



DATE: June 23, 2015

CATEGORY: New Business

DEPT.: Community Development

TITLE: **North Bayshore Trip Cap Report**

RECOMMENDATION

Review and accept the North Bayshore Trip Cap Report.

BACKGROUND

2030 General Plan

The City's General Plan identified North Bayshore as a "change area" and included some key goals and policies to transform the area from a suburban office district to one that is highly sustainable with more diverse commercial land uses. The General Plan also included policies that require new development to implement Transportation Demand Management (TDM) strategies and called for major improvements to key streets such as Shoreline Boulevard.

North Shoreline Transportation Study

Based on the General Plan's policy direction and projected growth for North Bayshore, the City completed the North Shoreline Transportation Study (NSTS) in 2013. The NSTS set an ambitious 45 percent target for single-occupancy vehicle (SOV) a.m. peak-hour trips (generally within the 7:00 a.m. to 10:00 a.m. period) for the North Bayshore Area. The 45 percent target was based on the network capacity in North Bayshore and the amount of future development projected from the General Plan. The NSTS noted that achieving this target will require a strong Transportation Management Association (TMA) and new development implementing innovative and aggressive TDM programs.

North Bayshore Precise Plan

The City then adopted the North Bayshore Precise Plan in November 2014 based on the policy foundations set by the 2030 General Plan and the NSTS. The Precise Plan

established an initial vehicle trip cap of 18,900 vehicles across the three North Bayshore gateways. This trip cap number assumes a 45 percent SOV mode share. The Precise Plan also includes the following key standards to guide implementation of the trip cap:

1. **Vehicle trip cap monitoring.** The City shall monitor the number of vehicle trips during the morning peak period (7:00 a.m. to 10:00 a.m.) at each of the three major entry points to North Bayshore: San Antonio Road, Rengstorff Avenue, and Shoreline Boulevard. Monitoring shall occur at least twice a year during periods determined by the City.
2. **Vehicle trip cap.** If monitoring shows that the trip cap is reached at any of the three gateway locations after two consecutive data reporting periods, the City will not grant any new building permits for net new square footage in the North Bayshore Precise Plan area until the number of morning peak period vehicle trips is reduced below the trip cap, except as described in the next paragraph.

An application for new development may propose strategies, including, but not limited to, physical improvements to the transportation network and additional TDM measures, along with traffic analysis demonstrating the proposed strategies and/or improvements will comply with the district vehicle trip cap prior to project occupancy. Proposed strategies and/or improvements shall be implemented prior to building occupancy unless deemed otherwise by the City Council. The City Council will consider applications proposing improvements to the transportation network and/or additional TDM measures according to the review process established by Council policy.

3. **Vehicle trip cap report.** The City shall prepare an annual North Bayshore vehicle trip cap report. This report will include data from the vehicle trip cap monitoring program, including the number of vehicle trips at each gateway and each gateway's vehicle trip capacity. The report will also document any trends or data regarding progress toward achieving the Precise Plan's mode share targets. The report may also include, but is not limited to, the following: single-vehicle occupancy percentage, implementation of employer TDM programs, and the timing and implementation of area transportation improvements.

4. **Vehicle trip cap evaluation.** The City Council shall review the annual vehicle trip cap report. The City Council will evaluate the report and may adjust the trip cap to reflect any new capacity at the gateways. If the report shows that the vehicle trip cap is not being achieved to the satisfaction of the City, the City Council may consider, but is not limited to, any of the following:
- Require new development to implement additional project and/or area-wide TDM strategies;
 - Increase the amount of City or developer contributions to fund area transportation improvements and implement a congestion pricing program for the area; and
 - Implement a congestion pricing program for the area.

ANALYSIS

The City hired AECOM, Inc., to prepare the trip cap report. The purpose of the trip cap report is to provide the City with updated information on the North Bayshore trip cap and SOV rates. The trip cap report is being funded through a grant the City received from the State's Proposition 84 (Sustainable Communities) grant funding program.

Trip Cap Report Summary

Trip counts (vehicles, bicyclists, and pedestrians) were taken in March 2015 across the three gateway locations (Shoreline Boulevard, Rengstorff Avenue, and San Antonio Road), as shown below:



The results of the trip monitoring show little change in the inbound motor vehicle trips and person-trip mode shares for SOVs when compared to the data collected in February 2014 during the Precise Plan update. The following are the key findings from the report:

- **Forty-five (45) percent SOV target.** Some progress towards the City's 45 percent SOV ("drive alone") target has been made. Both the weekday a.m. peak period and the weekday a.m. peak hour SOV mode shares are 55 percent, which is down from 57 percent observed last year.
- **Gateway trips.** A total of 13,670 vehicles entered the North Bayshore Area during the morning a.m. peak period. This Precise Plan's districtwide vehicle trip cap for inbound vehicles during this peak period is 18,900 vehicle trips.

- Shoreline Boulevard.** Shoreline Boulevard is still the most impacted gateway. There was a slight improvement in available capacity on Shoreline Boulevard during the a.m. peak period between 2014 (6,650 trips/6,740 trip capacity or 98 percent) and 2015 (6,290 trips/6,740 trip capacity or 93 percent).

The following tables summarize additional trip cap report data, and compares the data to the 2014 Precise Plan trip cap counts.

Table 1: Inbound Gateway Available Capacity: Peak Period (7:00 a.m. to 10:00 a.m.)

Gateway / Roadway Segment	Weekday AM Peak Period				
	Gateway Capacity	Feb-2014		Mar-2015 ⁽¹⁾	
		Vehicle Volume	Available Capacity	Vehicle Volume	Available Capacity
1. San Antonio Road	4,140	2,050	2,090	2,270	1,870
<i>San Antonio Road</i>					
Between Bayshore Parkway and Casey Avenue	1,250	620	630	700	550
<i>Bayshore Parkway</i>					
Between San Antonio Road and Garcia Avenue	2,900	1,430	1,470	1,570	1,330
2. Rengstorff Avenue					
Between US 101 NB Ramps and Garcia Avenue-Charleston Road	8,020	5,240	2,780	5,110	2,910
3. Shoreline Boulevard					
Between US 101 NB Ramps-La Avenida Street and Pear Avenue	6,740	6,650	90	6,290	450
Total	18,900	13,940	4,960	13,670	5,230

Source: Fehr & Peers, 2014; AECOM 2015.

Notes:

⁽¹⁾ For the purposes of comparison, March 2015 conditions volumes were rounded to the nearest 10.

Table 2: Inbound Person-Trips Mode Share Comparison

Classification	Weekday AM Peak Period			Weekday AM Peak Hour		
	Feb-2014	Mar-2015 ⁽¹⁾	Difference	Feb-2014	Mar-2015 ⁽¹⁾	Difference
Drive Alone (SOV)	57%	55%	-2%	50%	55%	5%
Carpool (HOV)	13%	13%	0%	12%	12%	0%
Transit / Shuttle	25%	25%	0%	33%	26%	-7%
Other⁽²⁾	1%	1%	0%	1%	1%	0%
Bicycle	3%	5%	2%	3%	5%	2%
Pedestrian	1%	1%	0%	1%	1%	0%

Source: Fehr & Peers, 2014; AECOM 2015.

Notes:

⁽¹⁾ For the purposes of comparison March 2015 conditions classification percentages were rounded to the nearest whole number.

⁽²⁾ The "Other" category in the *NBPP Memo* only includes trucks. The "Other" category in the March 2015 analysis includes motorcycles, trucks, and intercampus Google shuttles at one person-trip per vehicle.

⁽³⁾ Weekday AM peak hour, consisting of four consecutive 15-minute intervals with the highest recorded motor vehicle volumes, 8:45-9:45 AM.

NEXT STEPS

Staff plans to take a second set of trip counts in early 2016. As noted earlier, if the North Bayshore district does not achieve the trip cap after two consecutive data reporting periods, then the City Council has several options, such as requiring new development to implement additional project and/or area-wide TDM strategies; increasing the amount of City or developer contributions to fund area transportation improvements; or implementing a congestion pricing program for the area.

Looking ahead, staff expects continued improvement toward achieving Precise Plan transportation goals; however, it is unlikely that substantial reduction of gateway congestion or achievement of the 45 percent SOV mode share target will occur until key Precise Plan priority improvements are implemented. The recent Bonus FAR process identified several key physical improvements that will be constructed as part of Bonus FAR entitlements if the following development proposals are approved:

- Shoreline Boulevard street improvements between Highway 101 and Pear Avenue, and between Pear Avenue and Plymouth Street when the Plymouth Street – Space Park Way street alignment occurs (LinkedIn);
- Rengstorff Avenue signal timing improvements at Leghorn Street, Highway 101, and Garcia Avenue intersections and an adaptive signal system (Google – Landings); and
- New bicycle/pedestrian bridges over Highway 101 near Shoreline Boulevard (LinkedIn) and Rengstorff Avenue (Google – Landings).

The North Bayshore community may want to start planning now for the implementation of additional TDM strategies, services, or improvements to help the district move more rapidly towards the 45 percent mode share target. These strategies could either be implemented by individual companies, groups of companies, Bonus FAR developments, or the TMA.

FISCAL IMPACT

None. This first North Bayshore trip cap report cost \$84,000 and was funded by a State of California Sustainable Communities grant.

ALTERNATIVES – Provide direction to staff regarding the current trip cap report.

PUBLIC NOTICING

Agenda posting. Copies of this report were also sent to the North Bayshore interested parties list.

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MA/7/CAM
891-06-23-15CR-E

Attachment: 1. Trip Cap Report