



CHAPTER 24

Department of Transportation Services

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The Department of Transportation Services' (DTS) mission is to provide a safe and efficient transportation system for the City and County of Honolulu. It accomplishes this mission through effective management of resources to plan, design, implement, operate, and maintain city streets, highways, transit systems and city transportation facilities. DTS also has jurisdiction over the efficient movement of vehicles, pedestrians, bicycles, and other modes of transportation through the city's transportation infrastructure.

Over the past 5 years, operating expenditures increased 15% from FY 2009 (\$200.8 million) to FY 2013 (\$230.9 million). According to DTS, expenditures have increased due to collective bargaining increases (O`ahu Transit Services' and city), and rising energy costs.

The department consists of the following divisions:

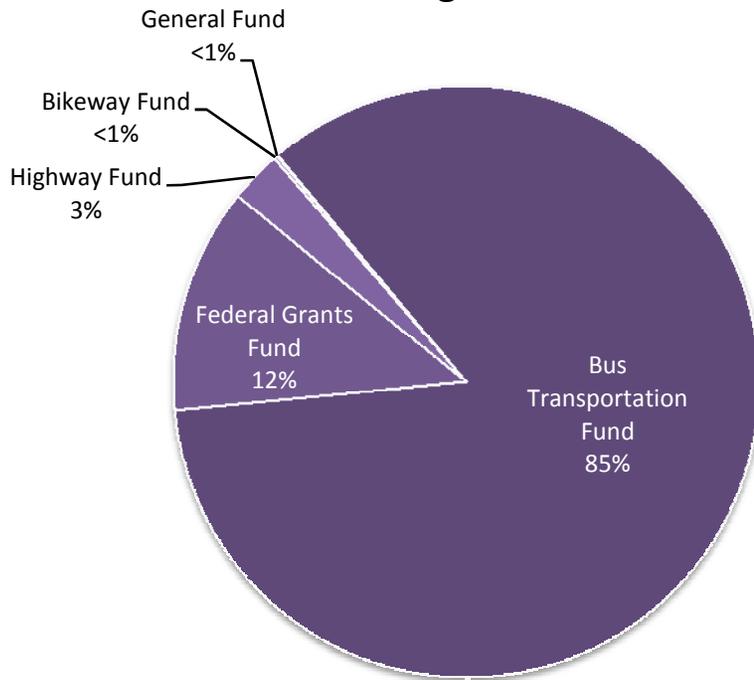
- Administration plans, directs and coordinates the operational activities of the divisions, and serves as the liaison with the Transportation Commission.
- Transportation Planning coordinates the department's transportation planning concepts and initiatives.
- Public Transit is responsible for the city's fixed-route bus transit system (TheBus) and the paratransit system (TheHandi-Van). It oversees O`ahu Transit Services (OTS), the contractor that manages and operates the public transit system for the city.
- Traffic Engineering conducts studies and analysis to promote the safe, efficient, and effective operation of the city's streets, roadways and related facilities.
- Traffic Signals and Technology designs, implements, operates and maintains over 797 state and city traffic signals on O`ahu. It also operates the Traffic Management Center.

The department's highlights include bus services improvements in March 2013 through August 2013, expansion of the traffic camera system into the Kapolei area, continued incremental implementation of the O`ahu Bike Plan, and actively managing and administering federal and transit grant programs.

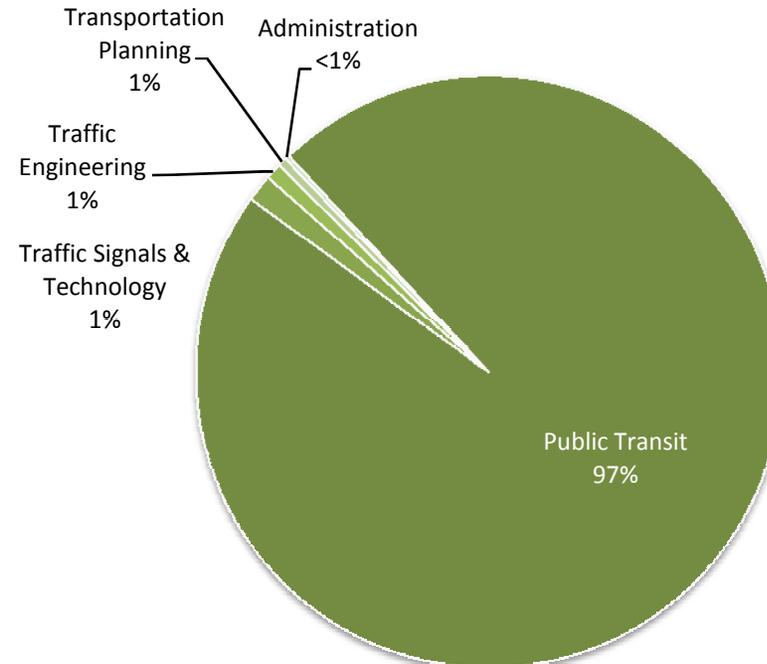
The Department of Transportation Services plans, designs, engineers and implements a safe and efficient multi-modal transportation system for the City and County of Honolulu.

- Mission Statement

Funding Sources¹



Funding Uses¹



¹Percentages do not total to 100% due to rounding.

Staffing

	Operating Expenditures (\$ million)	Revenues (\$ million)	Total Authorized FTE	Total Vacant FTE	Cost per FTE (\$ million)	Total Overtime Expenditures ²
FY 2009	\$200.8	\$67.5	194	103	\$1.0	\$271,873
FY 2010	\$205.2	\$94.0	225	136	\$0.9	\$250,826
FY 2011	\$217.0	\$89.4	274	187	\$0.8	\$257,997
FY 2012	\$224.3	\$79.3	115	38	\$1.9	\$243,840
FY 2013	\$230.9	\$88.0	115	40	\$2.0	\$334,039
Change from last year	2.9%	10.9%	0.0%	5.3%	4.8%	37.0%
Change over last 5 years	15.0%	30.4%	-40.7%	-61.2%	97.5%	22.9%

Source: Executive Operating Program and Budget (FY 2010-FY 2014), Department of Budget and Fiscal Services and Department of Transportation Services. ²DTS total overtime expenditures is comprised of non-holiday overtime only and overtime pay is established by bargaining unit agreement, as applicable.

Administration and Transportation Planning

Administration plans, directs and coordinates the department's activities in accordance with the city charter and direction from the mayor and managing director. It provides personnel management, budget preparation, and fiscal management. Over the last five years administration's expenditures increased nearly 6% from FY 2009 (\$528,867) to FY 2013 (\$560,111). According to DTS, the increase is attributed to collective bargaining restoration of salary schedules and the elimination of furloughs/supplemental time off.

The department's goals are to provide greater and improved safety for all modes of transportation and increased quality of life for residents, incorporating *complete streets* principles that balance multiple modes of travel, including but not limited to transit (TheBus / TheHandiVan), motor vehicles, bicycles, pedestrians and rail (under construction) into the planning, design, and construction of city transportation facilities and projects, including the city's Transit Oriented Development (TOD) plans and projects.

Transportation Planning

Transportation Planning (TPD) provides citywide transportation planning and project programming for capital improvement and project budgets. TPD also performs environmental, traffic impact, and

future travel demand studies. It applies for and administers highway and transit programs and projects that are funded by the Federal Highway Administration and Federal Transit Administration. TPD's expenditures been fairly stable at \$1.1 million over the past five years.

TPD implemented the Smart Parking Meter Project in FY 2013. DTS reports about 340 smart meters were installed in the civic center, downtown, and Chinatown areas under a pilot program. Smart parking meters are solar powered, accept credit card transactions, and provide intelligent enforcement and technical and financial reports through sensors and a secured internet network. Customer feedback has been positive and DTS expects to expand the project into other high meter occupancy areas.



For federal FY 2013 and 2014, a new federal funding transportation act, MAP-21, was passed. TPD continues to ensure that Honolulu receives its proper allocations and remains compliant with the FTA and FHWA requirements.

	Operating Expenditures		Complaints Referred to DTS Administration		Transportation Planning		
	Administration	Transportation Planning (\$ million)	Mayor's/MD's DART ¹ and RISRs ²	Customer Service Department Referrals	Federal Grants Programmed	Transportation Improvement	
					(\$ million) ³	Program Projects	Active Grants Managed
FY 2009	\$528,867	\$1.1	781	1,098	\$93.0	25	35
FY 2010	\$532,534	\$1.4	648	1,048	\$65.0	25	25
FY 2011	\$538,112	\$0.8	469	830	\$23.0	25	25
FY 2012	\$463,964	\$1.1	601	960	\$83.0	27	27
FY 2013	\$560,111	\$1.1	819	1,142	\$60.0	30	20
Change from last year	20.7%	-1.1%	36.3%	19.0%	27.7%	11.1%	25.9%
Change over last 5 years	5.9%	1.8%	4.9%	4.0%	-35.5%	20.0%	-42.9%

Source: Executive Operating Program and Budget (FY 2010-FY 2014), Department of Budget and Fiscal Services and Department of Transportation Services. ¹DART – Mayor's Document and Record Tracking Program. ²RISR – Managing Director's Request for Investigation and Services Report. ³FY 2009 total includes American Recovery and Reinvestment Act (ARRA), State of Good Repair (SGR), and Transit Investment for Greenhouse Gas and Energy Reduction (TIGGER) funds; omits HART funding.

The Public Transit Division (PTD) plans and directs the city’s public transit system, including both TheBus and TheHandi-Van. PTD oversees the city’s contract with O’ahu Transit Services, Inc. (OTS), which is responsible for managing and operating both TheBus and TheHandi-Van.

Public Transit comprises 97% of the department’s operating budget. Over the last five years, public transit’s expenditures increased 17% from FY 2009 (\$191.8 million) to FY 2013 (\$223.7 million). According to DTS, the expenditure increase was primarily due to the full year effect of collective bargaining pay increases for bus drivers, increased funding for fuel, bus parts, electricity and public liability insurance.

From December 2012 through May 2013, DTS Administration implemented the mayor’s priority to restore and improve bus service in January through May 2013 on seven routes that were changed in June and August 2012 to reduce costs.



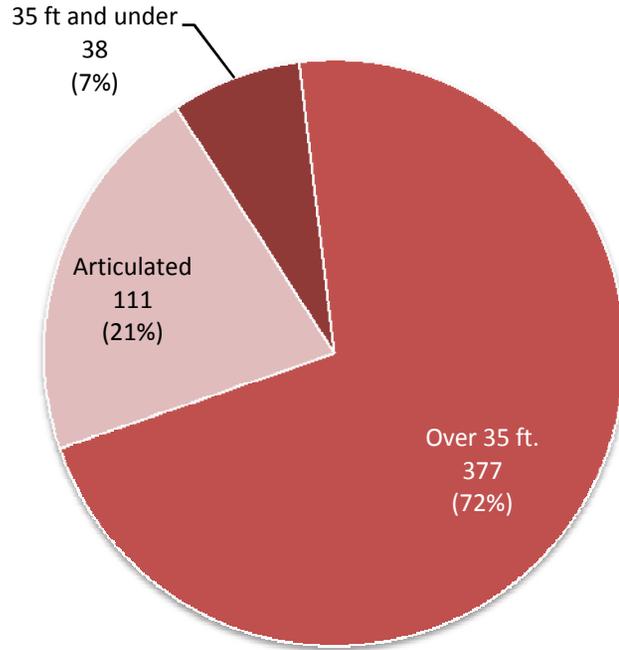
Photo Courtesy of Department of Transportation Services

In the 2013 National Citizen Survey, about 42% of respondents reported using TheBus, TheHandi-Van or other public transportation instead of driving. This was higher than the national benchmarks. Residents rating ease of travel by public transportation in Honolulu *excellent* or *good* were 42%. Over the past year, residents rating quality of bus services as *excellent* or *good* increased 4% from 58% in FY 2012 to 62% in FY 2013.

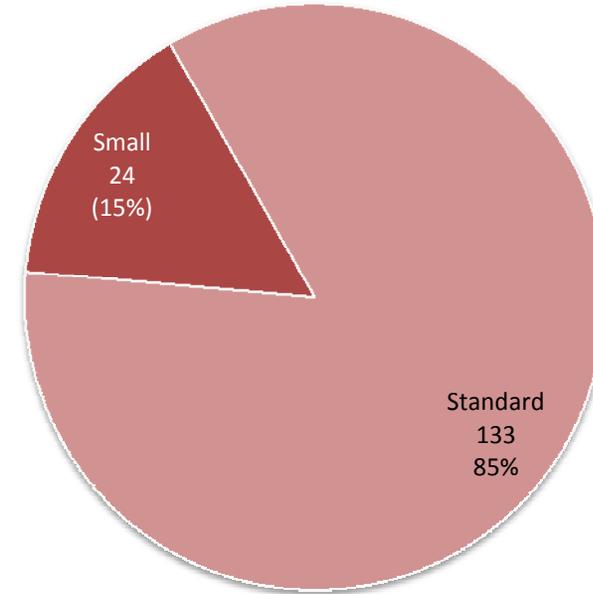
	Public Transit				Bus Subsidy (\$ million)			The National Citizen Survey (% Excellent or Good)	
	Operating Expenditures (\$ million)	Bus Fare ¹ (\$ million)	Bus Operating Cost (\$ million)	Fare Box Recovery % ²	General Fund	Highway Fund	Total Subsidy		Bus or Transit Services
FY 2009	\$191.8	\$42.5	\$165.1	26%	\$85.4	\$41.9	\$127.3	FY 2009	-
FY 2010	\$194.3	\$45.9	\$162.9	28%	\$96.3	\$28.0	\$124.3	FY 2010	67%
FY 2011	\$205.1	\$51.7	\$171.3	30%	\$70.5	\$64.3	\$134.8	FY 2011	68%
FY 2012	\$217.0	\$54.8	\$178.0	31%	\$63.8	\$63.3	\$127.1	FY 2012	58%
FY 2013	\$223.7	\$55.0	\$182.9	30%	\$68.6	\$76.6	\$145.2	FY 2013	62%
Change from last year	3.1%	0.5%	2.7%	-2.2%	7.5%	21.0%	14.2%	Change from last year	4%
Change over last 5 years	16.6%	29.6%	10.8%	17.0%	-19.7%	82.8%	14.1%	Change over last 4 years	-5%

Source: Executive Operating Program and Budget (FY 2010-FY 2014), Department of Budget and Fiscal Services, Department of Transportation Services. ¹As of January 2014, one-way fares are: Adult (\$2.50), Youth (\$1.25), Disability (\$1.00) and Senior Citizen (\$1.00). More bus fare information can be found at www.thebus.org. ²Farebox recovery set by Resolution 00-29, CD1 at 27-33% bus fare revenues to operating costs.

TheBus Fleet Mix



The Handi-Van Fleet Mix



	Fixed Route (TheBus)					Demand Response (TheHandi-Van)				
	Total Bus Hours (million)	Passenger Boardings (million)	Average Weekday Ridership	Total TheBus Boardings at UH Manoa ¹	Operating Expense per Passenger Boarding ²	Total Service Hours	Passenger Boardings	Total TheHandi-Van Boardings at UH Manoa ¹	Average Weekday Ridership	Operating Expense per Passenger Boarding ²
FY 2009	1.5	77.3	237,512	1,800,877	\$2.13	436,150	840,763	N/A	2,856	\$36.35
FY 2010	1.5	73.2	230,787	2,076,776	\$2.23	397,625	790,357	N/A	2,665	\$38.21
FY 2011	1.5	73.8	228,158	2,323,035	\$2.32	400,424	825,680	N/A	2,782	\$38.60
FY 2012	1.5	76.3	229,515	2,579,421	\$2.34	415,727	845,903	625	2,842	\$39.22
FY 2013	1.4	69.2	222,241	2,593,994	\$2.64	424,993	841,447	901	2,807	\$43.71
Change from last year	-4%	-9%	-3%	1%	13%	2%	-1%	44%	-1%	11%
Change over last 5 years	-6%	-11%	-6%	44%	24%	-3%	0%	-	-2%	20%

Source: Executive Operating Program and Budget (FY 2010-FY 2014), Department of Transportation Services, Tools to Measure Performance (Final Draft) January 2012, and 2013 National Citizen Survey (Honolulu). ¹UH-Manoa boardings are for 26 bus stops in and adjacent to UH-Manoa and are based on weekly ridership data. ²American Public Transportation Association: data for Unlinked Passenger Trips, also called boardings, is the number of times passengers board public transportation vehicles, FY 2009 to FY 2012.

TheBus (Fixed Route)

From FY 2009 to FY 2013, total bus hours declined about 6%. During this same time period passenger boardings and average weekday ridership have declined about 11% and 10% respectively. Passenger boardings in FY 2013 were 69.2 million compared to 77.3 million in FY 2009. Of those, nearly 2.6 million boardings were at UH Manoa. Average weekday ridership was 222,241 in FY 2013 compared to 237,512 in FY 2009. Operating expense per passenger boarding has increased about 24% from \$2.13 in FY 2009 to \$2.64 in FY 2013. During FY 2013, DTS reports that improvements (increased frequency, extending service, additional peak hour trips) were made to seven bus routes.

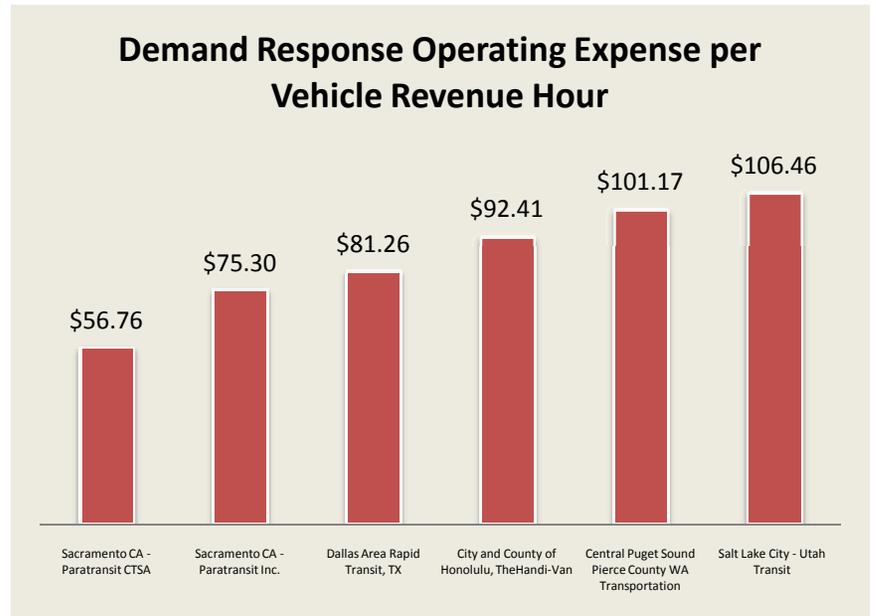
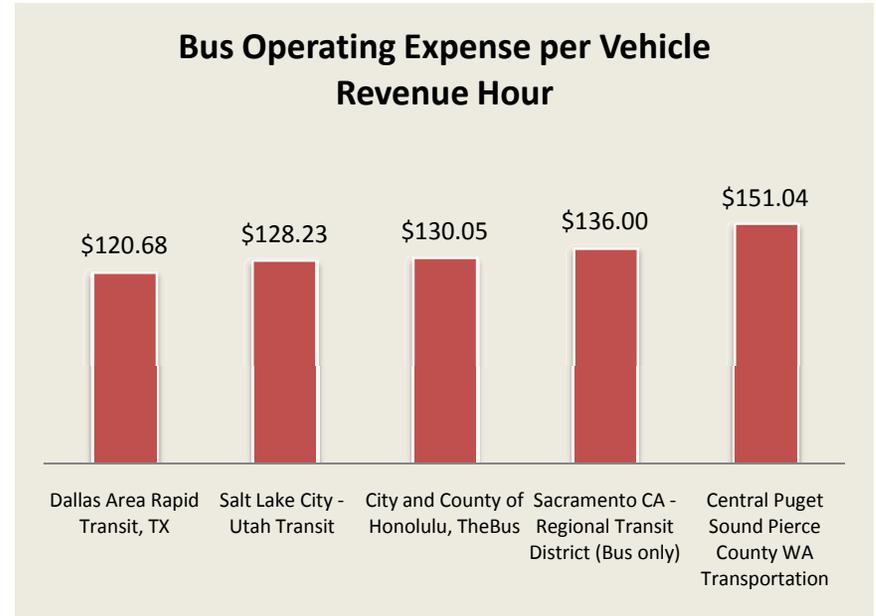
TheHandi-Van (Demand Response)

TheHandi-Van provides transportation service for persons with disabilities who are functionally unable to independently use TheBus. A total of 4,370 functional assessments for paratransit eligibility were conducted in FY 2013. Of these, 3,285 were deemed unconditionally eligible, 555 conditionally eligible, 337 were granted temporary eligibility, and 193 were deemed not eligible.

Over the past five years, total service hours for the TheHandi-Van decreased somewhat, from 436,150 in FY 2009 to 424,993 in FY 2013, while passenger boarding were similar in FY 2009 (840,763) and FY 2013 (841,453). During this same time period TheHandi-Van’s operating expense per passenger boarding increased 20%, from \$36.35 (FY 2009) to \$43.71 (FY 2013). DTS noted that 99 new handi-vans were procured in FY 2013.

Human Services Transportation Coordination Program

In FY 2013 DTS provided \$495,184 in financial assistance to Goodwill Industries of Hawai'i, Inc. (Goodwill) to transport clients to/from Goodwill programs, and midday and late night trips between Kalaeloa transitional shelters and the Kapolei Transit Center. The Kalaeloa shuttle provides a vital link to jobs and services for area residents.



Source: Department of Transportation Services and National Transit Database FY 2012 Reporting Year.

Traffic Engineering

Traffic Engineering's mission is the safe and efficient operations for all city roads and streets for the vehicular, pedestrian and bicycle movement of people and goods. The division administers and implements various capital improvements for traffic, safety, and bikeway programs. This includes new signage and striping, and updating the city's traffic code and pedestrian safety programs. In FY 2013, the division's operating expenses increased 23% over last year. The division reports the increase was due to a higher level of federal grant funding (Contra-Flow Update Study, Bike-Ed Hawai'i grant, a new Adult Bike Education program, and a Complete Streets Outreach and Education program), restoration of collective bargaining salary schedules and the elimination of furloughs/supplemental time off.

During FY 2013, Traffic Engineering continued working with communities to promote pedestrian safety, including the *Be Safe, Be Seen* Halloween Pedestrian Safety Campaign; conducting pedestrian safety booths at various fairs and community events; producing a television PSA on pedestrian overhead flashing lights; conducting safety presentations at various senior living facilities and senior groups; and launching a new *Ped Man* safety campaign directed toward elementary school students.



Photo Courtesy of Department of Transportation Services

The division increased funding for an ongoing Bike-Ed Hawai'i Program that reached out to approximately 8,600 4th graders island-wide, and started a new Adult Bike Education program. Traffic Engineering conducted a Complete Streets Outreach and Education program, and initiated three Complete Streets demonstration projects.

	Operating Expenses (\$ million)						Traffic Fatalities	
		Traffic Engineering Studies	Special Studies	Minor Traffic & Bikeway Projects	Safety Campaigns	Pedestrian	Bicycle	
FY 2009	\$2.3	1,283	7	11	4	11	3	
FY 2010	\$1.8	1,283	7	11	4	20	3	
FY 2011	\$2.3	1,283	3	15	5	16	1	
FY 2012	\$1.7	1,462	7	21	6	17	1	
FY 2013	\$2.1	1,548	10	22	9	19	0	
Change from last year	23.2%	5.9%	42.9%	4.8%	50.0%	11.8%	-	
Change over last 5 years	-8.5%	20.7%	42.9%	100.0%	125.0%	72.7%	-	

Source: Executive Operating Program and Budget (FY 2010-FY 2014), Department of Budget and Fiscal Services, and Department of Transportation Services.

In August 2012, the department published the *O`ahu Bike Plan: A Bicycle Master Plan*. The plan's vision, O`ahu is a bicycle friendly community where bicycling is a safe, viable and popular travel choice for residents and visitors of all ages.

The Traffic Engineering Division substantially completed construction of four American Recovery and Reinvestment Act (ARRA) federal stimulus projects, Kalakaua Avenue bike lane; Lei of Parks route project; Kalaheo Avenue shoulder improvements; and Date Street bike path rehabilitation. The division also installed traffic engineering improvements including pedestrian-activated overhead flashing lights in McCully, high-friction surfacing to deter drifting along Round Top and Tantalus Drives, driver-feedback radar speed signs, and several traffic calming projects throughout the city.

In the 2013 National Citizen Survey, about 91% of respondents rated they *strongly* or *somewhat* support increasing efforts to effectively address bicycle and pedestrian safety, even if it involves raising taxes.

The National Citizen Survey (% Excellent or Good)

	Ease of Car Travel in Honolulu	Ease of Travel by Public Transportation in Honolulu	Ease of Walking in Honolulu	Ease of Bicycle Travel in Honolulu
FY 2009	-	-	-	-
FY 2010	25%	-	47%	22%
FY 2011	23%	-	51%	21%
FY 2012	20%	-	52%	21%
FY 2013	15%	42%	45%	18%
Change from last year	-5%	-	-7%	-3%
Change over last 4 years	-10%	-	-2%	-4%

Source: 2013 National Citizen Survey (Honolulu).

Shared Use Path
Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with crossflow minimized.

Bike Lane
Provides a striped lane for one-way bike travel on a street or highway.

Bike Route/ Signed Shared Roadway
Provides for shared use with motor vehicle traffic, typically on lower volume roadways.

Source: O`ahu Bike Plan, August 2012

Traffic Signals and Technology

Traffic Signals and Technology (TST) is responsible for the Honolulu Traffic Management Center and implementation of the city's Intelligent Transportation System program to improve existing highway traffic efficiency through technology. It designs, implements, operates and maintains nearly 800 city and state traffic signals and 86 emergency vehicle pre-emption systems on O`ahu. Management of these transportation systems is essential to meeting the department's goal of providing safe and efficient transportation.

TST's operating expenditures increased nearly 5% over last year. According to DTS, the increase is due to an increase in electricity cost and demand, number of traffic signals, traffic camera supplies, and salaries.

TST staffs at the city's Traffic Management Center (TMC) monitor traffic Monday through Friday from 5:30 a.m. to 6:00 p.m. The city's traffic camera web page displays real-time pictures of local traffic conditions. This web site is one of the city's most popular webpages.



Artist's Rendering Courtesy of Department of Transportation Services

	Operating Expenditures (\$ million)	Total Traffic Cameras	Traffic Signals Inspected	Adjusted Signal Timing for Efficient Traffic Flow ¹	Responses to Complaints	Responses to Legal Issues	Street Use Permits	Special Events
FY 2009	\$3.5	200	555	165	690	60	6,555	172
FY 2010	\$3.4	200	421	160	623	72	6,281	168
FY 2011	\$3.4	200	421	160	623	72	7,185	179
FY 2012	\$3.3	209	592	47	592	42	6,903	176
FY 2013	\$3.4	209	592	-	548	39	7,715	82
Change over last year	4.9%	0.0%	0.0%	-	-7.4%	-7.1%	11.8%	-53.4%
Change over last 5 years	-2.6%	4.5%	6.7%	-	-20.6%	-35.0%	17.7%	-52.3%

Source: Executive Operating Program and Budget (FY 2010-FY 2014), Department of Budget and Fiscal Services, Department of Transportation Services, and 2013 National Citizen Survey (Honolulu)

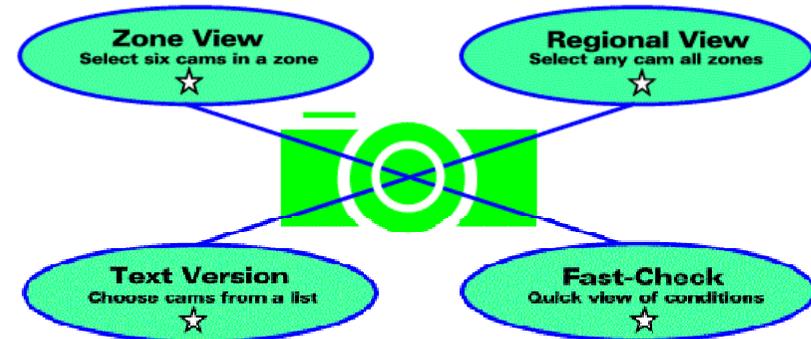
¹FY 2009 to FY 2011 Optimize Timings of Traffic Signals. FY 2012 Adjusted signal timing for efficient traffic flow.

and averages 47,000 monthly hits. Currently, the site continues to broadcast live traffic videos on the Internet. During peak hours, live traffic videos from the TMC link to the local television stations, and traffic reporters from various radio stations transmit traffic reports from the traffic center to assist O`ahu commuters to better plan their schedules. DTS is currently working to expand the traffic camera system to Kapolei and Waipio. The city’s new Joint Traffic Management Center is planned to open in 2016.

Efficient traffic signal operations are established through field inspections and traffic video monitoring. Operational timing plans are monitored especially during the morning and afternoon peak hours when congestion levels are at the highest. The TMC utilizes 209 traffic cameras to provide real time traffic information and is able to remotely adjust 398 traffic signals. The system is an invaluable tool to analyze, select and mitigate traffic congestion. The center will intervene and compensate by implementing special timing plans to ease the related congestion.

Honolulu Traffic Cameras

Please select and bookmark your favorite page below.



Traffic Control Center & Dept of Information Technology

Source: <http://www1.honolulu.gov/cameras/traffic.htm>

In FY 2013 DTS completed an upgrade to the traffic signal control software that will extend functionality for the 800 signalized intersections. The updated software includes the capability of advance pedestrian signal crossing.

In the 2013 National Citizen Survey, residents rating traffic flow on major streets *excellent* or *good* was 10%, these ratings were *much lower* than national benchmarks and cities with over population over 300,000. About 25% of residents rating traffic signal timing as *excellent* or *good*, this rating was *lower* than national benchmarks and for cities with over 300,000 residents.

The National Citizen Survey (% *Excellent* or *Good*)

	Traffic Signal Timing	Traffic Flow on Major Streets
FY 2009	-	-
FY 2010	37%	10%
FY 2011	35%	12%
FY 2012	30%	11%
FY 2013	25%	10%
Change from last year	-5%	-1%
Change over 4 years	-12%	0%

Source: 2013 National Citizen Survey (Honolulu).

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