

# Chapter 12 - Honolulu Fire Department

The Honolulu Fire Department (HFD) is the designated fire protection agency for the City and County of Honolulu. HFD's responsibilities are to provide fire fighting, rescue, emergency medical, and hazardous materials response for O'ahu. HFD is accredited by the Commission of Fire Accreditation International (CFAI). HFD is organized into four divisions:



### Administrative Services Bureau (ASB)

Provides administrative, personnel, logistical, and maintenance support to the fire suppression force. The ASB oversees HFD's operating budget, property and inventory, personnel administration, and the administration of safety and health-related programs, such as the Infectious Disease program.



### Fire Operations

Provides fire suppression and responds to search and rescue, hazardous materials, and medical emergency incidents.



### Planning and Development (P&D)

Coordinates HFD's short and long-term planning, operational, and quality improvement processes. P&D also prepares annual compliance reports; develops deployment models; and reviews, researches, and monitors emerging legislation, regulations, trends, events, and past department performance to establish goals that fulfill HFD's mission.



### Support Services

Support Services manages and coordinates the operations of the Training and Research Bureau (TRB) and the Fire Prevention Bureau (FPB).

Each division is managed by an assistant chief who is responsible for daily management of the sections and provides executive support to the fire chief and the deputy fire chief.

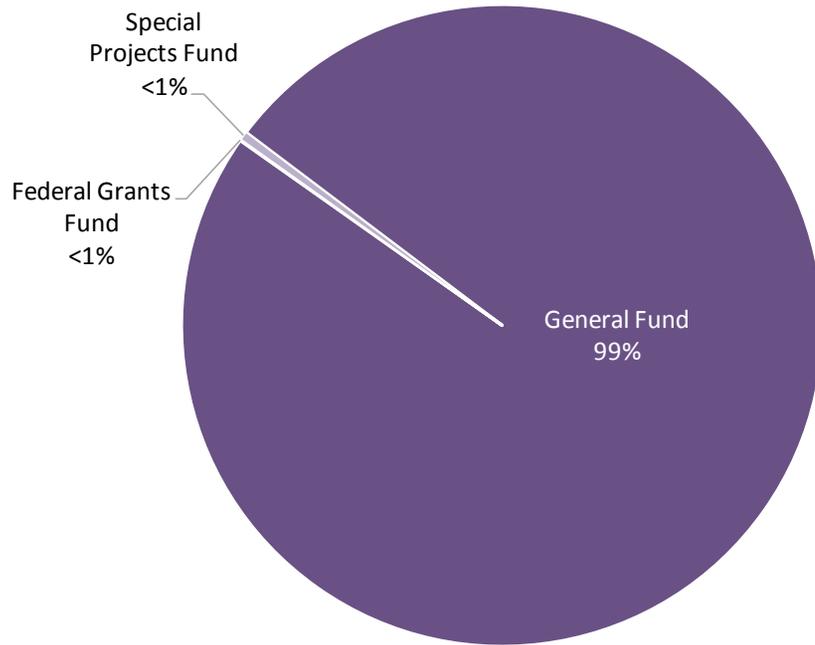


*To provide for a safer community through prevention, preparedness, and effective emergency response.*

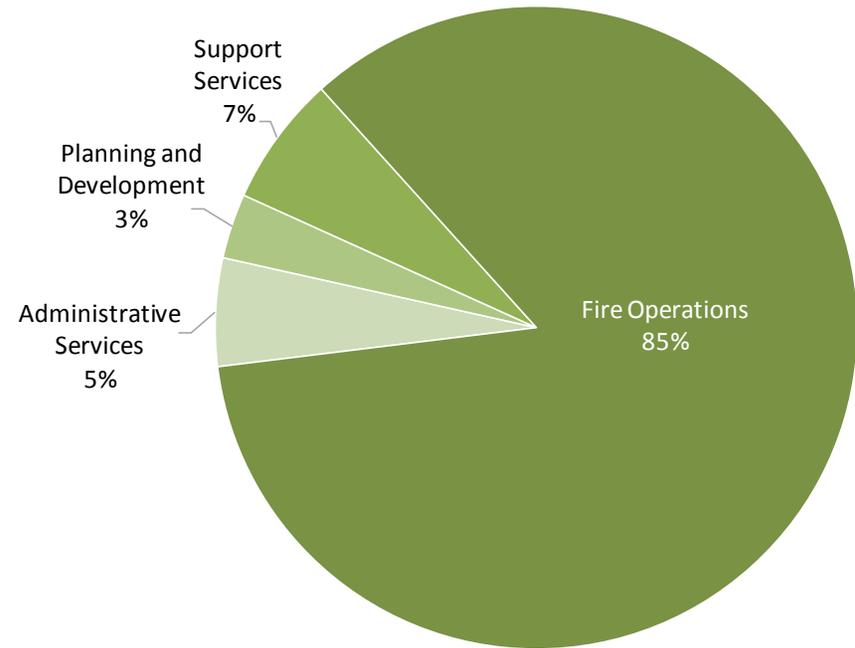
*Mission Statement*

# Spending and Staffing

## Fund Sources<sup>1</sup>



## Fund Uses



	Revenues (\$ millions)	Operating Expenditures (\$ millions)	Staffing			Overtime Expenditures <sup>3</sup>	
			Authorized FTE	Vacant FTE	Cost Per FTE <sup>2</sup>	Total (\$ millions)	Non-Holiday (\$ millions)
FY 2015	\$4.24	\$110.80	1,165	105	\$95,104	\$11.80	\$6.99
FY 2016	\$1.87	\$112.83	1,155	67	\$97,689	\$12.56	\$7.87
FY 2017	\$1.73	\$124.44	1,168	119	\$106,540	\$16.26	\$10.99
FY 2018	\$2.22	\$126.54	1,168	152	\$108,339	\$19.19	\$14.40
FY 2019	\$2.40	\$130.49	1,185	105	\$110,122	\$20.66	\$15.24
Change from last year	8%	3%	1%	-31%	2%	8%	6%
Change over last 5 years	-44%	18%	2%	0%	16%	75%	118%

Source: Department of Budget and Fiscal Services. <sup>1</sup>Percentages do not total 100% due to rounding. <sup>2</sup>Cost Per FTE = Total Operating Expenditures/Total Authorized FTE. <sup>3</sup>Overtime pay is established by bargaining unit agreement, as applicable.

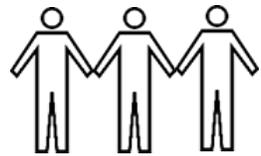
## Spending and Staffing



Overtime Expenditures

**\$20.66 M ▲ 8%**

The department attributes the FY 2018 to FY 2019 increase to maintaining adequate staffing levels due to vacancies and department-wide training in active threat and high-rise fire fighting.



Vacant FTE

**105 FTE ▼ 31%**

The department attributes the FY 2018 to FY 2019 decrease to fewer retirements of personnel with 25-30 years of service and an increase in number of fire fighter recruits graduating from each class.

## Five Year Trends



- Non-Holiday overtime expenditures increased by 118% over the last five years. The department attributes this increase to maintaining safe staffing levels, continuous training, and adhering to accreditation standards.



- Operating expenditures increased 18% over the last five years. HFD attributes the increase to negotiated salary and benefit increases, procurement of technologically advanced equipment to enhance fire fighter capabilities, personnel training, and facility improvements.

## National Community Survey



- The 2019 National Community Survey asked residents to rate the quality of fire services in Honolulu. A majority of residents (82%) rated services as *excellent or good*. The rating decreased 6% from FY 2018 to FY 2019. The 82% rating is similar to percentages reported nationwide and among communities with populations over 300,000.

## FY 2019 ACCOMPLISHMENTS

- Supported enactment of Ordinance 19-4, Life Safety Evaluation/Automatic Fire Sprinkler Retrofit for Existing Residential High-Rise Buildings
- Issued high-rise equipment kits to all fire trucks and provided high-rise fire training to HFD personnel
- Added a third helicopter to increase training and response capabilities
- Filled 97% of authorized staffing positions

## CHALLENGES MOVING FORWARD — FY 2020

- *Securing sufficient funding to maintain, repair, and renovate aging HFD worksites*
  - *Limited classroom availability for required training programs and events*

# Accreditation

The Honolulu Fire Department is accredited by the Commission on Fire Accreditation International (CFAI). HFD first achieved accreditation in 2000 and was reaccredited in 2005, 2010, and 2015. CFAI accreditation is governed by 11 members that represent a cross-section of fire and emergency services who review agencies applying for accredited status.

CFAI is an all-hazard, quality improvement model based on risk analysis and self-assessment that promotes the establishment of community-adopted performance targets for fire and emergency service agencies. The accreditation process is one of agency self-assessment. The assessment spans a multitude of areas to cover the scope of fire and emergency services, including: governance and administration; assessment and planning; objectives and goals; financial, human, and physical resources; training and competency; external systems relationships; and programs—Community Risk Reduction, Public Education, Fire Investigations, Domestic Preparedness, Fire Suppression, EMS, Technical Rescue, Hazmat, Aviation Rescue and Firefighting, Marine/Shipboard Rescue and Firefighting, and Wildland Firefighting.

The benefits of HFD working towards achieving and maintaining accreditation are: enhancing HFD's profile throughout the community; emphasizing HFD's dedication to excellence to its stakeholders; establishing an agency-wide culture of continuous improvement; assisting with communicating HFD leadership's philosophies; building positive relationships with labor groups; providing independent verification and validation of HFD's operations; and providing tangible data and information to the city's elected officials.

HFD is preparing for its 2020 reaccreditation. Preparations include drafting a Strategic Plan, Fire and Emergency Service Self-Assessment Manual, and Community Risk Assessment/Standards of Cover for submission in January 2020. These documents will be reviewed to ensure they meet the criteria set forth by the CFAI. An on-site peer assessment team will validate the prepared documents in 2020 and recommend denial, deferral, or reaccreditation.



*HFD's CFAI Accreditation Plaque.*

Source: Honolulu Fire Department

# Fire Commission & Administration Service Bureau

The Honolulu Fire Commission is comprised of five commissioners and assisted by a part-time secretary and an attorney from the Department of the Corporation Counsel. The commission meets monthly with the fire chief, deputy fire chief, and assistant chiefs. The commissioners are appointed by the mayor and confirmed by the Honolulu City Council. No compensation is rendered for their services.

The Administrative Services Bureau oversees personnel, occupational safety and health, maintenance facilities, master agreements, and the operating and capital improvement program budgets. The bureau's operating expenditures increased 21% from \$3.24 million in FY 2015 to \$3.92 million in FY 2019. The department attributes the increase to compensation for new administrative positions, negotiated salary increases, facility repair and maintenance, and costs to establish new master agreements.

The bureau's Mechanic Shop plans, directs, and coordinates all activities concerned with the repair, maintenance, installation, and modification of fire apparatuses, fire vehicles, and fire and rescue equipment and appliances. This includes the repair and maintenance of office furniture and Honolulu Police Department heavy vehicles. Over the past five years, the Mechanic Shop's operating expenditures increased 22% to \$2.33 million in FY 2015 from \$2.85 million in FY 2019. The department attributes the increase to newly added fire fighting systems and equipment on fire apparatuses, additional maintenance and repairs to meet industry safety and emission standard for fire apparatus, an increase in fabrication jobs, and the cost of replacement parts.

	Operating Expenditures		
	Fire Commission	Administration (\$ millions)	Mechanic Shop (\$ millions)
FY 2015	\$5,306	\$3.24	\$2.33
FY 2016	\$5,140	\$3.25	\$2.54
FY 2017	\$3,216	\$3.89	\$2.62
FY 2018	\$6,797	\$4.04	\$2.64
FY 2019	\$3,293	\$3.92	\$2.85
Change from last year	-52%	-3%	8%
Change over last 5 years	-38%	21%	22%

Source: Department of Budget and Fiscal Services.

## O'ahu Fire Stations



- |                 |                       |                   |
|-----------------|-----------------------|-------------------|
| FB Waterfront*  | 16 Wahiawa            | 32 Kalihi Uka     |
| 1 Central       | 17 Kane`ohe           | 33 Palolo         |
| 2 Pawa`a        | 18 Kailua             | 34 Hawai`i Kai    |
| 3 Makiki        | 19 Aikahi             | 35 Makakilo       |
| 4 Kuakini       | 20 Pearl City         | 36 Mililani       |
| 5 Kaimuki       | 21 Ka`a`awa           | 37 Kahalu`u       |
| 6 Kalihi        | 22 Manoa              | 38 Waiau          |
| 7 Waikiki       | 23 Wailupe            | 39 Olomana        |
| 8 Mokulele      | 24 Ewa Beach          | 40 Kapolei        |
| 9 Kaka`ako      | 25 Nu`uanu            | 41 Mililani Mauka |
| 10 Aiea         | 26 Wai`anae           | 42 Waikele        |
| 11 Sunset Beach | 27 Waimanalo          | 43 East Kapolei   |
| 12 Waipahu      | 28 Nanakuli           | A1 Aircraft       |
| 13 Kahuku       | 29 McCully-Mo`ili`ili |                   |
| 14 Waialua      | 30 Moanalua           |                   |
| 15 Hau`ula      | 31 Kalihi Kai         |                   |

Oahu Fire Stations.

Source: <http://cchnl.maps.arcgis.com/home/webmap/viewer.html?useExisting=1> (top photo), Honolulu Fire Department (bottom photo).

# Fire Operations

Fire Operations is responsible for emergency responses including fires, medical emergencies, mountain and ocean rescues, and hazardous materials. In addition, Fire Operations conducts commercial occupancy inspections; prepares industrial and commercial fire preplans; participates in community relations activities; attends training classes, drills, and exercises; keeps abreast of trends in firefighting techniques, emergency medical services, fire prevention, public education, and municipal water supply; and performs daily maintenance on HFD apparatuses, facilities, and grounds. HFD protects the city with a force of over 1,100 firefighters. O'ahu is divided into five battalions containing 44 fire stations.

Fire Operations' expenditures totaled \$110.58 million in FY 2019, which is a 3% increase from \$106.9 million in FY 2018 and a 19% increase from \$92.7 million over the past five years.

Fire-related incidents decreased 17% over the past year from 20,626 in FY 2018 to 17,122 incidents in FY 2019 and decreased 13% over the past five years from 19,792 in FY 2015. HFD attributes this to updated fire codes, successful code enforcement, and stronger legislation to help reduce the number of fire incidents.



Rescue Training at the Pali Lookout  
Photo Courtesy of the Honolulu Fire Department

	Significant Incident Statistics										
	Fire Operations Expenditures (\$ millions)	Residents Served Per Fire Station <sup>1</sup>	Aircraft Responses	Fire-Related Incidents	Building Fires	Wildfires	Dollar Loss <sup>2</sup> (\$ millions)	Fatalities		Injuries	
								Fire Personnel	Civilian	Fire Personnel	Civilian
FY 2015	\$92.70	23,065	702	19,792	240	367	\$13.04	0	2	21	26
FY 2016	\$95.62	23,226	339	20,705	246	309	\$21.02	0	4	14	23
FY 2017	\$104.78	23,084	703	21,278	251	349	\$16.23	0	7	15	13
FY 2018	\$106.90	22,992	624	20,626	254	379	\$140.19	1	10	23	19
FY 2019	\$110.58	23,025	717	17,122	223	493	\$41.08	0	3	55	20
Change from last year	3%	<1%	15%	-17%	-12%	30%	-71%	-100%	-70%	139%	5%
Change over last 5 years	19%	<-1%	2%	-13%	-7%	34%	215%	--	50%	162%	-23%

Source: Honolulu Fire Department and Department of Budget and Fiscal Services. <sup>1</sup> Residents Served Per Fire Station = Population (based on most recent available census data) / the number of fire stations. <sup>2</sup> Includes \$107,370,000 dollar loss due to the fire at the Marco Polo condominium in FY 2018.

The number of rescue calls has risen from 805 calls in FY 2018 to 1,463 calls in FY 2019 which is an 82% increase over the past year. HFD attributes this to the increasing popularity of unsafe hiking trails and shoreline areas that have led to the increase in rescue calls. Over the past five years, the three hikes with the most rescues are Diamond Head with 195 rescues, Koko Crater Stairs with 125 rescues, and Nu`uanu with 74 rescues. The popularity of the Diamond Head trail coupled with humid summers are reasons behind its ascension to the top spot for HFD rescues.



*Top 3 Hiking Trails for HFD Rescues*  
Photos Courtesy of the Honolulu Fire Department



*New Hauula Fire Station*  
Photos Courtesy of the Honolulu Fire Department

Fire Communication Center total service calls has steadily risen from 52,022 in FY 2015 to 56,785 in FY 2019 representing a 9% increase in that span of time. Medical-related calls, which accounted for the majority of total calls, rose by 9% over the past five years. Calls for fire-related incidents increased by 5% from FY 2018 and by 24% from FY 2015 to FY 2019.

	Fire Communication Center: Calls for Service								Community Survey (% Excellent or Good)
	Fire	Medical	Rescue	Hazardous Materials	Service Calls	False Alarms	Other	Total	Fire Services
FY 2015	1,799	36,553	812	1,732	2,439	3,451	5,236	52,022	85%
FY 2016	1,836	36,892	964	1,702	2,634	3,338	5,641	53,007	84%
FY 2017	1,943	37,874	830	1,731	3,180	3,135	5,914	54,607	84%
FY 2018	2,135	39,601	805	1,550	2,950	3,094	6,289	56,424	88%
FY 2019	2,236	39,663	1,463	1,454	3,144	2,760	6,065	56,785	82%
Change from last year	5%	<1%	82%	-6%	7%	-11%	-4%	1%	-6%
Change over last 5 years	24%	9%	80%	-16%	29%	-20%	16%	9%	-3%

Source: Honolulu Fire Department and 2019 National Community Survey (Honolulu).

# Fire Operations

The HFD’s Emergency Medical Services (EMS) Division co-responds with the Honolulu Emergency Services Department to send an apparatus to life-threatening calls, such as heart attacks, difficulty breathing, possible strokes, vehicle crashes, and significant trauma.

The HFD’s EMS Urban Tier I (Tier I/II/rural designations are based on population density, persons per capita, historical incident, and risk) responses within 8:12 minutes has remained steady over the past five years ranging from 91.96% to 92.74% of responses within the set time frame. The department’s Urban Tier I fire responses have also remained relatively stable over the past five years ranging from 84.27% to 86.98% of responses occurring within 8 minutes and 12 seconds from notice.

HFD’s EMS Urban Tier II responses within 9:30 minutes has remained steady from FY 2015 to FY 2019 with response times ranging from 92.87% to 93.36% within the time goal. The department’s Urban Tier II fire responses have also remained relatively stable over the past five years ranging from 82.10% to 85.76% of responses occurring within 9 minutes and 30 seconds from notice.

Rural Fire Responses within the standard 16 minutes have decreased by 5% over the past year and 9% over the past five years. HFD states that the decreases are due to the volatility of having a low number of rural fire incidents.



*Rapid Transit System Rescue Training*  
Photos Courtesy of the Honolulu Fire Department

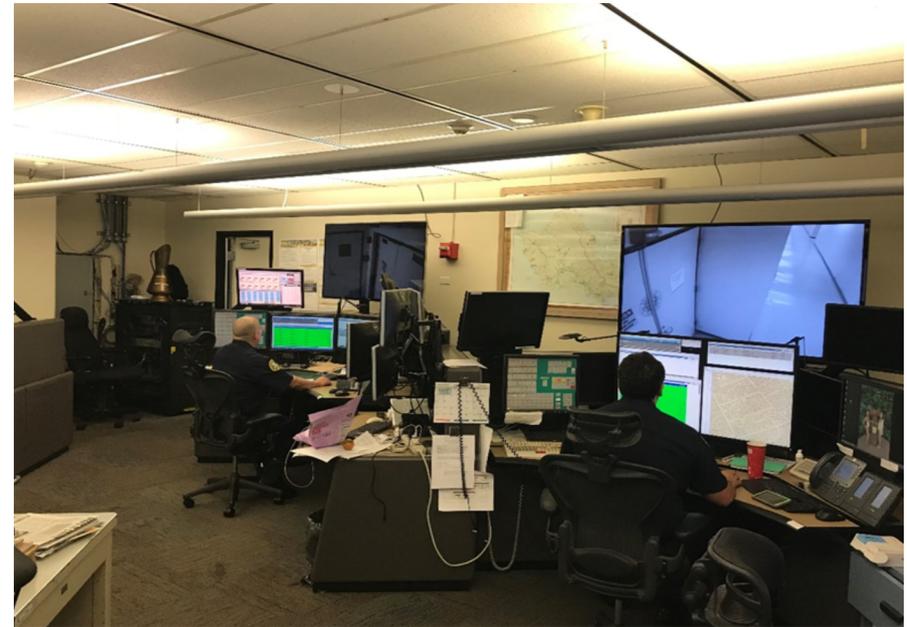
	Emergency Medical Services Incidents	EMS Urban (Tier I) Responses		EMS Urban (Tier II) Responses		EMS Rural Responses		Urban (Tier I) Fire Responses		Urban (Tier II) Fire Responses		Rural Fire Responses	
		90% Fractile Time	Within 8:12 Minutes	90% Fractile Time	Within 9:30 Minutes	90% Fractile Time	Within 16:00 Minutes	90% Fractile Time	Within 8:12 Minutes	90% Fractile Time	Within 9:30 Minutes	90% Fractile Time	Within 16:00 Minutes
FY 2015	36,553	07:50	91.96%	08:51	93.36%	12:10	97.55%	09:16	84.27%	10:29	82.95%	13:58	97.39%
FY 2016	36,892	07:44	92.74%	08:52	93.26%	12:12	97.83%	08:44	86.36%	10:31	85.76%	12:59	96.85%
FY 2017	37,874	07:51	92.28%	08:57	92.87%	11:44	98.58%	08:32	86.48%	10:48	82.10%	15:46	90.48%
FY 2018	39,601	07:49	92.09%	08:52	93.05%	12:11	97.53%	08:38	86.98%	10:24	84.49%	14:27	93.20%
FY 2019	39,636	07:47	92.68%	08:57	92.93%	12:43	97.20%	08:48	85.75%	11:08	80.31%	16:27	88.61%
Change from last year	<1%	<-1%	1%	1%	<-1%	4%	<-1%	2%	-1%	7%	-5%	14%	-5%
Change over last 5 years	8%	-1%	1%	1%	<-1%	4%	<-1%	-5%	2%	6%	-3%	18%	-9%

Source: Honolulu Fire Department. Total response time standards for first arriving company are as stated in 2015 Standards of Cover document and 2018 Annual Compliance Report prepared for the Commission on Fire Accreditation International (CFAI). Fractile refers to the point below which a stated fraction of the values lie and is used as a true measure of performance.

# Planning and Development

Planning and Development (P&D) prepares and submits Annual Compliance Reports to the Commission on Fire Accreditation International; develops and maintains critical department deployment models, including the Standards of Cover and other risk identification and mitigation strategies; reviews, researches, and monitors emerging legislation, regulations, trends, events, and past department performance to establish goals and objectives necessary to fulfill the department’s mission; coordinates the grant management process, which includes applications, budgets, procurements, and reports; and manages the department’s web portal and internet sites. P&D also researches and develops new programs, and evaluates existing programs and services to improve the department’s efficiency and effectiveness.

Planning and Development’s expenditures increased 42% from \$3.21 million in FY 2015 to \$4.55 million in FY 2019 and increased 14% from \$3.99 million in FY 2018. According to the department, the increase is attributed to the rising costs of negotiated salaries, overtime expenses, new personnel, and radio and computer system upgrades.



	Planning & Development Expenditures (\$ millions)	Radio Shop <sup>1</sup>	
		Services and Repairs	Planning and Training
FY 2015	\$3.21	2,699	161
FY 2016	\$3.32	2,601	138
FY 2017	\$3.81	2,739	143
FY 2018	\$3.99	2,494	121
FY 2019	\$4.55	2,736	119
Change from last year	14%	10%	-2%
Change over last 5 years	42%	1%	-26%

Source: Honolulu Fire Department and Department of Budget and Fiscal Services. <sup>1</sup>The HFD’s Radio Shop services the HFD and all other city departments, with the exception of the HPD.

Fire Communication Center Dispatchers (top photo) and Inspection of the HFD’s new rescue boat being built by Hoku Boats LLC (bottom photo).

Photo Courtesy of the Honolulu Fire Department

## Support Services

Support Services manages and coordinates the operations of the Fire Prevention Bureau (FPB) and the Training and Research Bureau (TRB), each of which is managed by a Battalion Chief.

Support Services' expenditures totaled \$8.56 million in FY 2019 which was a 29% increase from \$6.63 million in FY 2015 and a 7% increase from \$8.03 million in the prior year. According to the department, the increase is due to the rising costs of negotiated salary increases and current expenses.

The total number of fireworks permits increased 56% from 11,749 in FY 2015 to 18,365 in FY 2019.

Over the last five years, the percentage of fire safety presentation attendees increased 69% from 38,350 in FY 2015 to 64,895 in FY 2019 and increased 20% from the prior year. The increase was due to public requests for fire safety and prevention education.

The total number of hazardous materials facilities permitted decreased 68% over the last five years from 328 in FY 2015 to 105 in FY 2019 and decreased 40% from the prior year. The department attributes the reductions to the separation of tank and facilities permitting information.

In the 2019 National Community Survey, residents' ratings for fire prevention and education in Honolulu decreased 3% from the prior year. The 60% rating *excellent* or *good* is lower to percentages reported nationwide and among communities with populations over 300,000.



Rescue Training at the Pali Lookout

Photo Courtesy of the Honolulu Fire Department

	Support Services Expenditures (\$ millions)	Fire Prevention				Hazardous Materials			Community Survey (% Excellent or Good)
		Fireworks Permits <sup>1</sup>	Inspections <sup>2</sup>	Building Plans Reviewed	Fire Safety Presentations (Attendees)	Incidents	Facilities Permitted	Facilities Inspected	Fire Prevention and Education
FY 2015	\$6.63	11,749	50,532	2,951	38,350	1,605	328	328	59%
FY 2016	\$7.52	14,390	65,144	3,355	33,628	1,602	284	271	60%
FY 2017	\$8.12	17,699	75,745	3,214	41,017	1,639	224	266	51%
FY 2018	\$8.03	21,100	75,850	2,943	54,019	1,485	176	295	63%
FY 2019	\$8.56	18,365	76,210	3,225	64,895	1,454	105	463	60%
Change from last year	7%	-13%	<1%	10%	20%	-2%	-40%	57%	-3%
Change over last 5 years	29%	56%	51%	9%	69%	-9%	-68%	41%	1%

Source: Honolulu Fire Department, Department of Budget and Fiscal Services, and 2019 National Community Survey (Honolulu). <sup>1</sup>Fireworks Permits includes public display permits, satellite city hall permits and special permits. <sup>2</sup>Inspections consist of occupancy (initial) and company program inspections.