

CONGESTION MANAGEMENT PROCESS ANALYSIS

ORTP 2030 Project #31 (Revised) Fixed Guideway, East Kapolei to Ala Moana

Plan, design, and construct a fixed guideway system between East Kapolei and Ala Moana. This project includes intermodal connections with TheBus system to provide feeder services to fixed guideway stations. Note that the alignment, system technology, and location of transit stations may be refined during the preliminary engineering, Environmental Impact Statement, and subsequent processes.



In comparing the revised Project #31 with the Congestion Management Process baseline, the project is forecasted to result in a decrease in auto trips and an increase in transit trips to work. The number of transit trips to work is projected to increase by about 56%. Systemwide Vehicle Miles Traveled, Vehicle Hours Traveled, and Vehicle Hours of Delay are projected to decrease in the AM peak. Overall AM peak mean speeds are projected to increase.

Congestion Management Process

The project receives 18 points when rated using the CMP performance measures.

Performance Measure	Points
On List of Congested Roadways	1
Additional Transit Trips to Work	8
Transit Mode Share	3
Vehicle Miles Traveled	2
Vehicle Hours Traveled	2
Vehicle Hours of Delay	2
Total	18

2030 Daily Resident Trips to and from Work

Mode	Without Project	Percent	With Project	Percent
Automobile Trips	979,000	87%	947,000	84%
Transit Trips	72,000	6%	112,000	10%
Bicycle and Walk Trips	80,000	7%	72,000	6%
Total*	1,131,000	100%	1,131,000	100%

* Values may not add exactly to the totals because of rounding.

2030 AM Peak Vehicle Miles Traveled

Facility Type	Without Project	With Project	Difference	Percent Difference
Freeways	1,159,000	1,085,900	-73,100	-6%
Expressways	266,000	254,200	-11,800	-4%
Arterial	864,500	803,200	-61,300	-7%
Collector	335,900	290,700	-45,200	-13%
Total*	2,625,500	2,434,100	-191,400	-7%

* Values may not add exactly to the totals because of rounding.

2030 AM Peak Vehicle Hours Traveled

Facility Type	Without Project	With Project	Difference	Percent Difference
Freeways	60,700	29,500	-31,200	-51%
Expressways	10,300	5,700	-4,600	-45%
Arterial	48,900	29,900	-19,000	-39%
Collector	19,400	13,800	-5,600	-29%
Total*	139,300	79,000	-60,300	-43%

* Values may not add exactly to the totals because of rounding.

2030 AM Peak Vehicle Hours of Delay

Facility Type	Without Project	With Project	Difference	Percent Difference
Freeways	41,500	11,500	-30,000	-72%
Expressways	5,900	1,500	-4,400	-75%
Arterial	23,900	6,800	-17,100	-72%
Collector	8,200	4,200	-4,000	-49%
Total*	79,400	24,000	-55,400	-70%

* Values may not add exactly to the totals because of rounding.

2030 AM Peak Mean Speeds

Facility Type	Without Project	With Project	Difference	Percent Difference
Freeways	19.09	36.81	17.72	92.8%
Expressways	25.83	44.60	18.77	72.7%
Arterial	17.68	26.86	9.18	51.9%
Collector	17.31	21.07	3.76	21.7%
Total*	18.85	30.81	11.96	63.4%

* Values may not add exactly to the totals because of rounding.

