

2018 ENERGY BENCHMARKING REPORT

Hetch Hetchy Power - San Francisco Municipal Buildings

January 2020



Cover Facility:

Energy Performance Overview	
1 South Van Ness	
Year Constructed	1959
2018 Energy Use Intensity (kBtu/ft ²)	44.5
EUI Percent Change 2017-2018	-12.5%
Carbon Footprint (lbs/ft ²)	1.09
Carbon Footprint Percent Change 2017-2018	-28.6%

The San Francisco Public Utilities Commission (SFPUC)'s Power Enterprise offers a wide range of energy efficiency services such as building retro-commissioning and energy audits which, like our benchmarking efforts, can identify opportunities for operational improvements and energy savings. In calendar year 2018, SFPUC investments in energy efficiency measures totaled \$2.1 million.

Spurred by Power's Distributed Energy Resources (DER) team, these endeavors have transformed many municipal buildings throughout San Francisco. Among the six projects that were completed in 2018 were the installation of boilers at Laguna Honda Hospital; lighting at the War Memorial Opera House, Joseph Lee Gym, Ella Hill Hutch and Earl P. Mills Community Centers; and retro-commissioning at 1 South Van Ness.

The office space at 1 South Van Ness houses many City departments, including the Department of Human Resources, SFMTA, and Controller's Office - Payroll/Personnel Services Division. The 1 South Van Ness retro-commissioning project entailed a thorough audit of the building's heating,

ventilation, and air conditioning systems to identify any existing equipment issues, as well as operations and maintenance practices that could be improved in order for the building to run more efficiently.

The issues identified in the retro-commissioning assessment led to the implementation of several energy efficiency measures including, but not limited to, the following:

- Targeted setpoint adjustments to the cooling towers, enhancing the performance of the air conditioning system
- Faulty variable air volume (VAV) controllers, sensors, and other components recalibrated and/or replaced
- Pump motor upgraded to premium efficiency
- Improved boiler operation and temperature reset schedule

In addition to the retro-commissioning project, 1 South Van Ness is also now benefitting from the impacts of work recently completed by SFPUC to upgrade building controls and improve performance of the steam system, including the following measures:

- Maintenance and repair of the steam traps to prevent the unnecessary removal of condensate from the steam distribution system
- Improved operation of the steam control valves and conversion from pneumatic to digital control actuators for improved control
- Replacement of a leaky steam coil from the air distribution system

These and other improvements contributed to a significant decrease in the operating load and overall building energy usage, particularly natural gas, the primary source of carbon emissions for municipal buildings, given that Hetch Hetchy electricity is 100% greenhouse-gas free. Additional measures identified in the project will continue to be implemented and are expected to generate additional energy savings in future years.

Acknowledgements

Gathering the information necessary to complete this benchmarking report involved the time and expertise of numerous people at a number of different departments and agencies. Many thanks to all those whose hard work and continued care went into ensuring that this report is as complete and accurate as possible.

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Departments mentioned in this report and their respective abbreviations are indicated below.

Animal Care and Control	ACC
Arts Commission	SFAC
Asian Art Museum	AAM
California Academy of Sciences	CAS
Central Shops (General Services Agency)	GSA
City College of San Francisco	CCSF
Convention Facilities Department / Moscone Center	CFD
District Attorney	DA
Department of Emergency Management	DEM
Department of the Environment	SFE
Department of Public Health	DPH
Department of Public Works	DPW
Department of Technology	DT
Economic and Workforce Development	ECN
Fine Arts Museums of San Francisco	FAMSF
Fire Department	SFFD
Human Services Agency	HSA
Juvenile Probation	JUV
Municipal Transportation Agency	SFMTA
Fire Department	SFFD
Police Department	SFPD
Public Library	SFPL
Real Estate Division	RED
Recreation & Park Department	RPD
San Francisco International Airport	SFO
San Francisco Public Utilities Commission	SFPUC
San Francisco Unified School District	SFUSD
Sheriff's Department	SHF
War Memorial and Performing Arts Center	WMPAC

Please email any questions about this report to:
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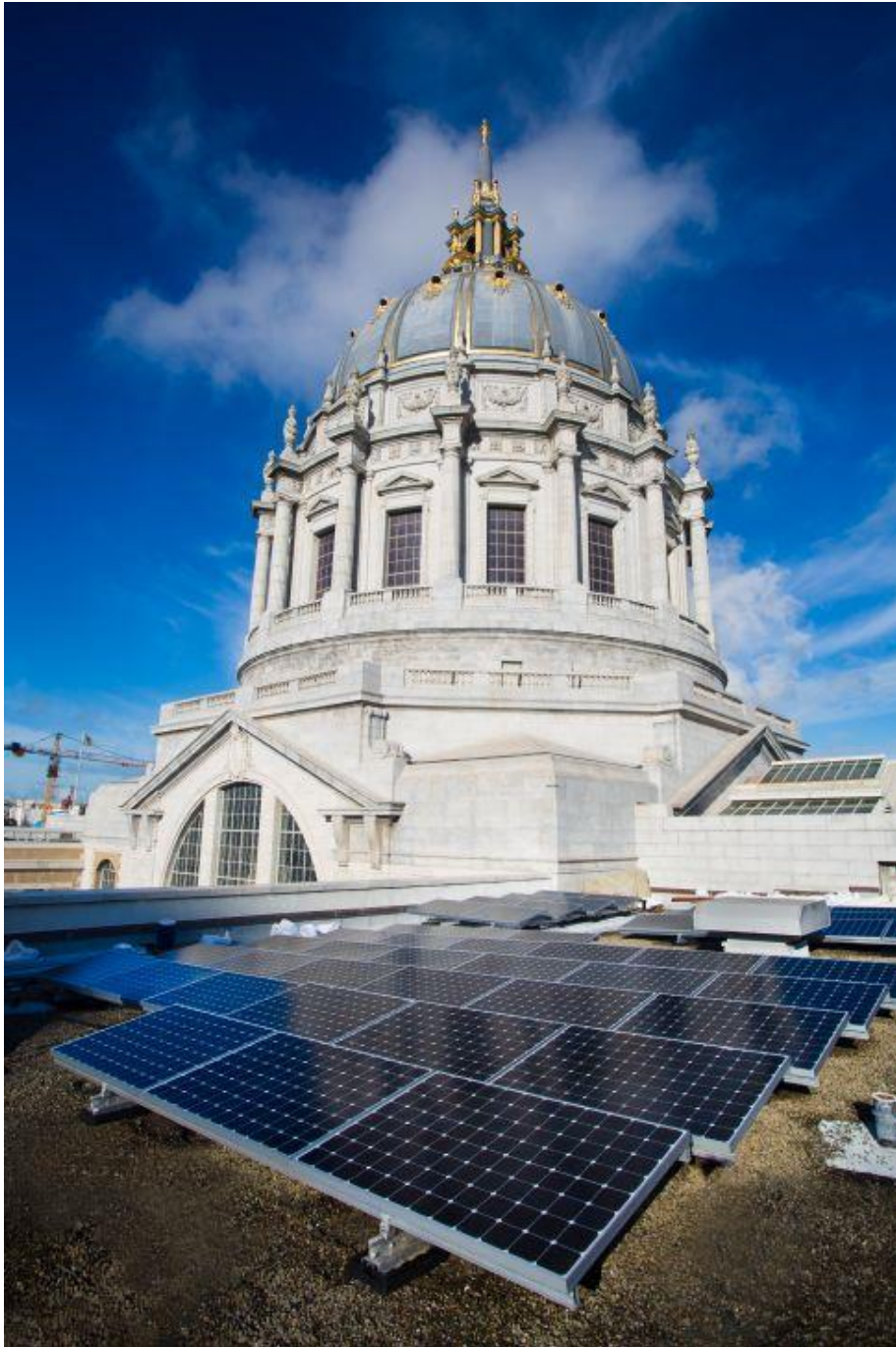


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Executive Summary

Background

San Francisco first began to benchmark its properties in 2011, when the San Francisco Existing Commercial Buildings Energy Performance Ordinance was approved by the Board of Supervisors and signed by Mayor Edwin M. Lee. This ordinance requires owners of non-residential buildings over 10,000 square feet to annually benchmark and disclose the energy performance of their buildings, using the U.S. Environmental Protection Agency (EPA) Portfolio Manager tool to obtain ENERGY STAR ratings when possible.

As the owner and occupant of hundreds of buildings, the City and County of San Francisco has chosen to lead by example and provide transparency on its operations. These facilities, along with a growing number of large commercial and residential buildings, receive 100% greenhouse gas (GHG)-free electricity from the San Francisco Public Utilities Commission (SFPUC) through the Hetch Hetchy Regional Water and Power System.

This is the eighth annual report detailing the energy performance of 494 San Francisco municipal facilities encompassing over 49.5 million square feet of building area during calendar year 2018, including data on 132 San Francisco Unified School District facilities and nine City College of San Francisco facilities. This report does not include the energy usage of non-municipal buildings, nor does it include data on the nearly 400,000 customers enrolled with CleanPowerSF, San Francisco's not-for-profit Community Choice Aggregation (CCA) program, which is also operated by the SFPUC.

By distributing this report on behalf of many different City agencies, the SFPUC hopes to provide a fresh perspective on these public facilities, highlight energy performance successes, and focus attention and resources on buildings that may benefit from energy efficiency upgrades.

Report Contents

Comparison by Building Type: The detailed charts in this report provide a rich amount of information about each location. For each facility type,

readers will find individual facilities ranked in descending order of on-site Energy Use Intensity (EUI), plus an indication of each facility's annual carbon footprint. Summary charts provide insights into the energy use of each municipal facility type.

ENERGY STAR Ratings: The ENERGY STAR rating system provides a gauge of a building's energy performance as compared to other like buildings nationwide. Because the scale is geared to commercial buildings, only municipal facilities that fall in specific, eligible building categories can obtain a 1-100 score. A score of 50 represents the national median. To put this in perspective, a building with an ENERGY STAR score of 76 would indicate that it is performing better than 75% of other buildings in the same category.

Comparison to Prior Years: This report depicts, where possible, year-to-year comparisons of EUI for benchmarked buildings. Because the number of buildings with complete data fluctuates, weather variations and changes in occupancy and operations due to renovations can greatly influence energy use. For these reasons, comparisons within the City's portfolio are not entirely perfect.

2018 Results

The findings in this report suggest that San Francisco's municipal buildings' EUI have modestly improved across the City's portfolio as evidenced in the decline of electric, gas, and steam use in calendar year 2018. This trend, in turn, resulted in a small overall decrease in GHG emissions intensity. A more in-depth analysis of these findings can be found in Putting the Results into Context (page 29).

Calendar Year 2018 Highlights:

- Complete benchmarking results are provided for 463 San Francisco city facilities across 30 facility types, with partial information for an additional 31 facilities.
- Average EUI and carbon footprint, not including the airport, decreased by 1% and 0.5%, respectively, from the previous year, with reductions of 15.2% and 24.8%, since 2009. The airport, on its own, saw a 1.9% decrease, and 3.5% reduction in carbon footprint compared to 2017.

Introduction

Each year, the City and County of San Francisco reaffirms its commitment to the environment by aiming to reduce the energy consumption of public buildings. San Francisco's public buildings obtain their electricity from the City's GHG-free Hetch Hetchy Power system, and stewardship of this public resource demands that the City make the most efficient use of energy. Many of these buildings also consume GHG-emitting natural gas and steam, contributing to climate change.

The San Francisco Public Utilities Commission (SFPUC) has offered energy efficiency services to its power customers for the past three decades. Combined with the efforts of individual departments, these

energy improvements in existing buildings save the City millions of dollars per year in energy costs. Additionally, as public facilities are built or undergo major renovations, they must meet energy performance and LEED Gold standards.

To most effectively take action, building owners and occupants need to be informed of cost-effective opportunities for energy savings. With this in mind, the Board of Supervisors approved the San Francisco Existing Commercial Buildings [Energy Performance Ordinance](#) in February 2011. The ordinance requires owners of non-residential buildings larger than 10,000 square feet (both privately and municipally owned) to annually disclose their buildings' energy performance by benchmarking against similar facilities.



With support from several other departments and agencies that own or lease full buildings, the SFPUC has issued this report to provide San Francisco's agencies and the general public a better understanding of how the City's municipal facilities perform. This report identifies high performing buildings as well as opportunities for improvement and is an attempt by the City to lead by example and provide transparency.

San Francisco's Approach to Benchmarking

This report details the energy usage of many more facilities than required by the ordinance. Although benchmarking is only mandated for buildings larger than 10,000 square feet, buildings of smaller size where a meaningful benchmark could be established were also included. Furthermore, this report includes numerous buildings owned by the City outside of the geographic boundaries of San Francisco, as well as some privately-owned buildings that are occupied in full by City departments.

San Francisco's ordinance, like those in other cities, identifies the U.S. Environmental Protection Agency (EPA) Portfolio Manager tool as the preferred method of benchmarking for private-sector buildings. As a well-recognized national rating tool that draws on the best available energy use data, it is a widely accepted way for owners and occupants of eligible facilities to see how their buildings stack up against local and national peers. Eligible buildings can receive a 1-100 score that compares a structure's energy performance to similar buildings nationwide, taking climate differences between regions into account. The EPA recently finalized a revised methodology for scoring buildings and the scores in this report reflect the new methodology. Note that some of the building-specific characteristics required to generate a score are default values based on building type and square footage. As we acquire more accurate information in the future, scores may change slightly.

The City's municipal buildings—such as its libraries, fire stations, museums, and recreation centers—are benchmarked on the basis of on-site Energy Use Intensity (EUI). This is a measure of annual energy use per square foot of building area. The resulting EUI for each facility is then compared to the EUI of other San Francisco municipal buildings of a similar type. While national average EUI figures are published for a variety of building types, these figures are not normalized for climate and thus are not an ideal method of understanding how well a building in San Francisco performs. A building in San Francisco's mild climate would tend to perform relatively well compared to its national peers on the basis of EUI, without revealing much about the building's actual energy efficiency.

One other item to note is the use of “on-site” rather than “source” EUI as the primary metric in this report, due to the City's source of electricity. To derive source EUI, the EPA's Portfolio Manager tool uses national averages to convert electricity used in a facility to the total energy required to supply this electricity. In most cases, electricity delivery involves substantial conversion losses through the burning of fossil fuel, plus some losses due to transmission and distribution of the resulting power. However, the SFPUC's Hetch Hetchy Power system and some local distributed generation provide nearly all of the electricity needed by San Francisco's municipal buildings. Since these power sources do not involve converting fossil fuels to electricity, use of a national average site-source ratio would be misleading. Therefore, all comparisons in this report are based on on-site energy use.

It is the SFPUC's hope that its Annual Energy Benchmarking Report is helpful to City departments and other readers and is used as a means to supplement and improve upon other information sources about San Francisco's municipal sustainability performance. As changes are made to the EPA's ENERGY STAR system, and as San Francisco's private sector buildings have begun to release their own energy performance data, the SFPUC will look for ways to further refine its benchmarking methods to improve the accuracy and relevancy of its reporting and to help lead the way in improving access to energy data in San Francisco and the nation.

Energy Use in San Francisco's Municipal Buildings

Information Sources and Assumptions

Creating an accurate energy performance benchmark of San Francisco's municipal buildings requires information from numerous sources.

Energy data: Electricity, natural gas, and steam data is stored in the SFPUC's energy accounting database, EnergyCAP, which contains monthly metered usage for all utility meters where billing is managed by the SFPUC.

Additional natural gas data was obtained from other sources in cases where the site pays Pacific Gas and Electric (PG&E) or another vendor directly for natural gas. In instances like these, meter information was provided by the individual department to the SFPUC. Natural gas data for SFUSD facilities, for example, was provided by SFUSD.

There are 31 facilities where there was not a sufficient amount of 2018 data gathered to be able to report on them accurately, or where square footages are unknown (page 28). While this report provides limited data for these individual facilities, their energy usage is not included in overall figures, trends, and summary charts. SFPUC hopes to have more accurate data on these facilities for future reports.

Facility data: Accurate facility data is needed to reliably benchmark a building. As part of the initial report (calendar year 2011), the SFPUC and other departments engaged in a thorough verification process to review available building and operations data and supply additional detail for the benchmarking effort. Where feasible, similar verification occurred for facilities added to subsequent reports since, and some departments have provided updates for locations that were previously included.

This report generally refers to "facilities" rather than "buildings" because, in many cases, energy meters are shared by multiple buildings. Locations like these are benchmarked as campuses. By way of example, the Airport is listed as one facility but contains several dozen individual buildings. San Francisco General Hospital is also benchmarked as one facility but is a campus of more than 15 individual buildings. Similarly, Moscone Center North and South are considered a campus with shared mechanical systems, as are the War Memorial Veterans Building and Opera House.

In some cases, a facility comprises more than one space type. The Hall of Justice, for example, is a mixed-use facility that contains offices, a courthouse, and jail areas. Where this would affect the ENERGY STAR rating, multiple space types were entered into EPA's Portfolio Manager.

Departments also supplied the SFPUC with the size of parking garages and parking lots. Where attached parking would affect the ENERGY STAR rating of a facility, this data was entered into Portfolio Manager as an additional space type. The EUI calculations in this report include parking garage area as part of a facility's square footage, which in most cases decreases the reported EUI of a building due to the lower energy intensity of a typical parking garage. However, the area of exterior parking lots is not included in the EUI calculations for the adjacent buildings.

Civic Center steam loop: Two historic Civic Center buildings, Bill Graham Civic Auditorium and the Department of Public Health Central Office, obtain steam from the NRG Energy Center steam loop but do not have individual steam meters. Because these buildings are not eligible for an ENERGY STAR rating due to the absence of accurate steam meter data, the unmetered portion (City Hall is metered) of Civic Center steam use was apportioned between these two buildings based on their square footage in order to estimate their individual EUIs.

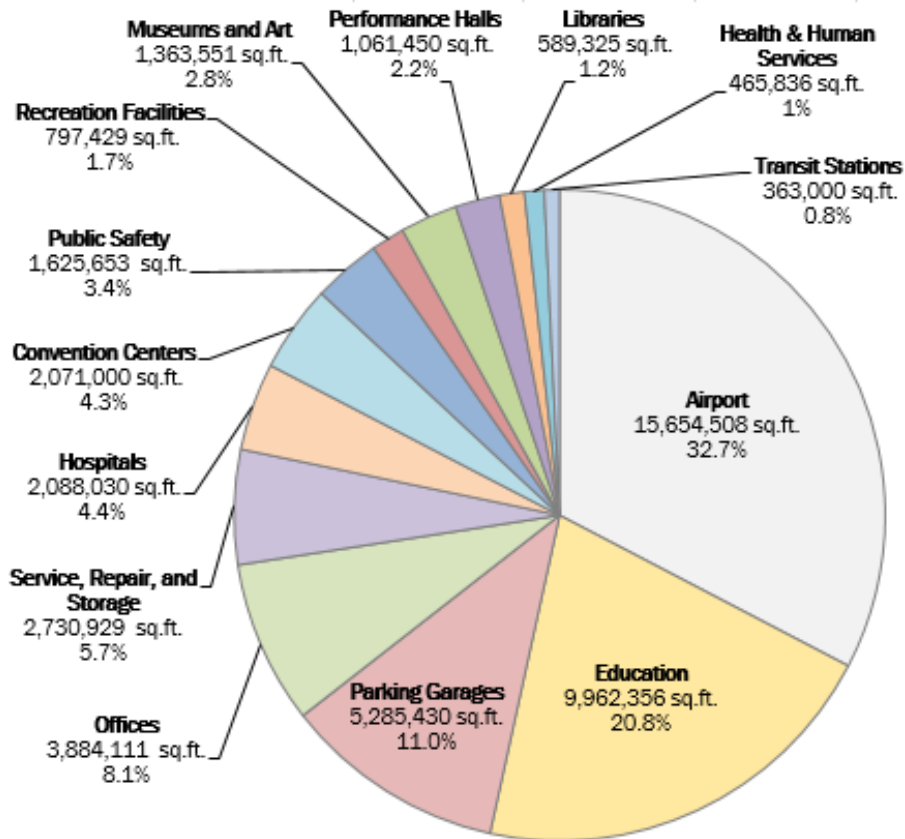


Figure 1: Benchmarked Square Footage by Building Category
 (Total Benchmarked Building Area = 47,942,608 sq ft)

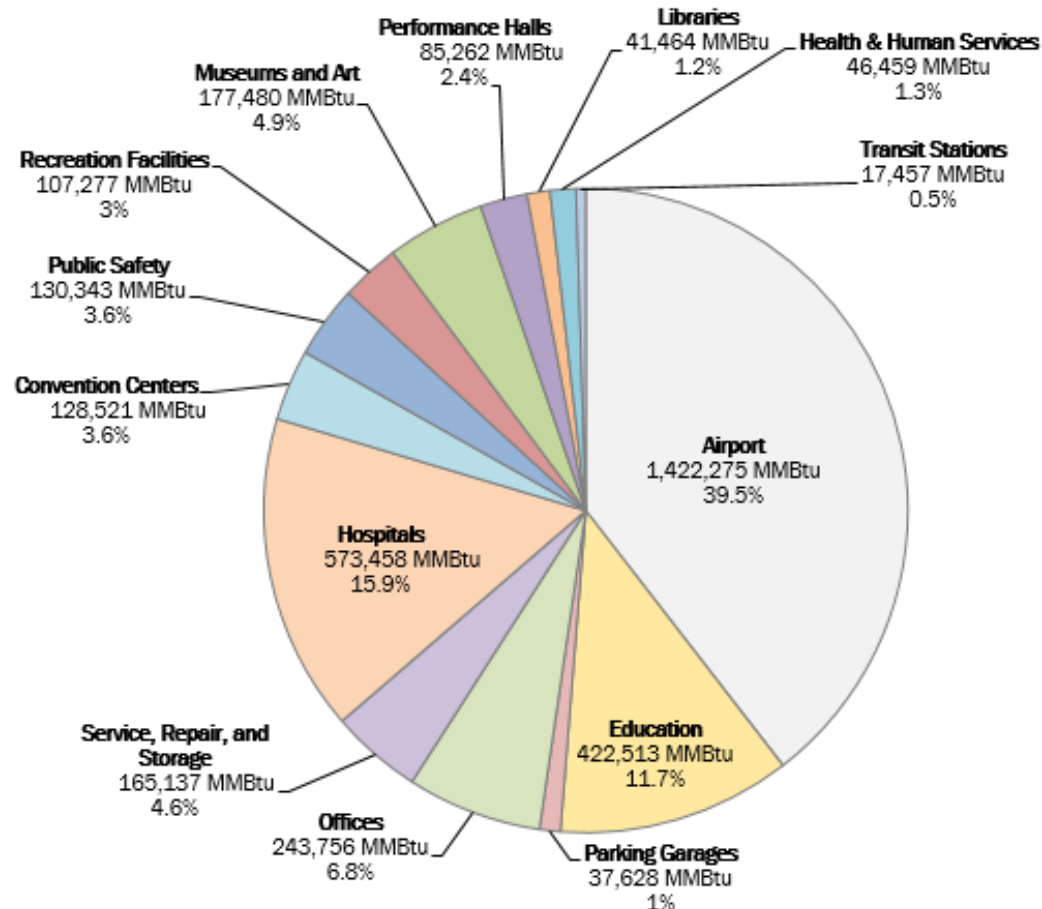


Figure 2: Benchmarked Energy Use by Building Category
 (Calendar Year 2018 Benchmarked Energy Use = 3,599,030 MMBtu)

Comparing the two charts above (Figures 1 and 2), some building types consume energy out of proportion to their size. For instance, San Francisco General and Laguna Honda hospitals comprise only 4.4% of the benchmarked square footage, but consumed 15.9% of benchmarked energy in 2018. This is largely due to the hospitals' operating hours and high energy use intensity. On the other hand, parking garages make up 11% of benchmarked square footage but used 1% of the year's benchmarked energy use. The average EUI figure for each building type

can be found adjacent to their respective categories, beginning on page 14. Municipal facilities use GHG-free SFPUC electricity, natural gas supplied by PG&E or an aggregator (either the California Department of General Services or SPURR), and steam supplied by Clearway Energy, Inc. To compare these forms of on-site energy use, units have been converted throughout this report to British thermal units (Btu) of energy.¹

¹ Conversion factors are those referenced by EPA's ENERGY STAR Portfolio Manager.

Renewable Energy at Municipal Facilities

The City and County of San Francisco is strongly committed to expanding the local use of renewable energy, including solar photovoltaics (PV). In calendar year 2018, the SFPUC distributed power from 21 PV facilities that generated a combined 8,862 megawatt hours (MWh) of clean power.

The largest of these facilities is fittingly located atop San Francisco's largest water reservoir, the Sunset Reservoir. With a capacity of a little over 5 MW, the solar arrays span an area the size of about ten football fields. When this array was completed in November of 2010, it was the largest urban solar array in California. The renewable, greenhouse gas-free energy from Sunset Reservoir helps power essential city services such as public transportation, hospitals, and schools.



2018 Energy Benchmarking Results

Carbon Footprint

The GHG emissions of each facility (on a per square foot basis) is provided to help integrate this benchmarking report with the City's annual Climate Action Plan reporting. The average 2018 carbon footprint of the benchmarked facilities (4.32 pounds of CO₂ emissions per square foot) decreased 0.5% from 2017 while remaining 24.8% lower compared to 2009.

One key difference between the buildings in this report and their national counterparts is that electricity in San Francisco municipal buildings is GHG-free electricity from the SFPUC's Hetch Hetchy Power system. This difference is not taken into account by the ENERGY STAR ratings, thus becomes an additional lens with which to view the relative performance of the facilities in this report. Emissions factors for natural gas and steam used in this report are explained on page 13.

Energy Use Intensity (EUI) for all Facilities

As described previously, the primary method of benchmarking the facilities in this report is to compare the on-site annual Energy Use Intensity (EUI) of each facility to other San Francisco municipal facilities of the same type. This EUI comparison is helpful, but not perfect. The wide variation in energy performance within many facility types indicates the potential for energy efficiency retrofit projects at the most energy-intensive locations. However, each department should look in more detail at the list of its buildings to help interpret the results. For example, some facilities have energy meter arrangements that do not correspond to discrete buildings (e.g. locations in Golden Gate Park and other Recreation & Park clubhouses and playgrounds), which means the EUI for some facilities includes energy use from adjacent areas as well.

To help track changes in energy use over time, a comparison to calendar year 2017 EUI is included for each site. This comparison is also not perfect—it is not adjusted to account for fluctuations in weather or changes in occupancy or operations—but does provide informative

results. In cases where the SFPUC was aware that a facility was vacant or under construction for an extended period of time during 2017 or 2018, a note (4) is included after the facility name.

While we have included data on energy use at water treatment and wastewater facilities, it should be noted that corresponding EUIs for these building categories are relative to energy use only (EUI for these facility types is more typically expressed as a function of water use).

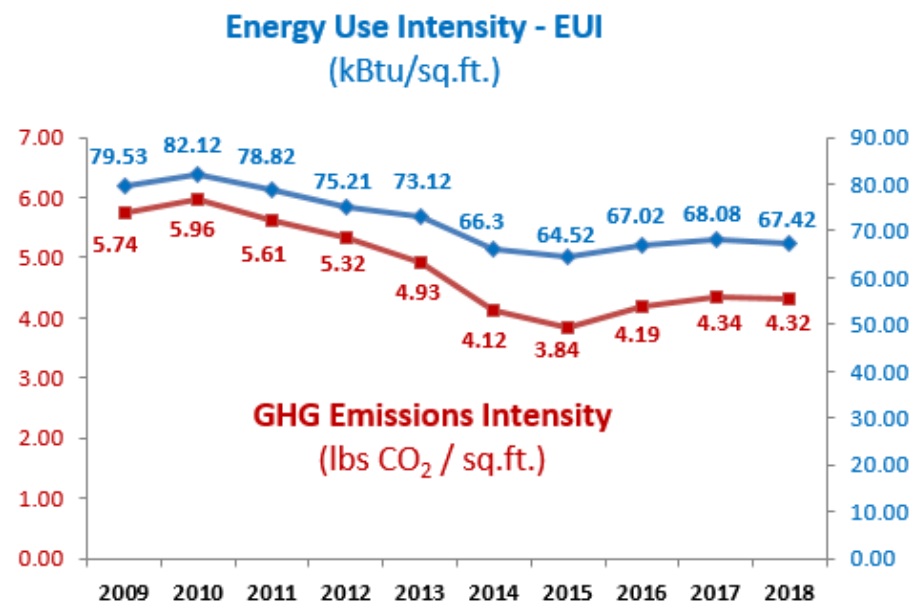


Figure 3: Trends in Energy Use and GHG Emissions Intensity

The overall EUI of benchmarked facilities decreased 1% from 2017 but has come a long way since 2009 with an overall drop of 15.2%.

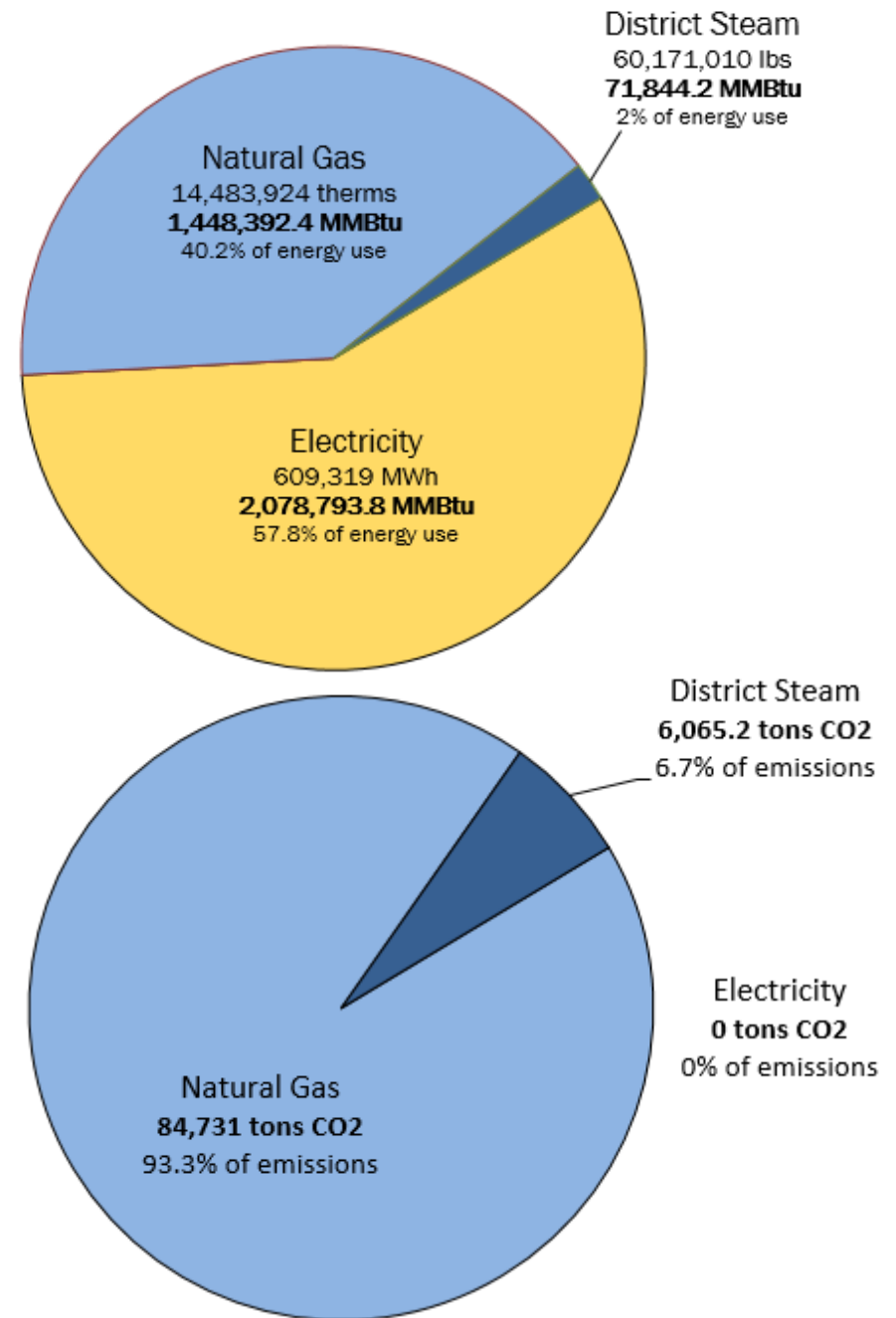
Data Uncertainties and Exceptions

As described in the previous section of this report, a small number of facilities received a “partial benchmark” due to missing square footage, meter and/or usage information. These facilities are listed separately (*page 28*).

In addition to these partially benchmarked buildings, there are footnotes (#) beside the names of some benchmarked facilities. These notes clarify situations where energy or facility data is treated as a special case, or where facilities need further investigation in future years. Several facilities that were under construction or that had irregular natural gas billing were treated as one of these special cases. For a key to these notes, [see Appendix A](#). In some cases, this prevents a meaningful EUI comparison to prior years.

Figure 4: Energy Use and GHG Emissions by Fuel Type

(Calendar Year 2018 Benchmarked Energy Use = 3,599,030.5 MMBtu)



Interpreting the Results

The 2018 Energy Benchmarking results are grouped by facility type and provide key data points about each facility, as well as the facility's energy performance in calendar year 2018.


Each facility's estimated 2018 carbon footprint is shown here as pounds of CO₂ emissions per square foot of building area. For electricity in 2018, GHG emissions associated with SFPUC electricity were zero. Natural gas emissions are derived from national averages cited by ENERGY STAR (11.7 lbs CO₂ per therm of natural gas). GHG emissions from steam are updated annually by the City's steam vendor, NRG Energy Center (0.2016 lbs CO₂ per pound of steam for calendar year 2018).

This column lists 2018 ENERGY STAR ratings. "N/A" indicates either a facility type not eligible for a rating, that inadequate information is available, or a building does not qualify for a rating based on the EPA's operating thresholds.

General category of building, corresponding to energy use snapshot in Figures 1 and 2.

Specific facility type, allowing a comparison of similar facilities to each other

See Page 3 for a list of department acronyms.

Facility	Dpt.	Year Built	Building Area (sq. ft.)	EUI Change Since 2017	Calendar Year 2018			
					Annual Site EUI (kBtu/sq.ft.)	ENERGY STAR 	Carbon Footprint (lbs CO ₂ /sq.ft.)	Annual Site MMBtu
Health & Human Services					99.7			
Homeless Service - San Francisco Average					5.2%	141.9		12.73
Multi-Service Center South	HSA	1924	25,600	7.9%	237.8	N/A	21.47	
Multi-Service Center North	HSA	1913	37,125	2.0%	162.0	N/A	14.76	
Mission Neighborhood Resource Center	HSA	1922	6,500	-5.8%	125.8	N/A	8.09	
Hamilton Family Shelter	HSA	1966	50,000	8.7%	80.0	N/A	7.36	

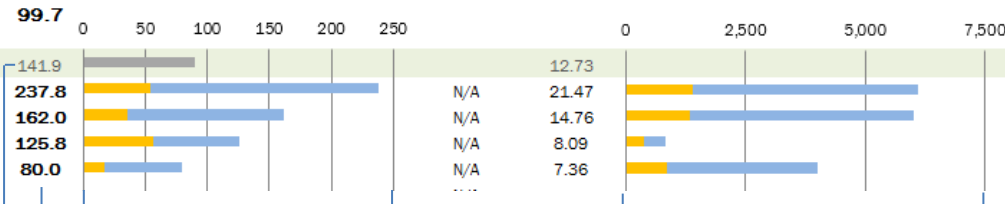
Health & Human Services

Homeless Service - San Francisco Average

- Multi-Service Center South
- Multi-Service Center North
- Mission Neighborhood Resource Center
- Hamilton Family Shelter

This section includes facility characteristics for each location—owning or occupying City department (see page 3 for a list of acronyms), year built, and total building area in square feet.

The change in annual EUI from 2017 to 2018 is shown in this column for each facility. An improvement of more than 10% is shown in green. An EUI increase of more than 10% is shown in red. Facilities that were unoccupied for prolonged periods during either 2017 or 2018 are indicated with a footnote (4) next to the facility name. "N/A" indicates a non-meaningful comparison, for example, where a building was vacant or under construction for a significant portion of one or both years.



2018 **Energy Use Intensity (EUI)** for each facility which represents total on-site energy, in kBtu, per square foot of building area.

For each facility type, the average 2018 EUI of San Francisco municipal buildings is provided on the top row, for comparison to individual facilities of that type.

Electricity, natural gas, and district steam are shown in yellow, light blue, and dark blue, respectively. Facility type averages are shown in grey. *Note: Chart scales vary for different facility types.*

Bars shown in this area indicate total 2018 on-site energy use for each facility, in MMBtu. *Note: Chart scales vary for different facility types.*

Facility	Year Built	Building Area (sq. ft.)	Calendar Year 2018			
			EUI Change Since 2017	Annual Site EUI (kBtu/sq.ft.)	ENERGY STAR 	Carbon Footprint (lbs CO2/sq.ft.)

Convention Centers

				62.1	0	25	50	75	100		0	20,000	40,000	60,000	80,000	
Convention Center - San Francisco Average				1.4%	62.1							3.23				
Moscone Center West	2002	775,000	-9.0%	79.1						N/A	5.49					
Moscone Center North & South (1)(4)	1981	1,296,000	13.2%	51.9						N/A	1.97					

Performance Halls

				80.3	0	25	50	75	100	125		0	20,000	40,000	60,000	
Performance Hall - San Francisco Average				4.5%	80.3							5.87				
War Memorial Veterans Building & Opera House (1)	1932	529,700	12.6%	94.0						N/A	6.43					
Bill Graham Civic Auditorium (steam unmetered) (2)(14)	1915	302,250	-4.3%	79.9						N/A	7.73					
Davies Symphony Hall / Zellerbach Rehearsal Hall (1)	1980	229,500	-6.5%	49.2						N/A	2.32					

Museums and Art


				130.2	0	100		0	1,000	2,000	3,000	4,000		
Art/Cultural Center - San Francisco Average				64.1%	39.9							3.02		
Randall Museum (4)	1951	32,030	N/A	94.7						N/A	8.62			
GGP -- Sharon Arts Studio (3)	1888	11,376	9.2%	67.1						N/A	7.81			
SOMArts Cultural Center	1906	17,844	-0.2%	43.7						N/A	1.58			
Harvey Milk Center for the Arts	1950	23,125	-4.2%	29.2						N/A	1.34			
African American Art & Culture Complex	1935	34,031	-14.1%	19.6						N/A	1.24			
Bayview Opera House	1888	14,000	1.5%	18.8						N/A	1.08			
Mission Cultural Center for Latino Arts	1948	32,230	0.7%	16.5						N/A	0.88			
Arts Commission Window Site / Gallery	1914	4,163	-48.6%	2.2						N/A	0.22			
Museum - San Francisco Average				-3.4%	142.9							7.48		
California Palace of the Legion of Honor	1924	117,665	-8.9%	276.7						N/A	21.74			
GGP -- Conservatory of Flowers (3)	1879	27,900	-0.4%	196.8						N/A	23.02			
De Young Museum	2005	292,500	-7.3%	162.3						N/A	9.43			
California Academy of Sciences	2008	426,000	6.1%	143.8						N/A	4.88			
Asian Art Museum	1917	185,000	-12.9%	113.6						N/A	4.84			
Coit Tower (14)	1933	5,687	31.6%	70.4						N/A	0.00			
Palace of Fine Arts (14)	1915	140,000	25.2%	18.2						N/A	0.00			


Facility	Year Built	Building Area (sq. ft.)	Calendar Year 2018			
			EUI Change Since 2017	Annual Site EUI (kBtu/sq.ft.)	ENERGY STAR 	Carbon Footprint (lbs CO2/sq.ft.)


Education

42.4

Facility	Year Built	Building Area (sq. ft.)	EUI Change Since 2017	Annual Site EUI (kBtu/sq.ft.)	ENERGY STAR	Carbon Footprint (lbs CO2/sq.ft.)	Annual Site MMBtu
Childcare / Teen Center / Family Center - San Francisco Average			-1.3%	32.7		2.66	
Argonne CDC	2001	2,500	-11.7%	92.3	N/A	6.89	
Zaida T Rodriguez EES Pre-K	1976	1,800	-10.8%	86.5	N/A	7.26	
Earl P Mills Community Center	1971	15,000	-7.2%	68.8	N/A	5.25	
Noriega CDC	1951	14,700	5.3%	54.4	N/A	4.74	
SFUSD - Sarah Cooper Childcare Center	1900	37,500	90.7%	47.7	N/A	4.47	
Jefferson Early Education	1960	2,400	-0.2%	39.4	N/A	2.55	
John McLaren CDC	1954	57,885	2.0%	38.4	N/A	3.46	
Junipero Serra Annex CDC	1970	5,800	5.3%	36.3	N/A	1.20	
Sojourner Truth Child Center	1971	5,184	-6.8%	36.2	N/A	2.55	
Yoey at Bessie Smith CDC	1943	3,700	-5.9%	36.0	N/A	2.83	
Zaida Rodriguez TK (old Mission CDC)	1976	4,100	17.5%	34.5	N/A	2.13	
San Miguel CDC	1929	52,545	-22.3%	29.8	N/A	1.93	
Theresa Mahler CDC	1943	5,339	-2.2%	27.9	N/A	1.65	
Playmates Nursery	1954	3,000	-8.9%	25.6	N/A	1.05	
Leola M Havard Early Education	1969	74,100	-9.0%	24.9	N/A	2.28	
MLK Child Care Center	1971	7,409	5.0%	24.4	N/A	2.24	
Visitation Valley Family Resource Center	1940	12,000	-1.3%	23.3	N/A	1.85	
Shorey Childrens Center	1971	9,700	9.9%	12.9	N/A	0.74	
SFUSD -- SPEd Medical Therapy Unit (Laguna)	1972	12,400	2.1%	12.0	N/A	0.52	
Tule Elk Park CDC (4)	1923	32,000	-47.4%	12.0	N/A	0.84	
College / Adult Education - San Francisco Average			-0.5%	73.9		5.14	
GGP -- Senior Center	1930	5,940	4.8%	161.1	N/A	15.02	
SFPD Academy	1966	19,332	16.0%	128.6	N/A	10.63	
CCSF -- Ocean Campus	1940	931,000	8.2%	103.7	N/A	7.65	
CCSF -- Mission Center	1939	138,129	18.5%	88.5	N/A	6.21	
CCSF -- Fort Mason Campus	1934	24,000	19.5%	77.7	N/A	6.70	
CCSF -- Chinatown / North Beach Annex	2012	29,411	-35.3%	63.5	N/A	4.40	
Sheriff Community Programs / Five Keys Adult School	1959	10,842	17.0%	60.9	N/A	2.43	
CCSF -- Downtown Center	1978	86,038	1.6%	56.5	N/A	1.90	
CCSF -- Chinatown / North Beach Center	2012	157,353	-22.1%	32.2	N/A	1.36	
CCSF -- Airport Campus	1975	27,753	6.1%	28.7	N/A	1.96	
Southeast Community Facility and Greenhouses (4)	1986	193,400	N/A	27.6	N/A	1.37	
CCSF -- John Adams Center	1911	151,397	3.1%	22.7	N/A	1.77	
CCSF -- Evans Center	1984	90,000	-1.2%	19.5	N/A	0.32	

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High School - San Francisco Average			8.9%	35.6			2.88
Ida B Wells High	1910	34,300	-3.0%	108.7	52	10.57	
Raoul Wallenberg High	1952	62,840	2.3%	51.0	81	4.31	
School of the Arts / Academy of Arts and Sciences	1970	209,500	41.7%	43.1	45	3.00	
Balboa High	1928	261,700	14.6%	40.3	39	3.89	
Philip and Sala Burton High	1963	230,000	23.7%	39.9	56	3.21	
June Jordan High / City Arts and Tech High	1957	151,600	24.1%	39.0	63	3.52	
Independence High (Old Laguna Honda)	1908	30,114	5.1%	38.9	61	3.14	
Mission Prep (former SF International High)	1980	33,100	-7.1%	36.6	80	2.09	
Mission High	1922	225,000	-12.9%	35.3	49	2.96	
Galileo High	1924	242,400	9.1%	34.9	0	2.84	
Gateway High / KIPP San Francisco Bay Academy (13)	1913	143,237	6.0%	33.8	58	2.79	
John O'Connell High	1999	130,091	3.3%	33.3	66	2.07	
Thurgood Marshall High	1957	149,796	6.8%	30.3	50	2.17	
Downtown High	1936	58,760	6.9%	29.5	39	2.99	
Hilltop County Community High / Sunshine Building	1937	61,442	-30.9%	28.7	92	1.85	
Abraham Lincoln High	1940	330,200	4.1%	26.3	90	1.97	
Lowell High	1962	245,000	16.2%	25.2	75	1.97	
Elementary / Middle School - San Francisco Average			4.9%	35.1			2.69
Mission Education Center Elementary	1911	17,500	27.2%	78.4	15	7.78	
Robert Louis Stevenson Elementary	1953	47,500	101.6%	74.2	77	7.18	
Buena Vista / Horace Mann	1924	68,000	51.1%	71.0	95	6.94	
Civic Center Secondary at John Swett Campus	1912	29,060	-14.9%	70.7	55	5.61	
Visitacion Valley Middle	1971	113,600	-13.6%	67.2	20	6.13	
Chinese Education Center	1976	10,580	35.8%	56.3	61	3.33	
George Moscone Elementary	1997	32,763	-2.6%	56.0	11	3.17	
Lafayette Elementary	1927	54,283	29.0%	53.1	8	5.25	
Hillcrest Elementary	1951	60,280	13.5%	51.5	4	5.04	
Claire Lillenthal (K-2 Madison Campus)	1910	20,855	17.2%	50.5	78	4.29	
Ulloa Elementary	1952	53,000	-10.3%	49.5	3	4.57	
Longfellow Elementary	1960	40,500	6.8%	48.8	57	4.05	
James Lick Middle (13)	1932	116,000	79.0%	47.0	92	4.60	
George Peabody Elementary	1976	21,799	-7.7%	46.6	30	3.10	
Sunset Elementary	1951	40,150	12.1%	46.5	75	4.12	
Guadalupe Elementary	1922	40,777	-3.2%	46.5	79	3.60	
John Muir Elementary	1928	53,500	25.8%	44.7	88	4.09	
E R Taylor Elementary	1923	56,113	38.4%	44.7	35	4.24	
Sherman Elementary	1928	56,200	12.0%	44.4	60	4.46	
Cesar Chavez Elementary	1926	49,100	11.1%	44.0	80	3.65	
El Dorado Elementary (4)	1953	30,300	N/A	43.8	30	3.52	
Dr Charles R Drew Elementary	1971	55,234	15.3%	43.2	61	3.49	

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Clarendon Elementary	1962	39,500	-2.6%	43.2	53	3.09	
Alamo Elementary	1924	50,420	23.7%	41.9	35	2.49	
Rosa Parks Elementary / Raphael Weill CDC	1927	66,900	21.8%	41.5	0	3.45	
Aptos Middle	1931	168,000	36.8%	40.6	78	4.04	
Dr William Cobb Elementary	1923	36,246	6.4%	40.2	56	3.21	
Paul Revere Elementary	1928	56,400	2.4%	39.9	64	2.78	
SF Public Montessori Elementary	1924	64,500	-8.5%	39.3	80	3.97	
Jefferson Elementary	1923	42,434	-28.7%	38.6	60	3.25	
Jose Ortega Elementary	1953	35,180	-36.0%	38.5	59	3.02	
Presidio Middle	1930	140,000	5.0%	38.3	87	4.13	
Sunnyside Elementary	1927	41,902	19.1%	38.1	7	3.53	
Chinese Immersion Elementary at DeAvila	1926	58,582	0.5%	37.7	0	3.51	
Sanchez Elementary	1927	50,500	-12.0%	37.4	44	3.40	
Rooftop Alternative (K-4 Burnett Campus)	1952	23,300	34.1%	36.9	73	3.58	
Commodore Sloat Elementary	1977	59,200	20.3%	36.5	39	2.89	
Lakeshore Elementary	1954	56,101	19.0%	35.4	67	3.09	
Bret Harte Elementary	1954	79,000	-2.1%	35.2	37	2.75	
Gateway Middle	1908	31,121	1.8%	35.1	64	2.97	
Malcolm X Elementary	1957	50,800	8.5%	34.8	33	2.92	
Argonne Elementary	1997	52,000	-1.7%	34.8	42	2.41	
Daniel Webster Elementary	1924	42,800	-1.5%	34.7	71	2.53	
Dr George Washington Carver Elementary	1974	45,500	-6.7%	34.4	65	1.54	
Leonard R Flynn Elementary	1926	52,700	-3.9%	33.6	75	2.48	
Rooftop Alternative (5-8 Mayeda Campus)	1997	21,000	-3.6%	33.3	41	1.30	
Francisco Middle (13)	1926	104,897	75.3%	32.8	73	2.88	
Francis Scott Key Elementary	1936	52,000	-15.6%	32.8	72	2.51	
Claire Lilienthal (3-8 Winfield Scott Campus)	1930	34,000	8.8%	32.7	72	2.60	
Creative Arts Charter	1962	33,117	-16.2%	32.5	N/A	2.78	
Roosevelt Middle	1930	121,000	16.5%	32.0	45	2.82	
West Portal Elementary	1927	44,700	52.3%	31.9	43	2.54	
Lawton Elementary	1934	64,940	-26.7%	31.8	0	2.81	
Cleveland Elementary	1911	34,000	8.1%	31.7	27	2.59	
Miraloma Elementary	1952	51,900	-21.7%	31.7	81	2.78	
Alvarado Elementary	1926	51,700	-24.2%	31.6	71	2.59	
Harvey Milk Civil Rights Academy	1952	30,560	19.0%	31.3	36	2.46	
Visitacion Valley Elementary	1936	51,400	38.0%	31.0	83	2.74	
Alice Fong Yu Elementary	1914	59,650	-5.7%	31.0	0	2.59	
Dr Martin Luther King Middle	1940	72,210	8.3%	30.7	0	1.95	
Frank McCoppin Elementary	1976	32,700	11.7%	30.5	55	1.88	
Sutro Elementary	1976	32,860	18.9%	29.9	27	1.87	

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				0	50	100	150	200		0	2,000	4,000	6,000	8,000
Bryant Elementary and CDC	1969	32,500	-5.8%	29.8					63	1.82				
SF Community School	1911	66,900	21.3%	29.0					80	2.80				
James Denman Middle (4)	1940	150,900	3.9%	29.0					58	1.86				
John Yehall Chin Elementary (4)	1914	23,100	N/A	28.8					3	1.74				
Marina Middle	1936	152,900	20.3%	28.6					44	2.52				
Tenderloin Elementary	1998	61,569	12.3%	27.1					80	1.46				
Bessie Carmichael Elementary	2000	56,358	-19.7%	26.8					81	0.98				
Jean Parker Elementary	1996	46,000	41.6%	26.4					75	1.75				
Everett Middle	1926	155,370	-21.9%	26.4					56	2.10				
Grattan Elementary	1971	55,420	6.0%	25.9					92	2.15				
Glen Park Elementary	1936	45,200	-8.6%	25.7					34	2.00				
Spring Valley Elementary	1912	50,400	12.5%	25.5					61	1.67				
Redding Elementary (4)	1917	26,100	N/A	25.1					59	1.53				
Starr King Elementary	1955	49,900	17.0%	24.7					64	1.83				
Bessie Carmichael / Filipino Education Ctr (6-8)	1975	13,654	-7.3%	23.9					92	1.20				
Marshall Elementary	1977	34,300	-15.3%	23.3					58	1.51				
Dianne Feinstein Elementary	2003	62,087	12.9%	23.1					51	1.28				
Herbert Hoover Middle	1956	132,400	-7.5%	22.8					83	1.61				
Edison Charter Academy Elementary	1927	59,200	-23.5%	22.6					93	1.26				
Garfield Elementary	1979	33,800	-4.9%	22.5					0	0.51				
A P Giannini Middle	1954	136,392	-40.4%	22.2					77	1.74				
Willie L. Brown Jr. Middle	2001	88,500	-24.5%	20.3					N/A	1.27				
Junipero Serra Elementary	1977	34,200	-4.2%	19.2					82	0.62				
Gordon J Lau Elementary	1914	63,800	11.5%	18.1					46	0.83				
Fairmount Elementary	1976	60,960	-3.2%	17.8					58	0.72				
Monroe Elementary	1977	53,400	20.7%	17.2					36	0.82				
McKinley Elementary	1977	45,160	-30.8%	13.6					89	0.50				
Sheridan Elementary	1975	46,335	-41.3%	13.2					59	0.35				


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






























































<i>Libraries</i>				70.4	0	50	100	150	0	10,000	20,000	30,000
Library - San Francisco Average				-1.6%	76.9				3.48			
Noe Valley/Sally Brunn Branch Library	1916	6,096	65.7%	114.6				N/A	8.61			
Ortega Branch Library	2011	9,300	29.4%	80.4				N/A	5.30			
Richmond/Milton Marks Branch Library	1914	13,900	-11.6%	79.7				N/A	3.83			
North Beach Branch Library	2013	8,500	4.3%	77.1				N/A	5.42			
Main Library (14)	1996	376,000	5.0%	76.1				N/A	3.79			
West Portal Branch Library	1939	8,010	3.9%	74.2				N/A	4.56			
Western Addition Branch Library	1966	8,000	-1.2%	73.3				N/A	5.23			
Bayview Linda Brooks-Burton Branch Library	2012	9,527	15.3%	70.2				N/A	6.08			
Chinatown Him Mark Lai Branch Library	1921	17,858	-9.5%	68.7				N/A	2.08			
Sunset Branch Library	1918	9,434	7.3%	66.1				N/A	3.66			
Merced Branch Library	1958	5,832	5.3%	65.1				N/A	3.74			
Mission Branch Library	1916	10,479	-11.0%	59.7				N/A	1.11			
Marina Branch Library	1954	7,633	-7.7%	58.6				N/A	1.73			
Ingleside Branch Library	2009	6,100	7.1%	57.7				N/A	3.47			
Portola Branch Library	2009	6,427	-8.4%	56.6				N/A	2.52			
Parkside Branch Library	1951	6,822	16.2%	53.3				N/A	2.61			
Bernal Heights Branch Library	1940	8,777	-8.3%	51.3				N/A	2.52			
Ocean View Branch Library	2000	4,794	-50.3%	50.8				N/A	2.06			
Anza Branch Library	1932	8,222	2.6%	50.0				N/A	2.21			
Glen Park Branch Library	2007	7,185	3.5%	45.8				N/A	0.83			
Presidio Branch Library	1921	10,205	2.5%	44.7				N/A	2.66			
Eureka Valley/Harvey Milk Branch Library	1961	6,465	21.2%	44.4				N/A	0.88			
Golden Gate Valley Branch Library	1917	7,432	44.2%	38.2				N/A	1.94			
Park Branch Library	1909	8,060	-10.3%	38.0				N/A	1.65			
Visitacion Valley Branch Library	2011	9,945	-5.9%	34.7				N/A	1.18			
Excelsior Branch Library	1967	8,322	-4.9%	34.2				N/A	1.53			

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Health & Human Services


				99.7	0	50	100	150	200	250		0	2,500	5,000	7,500	
Homeless Service - San Francisco Average				5.2%	141.9							12.73				
Multi-Service Center South	1924	25,600	7.9%	237.8							N/A					
Multi-Service Center North	1913	37,125	2.0%	162.0							N/A					
Mission Neighborhood Resource Center	1922	6,500	-5.8%	125.8							N/A					
Hamilton Family Shelter	1966	50,000	8.7%	80.0							N/A					
Medical Clinic - San Francisco Average				-9.6%	98.3							7.04				
Chinatown Public Health Center (Health Center #4)	1967	22,500	-36.1%	136.8							N/A					
San Francisco City Clinic	1930	8,000	20.9%	125.9							N/A					
Ocean Park Health Center (Health Center #5)	1967	16,247	23.7%	116.4							N/A					
Castro Mission Health Center (Health Center #1)	1965	15,258	4.3%	109.8							N/A					
Curry Senior Service Center (14)	1930	11,195	15.1%	81.6							N/A					
Maxine Hall Health Center (Health Center #2)	1966	20,590	-11.1%	81.4							N/A					
Potrero Hill Health Center	1976	8,000	-9.4%	79.9							N/A					
Southeast Health Center	1979	14,604	-11.2%	76.2							N/A					
Silver Avenue Health Center (Health Center #3)	1967	22,950	-0.9%	74.6							N/A					
Mental Health Center - San Francisco Average				-5.8%	57.2							1.24				
SE Mission Geriatric Services		1,500	10.6%	90.2							N/A					
Mental Health Services -- 1380 Howard	1927	84,000	-7.0%	80.6							87					
OMI Family Center	1962	5,000	-13.1%	65.9							N/A					
South of Market Mental Health Services	1956	13,000	7.6%	46.1							57					
Sunset Mental Health Services	1949	5,500	-8.7%	45.6							64					
S Van Ness Mental Health / Mission Family Center	1958	14,700	-4.6%	40.0							86					
SE Child/Family Therapy Center (5)	1939	3,000	37.1%	34.2							N/A					
Mission Mental Health Services	1943	30,750	-7.0%	27.8							68					
Chinatown/North Beach Mental Health Services (14)	1953	11,067	-1.6%	26.9							89					
Chinatown Child Development Center	1950	9,250	-11.8%	25.5							55					
Veterinary - San Francisco Average				3.5%	192.1							16.48				
Animal Shelter	1931	29,500	3.5%	192.1							N/A					
Hospitals					274.6	0	100	200	300	400		0	150,000	300,000	450,000	
Hospital - San Francisco Average				-5.0%	274.6							20.57				
San Francisco General Hospital	1915	1,370,904	-6.4%	318.3							N/A					
Laguna Honda Hospital (6)	1926	717,126	-0.3%	191.2							N/A					


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Offices				62.8						
General Office - San Francisco Average										
Hall of Justice (7)	1959	634,717	-0.2%	133.7	64	10.14				
Sheriff Training Facility	1963	19,057	-1.7%	130.3	76	8.56				
SFUSD -- Administration - Franklin (8)	1976	78,028	-1.5%	123.8	N/A	5.39				
SFUSD -- 3045 Santiago Admin Building	1954	15,334	0.5%	99.5	N/A	9.69				
Temp Sewer Operations Office (5) (14)	2000	2,500	-35.1%	95.0	N/A	0.00				
GGP -- McLaren Lodge and Annex	1896	17,252	2.1%	89.6	70	5.82				
DPH Central Office (steam unmetered) (2)	1932	103,000	-11.9%	85.3	60	9.69				
GGP -- Park Aid Station / Natural Areas Program (5)	1902	2,733	15.3%	84.6	N/A	6.28				
1680 Mission St	1923	40,053	12.6%	84.2	62	5.37				
CHN Headquarters	1923	60,000	6.0%	82.6	48	5.71				
Women's Resource Center	1959	5,920	42.2%	77.0	88	6.15				
Enforcement Division	1920	8,000	-16.1%	67.2	73	2.27				
SFUSD -- Children's Center Administration Building (8)	1930	20,000	3.6%	64.7	N/A	6.41				
1660 Mission St	1990	81,747	-1.9%	62.2	80	1.27				
Moccasin Administration Building (9) (14)		12,241	124.6%	61.3	73	0.00				
Investigations -- 160 South Van Ness	1936	14,219	9.3%	60.9	90	1.01				
Human Services Agency Headquarters	1979	136,385	3.9%	59.0	55	1.07				
SFUSD -- School Health Programs (8)	1950	13,900	6.2%	55.4	N/A	3.32				
Gloria R Davis Middle/Kipp SF College Prep	1976	60,700	24.3%	55.4	N/A	4.39				
Public Defender's Office	1985	36,171	9.7%	53.7	22	0.81				
30 Van Ness Ave	1965	187,771	4.5%	53.5	79	1.24				
SFPUC -- 525 Golden Gate Ave	2012	277,511	-1.6%	51.6	N/A	1.34				
SFFD - Headquarters	1912	43,010	-7.4%	51.0	58	1.19				
CCSF -- Administrative Offices	1949	50,521	-27.0%	50.2	97	4.68				
MediCal -- 1440 Harrison	1921	52,200	-2.4%	48.0	50	1.69				
Social Services -- 1235 Mission	1935	124,219	-42.5%	46.7	49	0.99				
One South Van Ness (OSVN)	1959	567,868	-12.5%	44.5	92	1.09				
1650 Mission St	1983	196,536	-31.2%	42.8	88	1.58				
Airport Reprographics	1967	6,000	-8.5%	38.0	0	1.06				
Library Support Services Building	1925	43,182	3.9%	37.6	18	0.77				
City Hall (14)	1915	568,510	5.2%	36.3	53	1.41				
SFUSD -- Irving M Scott Building	1895	12,300	0.1%	35.9	N/A	3.08				
Seneca First Stop Visit Cntrl/Workforce Development	1947	8,100	-6.4%	33.0	73	1.44				
SFUSD -- Student Nutrition Services (8)	1932	9,900	-48.5%	32.7	N/A	1.93				
CDD Office - 1990 Oakdale (17)	1956	19,200	N/A	31.4	N/A	3.08				
San Francisco Adult Probation Office (17)	1929	18,400	N/A	31.4	N/A	1.13				
SFUSD -- Administration - Van Ness (8)	1927	241,956	0.7%	23.2	N/A	2.12				
CDD Office - 1980 Oakdale (17)	1956	17,200	N/A	9.5	N/A	0.63				
Bayside Office Space and Warehouse (4)	1978	50,593	N/A	8.7	N/A	0.00				
35/45 Onondaga Building (4) (10) (14)	1928	8,747	N/A	0.6	N/A	0.00				
Courthouse - San Francisco Average			0.0%	52.3		3.34				
Community Justice Center	1913	18,430	0.0%	52.3	N/A	3.34				

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Public Safety				80.2	0 50 100 150 200			0 500 1,000 1,500 2,000 2,500 3,000
Fire Station - San Francisco Average			-8.3%	53.5			3.87	
Fire Station 35 (Fire Boat House)	1908	4,712	-4.5%	180.5		N/A	6.04	
Fire Fighting Training Center - Treasure Island (14)	1899	5,040	-4.6%	158.1		N/A	0.00	
Fire Station 31	1913	8,500	6.9%	96.5		N/A	8.10	
Fire Station 10	1956	14,300	-0.7%	95.8		N/A	8.85	
Fire Station 34	1929	4,400	-20.1%	94.4		N/A	6.72	
Fire Station 06	1948	13,500	0.2%	93.6		N/A	8.85	
Fire Station 38	1960	13,400	6.8%	86.9		N/A	7.77	
Fire Station 22	1962	5,900	-28.7%	82.5		N/A	6.56	
Fire Station 29	1956	8,300	-14.8%	79.9		N/A	6.77	
Fire Station 01	2013	15,136	-15.9%	77.0		N/A	3.73	
Fire Station 32 (13)	1941	10,900	-65.6%	20.0		N/A	0.47	
Fire Station 20	1963	10,300	-18.4%	75.6		N/A	6.26	
Fire Station 07 / Division of Training	1953	33,600	13.7%	74.8		N/A	6.25	
Fire Station 17	1955	12,100	0.3%	74.0		N/A	6.02	
Fire Station 13	1974	18,790	-1.4%	71.6		N/A	3.86	
Fire Station 21	1958	8,000	-10.9%	70.2		N/A	5.78	
Fire Station 15	1957	12,138	-23.1%	68.9		N/A	4.48	
Fire Station 11	1956	14,000	-20.1%	68.2		N/A	5.51	
Fire Station 19	1951	11,500	-7.3%	66.7		N/A	5.79	
Fire Station 18	1951	15,900	16.3%	66.7		N/A	6.01	
Fire Station 12	1955	11,300	-1.5%	66.5		N/A	5.68	
Fire Station 40	1931	7,350	5.6%	63.5		N/A	4.52	
Fire Station 43	1970	10,800	-18.4%	61.8		N/A	3.88	
Fire Station 08	1940	8,000	11.4%	61.3		N/A	3.58	
Fire Station 03	1973	8,000	9.4%	59.9		N/A	2.83	
Fire Station 24	1914	7,600	-5.3%	58.5		N/A	4.53	
Fire Station 37	1915	6,950	5.5%	54.2		N/A	4.04	
Fire Station 39	1923	8,450	2.0%	53.3		N/A	4.49	
Fire Station 44	1915	8,450	-11.1%	52.9		N/A	4.13	
Fire Station 33	1973	5,900	-7.0%	52.5		N/A	3.03	
Fire Station 09	1972	21,400	7.8%	46.5		N/A	3.49	
Fire Station 25	1916	11,420	-9.7%	44.2		N/A	2.98	
Fire Station 02	1994	16,920	0.0%	42.3		N/A	2.37	
Fire Station 36	1961	16,100	-3.6%	41.9		N/A	2.68	
Fire Station 42	1979	9,300	5.6%	38.8		N/A	2.57	
Fire Station 26	1968	15,000	-14.5%	35.3		N/A	2.78	
Fire Station 23	1959	12,000	-27.9%	35.2		N/A	2.72	
Fire Station 41 (13)	1956	9,600	-56.0%	21.1		N/A	0.61	
Fire Station 49	1958	75,000	2.9%	13.9		N/A	0.39	
Fire Station 48 - Treasure Island	1899	15,000	-65.3%	10.3		N/A	1.21	
Fire Station 16 (4)	1938	14,000	N/A	4.1		N/A	0.48	
Fire Station 05 (4)	1954	12,600	N/A	0.8		N/A	0.00	

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Police Station - San Francisco Average			-6.5%	74.9		3.87
Bayview Police Station	1996	16,000	-8.6%	125.1	N/A	7.49
Ingleside Police Station	1910	18,500	-2.2%	113.5	N/A	9.21
Central Police Station	1970	8,000	-7.4%	107.9	N/A	0.86
Park Police Station	1910	13,700	-23.1%	83.2	N/A	5.17
Mission Police Station	1994	25,000	2.7%	70.9	N/A	3.35
Northern Police Station	1988	18,000	6.9%	69.2	N/A	3.28
Richmond Police Station	1910	13,000	4.5%	67.5	N/A	3.84
SFPD Tactical Company	1941	52,125	-5.4%	66.9	N/A	2.59
Taraval Police Station	1929	18,070	-28.4%	56.0	N/A	3.70
Tenderloin Police Station	2000	27,500	-1.2%	44.8	N/A	1.82
Emergency Center - San Francisco Average			-11.7%	219.0		8.58
Emergency Operations Center	1998	56,000	-11.7%	219.0	N/A	8.58
Jail / Correctional - San Francisco Average			-4.1%	90.2		6.09
Youth Guidance Center	1950	210,000	-3.0%	132.9	N/A	11.83
San Francisco County Jail, San Bruno Facility	1934	348,202	-6.7%	98.4	N/A	6.63
County Jail #1 & #2	1994	250,000	2.3%	42.7	N/A	0.52
Recreation Facilities				134.5		
Clubhouse - San Francisco Average			3.7%	71.4		4.09
South Sunset Clubhouse and Playground	1949	1,500	30.9%	313.7	N/A	5.86
Sandy Tatum Clubhouse	2005	20,000	1.4%	294.8	N/A	21.73
Youngblood Coleman Clubhouse and Playground	1960	2,135	13.9%	211.9	N/A	4.02
James Rolph Jr Clubhouse	1921	2,730	9.7%	170.2	N/A	5.16
Laurel Hill Clubhouse and Playground	1953	1,134	12.4%	151.0	N/A	16.43
Merced Heights Clubhouse and Playground	1950	1,136	10.2%	135.3	N/A	4.98
GGP -- Stow Lake Boathouse	1945	4,647	6.5%	117.6	N/A	8.02
Jose Coronado Clubhouse and Playground (13)	1995	933	N/A	89.1	N/A	0.00
Cayuga Clubhouse	2013	2,500	-16.1%	81.7	N/A	4.04
Lincoln Park Golf Course	1936	6,329	-2.4%	81.4	N/A	1.86
Boeddeker Park and Clubhouse (14)	1989	3,740	-31.6%	81.2	N/A	0.00
Jackson Clubhouse and Playground	1912	8,060	32.8%	79.6	N/A	6.53
GGP -- Golf Course Clubhouse (14)	1951	2,470	-35.0%	79.0	N/A	0.00
Fulton Clubhouse and Playground	1955	1,420	-5.8%	67.3	N/A	4.70
Margaret S Hayward Clubhouse and Playground	1922	6,717	-4.3%	61.6	N/A	2.33
Woh Hei Yuen Clubhouse	1997	5,000	64.6%	57.4	N/A	4.56
Hayes Valley Clubhouse	2011	2,500	13.5%	55.3	N/A	2.41


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Excelsior Clubhouse and Playground (13)	1928	2,255	N/A	55.3	N/A	4.50	
Argonne Clubhouse and Playground	2006	1,000	-13.3%	54.2	N/A	2.04	
Cabrillo Clubhouse	1931	1,420	11.6%	50.3	N/A	4.16	
Silver Terrace Clubhouse and Playground	1953	7,842	-2.4%	48.2	N/A	0.47	
Gilman Clubhouse and Playground (14)	1969	1,578	-17.8%	46.4	N/A	0.00	
Christopher Clubhouse (14)	1971	2,337	10.8%	43.5	N/A	0.00	
Junipero Serra Clubhouse and Playground	1955	1,700	3.4%	43.4	N/A	2.68	
Moccoppin Square Clubhouse	1955	2,000	-24.5%	42.5	N/A	1.56	
Helen Wills Clubhouse and Playground	2005	3,082	-47.9%	39.5	N/A	2.44	
J. P. Murphy Clubhouse	1950	1,820	22.0%	39.4	N/A	2.94	
Julius Kahn Clubhouse	1922	1,105	-6.0%	38.2	N/A	3.56	
Rochambeau Clubhouse and Playground	2004	1,482	7.6%	38.0	N/A	0.87	
Visitation Valley Clubhouse and Playground	2003	2,600	-13.5%	36.2	N/A	2.36	
Parque Ninos Unidos Clubhouse	2004	2,414	-2.0%	35.9	N/A	2.48	
Lake Merced Boathouse	1958	15,200	30.9%	33.5	N/A	2.94	
Sigmund Stern Grove / Trocadero Clubhouse	1930	12,832	8.4%	33.4	N/A	1.14	
Sunnyside Conservatory (14)	1900	1,536	22.7%	30.9	N/A	0.00	
Wawona Clubhouse (Project Insight)	1950	1,830	10.4%	30.3	N/A	2.54	
West Portal Clubhouse and Playground	2004	2,728	15.6%	28.1	N/A	1.06	
Midtown Terrace Clubhouse and Playground	1961	2,176	-39.9%	28.0	N/A	2.36	
Sunnyside Clubhouse and Playground	1969	4,412	-12.4%	26.8	N/A	1.77	
Peixotto Clubhouse and Playground	1955	2,000	9.4%	25.3	N/A	2.14	
Cow Hollow Clubhouse and Playground	1950	675	34.8%	24.9	N/A	2.36	
Richmond Clubhouse and Playground	1916	1,200	-4.1%	21.2	N/A	1.79	
Grattan Clubhouse and Playground	1949	1,854	2.4%	20.1	N/A	1.37	
Douglas Clubhouse and Playground	1926	1,072	29.2%	18.0	N/A	1.58	
Willie Woo Woo Wong Clubhouse (14)	1927	6,000	-14.7%	17.6	N/A	0.00	
West Sunset Clubhouse (13)	1953	13,530	N/A	16.3	N/A	0.87	
Miraloma Clubhouse and Playground	1949	1,352	-22.8%	11.9	N/A	0.58	
Crocker Amazon Clubhouse and Playground	1955	24,040	12.0%	7.9	N/A	0.44	
Pine Lake Park Clubhouse (14)	1950	1,242	-15.3%	7.2	N/A	0.00	
Presidio Heights Clubhouse and Playground	1910	958	9.0%	7.0	N/A	0.65	
Alice Chalmers Clubhouse (14)	1951	2,505	-0.6%	5.0	N/A	0.00	
Recreation Center - San Francisco Average			8.5%	121.5		4.32	
GGP -- Kezar Pavilion (13)	1925	24,254	N/A	145.7	N/A	14.91	
Joseph Lee Rec Center	1950	16,383	-30.8%	99.0	N/A	8.92	
Mosocone Rec Center	1924	9,650	-0.2%	99.0	N/A	6.26	

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Minnie & Lovie Ward Rec Center	2007	19,461	-4.3%	93.9	N/A	5.29	
Eureka Valley Rec Center	1951	17,880	5.8%	90.9	N/A	8.54	
Upper Noe Rec Center	1950	16,447	15.9%	76.3	N/A	5.69	
GGP -- County Fair Building/Hall Of Flowers	1961	23,477	31.0%	76.1	N/A	6.68	
St. Mary's Rec Center and Playground	1949	23,307	27.4%	65.7	N/A	5.62	
Tenderloin Rec Center	1995	10,133	2.6%	64.8	N/A	4.58	
Palega Rec Center	1928	18,397	-7.8%	57.3	N/A	3.61	
Bernal Heights Rec Center	1932	5,008	0.6%	56.1	N/A	4.49	
Sunset Rec Center	1940	16,424	1.5%	51.3	N/A	2.65	
Mission Rec Center / Mission Arts Center	1984	30,850	-6.7%	50.1	N/A	3.24	
Betty Ann Ong Chinese Rec Center	1951	24,234	4.2%	37.3	N/A	1.97	
GGP -- Model Yacht Clubhouse (3)	1938	3,168	3.1%	31.1	N/A	3.63	
Richmond Rec Center (13)	2000	18,470	-72.4%	21.2	N/A	0.32	
Glen Park Rec Center / Glenridge Nursery School (4)	1934	22,301	N/A	12.5	N/A	0.19	
Swimming Pool - San Francisco Average			9.2%	291.6		26.34	
Hamilton Rec Center and Pool	1953	16,988	40.7%	455.6	N/A	34.74	
Coffman Pool / Herz Clubhouse and Playground	1957	12,289	17.5%	447.9	N/A	41.03	
Charlie Sava Swimming Pool / Larsen Park	1957	12,900	22.9%	433.1	N/A	40.49	
Rossi Swimming Pool and Playground	1958	15,162	4.7%	417.3	N/A	43.41	
Mission Community Pool / Clubhouse	1916	8,500	16.5%	403.2	N/A	42.01	
Martin Luther King Jr Swimming Pool	2001	23,851	-1.0%	247.6	N/A	19.84	
North Beach Swimming Pool/Joe DiMaggio Playground	2004	16,384	-11.7%	230.9	N/A	19.29	
Garfield Pool and Garfield Square Clubhouse	1958	21,160	-13.9%	206.1	N/A	20.33	
Balboa Swimming Pool (4)	1962	19,000	N/A	0.7	N/A	0.00	
Other Recreational Buildings - San Francisco Average			0.0%	201.6		12.02	
GGP -- Murphy Millwright's Cottage	1904	2,960	-19.6%	518.9	N/A	2.47	
SF Zoo	1930	65,739	-1.0%	327.7	N/A	19.02	
GGP -- Beach Chalet and Visitor Center	1925	18,045	8.8%	222.7	N/A	24.69	
GGP -- Music Concourse (14)	1900	5,095	11.1%	139.0	N/A	0.00	
GGP -- Kezar Stadium (14)	1924	5,000	-15.5%	92.2	N/A	0.00	
SFPD Pistol Range	1942	10,000	16.4%	61.7	N/A	1.45	
SFPD Stables	1935	11,800	26.7%	60.0	N/A	5.75	
GGP -- Pioneer Log Cabin (14)	1911	2,256	-6.8%	31.7	N/A	0.00	
GGP -- Bercut Equestrian Field (14)	1930	20,632	16.5%	12.0	N/A	0.00	
GGP -- Dutch Windmill (14)	1902	2,500	-9.9%	11.9	N/A	0.00	
Fay House (14)	1912	4,536	23.3%	1.8	N/A	0.00	

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Service, Repair, and Storage

				60.5										
				0	75	150	225	300	0	10,000	20,000	30,000	40,000	
Corporation Yard / Vehicle Repair - San Francisco Average				4.5%	74.4					2.96				
H. Hetchy-Warnerville Substation/Switchyard (14)		1,835	-11.4%	276.4					N/A	0.00				
Islais Creek - Motor Coach (4) (14)	2013	16,200	N/A	184.9					N/A	0.00				
GGP -- Maintenance Yard and Nursery	1957	43,947	15.3%	183.8					N/A	16.70				
Metro East Facility - LRV	2008	180,000	13.0%	176.6					N/A	1.63				
Cable Car Barn and Power House (13)	1906	83,741	0.1%	145.7					N/A	0.00				
Millbrae Yard		60,045	-3.4%	132.8					N/A	6.96				
Woods Division - Motor Coach	1976	161,719	10.7%	124.1					N/A	8.57				
City Distribution Division		67,500	-0.2%	108.9					N/A	7.51				
Kirkland Division - Motor Coach	1949	9,352	-14.3%	106.3					N/A	3.47				
Cameron Beach (Geneva) Yard - LRV and Streetcar	1984	31,514	2.9%	80.5					N/A	2.43				
Hall of Justice Gas Station	1959	4,360	40.4%	67.1					N/A	3.95				
Sunol Yard		12,095	50.1%	66.4					N/A	3.22				
1399 Marin - Maintenance Facility (14)	1972	25,100	9.9%	61.5					N/A	0.00				
Green Division and Annex - LRV (13)	1977	208,371	19.5%	59.0					N/A	1.41				
Flynn Division - Motor Coach	1941	268,947	-13.5%	58.6					N/A	2.99				
Potrero Division - Trolley Coach	1914	101,510	-1.3%	54.1					N/A	2.97				
Presidio Division - Trolley Coach	1912	158,381	4.6%	46.1					N/A	3.10				
South Forks Maintenance Yard (14)		2,900	-16.7%	40.6					N/A	0.00				
DPW -- Corporation Yard	1949	102,764	10.4%	35.9					N/A	1.59				
Central Shops	1959	80,577	-42.7%	32.9					N/A	2.63				
GGP -- San Francisco Botanical Garden (3)	1955	29,763	-14.9%	18.9					N/A	2.22				
Scott Division	1990	116,144	11.1%	18.8					N/A	0.52				
Bayshore Yard and Shop		255,420	-4.6%	12.8					N/A	0.33				
Other Shops - San Francisco Average				2.4%	26.1					0.98				
ReproMail	1935	10,469	-1.0%	64.1					N/A	1.19				
SFUSD -- Buildings and Grounds	1968	40,000	9.8%	53.0					N/A	3.19				
SFFD - Bureau of Equipment	1918	7,000	-32.4%	36.0					N/A	1.02				
700 Pennsylvania - Maintenance of Way	1947	99,383	3.1%	29.6					N/A	1.21				
Sustainable Streets Division	1999	90,000	0.6%	19.4					N/A	0.56				
1401 Bryant - Overhead Lines	1897	46,000	-6.7%	11.7					N/A	0.06				
Paint Shop and Vehicle Parking (14)	1958	35,021	38.7%	8.5					N/A	0.00				
Warehouses - San Francisco Average				5.4%	16.0					1.89				
SFUSD -- Warehouse/Transportation (8)	1946	132,000	-14.5%	18.9					10	0.59				
Burke Avenue Facility - Central Warehouse (4) (13)	1969	103,231	52.3%	18.9					86	0.04				
Brooks Hall (10) (14)	1956	90,000	8.9%	13.4					N/A	0.00				
651 Bryant - Power Utility Services	1954	14,000	-4.8%	13.2					0	0.09				
Streetlight Warehouse (10) (14)	1988	6,400	7.4%	11.5					N/A	0.00				
Oakdale Office/Warehouse (10)		7,800	-6.3%	7.0					N/A	0.13				
Fine Arts Warehouse (14)	1983	27,440	-14.8%	5.2					58	0.00				

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Parking Garages

			7.1		0 5 10 15			0 2,500 5,000 7,500		
Parking Garage (14) - San Francisco Average			-2.9%	7.1						
Sixteenth & Hoff Garage	1996	17,284	-1.7%	12.3	N/A			0.00		
Vallejo Street Garage	1969	62,760	-11.3%	9.5	N/A			0.00		
Portsmouth Square Garage	1962	225,480	1.7%	8.7	N/A			0.00		
SF General Hospital Garage	1996	300,000	1.0%	8.6	N/A			0.00		
Union Square Garage	1941	423,780	-8.5%	8.5	N/A			0.00		
St Mary's Square Parking Garage	1952	245,445	-5.8%	8.2	N/A			0.00		
Performing Arts Garage	1983	209,896	7.0%	7.9	N/A			0.00		
Golden Gateway Garage	1965	226,800	-0.8%	7.8	N/A			0.00		
Fifth & Mission Garage	1957	992,600	-3.0%	7.2	N/A			0.00		
Sutter Stockton Garage	1959	717,970	-5.2%	7.1	N/A			0.00		
Moscone Center Garage	1984	255,444	-3.1%	6.9	N/A			0.00		
Civic Center Garage	1958	355,674	6.3%	6.7	N/A			0.00		
North Beach Garage	2002	82,405	13.5%	6.5	N/A			0.00		
Mission Bartlett Garage	1983	113,759	0.3%	6.5	N/A			0.00		
Japan Center Garage - Fillmore Street Annex	1965	59,308	-0.2%	6.5	N/A			0.00		
Ellis O'Farrell Garage	1964	304,520	-10.0%	5.8	N/A			0.00		
Japan Center Main Garage	1965	237,566	-2.4%	5.4	N/A			0.00		
Music Concourse Garage	2005	300,000	-4.5%	5.0	N/A			0.00		
SFUSD -- 1340 Bush Garage	1969	13,316	-11.2%	4.8	N/A			0.00		
Polk Bush Garage	1993	70,160	-1.4%	4.2	N/A			0.00		
Lombard Street Garage	1988	71,263	-22.2%	4.2	N/A			0.00		

Transportation

			48.1		0 25 50 75 100			0 1,000 2,000 3,000 4,000		
Transit Station (14) - San Francisco Average			-11.4%	48.1						
Castro Station	1972	31,000	-11.8%	59.8	N/A			0.00		
Embarcadero Station (11)	1972	56,000	-0.7%	58.1	N/A			0.00		
Church Station	1972	39,000	-13.3%	49.3	N/A			0.00		
Civic Center Station (11)	1972	53,000	-0.9%	48.1	N/A			0.00		
Powell Station (11)	1972	59,000	-14.5%	46.6	N/A			0.00		
Montgomery Station (11)	1972	57,000	1.7%	45.2	N/A			0.00		
Van Ness Station	1972	42,000	-13.0%	40.8	N/A			0.00		
Forest Hill Station	1918	26,000	-53.9%	32.4	N/A			0.00		

			90.9		0 25 50 75 100			0 500,000 1,000,000 1,500,000		
Airport (15) (16) - San Francisco Average			-1.9%	90.9						
San Francisco International Airport	1954	15,654,508	-1.9%	90.9	N/A			2.69		

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Buildings with Incomplete Meter Data

Buildings with Incomplete Meter Data (13) - San Francisco Average				74.3		1.74	
SFPD Building 606 Crime Lab (12)(14)	1986	56,325	1.9%	130.4	N/A	0.00	
George Washington High (13)	1936	228,800	63.3%	63.4	68	6.08	
Presidio CDC	1985	19,170	4.7%	56.9	N/A	6.65	
Mission Bay Branch Library	2006	7,500	7.4%	51.6	N/A	0.00	
Potrero Branch Library	1951	5,428	0.8%	44.0	N/A	0.19	
Visitacion Valley CDC	1998	1,753	49.8%	38.4	N/A	0.00	
25 Van Ness Ave	1913	157,056	-8.4%	37.0	63	0.12	
District Attorney's Office	1906	17,625	-2.8%	35.2	N/A	0.00	
Workforce Development Service Center	1947	2,465	38.6%	28.2	N/A	0.00	
Gene Friend Rec Center @ SDMA	1989	16,354	11.5%	27.4	N/A	0.00	
New School/SF International High (former Intl Studies Academy)	1971	108,400	-47.1%	22.0	73	0.73	
Fire Station 14	1973	15,900	-20.9%	19.7	N/A	0.09	
Fire Station 28 (13)	1967	9,350	-61.8%	18.0	N/A	-0.16	
Potrero Hill Rec Center	1950	18,805	-65.3%	16.4	N/A	0.21	
Western Addition Community Technology Center	1991	4,500	-56.9%	14.9	N/A	0.00	
Log Cabin Ranch Youth Guidance	1953	80,758	-4.7%	13.2	N/A	0.00	
Library - 750 Brannan St (17)	1963	24,173	N/A	12.2	N/A	0.00	
Ella Hill Hutch Community Center	1980	22,300	-28.9%	10.5	N/A	0.00	
New Traditions Elementary	1924	26,300	-46.7%	10.0	36	0.00	
Camp Ida Smith		1,200	-6.3%	9.5	N/A	0.00	
Commodore Stockton CDC	1924	21,255	-5.4%	8.7	N/A	0.00	
Redwood Center	1939	11,000	-16.1%	6.1	N/A	0.00	

Buildings of Unknown Size

Camp							
Pollution Control, Bayside (former Asphalt Plant)				N/A	N/A	N/A	
Camp Mather				N/A	N/A	N/A	

Water and Wastewater Treatment Buildings

Wastewater Treatment (18)				0	500	1000	1500	2000		0	50,000	100,000	150,000
Oceanside Water Pollution Control Plant	1993	49,000		1946.1					N/A	N/A			
Southeast Water Pollution Control Plant	1951	524,593		237.1					N/A	N/A			
North Point Wet Weather Facility	1951	89,600		22.2					N/A	N/A			
Water Treatment (18)													
San Antonio Pump Station / Sunol WTP		51,202		582.1					N/A	N/A			
Harry Tracy Water Filtration		38,870		558.9					N/A	N/A			
Rock River Lime Facility		2,040		243.8					N/A	N/A			
Pulgas Dechloramination Facility		8,000		236.5					N/A	N/A			

Putting the Results into Context

As noted earlier in the report, San Francisco municipal benchmarked facilities showed similar annual EUI (-1% vs. 2017) and a modest reduction in carbon footprint (-0.5%) compared to 2017. These statistics are exclusive of the airport's energy usage which saw a 1.9% decrease, and 3.5% reduction in carbon footprint. The most significant contributing factor to this year's carbon footprint reduction was a 0.4% drop in natural gas EUI, with emergency centers, police stations, and medical clinics showing the greatest changes. Although not a large portion of San Francisco's energy mix, steam EUI also decreased by 2.7%.

Notably, electricity usage continued to decline, falling 1.4% compared to 2017. These results suggest that energy efficiency efforts focused on this fuel type continue to provide benefits, but that future efforts focused on reducing natural gas usage will have the most impact on reducing carbon emissions.

The findings of this report provide ample opportunity to target and optimize high-consuming facilities in 2017, putting San Francisco on track towards a greener future. While every effort has been made to ensure that the information contained in this report is complete, accurate, and up-to-date, readers should be aware that irreconcilable meter data and/or changes in a building's occupancy or primary use may skew their respective results.

In response to natural gas being the primary contributor to greenhouse gas emissions from San Francisco buildings, the Board of Supervisors introduced an ordinance in September 2019, requiring new construction and major renovations of all municipal buildings to exclude natural gas sources and rely fully on electricity. As a complement to the ordinance, the SFPUC's Fuel Switching Project, spearheaded by SFPUC Power's Distributed Energy Resources (DER) team, aims to reduce San Francisco's environmental footprint for many years to come by supporting projects that transition natural gas-reliant building systems to electricity.

To accomplish this goal, the SFPUC has been providing engineering design and contracting services to replace natural gas heating systems with all-electric heat pump and/or variable refrigerant flow (VRF) systems, mainly at SFUSD locations and small commercial facilities. These new systems will be powered by GHG-free Hetch Hetchy hydroelectricity, further reducing San Francisco's emissions.

The Laguna Honda Hospital Boiler Replacement Project, for example, involved the replacement of an obsolete boiler with smaller boilers and an all-electric hot water system. Based on the energy audit conducted at this site, the project will realize an estimated annual reduction of 141,369 therms. (That's 1,654,017 pounds of CO₂ eliminated each year!) Besides the projected financial savings, these improvements will serve to both increase efficiency overall, and shift a significant portion of their energy source from natural gas to greenhouse gas-free Hetch Hetchy electricity.

APPENDIX A:

Key to Benchmarking Notes

- (1) Adjacent facilities combined for benchmarking, due to shared mechanical systems.
- (2) Bill Graham Civic Auditorium and DPH Central Office receive steam from the Civic Center steam loop that is unmetered at individual facility level. For purposes of this report, the metered use at the steam loop is apportioned based on each building's square footage, but may be over reported here due to leaks and other losses in the steam loop itself.
- (3) Facilities in Golden Gate Park, in cases where electrical meters specific to the facility cannot be located.
- (4) This location was under construction or vacant for an extended period of time during a portion of calendar years 2017 and/or 2018.
- (5) Not qualified for ENERGY STAR rating, due to small size.
- (6) Not qualified for ENERGY STAR rating for hospitals. As a long-term care facility, Laguna Honda Hospital is not eligible for the hospital category.
- (7) Not qualified for ENERGY STAR rating, due to more than 10% of the mixed-use facility being classified as "Other" space type.
- (8) Facility operations data required for ENERGY STAR rating is unavailable at time of report publication.
- (9) The ENERGY STAR rating of the Moccasin Administration Building assumes on-site energy generation. Located at the site of the SFPUC's Moccasin Powerhouse in Moccasin, California, the all-electric facility obtains its energy from hydropower resources in the immediate vicinity. Therefore, the conversion and transmission losses of a typical building are not applicable.
- (10) Not qualified for ENERGY STAR rating, due to lack of full-time occupants.



- (11) The square footage and energy use listed for these shared stations represents the Muni portion only, excluding BART.
- (12) Annual propane use at this site unknown.
- (13) Irregular natural gas use. Some or all natural gas use data is unknown, missing, or gas meter readings may be inaccurate.
- (14) Buildings with no gas services.
- (15) Represents the entirety of all electric and gas data including Airport tenants' usage.
- (16) A significant portion of the Airport is in operation 24 hours per day.
- (17) Newly reported municipal building as of late 2017 or 2018.
- (18) Corresponding EUIs for these building categories are relative to energy use only (EUIs for these facility types is more typically expressed as a function of water use).

Photograph Information and Sources

Cover Page: 1 South Van Ness building *(Photo Credit: Robin Scheswohl/SFPUC)*

Page 4: The SFPUC is responsible for the installation, maintenance and operation of the City's municipal solar installations like the one at City Hall.
(Photo Credit: Robin Scheswohl/SFPUC)

Page 6: The SFPUC headquarters, a LEED-Platinum building, is located at 525 Golden Gate Avenue in San Francisco's Civic Center.
(Photo Credit: Carmen Magana)

Page 10: One of 27 solar facilities owned and operated by the SFPUC, San Francisco International Airport's solar array is located at Terminal 3.
(Photo Credit: Katherine Du Tiel)

Page 30: Power Enterprise's Utility Field Services crew (L-R: Matt Greco, Hieu Doan, Cillian O'Donnell, Daniel Bandana, O.J. Jarvis, Ian Anonuevo, Andy Tang, David Gonzalez) on site at the War Memorial Opera House. *(Photo Credit: Robin Scheswohl/SFPUC)*



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