

CITY OF ALAMEDA

Memorandum

To: Ann Marie Gallant
Interim City Manager

From: Matt T. Naclerio
Public Works Director

Date: June 28, 2010

Re: Update of Traffic Capacity Management Procedure

BACKGROUND

On June 19, 2001, the City Council adopted a resolution approving the Traffic Capacity Management Procedure (TCMP). Established pursuant to mitigation measures contained in the Environmental Impact Report (EIR) for the Catellus project, the TCMP estimates the remaining traffic capacity in the Webster and Posey Tubes. Its purpose is to identify a project's impact to the remaining capacity of the Tubes prior to the City Council's approval of the project and to determine appropriate mitigations to reduce a project's peak hour trips.

The TCMP is applicable to any proposed development west of Grand Street that generates new peak hour trips through the Tubes in excess of one percent of the current estimated reserve capacity. The TCMP requires a developer to identify the number of peak hour trips projected to use the Tubes and propose feasible mitigation measures to reduce the peak hour trips by at least ten percent for residential development and 30% for non-residential development. The Planning Board may reduce these requirements.

Implementing Policy 4.1.2.d of the General Plan requires that the TCMP be updated at least every two years to include the latest Webster and Posey Tubes traffic volumes and trip generation totals for developments approved but not yet occupied. The TCMP was last updated in 2008. Exhibit 1 provides the required updated capacity of the Tubes and includes traffic projections for the Alameda Landing project. In addition, the projected trip generation totals for the unoccupied units at the Summer Homes development on Buena Vista Avenue and Poggi Street, and the vacant units at the North Housing located near Main Street have been included in the determination of remaining capacity. Existing Alameda Point and the Fleet and Industrial Supply Center (FISC) land uses are accounted in the existing daily volume counts shown in Exhibit 1. Furthermore, no reductions have been taken for projects that are required to provide Transportation Demand Management programs as mitigation for project related traffic impacts. This approach provides a conservative estimate for determining the remaining capacity of the Tubes.

CC/ARRA/CIC
Exhibit 7 to
Agenda Item #3-B
07-07-10

DISCUSSION

Two-week traffic counts of the Webster and Posey Tubes were collected from October 18, 2009 to October 31, 2009. As indicated in Exhibit 2, when compared to last year's traffic volumes, the Posey Tube shows an average decrease of approximately five percent during the morning peak hour and a two percent decrease during the afternoon peak hour. The Webster Tube shows a five percent decrease during the morning peak hour and a six percent decrease during the afternoon peak hour. This decrease can be attributed to lower traffic volumes associated with the overall economic downturn and the shift of traffic due to the construction on Webster Street and Wilver "Willie" Stargell Avenue.

Based on the remaining capacity determined in Exhibit 1, Public Works staff has calculated the hypothetical maximum development that could be accommodated for different types of development for both current conditions and 2030. The 2030 projection assumes a one-half percent background growth per year. The development estimates are determined by taking the remaining capacity and dividing by the trip generation rate for each development type. The difference in development potential as detailed in the last report is shown in parentheses below.

Estimated Maximum Development Per Land Use Type Based on Remaining Capacity

- 1.92 Million Square Feet (MSF) of Manufacturing Use; (0.29 MSF); **or**
- 4.18 MSF of Warehouse Use; (0.61MSF); **or**
- 1.94 MSF of Light Industrial Use; (0.12 MSF); **or**
- 1.35 MSF of Office Use; (0.08 MSF); **or**
- 0.29 MSF of Shopping Center Use; (0.04 MSF); **or**
- 0.46 MSF of Specialty Retail; (0.07 MSF); **or**
- 791 Single Family Residential Detached Units; (116 DU); **or**
- 1,233 Residential Attached (Duplex) Units or Town homes (183 DU)

Estimated Maximum Development Per Land Use Based on Projected 2030 Capacity

Due to a projection of no reserve capacity in 2030 for the inbound (southbound) direction of the Webster Tube, no future land uses can be projected using Institute of Traffic Engineers (ITE) Trip Generation Manual. Assuming a nominal reserve capacity of 10 trips for this approach, the following uses could be expected:

55 KSF of Manufacturing Use; (0 MSF); **or**
120 KSF of Warehouse Use; (0 MSF); **or**
130 KSF of Light Industrial Use; (0 MSF); **or**
60 KSF of Office Use; (0 MSF); **or**
8.5 KSF of Shopping Center Use; (0 MSF); **or**
14 KSF of Specialty Retail; (0 MSF); **or**
22 Single Family Residential Detached Units; (-2 DU); **or**
35 Residential Attached (Duplex) Units or Town homes (0 DU)

FINANCIAL IMPACT

There is no financial impact to the General Fund anticipated from continuing implementation of the TCMP.

MUNICIPAL CODE/POLICY DOCUMENT CROSS REFERENCE

The TCMP is consistent with implementing Policy 4.1.2.d of the General Plan.

RECOMMENDATION

This report is for informational purposes only.

OK:VP:gc

Exhibit(s):

1. TCMP Remaining Traffic Capacity
2. Webster and Posey Tubes Traffic Volume

cc: Mayor and City Councilmembers
Deputy City Manager Ott
Supervising Civil Engineer

TCMP

Interim Traffic Policy for the Alameda Tubes

(As of Oct, 2009)

	Webster Tube (Inbound or SB)	Posey Tube (Outbound or NB)
Capacity ¹	3,976	4,007
PM Peak Hour		
Existing Volume + Vacant Uses ²	3,131	2,170
Approved Projects Volume	480	654
Subtotal	3,611	2,824
Remaining Capacity	364	1,183
2030 Capacity (after Background Growth) ³	(16)	919
1% of Remaining Capacity (Excluding Background Growth)	4	12
AM Peak Hour		
Existing Volume + Vacant Uses ²	1,958	2,925
Approved Projects Volume	484	253
Subtotal	2,442	3,177
Remaining Capacity	1,533	829
2030 Capacity (after Background Growth) ³	1,295	474
1% of Remaining Capacity (Excluding Background Growth)	15	8

¹ Assumes a 55MPH Free Flow Speed & Actual Peak Hour Factor Observed (0.93)

² Use the Mean Value of Readings during 2 Consecutive Work weeks (Tue-Thu) plus vacant uses. 2008 traffic data used for existing due to lower volumes in 2009.

³ Assumes 0.5% growth per year

EXHIBIT 2**Posey/Webster Tubes
Historical Traffic Volume Data**

YEAR	Month	Posey Tube (NB)			Webster Tube (SB)			Total ADT ¹
		ADT	AM Peak	PM Peak	ADT	AM Peak	PM Peak	
			Hour	Hour		Hour	Hour	
1993	July	42,800	3,392	3,339	31,608	2,299	2,587	74,408
1994	July	33,988	2,615	2,875	38,151	2,735	3,656	72,139
1995	July	35,972	2,893	2,768	44,004	2,870	3,826	79,976
1996	Sept	30,567	2,543	2,234	28,201	2,017	2,732	58,768
1997	Oct	27,704	2,606	2,114	27,795	1,985	2,777	55,499
1998	Sept	30,618	2,895	2,266	30,276	2,153	3,278	60,894
1999	April	31,397	2,994	2,325	33,627	2,189	3,414	65,024
2000	Oct	28,001	2,788	2,369	26,722	2,204	2,980	54,723
2001	Nov	24,877	2,471	2,129	23,868	2,186	3,067	48,745
2002	Oct	23,665	2,303	1,962	26,893	1,979	2,869	50,558
2003	Sept	28,268	2,788	2,228	26,943	1,992	2,918	55,211
2004	Nov	28,775	2,877	2,289	27,527	1,905	3,008	56,302
2005	Nov	28,545	2,693	2,197	29,259	1,913	3,032	57,804
2006	Oct	29,859	3,038	2,225	29,128	1,935	2,985	58,987
2007	Oct	29,504	2,769	2,185	29,321	1,877	3,064	58,825
2008	Oct	29,203	2,863	2,137	29,033	1,940	3,058	58,236
2009	Oct	28,648	2,732	2,103	28,064	1,838	2,873	56,712

1. Average Daily Traffic - Total Volume for 24-hour period, reported in vehicles per day

Note: This information is based on raw data and has not been validated and may not be fully accurate because (1) The data was not collected at the same time each year and traffic fluctuates seasonally (2) During some years data was collected for only one