City of Long Beach ***Memorandum***
Working Together to Serve

Date: December 1, 2004

To: Mike Conway

Cc: Greg Carpenter
Dave Roseman
Rick Trent

From: Vickie Becker

Subject: **Meeting Minutes San Gabriel River Study Group 11/10/04**

Meeting Notes:

Roll Call:
Attendees

Committee Member	Alternate	Committee Members	Alternates	Association
X	NA	Ric Trent, Chair	**Vice Chair to be selected at a later date.**	Naples Neighborhood Association
X	X	David Bates	Denis Craig	Island Village
X	X	Jim Carter	Dave Bower	Bixby Village HOA
NA	X	Ben Goldberg	Janice Dahl	University Park Estates
NA	X	Shelly Hanks	Sonia Pawluczyk	Alamitos Heights
X	NA	Tom Lockhart		Belmont Shores
X	NA	Bob Metzger	Tom Pattterson	Bay Harbour
X	X	Sam Smock	Lisa Rinaldi	Pacific Villas HOA
X	NA	Mike Pugh		College Estates East
X	X	Hank Snapper	Ted Dalton	Spinnaker Bay

City of Long Beach:

Mike Conway, Property Services Bureau Manager
Greg Carpenter, Planning Bureau Manager
David Roseman, City Traffic Engineer
Vickie Becker, Planner

Review of Minutes from 10/14/04 meeting.
Minutes Approved

Meeting open for public comment.
No comments.

Speaker Presentation:

Dave Roseman, City Traffic Engineer, City of Long Beach.

Mr. Roseman gave a brief review of his education and personal background indicating that he is a resident of the City of Long Beach, and a graduate of California State University, Long Beach. He worked for the City of Los Angeles Department of Transportation for approximately 14 years and came to work for the City of Long Beach in April of 2002.

The discussion then continued with Mr. Roseman asking the audience to define traffic congestion. Many of the audience members came up with some general definitions such as waiting at a traffic light through several light changes, slow speeds on major thoroughfares, and too many cars. Mr. Roseman then explained that there is no single industry established definition for traffic congestion. Although a number of factors relating to congestion, such as volume, stops, delay, etc., can be measured, the concept of what is congestion and how severe it may be remains and individual and personal assessment.

The discussion then moved to ways of determining or conducting a traffic study for development projects. Mr. Roseman presented a copy of the “ITE Trip Generation” manual and explained that the manual consists of a series of tables and equations used to estimate the approximate number of trips anticipated from a specific type of development. The tables further define the number of weekend, weekday, and peak period trips by various factors including number of square feet, employees, units, etc.

Traffic Study Methodology:

Mr. Roseman explained that the first step in analyzing or projecting the impact a specific development might have on the existing roadway network would be to determine the number of anticipated inbound and outbound trips generated by time. As an example, Mr. Roseman used an average 2,000 square foot home, which is anticipated to generate 10 trips per day. That same 2,000 square feet in an office building would be expected to generate approximately 20 trips. While 2,000 square feet in a shopping center would be expected to generate 80 trips per day.

Once the trip generation is determined for a proposed development the next step is to determine the trip distribution, or where the trips are coming from or going to. Development of a trip distribution pattern for a development is not an exact science and is generally determined by traffic engineers based on information regarding the surrounding roadway network and land use as well as a healthy dose of engineering judgment. For large-scale developments a computerized traffic model is typically used as a guide to assist traffic engineers in determining an appropriate trip distribution pattern.

The trip generation numbers combined with the trip distribution pattern begins to provide a picture of how the traffic volumes from the new development will impact the existing roadway network. The future traffic conditions with the development can then be determined by adding the new traffic volumes with the existing traffic volumes as gathered from traditional traffic counts. Traffic engineers then analyze a variety of traffic scenarios that include the existing traffic conditions, future conditions without the project, future conditions with the project, and future conditions with the project and any proposed roadway improvements. Typically, traffic engineers use the traffic volumes during weekday peak periods (7am-9am and 4pm-6pm) in their analysis to capture the worse case traffic scenarios.

Once the traffic volumes have been determined for the roadway network for all of the various scenarios, traffic engineers then analyze the data to determine if the added traffic on the network is considered a significant traffic impact. Each city has its own procedures for calculating impacts and determining which impacts are considered significant. In the City of Long Beach the ICU method of determining intersection “Level of Service” is used to perform the calculations and make those determinations.

Mr. Roseman then explained how an intersection’s “Level of Service” is determined. Basically, an intersection’s “Level of Service” is similar to the academic grading scale with “A” being excellent (free flow) and “F” being failure (forced flow). Unlike the academic grading scale, “E” is considered capacity and is typically the peak hour goal for maximum traffic throughput. On a freeway for

example “Level of Service E” is approximately 35mph at approximately 2,200 vehicles per lane per hour. On arterial streets “Level of Service” is more complex to determine and it is generally only calculated at intersections. That calculation is generally based on the number of travel lanes, opposing traffic volumes, and the type of traffic signal operation. In Long Beach any development that reduces an intersection’s “Level of Service” by 2% for grades “D” – “F” is considered significant.

Other issues when mitigating and projecting traffic flow.

There are many other factors that can also contribute to traffic congestion and circulation impacts. Traffic light sequencing and roadway jurisdiction also have an impact on how traffic flows. The State Department of Transportation (Caltrans) controls all the traffic signals on PCH, 7th Street east of PCH, and at freeway ramps. Traffic signal coordination across jurisdictional boundaries is not always synchronized for technical and political reasons. There are about twenty signalized intersections surrounding the wetlands area. About half of those traffic signals are under Caltrans control.

Determining alternate routes and other mitigation:

Much of the existing traffic congestion in the area of the wetlands is a result of the many bridges in the area and limited opportunities for additional roadways or roadway widening. Much of the existing roadway and bridge infrastructure was built at a time when traffic demands were not as great. In order to support additional larger scale developments in the area it is reasonable to assume that significant infrastructure investment would be needed. Some alternatives for improving the existing situation and helping to mitigate the impacts of future development include: creating right hand turn pockets, creating new roadway connections, and improving traffic signal operations.

1) Adding turn lanes
    a. Possible at some locations; however, many intersections are under Caltrans jurisdiction and thus improvements must meet Caltrans design standards. Caltrans standards require that all State Routes such as PCH have minimum lane widths of 12 feet (City standards call for 10 foot lanes) and include an 8 foot shoulders (City has no shoulder requirements). In some areas there is little available room for street widening because of either physical conditions or existing development. Such constraints create challenges for creating new lanes. However, the City of Long Beach is pursuing a project with Caltrans to improve the intersection of PCH and 2nd Street (Westminster) by widening the southbound approach.

2) Creating new roads

a. Possible when the land is available; however, because of the extensive network of waterways most new road construction has limited benefit with out widening a bridge or constructing a new bridge.

3) Improving traffic signal operations
   a. Improving traffic operations thorough traffic signal upgrades or timing improvements could create traffic problems at other intersections along the same roadway.
   b. Cross-jurstidictional cooperation on traffic signal operations is not always possible due to technical or political constraints.

What is the staff process when a proposal for a project is submitted?

1) Staff analyzes the project and determines whether an Environmental Impact Report (EIR), which includes a traffic study, is required. If an EIR is not required the City's Traffic Engineer can require an independent traffic study. A 3rd party consultant is hired to perform the study.
2) Staff reviews the EIR, or Traffic Study and either accepts or rejects the analysis. If necessary, mitigation measures are determined within the study and negotiated with City Staff. The costs incurred by the improvements are assessed and charged to the developer by means of a traffic impact fee. These fees are determined based on factors of the development such as number of bedrooms, or square footage of development.

Possible mitigation at PCH and 2nd Street

1) The possible extension of Studebaker Road, issues, and questions.
   a) Issues
   b) Soils Conditions
   c) Improve the left hand turn lane at 2nd Street and PCH.
   d) Improve Traffic Signal coordination with Marina Drive.
   e) Extend Shopkeeper Road to connect to connect at PCH.
   f) Can we widen Studebaker Road? (Possibly through Traffic Element)
   g) Redesigning the circulation pattern must include the intersection at 7th Street and PCH.
   h) Can we implement an additional freeway ramp at bridges into Belmont Heights and Naples?
   i) Can we widen the bridges?

Other Issues:

Public comment reserved for next meeting 12/8/04
Choose Group Name next meeting 12/8/04