



**METROPOLITAN  
TRANSPORTATION  
COMMISSION**

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## *Memorandum*

TO: Policy Advisory Council

DATE: July 3, 2012

FR: Lisa Klein

W.I. 1236

RE: Express Lane Network: Update and Environmental Justice Analysis Approach

In April 2012, the Policy Advisory Council convened a special meeting for an update on the Regional Express Lane Network. This memorandum provides an update on recent work efforts, seeks feedback on the proposed approach to the environmental justice analysis for the Phase 1 project, and includes responses to questions posed by members of the Council and the public at the April meeting.

### **Background**

Based on action by the California Transportation Commission in fall 2011, MTC intends to develop and implement the Regional Express Lane Network on 270 miles of freeway. The project goals include (1) improving connectivity of the region's HOV system to reduce travel time and improve reliability for buses and carpools; (2) better use existing capacity in the HOV lanes and freeway as a whole; and (3) offer a reliable travel option. The "MTC-Authorized Network" complements 280 miles of express lanes that the Valley Transportation Authority and Alameda County Transportation Commission are statutorily authorized to implement. (See map in attached presentation slides.)

MTC is starting development of phase 1 of the Network ("Phase 1 Project"). MTC is undertaking environmental studies on converting an initial set of existing HOV lanes to express lanes, approximately 80 miles total, on I-880 in Alameda County, I-680 in Contra Costa County, and at the approaches to the Bay Bridge, San Mateo-Hayward Bridge and Dumbarton Bridge. (See map in attached presentation slides.)

### **Part 1: Update on Current Work**

Current work falls into several areas of interest to the Council:

1. Development of Phase 1 Project. Work continues on the early engineering and environmental studies for Phase 1. MTC has developed a proposed approach to the environmental justice analysis and has begun to assemble supporting data, as described below.
2. Development of a strategy to finance the Network. As discussed at the April meeting, staff expected that the Commission would consider this summer whether to assign the responsibility for financing, implementing and operating the Network to the Bay Area Infrastructure Financing Authority (BAIFA), an existing joint powers authority between

MTC and BATA. This item was of particular interest to the Council, and several members noted their concerns assigning these responsibilities to BAIFA, which would consist of a subset of commissioners. Subsequent to the meeting, staff decided to further review the options and to defer this discussion until the fall.

3. Adoption of tolling and operational policies. Work in this area is expected to ramp up in 2013.

## **Part 2: Approach to Environmental Justice (EJ) Analysis**

MTC will conduct an EJ analysis as part of the environmental process for the Phase 1 Project, as is required under Federal and State environmental laws (NEPA and CEQA) to identify and address disproportionately high and adverse impacts to low-income and minority populations. However, Phase 1 is just the first phase of several needed to implement the MTC-Authorized Network and many of the EJ considerations are well-suited to be addressed at the regional or program-level; as such, MTC staff is proposing to conduct a two-part analysis consisting of:

1. A “Context Analysis” that will set the stage for project analysis of Phase 1 and future phases by establishing consistent criteria to identify low-income and minority populations that live along or travel in the entire MTC-Authorized Network. It will also analyze at the program level elements that will span multiple projects or phases. For example, it will assess the ability of low-income travelers to obtain FasTrak accounts and whether they are likely to use express lanes as paid customers, carpoolers or transit riders. This effort will include surveys of low-income and minority residents throughout the area served by the MTC-Authorized Network. The Context Analysis will start immediately with a draft report due this fall and a final report at the end of the year.
2. A more specific “Project Analysis” that will evaluate the impacts of Phase 1 (and eventually of later phases) in more detail. For example, the Phase 1 Project-level Analysis will assess the specific traffic and air quality impacts to determine if disproportionately high and adverse impacts would occur for low-income and minority travelers and communities in the Phase 1 project area. The Project Analysis will draw from information developed in the Context Analysis and will get underway this fall, after substantial progress has been made on the Context Analysis.

The attached slides provide an overview of staff’s proposed approach to the Environmental Justice Analysis.

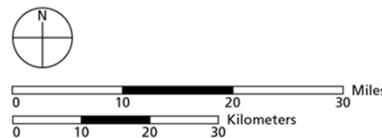
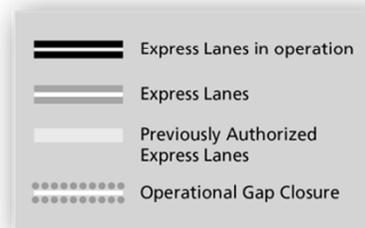
## **Part 3: Response to Questions Posed in April**

Attachment 2 includes responses to questions posed by members of the Council and the public at the April 3, 2012 meeting.

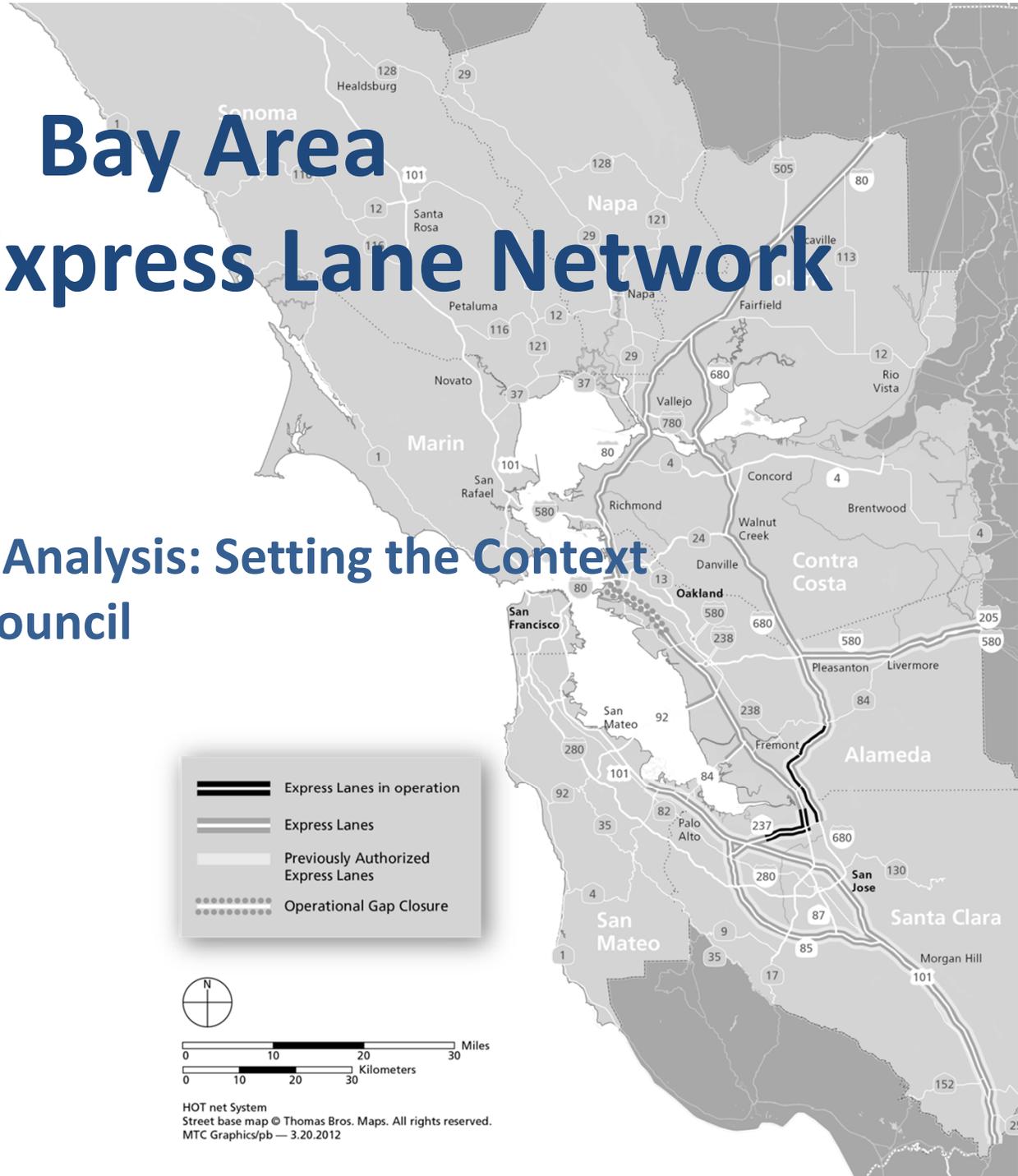
# Bay Area Regional Express Lane Network

Environmental Justice Analysis: Setting the Context  
MTC Policy Advisory Council  
July 11, 2012

*Draft June 26, 2012 (LK)*

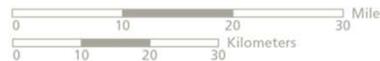


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# Discussion Questions

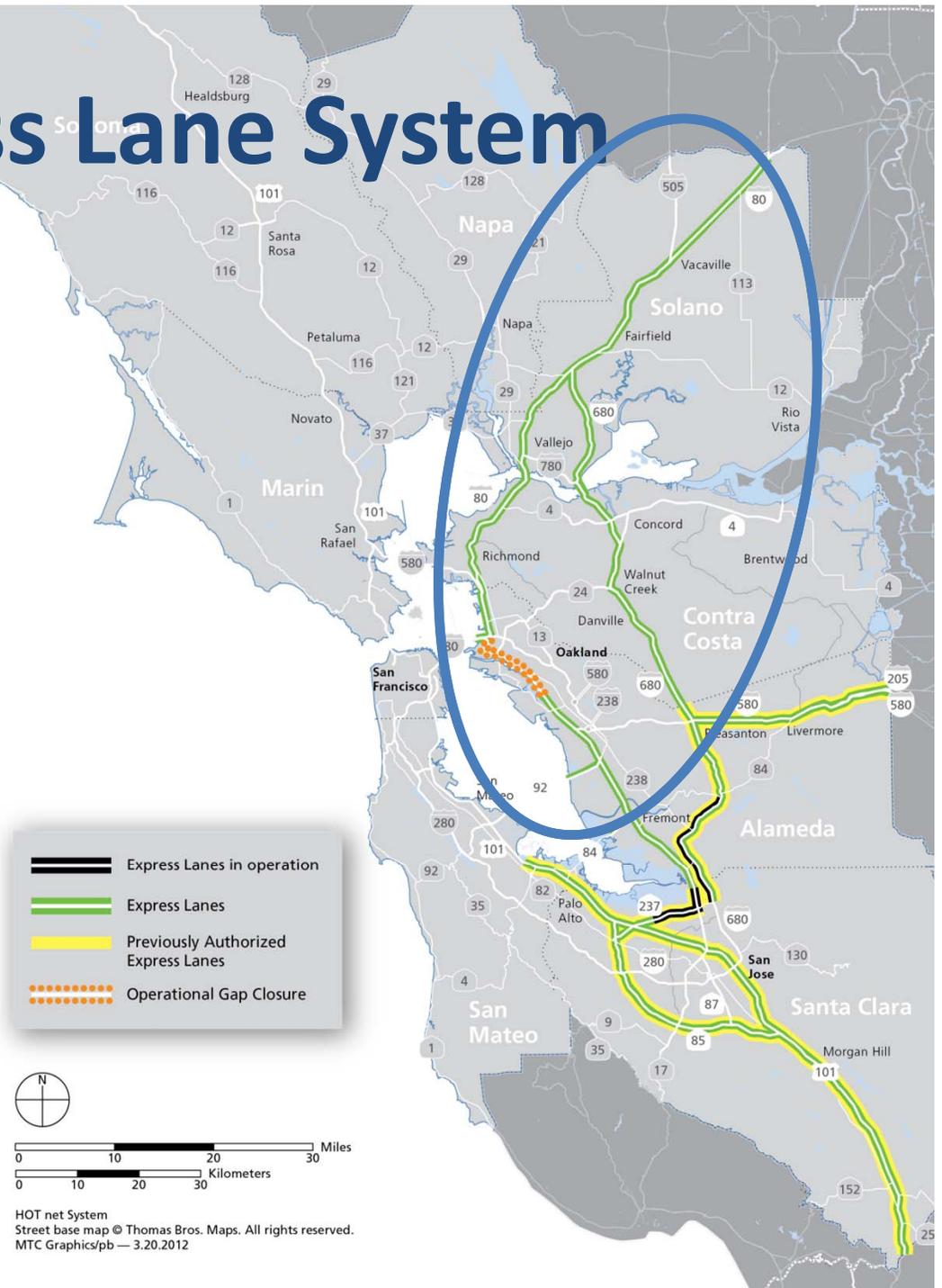
1. Does the proposed framework address the main environmental justice (EJ) questions?
2. What suggestions does the Policy Advisory Council have for surveying low-income and minority residents who may be impacted (positively or negatively) by the Express Lane Network?



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# Regional Express Lane System

- MTC will develop and operate a 270-mile “MTC-Authorized Network”.
- Integrates with 280 miles of previously authorized lanes to be developed by Santa Clara and Alameda counties.





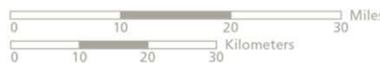
# Two-Part EJ Analysis Approach

## Context Analysis

Provides a context for project analysis by analyzing at a program-level elements that will span multiple projects and phases.

## Project Analysis

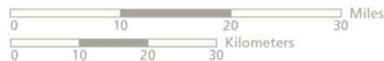
Provides more specific evaluation of Phase 1 impacts in project-level environmental studies.



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# Key Questions

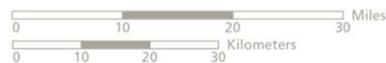
1. Where do low-income and minority populations reside and travel within the area served by the MTC-Authorized Express Lane Network?
2. What are the user characteristics of these travelers by mode and to what extent are improvements in overall mobility in the MTC-Authorized Express Lane Network likely to serve these travelers?



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# Approach

- Establish consistent criteria to identify minority and low-income communities relative to the MTC Authorized Express Lane Network.
- Identify travel patterns by income and mode in the areas that generate the most trips in the corridors within the Network (travelshed analysis).



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# Key Questions

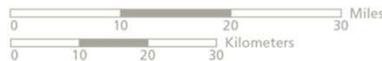
1. Is the toll tag requirement a barrier for low-income and minority persons, who may be more likely to lack access to a credit card or bank account?
2. Are low-income populations likely to be able to afford and willing to pay the tolls?



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# Approach

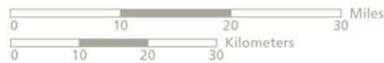
- Review user costs, procedures and access options for obtaining and maintaining a FasTrak<sup>®</sup> toll tag.
- Survey low-income and minority residents in the MTC-Authorized Express Lane Network area (travel patterns, willingness to pay).
- Review studies of tolling and toll tag use by low-income and minority travelers in other regions, and assess applicability to the Bay Area.



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# Potential Engagement Tools

- Intercept surveys
- Focus groups
- Website
- Direct mail to focused population
- Flyers and newsletters



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# Potential Survey Questions

- Do you own your own vehicle?
- Do you carpool with another person in his or her vehicle?
- How many days per week do you travel on (insert highway) during the am peak period?
- How many days per week do you travel on (insert Highway) during the pm peak period?
- Are you willing to pay a fee on occasions when it is important to you to avoid congestion when traveling on (insert highway).
- If you were to pay a fee to avoid congestion, what would be the easiest way for you to pay the fee?



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# Project Level Analysis

**Additional detail will be provided in the project-level analysis regarding the potential for adverse air quality, noise, and traffic impacts to affected low-income and minority populations from the Phase 1 Project.**



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# Schedule for EJ Context Analysis

Refine Methodology

July 2012

Draft Report

October 2012

Final Report

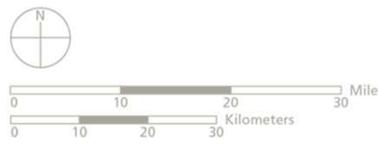
December 2012

*The project-level EJ analysis for Phase 1 will build on the Context Analysis, and will begin in fall 2012. A draft of the Project-level technical memo will be developed in early 2013.*



# Discussion Questions

1. Does the proposed framework address the main environmental justice (EJ) questions?
2. What suggestions does the Policy Advisory Council have for surveying low-income and minority residents who may be impacted (positively or negatively) by the Express Lane Network?



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**Attachment 2**  
**Response to Requests for Information on the Regional Express Lane Network**  
**from the April 3, 2012 Special Meeting of the Policy Advisory Council**

Requests from members of the Policy Advisory Council

1. How much of the Network is composed of Express Lanes converted from existing HOV lanes versus by widening to add new lanes?

*This information was presented in slide #8 in the April 3 presentation. (See attached excerpt.) The new authority granted to MTC permits 270 miles of express lanes (and 20 miles of operational gap closure). Of 270 miles of express lanes, 150 miles (56%) are conversions of existing HOV lanes and 120 miles (44%) would require widening for new lanes.*

2. Please provide data on the income level of existing FasTrak account holders.

*Staff has identified two sources of information described below. However, none provides a very satisfying answer to this question in large part because laws regarding the collection and use of personally identifiable information influence BATA's ability to collect and analyze meaningful data on the income level of FasTrak account holders. In addition, statistics on FasTrak use by income do not alone indicate whether there are barriers for low-income individuals. This data must be considered in light of travel patterns (see data below) since populations that are more likely to cross transbay bridges during peak hours would have more incentive to acquire FasTrak.*

*Perhaps more importantly, BATA is considering expanding a program that the Golden Gate Bridge Highway and Transportation District will implement as part of its transition to an all-electronic toll system. This program would allow customers to replenish FasTrak accounts with cash at numerous convenience stores and gas stations significantly improving the ability of all residents to use FasTrak on a cash-basis. Particular emphasis will be given to communities with a high level of residents who do not have credit cards or bank accounts.*

Data on Income-Level of FasTrak® Account Holders

a) *In 2009, MTC conducted a telephone survey of Bay Area residents to assess the level of knowledge and use of MTC programs such as 511, Clipper and FasTrak. While, MTC staff has been able to generate cross-tabs of FasTrak usage by household income level, the data do not necessarily provide a meaningful answer for several reasons: (1) the survey was not designed to be statistically significant by income level; while the margin of error for the cross-tabs is not available, it is likely quite large; (2) the share of respondents who refused to provide data on income is larger than the share of respondents in most of the income categories; (3) the survey was conducted prior to 2010 when BATA made several changes that may have affected use of FasTrak including expansion of FasTrak lanes at several bridges and requirement that carpools carry FasTrak on bridges.*

- *Out of 1,350 people surveyed, approximately 34% (459) had FasTrak*
- *Out of this sample of FasTrak owners:*
  - *8% (38 individuals) had household income less than \$50,000*
  - *42% (194 individuals) had household income between \$50,000 and \$150,000*
  - *24% (108 individuals) had household income over \$150,000*
  - *26% (119 individuals) refused to provide data on household income*

*While it is difficult to ascribe statistical significance to these results for the reasons listed above, the results are not surprising given regional travel patterns. Analysis of data on household workers from the US Census Bureau (American Community Survey 2006-2008 Census*

*Transportation Planning Package) indicates that approximately 10% of Bay Area commuters cross one of the region's toll bridges to get to work. Of those commuters who cross a bridge:*

- 13% have a household income of less than \$50,000
- 55% have a household income of \$50,000 to \$149,000
- 32% have a household income of \$150,000 or higher

b) *Staff has the ability to map the number of FasTrak® accounts by zip code and can compare this to Census Bureau data on income levels, which we typically map at the travel analysis zone or census tract level. However, MTC staff believes this comparison is likely to provide little insight since census tracts do not nest nicely within zip codes and there tends to be a great deal of variation in household income within zip codes.*

3. Why was the take-a-lane for HOV alternative rejected for the San Mateo segment of US 101?

*The pure take-a-lane for HOV alternative was not favored by the agencies sponsoring the study (Caltrans, MTC and the San Mateo County City/Council of Governments and the San Mateo County Transportation Authority) because it significantly increased delays for the mixed flow lanes on the US 101 freeway. Average travel times increased by 67% (about a half hour) when compared to the do-nothing alternative. A hybrid HOV alternative that is currently being looked at combines the best features of the pure take-a-lane and the add-a-lane alternatives.*

Requests from members of the public

4. Why does the summary of the CTC application financial analysis (slide #13, excerpt attached) show debt proceeds exceeding debt service in the Conservative Case? Why are the totals for the Base and Conservative Case so different?

*This summary shows revenues and expenditures through year 2040, which matches the analysis period for the Sustainable Communities Strategy. For the Base Case, the CTC application assumes a final bond issuance in 2029 and completion of construction in 2030. For the Conservative Case, the analysis assumes a final bond issuance in 2034 and completion of construction in 2035. In both cases debt service payments extend beyond the year 2040; because the Base Case assumes a faster build out than in the Conservative Case, the financial summary slide reflects a higher amount of total debt service paid by 2040. For the Base Case, debt proceeds are estimated to total \$2.1 billion and debt service to total \$5.3 billion through 2074. For the Conservative Case, debt proceeds are estimated to total \$2.4 billion and debt service to total \$6.2 billion through 2074. Attachment 7 of the CTC Application includes a complete year-by-year accounting of revenue and expenses through year 2074. [http://www.mtc.ca.gov/planning/hov/FINAL\\_CTC\\_Application\\_092811b.pdf](http://www.mtc.ca.gov/planning/hov/FINAL_CTC_Application_092811b.pdf)*

5. What performance measures will be used to assess “measurable benefits for transit”?

*Prior to initiating operations, MTC will define a set of metrics to assess the impact of express lanes in a number of areas. The specific metrics have not been defined; however, they will likely address usage (persons and vehicles) by carpools, transit and drive alone vehicles; violations; collisions; travel time and reliability in the express lanes and general purpose lanes; and customer satisfaction. Specific metrics for benefits to transit will be developed based on discussions with transit operators and other stakeholders and might address several of these areas (usage, travel time, reliability and customer satisfaction).*

6. What agency is leading the HOV study on US 101 on the peninsula?

*This is a joint effort co-led by Caltrans, MTC and the San Mateo County City/Council of Governments and the San Mateo County Transportation Authority.*

7. Please provide a link to the report by the US Government Accountability Office (GAO) that is cited in the presentation.

*The GAO report "Traffic Congestion Road Pricing Can Help Reduce Congestion, but Equity Concerns May Grow" was issued January 2012. It is available at <http://www.gao.gov/products/GAO-12-119>.*

Excerpts from April 3 Presentation

## Regional Express Lane Network Mileage

	Directional Miles		
	Previously Authorized <sup>1</sup>	New Authority	Total
Convert existing HOV lanes to express lanes <sup>2</sup>	190	150	340
Widen existing freeways to create express lanes	90	120	210
Operational gap closure	0	20	20
<b>Total</b>	<b>280</b>	<b>290</b>	<b>570</b>

<sup>1</sup> In both Alameda and Santa Clara counties

<sup>2</sup> Includes existing I-680 Sunol Express Lane (14 miles)

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## Financial Analysis in CTC Application

*Total amounts through 2040 (millions of inflated dollars)*

		Base Case (compl. by 2030)	Conservative Case (compl. by 2035)
<b>Funds</b>	<b>Express Lane Toll Revenue</b>	6,500	4,400
	<b>Debt Proceeds (Bonds/TIFIA)</b>	2,100	2,400
	<b>Other*</b>	600	1,000
<b>Expenditures</b>	<b>Operations, Maintenance and Rehabilitation</b>	(1,500)	(1,300)
	<b>Capital Costs</b>	(3,000)	(3,600)
	<b>Debt Service</b>	(3,400)	(2,300)
	<b>Potential Net Revenue**</b>	<b>1,300</b>	<b>600</b>

\* Composed largely of grant funding (\$400 - \$800 M), local funding (\$100 M), and other such as reserves and interest (\$100 M)

\*\* These potential surpluses emerge in the later years (after completion of the Network), and due to their bottom-line nature, are highly sensitive to variations in toll policy, revenue, cost, schedule and financing assumptions.

Does not include express lanes in Santa Clara County, which would be separately financed and operated

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