

July 14, 2004

Honorable Chairman and Members of the
Public Works Commission

Regular Meeting of
July 21, 2004

PROSPECT AVENUE LICENSE PLATE SURVEY

Recommendation:

It is recommended that the Public Works Commission consider the results of a license plate survey and discuss options for alleviating traffic congestion on Prospect Avenue.

Background:

At the March 24, 2004 meeting of the Public Works Commission, residents in the area of Prospect Avenue between Aviation Boulevard and Anita Street expressed concerns about high volume traffic and speeding on Prospect Avenue. The Commission requested that staff investigate the cause of the heavy through-traffic on Prospect and suggest possible solutions. The Commission also requested that, on a one-month trial basis, the length of time for left turns from westbound Aviation Boulevard onto southbound Prospect Avenue be reduced as a way to reduce traffic volume. Staff decided to first conduct a license plate survey to determine who is using Prospect as an alternative to Pacific Coast Highway.

Analysis:

The license plate survey was conducted during the morning peak hours of 7:00 to 9:00 a.m., and during the afternoon peak hours of 4:00 to 6:00 p.m. The survey fieldwork consisted of two staff members stationed at each end of Prospect Ave., one person per direction. The license plates of vehicles entering and exiting the segment between Aviation Boulevard and Anita Street were recorded. The data was analyzed to determine how many cars were using Prospect Avenue as an alternate to Pacific Coast Highway. The attached report shows a summary of the information collected.

Morning peak hours (7:00 a.m. – 9:00 a.m.)

The data collected during the morning peak hours showed that there were 601 vehicles starting southbound on Prospect Avenue at Aviation Boulevard and of the 601 vehicles, 276 vehicles were thru traffic. Starting northbound on Prospect Avenue at Anita Avenue there were 984 vehicles. Of the 984 vehicles, 569 vehicles were thru traffic.

Afternoon peak hours (4:00 p.m. to 6:00 p.m.)

The data collected during the morning peak hours indicated that there were 1,078 vehicles starting southbound on Prospect Avenue at Aviation Boulevard of which 482 vehicles were through traffic. Starting northbound on Prospect Avenue at Anita Avenue, there were 793 vehicles of which 416 vehicles were through traffic.

The data analyzed concludes that 40% to 50% of the vehicles traveling on Prospect Avenue during the survey peak hours are through traffic.

In an urban area where multiple connectivity from one location to another exists, a street classification such as "Collector" encourages through traffic. Based on the classification of the roadway, 40% to 50% being through traffic is not unreasonable.

Furthermore, traffic distribution in an area roadway system is fluid. This means that the volume to capacity ratio on various connected streets is balanced. The hourly volumes surveyed on Prospect Avenue indicate that the roadway is performing on a D/E level of service.

The results of this survey indicate that 50-60% of the traffic on Prospect Avenue is made up of local residents going to and from their homes. Staff is concerned about decreasing green time for left turns from Aviation onto Prospect, which would impact so many local residents. As was presented at the March Commission meeting, this left turn movement is already operating at a very poor level of service. Staff requests that the Commission reconsider its decision to perform the trial change in signal timing.

Attachment: License Plate Survey

Respectfully submitted,

Richard D. Morgan, P.E.
Director of Public Works/City Engineer