

**Table 18.19-- ROADWAY CONGESTION FOR THE HONOLULU
URBANIZED AREA: 2004 TO 2007**

Subject	2004	2005	2006	2007
Population (1,000)	700	705	705	705
Urban area (square miles)	140	140	140	140
Population density (persons/square mile)	5,000	5,036	5,036	5,036
Peak travelers (1,000)	378	383	386	388
Daily vehicle-miles of travel (1,000)				
Freeway	6,000	6,015	6,080	6,275
Arterial streets	3,200	3,250	3,200	3,170
Cost components				
Value of time (\$/hour)	14.10	1/ 14.58	15.06	15.47
Commercial cost (\$/hour)	1/ 86.24	1/ 94.06	98.77	102.12
Fuel cost (\$/gallon)	2.38	2.63	3.09	3.41
Congested system (percent of lane-miles)	46	48	50	51
Number of daily rush hours 2/	6.8	6.8	7.0	7.2
Annual excess fuel consumed 3/				
Total (1,000 gallons)	5,680	1/ 6,358	6,479	7,051
Per peak traveler (gallons)	15	1/ 17	17	18
Annual delay (person-hours) 4/				
Total (1,000)	1/ 8,495	1/ 9,550	9,393	10,076
Per peak traveler 5/	22	1/ 25	24	26
Congestion cost 6/				
Total (\$ million)	1/ 147	1/ 173	179	199
Per peak traveler (\$)	1/ 388	1/ 451	464	514

1/ Revised from previous *Databook* .

2/ Time when system might have congestion.

3/ Increased fuel consumption due to travel in congested conditions rather than free-flow conditions.

4/ Travel time above that needed to complete a trip at free-flow speeds (60 mph on freeways and 35 mph on arterials).

5/ Extra time required to travel in the peak period divided by the number of travelers who begin a trip during the peak period (6 to 9 a.m. and 4 to 7 p.m.).

6/ Value of travel delay for 2007 (estimated at \$15.47 per hour of person travel and \$102.12 per hour of truck time) and excess fuel consumption (estimated using state average cost per gallon).

Source: Texas Transportation Institute, *2009 Annual Urban Mobility Report*

<http://mobility.tamu.edu/ums/congestion_data/west_map.stm> accessed May 28, 2010.