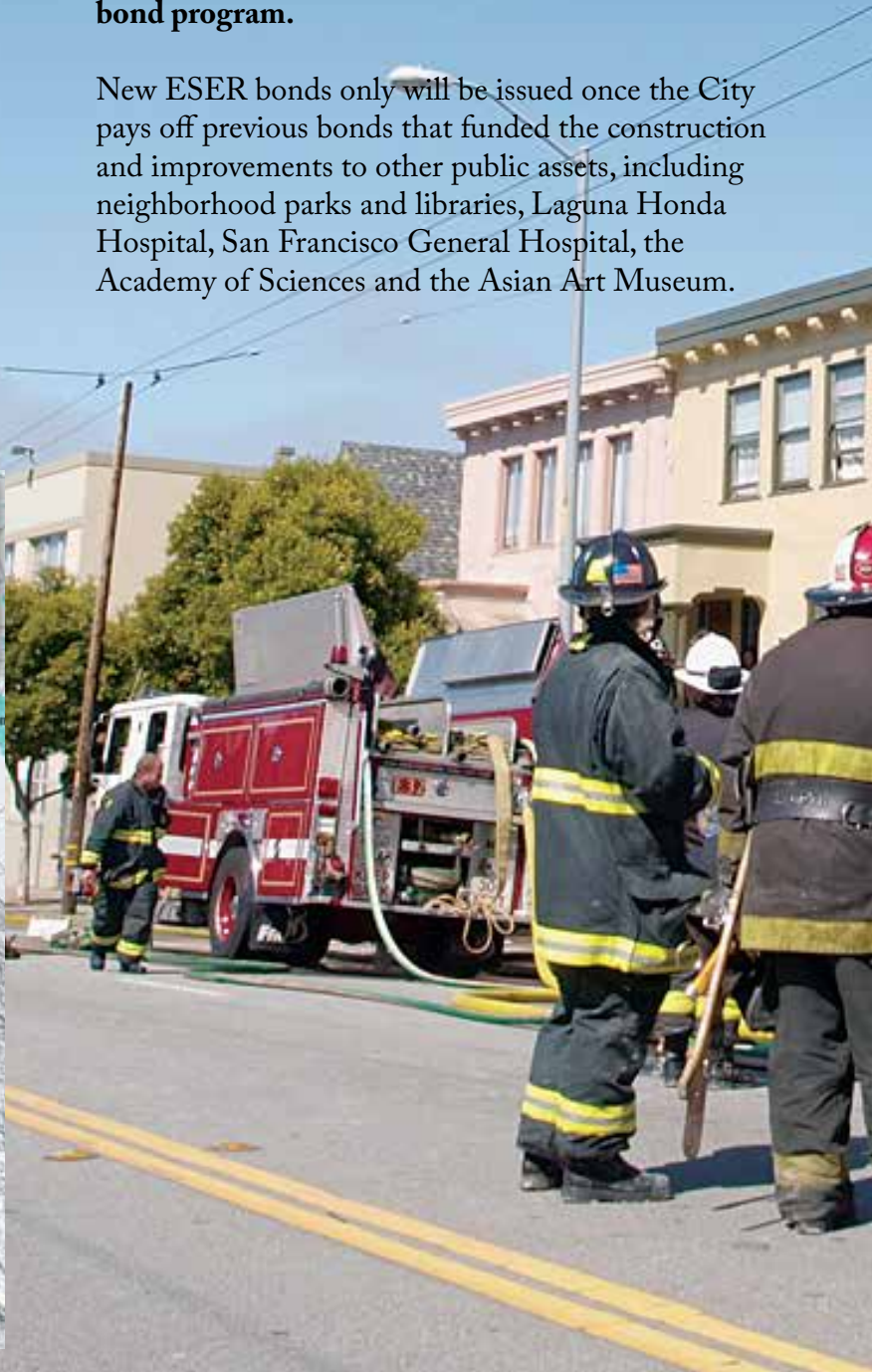
Who is proposing this and how will it affect property tax rates?

The Ten-Year Capital Plan is the City's formal commitment to long-term, strategic and fiscally responsible capital planning. The plan is adopted annually by the mayor and Board of Supervisors to prioritize capital needs across all City departments.

The \$400 million ESER 2014 bond proposal is included in the current capital plan.

Property tax rates will not increase as a result of this bond program.

New ESER bonds only will be issued once the City pays off previous bonds that funded the construction and improvements to other public assets, including neighborhood parks and libraries, Laguna Honda Hospital, San Francisco General Hospital, the Academy of Sciences and the Asian Art Museum.



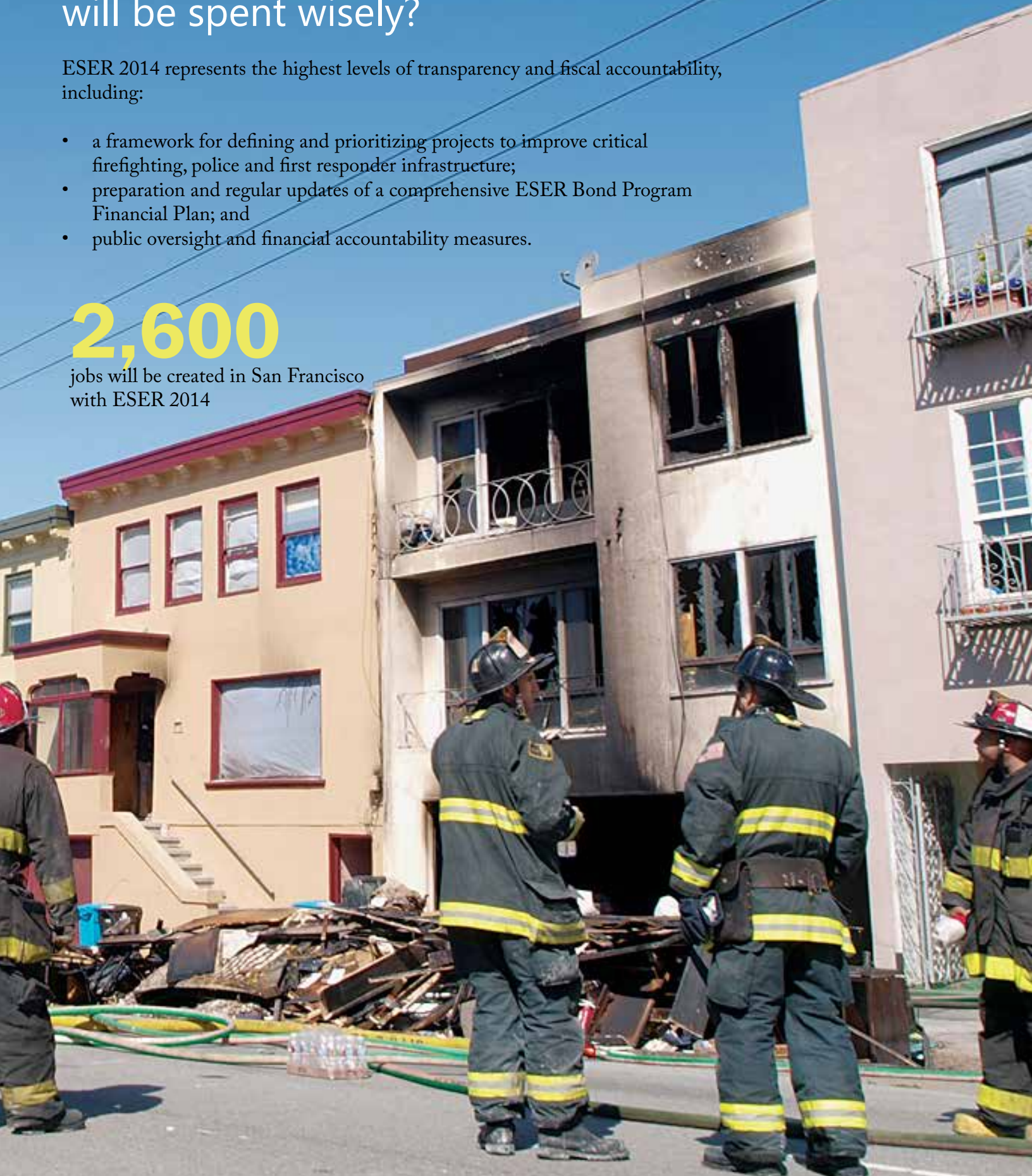
How can I be sure our money will be spent wisely?

ESER 2014 represents the highest levels of transparency and fiscal accountability, including:

- a framework for defining and prioritizing projects to improve critical firefighting, police and first responder infrastructure;
- preparation and regular updates of a comprehensive ESER Bond Program Financial Plan; and
- public oversight and financial accountability measures.

2,600

jobs will be created in San Francisco with ESER 2014





1906 earthquake aftermath

Introduction

The City and County of San Francisco is proposing a \$400 million Earthquake Safety and Emergency Response Bond (ESER 2014) for the June 2014 ballot, building on the essential work begun under the ESER 2010 bond.

ESER 2014 focuses on continuing to improve the structural resilience of essential facilities sufficient to ensure the effective delivery of fire and police services after a major earthquake or disaster.

ESER 2014 also is a part of the funding plan for the City's Justice Facilities Improvement Program, which outlines a strategic approach to replace the seismically deficient Hall of Justice, located at 850 Bryant Street. Having recognized that it is not financially feasible to address all of the Hall of Justice's shortcomings and life safety hazards with simple renovations and that major upgrades to the facility would disrupt essential public safety operations, the City launched the

Justice Facilities Improvement Program to replace the facility and provide new, improved venues for its six departments. Implementation of the Justice Facilities Improvement Program relies on funding provided over many years by a combination of general obligation bonds and the City's general fund.

ESER 2014 is the next phase of a program that began in 2010. It will pay for repairs and improvements that will allow San Francisco to more quickly and effectively respond to a major earthquake or other disaster.

ESER 2010 allowed the City to make significant strides in improvements to the police and first-responder services. Seismic improvements and upgrades have been made citywide to fire stations and the essential emergency firefighting water system, along with construction of the City's new Public Safety Building. (Details on program-specific progress to date are expanded upon later in this report.)



63% chance of a 6.7 or greater magnitude earthquake striking the San Francisco Bay Area in the next 20 years

It is critical to continue these upgrades. Responding quickly in an emergency will have a direct impact on how well San Francisco recovers after the next big earthquake, likely reducing the number of injuries and deaths, as well as speeding the City's economic recovery to keep San Francisco residents working in the crucial weeks and months immediately after a major earthquake.

Timing Is Critical

San Francisco is located in earthquake country. Unlike, hurricanes and tornadoes, which usually come with advance warning, the actual timing of earthquakes is unpredictable. The U.S. Geological Survey predicts that there is a 63 percent chance of a 6.7 or greater magnitude earthquake striking the Bay Area some time in the near future.^{2,3}

The aftermath of both the 1906 and 1989 earthquakes taught San Francisco lessons that have been taken to heart. Most of us are familiar with the Great Earthquake and Fire of 1906. The majority of the damage came not from the shaking, but from the fires that erupted subsequently. Approximately 80 percent of San Francisco's total loss was attributed to the fires. The result was devastating: approximately 3,000 deaths and the destruction of nearly 28,000 buildings.⁴ The National Fire Protection Association estimates the fire losses amounted to \$7.8 billion in 2006 dollars. As a result, after 1906, a high-pressure dedicated firefighting water system was built to fight multi-alarm fires.

More recently, the 1989 Loma Prieta Earthquake, whose epicenter was 60 miles south of the City and measured 6.9 on the Richter scale, triggered major fires in the Marina District. It is expected that a large earthquake closer to San Francisco will have even more devastating consequences.



The potential monetary losses following a major earthquake are staggering. Estimates for building damages from a major earthquake due to shaking and fire in 2005 dollars are as high as \$16 billion to \$38 billion.⁵ Fire damage would account for 20 to 50 percent of total earthquake damage, or about \$8 billion in losses.

If the City's emergency firefighting water system and other fire services infrastructure fail to perform after an earthquake, the damage from fire may be as much as 80 percent of total earthquake losses, similar to the 1906 tragedy. Fire damage of this magnitude would severely damage the Bay Area economy and San Francisco's capacity to recover.

- Responding quickly in an emergency reduces the number of injuries, deaths and property damage caused by a great earthquake and fire. A guiding principal of our City's long history of investing in San Francisco first responders is committing to the quickest possible response.
- Response times have a direct impact on how

well San Francisco recovers after the next big earthquake, potentially speeding the City's economic recovery and preserving the jobs of San Francisco residents in the weeks and months immediately following a major earthquake.

- Without these essential improvements, we put the lives of our first responders at risk, as well as the lives of San Franciscans who depend on them in times of greatest need.
- Every year that we delay repairs and needed upgrades to our firefighting facilities, infrastructure and public safety buildings, the cost increases. By acting now, we can improve safety and save local taxpayer dollars.

By repairing backup systems, making seismic upgrades and relocating critical first responder facilities to new buildings, San Francisco can better ensure it protects its residents, neighborhoods and businesses in the event of an earthquake or other emergency that is more likely to happen than not.



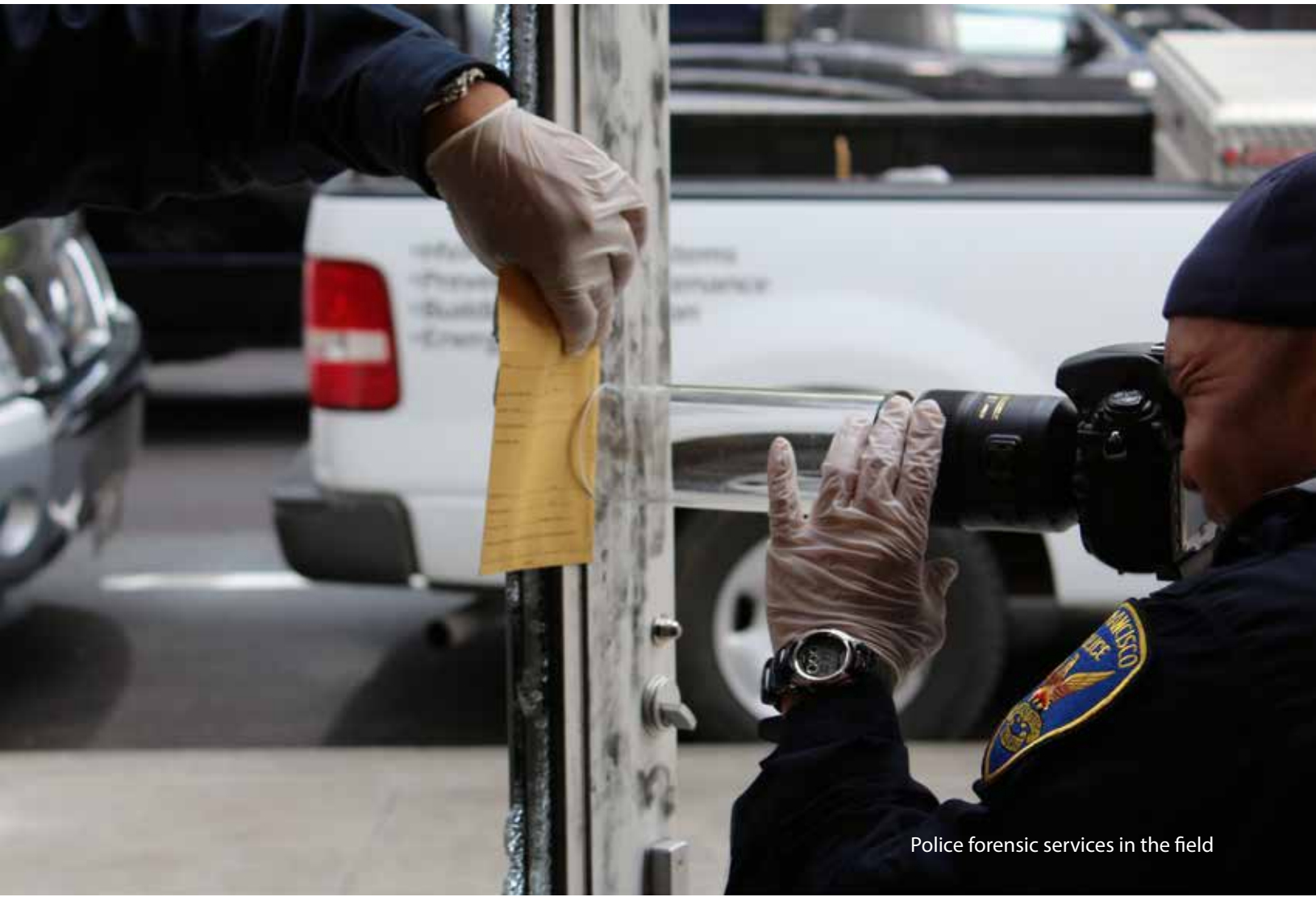
Fire damage could contribute to **80%** of total losses if fire services infrastructure fails to perform in the event of a major earthquake

In summary, with funding from the 2014 Earthquake Safety and Emergency Response Bond the City commits to:

- seismically strengthening and rehabilitating neighborhood firehouses;
- repairing and upgrading the City's deteriorating and vital backup emergency water system;
- seismically strengthening and rehabilitating police district stations and infrastructure;
- relocate the motorcycle police and crime lab from the seismically vulnerable Hall of Justice and the Hunters Point Shipyard to a safe facility;
- relocating the Medical Examiner Facility from the seismically vulnerable Hall of Justice at 850 Bryant Street to a seismically safe facility.

To ensure that our firefighters and police officers have the proper resources to immediately respond after an earthquake, emergency or major disaster, San Francisco's Capital Planning Committee recommended that the mayor and Board of Supervisors place a \$400 million general obligation bond to fund the retrofit and seismic rehabilitation of our aging public safety infrastructure on the June 2014 electoral ballot.





Police forensic services in the field



SFPUC Pump Station No. 2



Medical Examiner facility



Motorcycle police facility



ESER 2014 Project and Program Descriptions

Neighborhood Fire Stations

Emergency Firefighting Water System

District Police Stations and Infrastructure

Motorcycle Police and Crime Lab

Medical Examiner Facility



Neighborhood Fire Stations

ESER 2014 will renovate or replace fire stations to provide improved safety, seismic performance and a healthy work environment for the firefighters. The selected stations will be determined according to their importance for delivering fire suppression and emergency medical services to the City and County of San Francisco.

Background

Many of the 42 San Francisco Fire Stations have structural, seismic and other deficiencies. Some may not be operational after a large earthquake or disaster, threatening the ability of firefighters to respond quickly to an emergency.

In addition, there are other Fire Department facilities that support and augment the capacity to provide effective fire suppression capability that also have significant safety and functional deficiencies.

Prior to the passage of ESER 2010, the majority of the City's fire stations and support facilities were assessed for their conditions to identify vulnerabilities or deficiencies that could compromise their essential role as deployment venues for first responders.

For planning purposes, the assessment reports were reviewed by cost estimators who analyzed the expense of correcting the conditions. Preliminary assessment of the neighborhood fire stations indicates that the sum of correcting all existing deficiencies would require a budget exceeding \$350 million to correct. This is significantly more funding than is available from ESER 2010 and ESER 2014. That makes it even more critical to focus the likely expenditures of ESER 2014 funds towards the most beneficial and cost-effective improvement projects.

ESER 2010 Accomplishments

\$73.2 million is dedicated to the Neighborhood Fire Station program from the ESER 2010 bond. ESER 2010 identified improvements to 23 of the 42 neighborhood fire stations which are located in every supervisorial district of San Francisco. This is consistent with the ESER 2010 bond report that stated the program will complete improvements to about half of the City's neighborhood fire stations. A preliminary list of projects to be completed by ESER 2010 was identified by Public Works and the Fire Department, and was accepted by the Fire Commission in September 2010.

Improvements are being successfully implemented at these 23 stations and will continue through 2016. The work is being carefully phased to maintain sufficient Fire Department service levels



throughout the City.

Focused scope projects occurring at 16 neighborhood fire stations include roof construction, repainting and refurbishing (i.e. patching cracks before painting), and mechanical and general facilities upgrades (showers, windows, etc.). Also, five stations are scheduled to receive new backup emergency generators.

Comprehensive renovations are being performed at Station #36 at 109 Oak Street and at Station #44 at 129 Grand Street, and construction began in the fall of 2013.

Seismic projects are being performed at four neighborhood stations: Station #16 at 2251 Greenwich Street, Station #5 at 1301 Turk Street, Station #9 at 2245 Jerrold Street and Station #35 (the fire boat station) at Piers 22½ and 24.



“It is imperative that our fire stations, located in every neighborhood of San Francisco, are seismically safe to ensure a timely response to the more than 120,000 incidents that the San Francisco Fire Department responds to each year. ESER 2014 will allow for day-to-day improvement and efficiencies in our department and will play a critical role in our effectiveness with any large-scale disaster. It is a sound investment in our City’s future.”

- Joanne Hayes-White, San Francisco Fire Department Chief



Neighborhood Fire Stations

ESER 2014 Projects Description

ESER 2014 will provide improvements similar to ESER 2010 at an additional group of the stations. In addition, improvements will be considered to address the needs of the Bureau of Equipment at 2501 25th Street and the Emergency Medical Services at 1415 Evans Avenue.

ESER 2014 projects are anticipated to be organized and delivered in a similar fashion to those currently being executed in ESER 2010 in accordance with the program's capital project planning procedures.

1. Project scope is identified and estimated in the pre-design phase.
2. Projects are characterized as seismic, comprehensive or focused scope.
3. Project scope is prioritized, phased and scheduled for project delivery.
4. Fire Commission, Capital Planning Committee, and the Citizens' General Obligation Bond Oversight Committee are informed prior to proceeding.
5. Projects are designed, bid and constructed according to the Neighborhood Fire Station master schedule.

Budget and Schedule

The development of the project scope and schedules for the fire stations will be guided by the preservation of public safety. Work will be phased as required to maintain Fire Department service levels throughout the City.

The number of stations that can be temporarily deactivated for construction at any one time will be limited. Depending on the scope of the recommended and approved projects, this limitation may result in a construction program that requires up to seven years to complete work at an estimated 20 stations.

Milestone	Schedule
Start planning and design	October 2014
Start construction	May 2015
Complete construction	July 2022
Budget	\$85 million

23

ESER 2010 is successfully implementing improvements to 23 of San Francisco's 42 neighborhood fire stations. ESER 2014 builds on that work.



Emergency Firefighting Water System

Background

The Emergency Firefighting Water System is owned and operated by the San Francisco Public Utilities Commission.

The 1906 earthquake severely damaged the City's water system and there was insufficient water available to combat the numerous fires that erupted. At that time, and still today, San Francisco has proven to be especially vulnerable to fire loss due to dry summer months, high winds, the large number of buildings constructed of wood in close proximity of each other, and the vulnerability of the domestic water system.⁶ Due to these factors and the high seismic risk in the San Francisco Bay Area, City leaders approved the construction of an independent fire protection system, known as Emergency Firefighting Water System (also referred to as the Auxiliary Water Supply System). This system was designed for use as a secondary defense against fires in the event the domestic water system fails.

Inside one of the City's 153 cisterns

The Emergency Firefighting Water System delivers water at high pressure. It includes a reservoir, two storage tanks, two pump stations, and approximately 135 miles of pipes with approximately 1,600 hydrants and 3,800 valves.

Additionally, the system includes 52 connections along the northeastern waterfront, which allow fire engines to pump water from San Francisco Bay, and five manifolds that allow fireboats to pump seawater into Emergency Firefighting Water System pipes. The system also includes 153 cisterns, or underground water storage tanks.

ESER 2010 Accomplishments

ESER 2010 dedicated \$104 million to begin improvements and seismic upgrades to the Emergency Firefighting Water System. The initial funding targeted improvements to cisterns, pipelines, tunnels and five core facilities: Twin Peaks Reservoir, Ashbury Heights Tank, Jones Street Tank, Pump Station No. 1 in the South of Market neighborhood, and Pump Station No. 2 at Fort Mason.

- **Cisterns:** Approximately 30 new cisterns are being constructed with funding from ESER 2010. A contract for construction of the first six cisterns began in summer 2013; a second contract for five more cisterns began

in fall 2013, and a third contract for an additional five cisterns will start in spring 2014. Design work is under way for renovations or construction of approximately 14 additional cisterns

- **Pipelines and Tunnels:** Planning work is beginning for nine pipeline and tunnel projects. These projects are anticipated to investigate the condition of the existing Emergency Firefighting Water System pipelines, repair pipes and fire connections, repair a seawater intake tunnel, provide new water supply, motorize critical valves for remote control, and improve the electronic control system.
- **Core Facilities:** Construction began in the fall of 2013 to replace water valves and piping and to perform concrete repairs at Twin Peaks Reservoir. At the Ashbury Heights Tank, a 500,000-gallon water storage tank and piping are being replaced. Work is taking place at the Jones Street Tank to strengthen the tank foundation, the walls and roof, replace valves and piping, and refurbish the valve-house roof. Design work is under way to replace four diesel engines that turn seawater pumps, and replace ventilation, controls, and piping at Pump Station 1. Design work is in progress to seismically strengthen the building structure and replace the roof at Pump Station 2.

Emergency Firefighting Water System

ESER 2014 Projects Description

The Emergency Firefighting Water System consists primarily of three components:

- **Cisterns:** Cisterns are underground water storage tanks, with a typical storage capacity of 75,000 gallons. They serve as one of the most basic and reliable means for storing large amounts of water for firefighting. They are not connected to the City's regular piping system; water must be pumped from them using fire engines.
- **Pipelines and tunnels:** The Emergency Firefighting Water System pipelines are used exclusively for firefighting. The existing 135 miles of pipes carry water to high-pressure fire hydrants throughout the city.
- **Core Facilities:** Core facilities deliver water at high pressures for the suppression of multi-alarm fires. San Francisco's core facilities include Twin Peaks Reservoir, Ashbury Heights Tank, Jones Street Tank, Pump Station No. 1, and Pump Station No. 2.

ESER 2014 will build upon the work begun with funding from ESER 2010 and continue improvements and seismic upgrades to the various, vital components of the Emergency Firefighting Water System.

By providing an extra system for fire protection, in addition to the domestic water system, the San Francisco Emergency Firefighting Water System is vital for protecting against the loss of life, homes and businesses in the event of a major earthquake. The Emergency Firefighting Water System also is used throughout the year for the suppression of multiple alarm fires.

Specific projects will be selected based on an



evaluation of potential projects to determine those that will deliver the most benefit for fighting fires, particularly after an earthquake.

The San Francisco Public Utilities Commission completed a planning study in October 2013 to help maximize the likelihood that the Emergency Firefighting Water System will effectively provide the necessary firefighting capabilities after a major earthquake. This study provides a condition assessment, identifies system needs, recommends level of service criteria, performs numerous analyses, develops alternatives, and provides recommendations for implementation to the San Francisco Public Utilities Commission. The results and recommendations from this study will inform the selection of specific projects to be funded through ESER 2014. This selection process is guided by the Auxiliary Water Supply System Technical Steering Committee, which consists of senior technical and operational managers from the Fire Department, Public Works, and the San Francisco Public Utilities Commission. The study is also subject to approval by the Auxiliary Water Supply System Management Oversight Committee, which includes executive managers from the three departments.

Budget and Schedule

Upon selection of the projects, construction will proceed in a phased sequence to work toward the desired levels of service.

Of the \$400 million proposed for the overall ESER 2014 bond, \$55 million will be allocated to continue improvements and seismic upgrades to the Emergency Firefighting Water System. Specific projects will be selected based upon the process described previously. The overall program will include a mix of improvements and upgrades to some or all of the system components: core facilities, cisterns, pipelines and tunnels. The following table offers a sense of the scale of potential projects.



Brick ring indicating cistern below

Type of Project	Approximate Budget
Cisterns	\$1.2 million each
Pipes	\$10 million per mile
Facilities	Highly variable depending on specific upgrades or improvements

Through ESER 2010, the City will increase the number of functional cisterns by approximately

20%



New cistern construction

District Police Stations and Infrastructure

Background

There are 10 district police stations in San Francisco, strategically located throughout the City. Nearly all the Police Department's patrol cars and the response to all calls for service from the public are deployed from these district stations.

Some of these stations are nearly 100 years old and many of the renovations occurred nearly 20 years ago. Since that time, the needs of modern policing have shifted with new technologies that require power and infrastructure; operational changes, such as staffing the stations with investigators; updates in building codes, and new standards to ensure the care and safety of those who have been arrested or detained.

ESER 2010 Police District Stations and Infrastructure Accomplishments

ESER 2010 funded the design and construction of the Public Safety Building at Mission Bay. The 290,000-square-foot, \$243 million Public Safety Building relocates police administrative headquarters from the seismically deficient Hall of Justice and includes a relocated district police station, a new district fire station and fleet vehicle



Public Safety Building construction, opens Nov. 2014

parking. The state of the art, modern facility will provide the necessary structural and operational resiliency to enable police leadership to promptly and properly coordinate public safety services in the City for decades to come.

The ESER 2010 work also includes design and construction of a seismically safe Southern Station and the Police Headquarters as part of the Public Safety Building. Substantial completion of the construction is expected by mid-June 2014 and with a move-in set for November 2014.

Project Description

ESER 2014 will begin the renovation and/or the replacement of up to nine of the 10 district stations. Southern Station is being rebuilt under ESER 2010 and opens in late 2014.

In order to identify the need, the City retained expert consultants to examine the portfolio of San Francisco Police Department facilities. The City determined that "Immediate occupancy" was the baseline for making the necessary improvements. "Immediate occupancy" performance standard is essential in establishing reliable facilities from which the department can respond in an emergency. Officers deploying from a station need access to their uniforms, equipment and radios; police officers and staff must be able to get into their stations. In the event of a disaster, an operational police station is essential and is also a visible sign of a functioning government and the City's ability to aid its residents.

The study indicated that the funding needed to correct all of the deficiencies and upgrade the stations to modern police standards would exceed \$250 million, significantly more funds than would be available through ESER 2014.

The nine district stations studied exhibited a broad range of functional, safety, security and technical inadequacies including public safety and security deficiencies, insufficient space, lack of compliance with corrections standards regulations, lack of gender balancing for locker rooms, the need to increase accessibility, seismic



In the event of a disaster, an operational police station is essential.

District Police Stations and Infrastructure



strengthening, building system repair and upgrades. Many of the stations exhibited all or multiple examples of these deficiencies.

Additional detailed planning is required to develop priorities and focus the expenditures from this bond toward the most necessary, beneficial and cost-effective rehabilitation and improvement projects. The planning process will be in line with the Neighborhood Fire Station program’s capital project planning procedures implemented for ESER 2010.

To assist in that process, the study team is dividing the stations into three categories:

- complete a seismic upgrade or replace the building, either in place or at another location
- comprehensive renovation, extensive remodel or expansion
- incremental renovation, the station requires specific improvement, such as the addition of program space. For example, generally the station is in a state of good repair, but needs specific renovations.

Budget and Schedule

\$30 million will be allocated for Police District Stations and Infrastructure. The City will develop a priority and focus for the expenditures towards the most necessary, beneficial and cost effective rehabilitation and improvement projects to allow for Police Department personnel to respond in an emergency.

Milestone	Schedule
Start planning and design	TBD
Start construction	TBD
Complete construction	TBD
Budget	\$30 million



"At this critical point in history where technology seems to advance by the minute, our facilities have declined almost to the point of failure. We have a window of opportunity to make our facilities what they should be to best ensure our officers are able to meet the needs and expectations of the 21st century city we are sworn to serve and protect every day, including when earthquakes or other calamities strike."

- Greg Suhr, Chief of Police, San Francisco Police Department

Motorcycle Police and Crime Lab

Background

A major component of the City's Justice Facilities Improvement Program is the relocation of the motorcycle police and crime lab to provide seismically safe structures, professional work environments, and the facilities necessary for providing citywide forensic and traffic emergency response capabilities.

The motorcycle police (SFPD Traffic Company) is primarily composed of police officers assigned to motorcycles to provide traffic enforcement, accident investigations and to raise public awareness of traffic-safety measures. The company's primary mission is to reduce injuries and fatalities and to provide traffic and pedestrian safety through investigations and traffic management. The company's involvement is key in major citywide events, such as parades and demonstrations, and provides essential services in the event of a major disaster. Staff and vehicles are currently stationed at the seismically deficient Hall of Justice.

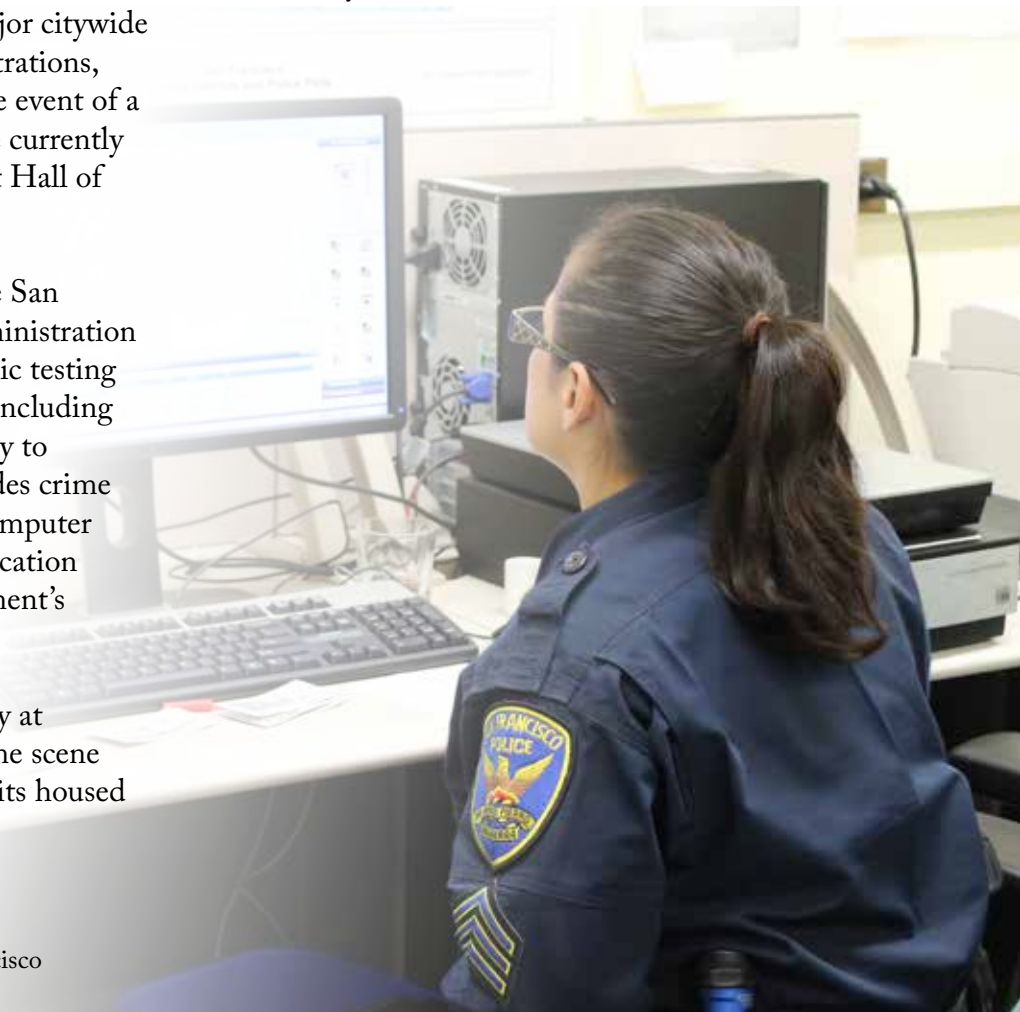
Forensic Services is a division of the San Francisco Police Department's Administration Bureau, with a crime lab, or a forensic testing laboratory, that examines evidence, including DNA, and provides expert testimony to support criminal cases. It also includes crime scene investigators, a photo lab, a computer forensics laboratory and the Identification Bureau, which manages the department's fingerprint records.

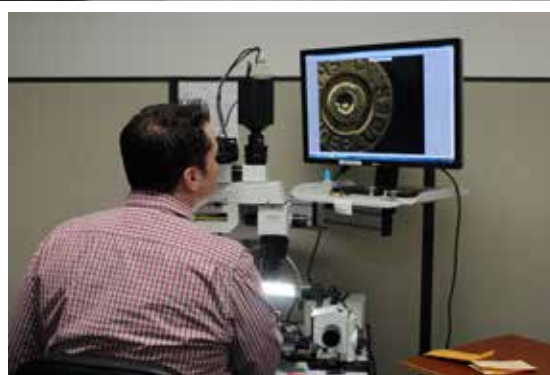
Forensic Services is located currently at three sites, with administration, crime scene investigations, and identification units housed

at the seismically deficient Hall of Justice, crime scene investigations vehicle impound lot at 450 7th Street, and the crime lab housed in the Hunters Point Shipyard at Building 606.

In the event of a major earthquake, the Hall of Justice is not expected to be operational and many of these critical functions would become unavailable. Officers assigned to these units would be unlikely to have access to their uniforms, equipment and vehicles.

Additionally, the Hunters Point Naval Shipyard is being transferred from the U.S. Navy to the City. Work to convert the shipyard into a residential development is under way and the building that now houses the crime lab is likely to be demolished.





Motorcycle Police and Crime Lab

Project Description

ESER 2014 will relocate the motorcycle police and consolidate the crime lab into a single site located at 1995 Evans Avenue. The project involves the demolition of the existing four structures at the current site on Evans and the construction of a new, four-story 90,000 square-foot building, along with a separate two-story, 42,000 square-foot parking structure.

In the next 15 to 20 years, as a result of the justice system's reliance on advances in DNA technology, the crime lab may grow to 178 employees and will require up to 130,000 square feet of additional space. The current proposed project is being developed with enough space to support 131 employees to satisfy the projected 2020 demand. Should future demand for scientific analysis become necessary, plans include the capacity for a potential 23,000 square-foot expansion.

The new facilities for the motorcycle police will support 104 employees for the projected 2020 demand.

The parking structure would be constructed with 82 spaces for sworn officers and City vehicles, 110 spaces for Traffic Company motorcycles, and storage space for 25 Forensic Services evidence impound vehicles.

The building has been designated as an essential facility and will be constructed in accordance with Essential Services Building Seismic Safety Act to resist the forces of a significant earthquake and remain appropriately operational.

It would include provisions for adequate drinking and fire suppression water, power, and sanitary sewage storage throughout the period of time during which the building may have to operate off the grid.



“All the police motorcycles are parked in the Hall of Justice basement. If there’s a major earthquake, those motorcycles may be inaccessible. That’s one of the last things we’d want to see happen. Motorcycles will be able to get around San Francisco if the streets are damaged and covered in debris.”

- SFPD Capt. Denise Flaherty, commanding officer of the motorcycle police



Budget and Schedule

The following is an estimate of the size, schedule and budget of the proposed project.

Facility	Size (gross sq ft)
Crime Lab	90,000
Traffic Company	20,000
Structure parking for 82 vehicles	42,000
Total	152,000
Milestone	Schedule
Start construction documents	October 2014
Start construction	May 2016
Complete construction	July 2018
Move in	October 2018
Budget	\$165 million

Medical Examiner Facility

Background

The Hall of Justice at 850 Bryant Street is more than 50 years old and seismically deficient. In the event of a major earthquake, the building and facilities are not expected to be operational, putting the Office of Chief Medical Examiner at risk.

The Office of the Chief Medical Examiner is charged with coordinating the investigation and certification of deaths in San Francisco and determining the cause, circumstances and manner of fatalities for those cases found to be under the office's jurisdiction. Medical examiners investigate and sign death certificates for all manners of deaths (homicide, suicide, accident) and deaths of persons who may be unidentified. The duties of the office are essential to fire, safety and first responder services, as well as the criminal justice system in the City, and are a fundamental segment of a response to a major earthquake or disaster.

During the Office of the Chief Medical Examiner's last accreditation process, the City was advised that the facility should be replaced to assure continued accreditation. The current Medical Examiner facility is undersized and has numerous deficiencies, and runs the risk of losing accreditation.



Project Description

ESER 2014 will build an improved Office of the Chief Medical Examiner at a new location, 1 Newhall Street, providing a seismically safe structure, professional work environments, and the facility necessary for citywide medical examiner emergency response capability.

The project proposes building enhancements to accommodate a reuse of the existing structure located at 1 Newhall Street for the Office of the Chief Medical Examiner.

Constructed in 1984, the 29,000-square-foot industrial warehouse at 1 Newhall Street - which has a wood timber roof and partial wood structure mezzanine level - was originally a commercial printing facility and office space. It is currently being used for storage by the City and County of San Francisco.

The initial project concept proposes to complete the second floor by interior construction of approximately 15,000 square feet, with no expansion to the existing building footprint. The entire Medical Examiner office would encompass 43,000 square feet, using the existing first floor, and newly constructed second floor within the existing building perimeter wall structure.

The project is considered first responder and therefore would be designed in accordance with the Essential Services Building Seismic Safety Act to resist the forces of a major earthquake and remain appropriately operational.

The facility will include provisions for adequate drinking and fire suppression water, power, and sanitary sewage storage throughout the period



of time during which the building may have to operate off the grid.

The Office of the Chief Medical Examiner would be designed for the preservation of evidence and storage of bodies following a major catastrophe. The facility would be designed to have appropriate security, including proper monitoring via closed-circuit television, and shield the public view from areas where bodies would be transported to and from the facility shielded from public viewing.

The facility is largely dedicated to the science required to properly investigate the matter of violent, unexplained and/or suspicious deaths and will be keenly attentive to providing an empathetic and supportive place for those families and friends attending to what are typically very stressful and challenging events.

“The facility is far too small and has been used around the clock every day for a great many years. The staff keeps the facility sanitary, but it is just plain worn out and ... without a new facility, standards will not be met and the office will not qualify for accreditation.”

- National Association of Medical Examiners, Committee for Standards, Inspection and Accreditation

Medical Examiner Facility

The new facility will house each of the Office of the Chief Medical Examiner's programmatic and first responder functions, consisting of autopsy, the forensics laboratory, field investigations and public service functions.

Budget and Schedule

Facility	Size (gross square feet)
Office of the Chief Medical Examiner	43,000
Milestone	Schedule
Start construction	April 2015
Complete construction	October 2016
Move in	December 2016
Budget	\$65 million



Ten-Year Capital Plan

A fiscally responsible solution to the City's critical capital needs

The City has invested significant general fund dollars into the repair and rehabilitation of our capital assets over the years. However, the City cannot rely on annual general funds alone to address these critical needs.

The 2014 Earthquake Safety and Emergency Response Bond proposal is the most recent product of the City's formal commitment to long-term, strategic, and fiscally responsible capital planning. Adopted through legislation by the mayor and Board of Supervisors in 2005, the Capital Planning Committee was created to guide and prioritize capital needs citywide. The Ten-Year Capital Plan is developed by the Capital Planning Committee and adopted annually by the Board of Supervisors prior to adoption of the annual City budget.

The capital plan prioritizes critical capital projects that impact public safety and well-being; places a strong emphasis on accountability and transparency; and demonstrates the highest levels of fiscal restraint and responsibility. Since its inception, the top priorities of the capital plan have been the seismic improvement of San Francisco General Hospital, which voters approved in November 2008, and the initial seismic improvement of our public safety facilities which this bond addresses. ESER 2014 builds on the programs as a second phase that began with ESER 2010.

Where general funds are not adequate to pay the costs of major capital improvements, the capital plan recommends using one of two sources of long-term debt financing: general obligation bonds backed by property taxes upon approval by voters, and general fund debt programs backed by the City's general fund upon approval by the Board of Supervisors and the mayor. Both sources are appropriate means of funding capital improvements, as they spread the

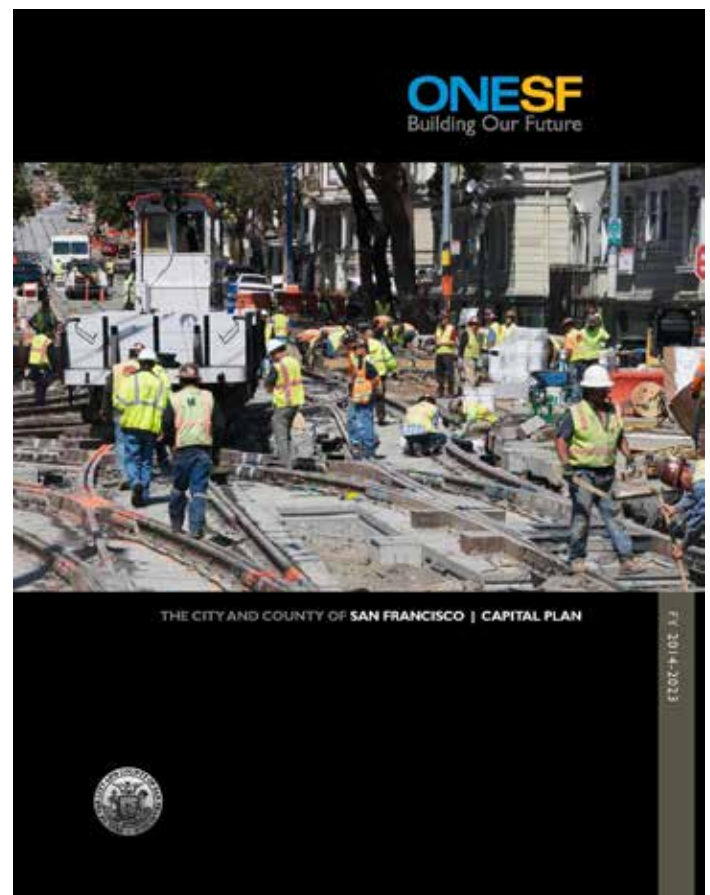
cost of these facilities over their long useful lives and across the generations of San Franciscans that will reap their benefits.

Despite a large backlog of capital infrastructure needs, the capital plan has adopted strict financial constraints on the use of long-term debt financing to avoid placing an increased burden on future generations. Voter-approved bonds proposed by the capital plan are only proposed as the City retires existing debt from prior bonds.

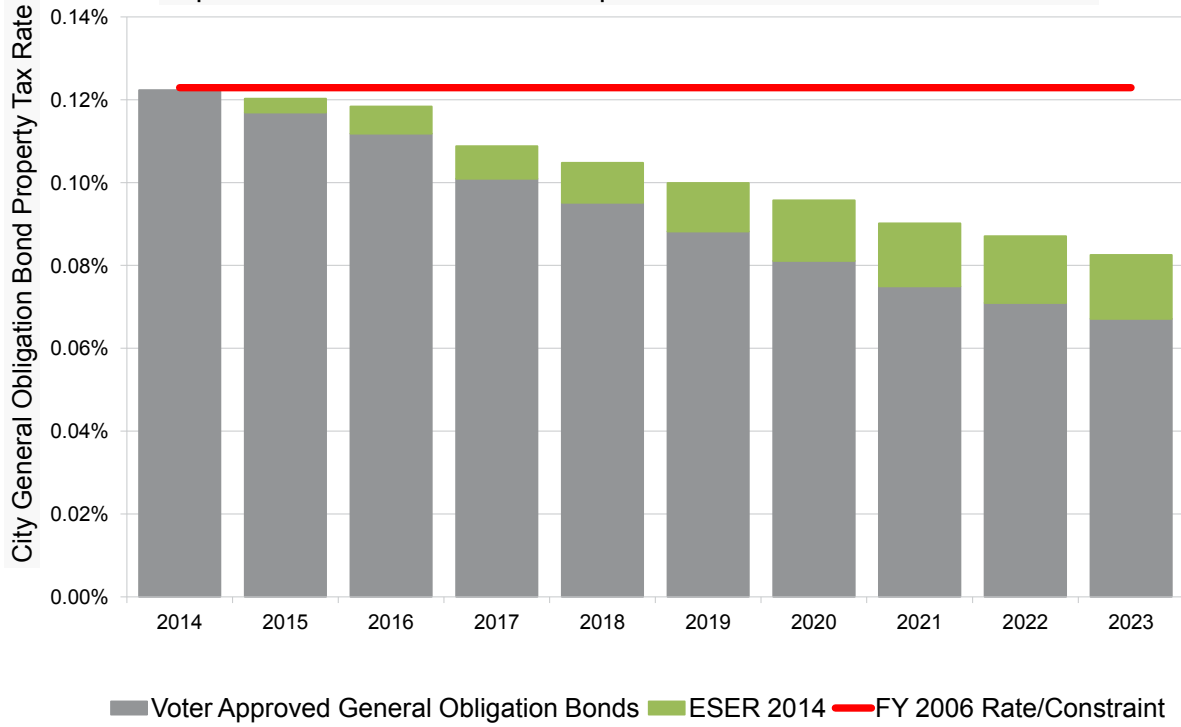
As we pay off our obligations for other facilities such as branch libraries, neighborhood parks, the Academy of Sciences, and hospitals, the City can initiate new capital projects without increasing property tax rates.

This Earthquake Safety and Emergency Response General Obligation Bond (ESER 2014) will not increase property tax rates beyond their fiscal year 2006 levels.

For more information on the City's capital plan, please visit sfgov.org/cpp.



Existing and Proposed ESER 2014 General Obligation Bond Program per San Francisco 10-Year Capital Plan Fiscal Years 2014 - 2023



Property tax rates will not increase as a result of ESER 2014.



Accountability Measures

The Earthquake Safety and Emergency Response Bond Program includes a comprehensive set of public oversight and accountability measures that apply to each of the funding areas. These measures are in addition to California state bond law requirements.

They can be summarized under three basic principles of commitment to cost accuracy, public involvement and transparent selection criteria and rules. The project budget amounts include the following budget components: Construction, including escalation for inflation and construction change order contingencies; Project Control, including planning, design, environmental review, project management, construction management, and regulatory agency permits and fees; and bond issuance and accountability.

Each of the programs has a scope with realistic cost and schedule estimates that spell out construction and project cost contingencies, schedules, and inflation estimates. Where specific projects are not identified, transparent and responsible oversight procedures are put in place for project selection and prioritization.

As with ESER 2010, there will be continued regular public reporting of bond expenditures through a dedicated bond website updated quarterly. There also will be periodic reviews before the fire and police commissions, Capital Planning Committee and Board of Supervisors as part of the 10-year capital plan and annual capital budget processes.

Per the Administrative Code (Section 5.30 to 5.36), the Citizens' General Obligation Bond Oversight Committee reviews, audits and reports on the expenditure of bond proceeds to assure the expenditures are in accordance with the will of the voters. This committee will submit audits and reports to the Police and Fire Commissions, Board of Supervisors and the Mayor's Office.

Also per the Administrative Code (Section 2.70 to 2.74) and 60 days prior to the issuance of any portion of the bond authority, Public Works must submit a bond accountability report to the Clerk of the Board of Supervisors, the City Controller, the Treasurer, the Director of Public Finance and the Board of Supervisors Budget Analyst describing the current

status and description of each proposed project and whether it conforms to the express will of the voters.

Additionally, there are transparent selection criteria and rules as a part of ESER 2014, including objective means of prioritizing projects through the use of criteria that are identified in the bond and clear rules for funding, scope, or prioritization changes based on the same criteria, should changes be necessary.

ESER 2014 Specific Project Budgets

Project	Budget (millions)
Medical Examiner Facility	\$65
Motorcycle Police and Crime Lab	\$165
Total	\$230

Framework for Defining and Prioritizing Projects

This program also provides a framework for defining and prioritizing projects within the amounts allocated to the following bond program components:

Project	Budget (millions)
Emergency Firefighting Water System	\$55
Neighborhood Fire Stations	\$85
Police District Stations and Infrastructure	\$30
Total	\$170

Public Works will prepare a comprehensive capital project planning procedures for both police district stations and infrastructure and the neighborhood fire stations. The objective scoring criteria will guide the development of the plan. For the Emergency Firefighting Water System, the selection process is guided by the Auxiliary Water Supply System Steering Committee, which consists of senior technical and operational managers from the Fire Department, Public Works and the San Francisco Public Utilities Commission; and is subject to approval by the Auxiliary Water Supply System Management Oversight Committee, which includes executive managers from the three departments.



Photos

1. Pages 3-4: Ken Shin
2. Pages 5-6: San Francisco Examiner
3. Page 24: Brant Ward, San Francisco Chronicle
4. Page 38: David Thompson
5. Back cover: Roger Jones

Notes

1. The San Francisco Controller's Office estimates that 6.5 San Francisco jobs are created for every \$1 million invested in construction projects.
2. U.S Geological Survey, 2007. The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2); obtained from website: http://pubs.usgs.gov/of/2007/1437/of2007-1437_text.pdf
3. U.S. Geological Survey, USGS Fact Sheet 2008-3027. Forecasting California's Earthquakes – What We Can Expect in the Next 30 Years; obtained from website: <http://pubs.usgs.gov/fs/2008/3027/fs2008-3027.pdf>
4. Applied Technology Council (ATC), March 1, 2005. San Francisco's Earthquake Risk - Report on Potential Earthquake Impacts in San Francisco; obtained from website: http://www.pbs.org/newshour/indepth_coverage/science/1906quake/atc-report.pdf
5. Ibid.
6. Marsden Manson, San Francisco City Engineer, Report on the Auxiliary Water Supply for Fire Protection for San Francisco, California (San Francisco: Britton & Rey, 1908.

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