2011 ENERGY BENCHMARKING REPORT

San Francisco Municipal Buildings

October 2012

San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

This material is based upon work supported by an Energy Efficiency and Conservation Block Grant from the U.S. Department of Energy under Award Number DE-EE0000879.

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Cover Photo: 25 Van Ness Avenue. Built in 1913.

25 Van Ness used 16% less energy in calendar year 2011 compared to the previous year. Among San Francisco's 26 office buildings, 25 Van Ness had the sixth lowest Energy Use Intensity and performed better than 72 percent of office buildings nationwide. (Owner: Real Estate Division)

Acknowledgements

Gathering the information necessary to complete this report involved contributions of time and expertise by numerous people. As this report marks the first time that the City and County of San Francisco has publicly disclosed the relative energy consumption of its buildings, a great deal of care went into ensuring that the facility data was as complete and accurate as possible.

Special thanks goes to Darryl Dunn of SFPUC Power Enterprise and Sachiko Tanikawa of the Department of the Environment for indispensable help with this project. Thanks also to staff from Austin Energy and the City of Los Angeles Department of General Services for sharing valuable early lessons from municipal benchmarking efforts.

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Executive Summary

Background

This report details the energy performance of over 300 of San Francisco's municipal facilities during calendar year 2011, including more than 37 million square feet of building area.

In February 2011, the San Francisco Existing Commercial Buildings Energy Performance Ordinance was approved by the Board of Supervisors and signed by Mayor Edwin M. Lee. The 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 about its own operations. By compiling the data in this report for the first time and releasing it publicly, the City hopes individual departments obtain a fresh perspective on their own facilities, in order to track energy performance successes and help focus attention and resources on buildings that may benefit the most from energy-related improvements.

Key Findings

Comparison by Building Type: The **detailed charts in this report** give a rich amount of information about each location, organized by facility type. For each facility type, the reader can see the individual facilities ranked in descending order of Energy Use Intensity (EUI), an indication of each facility's annual carbon footprint, and a profile of what times of year are most (and least) energy intensive. Summary charts also provide new insights into the average energy intensity of each municipal facility type.

ENERGY STAR Ratings: Since the ENERGY STAR rating system is designed for commercial building types, only 10% of San Francisco's municipal facilities are building types eligible for a rating. Of the 30 municipal facilities eligible for a rating, **over three quarters performed equal to or better than the national median** for similar buildings. Only 2 out of 30 facilities ranked in the bottom 25% compared to their national peers. Eleven rating-eligible facilities performed in the top 25% nationwide, the threshold for the ENERGY STAR label.

Comparison to Prior Year: Year-to-year comparisons for the City's portfolio of buildings are imperfect, since the occupancy of some buildings fluctuates due to renovations and changes in use. Nevertheless, the overall **EUI of the benchmarked facilities improved 3.8% from 2010** and 1.1% compared to 2009. The average 2011 **carbon footprint of the benchmarked facilities improved 5.3% from 2010** and 2.3% compared to 2009.

Making Use of the Results

The findings in this report suggest that the City and County of San Francisco performed well in 2011. However, the energy benchmarking results here are just a first step. The wide variation in energy performance within most facility types suggests there are numerous opportunities for improvement.

This report represents an expansion of existing efforts by the San Francisco Public Utilities Commission and other departments to track and improve the energy efficiency of municipal buildings. The SFPUC offers a range of energy efficiency services such as energy audits and green building commissioning that can identify technical deficiencies and recommend operations and maintenance improvements. The role of building occupants in using energy wisely is also crucial.

Developing this report for the first time was a major undertaking supported by numerous departments. City departments should look in more detail at facilities that appear as outliers in the data and provide data improvements where necessary. The SFPUC is hopeful that the format of this report provides value to City departments and the general public, and welcomes suggestions about how to improve this report in future years.

Introduction

The City and County of San Francisco is strongly committed to reducing its impact on the environment and its contributions to climate change. Through key policy documents including the Climate Action Plan and the 2011 Updated Electricity Resource Plan, the City has laid out strategies to achieve its ambitious greenhouse gas (GHG) reduction goals.

One of the actions the City is taking in support of those commitments is to reduce the energy consumption of public buildings. San Francisco's public buildings are fortunate to obtain their electricity from GHG-free sources, primarily the City's Hetch Hetchy Power system. However, responsible use of this public resource demands that the City make the most efficient use of this energy. Also, these buildings consume natural gas and steam, which contribute 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 while also improving the indoor environment for building occupants. Additionally, as public facilities are built or undergo major renovations, they must meet the energy performance and LEED Gold standards of the City's Green Building Ordinance.

However, 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, amending the Environment Code. 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 24 departments 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 related to government operations.

The information in this report is just a first step. Together with the more detailed information gained from energy audits and the in-depth knowledge of building owners and occupants, this report will help City departments target resources to locations that could benefit the most from energy-related improvements.

Photo: Chinatown Public Health Center. Built in 1967.

The Chinatown Public Health Center used 27% less energy in calendar year 2011 compared to the previous year. The facility had the third lowest Energy Use Intensity of the City's nine health clinics. The SFPUC retrofitted the Health Center's lighting and heating systems in late 2010 and early 2011. (Owner: Department of Public Health)

San Francisco's Approach to Benchmarking

In 2011, San Francisco joined a growing number of cities that have recently adopted ordinances requiring building owners to benchmark and publicly disclose the energy performance of their facilities each year. Energy benchmarking is simply a way to track the performance of a building over time and to compare a building to other similar structures, in order to help identify opportunities for improvement.

While the concept is simple, the undertaking of performing this process for the first time for San Francisco's hundreds of municipal buildings was relatively complex. As the City's public electricity provider, the SFPUC opted to coordinate the required data gathering effort and publish a consolidated annual report for all City departments. Beginning with outreach in the fall of 2011 through the City's Climate Action Plan framework, SFPUC staff worked with representatives of 24 different departments to gather and verify the facility data necessary for this report.

This report includes more facilities than required by the ordinance. Although the ordinance only requires benchmarking buildings larger than 10,000 square feet, this municipal report includes buildings of smaller size where a meaningful benchmark could be established. The smallest buildings—park restrooms and kiosks, for example—are excluded. Also, 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, Portfolio Manager (and the associated ENERGY STAR rating system) is an excellent way for eligible buildings to see how they stack up against their local and national peers. Eligible buildings can receive a 1-100 score (with 50 being the median and 100 the best) that compares a structure to similar buildings nationwide.

However, for municipal buildings, the ENERGY STAR rating system only applies for a minority of building types (representing approximately 10% of San Francisco's municipal facilities). The bulk of the City's municipal buildings—the libraries, fire stations, museums, recreation centers, etc.—instead are benchmarked in this report based on on-site Energy Use Intensity (EUI), which 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 efficiency.

Another decision was 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. Portfolio Manager recommends an average site-source ratio of 3.34 to account for these losses. However, the SFPUC's Hetch Hetchy Power system and some local distributed generation provide 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 (with the exception of ENERGY STAR ratings) are based on site energy use.

It is important to point out that this benchmarking report is a new step, but is only an expansion of many existing efforts to track and report the energy efficiency of the City's buildings. Some City departments (e.g. the

Real Estate Division and the California Academy of Sciences) were already using Portfolio Manager to benchmark specific facilities, prior to the requirements of the new ordinance. Also, the SFPUC has distributed quarterly Energy Usage Reports to every department for several years, giving departments regular information about fluctuations in energy use for each of their sites. The SFPUC and other departments have also annually contributed energy data for every City facility as part of the Climate Action Plan process coordinated by the Department of the Environment.

It is the hope of the SFPUC that the format of this report will be helpful to City departments and other readers, as a way 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 begin to release their own energy performance data, the SFPUC will look for ways to further refine its benchmarking methodology in order 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.

San Francisco municipal facility types **eligible** for ENERGY STAR rating:

- Mental Health Center (Medical Office)
- Hospital
- General Office
- Warehouse
- Wastewater Treatment Plant

San Francisco municipal facility types **not eligible** for rating:

- Convention Center
- Performance Hall
- Art/Cultural Center
- Museum
- Childcare / Teen Center
- College / Adult Education
- Library
- Homeless Service
- Medical Clinic
- Veterinarian
- Parking Garage
- Fire Station
- Police Station
- Emergency Center
- Jail / Correctional
- Clubhouse
- Recreation Center
- Swimming Pool
- Camp
- Other Recreational Building
- Corporation Yard / Vehicle Repair
- Other Shop
- Transit Station
- Airport

Energy Use in San Francisco's Municipal Buildings

Information Sources and Assumptions

Creating an accurate energy performance benchmark of all of San Francisco's municipal facilities required consolidating information from a variety of sources.

Energy data: Nearly all of the energy use data (electricity, natural gas, and steam) already existed in a central location in the SFPUC Power Enterprise's energy accounting database, which contains metered monthly usage for all utility meters where billing is managed by the SFPUC.

Some additional natural gas data was obtained from the Airport for meters where the airport pays PG&E for natural gas directly. Natural gas usage for a small number of other gas meters was obtained from PG&E, in rare cases where the site pays PG&E directly for natural gas use. There are twelve facilities where a portion of energy use records are missing. These are listed separately at the end of the report.[1]

Facility data: Accurate facility data is just as important as accurate energy use data, in order to reliably benchmark a building. The SFPUC and other City departments engaged in a thorough verification process to review available building and operations data and supply additional detail for the benchmarking effort. For a full description of this process, see the inset on page 12.

This report generally refers to "facilities" rather than "buildings", because in many cases there are energy meters shared by multiple buildings at one location. These locations are benchmarked as **campuses**. For instance, the Airport is listed as one facility, but contains 70 individual buildings. San Francisco General Hospital is benchmarked as a single facility but is actually a campus of more than 15 individual buildings. Similarly, Moscone Center North and South are considered as a campus due to their shared mechanical systems, as are the War Memorial Veterans Building and Opera House.

In some cases, municipal facilities contain more than one space type. For instance, the Hall of Justice is a **mixed-use facility** that contains offices, a courthouse, and jail areas. Where this information 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** connected to buildings. Where attached parking would affect the ENERGY STAR rating, this data was entered into Portfolio Manager as an additional space type. However, it is important to note that the EUI calculations in this report include parking *garage* area as part of a facility's square footage, which in most cases decreases the EUI of a building due to the lower energy intensity of a typical parking garage. Parking *lots* are not included in the EUI calculations.

Civic Center steam loop: Three buildings on San Francisco's historic Civic Center obtain steam from the NRG Energy Center steam loop but do not have individual steam meters: Bill Graham Civic Auditorium, the DPH Central Office at 101 Grove, and City Hall.[2] As a way to allocate steam use to generate an estimated EUI for these buildings, Civic Center steam use was apportioned to these three buildings based on their square footage. However, these buildings are not eligible for an ENERGY STAR rating in the absence of accurate steam meter data.

Snapshot of Energy Use

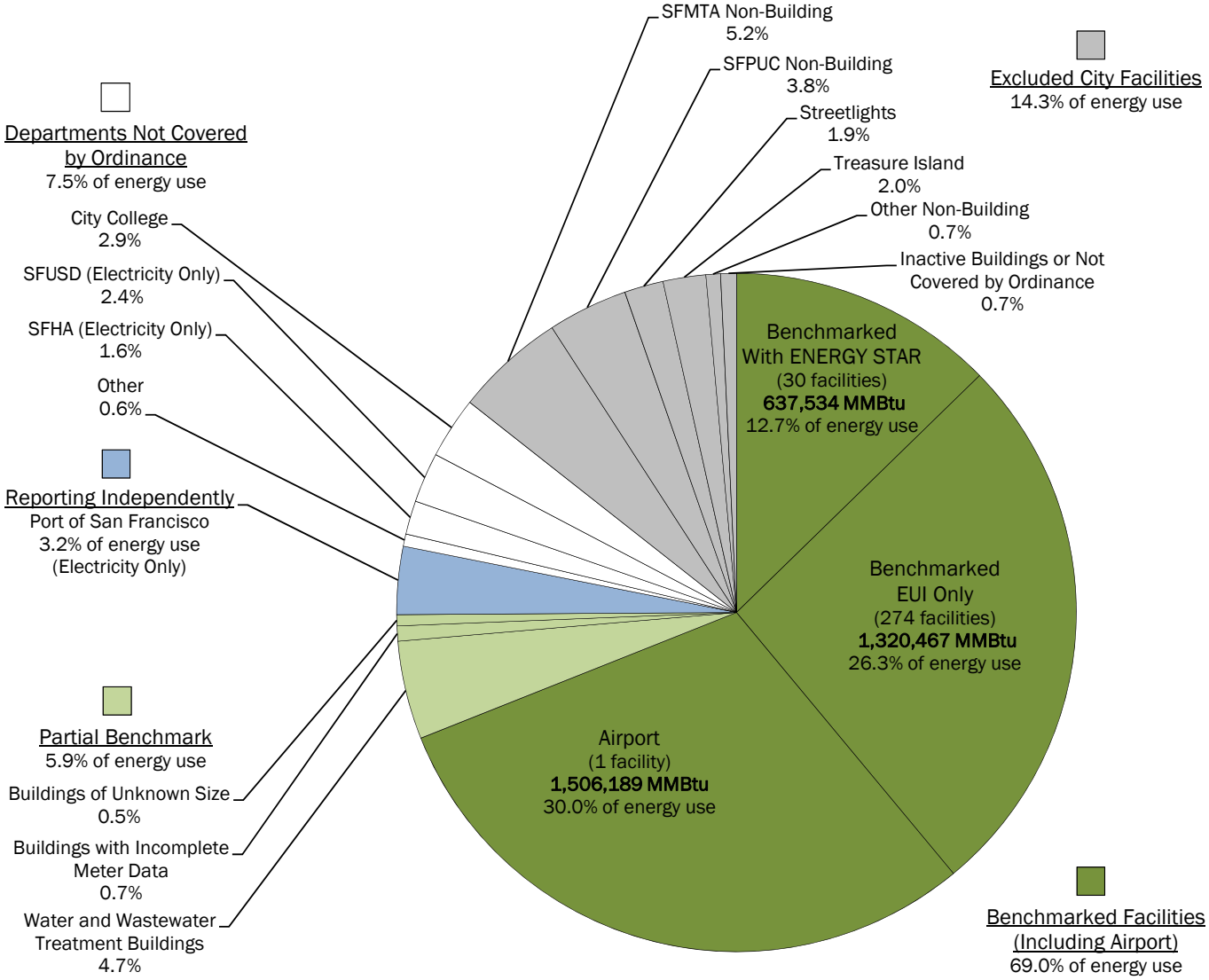
In calendar year 2011, the overall Energy Use Intensity (EUI) of the 304 benchmarked facilities (excluding the Airport) was 90.81 kBtu of on-site

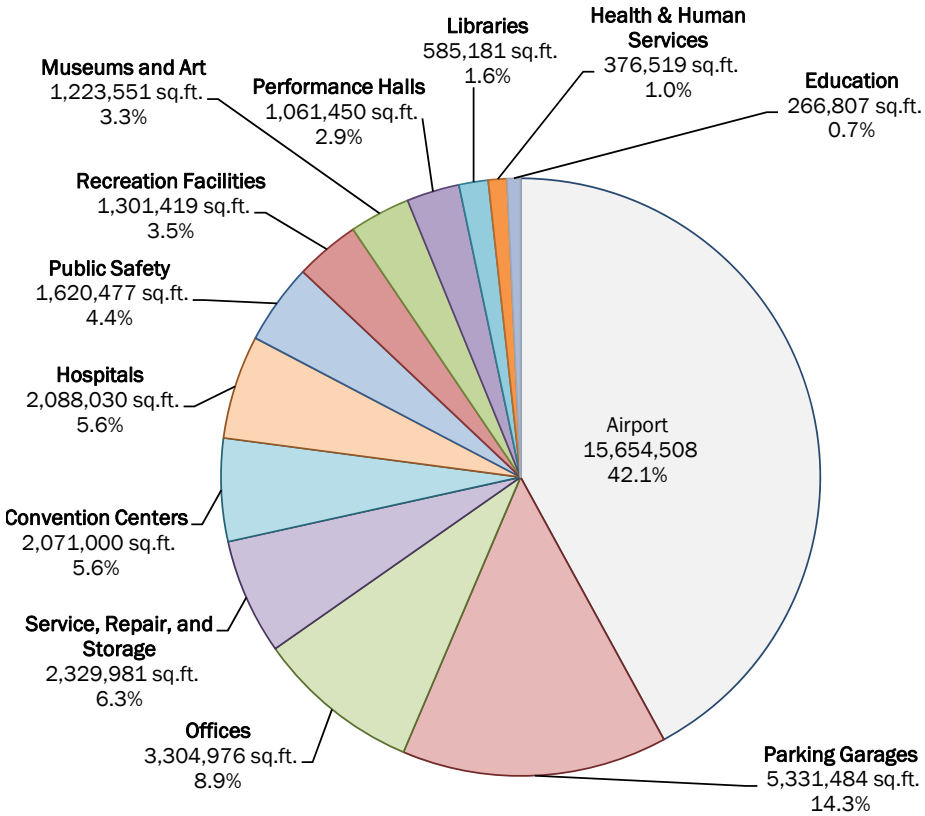
[1] Excluded from this report are any amounts of fuel oil that may be burned in several dual-fuel boilers, to ensure readiness in case of a natural gas curtailment event.

[2] A steam sub-meter was installed at the end of 2011 at City Hall. Twelve months of data are required for an ENERGY STAR rating.

Energy Use in Municipal Facilities: Calendar Year 2011

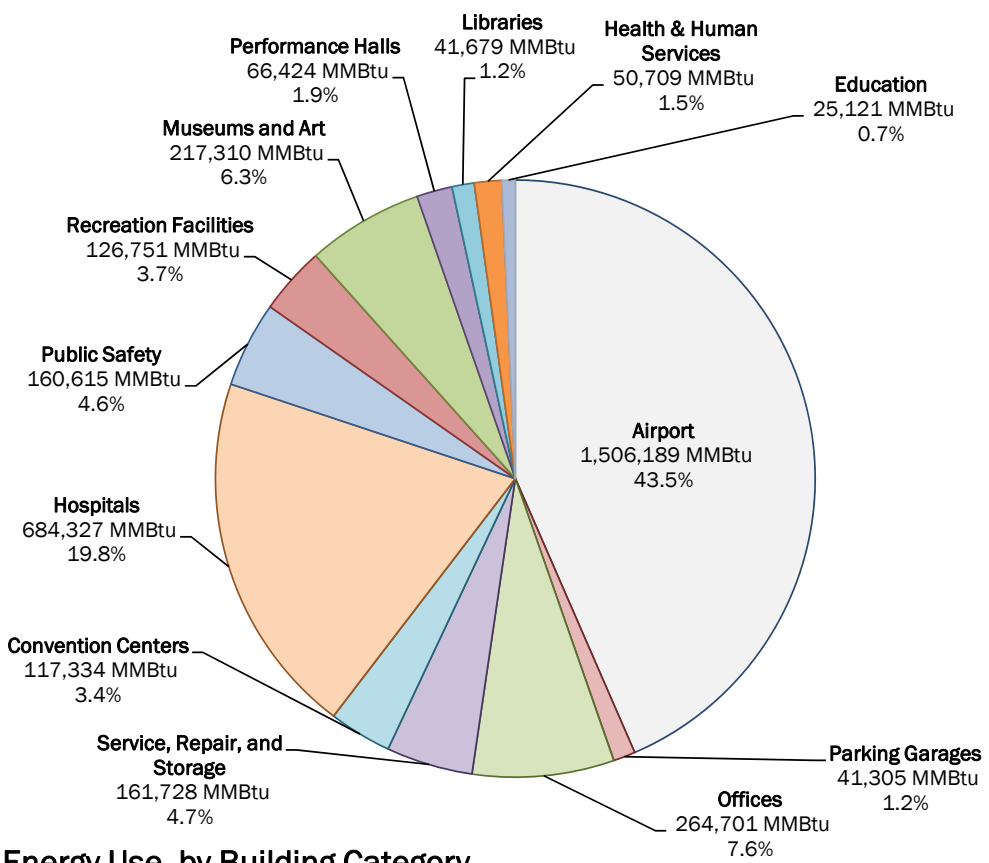
The buildings benchmarked in this report represent 69% of the electricity, natural gas, and district steam used in San Francisco's municipal facilities in calendar year 2011. Shown in dark green, these 305 facilities (including San Francisco International Airport) used a total of 3,464,191 MMBtu of on-site energy. This report also provides partial benchmark results for an additional 5.9% of municipal facility energy use, though these facilities cannot be properly benchmarked on a per-square-foot basis. 25% of the on-site energy used in municipal facilities is excluded from this report, as indicated. [Note that the figures for the School District (SFUSD), Housing Authority (SFHA), and Port are partial totals that exclude non-SFPUC energy such as natural gas.]





Square Footage, by Building Category

(Total Benchmarked Building Area = 37,215,383 sq ft)



Energy Use, by Building Category

(Calendar Year 2011 Benchmarked Energy Use = 3,464,191 MMBtu)

energy per square foot of building area.[3] This was an improvement of 3.85% from the 2010 EUI of 94.45, though this overall year-to-year comparison does not fully take into account buildings under renovation or experiencing other changes of use that could affect their energy use.[4]

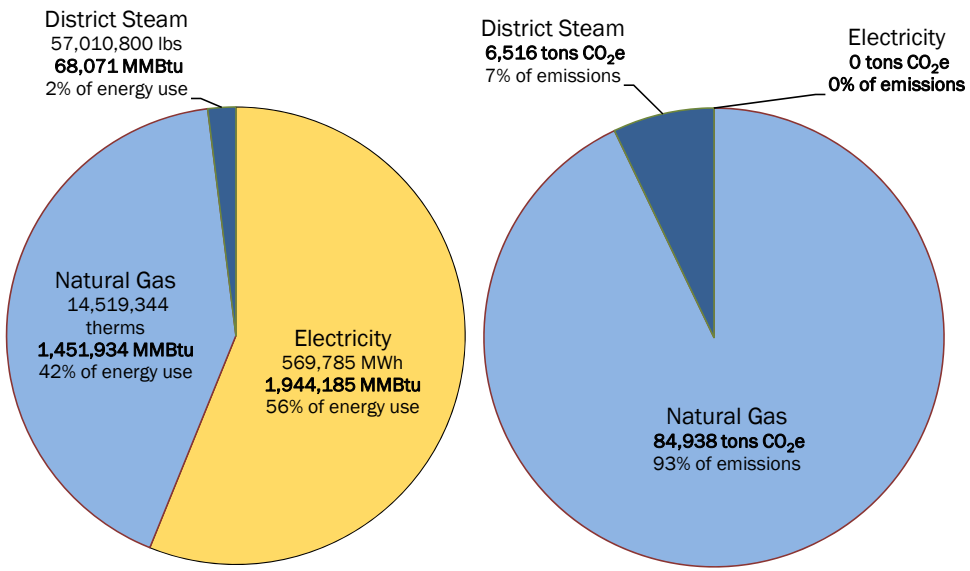
Tracking energy use in relation to building square footage reveals some interesting results about different categories of facilities. Comparing the two charts above, it is quickly apparent that some building types consume energy out of proportion to their size. For instance, while the two hospitals make up only 5.6% of the square footage of benchmarked buildings, they consumed almost 20% of the total benchmarked energy in 2011 (average EUI of 327.7). This is partly due to the hospitals' operating hours and intensity of use. On the other hand, parking garages (which are unheated) make up 14.3% of benchmarked square footage but used only 1.2% of the year's benchmarked energy use (average EUI of only 7.7). Museums have a higher than average EUI, while convention centers and

[3] 2011 and 2010 overall EUI comparison excludes data for the Airport, for which some natural gas data prior to 2011 is not available to the SFPUC.

[4] Additionally, the site EUI figures shown in this report are not weather normalized to account for year-to-year fluctuations in the number of heating and cooling degree days. The ENERGY STAR ratings, where available, are weather normalized.

performance halls are somewhat less energy intensive (possibly because of their more intermittent use). Average 2011 EUI figures for all building types can be found in the next section of this report.

Municipal facilities use GHG-free SFPUC electricity, natural gas supplied by either PG&E or the California Department of General Services (as an aggregator), and steam supplied by NRG. To compare these forms of on-site energy use, units have been converted throughout this report to British thermal units (Btu) of energy.[5] The charts below show the different energy sources used at the 304 benchmarked facilities plus the Airport, as well as the total associated greenhouse gas emissions.[6]



Energy Use and Emissions, by Fuel Type
(Calendar Year 2011 Benchmarked Energy Use = 3,464,191 MMBtu)

[5] Conversion factors are those referenced by EPA's ENERGY STAR Portfolio Manager: (1 kBtu = 3.412 kWh of electricity = 100 therms of natural gas = 1.194 lbs of district steam). 1 MMBtu = 1,000 kBtu = 1,000,000 Btu.

[6] SFPUC electricity GHG emissions are zero for 2011. Natural gas and district steam emissions are derived from national averages cited by ENERGY STAR (11.7 lbs CO_2e per therm of natural gas; 0.2286 lbs CO_2e per pound of steam).

Sources and Verification of Facility Data

To develop a list of facilities affected by the Energy Performance Ordinance, SFPUC staff began with a list of over 1,000 individually metered municipal facilities in the Power Enterprise energy accounting database, and cross-referenced this data with databases of owned and leased facilities maintained by the City's Real Estate Division and Capital Planning Committee.

Next, the SFPUC screened out facilities owned by agencies not covered by the ordinance, such as the School District, Housing Authority, and City College. The Port of San Francisco, which maintains its own facility records and natural gas use data, will be independently reporting its energy performance data to the public on an annual basis.

Of the 90 facility categories in the database, those that did not meet the definition of "building" were also screened out. These included bridges, bus stops, fire pumps, sirens, street lights, traffic signals, water pumps, etc. While extremely small buildings such as park restrooms and kiosks were excluded from the report, numerous other buildings smaller than the ordinance's 10,000 square foot threshold were included where they provided a meaningful comparison to other buildings.

To maximize the accuracy of the resulting facility list, as well as building sizes and operating characteristics, the SFPUC displayed all known facility data in a web-based survey tool and asked each department to verify its list of facilities. The SFPUC also supplied a list of meters associated with each facility, for each department to correct meter matchups if necessary.

Representatives from all 24 affected departments verified the data and provided corrections and missing information. Data verified through this process included building square footage, number of building occupants, operating hours, year built (and renovated), and other ENERGY STAR facility characteristics depending on building type.

The SFPUC and other Departments were able to verify most facility data. Square footage information and partial meter data from a small fraction of relevant facilities is still unknown. A "partial benchmark" of those facilities is included in this report, and an effort will be made to obtain the missing data in future years.

2011 Energy Benchmarking Results

Energy Use Intensity (EUI) for all Facilities

As described previously in this report, the primary method of benchmarking the City's facilities in this report is to compare the on-site annual Energy Use Intensity (EUI) of each facility to other municipal facilities of the same type. By listing the facilities of each type in descending order of EUI, the reader can quickly see which facilities consumed the most energy per square foot, and which consumed the least. While the charts on the right-hand side of pages 16-27 show the *total* energy use for each facility, the primary comparison should be on a per-square-foot basis.

This EUI comparison is extremely helpful, but not perfect. The wide variation in energy performance within many facility types indicates the potential for energy efficiency retrofit projects to improve low performers. However, each department should look in more detail at the list of its buildings to help interpret the results. Some facility types are particularly susceptible to having complex energy meter arrangements that do not always correspond to discrete buildings (e.g. locations in Golden Gate Park and other Recreation & Park clubhouses and playgrounds), which means energy use for some facilities may include energy use from adjacent areas as well.

To help track changes in energy use over time, a comparison is included to calendar year 2010 EUI at each site. This comparison is also not perfect, as it is not normalized to account for annual fluctuations in weather, but does provide some interesting results. Note that in cases where a facility was vacant or under construction for an extended period of time during 2010 or 2011, a year-to-year comparison is not included.

ENERGY STAR Ratings

Since the ENERGY STAR rating system was developed primarily for commercial buildings, most of the municipal buildings in San Francisco are building types that are not eligible for a 1-100 rating. However, of the 305 municipal facilities benchmarked in this report, 30 of them do have building characteristics that make them eligible to receive an ENERGY STAR rating. The SFPUC entered all data for those 30 facilities into the EPA's Portfolio Manager system, which generated 1-100 ratings that allow a comparison to national averages. Unlike the EUI data, these ratings take into account local climate and weather conditions, as well as building characteristics such as weekly operating hours and number of occupants.

In general, five types of San Francisco municipal facilities fall into a category eligible for an ENERGY STAR rating: Office buildings, Hospitals, Mental Health Centers (Medical Office), Warehouses, and Wastewater Treatment Plants. Of the facilities in appropriate categories, some did not qualify for a rating because they did not meet ENERGY STAR's minimum operating thresholds (for instance, the buildings were too small or did not have any full-time occupants). The ratings for these non-qualifying facilities are listed as "N.Q." along with explanations. Finally, the City's wastewater treatment plants are not rated in this report, as ENERGY STAR's methodology for rating these facilities requires more detailed monthly operations data than was available at the publication time of this report. These facilities will be rated in future years.

San Francisco Facilities in ENERGY STAR Categories: Comparison to National Median Rating

	Number of Facilities	Percentage of Rated Facilities
Top 25% (76-100 rating)	11	36.7%
2nd Quarter (51-75 rating)	11	36.7%
Median (50 rating)	1	3.3%
3rd Quarter (26-49 rating)	5	16.7%
Bottom 25% (1-25 rating)	2	6.7%
TOTAL	**30**	**100%**

As can be seen in the chart above, 11 of the 30 rating-eligible facilities scored in the top 25% of similar buildings nationwide, and therefore

appear qualified to receive the ENERGY STAR label.[7] Over three quarters of rating-eligible San Francisco facilities performed equal to or better than the national median for similar buildings. Only two facilities were rated in the bottom 25% compared to similar buildings nationwide. Individual ratings for all 30 of these facilities can be seen in the charts on the following pages, grouped by facility type. The top 11 facilities are listed individually to the right side of this page.

Carbon Footprint

To provide an additional point of comparison, the report shows the estimated carbon footprint of each facility for calendar year 2011. This information is provided to help City departments understand which facilities contributed more to the department's annual emissions (on a per square foot basis) and to help integrate this benchmarking report with departments' annual Climate Action Plans. The average 2011 carbon footprint of the benchmarked facilities (6.41 pounds of CO_2 equivalent emissions per square foot) improved 5.3% from 2010 and 2.3% compared to 2009.

One key difference between San Francisco's municipal buildings and their national counterparts is that electricity in 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 used in this report are explained on the next page.

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 or meter information. These facilities are listed separately on the last page of the benchmarking results.

[7] To obtain the ENERGY STAR label, the department that owns the building must have the results validated by a licensed engineer or architect, and submit a formal application to the EPA's ENERGY STAR program.

In addition to these partially benchmarked buildings, there are notes (1) beside the names of some 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. Among these are facilities that are in eligible ENERGY STAR categories, but do not meet the EPA's thresholds for ratings. For a key to these notes, see Appendix A.

The 11 facilities that appear qualified for the **ENERGY STAR label** for calendar year 2011 (subject to validation) are as follows:

Department of Public Health:	**Chinatown Child Development Center** **Mission Mental Health Services**
Department of Public Works:	**1680 Mission St**
Human Services Agency:	**MediCal – 1440 Harrison** **Social Services – 1235 Mission**
Real Estate Division:	**1650 Mission St** **One South Van Ness** **Public Defender's Office**
San Francisco Public Library:	**Library Support Services Building**
SFPUC:	**651 Bryant - Power Utility Services** **Moccasin Administration Building** (11)

How to Interpret Data on the Following Pages

The 2011 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 2011.

General category of building, corresponding to energy use snapshot in previous chapter

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

See Appendix B for a list of department acronyms.

Each facility's 2011 ENERGY STAR rating is shown here. Facilities in the top 25% of similar buildings nationwide are indicated with a green dot. ● Facilities in the bottom 25% are indicated with a red dot. ● "N/A" indicates a facility type not eligible for a rating, or that inadequate information is available. "N.Q." indicates the facility is an eligible category but does not qualify for a rating based on EPA's operating thresholds.

Each facility's estimated 2011 carbon footprint is shown here as pounds of CO_2 equivalent emissions per square foot of building area. For electricity in 2011, GHG emissions associated with SFPUC electricity were zero. Natural gas and district steam emissions are derived from national averages cited by ENERGY STAR (11.7 lbs CO_2e per therm of natural gas; 0.2286 lbs CO_2e per pound of steam).

Facility	Dpt.	Year Built	Year Renov.	Building Area (sq. ft.)	Calendar Year 2011: Monthly Site Energy Use Intensity (EUI)	EUI Change Since 2010	Annual Site EUI (kBtu/sq.ft.)	ENERGY STAR ☆	Carbon Footprint (lbs CO2e / sq.ft.)	Annual Site MMBtu
Health & Human Services							0 100 200 300 400			0 2,500 5,000 7,500 10,000
Medical Clinic - *San Francisco Average*					J F M A M J J A S O N D	*-2.6%*	*130.2*		*10.71*	
Chinatown Public Health Center (Health Center #4)	DPH	1967	2010	22,500		-26.9%	**108.1**	N/A	8.19	
Curry Senior Service Center	DPH	1930	2006	11,195		-8.8%	**106.5**	N/A	11.58	
Mental Health Center - *San Francisco Average*					J F M A M J J A S O N D	*-12.3%*	*32.3*		*1.27*	
South of Market Mental Health Services	DPH	1956	1998	13,000		-12.0%	**40.2**	70	1.38	
Chinatown Child Development Center	DPH	1950	1985	9,250		-54.2%	**30.1**	**78** ●	0.80	

This section includes facility characteristics for each location—facility owner, year built, year renovated, and total building area in square feet.

The fluctuation in monthly EUI is shown throughout the calendar year, to provide a sense of the times of year with highest and lowest energy use.

The change in annual EUI from 2010 to 2011 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 2010 or 2011 (due to renovations or other reasons) are shown as N/A.

District steam shown in dark blue

Natural gas use shown in light blue

Electricity use shown in yellow

2011 Energy Use Intensity (EUI) for each facility, in kBtu of total on-site energy, per square foot of building area

San Francisco's average 2011 EUI for each facility type is provided on the top row here, and also shown as a gray bar for comparison to individual facilities.

Bars shown here indicate total 2011 energy use for each facility, in MMBtu of on-site energy. Note: Chart scales vary for different facility types.

Facility	Dpt.	Year Built	Year Renov.	Building Area (sq. ft.)	Calendar Year 2011: Monthly Site Energy Use Intensity (EUI)	EUI Change Since 2010	Annual Site EUI (kBtu/sq.ft.)	ENERGY STAR	Carbon Footprint (lbs CO2e / sq.ft.)	Annual Site MMBtu
Convention Centers										
Convention Center - *San Francisco Average*					J F M A M J J A S O N D	*-8.5%*	*56.7*		*3.24*	
Moscone Center West	CFD	2002		775,000		-9.5%	**68.7**	N/A	4.07	
Moscone Center North & South (1)	CFD	1981	1992	1,296,000		-7.7%	**49.5**	N/A	2.74	
Performance Halls										
Performance Hall - *San Francisco Average*					J F M A M J J A S O N D	*0.0%*	*62.6*		*5.12*	
War Memorial Veterans Building & Opera House	WMPAC	1932		529,700		2.7%	**78.5**	N/A	5.87	
Davies Symphony Hall / Zellerbach Rehearsal Hall (1)	WMPAC	1980		229,500		-9.9%	**58.1**	N/A	3.21	
Bill Graham Civic Auditorium (on steam loop) (2)	RED	1915	1989	302,250		3.7%	**38.1**	N/A	5.26	
Museums and Art										
Art/Cultural Center - *San Francisco Average*					J F M A M J J A S O N D	*-1.4%*	*40.3*		*3.03*	
GGP – Sharon Arts Studio (3)	RPD	1888	1992	11,376		-0.5%	**88.8**	N/A	10.38	
Randall Museum	RPD	1951		32,030		-0.8%	**78.3**	N/A	6.88	
Harvey Milk Center for the Arts	RPD	1950	2009	23,125		-15.0%	**35.5**	N/A	2.30	
African American Art & Culture Complex (4)	SFAC	1935		34,031		1.9%	**29.5**	N/A	2.12	
SOMArts Cultural Center (4)	SFAC	1906		17,844		-8.6%	**27.9**	N/A	0.60	
Mission Cultural Center for Latino Arts (4)	SFAC	1948		32,230		15.8%	**24.6**	N/A	1.12	
Bayview Opera House (4)	SFAC	1888		14,000		-2.0%	**10.0**	N/A	0.01	
Arts Commission Window Site / Gallery	SFAC	1914		4,163		-8.6%	**6.3**	N/A	0.24	
Museum - *San Francisco Average*					J F M A M J J A S O N D	*2.5%*	*199.6*		*11.00*	
California Palace of the Legion of Honor	FAMSF	1924	1995	117,665		2.8%	**318.6**	N/A	23.00	
Asian Art Museum	AAM	1917	2003	185,000		7.1%	**211.8**	N/A	10.49	
GGP – Conservatory of Flowers (3)	RPD	1879	2003	27,900		1.4%	**209.3**	N/A	24.48	
De Young Museum	FAMSF	2005		292,500		-1.0%	**192.6**	N/A	10.69	
California Academy of Sciences	CAS	2008		426,000		2.9%	**167.5**	N/A	7.38	
Coit Tower	RPD	1933	2012	5,687		-11.9%	**52.2**	N/A	0.00	

Facility	Dpt.	Year Built	Year Renov.	Building Area (sq. ft.)	Calendar Year 2011: Monthly Site Energy Use Intensity (EUI)	EUI Change Since 2010	Annual Site EUI (kBtu/sq.ft.)	ENERGY STAR	Carbon Footprint (lbs CO2e / sq.ft.)	Annual Site MMBtu
Education										
Childcare / Teen Center - *San Francisco Average*					J F M A M J J A S O N D	*23.2%*	*45.8*		*3.85*	
Earl P Mills Community Center	HSA	1971		15,000		19.5%	**77.0**	N/A	6.28	
Sojourner Truth Child Center	HSA	1971		5,184		105.4%	**41.0**	N/A	3.52	
MLK Child Care Center	HSA	1971		7,409		0.4%	**31.8**	N/A	3.13	
Shorey Childrens Center	HSA	1971		9,700		28.1%	**10.7**	N/A	0.80	
College / Adult Education - *San Francisco Average*					J F M A M J J A S O N D	*-11.9%*	*102.0*		*10.07*	
GGP – Senior Center	RPD	1930		5,940		-6.0%	**159.6**	N/A	14.72	
SFPD Academy	SFPD	1966		19,332		-19.1%	**139.8**	N/A	11.45	
Southeast Community Facility and Greenhouses (5)	SFPUC	1986		193,400		-12.3%	**98.2**	N/A	10.13	
Sheriff Community Programs / Five Keys Adult School	SHF	1959		10,842		34.9%	**71.3**	N/A	4.02	
Libraries										
Library - *San Francisco Average*					J F M A M J J A S O N D	*0.1%*	*71.2*		*3.74*	
Ocean View Branch Library	SFPL	2000		4,794		5.7%	**173.3**	N/A	3.35	
West Portal Branch Library	SFPL	1939	2007	8,010		-9.2%	**102.7**	N/A	7.03	
Noe Valley/Sally Brunn Branch Library	SFPL	1916	2008	6,096		-16.0%	**97.3**	N/A	7.46	
Potrero Branch Library	SFPL	1951	2010	5,428		N/A	**89.3**	N/A	6.00	
Western Addition Branch Library	SFPL	1966	2008	8,000		13.4%	**88.0**	N/A	6.50	
Marina Branch Library	SFPL	1954	2007	7,633		-10.2%	**87.2**	N/A	5.17	
Chinatown Him Mark Lai Branch Library	SFPL	1921	1996	17,858		-4.2%	**87.0**	N/A	3.69	
Main Library	SFPL	1996		376,000		-6.8%	**75.3**	N/A	4.03	
Park Branch Library	SFPL	1909	2011	8,060		N/A	**73.9**	N/A	4.29	
Ingleside Branch Library	SFPL	2009		6,100		-8.3%	**71.6**	N/A	4.54	
Richmond/Milton Marks Branch Library	SFPL	1914	2009	13,900		-1.2%	**70.0**	N/A	2.51	
Presidio Branch Library	SFPL	1921	2011	10,205		N/A	**69.4**	N/A	5.70	
Bernal Heights Branch Library	SFPL	1940	2010	8,777		-3.8%	**66.2**	N/A	3.58	
Merced Branch Library	SFPL	1958	2011	5,832		N/A	**61.1**	N/A	3.86	
Portola Branch Library	SFPL	2009		6,427		6.4%	**59.8**	N/A	3.19	
Sunset Branch Library	SFPL	1918	2007	9,434		-0.2%	**56.3**	N/A	1.06	
Anza Branch Library	SFPL	1932	2011	8,222		N/A	**50.5**	N/A	3.09	
Mission Branch Library	SFPL	1916		10,479		-13.5%	**50.3**	N/A	0.98	
Excelsior Branch Library	SFPL	1967	2005	8,322		-12.5%	**47.1**	N/A	2.30	
North Beach Branch Library	SFPL	1959		8,455		15.9%	**42.7**	N/A	2.80	
Glen Park Branch Library	SFPL	2007		7,185		-5.7%	**41.2**	N/A	0.71	
Parkside Branch Library	SFPL	1951	2010	6,822		N/A	**39.3**	N/A	1.70	
Eureka Valley/Harvey Milk Branch Library	SFPL	1961	2009	6,465		-3.6%	**38.2**	N/A	0.99	
Ortega Branch Library	SFPL	2011		9,300		N/A	**31.2**	N/A	1.22	
Visitacion Valley Branch Library	SFPL	2011		9,945		N/A	**21.6**	N/A	0.98	
Golden Gate Valley Branch Library	SFPL	1917	2011	7,432		N/A	**17.4**	N/A	0.69	

Facility	Dpt.	Year Built	Year Renov.	Building Area (sq. ft.)	Calendar Year 2011: Monthly Site Energy Use Intensity (EUI)	EUI Change Since 2010	Annual Site EUI (kBtu/sq.ft.)	ENERGY STAR	Carbon Footprint (lbs CO2e / sq.ft.)	Annual Site MMBtu
Health & Human Services										
Homeless Service - *San Francisco Average*					J F M A M J J A S O N D	*5.9%*	*173.7*		*15.76*	
Multi-Service Center South	HSA	1924		25,600		3.4%	**275.5**	N/A	25.67	
Multi-Service Center North	HSA	1913		37,125		5.4%	**219.8**	N/A	20.19	
Mission Neighborhood Resource Center	HSA	1922		6,500		4.6%	**134.3**	N/A	8.98	
Hamilton Family Shelter	HSA	1966		50,000		11.4%	**92.4**	N/A	8.27	
Medical Clinic - *San Francisco Average*					J F M A M J J A S O N D	*-2.6%*	*130.2*		*10.71*	
Potrero Hill Health Center	DPH	1976	2012	8,000		5.0%	**152.4**	N/A	13.19	
Southeast Health Center	DPH	1979	2012	14,604		31.2%	**151.7**	N/A	9.86	
Ocean Park Health Center (Health Center #5)	DPH	1967	2009	16,247		2.0%	**143.3**	N/A	13.19	
Maxine Hall Health Center (Health Center #2)	DPH	1966	2006	20,590		4.3%	**142.2**	N/A	12.12	
Castro Mission Health Center (Health Center #1)	DPH	1965	2008	15,258		-14.1%	**132.6**	N/A	10.50	
Silver Avenue Health Center (Health Center #3)	DPH	1967	2005	22,950		3.5%	**128.9**	N/A	10.47	
Chinatown Public Health Center (Health Center #4)	DPH	1967	2010	22,500		-26.9%	**108.1**	N/A	8.19	
Curry Senior Service Center	DPH	1930	2006	11,195		-8.8%	**106.5**	N/A	11.58	
San Francisco City Clinic	DPH	1930		8,000		1.0%	**104.9**	N/A	8.01	
Mental Health Center - *San Francisco Average*					J F M A M J J A S O N D	*-12.3%*	*32.3*		*1.27*	
Sunset Mental Health Services	DPH	1949	1972	5,500		-5.7%	**48.5**	72	3.46	
S Van Ness Mental Health / Mission Family Center	DPH	1958		14,700		-3.2%	**48.1**	65	2.49	
South of Market Mental Health Services	DPH	1956	1998	13,000		-12.0%	**40.2**	70	1.38	
Chinatown Child Development Center	DPH	1950	1985	9,250		-54.2%	**30.1**	**78** ●	0.80	
SE Child/Family Therapy Center (6)	DPH	1939	1998	3,000		-4.2%	**26.7**	N.Q.	1.65	
Mission Mental Health Services	DPH	1943	2002	32,000		-10.6%	**25.0**	**92** ●	0.81	
Redwood Center (7)	DPH	1939		11,000		N/A	**18.5**	N.Q.	0.00	
Veterinarian - *San Francisco Average*					J F M A M J J A S O N D	*2.8%*	*305.3*		*28.70*	
Animal Shelter	ACC	1931	1989	29,500		2.8%	**305.3**	N/A	28.70	
Hospitals										
Hospital - *San Francisco Average*					J F M A M J J A S O N D	*-5.5%*	*327.7*		*29.07*	
San Francisco General Hospital	DPH	1915	1976	1,370,904		-1.0%	**378.3**	**10** ●	34.39	
Laguna Honda Hospital (8)	DPH	1930	2010	717,126		N/A	**231.1**	N.Q.	18.89	

Offices

Facility	Dpt.	Year Built	Year Renov.	Building Area (sq. ft.)	Calendar Year 2011: Monthly Site Energy Use Intensity (EUI) (J F M A M J J A S O N D)	EUI Change Since 2010	Annual Site EUI (kBtu/sq.ft.) (0, 50, 100, 150, 200)	ENERGY STAR	Carbon Footprint (lbs CO2e / sq.ft.)	Annual Site MMBtu (0, 30,000, 60,000, 90,000, 120,000)
General Office - *San Francisco Average*						-0.6%	*80.1*		*4.88*	
35/45 Onondaga Building (9)	DPH	1928	1932	8,747		-14.9%	180.0	N.Q.	19.46	
Hall of Justice (10)	RED	1959		700,000		1.9%	155.9	N.Q.	11.97	
Temp Sewer Operations Office (6)	SFPUC	2000		2,500		25.6%	150.0	N.Q.	0.00	
GGP -- McLaren Lodge and Annex	RPD	1896	1950	17,252		-7.2%	112.9	43	6.98	
Sheriff Training Facility	SHF	1963	2002	19,057		10.1%	95.7	16	5.75	
Enforcement Division	SFMTA	1920		8,000		0.0%	89.1	47	3.21	
CHN Headquarters	DPH	1923	1993	60,000		4.0%	87.6	63	6.18	
Women's Resource Center	SHF	1959		5,920		-27.6%	86.0	26	7.08	
30 Van Ness Ave	RED	1965		180,939		-12.5%	83.4	56	3.59	
Human Services Agency Headquarters	HSA	1979		171,385		3.8%	81.0	63	4.08	
1660 Mission St	RED	1990		90,619		-5.9%	80.0	48	3.55	
Investigations -- 160 South Van Ness	HSA	1936	2002	14,219		6.8%	65.4	59	1.62	
Social Services -- 1235 Mission	HSA	1935		124,219		-0.9%	64.1	82	2.50	
Moccasin Administration Building (11)	SFPUC			12,241		71.9%	63.5	93*	0.00	
City Hall (on steam loop) (2)	RED	1915	2000	516,484		-1.9%	62.7	N.Q.	5.25	
1680 Mission St	DPW	1923		41,200		-22.2%	60.8	79	2.77	
MediCal -- 1440 Harrison	HSA	1921		52,200		7.3%	58.5	83	2.24	
Library Support Services Building	SFPL	1925	2001	43,182		-22.0%	58.0	83	3.55	
DPH Central Office (on steam loop) (2)	DPH	1932		119,000		6.1%	58.0	N.Q.	6.23	
SFFD - Headquarters	SFFD	1912	1999	50,000		-2.4%	56.1	73	1.28	
25 Van Ness Ave	RED	1913	1985	130,000		-16.1%	54.1	72	0.30	
One South Van Ness (OSVN)	RED	1959	1989	655,000		7.4%	45.4	86	1.09	
Seneca First Stop Visit Cntr/Workforce Development	HSA	1947		8,100		N/A	40.5	67	1.51	
Airport Reprographics	SFO	1967		6,000		3.9%	38.0	50	1.04	
1650 Mission St	RED	1983		216,712		-9.8%	37.4	96	1.08	
Public Defender's Office	RED	1985		52,000		-1.3%	36.6	84	0.09	

Parking Garages

Facility	Dpt.	Year Built	Year Renov.	Building Area (sq. ft.)	Calendar Year 2011: Monthly Site Energy Use Intensity (EUI) (J F M A M J J A S O N D)	EUI Change Since 2010	Annual Site EUI (kBtu/sq.ft.) (0, 25, 50, 75, 100)	ENERGY STAR	Carbon Footprint (lbs CO2e / sq.ft.)	Annual Site MMBtu (0, 2,500, 5,000, 7,500, 10,000)
Parking Garage - *San Francisco Average*						-3.9%	7.7		0.00	
Union Square Garage	SFMTA	1941		423,780		-20.0%	13.8	N/A	0.00	
Civic Center Garage	SFMTA	1958		355,674		0.8%	12.4	N/A	0.00	
Vallejo Street Garage	SFMTA	1969		62,760		0.4%	10.4	N/A	0.00	
Portsmouth Square Garage	SFMTA	1962		225,480		-4.0%	9.1	N/A	0.00	
Sixteenth & Hoff Garage	SFMTA	1996		17,284		-9.2%	8.8	N/A	0.00	
Music Concourse Garage	SFMTA	2005		300,000		2.7%	8.7	N/A	0.00	
Golden Gateway Garage	SFMTA	1965		226,800		-9.6%	8.5	N/A	0.00	
SF General Hospital Garage	SFMTA	1996		300,000		1.2%	7.4	N/A	0.00	
Sutter Stockton Garage	SFMTA	1959		745,000		3.1%	7.1	N/A	0.00	
Mission Bartlett Garage	SFMTA	1983		113,759		-1.7%	6.9	N/A	0.00	
Fifth & Mission Garage	SFMTA	1957		992,600		0.3%	6.9	N/A	0.00	
Polk Bush Garage	SFMTA	1993		73,860		-13.5%	6.6	N/A	0.00	
Japan Center Garage - Fillmore Street Annex	SFMTA	1965		59,308		-8.9%	6.5	N/A	0.00	
Ellis O'Farrell Garage	SFMTA	1964		315,549		-2.3%	6.4	N/A	0.00	
St Mary's Square Parking Garage	SFMTA	1952		245,445		-0.4%	5.8	N/A	0.00	
North Beach Garage	SFMTA	2002		82,405		-18.2%	5.5	N/A	0.00	
Moscone Center Garage	SFMTA	1984		255,444		-3.2%	5.4	N/A	0.00	
Performing Arts Garage	SFMTA	1983		213,564		9.1%	4.8	N/A	0.00	
Japan Center Main Garage	SFMTA	1965		237,566		1.4%	4.6	N/A	0.00	
Lombard Street Garage	SFMTA	1988		85,206		-4.8%	2.9	N/A	0.00	

Facility	Dpt.	Year Built	Year Renov.	Building Area (sq. ft.)	Calendar Year 2011: Monthly Site Energy Use Intensity (EUI)	EUI Change Since 2010	Annual Site EUI (kBtu/sq.ft.)	ENERGY STAR	Carbon Footprint (lbs CO2e / sq.ft.)	Annual Site MMBtu
Public Safety							0 100 200 300 400			0 1,250 2,500 3,750 5,000
Fire Station - *San Francisco Average*					J F M A M J J A S O N D	*-0.8%*	*65.8*		*5.41*	
Fire Station 35 (Fire Boat House)	SFFD	1908	1994	4,712		-15.6%	**174.8**	N/A	10.77	
Fire Station 34	SFFD	1929	1998	4,400		10.3%	**143.8**	N/A	11.84	
Fire Station 22	SFFD	1962		5,900		3.5%	**130.5**	N/A	12.46	
Fire Station 29	SFFD	1956	1996	8,300		14.5%	**118.4**	N/A	11.26	
Fire Station 20	SFFD	1963	1997	10,300		3.7%	**109.9**	N/A	10.84	
Fire Station 05	SFFD	1954	1984	12,600		3.6%	**102.5**	N/A	9.52	
Fire Station 17	SFFD	1955	1996	12,100		4.6%	**99.6**	N/A	8.80	
Fire Station 31	SFFD	1913		8,500		-13.7%	**99.3**	N/A	8.51	
Fire Station 01	SFFD	1953	1992	14,100		11.8%	**97.5**	N/A	8.16	
Fire Station 15	SFFD	1957	1997	12,138		1.3%	**95.4**	N/A	6.15	
Fire Station 16	SFFD	1938	1998	14,000		-5.5%	**92.0**	N/A	9.26	
Fire Station 21	SFFD	1958	1988	8,000		0.7%	**84.7**	N/A	8.32	
Fire Station 38	SFFD	1960		13,400		-3.1%	**83.9**	N/A	8.02	
Fire Station 10	SFFD	1956		14,300		-0.4%	**83.8**	N/A	7.98	
Fire Station 06	SFFD	1948	1998	13,500		-13.0%	**82.1**	N/A	7.81	
Fire Station 43	SFFD	1970	1995	10,800		-4.4%	**81.1**	N/A	4.64	
Fire Station 12	SFFD	1955		11,300		1.7%	**80.6**	N/A	7.04	
Fire Station 18	SFFD	1951	1997	15,900		8.7%	**79.7**	N/A	7.39	
Fire Station 13	SFFD	1974	1999	18,790		17.4%	**77.5**	N/A	5.20	
Fire Station 24	SFFD	1914	1997	7,600		-0.4%	**74.7**	N/A	6.21	
Fire Station 37	SFFD	1915	1990	6,950		5.2%	**73.5**	N/A	6.02	
Fire Station 19	SFFD	1951	1998	11,500		12.6%	**73.2**	N/A	6.66	
Fire Station 11	SFFD	1956	1996	14,000		-14.9%	**72.8**	N/A	6.40	
Fire Station 39	SFFD	1923	1998	8,450		-11.5%	**70.5**	N/A	6.28	
Fire Station 40	SFFD	1931	1995	7,350		-11.0%	**69.6**	N/A	4.54	
Fire Station 26	SFFD	1968	1997	15,000		-6.4%	**67.0**	N/A	5.77	
Fire Station 07 / Division of Training	SFFD	1953	2003	33,600		-11.8%	**66.9**	N/A	5.52	
Fire Station 08	SFFD	1940	1994	8,000		-2.2%	**62.8**	N/A	3.72	
Fire Station 32	SFFD	1941	1991	10,900		1.9%	**58.8**	N/A	5.60	
Fire Station 41	SFFD	1956		9,600		1.8%	**58.1**	N/A	5.19	
Fire Station 36	SFFD	1961	1996	16,100		5.0%	**57.9**	N/A	5.24	
Fire Station 23	SFFD	1959	1996	12,000		0.0%	**57.1**	N/A	5.47	
Fire Station 03	SFFD	1973		8,000		1.0%	**55.0**	N/A	3.00	
Fire Station 25	SFFD	1916		11,420		-6.6%	**51.7**	N/A	3.88	
Fire Station 33	SFFD	1973	1998	5,900		-3.3%	**49.0**	N/A	3.61	
Fire Station 09	SFFD	1972	1995	21,400		12.7%	**44.0**	N/A	3.33	
Fire Station 44	SFFD	1915	1998	8,450		-13.5%	**41.9**	N/A	2.71	
Fire Station 02	SFFD	1994		16,920		3.3%	**39.8**	N/A	2.09	
Fire Station 42	SFFD	1979	1998	9,300		-2.5%	**39.7**	N/A	2.50	
Fire Station 14	SFFD	1973		15,900		7.2%	**33.9**	N/A	1.81	
Fire Station 49	SFFD	1958	2002	75,000		-5.0%	**13.6**	N/A	0.54	

Facility	Dpt.	Year Built	Year Renov.	Building Area (sq. ft.)	Calendar Year 2011					
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Public Safety (Continued)							0 100 200 300 400			0 3,750 7,500 11,250 15,000
Police Station - *San Francisco Average*					J F M A M J J A S O N D	*-8.5%*	*80.2*		*4.22*	
Ingleside Police Station	SFPD	1910	1990	18,500		-9.0%	**134.9**	N/A	10.95	
Central Police Station	SFPD	1970		8,000		-2.4%	**125.9**	N/A	1.93	
Bayview Police Station	SFPD	1996		16,000		-14.2%	**98.8**	N/A	3.10	
Park Police Station	SFPD	1910	1993	13,700		-15.9%	**98.3**	N/A	6.78	
Northern Police Station	SFPD	1988	1987	18,000		-14.0%	**83.7**	N/A	3.97	
SFPD Tactical Company	SFPD	1941	2009	52,125		0.1%	**78.6**	N/A	4.79	
Mission Police Station	SFPD	1994		25,000		-17.2%	**74.7**	N/A	3.48	
Taraval Police Station	SFPD	1929	1994	18,070		-15.4%	**60.3**	N/A	3.57	
Richmond Police Station	SFPD	1910	1993	13,000		-9.2%	**52.5**	N/A	1.45	
Tenderloin Police Station	SFPD	2000		27,500		11.1%	**41.9**	N/A	1.20	
Emergency Center - *San Francisco Average*					J F M A M J J A S O N D	*-1.5%*	*187.1*		*8.19*	
Emergency Operations Center	DEM	1998	2010	56,000		-1.5%	**187.1**	N/A	8.19	
							0 100 200 300 400			0 15,000 30,000 45,000 60,000
Jail / Correctional - *San Francisco Average*					J F M A M J J A S O N D	*0.5%*	*120.5*		*8.84*	
San Francisco County Jail, San Bruno Facility	SHF	1934	2006	348,202		4.9%	**158.1**	N/A	12.08	
Youth Guidance Center	JUV	1950	2006	210,000		-4.2%	**150.3**	N/A	13.22	
County Jail #1 & #2	SHF	1994		250,000		-6.1%	**42.9**	N/A	0.64	

Recreation Facilities

Facility	Dpt.	Year Built	Year Renov.	Building Area (sq. ft.)	Calendar Year 2011: Monthly Site Energy Use Intensity (EUI)	EUI Change Since 2010	Annual Site EUI (kBtu/sq.ft.)	ENERGY STAR	Carbon Footprint (lbs CO2e / sq.ft.)	Annual Site MMBtu
Clubhouse - *San Francisco Average*					J F M A M J J A S O N D	*-8.3%*	*65.3*		*2.80*	
Sandy Tatum Clubhouse	RPD	2005		20,000		16.7%	**242.5**	N/A	16.22	
South Sunset Clubhouse and Playground	RPD	1949		1,500		6.2%	**235.0**	N/A	5.91	
Laurel Hill Clubhouse and Playground	RPD	1953		1,134		-85.7%	**159.3**	N/A	16.93	
Youngblood Coleman Clubhouse and Playground	RPD	1960		2,135		-29.0%	**140.8**	N/A	0.35	
Merced Heights Clubhouse and Playground	RPD	1950		1,136		0.2%	**118.3**	N/A	3.02	
GGP – Golf Course Clubhouse	RPD	1951		2,470		3.0%	**118.3**	N/A	0.00	
James Rolph Jr Clubhouse	RPD	1921		2,730		-36.9%	**105.9**	N/A	1.64	
Jose Coronado Clubhouse and Playground	RPD	1995		933		-23.0%	**89.2**	N/A	0.01	
Christopher Clubhouse	RPD	1971		2,337		3.0%	**88.2**	N/A	0.00	
Gilman Clubhouse and Playground	RPD	1969		1,578		-30.2%	**84.0**	N/A	0.00	
Lincoln Park Golf Course	RPD	1936		6,329		2.9%	**74.8**	N/A	2.07	
Crocker Amazon Clubhouse and Playground	RPD	1955	1982	24,040		11.0%	**65.5**	N/A	0.37	
Silver Terrace Clubhouse and Playground	RPD	1953		7,842		3.4%	**65.1**	N/A	0.94	
Helen Wills Clubhouse and Playground	RPD	2005		3,082		6.3%	**64.2**	N/A	5.12	
Midtown Terrace Clubhouse and Playground	RPD	1961		2,176		-4.4%	**63.8**	N/A	6.28	
Visitacion Valley Clubhouse and Playground	RPD	2003		2,600		-4.8%	**63.0**	N/A	4.73	
Mccoppin Square Clubhouse	RPD	1955		2,000		60.7%	**54.4**	N/A	4.24	
Parque Ninos Unidos Clubhouse	RPD	2004		2,414		-6.7%	**51.7**	N/A	4.28	
Margaret S Hayward Clubhouse and Playground	RPD	1922		6,717		-6.6%	**46.4**	N/A	0.89	
Woh Hei Yuen Clubhouse	RPD	1997		5,000		-20.1%	**44.5**	N/A	2.52	
Boeddeker Park and Clubhouse	RPD	1989		3,740		-22.4%	**44.4**	N/A	0.27	
Jackson Clubhouse and Playground	RPD	1912		8,060		5.7%	**43.4**	N/A	2.21	
Wawona Clubhouse (Project Insight)	RPD	1950		1,830		11.3%	**40.8**	N/A	3.21	
J. P. Murphy Clubhouse	RPD	1950		1,820		-4.2%	**37.7**	N/A	3.07	
Argonne Clubhouse and Playground	RPD	2006		1,000		16.5%	**36.6**	N/A	1.92	
GGP – Stow Lake Boathouse	RPD	1945		4,647		-20.1%	**36.1**	N/A	1.04	
Hayes Valley Clubhouse	RPD	1937		2,187		N/A	**34.6**	N/A	1.33	
Douglas Clubhouse and Playground	RPD	1926		1,072		-13.0%	**31.0**	N/A	1.79	
Peixotto Clubhouse and Playground	RPD	1955		2,000		-25.8%	**29.3**	N/A	2.33	
Excelsior Clubhouse and Playground	RPD	1928		2,255		-21.8%	**27.1**	N/A	2.14	
Julius Kahn Clubhouse	RPD	1922		1,105		-40.7%	**25.8**	N/A	1.99	
Rochambeau Clubhouse and Playground	RPD	2004		1,482		-3.8%	**25.5**	N/A	1.33	
Cow Hollow Clubhouse and Playground	RPD	1950		675		52.5%	**25.3**	N/A	1.53	
West Portal Clubhouse and Playground	RPD	2004		2,728		-2.9%	**25.1**	N/A	0.72	
Sigmund Stern Grove / Trocadero Clubhouse	RPD	1930	2005	12,832		-38.8%	**24.3**	N/A	0.24	
Miraloma Clubhouse and Playground	RPD	1949		1,352		-20.9%	**21.2**	N/A	1.64	
Sunnyside Conservatory	RPD	1900	2009	1,536		42.7%	**20.8**	N/A	0.00	
Richmond Clubhouse and Playground	RPD	1916		1,200		-64.1%	**17.8**	N/A	1.38	

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							0 75 150 225 300			0 1,250 2,500 3,750 5,000
Grattan Clubhouse and Playground	RPD	1949		1,854		-8.1%	16.8	N/A	1.15	
Fulton Clubhouse and Playground	RPD	1955		1,420		-76.8%	14.1	N/A	1.35	
Sunnyside Clubhouse and Playground	RPD	1969		4,412		-33.2%	13.3	N/A	0.47	
Willie Woo Woo Wong Clubhouse	RPD	1927		6,000		-11.3%	12.8	N/A	0.29	
Junipero Serra Clubhouse and Playground	RPD	1955		1,578		-23.5%	11.3	N/A	0.27	
Cayuga Clubhouse	RPD	1951		900		-20.7%	10.6	N/A	0.01	
Pine Lake Park Clubhouse	RPD	1950		1,242		-43.7%	8.6	N/A	0.00	
Alice Chalmers Clubhouse	RPD	1951		2,505		-15.8%	8.6	N/A	0.00	
West Sunset Clubhouse	RPD	1953		13,530		-39.7%	8.3	N/A	0.00	
Presidio Heights Clubhouse and Playground	RPD	1910		958		-23.9%	6.6	N/A	0.62	
Cabrillo Clubhouse	RPD	1931		1,420		N/A	5.9	N/A	0.00	
Lake Merced Boathouse	RPD	1950		9,100		-5.7%	4.9	N/A	0.00	
Recreation Center - *San Francisco Average*					J F M A M J J A S O N D	*-16.0%*	*62.0*		*4.96*	
Moscone Rec Center	RPD	1924	2008	9,650		1.6%	135.9	N/A	7.75	
Palega Rec Center	RPD	1928	2012	18,397		-34.0%	109.8	N/A	11.15	
Eureka Valley Rec Center	RPD	1951	2004	17,880		-10.3%	108.5	N/A	10.48	
Joseph Lee Rec Center	RPD	1950	2007	16,383		-13.6%	96.3	N/A	8.15	
Sunset Rec Center	RPD	1940	2012	16,424		N/A	83.9	N/A	8.92	
Minnie & Lovie Ward Rec Center	RPD	2007	2008	19,461		4.9%	74.6	N/A	6.29	
Richmond Rec Center	RPD	2000		18,470		38.0%	65.4	N/A	3.80	
Tenderloin Rec Center	RPD	1995		10,133		0.4%	62.1	N/A	4.58	
St. Mary's Rec Center and Playground	RPD	1949		23,307		-5.3%	61.5	N/A	5.26	
GGP -- County Fair Building/Hall Of Flowers	RPD	1961	1969	23,477		-23.4%	59.9	N/A	4.90	
Bernal Heights Rec Center	RPD	1932		5,008		31.7%	55.2	N/A	4.64	
Upper Noe Rec Center	RPD	1950	2006	16,447		-18.1%	45.6	N/A	2.29	
Mission Rec Center / Mission Arts Center	RPD	1984	2012	30,850		19.4%	45.5	N/A	2.79	
Gene Friend Rec Center @ SOMA	RPD	1989		16,354		-24.0%	45.3	N/A	3.21	
GGP -- Model Yacht Clubhouse (3)	RPD	1938		3,168		5.8%	40.4	N/A	4.72	
Glen Park Rec Center / Glenridge Nursery School	RPD	1934		22,301		-40.4%	34.3	N/A	2.37	
Potrero Hill Rec Center	RPD	1950		18,805		-66.9%	28.2	N/A	2.61	
GGP -- Kezar Pavilion	RPD	1925		24,254		15.7%	13.2	N/A	0.00	
							0 150 300 450 600			0 2,500 5,000 7,500 10,000
Swimming Pool - *San Francisco Average*					J F M A M J J A S O N D	*-9.5%*	*308.4*		*27.69*	
Charlie Sava Swimming Pool / Larsen Park	RPD	1957	2008	12,900		-5.6%	542.0	N/A	50.58	
Coffman Pool / Herz Clubhouse and Playground	RPD	1957	2008	12,289		-6.9%	528.3	N/A	51.12	
Hamilton Rec Center and Pool	RPD	1953	2010	16,988		-4.1%	474.0	N/A	38.25	
Rossi Swimming Pool and Playground	RPD	1958		15,162		-11.3%	423.8	N/A	44.55	
Garfield Pool and Garfield Square Clubhouse	RPD	1958		21,160		N/A	268.3	N/A	26.77	
North Beach Swimming Pool/Joe DiMaggio Playground	RPD	2004	2006	16,384		-2.7%	231.3	N/A	18.85	
Martin Luther King Jr Swimming Pool	RPD	2001		23,851		14.9%	222.9	N/A	16.46	
Mission Community Pool / Clubhouse	RPD	1916	2012	8,500		N/A	199.9	N/A	20.60	
Balboa Swimming Pool (12)	RPD	1962		19,000		N/A	34.3	N/A	0.00	

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							0 150 300 450 600			0 10,000 20,000 30,000
Other Recreational Buildings - *San Francisco Average*					J F M A M J J A S O N D	*-2.9%*	*76.4*		*4.24*	
SF Zoo	RPD	1930		65,799		-5.0%	**373.2**	N/A	23.18	
GGP -- Murphy Millwright's Cottage	RPD	1904	2011	2,960		N/A	**268.1**	N/A	0.58	
GGP -- Beach Chalet and Visitor Center	RPD	1925	1996	18,045		-2.9%	**234.7**	N/A	25.37	
GGP -- Kezar Stadium	RPD	1924		5,000		-23.5%	**172.1**	N/A	10.42	
GGP -- Music Concourse	RPD	1900		5,095		47.9%	**140.0**	N/A	0.00	
SFPD Pistol Range	SFPD	1942	1989	10,000		11.3%	**59.9**	N/A	1.81	
SFPD Stables	SFPD	1935		11,800		-26.3%	**59.5**	N/A	5.71	
GGP -- Pioneer Log Cabin	RPD	1911	1931	2,256		4.3%	**38.5**	N/A	0.00	
Camp Ida Smith	SFPUC			1,200		-10.4%	**37.3**	N/A	0.00	
Candlestick Park Stadium	RPD	1960		500,000		-1.2%	**33.6**	N/A	1.27	
GGP -- Bercut Equitation Field	RPD	1930		20,632		0.5%	**13.1**	N/A	0.00	
GGP -- Dutch Windmill	RPD	1902		2,500		10.9%	**7.8**	N/A	0.00	
Fay House	RPD	1912		4,536		-0.1%	**1.7**	N/A	0.00	

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Service, Repair, and Storage							0 75 150 225 300			0 10,000 20,000 30,000
Corporation Yard / Vehicle Repair - *San Francisco Average*					J F M A M J J A S O N D	*-8.5%*	*85.3*		*4.24*	
GGP -- Maintenance Yard and Nursery	RPD	1957		43,947		0.4%	**264.6**	N/A	26.50	
Kirkland Division - Motor Coach	SFMTA	1949		9,352		-1.1%	**194.6**	N/A	9.46	
H. Hetchy-Warnerville Substation/Switchyard	SFPUC			1,835		-9.5%	**187.9**	N/A	0.00	
Cable Car Barn and Power House	SFMTA	1906	1984	83,741		-7.4%	**149.2**	N/A	0.96	
Metro East Facility - LRV	SFMTA	2008		180,000		-22.1%	**143.9**	N/A	4.74	
Cameron Beach (Geneva) Yard - LRV and Streetcar	SFMTA	1984		31,514		-8.7%	**129.9**	N/A	5.52	
City Distribution Division	SFPUC			67,500		-11.9%	**126.3**	N/A	7.81	
Millbrae Yard	SFPUC			60,045		-6.0%	**123.6**	N/A	5.80	
Woods Division - Motor Coach	SFMTA	1976		161,719		2.4%	**115.4**	N/A	7.26	
Green Division and Annex - LRV	SFMTA	1977	1983	208,371		-9.0%	**80.8**	N/A	3.74	
Hall of Justice Gas Station	GSA	1959		4,360		0.3%	**73.8**	N/A	3.21	
Potrero Division - Trolley Coach	SFMTA	1914	1990	101,510		0.8%	**67.8**	N/A	4.05	
DT Corporation Yard	DT	1950		45,000		-5.2%	**66.7**	N/A	3.55	
Central Shops	GSA	1959		80,577		-5.8%	**56.1**	N/A	4.47	
Flynn Division - Motor Coach	SFMTA	1941	1989	268,947		-1.4%	**54.0**	N/A	2.52	
1399 Marin - Maintenance Facility	SFMTA	1972		25,100		14.4%	**49.5**	N/A	0.00	
Presidio Division - Trolley Coach	SFMTA	1912		158,381		-15.6%	**48.9**	N/A	2.85	
South Forks Maintenance Yard	SFPUC			2,900		-2.7%	**43.1**	N/A	0.00	
DPW -- Corporation Yard	DPW	1949		102,764		-6.0%	**40.6**	N/A	2.18	
Sunol Yard	SFPUC			12,095		23.0%	**24.1**	N/A	0.97	
GGP -- San Francisco Botanical Garden (3)	RPD	1955		29,763		-0.5%	**20.3**	N/A	2.32	
Scott Division	SFMTA	1990		116,144		-22.2%	**17.3**	N/A	0.46	
Other Shops - *San Francisco Average*					J F M A M J J A S O N D	*-2.1%*	*20.4*		*0.77*	
SFFD - Bureau of Equipment	SFFD	1918		7,000		-4.8%	**45.9**	N/A	1.81	
700 Pennsylvania - Maintenance of Way	SFMTA	1947	2000	99,383		-12.3%	**36.8**	N/A	1.54	
1401 Bryant - Overhead Lines	SFMTA	1897	1979	46,000		2.9%	**13.6**	N/A	0.09	
Sign Shop	SFMTA	1951		21,162		N/A	**11.8**	N/A	0.94	
Paint Shop	SFMTA	1961		11,000		N/A	**9.5**	N/A	0.00	
Sustainable Streets Division	SFMTA	1999		90,000		N/A	**7.2**	N/A	0.25	
Warehouses - *San Francisco Average*					J F M A M J J A S O N D	*-12.6%*	*11.2*		*0.09*	
651 Bryant - Power Utility Services	SFPUC	1954		14,000		2.0%	**21.9**	**78**	0.89	
Burke Avenue Facility - Central Warehouse	SFMTA	1969		103,231		-3.1%	**14.4**	26	0.09	
Fine Arts Warehouse	FAMSF	1983		27,440		-3.2%	**8.7**	54	0.00	
Brooks Hall (9)	RED	1956		90,000		-29.7%	**8.7**	N.Q.	0.00	
Streetlight Warehouse (9)	SFPUC	1988		6,400		-39.4%	**7.6**	N.Q.	0.00	
Oakdale Office/Warehouse (9)	SFPUC			7,800		-10.5%	**6.5**	N.Q.	0.09	
SFPD Storage Facility (9)	SFPD			11,000		-23.2%	**1.0**	N.Q.	0.00	
Airport					J F M A M J J A S O N D		0 25 50 75 100			0 375,000 750,000 1,125,000 1,500,000
San Francisco International Airport (4)	SFO	1954		15,654,508		N/A	**96.2**	N/A	2.85	

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Buildings with Incomplete Meter Data										
Buildings with Incomplete Meter Data - *San Francisco Average*					J F M A M J J A S O N D	*-2.8%*	*70.0*			
SFPD Building 606 Crime Lab (13)	SFPD	1986		56,325		1.0%	**135.5**	N/A	?	
Mental Health Services -- 1380 Howard (14)	DPH	1927		84,000		-15.8%	**97.3**	N/A	?	
Old SFPUC Headquarters (14)	SFPUC	1983		158,998		3.3%	**72.7**	N/A	?	
Mission Bay Branch Library (14)	SFPL	2006		7,500		-5.1%	**64.0**	N/A	?	
GGP -- Park Aid Station / Natural Areas Program (14)	RPD	1902	2012	2,733		-26.3%	**51.0**	N/A	?	
Fire Station 28 (15)	SFFD	1967	1997	9,350		-14.6%	**50.2**	N/A	5.88	
Palace Of Fine Arts / Exploratorium (14)	RPD	1915	2003	140,000		5.2%	**43.0**	N/A	?	
District Attorney's Office (14)	DA	1906		17,625		2.0%	**37.3**	N/A	?	
Western Addition Community Technology Center (14)	RPD	1991		4,500		-19.3%	**36.5**	N/A	?	
Chinatown/North Beach Mental Health Services (14)	DPH	1953	1988	11,067		-16.7%	**32.3**	N/A	?	
Workforce Development Service Center (14)	HSA	1947	2010	2,465		18.5%	**24.5**	N/A	?	
Ella Hill Hutch Community Center (14)	MOH	1980		22,300		0.6%	**21.0**	N/A	?	
Buildings of Unknown Size										
Transit Station					J F M A M J J A S O N D	*0.0%*				
Castro Station	SFMTA	1972				0.9%	**N/A**	N/A	0.00	
Church Station	SFMTA	1972				-0.8%	**N/A**	N/A	0.00	
Civic Center Station	SFMTA	1972				5.2%	**N/A**	N/A	0.00	
Embarcadero Station	SFMTA	1972				-1.7%	**N/A**	N/A	0.00	
Forest Hill Station	SFMTA	1918				11.0%	**N/A**	N/A	0.00	
Montgomery Station	SFMTA	1972				-4.8%	**N/A**	N/A	0.00	
Powell Station	SFMTA	1972				-2.6%	**N/A**	N/A	0.00	
Van Ness Station	SFMTA	1972				-0.5%	**N/A**	N/A	0.00	
Camp					J F M A M J J A S O N D	*0.4%*	*251.0*			
Camp Mather	RPD					12.8%	**N/A**	N/A	0.00	
Log Cabin Ranch Youth Guidance	JUV	1953	1966			-11.0%	**N/A**	N/A	0.00	
Water and Wastewater Treatment Buildings										
Wastewater Treatment					J F M A M J J A S O N D					
North Point Wet Weather Facility	SFPUC	1951				N/A	**N/A**	N/A	N/A	
Oceanside Water Pollution Control Plant	SFPUC	1993				N/A	**N/A**	N/A	N/A	
Southeast Water Pollution Control Plant	SFPUC	1951	1982			N/A	**N/A**	N/A	N/A	
Water Treatment					J F M A M J J A S O N D					
Harry Tracy Water Filtration	SFPUC					N/A	**N/A**	N/A	N/A	
Pulgas Dechloramination Facility	SFPUC					N/A	**N/A**	N/A	N/A	
Rock River Lime Facility	SFPUC					N/A	**N/A**	N/A	N/A	
San Antonio Pump Station / Sunol WTP	SFPUC					N/A	**N/A**	N/A	N/A	

Putting the Results in Context

The energy performance results in this report are just a first step. This report marks the first time that the City and County of San Francisco has been able to see the performance of all of its buildings in one place, and also the first time that energy performance information about the City's buildings has been made available to the public. This report is rich with information to help inform decision makers about where to target public resources, but must also be seen as part of a wider array of energy efficiency strategies that can reduce the City's energy use and improve the operation and comfort of its facilities.

Limitations of report data: To make the most out of this report, City departments should look in more detail at facilities that appear as outliers in the data. For instance, a poorly functioning HVAC system can result in large amounts of wasted energy, but in other cases may appear on paper as an energy efficient building because systems are not functioning. Additionally, while the SFPUC made every effort to accurately match meters to facilities and also indicate where a facility was vacant for any significant period of time, City departments should recognize that incomplete meter matchups or changes in occupancy may skew the results for a particular facility. As described elsewhere in this report, some types of facilities (e.g. park and recreational buildings) may be particularly susceptible to such meter and occupancy uncertainties.

Report improvements in future years: Developing this report for the first time was a major undertaking supported by numerous people and departments. Still, there is room for improvement. For the small number of buildings with incomplete meter information or lacking square footage data, the SFPUC will continue to encourage City departments to fill these gaps. The SFPUC will also continue to work with departments to improve the accuracy of meter matchups, as described above. As the EPA's ENERGY STAR program evolves, the City will seek opportunities to obtain ENERGY STAR ratings or other meaningful climate-adjusted national comparisons for additional building types such as libraries, fire stations, and museums. Future annual reports should also include benchmarks for wastewater facilities, which are benchmarked according to more complex metrics than square footage. The SFPUC will also work to eventually integrate the data for all 305 benchmarked facilities into the EPA's Portfolio Manager system, to allow year-to-year tracking of weather-normalized site energy use, and to allow easier sharing of data with the City's partners, such as with USGBC for LEED certified buildings. Finally, reports in future years could be improved by providing more detail about electricity consumption, for example by indicating the portion of energy obtained from on-site renewables or associated with Electric Vehicle charging stations.

The role of benchmarking: Benchmarking the energy use of a portfolio of buildings can help identify which buildings are outliers among their peers, and can be extremely useful for tracking changes in energy use from year to year. Once outliers are identified, energy audits can be performed to identify cost-effective retrofit opportunities in a particular building. The SFPUC offers a green building commissioning program to City departments, which can assist with new building projects and major renovations. Retro-commissioning of existing buildings can also identify equipment deficiencies and recommend operations and maintenance improvements to save energy and improve building performance. The role of building occupants in using energy wisely is also crucial, and the SFPUC is interested to work with City departments to share the results of this report with employees and other building users to help reinforce changes in occupant behavior.

The findings of this report suggest that the City and County of San Francisco performed well in 2011. The SFPUC hopes that City departments and others will find this data useful in better understanding the performance of individual facilities, and encourages readers to suggest improvements to the format of the report in future years. As one part of a comprehensive strategy to reduce the City's overall energy use and greenhouse gas emissions, the SFPUC offers this report to help better inform the conversation.

APPENDIX A:

Key to Benchmarking Notes

(1) Adjacent facilities combined for benchmarking, due to shared mechanical systems.
(2) Unmetered facilities on the Civic Center steam loop, with steam use estimated based on square footage. (See previous section of this report for details.)
(3) Facilities in Golden Gate Park, in cases where electrical meters specific to the facility cannot be located.
(4) Some or all natural gas paid directly by department (or tenant) to PG&E. Meter data obtained outside of SFPUC billing system.
(5) The metering arrangement at the SECF needs further investigation. It is assumed this energy use includes both electricity and natural gas for the nursery and greenhouses.
(6) Not qualified for ENERGY STAR rating, due to small size.
(7) Not qualified for ENERGY STAR rating for dormitories, due to inadequate number of rooms.
(8) Not qualified for ENERGY STAR rating for hospitals. As a long-term care facility, Laguna Honda Hospital is not eligible for the hospital category. The square footage listed includes the new hospital buildings as of 2010 plus the square footage of old wings A, B, C, and H. The total excludes 120,000 square feet under remodel in buildings K, L, M, and O, which will be reoccupied in future years.
(9) Not qualified for ENERGY STAR rating, due to lack of full-time occupants.
(10) Not qualified for ENERGY STAR rating, due to more than 10% of the mixed-use facility being classified as “Other” space type.
(11) 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 facility are not applicable.
(12) Natural gas use abnormally low, likely due to inoperable systems.
(13) Annual propane use at this site unknown.
(14) Some or all natural gas use appears to be paid directly to PG&E at these facilities. Natural gas use unknown.
(15) Damaged electrical meter.

APPENDIX B:

List of Departments and Acronyms

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

Photo: Roof of Multi-Service Center North. Built in 1913.

Multi-Service Center North used slightly more energy in calendar year 2011 than the previous year. The facility on Polk Street had the second highest Energy Use Intensity of the City's buildings that provide shelter and services to the homeless. The SFPUC is currently completing upgrades to the shelter's heating, ventilation, and air conditioning systems, which should significantly reduce energy use in future years. (Owner: Human Services Agency)

San Francisco Water Power Sewer

Services of the San Francisco Public Utilities Commission

For more information about the clean energy programs of the

San Francisco Public Utilities Commission, please visit our website:

www.sfwater.org