DEPARTMENT OF TRANSPORTATION'S
REPORT TO LEGISLATURE
OF
THE STATE OF HAWAII

UPDATE REPORT:
"ZIPPER LANE EXTENSION FEASIBILITY"

FROM

ACT 320
SESSION LAWS OF HAWAII 2012

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
DECEMBER 2013
UPDATE FOR THE ZIPPER LANE EXTENSION FEASIBILITY STUDY

Introduction:

The H-1 interstate highway acts as one of the primary urban corridors for the island of Oahu. Due to the high-density population that the H-1 interstate highway services and the narrow and linear geometrical nature, major traffic congestion frequently occurs along the H-1 interstate during the morning time period. To provide some relief to the congestion a contra-flow high occupancy vehicle (HOV) lane known as the “zipper lane” was implemented to provide an incentive for drivers to carpool. The zipper lane currently runs from Iwilei to Waipahu. With the population growth in Central and Leeward Oahu increasing, the need for travel lanes is becoming more significant. Extending the zipper lane westward from Waipahu toward Kapolei could improve the efficiency of traffic during the morning time period.

Act 320, Sessions Laws of Hawaii 2012 was signed into law in July 2012 to require the Department of Transportation (DOT) to conduct a study on the feasibility of extending the zipper lane westward from Waipahu toward Kapolei, west of the Kunia on-ramp. The feasibility study shall include:

1. A review of existing traffic conditions and how traffic conditions can be improved by extending the zipper lane westward;
2. The number and locations of additional entrances to the zipper lane;
3. A cost-benefit analysis of extending the zipper lane westward;
4. An identification and evaluation of desired, intended, and unintended effects of extending the zipper lane westward;
5. A timetable for the construction of this extension;

Schedule:

DOT contracted a consultant in September of 2013 to conduct a feasibility study. The feasibility study is expected to take six months with completion in March of 2014. A final report to the legislature will follow.

Status as of December 2013:

Travel time runs were taken on October 22, 2013 with the observed back of queue generally resulting between Kunia interchange and the Kualakai Parkway interchange, and on heavily congested traffic days the queue was observed to back up beyond the Kapolei interchange. Two additional entrance points are currently being evaluated with the extension of the zipper lane to service traffic entering the H-1 freeway from the Kualakai Parkway interchange and one from the Makakilo/Kapolei interchange. The extension of the zipper lane and the resulting effects to traffic in the general purpose lanes and traffic in the westbound direction are still being evaluated through different proposed alternatives. A cost-benefit analysis will be completed once the results of the alternatives are known.