SWAT

Danville • Lafayette • Moraga • Orinda • San Ramon & the County of Contra Costa

SOUTHWEST AREA TRANSPORTATION COMMITTEE
Meeting of February 1, 2010

3:00 p.m. SWAT Board Meeting
Danville Town Offices, Large Conference Room
510 La Gonda Way, Danville, CA

AGENDA

1. CONVENE MEETING/SELF INTRODUCTIONS

2. PUBLIC COMMENT:

Members of the public are invited to address the Committee regarding any item that is not listed on the agenda. (*Please complete a speaker card in advance of the meeting and hand it to a member of the staff)*

3. BOARD MEMBER COMMENT

4. ADMINISTRATIVE ITEMS

5. CONSENT CALENDAR:

5.A Approval of Minutes: SWAT Minutes of December 7, 2009 *(Attachment - Action)*

End of Consent Calendar

6. REGULAR AGENDA ITEMS:

6.A Review and Comment on SR 24 Corridor System Management Plan (CSMP)/Freeway Performance Initiative (FPI) – Congestion Mitigation Strategies: Authority and MTC staff will provide a presentation on this item. In order, the attachments enclosed consist of a summary letter from the Authority, a copy of the slide presentation, and the FPI Technical Memorandum. *(Attachments)*

6.B Review and Comment on Proposed Measure J General Plan Amendment (GPA)
Review Process: Authority staff will provide a presentation on this item. *(Attachments)*

7. WRITTEN COMMUNICATIONS: Consider Actions as Appropriate (*Attachments*)

- CCTA Board summary of actions from meetings of 12/16/09 and 1/20/10
- Authority policy response to inquiries raised by Save Mt. Diablo relating to the Measure "J" Urban Limit Line Requirements
- Caltrans notification of FY 2010/11 Transportation Planning Grants Open House/Workshop
- Notice of 511 Contra Costa Safe Routes to School mini-grant award
- Notice of Preparation of an EIR for the City of San Ramon General Plan Update
- Announcement of release of Final EIR for Concord Community Reuse Project

8. DISCUSSION: Next Agenda

9. ADJOURNMENT to Monday, March 1, 2010, or other meeting as deemed appropriate.

The SWAT Committee will provide reasonable accommodation for persons with disabilities planning to participate in SWAT monthly meetings. Please contact Andy Dillard at least 48 hours before the meeting at (925) 314-3384 or adillard@ci.danville.ca.us

Staff Contact: Andy Dillard, Town of Danville
Phone: (925) 314-3384 / E-Mail: adillard@ci.danville.ca.us

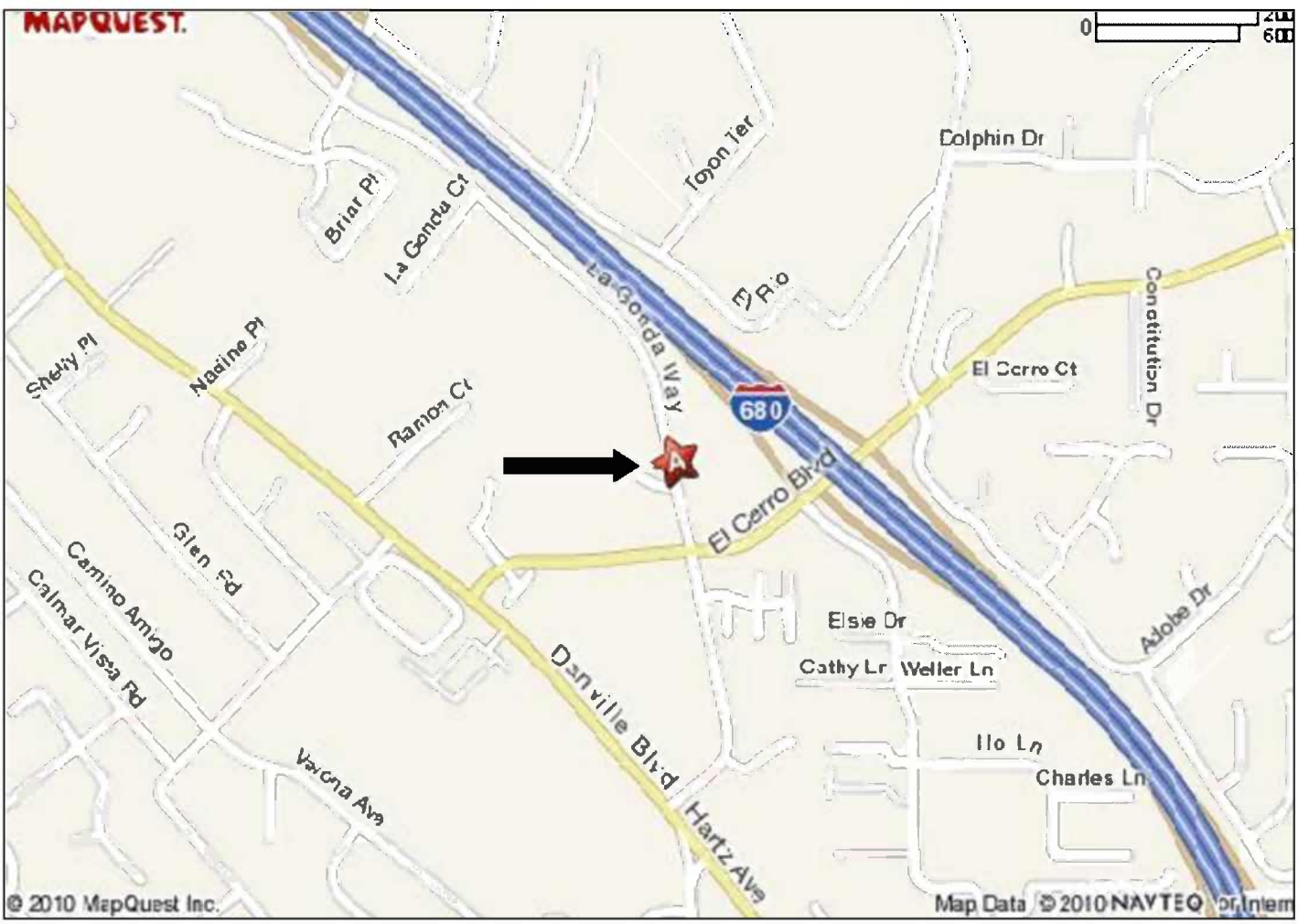
Agendas, minutes and other information regarding this committee can be found at: www.cccounty.us/SWAT

SOUTHWEST AREA TRANSPORTATION COMMITTEE

MEETING LOCATION MAP

PLEASE NOTE NEW MEETING LOCATION

DANVILLE TOWN OFFICES, LARGE CONFERENCE ROOM
510 LA GONDA WAY, DANVILLE



ATTACHMENT 5.A

SWAT

Danville • Lafayette • Moraga • Orinda • San Ramon & the County of Contra Costa

SUMMARY MINUTES
December 7, 2009 – 3:00 p.m.
Lafayette City Offices, Room 240
3675 Mt. Diablo Boulevard
Lafayette, CA

Committee Members Present: Don Tatzin, City of Lafayette; Mike Metcalf, Town of Moraga; Gayle Uilkema, Contra Costa County; Amy Worth, City of Orinda; Newell Arnerich, Town of Danville; Dave Hudson, City of San Ramon

Staff members present: Darlene Amaral, Richard Yee, Leah Greenblat, John Cunningham, Lori Salamack, Andy Dillard

Others present: Martin Engelmann, CCTA; Charles Hogle, CCTA-CAC; Grace Schmidt; Deidre Heitman, BART; Bill Loudon, DKS Associates

1. **CONVENE MEETING/SELF INTRODUCTIONS:** Meeting was called to order at 3:05 p.m.

2. **PUBLIC COMMENT:** None

3. **BOARD MEMBER COMMENT:** None

4. **ADMINISTRATIVE ITEMS**: Andy Dillard recorded the minutes. Extra agenda packets were made available.

5. **CONSENT CALENDAR:**

   5.A **Approval of Minutes:** SWAT minutes of November 2, 2009.

   ACTION: Worth/Arnerich/unanimous

   End of Consent Calendar

6. REGULAR AGENDA ITEMS:

6.A Appoint the SWAT Chair and Vice Chair for 2010:

The Committee took action to appoint the Danville SWAT representative Chair for 2010.

ACTION: Worth/Metcalf/Unanimous

The Committee took action to appoint the Orinda SWAT representative Vice Chair for 2010.

ACTION: Metcalf/Arnerich/Unanimous

6.B Adopt the Final *2009 Tri-Valley Transportation Plan/Acton Plan for Routes of Regional Significance* and the Final *2009 Lamorinda Action Plan for Routes of Regional Significance::*

The Committee took action to adopt the Final *2009 Tri-Valley Action Plan/Transportation Plan for Routes of Regional Significance.*

ACTION: Worth/Arnerich/Unanimous

The Committee took action to adopt the Final *2009 Lamorinda Action Plan for Routes of Regional Significance* with the following amendments:

1. Include a footnote on page 12 of the Action Plan, clarifying the language in Section 3.3, referring to the statement regarding BART and CCCTA ridership.
2. Add the following Action on page 23, under Table 7, "Transit": "Advocate for increased ridership and the restoration of State funding for transit."

ACTION: Worth/Uilkema/Unanimous

7. WRITTEN COMMUNICATIONS:

The following written communication items were made available:

- CCTA Board Summary of Actions from meeting of 11/18/09
- Town of Moraga – Notice of Intent Adopt Mitigated Negative Dec. for its 2009 Housing Element Update
- City of San Ramon – Notice of a Public Workshop for the North Camino Ramon Specific Plan
- City of San Ramon – Notice of a Public Hearing for the San Ramon City Center Mixed Use Project

ACTION: None

8. DISCUSSION: **Next Agenda** – Supervisor Uilkema requested an update on responses to the Save Mt. Diablo inquiry regarding local jurisdiction compliance with the Measure J Urban Limit Line requirements.

ACTION: None

9. **ADJOURNMENT:** The next meeting is tentatively scheduled for **Monday, January 4, 2009** at the Danville Town Offices, Large Conference Room, 510 La Gonda Way, Danville, CA.

ACTION: Meeting adjourned by Chair Tatzin at 3:30 p.m.

Staff Contact:
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Agendas, minutes and other information regarding this committee can be found at: www.cccounty.us/SWAT

ATTACHMENT 6.A

DATE: **January 6, 2009**

TO: **RTPC TACs**

FROM: **Matt Kelly, Planning**

SUBJECT: **SR4 & SR24 CSMP/FPI Congestion Mitigation Strategy agenda packet items**

At its November meeting, the Authority's Technical Coordinating Committee (TCC) received a presentation of the Congestion Mitigation Strategies developed during the Caltrans/MTC Corridor System Management Plan/Freeway Performance Initiative efforts for SR4 and SR24 in Contra Costa County. The TCC recommended forwarding the Congestion Mitigation Strategy documents to their respective RTPCs for review.

CSMP Background

As part of the passage of Proposition 1B in November 2006, the Corridor Mobility Improvement Account (CMIA) was created by the California Transportation Commission (CTC). The CTC required Caltrans to develop Corridor System Management Plans (CSMPs) for highway corridors containing projects receiving CMIA funds. The main objectives of these investments, which are part of the Governor's Strategic Growth Plan, are to decrease congestion, improve safety and travel times, and accommodate future growth in the population and economy.

The CSMPs are seen as a way to maximize the State's investment in the corridor, by assessing current and future performance, identify bottleneck locations and causes, and recommend a prioritized set of improvements to address the problem locations. SR-4 and SR-24 are part of the CSMP process because of the CMIA-funded Route 4 East Widening and Caldecott Tunnel Fourth Bore projects, respectively.

These two efforts were kicked-off in Summer 2008 with the establishment of Corridor Technical Advisory Committees (C-TACs), which include staff from Caltrans, the Metropolitan Transportation Commission (MTC), the Contra Costa Transportation Authority (CCTA), and affected jurisdictions and agencies along the corridors (as well as the Alameda County CMA on Route 24).

Freeway Performance Initiative

MTC's T-2035-strategy known as the Freeway Performance Initiative (FPI) seeks to develop a roadmap for selection of the best projects and operational strategies for the major freeway corridors in the Bay Area, based on performance and cost-effectiveness. MTC, along with their consultant PBS&J, has been working in tandem with Caltrans' CSMP effort on SR-4 and SR-24 to develop a prioritized list of system management strategies and associated projects for these two important Contra Costa corridors.

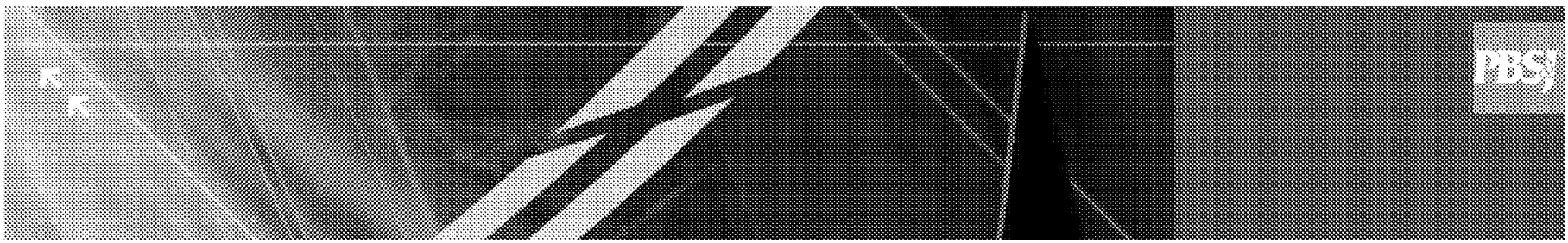
The FPI's approach to the corridor analysis includes looking at the entire transportation corridor, including parallel arterials and transit, and attempts to addresses both recurrent and non-recurrent congestion. The corridor analysis approach involves the following four steps:

1) Study Initiation – The corridor working group is convened, performance measures are developed, and analysis tools chosen,
2) Existing Conditions – Traffic information is collected, assessed and analyzed; bottlenecks/recurrent congestion locations identified,
3) Develop Mitigation Strategies and Projects – Congestion relief measures and cost estimates are developed, both for short and long-term implementation timelines, and
4) Analysis of Strategies and Projects – Proposed mitigation strategies are analyzed and prioritized, including supporting rationale.

RTPC Review

The Corridor TACs include at least one staff representative from each jurisdiction along the corridor. Since each corridor crosses through two or more RTPCs, the C-TAC structure helped to reduce the number of meetings, presentations, and reviews necessary to guide the CSMP process. The Prioritized Congestion Mitigation Strategy Technical Memorandums have had extensive review at the C-TAC level, and are now being forwarded to the RTPCs for review. Authority and regional agency staff will be available to attend TAC and Board meetings for presentations and to answer questions related to the documents. Any comments related to the technical documents should be forwarded to CCTA by February 12, 2010. Revised Draft CSMPs are expected to be released by Caltrans in February 2010, with final documents released in Spring 2010.

State Route 24



Freeway Performance Initiative (FPI)
and
Corridor System Management Plan (CSMP)

SWAT Committee Board Meeting

February 1, 2010

Caltrans

METROPOLITAN
TRANSPORTATION
COMMISSION

SR 24 Corridor

FPI Overview

FPI Study Process

Study Area

Existing and Future Conditions

Congestion Mitigation Strategies

Summary/Key Findings

Next Steps

FPI Overview

What is the FPI?

- The MTC Freeway Performance Initiative (FPI) is a series of corridor-level studies that are the building blocks of a strategic freeway plan for the Bay Area. The FPI studies are also intended to inform the next update of the Long Range Transportation Plan.

What is the CSMP?

- The Corridor System Management Plans (CSMPs) undertaken by Caltrans are required for all corridors that receive CMIA funding to implement capital improvement projects. The intent of the CSMP is to ensure that there is a plan in place to preserve the mobility gains of CMIA-funded projects.

How are the FPI and CSMP related?

- The technical scope of work for the FPI and CSMP are essentially the same. Caltrans is currently working to incorporate the FPI results into the CSMP.

How will this analysis be used?

- Caltrans will submit the CSMP to the CTC to fulfill the Prop. 1B requirement. The FPI technical analysis will be used by MTC in the next RTP update, and is being provided to local stakeholders as a tool to supplement their own local planning processes.

FPI Study Process

Assessment of Existing Conditions

Analysis of Projected Future Conditions:

- **Short-Term Evaluation (2009 - 2015)**
- **Long-Term Evaluation (2016 - 2030)**

Congestion Mitigation Strategies:

- **Demand Management**
- **Increased Capacity**
- **System Management**
- **Other**

Prioritization of Congestion Mitigation Strategies:

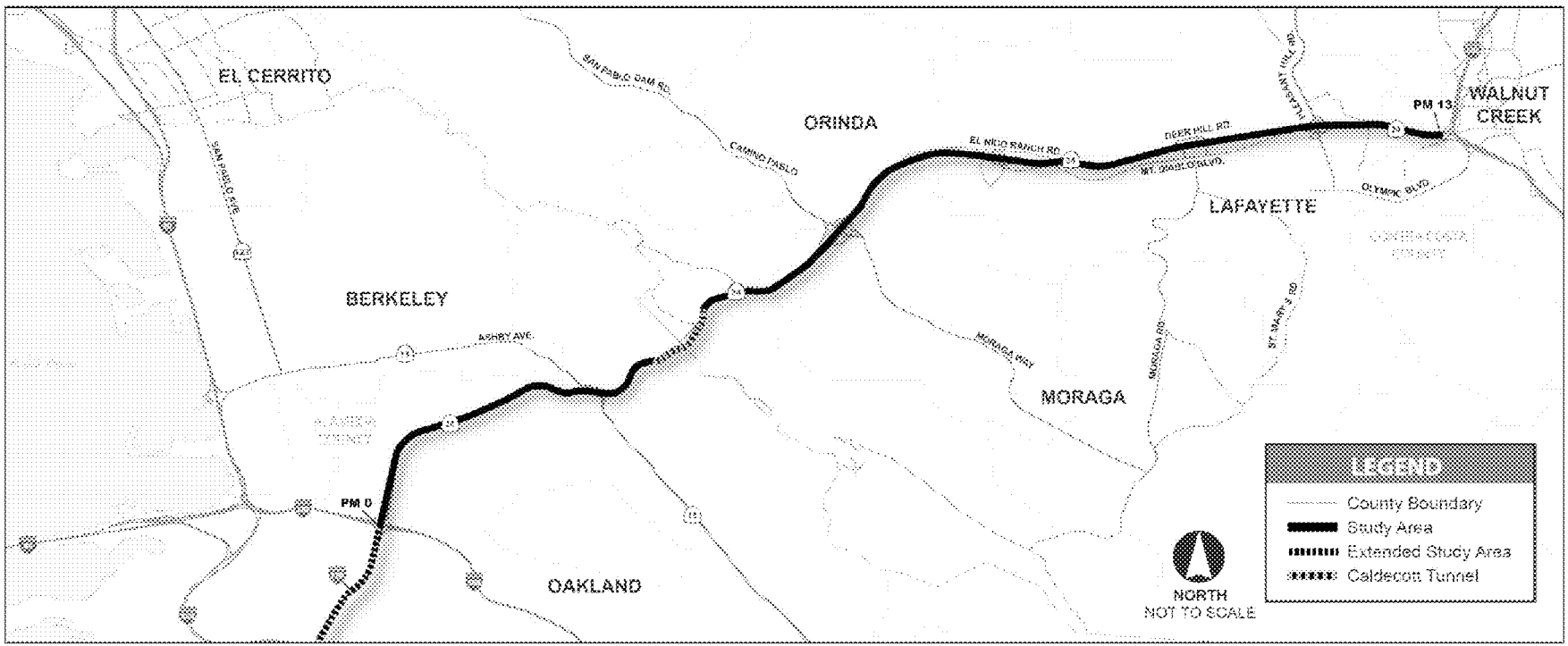
- **Based on cost-effectiveness analysis**

Stakeholder Outreach

A corridor TAC was formed and engaged at key milestones of the FPI including workshops to determine appropriate strategies for consideration in the SR 24 Corridor. Members included CCTA, local agency representatives, and BART.

SR 24 Corridor

Study Area



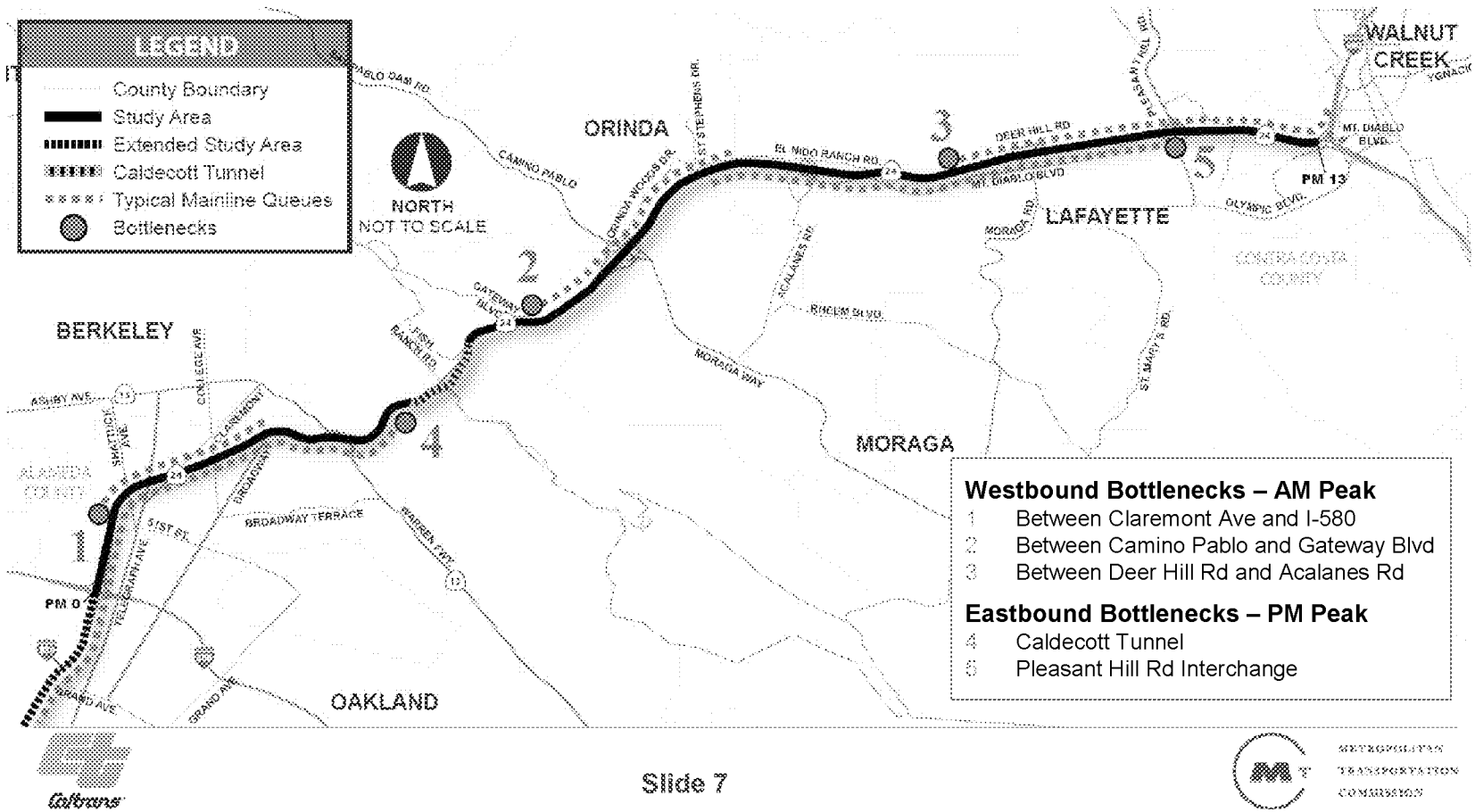
Existing Conditions

- Highway Travel Characteristics
  - 130,000 to 190,000 vehicles per day; 2% to 3% are trucks.
  - Over 60% of westbound AM peak period commuters through the Caldecott Tunnel travel by car, and a majority of them drive alone.
  - 12% of auto trips in the corridor are HOV 2+ eligible.
  - Average peak hour vehicle occupancy is 1.1 persons per vehicle.
- Transit Service
  - 34% to 41% of peak hour person trips are made via BART.
  - BART parking lots fill-up between 7:00 am and 7:30 am.
  - Other transit service accounts for approximately 3% of peak hour person trips.
- ITS Features
  - ITS coverage is approximately 30% of Caltrans' standards; concentration of coverage on the Contra Costa County side.
  - Caltrans has recently made substantial progress in filling detection gaps.

Congestion Mitigation Strategies – Short Term (2015)

Committed Improvements only

- **Westbound AM Peak Hour travel time will increase from 0:20 to 0:31 for 15-mile corridor**
- **Eastbound PM Peak Hour travel time will increase from 0:42 to 0:54 for 15-mile corridor**



SR 24 Corridor

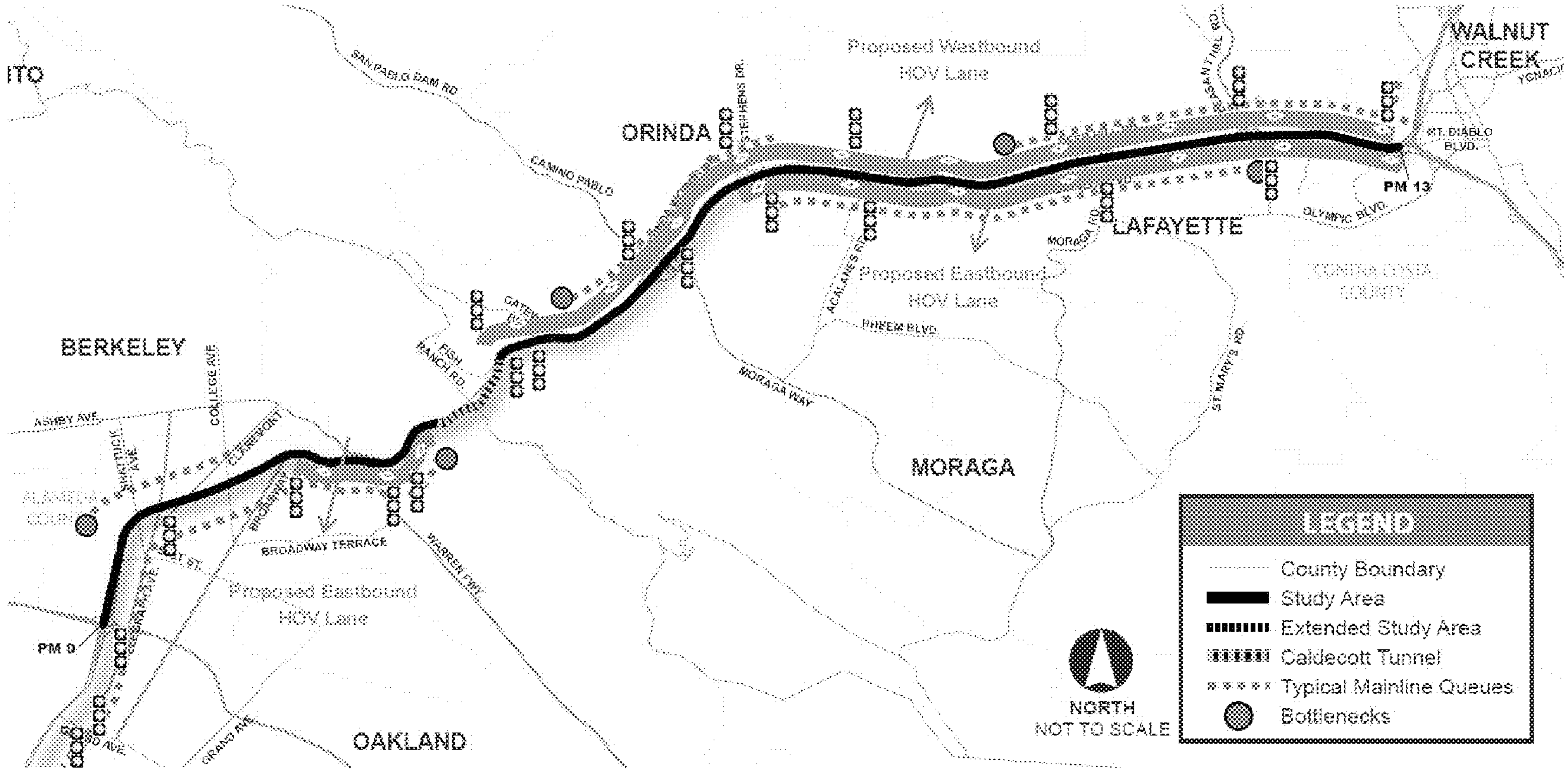
Congestion Mitigation Strategies – Short Term (2015)

Package A
- Activate existing ITS.
- Fill gaps in ITS coverage as needed.

Package B
- WB ramp metering from I-680 to the Tunnel.
- WB HOV-2 lane from I-680 to the Tunnel.

Package C
- EB ramp metering from I-580 to the Tunnel and on I-980.
- EB HOV-2 lane from Broadway to the Tunnel.

Package D
- EB ramp metering from the Tunnel to I-680.
- EB HOV-2 lane from St Stephens Rd to I-680.

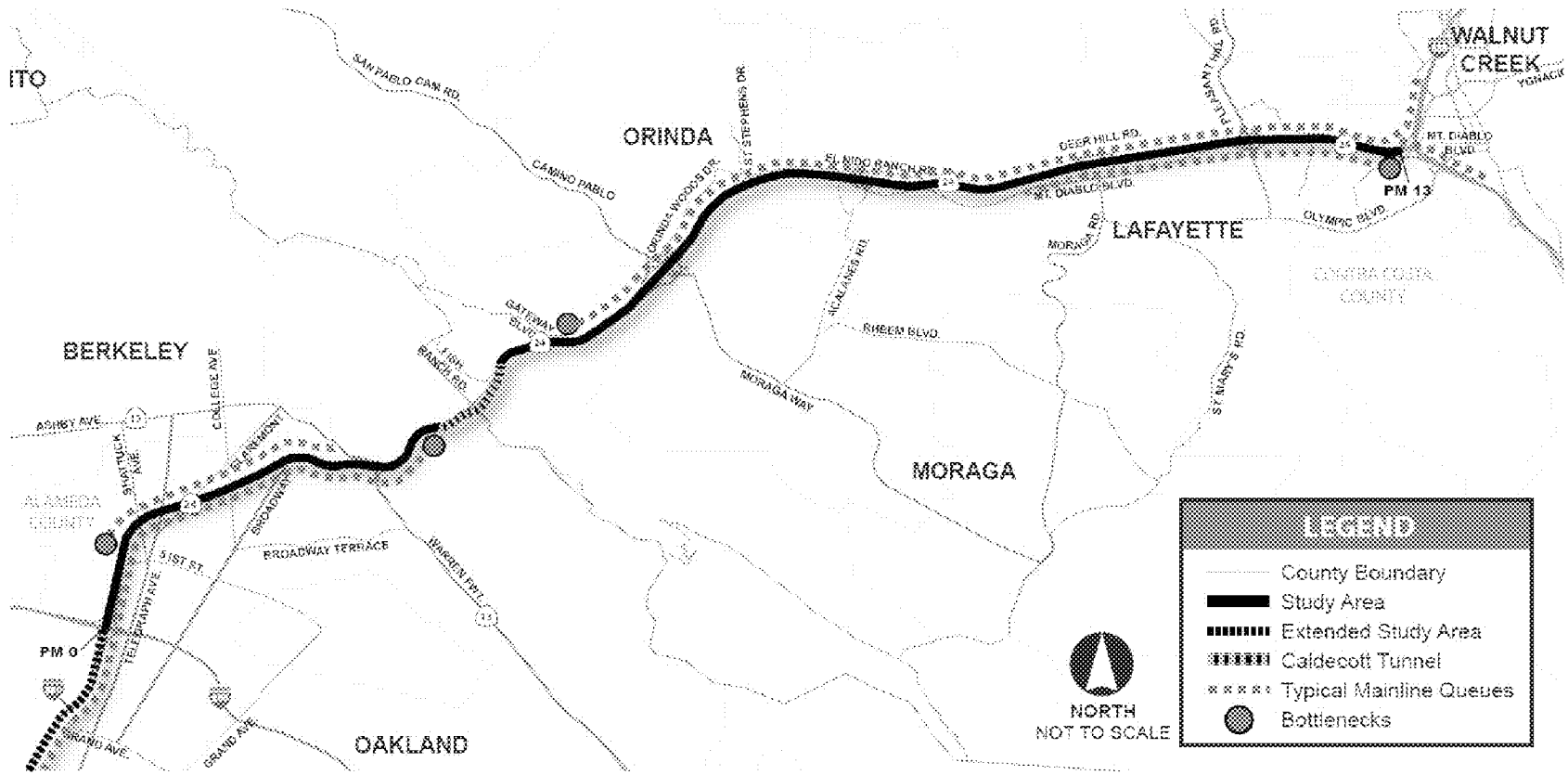


Reduction in Peak-Direction Delay	Vehicle Hours	16,200 hrs - 4,140 hrs = 12,060 hrs	26 % reduction
	Person Hours	17,700 hrs - 5,040 hrs = 12,660 hrs	28 % reduction

Congestion Mitigation Strategies – Long Term (2030)

Implementation of Short-Term Strategies

Reduction in Peak-Direction Delay	Vehicle Hours	32,200 hrs – 9,140 hrs = 23,060 hrs	28 % reduction
	Person Hours	34,100 hrs – 9,890 hrs = 24,210 hrs	29 % reduction



Other Congestion Mitigation Strategies

Transit Enhancements

- Additional BART parking capacity at upstream BART stations.
- Increased feeder-bus service to the BART stations within the SR 24 Corridor.
- BART system-wide operational improvements.

BART Coordination

- Met in late March to discuss transit strategy development.
- Improvements are expected to accommodate ridership increases in the range of 10% to 20%.

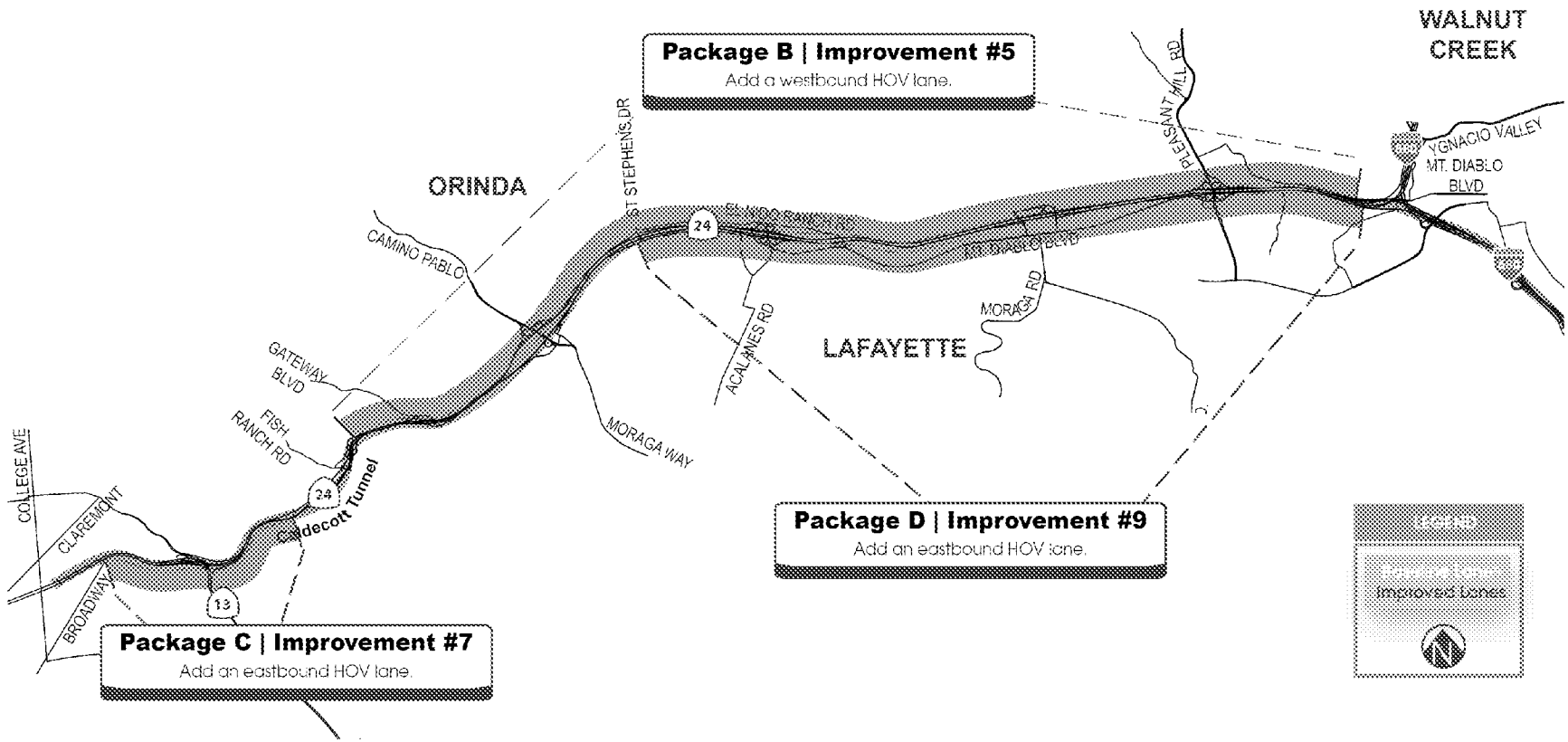
Congestion Pricing

- To be studied later.

Summary/Key Findings

»ITS ENHANCEMENTS: Package A ranked the highest providing the full coverage of ITS technology and management needed to address non-recurrent delay and safety.

»HOV LANES: HOV lanes proposed in Packages B, C and D provide a less congested, more reliable option for motorists willing to carpool.



Summary/Key Findings

- No additional capacity during the peak period for single-occupant vehicles.
- Consistent with the findings of the *SR 24 Transit Capacity Study*, the HOV-lane strategies can provide increased mobility through the corridor for vehicles with two or more occupants.
- ITS is a cost-effective strategy to address non-recurrent delay and manage system performance.
- Transit strategies and roadway pricing should be evaluated in more detail.

Next Steps

- Receive local stakeholder comments on the proposed congestion mitigation strategies (RTPC TACs & Boards)
- Caltrans CSMP submittal to CTC
- FPI technical analysis used by MTC to inform the RTP
- FPI technical analysis provided to local stakeholders as a tool to inform their own planning processes

Metropolitan Transportation Commission

SR 24 Corridor in Alameda and Contra Costa Counties

Prioritized Congestion Mitigation Strategies Technical Memorandum

Prepared by: PBS&J
For: Metropolitan Transportation Commission
Final
November 9, 2009

Table of Contents

Metropolitan Transportation Commission

SR 24 Corridor in Alameda and Contra Costa Counties

Prioritized Congestion Mitigation Strategies Technical Memorandum

Prepared by: PBS&J
For: Metropolitan Transportation Commission
Final
November 9, 2009

Introduction

This report presents the cost-effectiveness analysis and prioritization of congestion mitigation strategies for the State Route 24 (SR 24) Corridor in Alameda and Contra Costa Counties based on the *Congestion Mitigation Strategies Technical Memorandum*, (PBS&J, November 9, 2009) completed for this corridor. The methods and performance measures used for the analysis and prioritization are based on those set forth in the *Freeway Performance Initiative Traffic Analysis: Performance and Analysis Framework* (MTC, October 2007). Consistent with the guidance provided by this document, the primary objectives of the *Prioritized Congestion Mitigation Strategies Technical Memorandum* are 1) to estimate and compare life-cycle benefits and life-cycle costs of the proposed corridor improvements and, 2) to provide a prioritized list of corridor improvements based on the cost-effectiveness. Corresponding to these objectives, the report is presented in nine sections:

- **Section 1: Key Findings.** An executive summary of the findings in this analysis.
- **Section 2: Proposed Congestion Mitigation Strategies.** A list of the proposed congestion mitigation strategies for the SR 24 Corridor.
- **Section 3: Methodology.** A description of the quantitative and qualitative performance measures, calculation of benefits value, methodology for determining capital costs, life-cycle benefit cost calculations and prioritization of proposed congestion mitigation strategies.
- **Section 4: Performance Measures.** Results of the performance measures used in the benefits analysis and a comparison of Baseline and Improved scenarios.
- **Section 5: Life-Cycle Benefits.** Results of the life-cycle benefits analysis for the quantitative benefits and discussion of qualitative benefits analysis.
- **Section 6: Capital Costs.** Results of the life-cycle cost analysis to include values for capital costs, and operation and maintenance (O&M) costs.
- **Section 7: Cost-Effectiveness Analysis.** Results of the comparison of life-cycle benefits and life-cycle costs.
- **Section 8: Prioritization.** Ranking of congestion mitigation strategies based solely on the results of the cost-effectiveness analysis conducted for each mitigation strategy package.
- **Section 9: Transit Mitigation Strategies.** A list of proposed transit mitigation strategies.

Section 1: Key Findings

The cost-effectiveness analysis and the subsequent prioritization of congestion mitigation strategies along the SR 24 Corridor through Alameda and Contra Costa Counties evaluated a total of ten improvements grouped into five packages. These five packages represent over 156 million hours of life-cycle benefits and about $247 million in life-cycle costs.

The packages are ranked below, as determined by the cost-effectiveness analysis:

Short-term Package Ranking

1. **Package A (Short-term, Eastbound & Westbound):**
   - Improvement #1: Activate existing ITS installations that currently are not fully operational.
   - Improvement #2: Assess gaps in the current and programmed ITS installations and supplement as needed.
   - Improvement #3: Extend ITS coverage to fill the gap between I-580 and the Caldecott Tunnel.

2. **Package D (Short-term, Eastbound):**
   - Improvement #8: Implement ramp metering in the eastbound direction between the Caldecott Tunnel and I-680.[1]
   - Improvement #9: Add an eastbound HOV-2 Lane from the St Stephens Dr Interchange to the I-680 Interchange. (Left shoulder or widen on right.). During non peak hours, this lane would be open to all users (mixed-flow operations).

3. **Package B (Short-term, Westbound):**
   - Improvement #4: Implement ramp metering in the westbound direction between I-680 and the Caldecott Tunnel.
   - Improvement #5: Add a westbound left-shoulder HOV-2 Lane from I-680 to the Caldecott Tunnel. During non peak hours, this lane would be open to all users (mixed-flow operations).

4. **Package C (Short-term, Eastbound):**
   - Improvement #6: Implement ramp metering in the eastbound direction between I-580 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-980) from I-880 to I-580.
   - Improvement #7: Add an eastbound left-shoulder HOV-2 Lane from the Broadway on-ramp to the Caldecott Tunnel. During non peak hours, this lane would be open to all users (mixed-flow operations).

Long-term Package Ranking

1. **Package E (Long-term, Westbound):**
   - Improvement #10: Implement ramp metering in the westbound direction between the Caldecott Tunnel and I-580 and on the SR 24 Extended Corridor (I-980) from I-580 to I-880.

It should be noted that this prioritization is a result of the cost-effectiveness analysis of the quantitative benefits (mobility and reliability), and does not incorporate qualitative benefits (goods movement, HOV connectivity, and access management), or subjective matters such as funding or political influences. Information on the qualitative benefits of the proposed packages is included in this report to provide a comprehensive analysis for regional prioritizations.

[1] Caltrans goal is for all ramp metering to be adaptive.

A package of short-term and long-term transit mitigation strategies, Package F, is also included. This unranked package is listed below and discussed further in Section 9.

Package F (Short-term & Long-term, Eastbound & Westbound):

- Improvement #11: Additional BART parking capacity at upstream BART stations.
- Improvement #12: Increased bus transit access to the BART stations within the SR 24 Corridor.
- Improvement #13: BART system-wide operational improvements.[2]

[2] Improvements include the Central County Crossover Project.

Section 2: Proposed Congestion Mitigation Strategies

Congestion mitigation strategies for the SR 24 Corridor incorporated for the analysis and prioritization were based on the short-term (2015) and long-term (2030) mitigation measures proposed in the *Congestion Mitigation Strategies Technical Memorandum* (MST), (PBS&J, November 9, 2009).

These congestion mitigation strategies were first screened for effectiveness. This screening process was performed with an analysis using the same macroscopic simulation model, FREQ12, as was used in the *Future Conditions Technical Memorandum* (PBS&J, October 9, 2009*)* to validate the effectiveness of the proposed mitigation improvements.

Based on the results of the FREQ12 testing of the performance of the mitigation strategies proposed in the MST, some strategies were modified, added, or deleted and were then combined to build logical packages of mitigation improvements; the proposed congestion mitigation improvements are listed below in Exhibit 2-1. Packages A through D are short-term improvement packages and Package E is a long-term improvement package. Those strategies that entail physical expansion of SR 24 to accommodate new HOV or mixed-flow facilities are illustrated in Appendix A.[3]

Exhibit 2-1: Proposed Mitigation Improvements on SR 24

Package	Year	Direction	ID	Mitigation Improvement
A	2015	Both	1	Activate existing ITS installations that currently are not fully operational.
			2	Assess gaps in the current and programmed ITS installations and supplement as needed.
			3	Extend ITS coverage to fill the gap between I-680 and the Caldecott Tunnel.
B	2015	WB	4	Implement ramp metering in the westbound direction between I-680 and the Caldecott Tunnel.
			5	Add a westbound left-shoulder HOV-2 Lane from I-680 to the Caldecott Tunnel.
C	2015	EB	6	Implement ramp metering in the eastbound direction between I-680 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-680) from I-680 to I-580.
			7	Add an eastbound left-shoulder HOV-2 Lane from the Broadway on-ramp to the Caldecott Tunnel.
D	2015	EB	8	Implement ramp metering in the eastbound direction between the Caldecott Tunnel and I-680.
			9	Add an eastbound HOV-2 Lane from the St Stephens Dr Interchange to the I-680 Interchange (left shoulder or widen on right).
E	2030	WB	10	Implement ramp metering in the westbound direction between the Caldecott Tunnel and I-580 and on the SR 24 Extended Corridor (I-680) from I-580 to I-680.
Abbreviations: ITS = Intelligent Transportation System, HOV = High Occupancy Vehicle, WB = westbound, EB = eastbound.				

[3] ITS and ramp metering congestion mitigation strategies were not illustrated in the map format because the text descriptions adequately describe the limits of those strategies.

Section 3: Methodology

This section provides an explanation of the methodology that was used to prepare the cost-effectiveness analysis and prioritization of congestion mitigation strategies for this report.

A cost-effectiveness analysis is a systematic evaluation of the economic advantages (benefits) and disadvantages (costs) of a set of investment alternatives. The primary objective of a cost-effectiveness analysis is to compare the proposed mitigation improvements based on their projected benefits and estimated costs. The cost- effectiveness analysis accounts for the fact that benefits generally accrue over a long period of time, while capital costs are incurred primarily in the initial years.[4]

The methods and performance measures used for the analysis and prioritization presented in this section were selected based on the guidance set forth in the FPI Framework, with the following two exceptions:[5]

(1) The quantitative performance measures were not monetized. This was agreed upon by this project's sponsoring agencies (MTC, Caltrans and CCTA) so that the performance measures would be presented in their fundamental units (e.g., person-hours of delay saved).

(2) Safety was not evaluated as part of this analysis. As noted under exception (1), the measure of person-hours of delay saved was selected to compare the quantitative performance measures, which is incompatible with the measures typically used to assess safety (i.e., number of fatality, injury and property damage collisions saved). Therefore, safety cannot be equitably evaluated side-by-side with the other performance measures according to the prioritization methodology.[6]

The following describes the data and calculations required for performing the cost-effectiveness analysis.

Benefits

The proposed mitigation improvements for the SR 24 Corridor in Alameda and Contra Costa Counties were evaluated individually to assess the benefits of each improvement. These benefit performance measures include two quantitative performance measures and three qualitative performance measures. The quantitative performance measures are Mobility and Reliability; the qualitative performance measures are Goods Movement, HOV Connectivity, and Access Management. All values for the quantitative performance measures are represented in person-hours of delay saved.

Mobility

Mobility is a quantitative performance measure that describes how well the SR 24 Corridor moves people. Mobility can be measured in terms of recurrent vehicle delay, which is delay incurred on a typical travel day due to congested conditions in the corridor. Delay is measured as the amount of time lost for a vehicle traveling below 35 miles per hour (mph) within the corridor. By using a 35 mph standard, the recurrent delay calculated is the congested delay, not the total delay (which uses a 60 mph standard). The mobility performance measure is estimated for the implementation of each proposed mitigation improvement package.

Reliability

Reliability is a quantitative performance measure that captures the relative predictability of the public's travel time. This performance measure focuses on the extent to which mobility varies from day-to-day. Reliability can be measured in terms of

4 http://www.oim.dot.state.mn.us/EASS/

5 FPI Framework is the *Freeway Performance Initiative Traffic Analysis: Performance and Analysis Framework* (MTC, October 2007).

6 Exclusion of the safety performance measure did not affect the rankings presented in Sections 1 and 8.

non-recurrent delay, which is delay caused by irregular events, such as accidents, special events, maintenance, short-term construction, and weather. The reliability performance measure is estimated for the implementation of each proposed mitigation improvement package. It should be noted that based on Federal Highway Administration (FHWA) research, motorists consider non-recurrent delay (i.e., reliability hours) to be equivalent to three times that of recurrent delay (i.e., mobility hours).[7] This factor of three will be reflected in the prioritization of mitigation strategy packages shown in Section 8 and Appendix B of this technical memorandum.

Goods Movement

The goods movement performance measure is a qualitative measure that determines whether the corridor provides adequate freight mobility and reliability. As outlined in the FPI Framework, the goods movement measure will be assigned a "Yes" ranking if the improvement is located in one of the designated goods movements corridors.[8] A list of the goods movement corridors identified in MTC's submittal for Trade Corridor Improvement Funds (TCIF) under the 2006 Infrastructure Bond can be found in the FPI Framework. SR 24 is not designated as a goods movement corridor in the TCIF submittal and, therefore, will be given a "No" ranking for all improvements. It should be noted, however, that just because SR 24 is not designated as a goods movement corridor does not mean that the listed improvements have no impact on goods movement in the corridor. For the purposes of the FPI analysis, the goods movement performance measure is used specifically for comparing multiple corridors.

HOV System Connectivity

The HOV system connectivity performance measure is a qualitative measure that is used to evaluate if a corridor has an effective network of HOV lanes. This performance measure is significant because HOV lanes provide a travel-time savings incentive, increased reliability and air quality benefits. Proposed mitigation improvements that would increase HOV system connectivity can be ranked higher because of this qualitative benefit.

Access Management

The access management performance measure is a qualitative measure that evaluates the existing access management in the corridor, in terms of the number of access points such as ramps. The access management performance measure is an additional measure of safety and mobility that is not captured in those specific quantitative measures. Fewer access points along a corridor typically signify improved mobility and safety. Mitigation measures that would improve access management by reducing the number of access points will be assigned a "Yes" ranking and can be placed higher in the prioritization.

Cost

Cost performance measures estimate the total costs associated with the proposed mitigation improvements to the corridor. The two cost performance measures are capital costs (also known as construction costs or upfront costs) and operation and maintenance (O&M) costs (also known as ongoing costs). These costs are described below and are all presented in dollars at their 2007 value. As with the benefit performance measures, a discount rate of 4% per year is used to convert future values to present values by accounting for inflation and interest rates as well as inclusion of a risk factor.

Capital Costs

Capital costs include the construction, right-of-way acquisition, vehicle procurement (transit), and mitigation costs. Construction costs include mainline, ramps, intersections, bridges, signalization, erosion control, drainage, maintenance-of-traffic and

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7 This factor is from FHWA's ITS Deployment Analysis System (IDAS), which is based on the FHWA Highway Economic Requirements System (HERS).

8 *Freeway Performance Initiative Traffic Analysis: Performance and Analysis Framework* (MTC, October 2007)

mobilization. Unit prices of the construction items were obtained from Caltrans' Contract Cost Database and were applied to the quantity estimates.[9] Capital costs also include costs for engineering, administration, legal services, and a contingency add-in.

Operation and Maintenance (O&M) Costs

O&M costs are the annual costs estimated for operating and maintaining the proposed mitigation improvements. O&M costs include labor and materials for maintenance and repairs, utilities, financing, etc.

Scenarios

Benefits for the SR 24 Corridor were evaluated under two scenarios, Baseline Conditions and Improved Conditions (for a time period beginning after construction, referred to as Year 1, to the long-term future in 2030). A summary of all scenarios is listed below:

- Baseline Conditions, 2007
- Baseline Conditions, Year 1
- Baseline Conditions, 2015
- Baseline Conditions, 2030
- Improved Conditions, Year 1
- Improved Conditions, 2015
- Improved Conditions, 2030

Baseline Conditions

Benefits for Baseline Conditions were evaluated under 2007, 2015 and 2030 conditions and interpolated for all other years within the 2007 to 2030 timeline. Baseline 2007 Conditions were evaluated using 2007 data. Baseline 2015 Conditions incorporate existing 2007 conditions, projected growth in the area, and committed improvements in the SR 24 Corridor to be built between 2007 and 2015. Baseline 2030 Conditions also incorporate existing 2007 conditions, projected growth in the area, and committed projects.[10] A theoretical scenario of Baseline Year 1 is included in the interpolated values between Baseline 2007 Conditions and Baseline 2015 Conditions representing conditions after construction has been completed.

Improved Conditions

Benefits for Improved Conditions were evaluated under 2015 and 2030 conditions and interpolated for years in between. Data for a theoretical scenario of Improved Year 1 conditions were not modeled, but rather calculated based on available data from other scenarios.[11] Benefits are calculated from the end of construction, which varies by project, to 2030.

Analysis Approach for Prioritization

The benefit performance measures will be evaluated for all proposed mitigation improvements and for all scenarios described above. From these scenarios, the net increase in the quantitative benefits will be calculated from the end of construction (Year 1), to year 2030. This is known as the life-cycle benefits. Exhibit 3-4 illustrates the calculation of life-cycle benefits.

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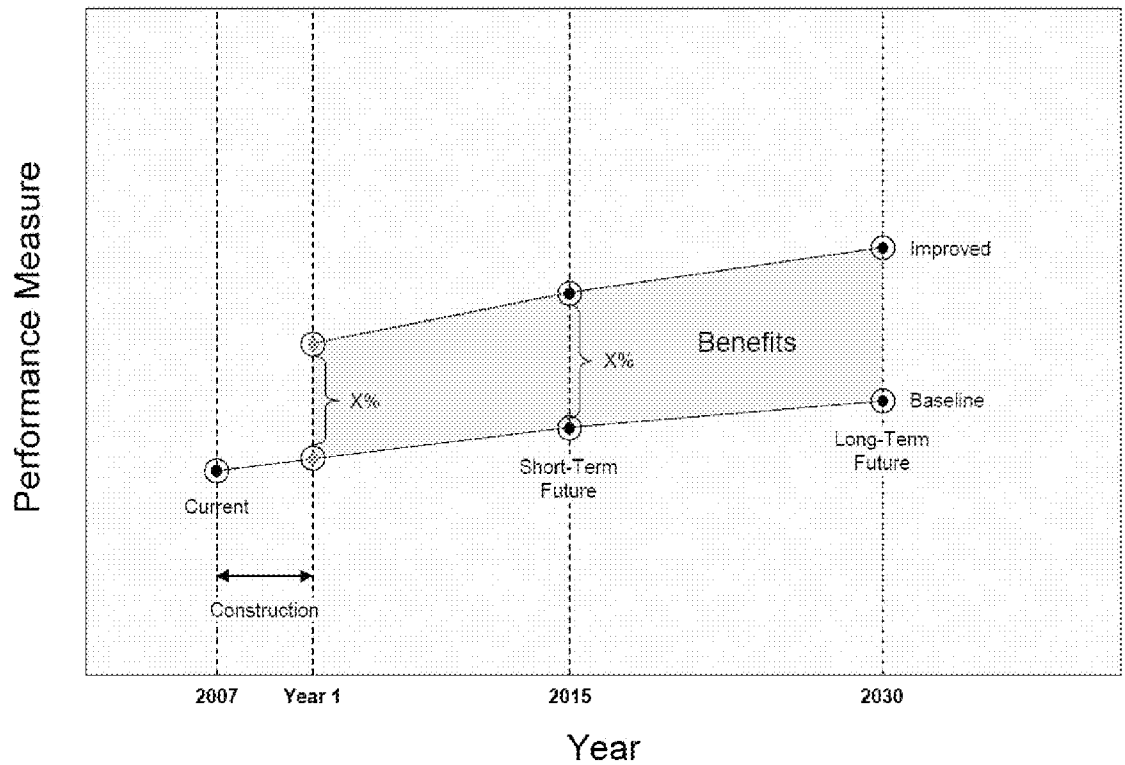
9 http://sv08data.dot.ca.gov/contractcost/

10 The one committed project is the *Caldecott Improvement Project* (4th Tunnel Bore).

11 Benefit values for Baseline Year 1, Baseline 2015 and Improved 2015 are known; therefore, Improved Year 1 benefit values were estimated by assuming constant growth (see Exhibit 3-4).

Exhibit 3-4 Life-Cycle Benefits



Source: Freeway Performance Initiative Traffic Analysis: Performance and Analysis Framework (October 2007)

Detailed benefit cost estimates for each project would normally require inclusion of the duration of construction to determine when the improvement is completed and will begin accumulating benefits. However, for the purposes of this analysis, which compares a wide variety of improvements with varying construction schedules, all improvements were evaluated assuming the same length of construction such that Year 1 is the same year for all improvements.

The summation of the benefits from Year 1 to 2030 (the life-cycle benefits), will be compared to the cost performance measures of all the mitigation improvements.

Analysis Tools

A variety of analysis tools were used to evaluate the benefits of the proposed mitigation improvements. These tools include a combination of software calculations and manual calculations. The selection of the tools was mandated by the modeling capacity of the software programs and varies by the type of proposed mitigation improvement and the type of benefit. A summary of the tools used is presented in Exhibit 3-5.

Exhibit 3-5 Analysis Tools used for Developing Benefits

Type of Proposed Mitigation Improvement	Type of Benefit	
	Mobility	Reliability
Auxiliary Lane	FREO	Manual Calculation (based on IDAS methodology)
HOV Lane		
Ramp Metering		
ITS System Enhancements	N/A	Manual Calculation (based on IDAS methodology)

The formulas for the manual calculations are applied to the data (volumes, capacities, etc.) from FREQ, which ensures consistency between the differing analysis tools and benefits. The full methodologies and calculations of the above analysis tools used for developing mobility and reliability are available by request. Descriptions of the analysis tools follow below.

Software Calculations: FREQ

FREQ was used to evaluate recurrent congestion (mobility) for existing and future highway operating conditions. The version used was FREQ12 PE/PL, Version 3.01. The two models contained within FREQ12 are FREQ12PE, an entry control macroscopic model for analyzing ramp metering, and FREQ12PL, an on-freeway priority macroscopic model for analyzing HOV facilities. The analysis output from FREQ was used in the calculations of benefits and performance measures. The only mobility condition that FREQ was not used for was ITS System Enhancements. FREQ does not analyze ITS Improvements. Additionally, the ITS Improvements recommended target non-recurrent delay (reliability), and therefore show negligible mobility benefits.

Manual Calculations: IDAS and AASHTO

Two sources of formulas and methodology, IDAS and AASHTO, were utilized in the manual calculations.

The methodology from the ITS Deployment Analysis System (IDAS) software was used to perform manual calculations to evaluate all the ITS improvements for reliability benefits. These formulas and methodology are outlined in the IDAS User's Manual.

In addition to being used to evaluate ITS improvements, the IDAS methodology was also used to perform manual calculations to evaluate the reliability benefits of the other proposed mitigation improvements (auxiliary lanes, HOV lanes and ramp metering). This analysis relates the number of lanes and volume-over-capacity (V/C) ratios to travel time reliability rates.

Section 4: Performance Measures

Performance measures, such as vehicle demand, travel speed, travel time and vehicle delay, were calculated and used in the benefits analysis. Exhibits 4-1 through 4-4 present the performance measures for the following scenarios:

- Baseline Conditions, 2007 (no improvements)
- Baseline Conditions, 2015 (committed improvements)
- Baseline Conditions, 2030 (committed improvements)
- Improved Conditions, 2015 (committed improvements + short-term strategies)
- Improved Conditions, 2030 (committed improvements + short-term strategies + long-term strategies)

Additionally, exhibits 4-5 through 4-9 show the projected changes in bottleneck locations and their associated queues for the above scenarios.

Exhibit 4-1: Performance Measures on SR 24 – Westbound – AM Peak Hour

Measure (Full Analysis Area – 15 miles)	SR 24 Westbound - AM Peak Hour						
	Baseline			Improved			
	2007	2015	2030	2015	Change	2030	Change
Veh. Hours of Travel (VHT)	4,300	6,150	11,300	5,400	-11%	8,550	-16%
Veh. Miles of Travel (VMT)	220,000	230,000	199,000	224,000	+2%	204,000	+3%
Average Speed (mph)	49	31	18	35 (HOV: 52)	+13% (HOV: +68%)	20 (HOV: 40)	+22% (HOV: +122%)
Delay Index (free-flow speed of 60 mph / average speed)	1.3	1.9	3.3	1.7 (HOV: 1.2)	---	3.0 (HOV: 1.5)	---
Average Corridor Travel Time (h:mm)	0:20	0:31	0:59	0:28 (HOV: 0:19)	-10% (HOV: -37%)	0:46 (HOV: 0:24)	-17% (HOV: -59%)
Total Delay (VHT for speeds less than 60 mph)	580	2,270	9,020	1,570	-31%	8,030	-2%
Congestion Delay (VHT for speeds less than 35 mph)	260	1,580	8,000	1,110	-17%	4,580	-39%
Miles of Congested Segments (Speeds less than 35 mph)	1.5	5.0	7.5	3.5	-30%	7.5	0%

Exhibit 4-2: Performance Measures on SR 24 – Eastbound – PM Peak Hour

Measure (Full Analysis Area – 15 miles)	SR 24 Eastbound - PM Peak Hour						
	Baseline			Improved			
	2007	2015	2030	2015	Change	2030	Change
Veh. Hours of Travel (VHT)	4,700	6,600	8,000	5,300	-9%	5,850	-30%
Veh. Miles of Travel (VMT)	138,000	140,000	135,000	140,000	+9%	149,000	+10%
Average Speed (mph)	22	17	15	21 (HOV: 26)	+24% (HOV: +47%)	21 (HOV: 27)	+40% (HOV: +80%)
Delay Index (free-flow speed of 60 mph / average speed)	2.7	3.5	4.0	2.9 (HOV: 2.4)	---	2.9 (HOV: 2.2)	---
Average Corridor Travel Time (h:mm)	0:42	0:54	1:01	0:44 (HOV: 0:36)	-13% (HOV: -33%)	0:44 (HOV: 0:33)	-28% (HOV: -46%)
Total Delay (VHT for speeds less than 60 mph)	2,430	4,620	5,720	2,980	-18%	3,150	-45%
Congestion Delay (VHT for speeds less than 35 mph)	1,990	3,680	4,250	2,170	-15%	2,270	-47%
Miles of Congested Segments (Speeds less than 35 mph)	6.0	9.0	10.5	8.0	-5%	9.0	-14%

Exhibit 4-3: Performance Measures on SR 24 – Westbound – AM Peak Period

Measure (Full Analysis Area – 15 miles)	SR 24 Westbound - AM Peak Period						
	Baseline			Improved			
	2007	2015	2030	2015	Change	2030	Change
Veh. Hours of Travel (VHT)	16,400	21,100	32,900	19,000	-10%	29,600	-9%
Veh. Miles of Travel (VMT)	866,000	913,000	937,000	922,000	+1%	871,000	+4%
Average Speed (mph)	54	50	28	48 (HOV: 54)	-5% (HOV: +8%)	29 (HOV: 44)	0% (HOV: +60%)
Delay Index (free-flow speed of 60 mph / average speed)	1.1	1.5	2.3	1.4 (HOV: 1.1)	---	2.3 (HOV: 1.4)	---
Average Corridor Travel Time (h:mm)	0:16	0:23	0:42	0:20 (HOV: 0:16)	-12% (HOV: -31%)	0:42 (HOV: 0:22)	0% (HOV: -48%)
Total Delay (VHT for speeds less than 60 mph)	1,280	6,000	19,100	5,870	-98%	18,280	-15%
Congestion Delay (VHT for speeds less than 35 mph)	540	3,200	13,600	2,650	-17%	11,370	-17%
Miles of Congested Segments (Speeds less than 45 mph)	0 - 1.5 (Avg. 1.0)	2.0 - 5.0 (Avg. 4.0)	5.0 - 7.5 (Avg. 7.0)	0.0 - 3.5 (Avg. 2.0)	-50%	2.5 - 7.5 (Avg. 5.0)	-14%

Exhibit 4-4: Performance Measures on SR 24 – Eastbound – PM Peak Period

Measure (Full Analysis Area – 15 miles)	SR 24 Eastbound - PM Peak Period						
	Baseline			Improved			
	2007	2015	2030	2015	Change	2030	Change
Veh. Hours of Travel (VHT)	15,800	19,500	22,200	17,400	-11%	16,800	-24%
Veh. Miles of Travel (VMT)	543,000	560,000	564,000	566,000	+1%	576,000	+4%
Average Speed (mph)	31	26	25	28 (HOV: 34)	+8% (HOV: +31%)	33 (HOV: 38)	+32% (HOV: +52%)
Delay Index (free-flow speed of 60 mph / average speed)	1.9	2.3	2.4	2.1 (HOV: 1.8)	---	1.8 (HOV: 1.6)	---
Average Corridor Travel Time (h:mm)	0:33	0:39	0:45	0:37 (HOV: 0:30)	-5% (HOV: -23%)	0:33 (HOV: 0:27)	-24% (HOV: -37%)
Total Delay (VHT for speeds less than 60 mph)	9,500	10,200	14,100	9,160	-20%	7,440	-48%
Congestion Delay (VHT for speeds less than 35 mph)	6,160	6,300	8,800	6,200	-8%	6,260	-46%
Miles of Congested Segments (Speeds less than 55 mph)	2.0 - 6.0 (Avg. 4.5)	5.5 - 9.5 (Avg. 7.0)	4.5 - 13.5 (Avg. 10.5)	2.0 - 6.0 (Avg. 4.5)	-36%	1.0 - 6.0 (Avg. 5.0)	-52%

Exhibit 4-3: Location of Bottlenecks and Recurrent Congestion on SR 24 - Baseline Conditions, 2007 (No Improvements)

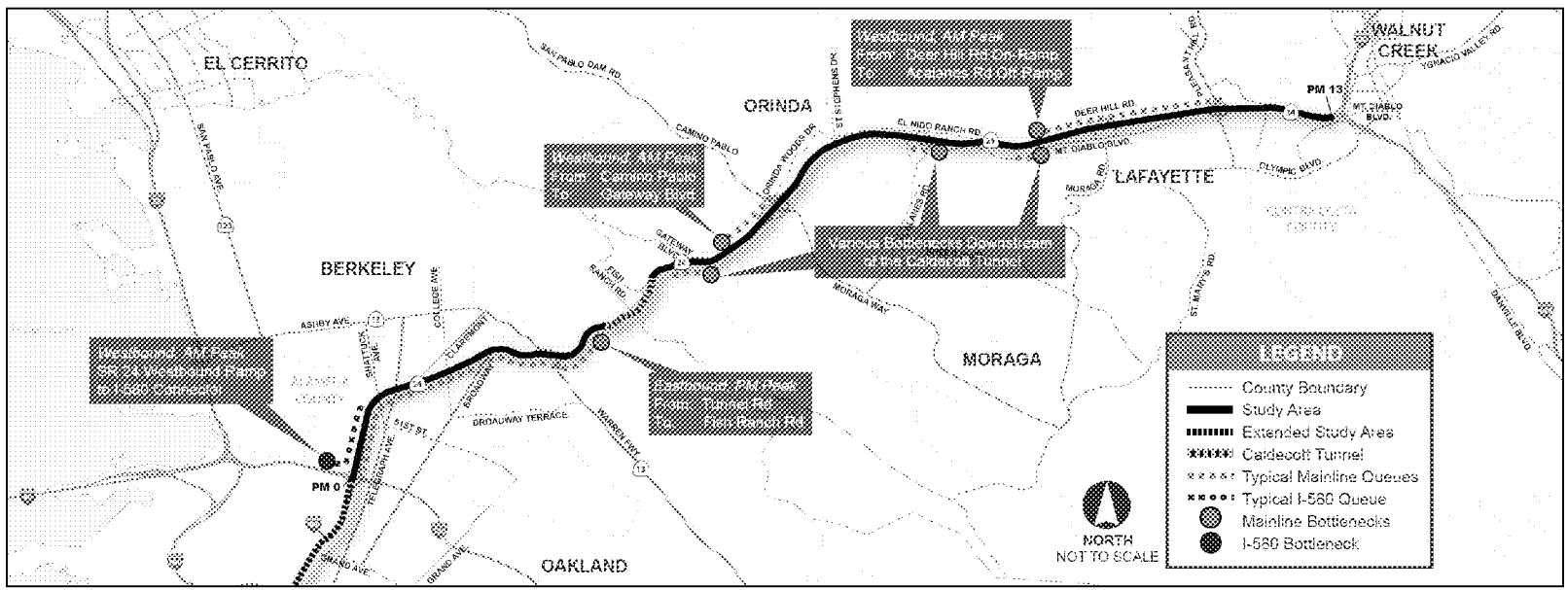


Exhibit 4-6: Location of Bottlenecks and Recurrent Congestion on SR 24 - Baseline Conditions, 2015 (Committed Improvements)

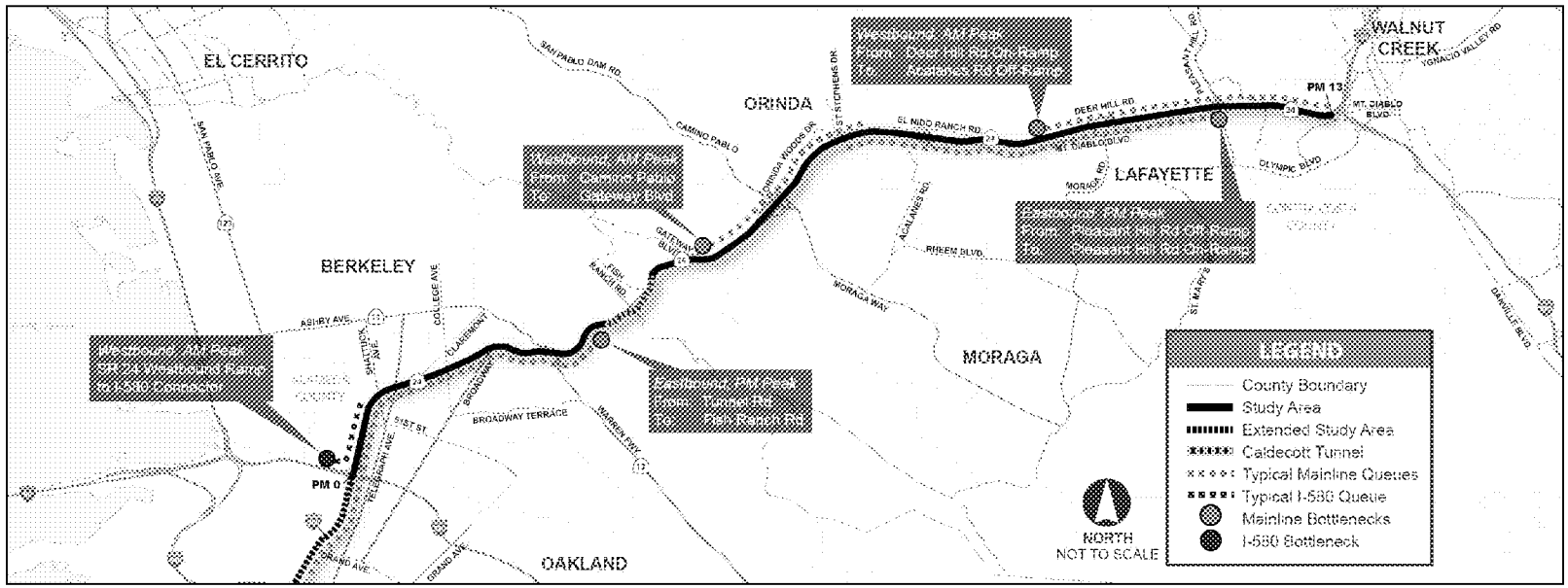


Exhibit 4-7: Location of Bottlenecks and Recurrent Congestion on SR 24 - Improved Conditions, 2015 (Committed Improvements + Short-Term Strategies)

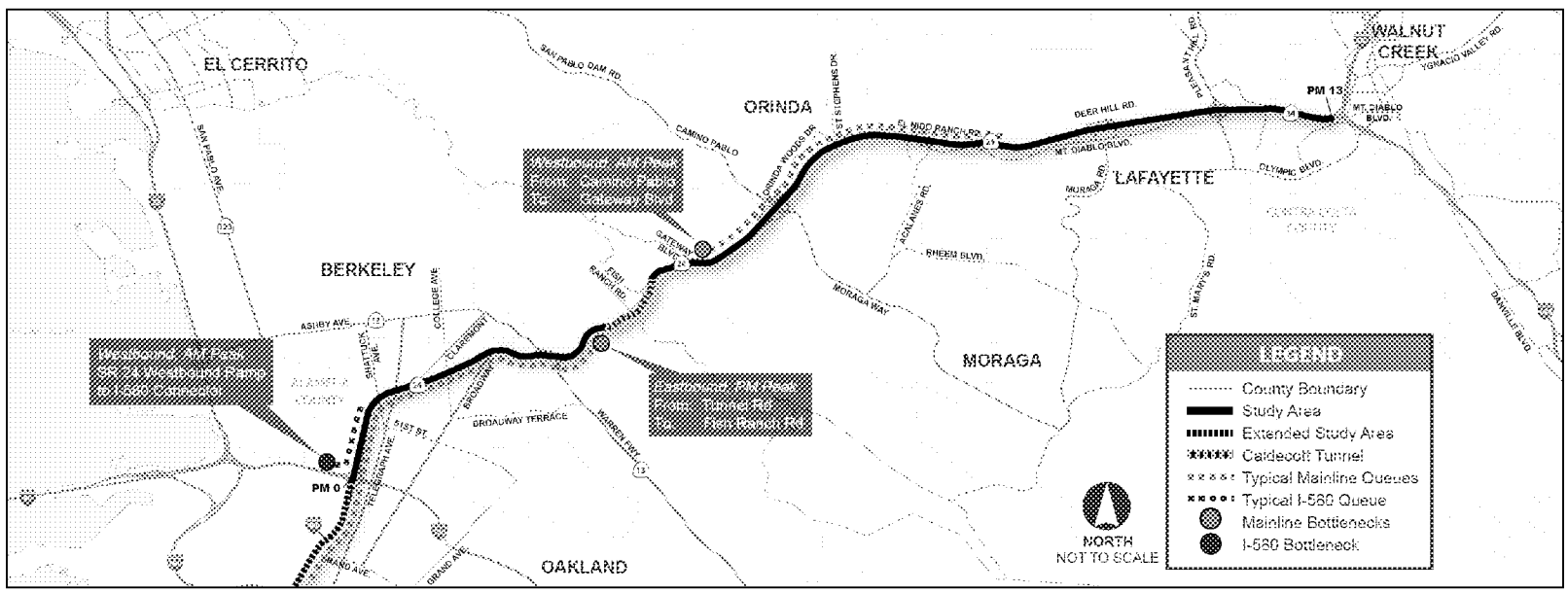


Exhibit 4-8: Location of Bottlenecks and Recurrent Congestion on SR 24 - Baseline Conditions, 2030 (Committed Improvements)

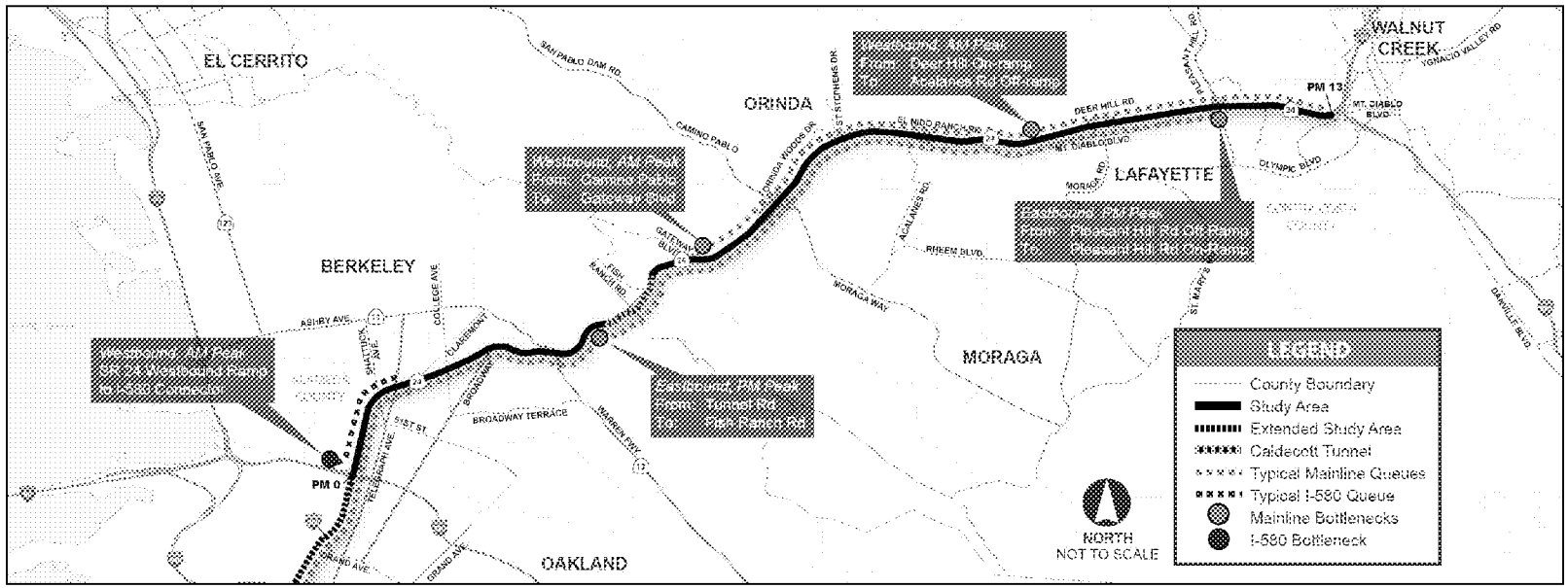
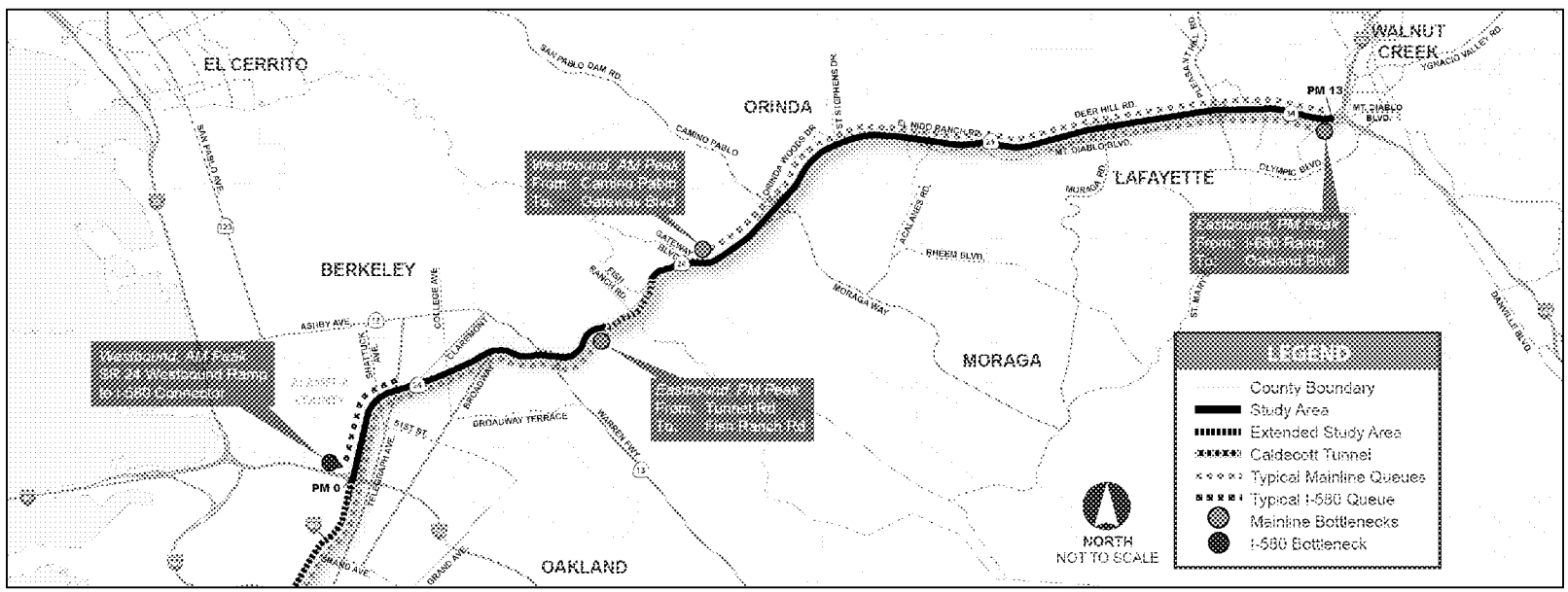


Exhibit 4-9: Location of Bottlenecks and Recurrent Congestion on SR 24 - Improved Conditions, 2030 (Committed Improvements + Short-Term Strategies + Long-Term Strategies)



Section 5: Life-Cycle Benefits

The proposed mitigation improvements were evaluated to assess the quantitative and qualitative benefits of the improvements. The quantitative benefits, (mobility and reliability), were evaluated to estimate their life-cycle benefits. The qualitative benefits, (goods movement, HOV connectivity and access management), are also evaluated for subjective prioritization applications.

Quantitative Benefits

The quantitative benefits, mobility and reliability were calculated for all proposed mitigation improvements as presented in Exhibit 5-1 using the analysis program (i.e., FREQ).

All calculations were performed on segment levels (e.g., Camino Pablo on-ramp to Gateway Boulevard [Wilder Road] off-ramp) and then summed for the entire SR 24 Corridor. The mobility and reliability benefits shown in Exhibit 3-1 are the life-cycle values for 21 years, from 2009 (also known as Year 1) to 2030. These benefits include a 4% discount rate. Additional notes and assumptions of each of these benefits are provided in the following text.

Mobility

All mobility benefits were estimated using FREQ. Mobility was evaluated using actual volumes (as opposed to demand volumes) and measured in hours of recurrent delay. Specifically, congested delay was used as the type of recurrent delay used to calculate mobility.

In coordination with MTC and Caltrans staff, it was determined that mobility benefits would be quantified by evaluating recurrent delay by using congested delay, which is defined as delay resulting from vehicle speeds of less than 35 mph. Congested delay was used instead of total delay, which is defined as delays from vehicles speeds of less than 60 mph.

As a result of using congested delay instead of total delay, some improvements show no mobility benefits. This is not because the speeds remain unchanged with the addition of these improvements, but rather the absence of one of these improvements alone does not cause a decrease in speed below the 35 mph threshold. This is also due to the "All-In Differential" method.

The mobility benefit model is based on the following calculations:

1. Distances are divided by vehicle speeds to estimate travel times.
2. Calculated travel times are compared to 35 mph travel time standards of congested delay and their difference is the recurrent delay.
3. Factors are applied to convert the recurrent delay from peak period to daily and from daily to life-cycle.

Values of the life-cycle mobility benefits are presented in Exhibit 5-1.

Reliability

Reliability benefits were estimated either in IDAS or by manual computations using the travel time reliability rates provided in the IDAS User's Manual Table B 2.14. Reliability was evaluated using unconstrained volumes to calculate V/C ratios and Vehicle Miles Traveled (VMT). Unconstrained volumes were used instead of constrained volumes because the constrained volumes are lower in oversaturated conditions as a result of vehicles in queue.

The reliability benefit model is based on the following calculations:

1. Unconstrained volumes multiplied by distance results in unconstrained VMT.
2. Travel time reliability rates from IDAS are a function of number of lanes and V/C. The travel time reliability rate is the number of vehicle hours of non-recurrent delay per VMT.

3. Unconstrained VMT values multiplied by the travel time reliability rates yields the non-recurrent delay.
4. Factors are applied to convert the non-recurrent delay from peak period to daily and from daily to life-cycle.

Values of the life-cycle reliability benefits are presented in Exhibit 5-1.

Exhibit 5-1: Quantitative Measures of Life-Cycle Benefits

Pkg	Year	Dir	ID	Mitigation Improvement	Life-Cycle Benefits		
					Mobility (vehicle hours)	Reliability (vehicle hours)	TOTAL (vehicle hours)
A	2015	Both	1	Activate existing ITS installations that currently are not fully operational.	0	6,946,000	29,656,000
			2	Assess gaps in the current and programmed ITS installations and supplement as needed.			
			3	Extend ITS coverage to fill the gap between I-580 and the Caldecott Tunnel.			
B	2015	WB	4	Implement ramp metering in the westbound direction between I-580 and the Caldecott Tunnel.	17,658,000	14,355,000	60,923,000
			5	Add a westbound left-shoulder HOV-2 Lane from I-580 to the Caldecott Tunnel			
C	2015	EB	6	Implement ramp metering in the eastbound direction between I-580 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-980) from I-580 to I-680.	6,927,000	2,673,000	13,946,000
			7	Add an eastbound left-shoulder HOV-2 Lane from the Broadway on-ramp to the Caldecott Tunnel.			
D	2015	EB	8	Implement ramp metering in the eastbound direction between the Caldecott Tunnel and I-680.	16,666,000	10,005,000	48,483,000
			9	Add an eastbound HOV-2 Lane from the St Stephens Dr Interchange to the I-680 Interchange (left shoulder or widen on right).			
E	2030	WB	10	Implement ramp metering in the westbound direction between the Caldecott Tunnel and I-580 and on the SR 24 Extended Corridor (I-980) from I-580 to I-680.	412,000	1,085,000	3,697,000

Abbreviations: ITS = Intelligent Transportation System; HOV = High Occupancy Vehicle

Note: Based on FHWA research, motorists consider non-recurrent delay (i.e., reliability hours) to be equivalent to three times that of recurrent delay (i.e., mobility hours). This factor is reflected in the "Total Life-Cycle Benefit" value.

Qualitative Benefits

The qualitative benefits were addressed for all proposed mitigation improvements as summarized below. These benefits were evaluated by determining if the proposed mitigation measure provided improvements in the SR 24 Corridor that cannot be easily quantified, but should be considered in the regional prioritization (i.e., comparing proposed mitigation improvements on SR 24 with proposed mitigation measures within other corridors in the region). These qualitative benefits, as outlined in the FPI Framework, are: goods movement, HOV connectivity, and access management. An improvement for these benefits is denoted by a "Yes." These qualitative benefits are not included in the ranking/prioritization of mitigation strategy packages because there is no specific dollar value associated with them. In accordance with the methodology described in Section 3 of this memorandum, the qualitative benefits are outlined below.

Goods Movement

For the goods movement performance measure, no mitigation improvements were given a "Yes" ranking. This is due to the fact that SR 24 is not designated as a goods movement corridor.

HOV System Connectivity

For the HOV system connectivity performance measure, the following mitigation improvements were given a "Yes" ranking:

- Improvement #5 of Package B: Add a westbound left-shoulder HOV-2 Lane from I-680 to the Caldecott Tunnel.
- Improvement #7 of Package C: Add an eastbound left-shoulder HOV-2 Lane from the Broadway on-ramp to the Caldecott Tunnel.
- Improvement #9 of Package D: Add an eastbound HOV-2 Lane from the St Stephens Dr Interchange to the I-680 Interchange. (Left shoulder or widen on right.).

Access Management

For the access management performance measure, no mitigation improvements were given a "Yes" ranking. This is due to the fact that there are no proposed mitigation improvements that reduce the number of access points on the SR 24 Corridor.

As noted previously, the final prioritization does not incorporate the above qualitative performance measures. However, these qualitative "Yes" rankings are important in that they provide a more comprehensive analysis to inform the regional prioritization process.

Section 6: Life-Cycle Costs

Capital costs and O&M costs were calculated for all proposed mitigation improvements, with the exception of those improvements that have to do with transit and tolling, and are presented in Exhibit 6-1. Details on the methodology for these cost estimations are provided in Section 3. Capital costs were incurred during construction years and O&M costs were accrued annually after construction. Life-cycle costs were calculated for a life-cycle of 21 years, from 2009 to 2030 as with the life-cycle benefits. Life-cycle costs include a 4% discount rate.

Exhibit 6-1: Life-Cycle Costs

Pkg	Year	Dir	ID	Mitigation Improvement	Capital Cost	O&M Cost (per year)	Life-Cycle Costs
A	2015	Both	1	Activate existing ITS installations that currently are not fully operational.	$ 5,151,000	$ 154,600	$ 17,680,000
			2	Assess gaps in the current and programmed ITS installations and supplement as needed.			
			3	Extend ITS coverage to fill the gap between I-680 and the Caldecott Tunnel.	$ 7,113,000	$ 213,400	
B	2015	WB	4	Implement ramp metering in the westbound direction between I-680 and the Caldecott Tunnel.	$ 5,682,000	$ 284,100	$ 112,950,000
			5	Add a westbound left-shoulder HOV-2 Lane from I-680 to the Caldecott Tunnel.	$ 102,425,000	$ 51,400	
C	2015	EB	6	Implement ramp metering in the eastbound direction between I-680 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-680) from I-680 to I-580.	$ 7,600,000	$ 380,000	$ 36,650,000
			7	Add an eastbound left-shoulder HOV-2 Lane from the Broadway on-ramp to the Caldecott Tunnel.	$ 23,403,000	$ 10,500	
D	2015	EB	8	Implement ramp metering in the eastbound direction between the Caldecott Tunnel and I-680.	$ 5,056,000	$ 252,800	$ 69,750,000
			9	Add an eastbound HOV-2 Lane from the St Stephens Dr interchange to the I-680 interchange (left shoulder or widen on right)	$ 60,566,000	$ 31,800	
E	2030	WB	10	Implement ramp metering in the westbound direction between the Caldecott Tunnel and I-580 and on the SR 24 Extended Corridor (I-980) from I-580 to I-880	$ 5,672,000	$ 283,600	$ 9,770,000

Abbreviations: ITS = Intelligent Transportation System, HOV = High Occupancy Vehicle

Section 7: Life-Cycle Cost-Effectiveness Analysis

Life-cycle benefits and life-cycle costs were compared to estimate the life-cycle cost-effectiveness for all proposed mitigation improvement packages, with the exception of the transit improvement package (Package F), and are presented in Exhibit 7-1. Details on the methodology used for the cost-effectiveness analysis are provided in Section 3. For each mitigation strategy package, life-cycle costs were divided by life-cycle benefits to estimate the life-cycle cost-effectiveness. The cost-effectiveness is presented as the cost for every hour of delay saved as estimated over a 21-year life-cycle, from 2009 to 2030.

Exhibit 7-1: Life-Cycle Cost-Effectiveness Analysis

Pkg	Year	Dir	ID	Mitigation Improvement	Life-Cycle Benefits	Life-Cycle Costs	Cost-Effectiveness
A	2015	Both	1	Activate existing ITS installations that currently are not fully operational.	29,830,000 person-hours of delay saved	$ 17,560,000	$0.59 / person-hour of delay saved
			2	Assess gaps in the current and programmed ITS installations and supplement as needed.			
			3	Extend ITS coverage to fill the gap between I-680 and the Caldecott Tunnel.			
B	2015	WB	4	Implement ramp metering in the westbound direction between I-680 and the Caldecott Tunnel.	68,923,000 person-hours of delay saved	$ 112,950,000	$1.65 / person-hour of delay saved
			5	Add a westbound left-shoulder HOV-2 Lane from I-680 to the Caldecott Tunnel.			
C	2015	EB	6	Implement ramp metering in the eastbound direction between I-580 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-980) from I-880 to I-580.	13,846,000 person-hours of delay saved	$ 36,660,000	$2.60 / person-hour of delay saved
			7	Add an eastbound left-shoulder HOV-2 Lane from the Broadway on-ramp to the Caldecott Tunnel.			
D	2015	EB	3	Implement ramp metering in the eastbound direction between the Caldecott Tunnel and I-680.	48,483,000 person-hours of delay saved	$ 69,730,000	$1.44 / person-hour of delay saved
			8	Add an eastbound HOV-2 Lane from the St Stephens Dr Interchange to the I-680 Interchange (left shoulder or widen on right).			
E	2030	WB	10	Implement ramp metering in the westbound direction between the Caldecott Tunnel and I-680 and on the SR 24 Extended Corridor (I-980) from I-580 to I-880.	3,697,000 person-hours of delay saved	$ 9,770,000	$2.64 / person-hour of delay saved

Abbreviations: ITS = Intelligent Transportation Systems, HOV = High Occupancy Vehicle

Section 8: Prioritization

All proposed mitigation improvement packages were ranked/prioritized based solely on the calculated cost-effectiveness (described above in Sections 3 and 7) of their respective improvements. For the purposes of this prioritization exercise, qualitative benefits and political considerations were not included. Rankings are shown in ascending order with Rank 1 having the most cost-effectiveness (as determined in Section 7). Exhibit 8-1 shows the ranking for each mitigation improvement package.

Exhibit 8-1: Prioritization of Mitigation Improvements

Pkg	Year	Dir	ID	Mitigation Improvement	Package Rank	
					Short-Term	Long-Term
A	2015	Both	1	Activate existing ITS installations that currently are not fully operational.	1	---
			2	Assess gaps in the current and programmed ITS installations and supplement as needed.		
			3	Extend ITS coverage to fill the gap between I-680 and the Caldecott Tunnel.		
D	2015	EB	8	Implement ramp metering in the eastbound direction between the Caldecott Tunnel and I-680.	2	---
			9	Add an eastbound HOV-2 Lane from the St Stephens Dr Interchange to the I-680 Interchange (left shoulder or widen on right)		
B	2015	WB	4	Implement ramp metering in the westbound direction between I-680 and the Caldecott Tunnel.	3	---
			5	Add a westbound left-shoulder HOV-2 Lane from I-680 to the Caldecott Tunnel.		
C	2015	EB	6	Implement ramp metering in the eastbound direction between I-680 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-680) from I-680 to I-580.	4	---
			7	Add an eastbound left-shoulder HOV-2 Lane from the Broadway on-ramp to the Caldecott Tunnel.		
E	2030	WB	10	Implement ramp metering in the westbound direction between the Caldecott Tunnel and I-580 and on the SR 24 Extended Corridor (I-680) from I-580 to I-680.	---	1

Abbreviations: ITS = Intelligent Transportation Systems, HOV = High Occupancy Vehicle

The ITS package, Package A, ranked the highest providing the full coverage of ITS technology and management needed to address nonrecurrent delay and safety on the SR 24 Corridor. Package D also ranked high because the HOV lane in this package is does not merge back into the mixed-flow lanes lane like the HOV lanes in Packages B and C, which have to merge before the Caldecott Tunnel.

As documented previously in the *Congestion Mitigation Strategies Technical Memorandum*, (PBS&J, November 9, 2009), it should be noted that Improvement #5 (Package B), provides a westbound HOV Lane, bringing the cross section of SR 24 westbound, west of Pleasant Hill Road to five lanes (four mixed-flow, one HOV), which is one more lane than cited in Gateway Constraint Policy set forth in the Lamorinda Action Plan Update (July 2008). In recognition of the Gateway Constraint Policy, a variation on this strategy that would shorten the proposed HOV lane, eliminating the segment between Pleasant Hill Road and I-680, was also evaluated. The analysis of the shortened HOV lane indicated that the associated costs and benefits would decrease by only 19% and 8%, respectively as compared to the full-length HOV lane proposed as Improvement #5. This relatively nominal change would not affect the overall ranking of Package B, shown above in Exhibit 8-1.

Section 9: Transit Mitigation Strategies

While the FPI and CSMP processes focus on freeway mitigation strategies, improved transit service was raised by stakeholders along the SR 24 corridor. In the case of SR 24 these services include a general package of increased transit access strategies, including additional parking at BART stations upstream of the corridor, enhanced bus feeder services, and operational enhancements to BART at a system-wide level that could accommodate ridership increases of 10 to 20 percent.[12]

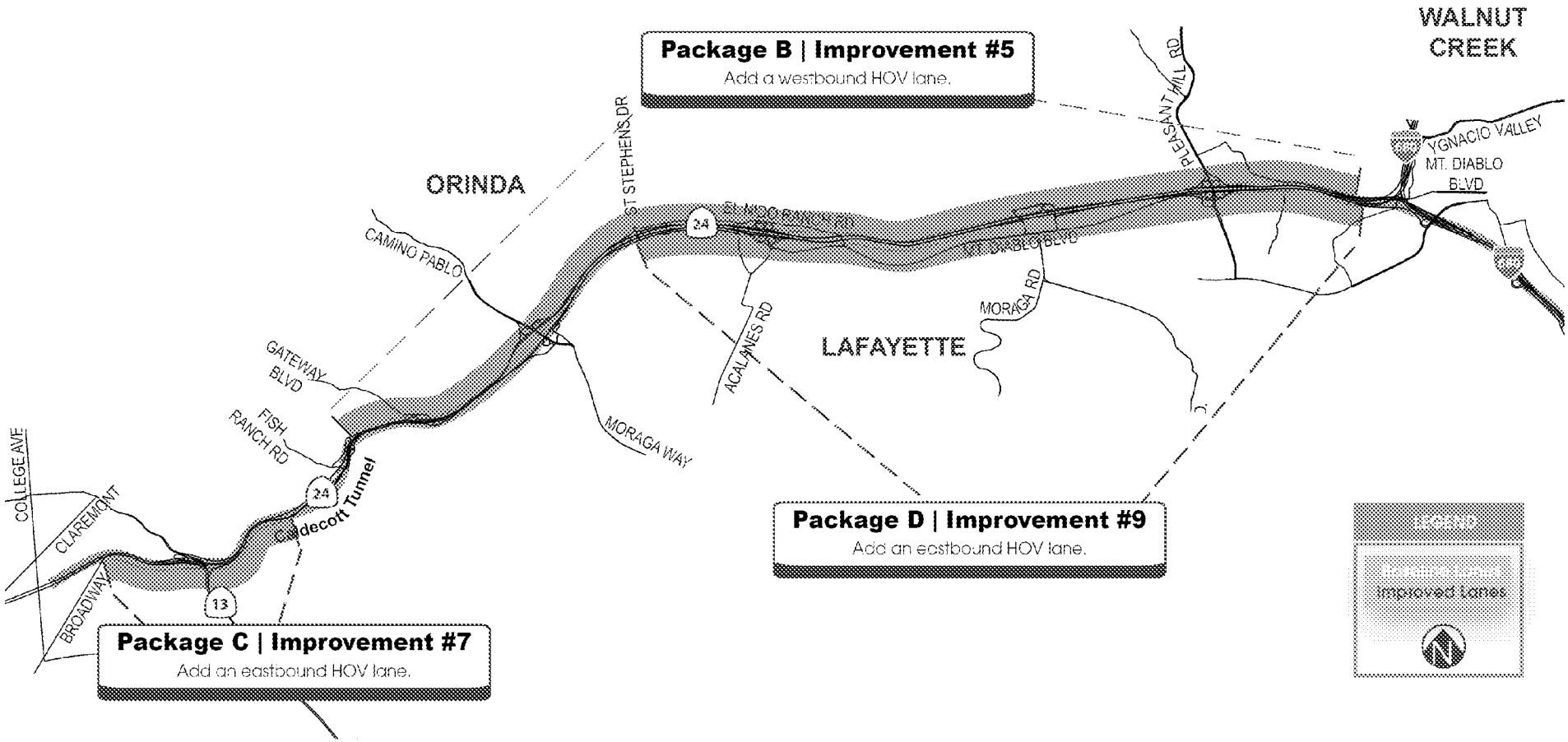
The transit mitigation strategies in Package F include both short-term and long-term strategies. A benefit cost ratio could not be estimated for this report, and thus these transit mitigation strategies cannot be ranked against other mitigation strategies for which life-cycle benefits and costs were available. For this reason, no prioritized recommendations are offered on this set of transit strategies and further analysis is recommended to determine the effectiveness of these improvements and their impacts on the corridor.

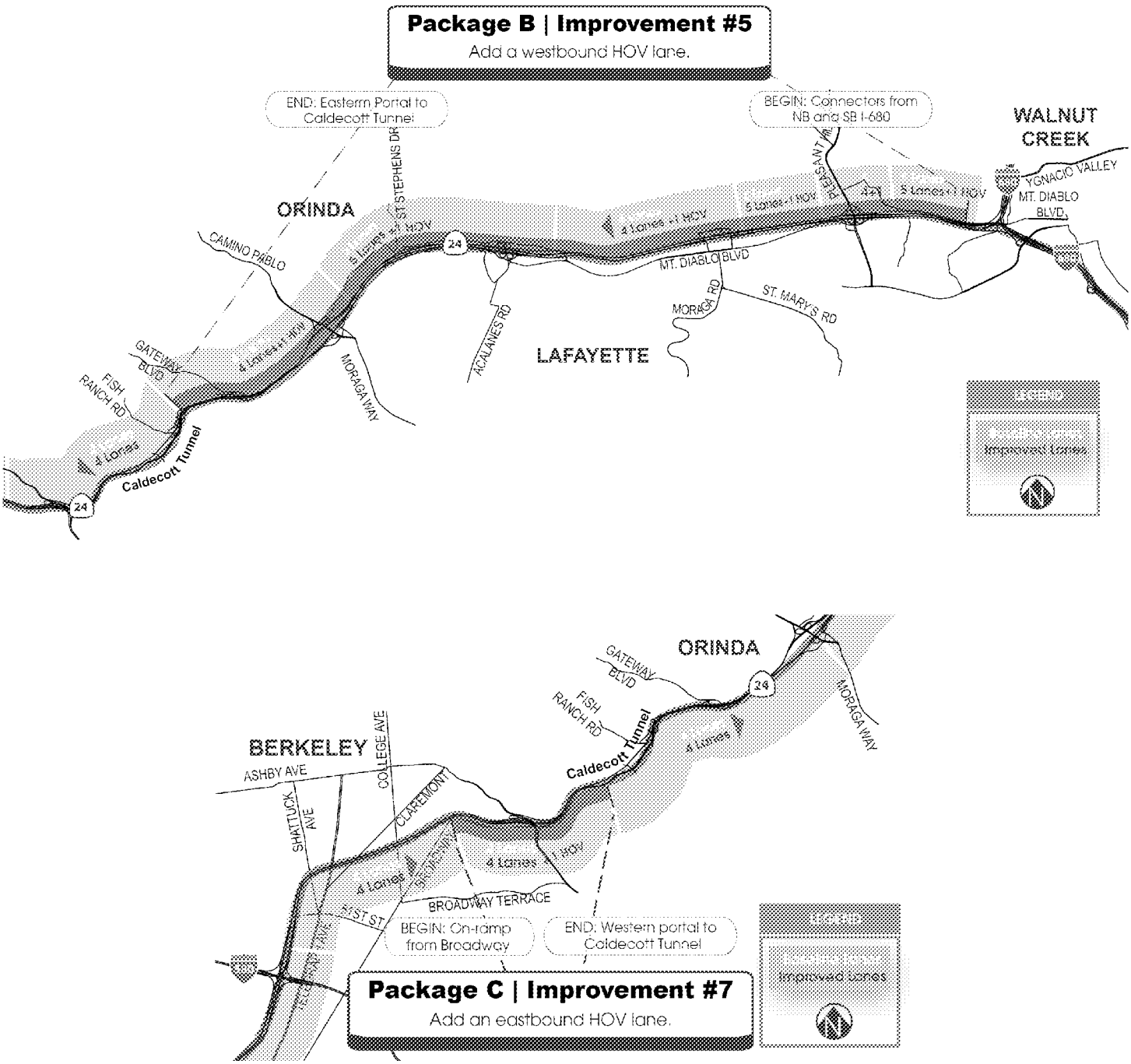
Exhibit 9-1: Transit Mitigation Improvements

Pkg	ID	Mitigation Improvement
F	11	Additional BART parking capacity at upstream BART stations
	12	Increased bus transit access to the BART stations within the SR 24 Corridor.
	13	BART system-wide operational improvements.

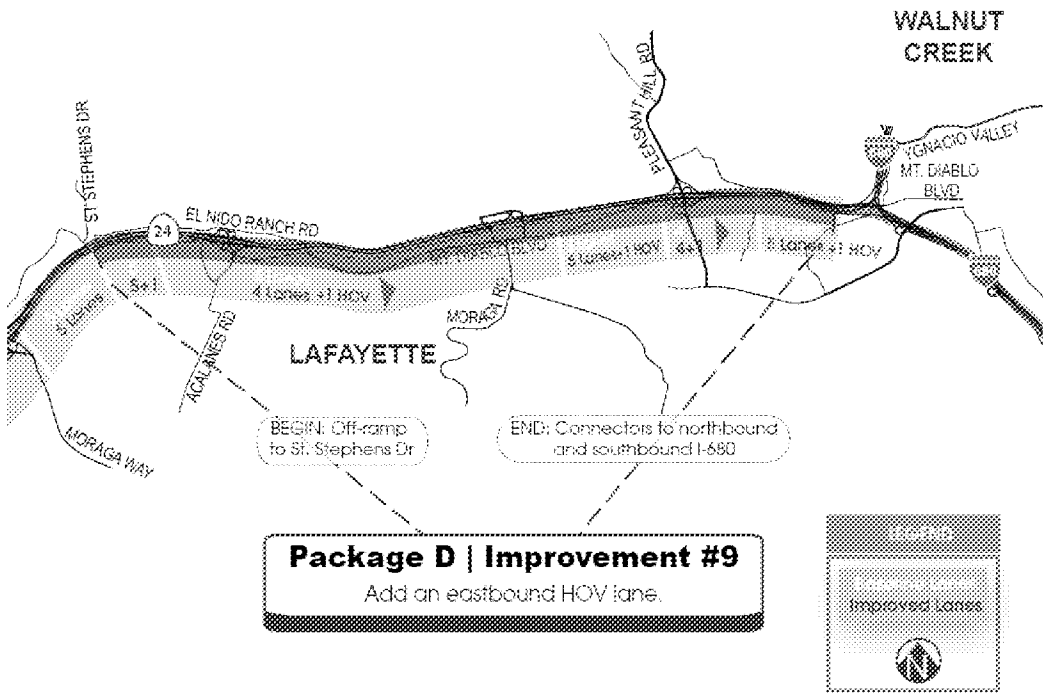
[12] The feasibility of accommodating ridership increases in this range was discussed with BART as part of the stakeholder coordination process.

Appendix A: Illustration of Selected Mitigation Strategies


Package B | Improvement #5
Add a westbound HOV lane.
WALNUT CREEK
ORINDA
ST STEPHENS DR
PLEASANT HILL RD
YGNACIO VALLEY
MT. DIABLO BLVD
CAMINO PABLO
24
EL NIDO RANCH RD
MORAGA RD
ACALANES RD
LAFAYETTE
GATEWAY BLVD
FISH RANCH RD
MORAGA WAY
COLLEGE AVE
CLAREMONT
Caldecott Tunnel
BROADWAY
13
Package D | Improvement #9
Add an eastbound HOV lane.
Package C | Improvement #7
Add an eastbound HOV lane.
LEGEND
Improved Lanes


Package B | Improvement #5
Add a westbound HOV lane.
END: Eastern Portal to Caldecott Tunnel
BEGIN: Connectors from NB and SB I-680
ORINDA
WALNUT CREEK
LAFAYETTE
CAMINO PABLO
ST. STEPHENS DR
SAN CARLOS AVE
YGNACIO VALLEY
MT. DIABLO BLVD
MT. DIABLO BLVD
MORAGA RD
ST. MARY'S RD
ACALANES RD
GATEWAY BLVD
FISH RANCH RD
MORAGA WAY
Caldecott Tunnel
4 Lanes
5 Lanes + 1 HOV
4 Lanes + 1 HOV
24
Legend
Improved Lanes

ORINDA
GATEWAY BLVD
FISH RANCH RD
Caldecott Tunnel
MORAGA WAY
BERKELEY
ASHBY AVE
COLLEGE AVE
SHATTUCK AVE
CLAREMONT
BROADWAY TERRACE
51ST ST
4 Lanes
4 Lanes + 1 HOV
BEGIN: On-ramp from Broadway
END: Western portal to Caldecott Tunnel
Package C | Improvement #7
Add an eastbound HOV lane.
Legend
Improved Lanes
24


WALNUT CREEK
ST STEPHENS DR
EL NIDO RANCH RD
24
PLEASANT HILL RD
IGNACIO VALLEY
MT. DIABLO BLVD
680
5 Lanes
5+1
4 Lanes +1 HOV
MORAGA RD
LAFAYETTE
AGALARNES RD
MORAGA WAY
BEGIN: Off-ramp to St. Stephens Dr
END: Connectors to northbound and southbound I-680
Package D | Improvement #9
Add an eastbound HOV lane.
Improved Lanes

Appendix B: Life-Cycle Cost-Effectiveness Analysis and Prioritization

SR 24 Prioritized Congestion Mitigation Strategies: Cost-Effectiveness Analysis

		Life-Cycle Benefits			Life-Cycle Costs [3]	Life-Cycle Cost-Effectiveness	Package Rank [4]	
		Mobility Benefits (per hrs saved)	Reliability Benefits (per hrs saved)	Total [1,2]		Cost to Person-Hour of Delay Saved	Short Term	Long Term
SHORT-TERM CONGESTION MITIGATION STRATEGIES								
	Short-term Strategies Package A							
1	Activate existing ITS installations that currently are not fully operational.							
2	Assess gaps in the current and programmed ITS and supplement as needed.	0	9,946,000	29,838,000	$17,580,000	$0.59 / per-hr of delay saved	1	---
3	Extend ITS coverage to fill the gap from I-580 to the Tunnel.							
	Short-term Strategies Package B							
4	Implement WB ramp metering from I-680 to the Tunnel.							
5	Add a WB left-shoulder HOV-2 Lane from I-680 to the Tunnel.	17,858,000	14,355,000	60,923,000	$112,950,000	$1.85 / per-hr of delay saved	3	---
	Short-term Strategies Package C							
6	Implement EB ramp metering from I-680 to the Tunnel.							
7	Add an EB left-shoulder HOV-2 Lane from I-680 to the Tunnel.	5,927,000	2,673,000	13,946,000	$36,650,000	$2.63 / per-hr of delay saved	4	---
	Short-term Strategies Package D							
8	Implement EB ramp metering from I-680 to the Tunnel.							
9	Add an EB left-shoulder HOV-2 Lane from I-680 to the Tunnel.	16,668,000	10,605,000	48,483,000	$69,730,000	$1.44 / per-hr of delay saved	2	---
LONG-TERM CONGESTION MITIGATION STRATEGIES								
	Long-term Strategies Package E							
10	Implement WB ramp metering from the Tunnel to I-580 and on I-980.	412,000	1,095,000	3,697,000	$9,770,000	$2.64 / per-hr of delay saved	---	1
ALL MITIGATION STRATEGIES								
		40,865,000	38,674,000	156,887,000	$246,680,000	$1.57 / per-hr of delay saved	---	---

Source: PBS&J, October 2008

Notes:
1. Life-Cycle benefits only include mobility and reliability. (No safety or qualitative benefit measures.)
2. Based on FHWA research, motorists consider non-recurrent delay (i.e., reliability hours) to be equivalent to three times that of recurrent delay (i.e., mobility hours). This factor is incorporated into the "Total Life-Cycle Benefits" value.
3. Life-Cycle costs include capital, and operating and maintenance.
4. Package rank based on cost effectiveness

Metropolitan Transportation Commission

SR 24 Corridor in Alameda and Contra Costa Counties

Congestion Mitigation Strategies Technical Memorandum

Prepared by: PBS&J
For: Metropolitan Transportation Commission
Final
November 9, 2009

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Metropolitan Transportation Commission

SR 24 Corridor in Alameda and Contra Costa Counties

Congestion Mitigation Strategies Technical Memorandum

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Introduction

This memorandum summarizes mitigation strategies for State Route 24 (SR 24) in Alameda and Contra Costa Counties based on the *Future Conditions Technical Memorandum* (FCT) completed for this corridor (PBS&J, October 9, 2009). The primary objective of this analysis is to identify candidate congestion mitigation strategies for the SR 24 Corridor for the short-term (2009 - 2015) and long-term (2016 - 2030). In the next phase of this study, the short- and long-term strategies will be finalized and a cost/benefits approach will be used to develop a prioritized list of mitigation strategies for SR 24.

Section 1: Key Findings

Congestion mitigation strategies for the SR 24 Corridor for 2015 and 2030 are based upon the calibrated FREQ models and the traffic forecasts presented and documented in the FCT. This analysis has been conducted to identify mitigation strategies that address congestion along the SR 24 Corridor and include capacity improvements (e.g., HOV facilities), operational improvements (e.g., auxiliary lanes) and transportation management strategies (e.g., ramp metering, changeable message signs).[1] Additionally, because of limited capacity through the Caldecott Tunnel, mitigation strategies that would reduce travel demand on the roadway by promoting carpool and more transit are identified and discussed.

For the purposes of this summary, the mitigation strategies are separated into short-term needs (2009 through 2015) and long-term needs (2016 through 2030). The strategies are grouped into packages that are based on either individual projects or logical groupings of projects. The strategies are not prioritized within the short-term or long-term categories; the prioritization of strategy packages will be addressed in the next phase of the study.

It should be noted that one of the mitigation strategies presented in Package B, provides a westbound HOV Lane, bringing the cross section of SR 24 westbound, west of Pleasant Hill Road to five lanes (four mixed-flow, one HOV), which is one more lane than cited in Gateway Constraint Policy set forth in the Lamorinda Action Plan Update (July 2008).

This study did not examine connecting the proposed HOV lanes on SR 24 to planned lanes on I-680 as this was beyond the physical limits of the study and the analytical models used for this evaluation. It is recommended that when HOV lanes are constructed on SR 24 that their connectivity to planned I-680 HOV lanes be addressed in more detail.

Short-term (2009 – 2015) Mitigation Strategies

Short-term Strategy Package A: Deploy ITS technologies on SR 24 throughout Alameda and Contra Costa Counties: This ITS-based strategy package includes the installation and operation of closed circuit television (CCTV), traffic detection and changeable message signs (CMS). The goal of this strategy package is to reduce non-recurrent congestion (improve reliability) along SR 24 in Alameda and Contra Costa Counties by decreasing accident recovery times. This package includes the following:

- Activate existing ITS installations that currently are not fully operational (e.g., no power, no connection to the Transportation Management Center).
- Assess gaps in the current and programmed ITS installations and supplement as needed (e.g., SR 24 between I-680 and the Caldecott Tunnel) to reduce and/or close significant detection gaps.
- Extend ITS coverage to fill the gap between I-580 and the Caldecott Tunnel.

Short-term Strategy Package B: Address existing and projected bottleneck locations and implement transportation management strategies on westbound SR 24 between I-680 and the Caldecott Tunnel: In 2015, these deficiencies are primarily focused between the Deer Hill Road (Central Lafayette) on-ramp and the Acalanes Road Off-ramp before the mainline increases from four lanes to five lanes and between the Camino Pablo (Orinda/Moraga) on-ramp and the Gateway Boulevard (Wilder Road) off-ramp where the demand volumes exceed the capacity of the five westbound lanes (four mixed-flow lanes and one auxiliary lane). To address these deficiencies a combination of capacity enhancements, operational improvements and transportation management measures are recommended as follows:

- Implement ramp metering in the westbound direction between I-680 and the Caldecott Tunnel.[2]

---

1 Mitigation strategies were not considered for freeway-connector ramps because congestion on connecting freeways (e.g., I-680, I-580) is not reflected in the FREQ model used for this analysis. Without an understanding of mainline congestion on the connecting freeways, the effectiveness of mitigation measures would not be quantifiable.

2 The Caltrans goal is for all ramp metering to be adaptive.

- Add a westbound left-shoulder HOV-2 Lane from I-680 to the Caldecott Tunnel.[3] During non peak hours, this lane would be open to all users (mixed-flow operations).

Short-term Strategy Package C: Address existing and projected bottleneck locations and implement transportation management strategies in the eastbound direction on the SR 24 Extended Corridor (I-980) from I-880 to I-580 and on SR 24 between I-580 and the Caldecott Tunnel: In 2015, these deficiencies are primarily focused through the Caldecott Tunnel where demand volumes approaching Caldecott Tunnel exceed the capacity of the four mixed-flow lanes through the tunnel. To address these deficiencies a combination of capacity enhancements, operational improvements and transportation management measures are recommended as follows:

- Implement ramp metering in the eastbound direction between I-580 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-980) from I-880 to I-580.
- Add an eastbound left-shoulder HOV-2 Lane from the Broadway on-ramp to the Caldecott Tunnel.[4] During non peak hours, this lane would be open to all users (mixed-flow operations).

Short-term Strategy Package D: Address existing and projected bottleneck locations and implement transportation management strategies on eastbound SR 24 between the Caldecott Tunnel and I-680: In 2015, these deficiencies are primarily focused between the Deer Hill Road (Central Lafayette) on-ramp and the subsequent loss of the auxiliary lane at the Pleasant Hill Road off-ramp. To address these deficiencies, the following combination of operational improvements and transportation management measures are recommended as follows:

- Implement ramp metering in the eastbound direction between the Caldecott Tunnel and I-680.
- Add an eastbound HOV-2 Lane from the St Stephens Drive interchange to the I-680 interchange (left-shoulder or widen on right).[5] [6] During non peak hours, this lane would be open to all users (mixed-flow operations).

Long-term (2016 – 2030) Mitigation Strategies

Long-term Strategies Package E: Address gaps in ramp metering on westbound SR 24: The following transportation management measure will improve mobility and is consistent with the Ramp Metering Development Plan *(Caltrans, July 2009)* for SR 24 and I-980:

- Implement ramp metering in the westbound direction between the Caldecott Tunnel and I-580 and on the SR 24 Extended Study Corridor (I-980) from I-580 to I-880.

Short-term and Long-term (2009 – 2030) Transit Mitigation Strategies

Transit Strategy Package F: Implement transit strategies on the SR 24 Corridor: These strategies address transit improvements that would increase transit ridership and capacity, effectively reducing travel demand on SR 24 in both the eastbound and westbound directions. The recommendations include:

- Additional BART parking capacity at upstream BART stations (e.g., Walnut Creek, Pittsburg/Bay Point).
- Increased bus transit access to the BART stations within the SR 24 Corridor (e.g., Lafayette and Orinda).[7]
- BART system-wide operational improvements.[8]

---

3 The HOV-2 Lane proposed for consideration Package B of the *SR 24 Transit Capacity Study* (DKS Associates, January 2006). This HOV-2 Lane is shoulder-running and drops just east of the Caldecott Tunnel.

4 This HOV-2 Lane is shoulder-running and drops just west of the Caldecott Tunnel.

5 This HOV-2 Lane can fit within the existing right of way (ROW) if the widening is to the inside (subject to Caltrans design exceptions) or can be widened to the outside, requiring additional ROW.

6 The analysis leading to this proposed mitigation improvement determined that if the eastbound HOV limits where reduced (i.e., the HOV lane was shortened), that the controlling bottlenecks would not be mitigated and/or upstream or downstream bottlenecks would appear.

7 The type of bus service is to be determined, but can be local and/or regional service.

8 Improvements include the Central County Crossover Project.

Section 2: Short-Term (2009 - 2015) Mitigation Strategies

2015 Bottleneck Locations

Four controlling bottleneck locations were identified in the 2015 FCT analysis and are shown in Appendix A of this report. Of these four bottlenecks, two are projected to occur during the AM peak period in the westbound direction, and two during the PM peak period in the eastbound direction. These bottlenecks, referred to as Locations 1 through 4 in the FCT, are described as follows:

- **Location 1 -- Westbound between Deer Hill Road** (Central Lafayette) **on-ramp and Acalanes Road off-ramp:** This bottleneck occurs west of the Deer Hill Road (Central Lafayette) on-ramp before it widens from four lanes to five lanes.
- **Location 2 -- Westbound between Camino Pablo (Orinda/Moraga) on-ramp and Gateway Boulevard (Wilder Road) off-ramp:** Downstream of Location 1, this bottleneck occurs where the demand volumes at this section exceed the capacity of the five westbound lanes (four mixed-flow lanes and one auxiliary lane).
- **Location 3 – Eastbound between Old Tunnel Road on-ramp and Fish Ranch Road off-ramp (the Caldecott Tunnel):** This bottleneck occurs where demand volumes approaching Caldecott Tunnel exceed the capacity of the four mixed-flow lanes through the tunnel.
- **Location 4 – Eastbound between Pleasant Hill Road off-ramp and on-ramp:** This bottleneck occurs where heavy on-ramp volumes upstream of the Deer Hill Road (Central Lafayette) on-ramp join the SR 24 mainline in addition to the subsequent loss of the auxiliary lane at the Pleasant Hill Road off-ramp.

Flow rates and demand volumes, measured in vehicles per hour (vph), were examined for the bottlenecks described above and within the projected queues resulting from these bottlenecks. Because of the proximity of the bottlenecks at Location 1 and Location 2, it is recommended that these bottleneck locations be addressed as a pair since mitigating the bottleneck at Location 1 would shift the congestion to Location 2. In addition to the controlling bottleneck locations described above, no downstream or upstream embedded bottlenecks have been revealed.

In addition to the controlling bottlenecks on SR 24 in the westbound and eastbound directions, congestion on I-580 results in queuing on the SR 24 mainline in the westbound direction during the AM peak period. This study does not address mitigation strategies for queues caused by congestion on I-580.

Westbound Short-Term Mitigation Strategies (Locations 1 & 2)

To address the controlling bottlenecks at Locations 1 and 2, strategies that included auxiliary lanes between interchanges and ramp metering were first considered because of their low construction costs and short implementation time. In cases where auxiliary lanes and ramp metering are not sufficient to address the bottlenecks, capacity improvement strategies such as HOV facilities are considered.

For the bottlenecks at Location 1 and Location 2, the proposed strategies under consideration are (a) ramp metering in the westbound direction between I-680 and the Caldecott Tunnel, and (b) a left-shoulder HOV-2 Lane from I-680 to the Caldecott Tunnel. Ramp metering is considered as a traffic management strategy that will primarily serve to provide uniform flow from the on-ramps by dissipating clusters of vehicles. The HOV-2 Lane (Package B of the *SR 24 Transit Capacity Study* (DKS Associates, January 2006) would encourage carpooling, but would not directly address congestion of single-occupant vehicles (SOVs) in the westbound mixed-flow lanes. During non peak hours, this lane would be open to all users (mixed-flow operations).

For the controlling bottlenecks at Location 1 and Location 2, mixed-flow lane capacity improvements were not proposed for consideration, because the effectiveness would be limited without extending mixed-flow lane capacity to the west through the Caldecott Tunnel. Since capacity improvements are not viable within the Caldecott Tunnel, (see Section 4: Screened Mitigation Improvements), the HOV-2 Lane mentioned above is under consideration to address these bottlenecks.

Eastbound Short-Term Mitigation Strategies (Locations 3 & 4)

To address the controlling bottlenecks at Locations 3 and 4, strategies that include auxiliary lanes between interchanges and ramp metering are first considered, because of their low construction costs and short implementation time. In cases that auxiliary lanes and ramp metering do not adequately address the bottlenecks, capacity improvement strategies such as HOV facilities are considered.

For the bottleneck at Location 3, the proposed strategies under consideration are (a) ramp metering in the eastbound direction between I-580 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-980) from I-880 to I-580 and (b) an eastbound left-shoulder HOV-2 Lane from the Broadway on-ramp to the Caldecott Tunnel. During non peak hours, this left-shoulder lane would be open to all users (mixed-flow operations).

Similar to the westbound direction, no mixed-flow lane capacity improvements are proposed for consideration to mitigate the bottleneck at Location 3, since capacity improvements within the Caldecott Tunnel are not viable (see Section 4: Screened Mitigation Improvements). A left-shoulder HOV-2 Lane from I-580 to Broadway was also not proposed for consideration because of the physical constraints within that section of SR 24 (see Section 4: Screened Mitigation Improvements).

For the bottleneck at Location 4, the proposed strategies under consideration are (a) ramp metering in the eastbound direction between the Caldecott Tunnel and I-680, and (b) an eastbound HOV-2 Lane from the St Stephens Drive interchange to the I-680 interchange. Ramp metering is considered as a traffic management strategy that will primarily serve to provide uniform flow from the on-ramps by dissipating clusters of vehicles. The addition of an HOV lane along this section of SR 24 can address the capacity constraint between St. Stephens Drive and I-680 and encourage carpooling. During non peak hours, this lane would be open to all users (mixed-flow operations).

Short-Term Intelligent Transportation Systems (ITS) Mitigation Strategies

In order to address non-recurrent delay, also known as incident delay, the proposed strategies under consideration are (a) activate existing ITS installations that currently are not fully operational (e.g., no power, no connection to the Transportation Management Center), (b) assess gaps in the current and programmed ITS installations and supplement as needed (e.g., SR 24 between I-680 and the Caldecott Tunnel) to reduce and/or close significant detection gaps, and (c) extend ITS coverage to fill the gap between I-580 and the Caldecott Tunnel.[9] Existing ITS infrastructure in the SR 24 Corridor, such as closed-circuit television cameras (CCTVs), changeable message signs (CMSs), and traffic monitoring stations (TMSs, also known as detectors), does not currently meet Caltrans' desired coverage. Several existing ITS installations would require maintenance to bring them to a fully-functioning state. ITS coverage in the portion of the SR 24 Corridor in Contra Costa County is substantial, but still has gaps that need to be addressed. ITS coverage in the Alameda County portion of the SR 24 Corridor is nearly non-existent. Incident delay accounts for a substantial portion of all delay. These proposed strategies under consideration will reduce incident delay (improve reliability) by decreasing accident recovery times.

Summary of Short-Term Mitigation Strategies

Suggested 2015 strategies for SR 24 in both the eastbound and westbound directions of travel include:

- **Activate existing ITS installations that are not fully operational.** As depicted in the *SR 24 Existing Conditions Technical Memorandum* (ECT), there are numerous ITS installations that are in place, but are not considered fully operational for a variety of reasons (e.g., no power, not connection to the TMC).

[9] ITS strategies can also address recurrent delay.

- **Assess gaps in the current and programmed ITS installations and supplement as needed to reduce and/or close significant detection gaps.** A significant number of ITS installations exist on sections of SR 24 (e.g., SR 24 between I-680 and the Caldecott Tunnel), but additional ITS installations would be needed to meet the ITS coverage goal for SR 24.[10]
- **Extend ITS coverage to fill the gap between I-580 and the Caldecott Tunnel.** The proposed ITS extension would complete the ITS package for the SR 24 Corridor. This section of SR 24 in Alameda County has higher accident rates than the rest of the corridor, furthering the need for ITS coverage within this section.
- **Implement ramp metering in the westbound direction between I-680 and the Caldecott Tunnel**. Operate as to dissipate clusters without impacts to the local roadway network.
- **Add a westbound left-shoulder HOV-2 Lane from I-680 to the Caldecott Tunnel.** This HOV-2 Lane would operate during the morning peak period in the westbound direction to provide additional capacity for HOVs in the SR 24 Corridor to "jump" the queues on the mainline. During non peak hours, this lane would be open to all users (mixed-flow operations).
- **Implement ramp metering in the eastbound direction between I-580 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-980) from I-880 to I-580.** Operate as to dissipate clusters without impacts to the local roadway network.
- **Add an eastbound left-shoulder HOV-2 Lane from the Broadway on-ramp to the Caldecott Tunnel.** This HOV-2 Lane would operate during the afternoon peak period in the eastbound direction to provide additional capacity for HOVs in the SR 24 Corridor to "jump" the queues on the mainline. During non peak hours, this lane would be open to all users (mixed-flow operations).
- **Implement ramp metering in the eastbound direction between the Caldecott Tunnel and I-680.** Operate as to dissipate clusters without impacting the local roadway network.
- **Add an eastbound left-shoulder HOV-2 Lane from the St Stephens Drive interchange to the I-680 interchange (left shoulder or widen to right).** Addition of an HOV lane along this section of SR 24 can address the capacity issues between St. Stephens Drive and I-680. During non peak hours, this lane would be open to all users (mixed-flow operations).

[10] ITS coverage goals are outlined in the SR 24 ECT.

Section 3: Long-Term (2016 - 2030) Mitigation Strategies

2030 Bottleneck Locations

The same four controlling bottleneck locations identified for 2015 were also identified for 2030, as documented in the SR 24 FCT analysis and shown in Appendix A of this report. These bottlenecks, labeled as Locations 1, 2, 3 and 4 are restated below:

- **Location 1 -- Westbound between Deer Hill Road (Central Lafayette) on-ramp and Acalanes Road off-ramp:** This bottleneck occurs west of the Deer Hill Road (Central Lafayette) on-ramp before it widens from four lanes to five lanes. In 2030, during most of the peak period, this bottleneck is embedded in the queue resulting from the bottleneck at Location 2.
- **Location 2 -- Westbound between Camino Pablo (Orinda/Moraga) on-ramp and Gateway Boulevard (Wilder Road) off-ramp:** Downstream of Location 1, this bottleneck occurs where the demand volumes at this section exceed the capacity of the five westbound lanes (four mixed-flow lanes and one auxiliary lane). In 2030, during most of the peak period, this bottleneck extends through the bottleneck at Location 1 effectively embedding that bottleneck.
- **Location 3 – Eastbound between Old Tunnel Road on-ramp and Fish Ranch Road off-ramp (the Caldecott Tunnel):** This bottleneck occurs where demand volumes approaching Caldecott Tunnel exceed the capacity of the four mixed-flow lanes through the tunnel. In 2030, during most of the peak period, this bottleneck is embedded in the queue resulting from the bottleneck at Location 4.
- **Location 4 – Eastbound between Pleasant Hill Road off-ramp and on-ramp:** This bottleneck occurs where heavy on-ramp volumes upstream of the Deer Hill Road (Central Lafayette) on-ramp join the SR 24 mainline, and the subsequent loss of the auxiliary lane at the Pleasant Hill Road off-ramp. In 2030, during most of the peak period, this bottleneck extends through the bottleneck at Location 3, effectively embedding that bottleneck.

Flow rates and demand volumes, measured in vehicles per hour (vph), were examined for the bottlenecks described above and within the projected queues resulting from these bottlenecks. As in 2015, no additional downstream or upstream bottlenecks were revealed in either direction in 2030.

In addition to the controlling bottlenecks on SR 24 in the westbound and eastbound directions, congestion on I-580 results in queuing on the SR 24 mainline in the westbound direction during the AM peak period. This study does not address mitigation strategies for queues caused by congestion on I-580.

Westbound Long-Term Mitigation Strategies (Locations 1 & 2)

To address the controlling bottlenecks at Locations 1 and 2 in 2030, additional auxiliary lanes or other capacity improvements were not identified as potential mitigation strategies for reasons previously cited (e.g., constraints at the Caldecott Tunnel). As such, the bottlenecks at Locations 1 and 2 are further addressed later in the following section: Short-Term and Long-Term Transit Mitigation Strategies.

Although it does not specifically addressing a controlling bottleneck location, a final ramp metering strategy is being considered: ramp metering in the westbound direction between the Caldecott Tunnel and I-580 and on the SR 24 Extended Study Corridor (I-980) from I-580 to I-880. This traffic management strategy will improve mobility downstream of the Caldecott Tunnel and is consistent with the Ramp Metering Development Plan *(Caltrans, July 2009)*.

Eastbound Long-Term Mitigation Strategies (Locations 3 & 4)

Similar to the situation described above, to address the controlling bottlenecks at Locations 3 and 4 in 2030, additional auxiliary lanes or other capacity improvements were not identified as potential mitigation strategies for the reasons previously cited (e.g., constraints at the Caldecott Tunnel). As such, the bottlenecks at Locations 3 and 4 are further addressed in the following section: Short-Term and Long-Term Transit Mitigation Strategies.

Summary of Long-Term Mitigation Strategies

Suggested 2030 strategies for SR 24 include:

- **Implement ramp metering in the westbound direction between the Caldecott Tunnel and I-580 and on the SR 24 Extended Study Corridor (I-980) from I-580 to I-880.** Gap-filling ramp metering strategy.

Section 4: Short-term and Long-term (2009 - 2030) Transit Mitigation Strategies

Transit Mitigation Strategies (Locations 1, 2, 3 & 4)

Due to the lack of viable capacity improvements within the Caldecott Tunnel, several transit mitigation strategies are under consideration to address the projected increase in travel demand on SR 24 in 2015 and 2030 in both the eastbound and westbound directions. These transit improvements would encourage travel along the SR 24 Corridor via modes other than the automobile, which would reduce travel demand on the SR 24 freeway.

Short-term and long-term transit mitigation strategies proposed for the SR 24 Corridor include (a) additional BART parking capacity at BART station park-and-ride lots upstream of the SR 24 Corridor (e.g., Walnut Creek, Pittsburg/Bay Point), (b) increased bus transit access to the BART stations within the SR 24 Corridor, and (c) BART system-wide operational improvements. Transit mitigation strategies (a) and (b) would encourage more transit use by increasing access to BART, while (c) would provide the operational enhancements necessary to accommodate ridership increases. All transit mitigation strategies would result in a mode shift from automobile to transit and would effectively reduce demand on the SR 24 freeway.

Other possible transit and complementary Transportation Demand Management strategies for future consideration include shuttle feeder service to Park-and-Ride facilities (or other transit hubs and major attractions), incentives to increase vanpool/carpool utilization and vehicle occupancy, and incentives to increase participation in employer-offered telework programs.

Summary of Short-Term and Long-Term Transit Mitigation Strategies

Suggested short-term and long-term transit mitigation strategies for SR 24 in both the eastbound and westbound directions of travel include:

- **Additional BART parking capacity at upstream BART stations** (e.g., Walnut Creek, Pittsburg/Bay Point). This parking strategy would improve access to BART without encouraging more congestion along the SR 24 Corridor.
- **Increased bus transit access to the BART stations within the SR 24 Corridor** (e.g., Lafayette and Orinda). This transit improvement strategy would improve access to BART via other transit services.
- **BART system-wide operational improvements.** This operational improvement strategy would allow BART to accommodate increased ridership.

Section 5: Screened Mitigation Strategies

This section discusses the mitigation strategies that were considered for expanding the capacity of the Caldecott Tunnel in the SR 24 Corridor, but were not selected for various reasons.[11] These discarded mitigations are as follows:

- **Caldecott Tunnel Fifth Bore.** Caltrans studies for the fourth bore selected the best location on the north side of the tunnels for the fourth bore. An additional fifth bore on the south side of the existing tunnels would face problematic constraints such as high cost and 4(f) impacts. Another bore on the north side has not been studied but would be difficult to construct and would likely encroach on the residential neighborhood on the west end of the tunnel. The studies for the fourth bore found that additional lanes beyond those planned for the selected two-lane bore provided little traffic benefit because of other constraints in the corridor.[12] The fifth bore concept was not considered because of prohibitively high costs and probable impacts.
- **Contra-flow lane through the Caldecott Tunnel.** This strategy would provide five travel lanes in the peak direction through the Caldecott Tunnel by converting operations in one of the tunnel bores during each peak period to bi-directional. This strategy was not considered to be feasible largely due to safety issues, but also because of the operational difficulties associated with maintaining changeable lanes within the tunnel.
- **An eastbound, left-shoulder HOV-2 Lane between I-580 and Broadway.** The section of SR 24 includes BART in the median, limited width within the cross section and elevated freeway sections that would be prohibitively expensive to modify compared to the expected benefit. On this basis, implementation of an HOV-2 Lanes was ruled out as a candidate mitigation strategy. The conclusion does not apply to eastbound SR 24 between Broadway and the Caldecott Tunnel where shoulder space is available to implement this type of strategy.

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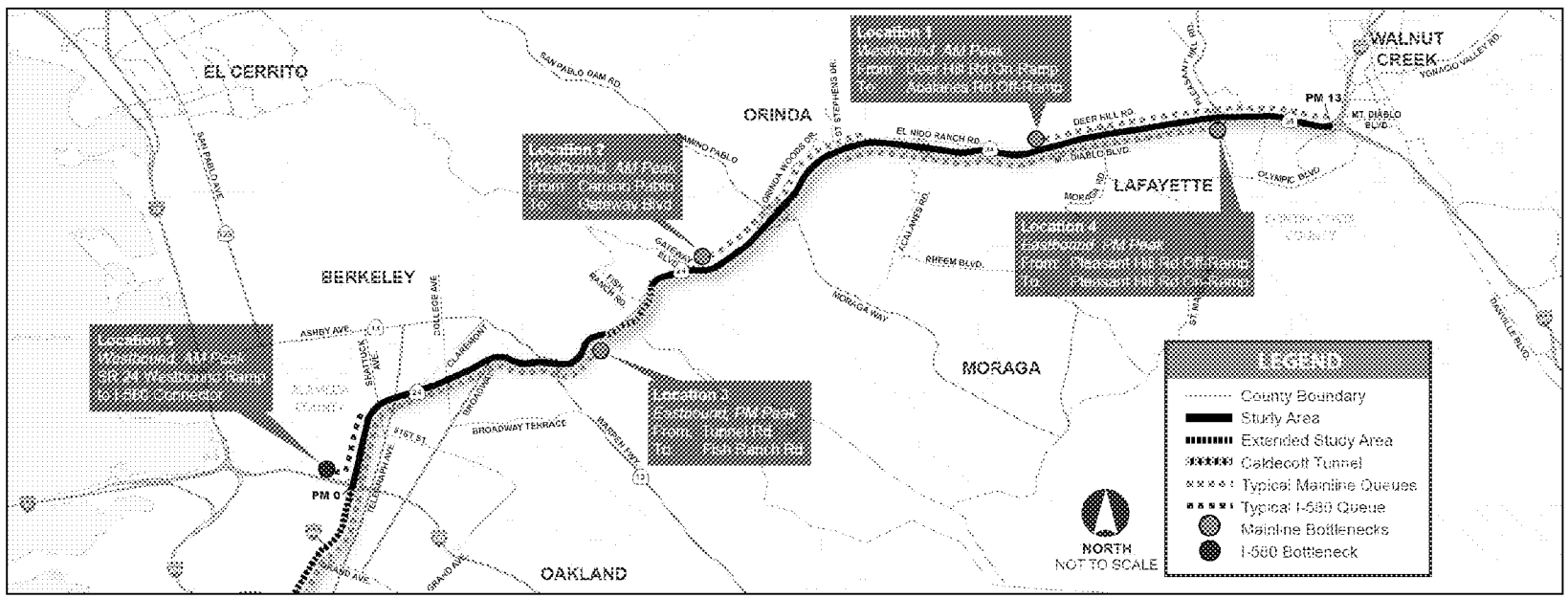
11 These reasons include, but are not limited to, feasibility and safety. Additionally, this is consistent with Statement #4 of the Vision, Goals, and Policies reported in the *Lamorinda Action Plan Update* (DKS Associates, July 2008) to "avoid the addition of roadway capacity for single occupant vehicles."

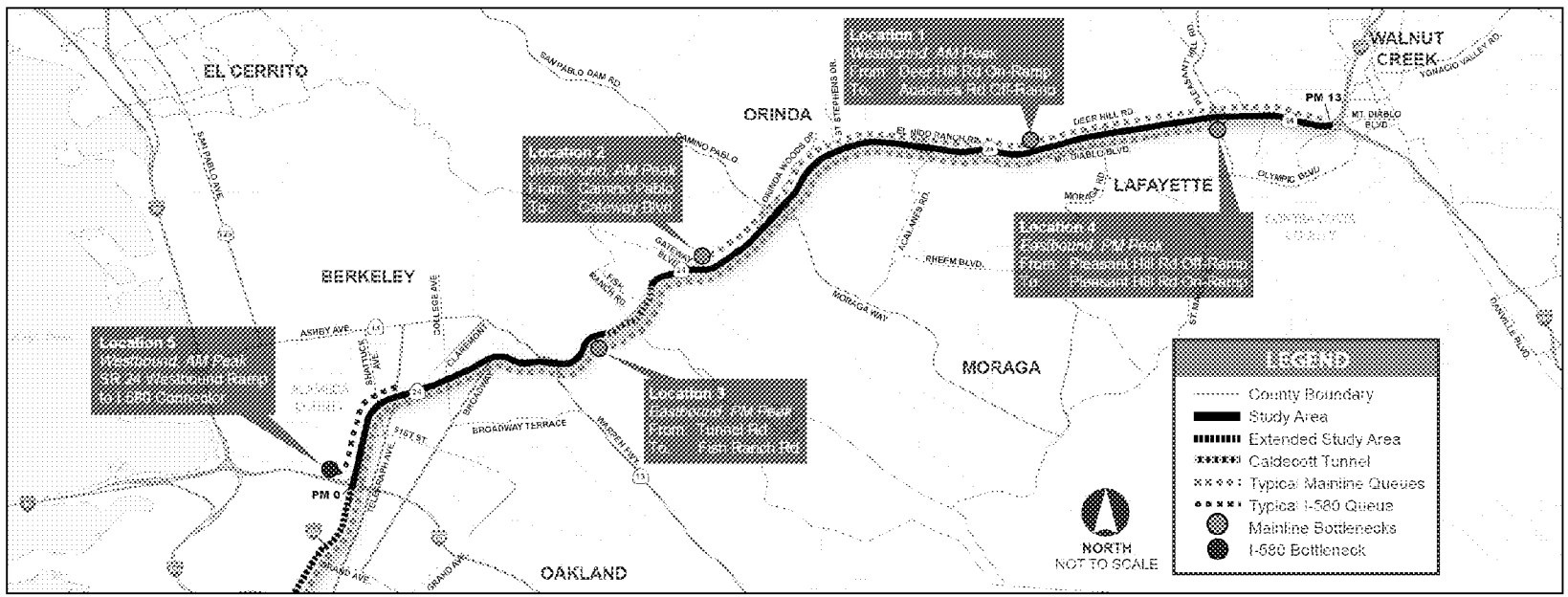
12 *Final Environmental Assessment / Environmental Impact Report, Volume I,* Caldecott Improvement Project on State Route 24 in Alameda and Contra Costa Counties, California, August 2007.

Appendix A: Locations of Bottlenecks and Recurrent Congestion

Locations of Bottlenecks and Recurrent Congestion on SR 24 in 2015



Locations of Bottlenecks and Recurrent Congestion on SR 24 in 2030



ATTACHMENT 6.B

CONTRA COSTA
transportation
authority

TO: Contra Costa Planning Directors, and Transportation/Land Use Planners

FROM: Martin R. Engelmann, Deputy Executive Director, Planning

DATE: December 2, 2009

SUBJECT: **Transmittal of the Proposed Measure J General Plan Amendment Review Process for Review by Local Jurisdictions**

Summary of Issues

Measure J (2004), which took effect on April 1, 2009, includes a cooperative planning component that calls for evaluation of the impacts of proposed General Plan amendments (GPAs) on the transportation system. We are currently in the process of updating that component, which was carried forward from the Measure C (1988) Growth Management Program (GMP).

Discussions on updating the GPA review process began more than a year ago with the Growth Management Task Force, a small group of local planers and Regional Committee managers that report to the Technical Coordinating Committee (TCC). I would like to take this opportunity to thank the members of the Task Force, many of whom attended every one of our lengthy meetings that focused on crafting a variety of alternatives for updating the GPA review process. The list of Task Force members is attached.

The proposed process, which was approved for circulation by the Authority in November 2009, is now available for public review. The updated process fulfills the requirements of Measure J while responding to newly raised concerns and recent legislative changes. The revised process would require four essential steps for GPA review:

1. Use of a uniform traffic model and methodology to evaluate the impacts of proposed GPAs on Regional Routes;
2. Notification, and full disclosure of impacts;
3. Cooperative discussions, with the intent of achieving mutually agreed-upon resolution; and
4. Documentation in the form of an MOU that establishes Principles of Agreement for monitoring and mitigation.

Attachment 1 provides a summary description of the required steps and the responsible parties. Attachment 2 provides details on each of the steps that local jurisdictions would follow to maintain compliance with the GMP and receive 18% Local Street Maintenance and Improvement Funds through Measure J. During the next couple of months, CCTA staff will be available to present the proposed GPA review process to the Regional Transportation Planning Committees (RTPCs) and to local Councils/Boards, if requested. To arrange for a presentation, please contact Diane Bodon at *dbodon@ccta.net* /(925)-256-4720.

Comments are due by Friday, February 12, 2010. Please direct your comments to my attention at mre@ccta.net or by U.S. mail. Final adoption by the Authority Board is expected in March/April 2010.

Background

The Growth Management Programs (GMP) for both Measure C and Measure J include a requirement for participation in an ongoing cooperative, multi-jurisdictional planning process. Measure C required local jurisdictions to "participate in a cooperative, multi-jurisdictional planning process to reduce [the] cumulative regional traffic impacts of development."[1] The Measure J Sales Tax Expenditure Plan states that "Each jurisdiction shall participate in an ongoing process with other jurisdictions and agencies…to create a balanced, safe, and efficient transportation system and to manage the impacts of growth."[2] The current planning process includes a provision for the analysis of General Plan Amendments (GPAs) and developments exceeding specified thresholds for their effects on the regional transportation system, including on Action Plan objectives.

The Authority's adopted policy for GPA review (Resolution 95-06-G), centers on whether a GPA will adversely affect the RTPC's ability to achieve its Multi-modal Transportation Service Objectives (MTSOs), as set forth in its Action Plan for Routes of Regional Significance. The Measure J program, which took effect on April 1, 2009, continues that approach. It requires that:

> In consultation with the Regional Transportation Planning Committees, each jurisdiction will use the travel demand model to evaluate changes to local General Plans and the impacts of major development projects for their effects on the local and regional transportation system and the ability to achieve the MTSOs established in the Action Plans.[3]

Refinements to Existing Policy - Conflict Resolution, Good Faith Evaluation

Under existing policy, the RTPCs play a central role in the review of proposed GPAs. The RTPC and the Sponsoring Jurisdiction meet and confer to determine whether the proposed GPA adversely affects the ability to carry out established Action Plan policies and objectives. The RTPC may change its Action Plan, and/or the Sponsoring Jurisdiction may modify its proposal. If consensus cannot be reached, the Authority provides the involved parties with a forum for conflict resolution.

Only once during the 20-year life span of Measure C was it necessary for the Authority to mediate a dispute among member agencies regarding an issue of compliance with regard to a proposed GPA. Following that dispute, the Authority determined that both parties had participated in good faith in the conflict resolution process, and therefore both were found by the Authority to have complied with the requirements of the GMP.

One important lesson learned from that dispute was that the method for resolving the dispute – mediation – required each party to sign a confidentiality agreement. Consequently, at the close of the process, the proceedings from the negotiation could not be made public without violating the agreements that had been

[1] Contra Costa Transportation Authority, *The Revised Contra Costa Transportation Improvement and Growth Management Program*, August 3, 1988, p. 11.
[2] Contra Costa Transportation Authority, Measure J – *Contra Costa's Transportation Sales Tax Expenditure Plan*, July 21, 2004, p. 24.
[3] Ibid, p. 25.

signed. Therefore, the only test for "good faith" participation became whether or not the parties had engaged in the negotiations.

Based upon that experience, a key refinement that we are proposing to existing policy is to change the method of dispute from mediation to facilitation. Unlike mediation, facilitated discussions are not subject to confidentiality agreements, and each party's offers for compromise and exchange could be reviewed publicly.

Call for a Change

In the course of updating the Action Plans for the 2009 Countywide Plan update, significant concerns were raised about the Measure J requirement for General Plan review. Some participants called into question the existing process set forth in Resolution 95-06-G. This process was considered by some to be overly cumbersome, bureaucratic, and outmoded. The major issues raised were:

- Does the use of quantitative benchmarks to assess the impacts of growth as part of the GPA review process conflict with the goals of infill development efforts, where congestion must be balanced with other goals that affect our quality of life? For example, congestion-based evaluation may generate policy conflicts with evolving land use patterns in some areas of the county, where more dense, transit-oriented development has been encouraged near major transportation hubs.
- Does the GPA review process unnecessarily replicate CEQA or create an additional overlay to CEQA? Although progress has been made to align the GPA review process with CEQA, Measure J nonetheless requires a separate process for GPA review.
- Is it appropriate to place GPA compliance conflicts before the Authority, a policy-oriented rather than a quasi-judicial forum?

More recently, the Authority incorporated updated action plans into the 2009 Countywide Transportation Plan. This update to the Plan addressed external developments such as State legislation aimed at reducing greenhouse gas (GHG) emissions (per AB 32, Statutes of 2006, and in recognition of SB 375, Statutes of 2008). Beyond responding to technical and process-related concerns, issues were raised during the process regarding the setting and use of MTSOs. Suggestions were made that revisions to the Authority's GPA review process were necessary to reflect the new requirements for achieving GHG emissions reductions, and better match CEQA requirements. While the proposed change to the conflict resolution process addresses a technicality in the existing process, it does not begin to address the broader issues that were raised.

Proposed GPA Review Process [4]

The proposed GPA review process involves disclosure, consultation, facilitation, principles of agreement, and the good faith test for compliance. The process builds upon existing policy by incorporating the establishment of long-range Principles of Agreement into the conflict resolution process. Given that many GPAs may take years, or even decades to reach fruition, this approach is viewed by staff as more realistic and practical than the previous requirement that all terms and conditions for mitigation should be hammered out "on the spot" during the CEQA review process. The Principles would specify roles and responsibilities of each party, and reflect a commitment on the part of the sponsoring and affected jurisdictions to continue to work together cooperatively in an ongoing effort to address transportation impacts of the proposed GPA.

The sponsoring jurisdiction fully discloses all impacts, consults with affected jurisdiction, participates in a facilitated discussion if needed, and if achievable, enters into a memorandum of understanding (MOU) with the affected jurisdiction. The MOU establishes principles of agreement regarding the timing, responsibilities and actions for (1) initial mitigations to be implemented, and (2) as development occurs, monitoring actual impacts to the routes of regional significance, and implementing appropriate further mitigations when triggered by actual impacts. The process recognizes that GPAs may take many years to develop, from conceptual plans to a completed and fully occupied project. During that time, GPA-related trip patterns, and the transportation network itself could undergo significant change.

As envisioned, the MOU, a public document, would incorporate Principles of Agreement for how the conflict will be managed, specified actions, timing and responsibilities for monitoring future impacts and considering mitigations. The MOU could require that the parties monitor and revisit the progress of the project, its impacts and mitigations, at specific milestones of development. The process anticipates the significant time lag between a jurisdiction's approval of the GPA and full occupancy/completion. As is often the case, a major GPA may take 10 or 20 years before it is fully completed. During that time, the project's impacts on the regional transportation network may turn out to be different than originally forecast. The MOU could acknowledge this aspect of project development by requiring that the parties return to negotiations as the project evolves.

Attachment 1 summarizes the proposed GPA review process. Attachment 2 provides the detailed step-by-step process.

PDA Exemption

One question that arose during the development of this process was whether a project that qualifies as a "Priority Development Area" under ABAG/MTC criteria should be exempt from the GPA review process. Presumably, PDA's are transit oriented developments that do not conflict with the objectives to reduce GHG emissions through reduced VMT and improved transit ridership. However, during the discussions, concerns were raised that the PDA exemption might be too broad, and did not recommend its inclusion. To

[4] **Plural vs. singular use of the terms Jurisdiction(s), RTPC(s), and Action Plan(s)** Throughout the discussion, the Sponsoring and the Affected Jurisdiction are referred to in the singular, as though only one upstream jurisdiction could initiate a GPA, and only one downstream jurisdiction could be affected. In practice, there may be more than one sponsoring jurisdiction, and clearly, more than one affected jurisdiction. In these cases, the plural – Jurisdictions – would apply as appropriate. Similarly, if more than one RTPC, and consequently more than one Action Plan were involved, the plural – RTPCs and Action Plans – also applies.

address this concern, more narrowly defined criteria were developed to limit the eligibility requirements, but not everyone was comfortable with the concept or those details.[5]
Concerns were expressed that an exemption could mask, under the guise of "smart growth," otherwise significant impacts of a proposed GPA on the regional network. Consequently, the PDA exemption provision is not included.

Findings of Noncompliance
Each option could result in the Authority making a finding of noncompliance with the GMP for either the Sponsoring or Affected Jurisdiction, or both. Under adopted Authority policy, a finding of noncompliance is made at the time of submittal and review of the local jurisdiction's GMP Biennial Compliance Checklist. If, based upon review of the Checklist, the Authority makes a finding of noncompliance, then current and future allocations of Local Street Maintenance and Improvement (LSM) funds are withheld, and the jurisdiction becomes ineligible to receive Measure J Transportation for Livable Communities (TLC) funding, which at an aggregated level comprises five percent of Measure J revenues.

The Authority may, at a later date, make a determination that the non-complying jurisdiction has taken appropriate remedial action or otherwise resolved the issue(s) raised, in which case the Authority may make a finding of compliance and reinstate allocation of LSM funds. For this GPA review process, the Authority has the option of setting a firm time limit after which compliance would be automatically reinstated and payment of LSM funds would resume without remediation.

Opportunities for Public Review and Discussion
During the coming months, Authority staff will be available to present and discuss the proposed GPA review process with local staff and your Councils/Boards. If you would like a presentation on the proposed process, please contact me at (925)256-4729|*mre@ccta.net*. I look forward to hearing from you.

Attachments:
List of Growth Management Task Force Members
Attachment 1: Summary Description of Proposed GPA Review Process
Attachment 2: Detailed Proposed Process for GPA Review

File: 4.16.07

[5] The following specific criteria were proposed to narrow eligibility: (a) housing densities of 20 units per acre or greater in housing and mixed use areas; (b) at least 50 percent of developed area is within ½ mile of rail or busway station, or major trunk bus line operating at least every 15 minutes during the business day; (c) the development has a balanced mix of housing, commercial and retail development; and (d) the development is designed to foster walking and other non-motorized modes.

Growth Management Task Force

Name		Agency	JobTitle
Christina	Atienza	WCCTAC	Executive Director
Aruna	Bhat	Contra Costa County	Deputy Dir. of Conservation & Develpmnt.
Victor	Carniglia		Consultant for the City of Antioch
John	Cunningh	C.C. Co. Cons. & Dev.	RTPC Mgr./ Senior Transportation Planner
Rich	Davidson	City of Richmond	City Engineer
Steven	Goetz	C.C. Co. Cons. & Dev.	Deputy Director- Transportation Planning
Leah	Greenblat	City of Lafayette	Transportation Planner
Lisa	Hammon	City of Hercules	Assistant City Manager
Ray	Kuzbari	City of Concord	Transportation Manager
Stephen	Lawton	City of Hercules	Economic Development Director
Jeremy	Lochirco	City of Walnut Creek	Senior Planner
Barbara	Neustadte	TRANSPAC	RTPC Manager
Paul	Reinders	City of Pittsburg	Senior Civil Engineer
Patrick	Roche	Contra Costa County	Planning Chief
John	Rudolph	WCCTAC	Project Manager
Leigha	Schmidt	City of Pittsburg	Planner
Andrew	Smith	City of Walnut Creek	Senior Planner/ Code Enforcement Supervisor
Dennis	Tagashira	City of Hercules	Planning Director

Attachment 1

Summary Description of Proposed GPA Review Process

Steps	Action	Responsible Party			
		Sponsor Jurisdiction	Affected Jurisdiction	RTPC	CCTA
1-2	Evaluate Proposed GPA	√			
3	Notify Affected Jurisdiction	√			
4	Analyze Traffic Impact	√			
5	Prepare Comment Letter		√	√	
6	Respond to Comment Letter	√			
7-8	File a Letter of Concern		√		
9	Respond to Letter of Concern	√			
10-12	Initiate Cooperative Resolution Discussions	√	√		
13	Formulate MOU	√	√		
14	Revise Action Plan			√	
15	Evaluate Compliance				√

Attachment 2
Proposed General Plan Amendment Review Process
Detailed Description

Step	Process	Timeframe (CEQA Reference)
1	**Net New Peak Hour Vehicle Trip** determination. Would the project generate 500 ***or more*** net new peak hour vehicle trips and add 50 ***or more*** net new peak hour vehicle trips to any Route of Regional Significance? (Note: The Sponsoring Jurisdiction's RTPC may adopt a lower applicable threshold in its Action Plan.) ➔ **NO:** Project is exempt from the GPA Review Process. although it is still subject to CEQA and the CEQA notification requirements in the applicable Action Plan. ➔ **YES:** Sponsoring Jurisdiction shall move to the next step of the GPA Review Process.	Initial Study Determination (Sec. 15063)
2	**Notification.** The Sponsoring Jurisdiction or its responsible RTPC shall notify potentially affected jurisdictions and RTPCs in accordance with the notification procedure as set forth in the Authority's *Implementation Guide* and applicable Action Plan. Notification shall take place during and as part of the required notification process in CEQA. The notification shall be issued as early as possible, but *no later* than the deadlines established in these procedures.	Notice of Intent to Adopt a Mitigated Negative Declaration (M/ND) (Sec. 15072) NOP (Sec. 15082)
3	**Traffic Impact Analysis.** The Sponsoring Jurisdiction conducts a traffic impact analysis for its CEQA review using "Thresholds of Significance" that include, but are not limited to, applicable MTSOs in the adopted Action Plan(s). The traffic impact analysis shall be conducted in a manner consistent with the Authority's adopted *Technical Procedures*. The Sponsoring Jurisdiction may, for the purposes of conducting the CEQA analysis, raise the performance level of an MTSO established in the adopted Action Plan if it believes that the MTSO is set too low to serve as a meaningful "Threshold of Significance" under CEQA. For example, if the Action Plan establishes an MTSO of LOS F for a specific Route of Regional Significance, and the Sponsoring jurisdiction determines that this level of performance is too low, it may raise that threshold to LOS D, consistent with CEQA guidelines (Sec. 15064 & 15064.7). The Sponsoring Jurisdiction shall provide the Traffic Impact Analysis, complete with all necessary supporting technical information, as requested by the Affected Jurisdiction to provide an	Released with Draft Environmental Document (Sec. 15087)

informed response.

4	**Comment Letter.** An Affected Jurisdiction may submit comments to the Sponsoring Jurisdiction expressing its concerns and issues regarding the potential impacts of the proposed GPA on Regional Routes. The Affected Jurisdiction shall submit its comments as early as possible during the Response to NOP (Sec. 15082(b)) and *no later* than the close of the comment period for the draft CEQA document. To the greatest extent possible, the comment letter should indicate issues, what mitigations are sought and/or acceptable for the project, as well as any changes in scope desired in the project, and the reasons why such changes are deemed to be appropriate.	Public Review Period (M/ND) (Sec. 15073) Draft EIR Public Review Period (Sec. 15087)
5	**Response to Comments.** If the Affected Jurisdiction comments on the traffic impact analysis in the CEQA document, the Sponsoring Jurisdiction shall: a. Consider requests for mitigation and changes in the scope of the project; b. Consider undertaking cooperative discussions; c. Address the comments as part of the "Response to Comments" requirement of CEQA; and d. Provide that response, along with the final environmental documents and all affiliated supporting documents, directly to the Affected Jurisdiction.	10 days prior to approval of environmental document and/or GPA
6	**Notice of Intent to File a Letter of Concern.** If the Affected Jurisdiction remains unsatisfied, it must notify the Sponsoring Jurisdiction with a "Notice of Intent to File a Letter of Concern" outlining a summary of its remaining issues prior to or at the scheduled public meeting when the sponsor considers approval of the environmental document and/or GPA. The Affected Jurisdiction must also submit a copy of this letter to the Authority, and subsequently document the bases for its concerns per step 7.	No later than the scheduled approval of the environmental document and/or GPA
7	**Letter of Concern.** The Affected Jurisdiction prepares a "Letter of Concern" for review and approval by its Council or Board. The letter should provide detailed bases for its concerns, as well as proposed changes to the project, transportation system enhancements and/or management plans to help offset the impacts, and or other mitigations. The Affected Jurisdiction's Council or Board must approve the "Letter of Concern" and transmit it to the Sponsoring Jurisdiction, and also submit a copy of this letter to the Authority.	Within 20 days of having filed the "Notice of Intent to File a Letter of Concern"

8 **Consider Response to Letter of Concern.** The Sponsoring Jurisdiction may initiate cooperative resolution discussions in writing and/or provide a written response letter to the Affected Jurisdiction, with copies of the documentation to the RTPC and Authority.

9 **GPA Approval.** Has the Sponsoring Jurisdiction approved the proposed General Plan Amendment?

Approval of the GPA

- ➔ **YES:** Sponsoring Jurisdiction shall move to step 10 of the GPA Review Process.
- ➔ **NO:** GPA Review Process is concluded or suspended.

10 **Affected Jurisdiction Response.** Has the Affected Jurisdiction that submitted a Letter of Concern concluded that the Sponsoring Jurisdiction has adequately responded to the concerns and issues outlined in its Letter of Concern?

- ➔ **YES:** Sponsoring Jurisdiction so informs the Authority in writing with a copy to the Affected Jurisdiction, and all involved parties move to Step 13 of the GPA review process.
- ➔ **NO:** Affected Jurisdiction informs the Sponsoring Jurisdiction in writing, with a copy to the Authority, that its actions on the GPA do not adequately respond to the concerns and issues of the Affected Jurisdiction. Proceed to Step 11.

11 **Initiate Cooperative Planning Discussions.** At the request of either the Sponsoring or Affected Jurisdiction, the Authority shall facilitate cooperative discussions structured to offer an opportunity to create principles of agreement that will serve as a framework for monitoring, review, and mitigation of potential impacts as the GPA develops over time. The goal is for these discussions is to develop principles of agreement that will maintain a cooperative planning context regarding impacts on the affected Regional Route or Routes, proposed mitigations, responsibilities for implementing those mitigations, and the timing for monitoring and review. The principles of agreement shall be memorialized in a Memorandum of Understanding (MOU) between the sponsoring and affected jurisdictions. Have the involved jurisdictions entered into cooperative planning discussions?

- ➔ **YES:** Sponsoring and Affected Jurisdictions move to Step 12 of the GPA review process.
- ➔ **NO:** If either or all jurisdictions decline to participate in cooperative resolution discussions, those jurisdictions that have declined shall be subject to review, as specified through the Checklist review procedure, to a findings of

noncompliance by the Authority (Step 14).

12 **Formulation of Principles of Agreement.** Have the involved parties agreed to a set of principles, specified actions, timing and responsibilities for monitoring impacts, and for implementing mitigations on Regional Routes, memorialized in an MOU?

- ➔ **YES:** Sponsoring and Affected Jurisdictions have adopted Principles of Agreement and asked the RTPC to revise the affected Action Plan to reflect the actions in the agreement. (All involved parties move to Step 13)
- ➔ **NO:** Through their respective RTPCs, both the Sponsoring and Affected Jurisdictions report on progress to date on the development of principles of agreement. If Principles of Agreement have not been adopted by the time for Authority review of the GMP Biennial Compliance Checklist of one or more involved jurisdictions, then Step 14 comes into play.

13 **RTPC Revises Action Plan.** The affected RTPC, working with the Sponsoring and Affected jurisdictions, revises the Action Plan to incorporate projects, programs, systems management investments and processes, mitigations or other actions to address the anticipated impacts and proposed mitigations and monitoring as set forth in the Sponsoring Jurisdiction's response to the Letter of Concern (if the outcome of Step 10 was "yes"), or the MOU (if the outcome of Step 12 was "yes").

14 **Good Faith Participation:** If all of the above steps have been followed, and the GPA remains the subject of dispute, the Authority may find one or both of the parties out of compliance with the GMP. The Authority will evaluate good faith participation in the GPA review process through the GMP Biennial Compliance Checklist in consideration of a number of factors, as shown in Exhibit 1. If principles are adopted, future compliance would be assessed based on continuing adherence of the sponsoring and affected jurisdiction to the principles of agreement.

END OF PROCESS

Exhibit 1

EXAMPLES OF GOOD FAITH PARTICIPATION IN THE GPA REVIEW PROCESS

For the Initiating Jurisdiction, did it take the following actions:

1. Analysis: Was the Countywide Model and Authority *Technical Procedures* used to evaluate impacts on Routes of Regional Significance?
2. Evaluation: Were impacts to Routes of Regional Significance identified and appropriate and feasible mitigations defined?
3. Notification: Were all Affected Jurisdictions properly notified?
4. Meet and Confer: Did the Sponsoring Jurisdiction meet and confer with the Affected Jurisdiction, RTPC, and others who expressed interest in and/or concerns about the proposed GPA?
5. Responsiveness to concerns/comments: Did the Sponsoring Jurisdiction agree to evaluate specific concerns and impacts? Was the Sponsoring Jurisdiction responsive and did it attempt to resolve and work out issues and concerns? Did the Sponsoring Jurisdiction propose to and/or agree to participate in continued discussions?

For the Affected Jurisdiction, did it take a sufficient number of the following actions:

1. Accept Capacity Improvements: Agree to accept capacity improvements or modest physical modifications to regional routes which are not in fundamental conflict with the jurisdiction's socio-economic character.
2. Accept systems management procedures and protocols, and/or other "non-physical" improvements to enhance carrying capacity or system efficiency.
3. Accept additional transit service.
4. Support federal, state or regional funding for improvements that serve the proposed development.

For all involved parties, have they, for example:

1. Committed to monitor MTSOs;
2. Agreed on thresholds that would trigger mitigations; and
3. Assigned responsibilities for funding and implementing mitigations? (Mitigation may include participation in a Traffic Management Program.)

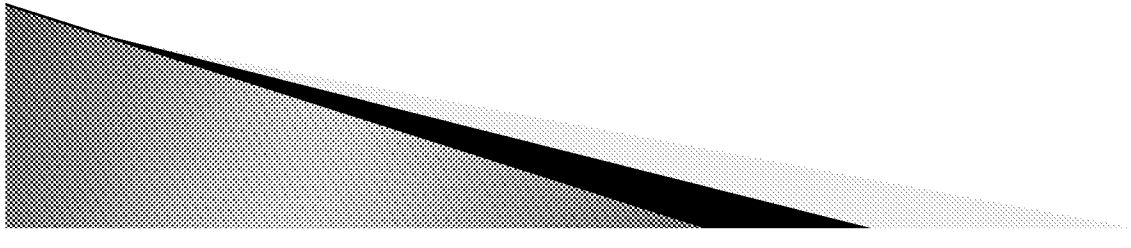
PROPOSED MEASURE J GENERAL PLAN AMENDMENT REVIEW PROCESS

SWAT

February 1, 2010

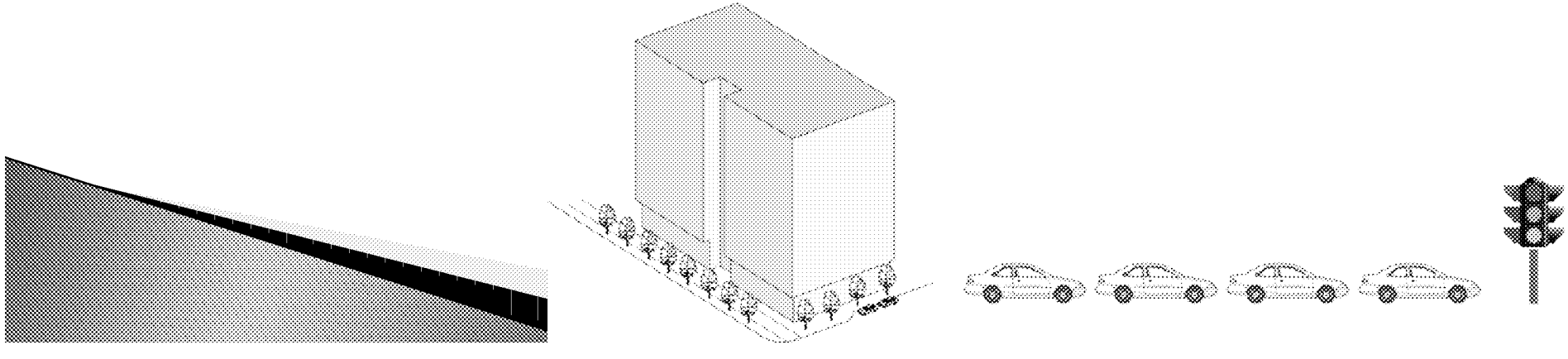
Overview

- Background
- Process
- Proposed GPA Review Procedure
- Questions and Comments



Upstream/Downstream Conundrum

- Generally, the "sponsoring" jurisdiction is upstream, and the "affected" jurisdiction is downstream
- A sponsoring jurisdiction's GPA may generate traffic that could adversely affect the downstream jurisdiction
- Sometimes, the "affected" jurisdiction resides upstream from the "sponsor"

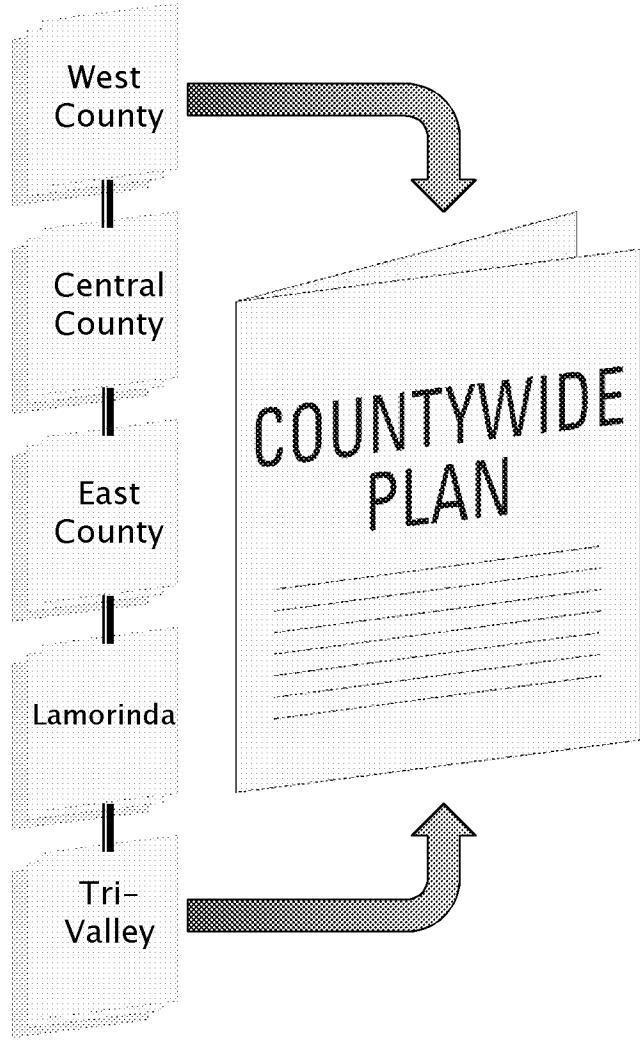


Measure J GMP Requirements

- Participate in an ongoing cooperative, multi-jurisdictional planning process
- Address housing options
- Local jurisdictions are required to comply with the GMP in order to receive:
  - 18% Local Street Maintenance and Improvement Funds and
  - 5% TLC

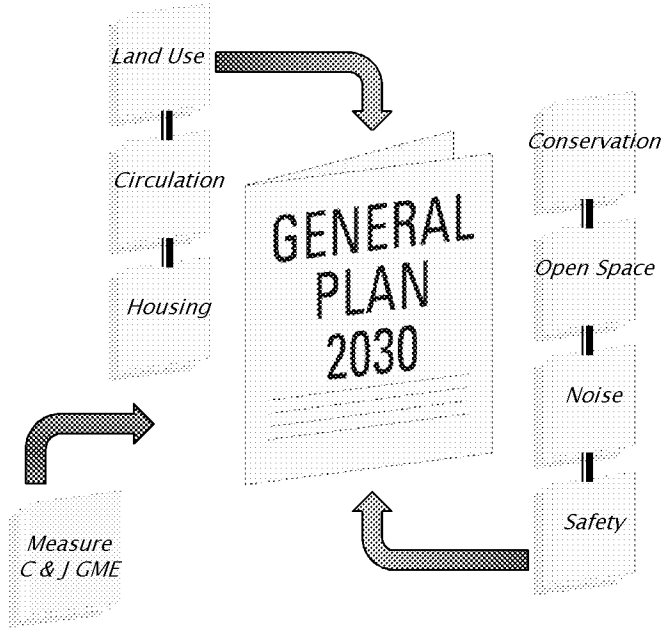
Role of the Action Plans

- Action Plans use adopted general plans to establish a 25-year time horizon for development
- Travel forecasts are based on adopted general plans
- Action Plans include MTSOs, which provide a framework for analysis of GPAs



Why Focus on General Plans?

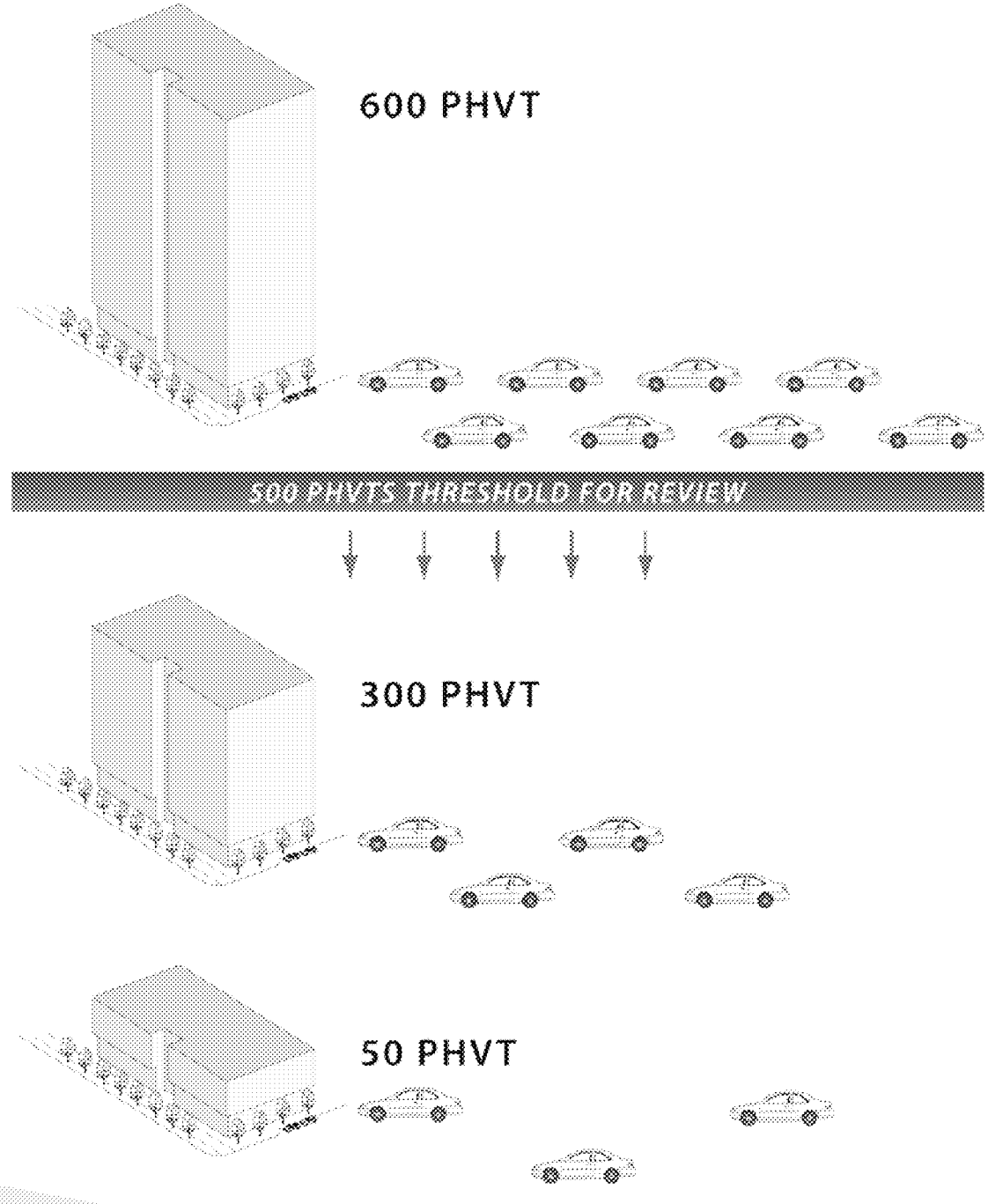
- Local General Plans serve as a guide in land use decisions
- GPs are a statement of policy goals which define the way a community desires to grow in the future
- GP *amendments* can significantly effect future traffic on the local and regional transportation system.
- These changes could hamper a local jurisdiction or an RTPC's ability to implement Action Plan policies or achieve the MTSOs.



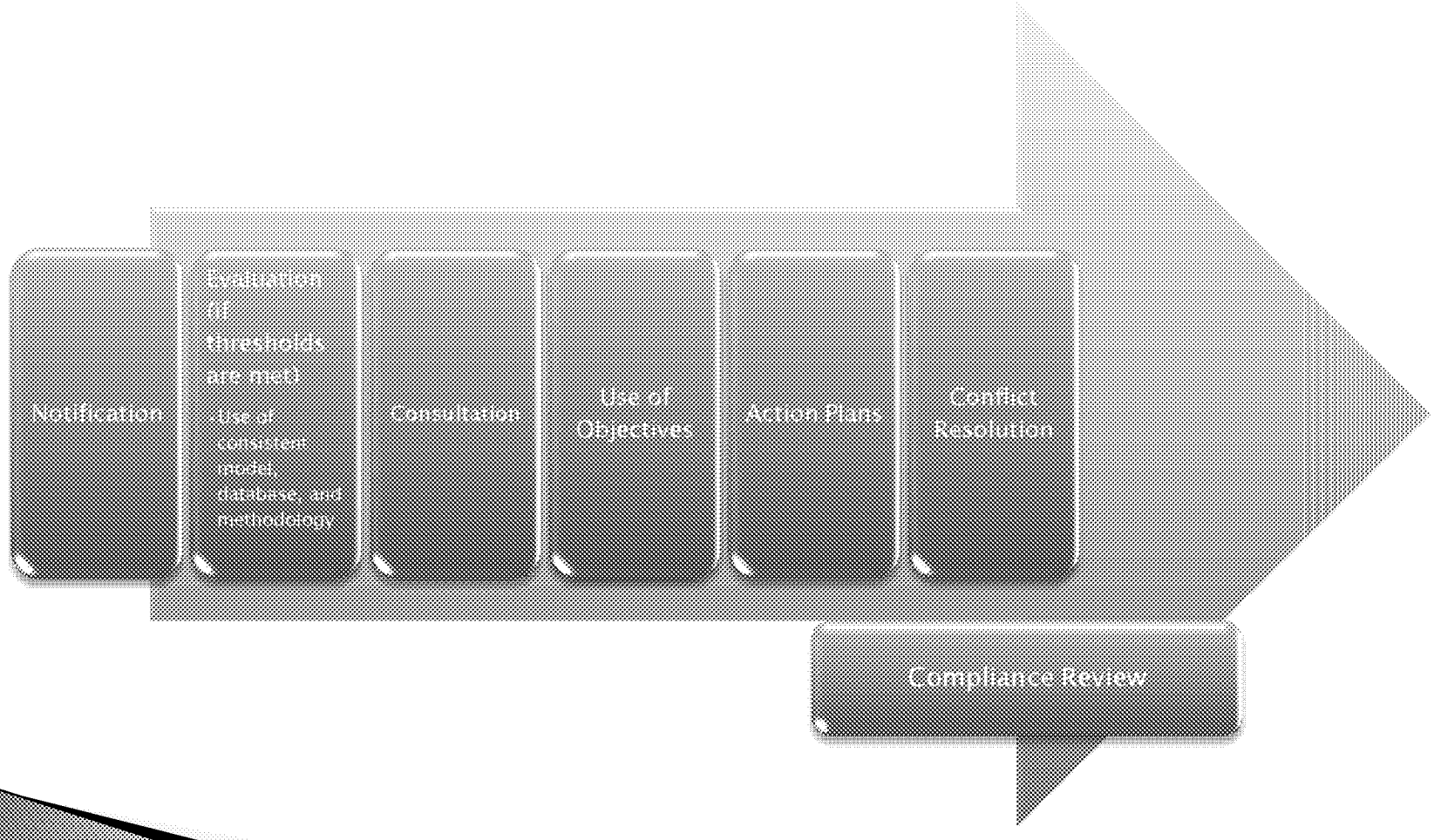
Establishing Thresholds for Significance

Review process applies to GPAs that generate 500 or more net new peak hour vehicle trips and add 50 or more trips to a RORS

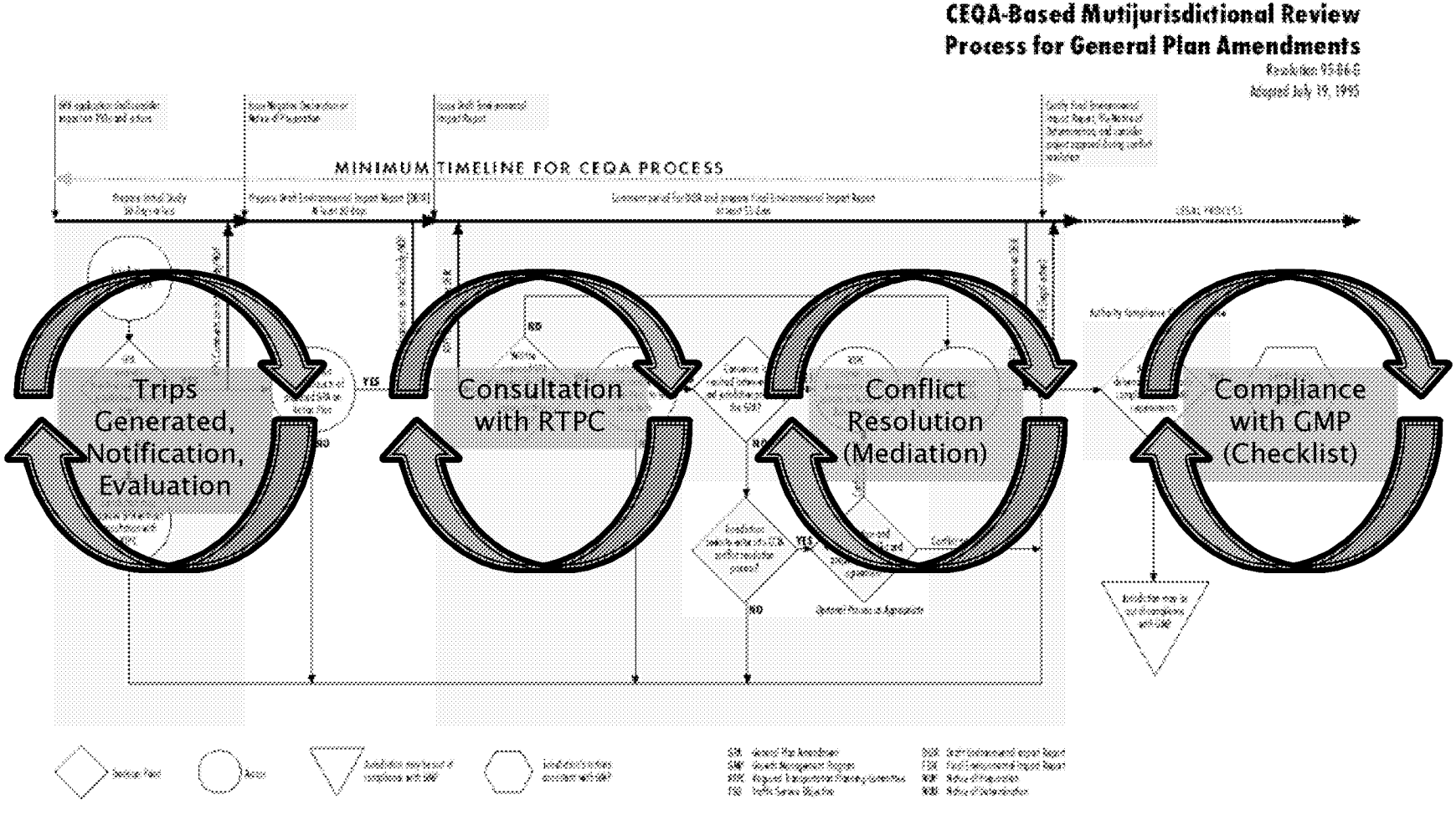
RTPCs may set a lower threshold



Existing Policy



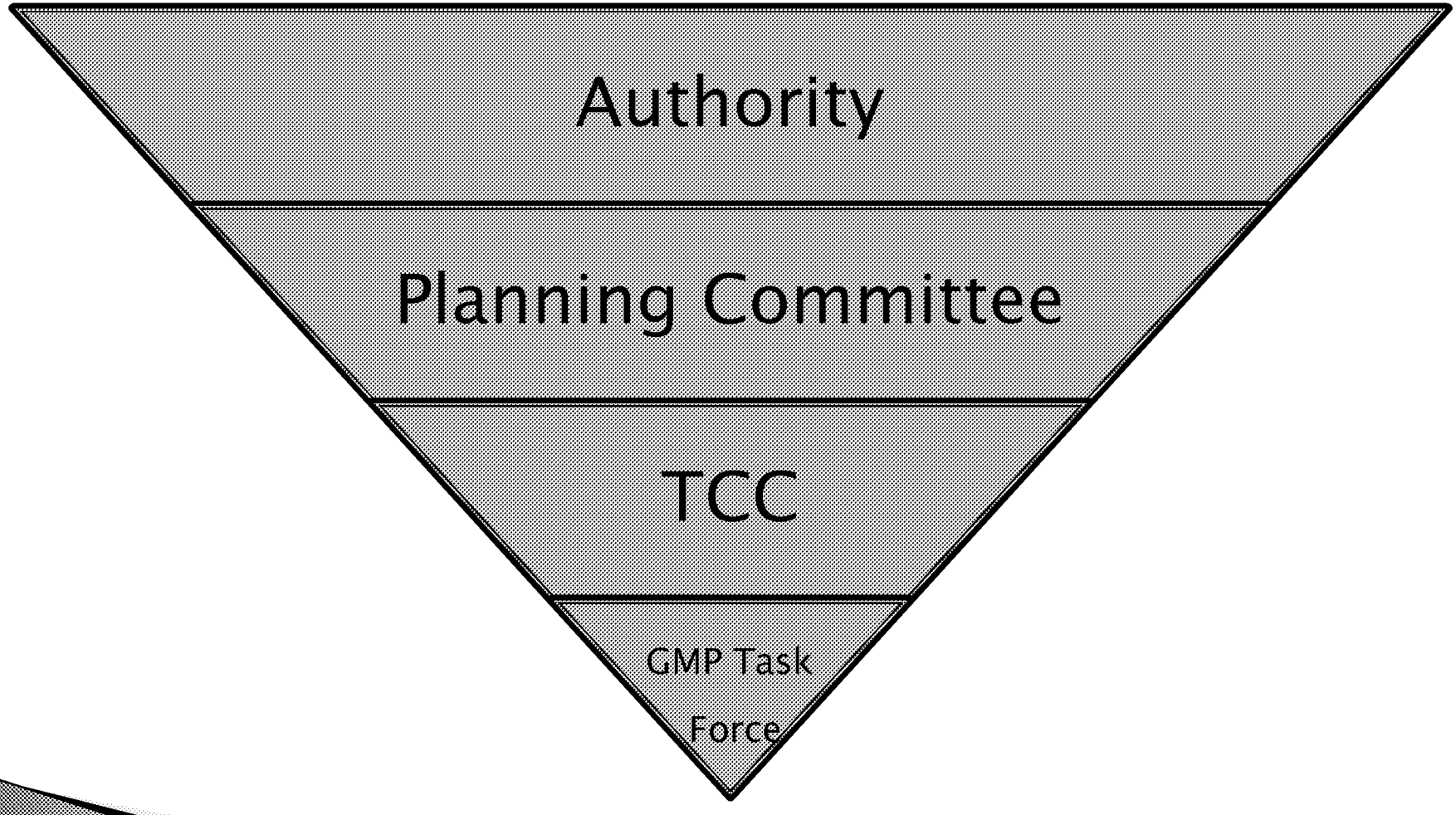
Existing Policy



Issues Raised

ISSUES RAISED: WHAT WE HEARD	
Use of mediation cumbersome, bureaucratic, outmoded.	
Use of quantitative benchmarks conflicts with other goals?	
The GPA review process unnecessarily replicates CEQA.	
The Authority may not be the appropriate body for "judging" GPA conflicts.	
"Smart Growth" projects should be exempt	

Development Process



Guiding Principles

- Build upon our experience with Measure C
- Simplify/streamline the process as much as possible
- Eliminate conflicts with CEQA
- Work with stakeholders and involved parties to improve the process
- Anticipate “on the ground” procedural issues
- Consider SB 375 GHG emissions reductions objectives

Issues and Responses

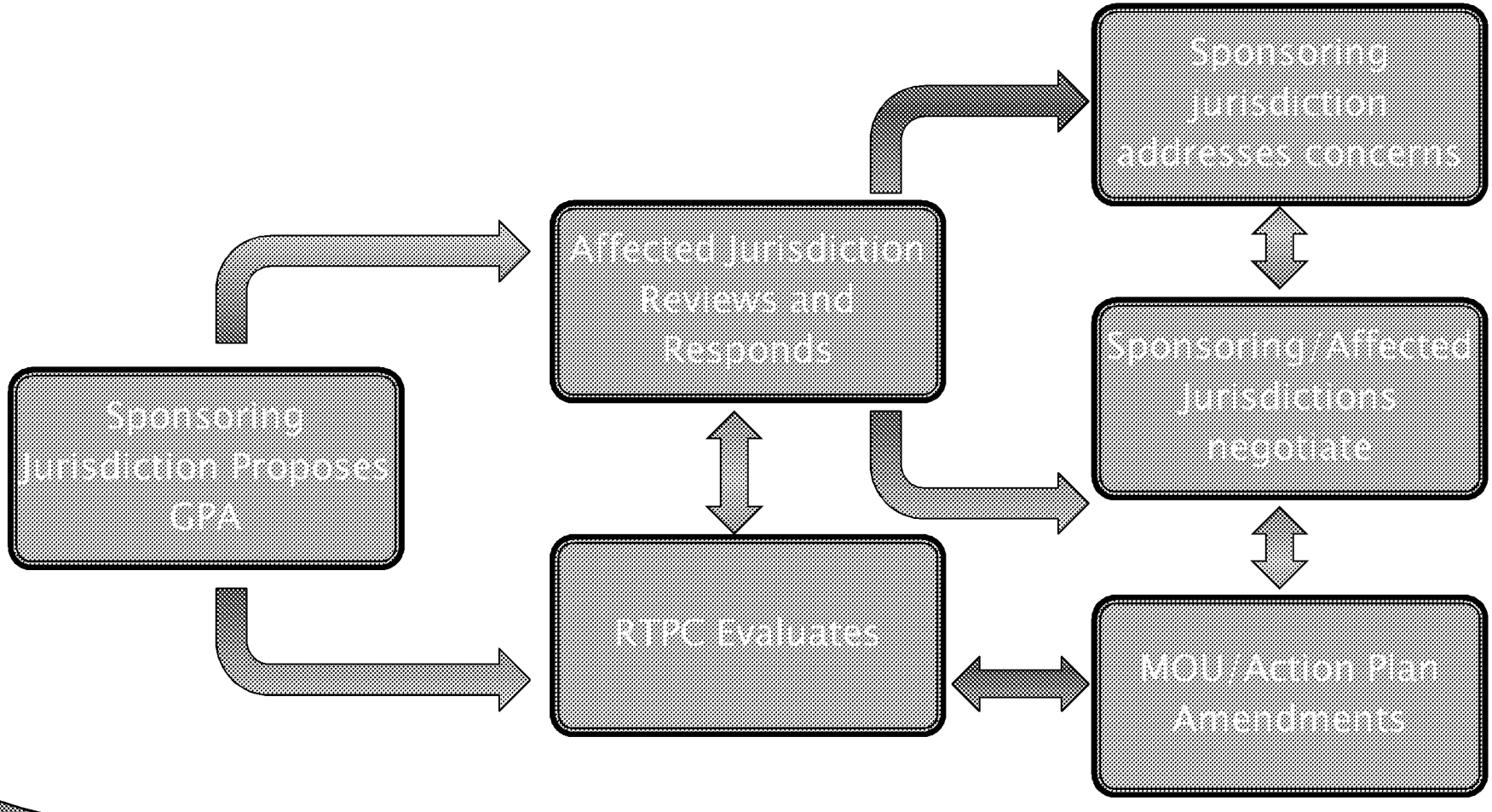
ISSUES RAISED: WHAT WE HEARD	OUR RESPONSE
Use of mediation cumbersome, bureaucratic, outmoded.	Use facilitation, instead of mediation
Use of quantitative benchmarks conflicts with other goals?	Quantitative objectives may conflict with other goals, however, the GPA process should recognize and, where appropriate, address conflicting goals. Furthermore, the use of MTSOs as a benchmark should be carried forward.
The GPA review process unnecessarily replicates CEQA.	Realign process with CEQA
The Authority may not be the appropriate body for "judging" GPA conflicts.	CCTA has a role in determining GMP compliance in the context of Measure J
"Smart Growth" projects should be exempt	Exemptions were considered, but not recommended

What Threshold Should Local Jurisdictions Use to Identify Impacts?

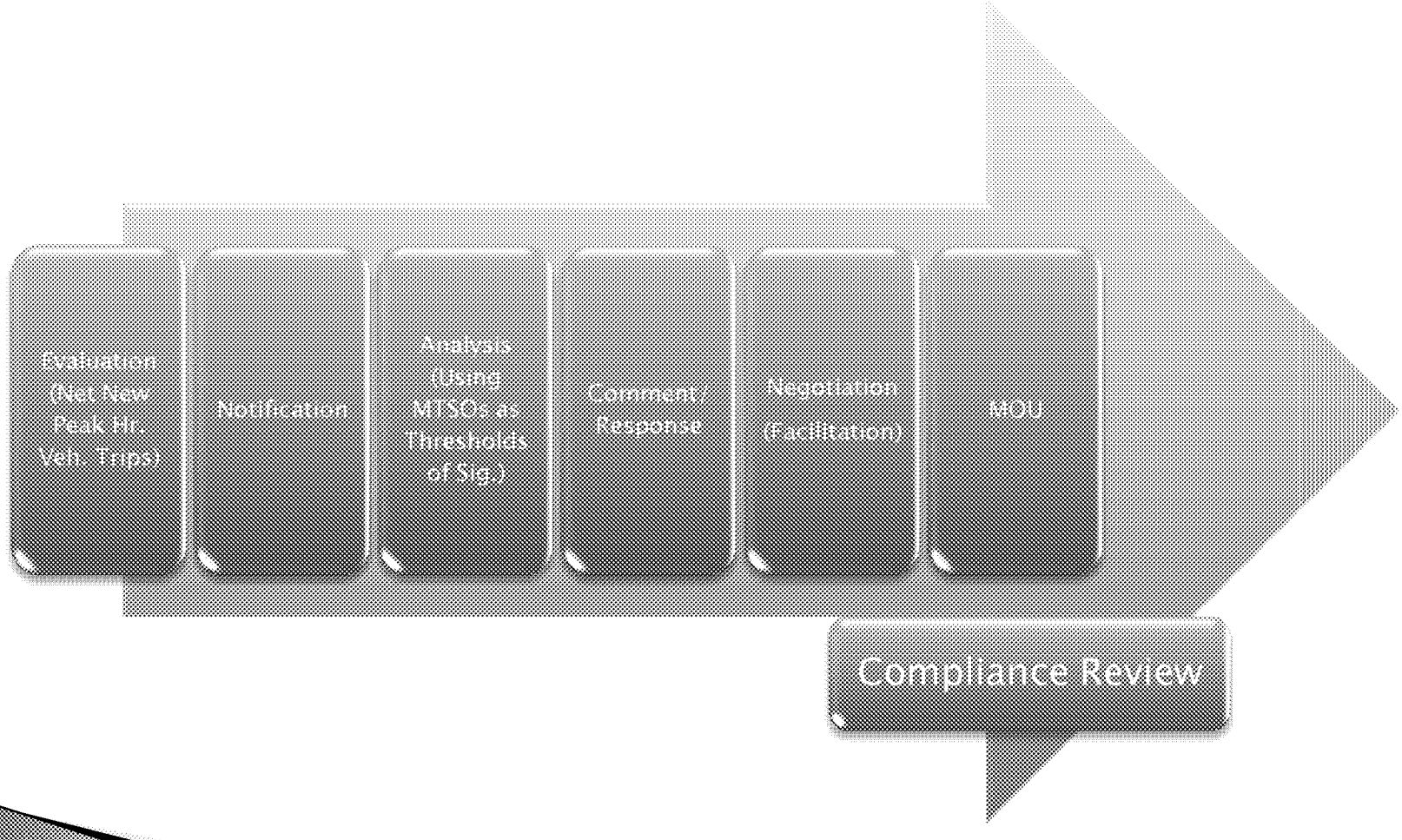
- MTSOs (Multimodal Transportation Service Objectives) can provide a frame of reference for analysis of GPAs
- To serve as thresholds of significance under CEQA, the MTSOs must be easily evaluated
- Examples include Level of Service and Delay Index

RTPCs have adopted a Level of Service "D" as an MTSO for many routes in Contra Costa

Basic Relationships



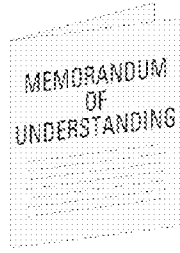
Proposed Process Summary



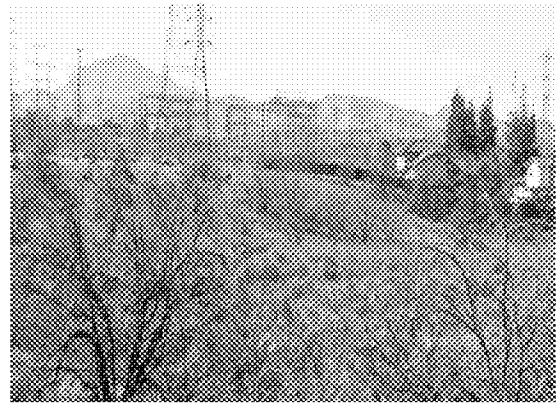
Summary Description

Steps	Action	Responsible Party			
		Sponsor Jurisdiction	Affected Jurisdiction	RTPC	CCTA
1	Evaluate Proposed GPA	√			
2	Notify Affected Jurisdiction	√			
3	Analyze Traffic Impact	√			
4	Prepare Comment Letter		√	√	
5	Respond to Comment Letter	√			
6-7	File a Letter of Concern		√		
8	Respond to Letter of Concern	√			
9-11	Initiate Cooperative Resolution Discussions	√	√		√
12	Formulate MOU	√	√		
13	Revise Action Plan			√	
14	Evaluate Compliance				√

Role of the MOU



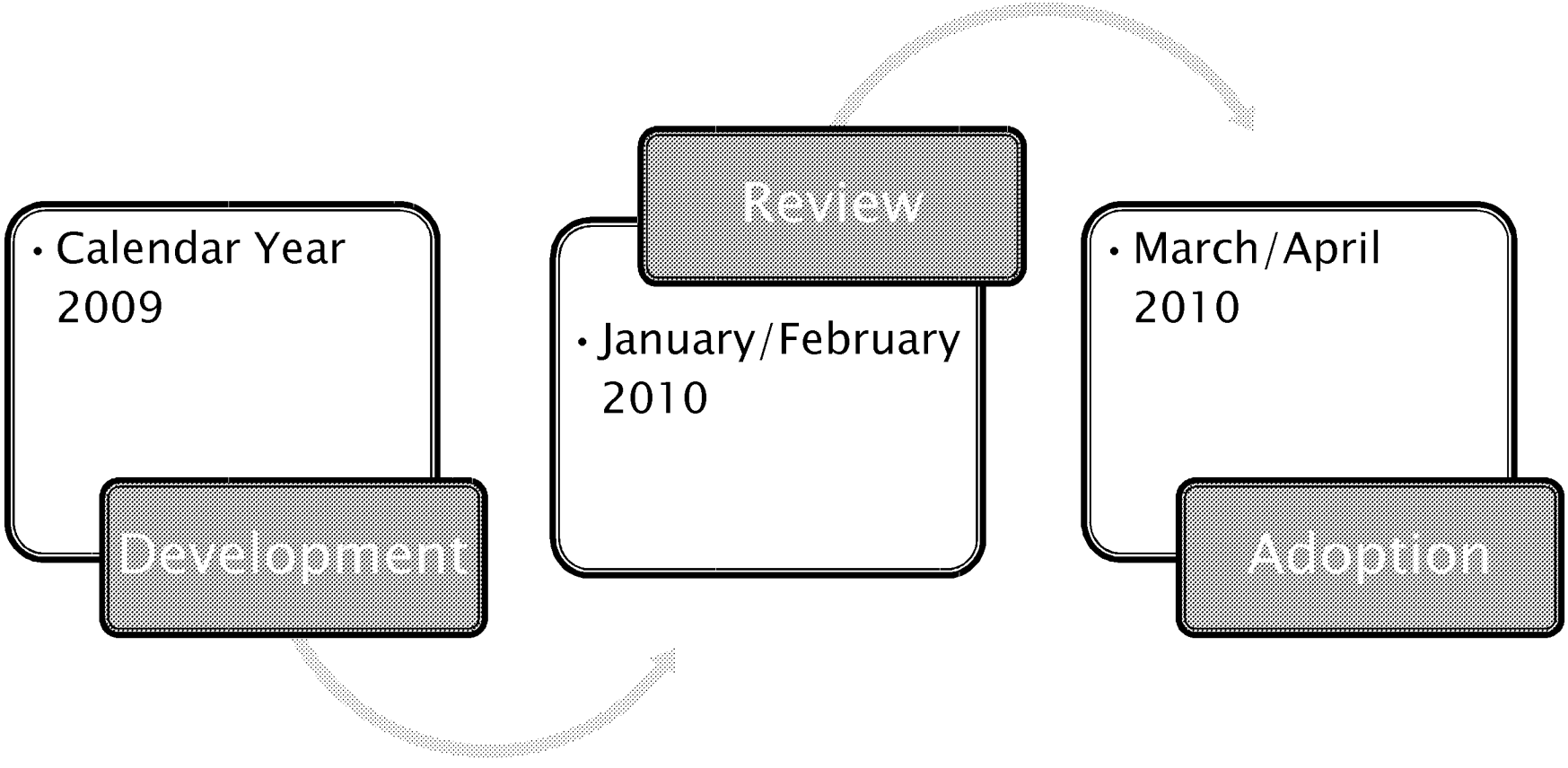
- Acknowledgement that GPAs may take years (or decades) to reach fruition
- Project's impacts may change over time
- More realistic than "on the spot" settlement agreement
- Incorporates Principles of Agreement on how conflicts will be managed
- Specifies actions, timing, responsibilities for monitoring, and mitigations
- MOU could require that the parties return to negotiations



PDA Exemption

- Transit oriented developments that do not conflict with the objectives to reduce GHG emissions
- Priority Development Areas could be exempted under ABAG/MTC's broad criteria
- Additional criteria was developed and considered
- TCC elected not to allow PDA exemptions

Timeline for Development, Review, and Adoption




Questions and Comments

ATTACHMENT 7

CONTRA COSTA
transportation
authority

TO: Barbara Neustadter, TRANSPAC; Andy Dillard, SWAT; John Cunningham, TRANSPLAN; Christina Atienza, WCCTAC; Jaimee Bourgois, TVTC; Leah Greenblat, LPMC/SWAT (TAC)

FROM: Robert K. McCleary, Executive Director

DATE: December 18, 2009

SUBJECT: **Items approved by the Authority on December 16, 2009, for circulation to the Regional Transportation Planning Committees (RTPCs), and items of interest**

At its **December 16, 2009** meeting, the Authority discussed the following items, which may be of interest to the Regional Transportation Planning Committees:

1. **Adoption of 2009 Measure J Strategic Plan:** The draft 2009 *Measure J Strategic Plan* was presented at the November Authority meeting. Staff recommends approval of Resolution No. 09-56-P adopting the *2009 Strategic Plan.* **Resolution No. 09-56-P**. *The Authority adopted the 2009 Measure J Strategic Plan.*

2. **Circulation of SR 4 & SR 24 Corridor System Management Plans (CSMP)/Freeway Performance Initiative (FPI) Technical Analyses.** Caltrans is currently developing Draft CSMPs for SR 4 and SR 24. In a parallel effort, MTC is implementing its Freeway Performance Initiative (FPI), which provides strategies for maximizing the cost effectiveness of future transportation investments to address freeway congestion. The draft reports are now available for review by the Regional Committees.

3. **Status Report on Legal Counsel Review of Questions Raised by Save Mt. Diablo Regarding the Measure J Urban Limit Line (ULL).** Authority's legal counsel is reviewing the questions raised by Save Mount Diablo regarding the Measure J ULL requirements and will be prepared to discuss the issues in January.

4. **Fiscal Audit and Management Letter for the year ended June 30, 2009.** The purpose of the Fiscal Audit (including the Independent Auditor's Report and the General Purpose Financial Statements) is to provide an independent assessment that the Authority's financial statements accurately portray financial activities occurring during the year, based on generally accepted accounting principles. *The independent auditors, Maze and Associates, reported a clean audit with no substantive findings. The Management Letter contained no significant recommendations.*

5. **Recommended Programming of 2010 STIP TE Funds.** The Authority has $3.9 million in federal Transportation Enhancement funds to program as part of the 2010 STIP. Staff released a "call for projects" in early October with applications due on November 2, 2009. The subcommittee established at the October TCC meeting has reviewed the applications received. Staff presented the subcommittee's recommendations at the TCC meeting to the Planning Committee. Subsequent to the meeting, staff was advised of an additional $1.04 million in available fund and recommends adding an additional project

in Hercules and augmenting funding for three other projects. *The Authority approved the amended list. (Attachment)*

6. **Development of Guiding Principles for Implementation of SB 375.** At its meeting in October 2009, the Authority asked the Planning Committee to develop draft guiding principles for Contra Costa's portion of the Sustainable Communities Strategy (SCS) as required under SB 375, and a draft scope, schedule, and budget for collaborative SCS development with Contra Costa's jurisdictions, MTC and ABAG. Building upon the Shaping Our Future Principles of Agreement that were discussed at-length in 2003, Authority staff proposes draft Principles that could help guide the collaborative planning process. *The Authority authorized staff to work with the city, town, and County Planning Directors on proposed revisions in early 2010, and return to the Planning Committee in February.*

7. **Adoption of 2009 Contra Costa Congestion Management Program (CMP).** The Authority released a draft 2009 CMP in September with a deadline for comments of October 5. Staff received comments and corrections to the Draft 2009 CMP and has prepared responses to those comments and proposed changes to the document. The Authority must adopt the proposed CMP update at a noticed public hearing and submit the adopted CMP to MTC by December 17. **Resolution No. 09-63-G** *The Authority Adopted the 2009 CMP.*

NOTE: The Caldecott Groundbreaking has been scheduled for Wednesday, January 20th, at 11:00 a.m.

Attachment C

Proposed 2010 STIP Cycle Projects

(x 1000)	PPNO		08/09	09/10	10/11	11/12	12/13	13/14	14/15	PA/ED	PS&E	R/W	CON	Comments
REGIONAL IMPROVEMENT FUNDS (RIP)														
Richmond Parkway Transit Center	2011E	AC Transit			12,700								12,700	(1)
Hercules Rail Station (CT District 75)	2011F	Hercules			8,000								8,000	(1)
Rte 4 E Widening from Somersville to 160	192F	Caltrans		42,624									42,624	(1)
I-680/SR4 Interchange - Phase 1	298E	CCTA					1,310				1,310			(1)
SR4 East Interchanges Improvements in Antioch	192C	CCTA		0		19,450							19,450	(1)
PPM (MTC)	2118	MTC	74	74	74	74	74	77	79				526	(2)
PPM (CCTA) Programmed	2110	CCTA	1358	1,557	0	592	592	593	593				5,285	(3)
Sum			1,432	44,255	20,774	20,116	1,976	670	672		1,310		88,585	
TRANSPORTATION ENHANCEMENT FUNDS (TE)														
Hercules Rail Station (CT District 75)	2011F	Hercules			1,097								1,097	
Bailey Road Transit Access Improvements	183H	Pittsburg	989										989	(4)
Refugio Bridge- Bicycle, Ped, and Vehicle Connectivity	2025D	Hercules	775										775	(5)
Montalvin Manor Pedestrian Improvements	183K	County	365										365	(6)
BART Station Community Wayfinding Project		BART			900								900	(7)

Attachment C

Proposed 2010 STIP Cycle Projects

(x 1000)	PPNO		08/09	09/10	10/11	11/12	12/13	13/14	14/15	PA/ED	PS&E	R/W	CON	Comments
Monument Corridor Pedestrian and Bikeway Improvements		Concord				900							900	(7)
Improvements to Moeser and Ashbury Pedestrian and Bicycle Corridors		El Cerrito			900								900	(7)
Pleasant Hill Road South End Pedestrian and Bicycle Safety Improvement Project, Phases 3 & 4		Lafayette			1,200								1,200	(7)
MTC TE Reserve	2118F	MTC					1,270		1,704				2,974	(8)
Sum			2,129	0	4,097	900	1,270	0	1,704				10,100	

Notes:

(1) Existing Project

(2) Added two years of MTC PPM in FY 13/14 & 14/15

(3) Funding was reduced by $80K to match new fund estimate and was redistributed to match need

(4) Existing Project: extension request for 15 months approved at May 2009 CTC meeting. Deadline to request allocation is 9/30/2010

(5) Existing Project: extension request for 16 months approved at May 2009 CTC meeting. Deadline to request allocation is 10/31/2010

(6) Existing Project: extension request for 20 months approved at June 2009 CTC meeting. Deadline to request allocation is 02/28/2011

(7) NEW Project

(8) Added $1.7 million based on the new fund estimate

CONTRA COSTA
transportation
authority

TO: Barbara Neustadter, TRANSPAC; Christina Atienza, WCCTAC
Andy Dillard, SWAT; Jaimee Bourgois, TVTC
John Cunningham, TRANSPLAN; Leah Greenblat, LPMC/SWAT (TAC)

FROM: Paul Maxwell, Interim Executive Director

DATE: January 22, 2010

SUBJECT: **Items approved by the Authority on January 20, 2010, for circulation to the Regional Transportation Planning Committees (RTPCs), and items of interest**

At its January 20, 2010 meeting, the Authority discussed the following items, which may be of interest to the Regional Transportation Planning Committees:

1. **Bay Area Rapid Transit District (BART) Request for Appropriation of Funds for Station Access Improvements.** BART is requesting for appropriations for a total of $5,507,000 for Design and Construction of Wayfinding Systems and Bicycle Storage Facilities at four Central County and three West County BART stations. **Resolutions No. 10-2-P; 10-3-P; 10-4-P; 10-5-P.** *Approved by the Authority.*

2. **Approval to Distribute the Final Measure C and Initial Measure J Calendar Year (CY) 2008 & 2009 Growth Management Program (GMP) Compliance Checklist for Allocation of Fiscal Year (FY) 2009-10 and 2010-11 Local Street Maintenance and Improvement Funds.** Staff has prepared the final Measure C and Initial Measure J CY 2008 & 2009 GMP Checklist for release to local jurisdictions in January 2010. Jurisdictions will have until June 30, 2011 to submit the checklist, which covers payment of Measure C Local Street Maintenance and Improvement (LSM) Funds for FY 2009-10 and FY 2010-11 available after July 1, 2011. *Approved by the Authority.*

3. **The Authority's Measure J Urban Limit Line Requirement: Policy Response to Questions Raised by Save Mount Diablo.** In its letter of November 12, 2009 to the Authority, *Save Mount Diablo* raised three questions regarding local jurisdiction compliance with the Measure J Urban Limit Line (ULL) requirement. *The Authority agreed to defer action on the consideration of additional ULL processes and criteria until the full Measure J GMP Implementation Documents are brought before the Planning Committee in spring 2010.*

4. **SB375 Implementation: Acceptance "In concept" of Proposed Scope of Work, Update on Guiding Principles, and Appointments to the Joint Policy Committee CEO and Working Group Committees:** Authority staff has worked jointly with staff from MTC/ABAG, and the Contra Costa Planning Directors, to develop an implementation plan for SB 375, which requires development of a Sustainable Communities Strategy (SCS) by 2013, for incorporation into the next Regional Transportation Plan (RTP). *The Authority adopted the "In Concept" proposed Scope of Work for SB 375 Implementation, accepted staff report on status of development of the*

Guiding Principles and approved the appointments to the JPC CEO and Working Group Committees.

5. **Receive Final Report on the I-680 HOV/Express Bus Access Study.** Regional Measure 2 (RM-2) set aside $15 million for HOV improvements on I-680 in central Contra Costa, with up to one million of the funds to be used to develop options and recommendations for providing Express Bus service on the I-680 HOV lane south of the Benicia-Martinez Bridge to connect to BART. The I-680 HOV/Express Bus Access Study has been completed by the CH2M Hill consultant team. In October 2009, the study was accepted by CCCTA (County Connection), the designated study lead agency in the RM-2 legislation. **Resolution No. 10-01-G.** *The Authority approved the study recommendation to select the I-680 Southbound HOV Gap Closure Project from N. Main to Livorna road as the preferred alternative for funding by available RM2 funds.*

Subject	**The Authority's Measure J Urban Limit Line Requirement: Policy Response to Questions Raised by Save Mount Diablo**
Summary of Issues	In its letter of November 12, 2009 to the Authority, *Save Mount Diablo* raised three questions regarding local jurisdiction compliance with the Measure J Urban Limit Line (ULL) requirement: 1. Is a discretionary act by a jurisdiction to approve or serve a development outside of the urban limit line that requires urban services such as water and sewer, a violation of the urban limit line and of Measure J? 2. Is this project (*the proposed "New Farm" development in the Tassajara Valley*), requiring urban services, a violation of the urban limit line and of Measure J? and 3. Is a Sphere of Influence expansion outside of an urban limit line, a violation of the urban limit line and of Measure J? *Save Mount Diablo* requested clarification regarding the specific circumstances outlined above. However, the request raises broader issues concerning compliance that warrant a more comprehensive discussion of the intent of the ULL requirement, and the scope and nature of the Authority's policies and procedures for assessing a local jurisdiction's eligibility for Measure J funding. The Authority may need to further refine and clarify its ULL assessment process and criteria in order to carry out the intent of Measure J.
Recommendations	Staff recommends that the Authority respond by: 1. After Authority review, deciding whether to share the legal opinion prepared by Nossaman in response to this request; and 2. Circulating for a timely review the Suggested Process and Criteria for Determining Compliance with the ULL Requirement of Measure J (Attachment B).
Financial Implications	If a local jurisdiction is found out of compliance with the ULL provision of the Measure J Growth Management Program, it would not receive its formula share of the 18 percent and TLC funds allocated to complying jurisdictions.
Options	A. Adopt the Suggested Process without circulation; or B. Not take action at this time; or C. Provide additional direction to staff.
Attachments *(See PC Packet, dated 01/06/10)*	A. Letter from *Save Mount Diablo* to Chair Maria Viramontes re ULL Issues (November 12, 2009) B. Draft Proposed Process and Criteria for Assessing Compliance with the ULL Requirement of Measure J
Changes from Committee	*The PC recommended that the full Authority review legal counsel's draft opinion in closed session at its next meeting on January 20,*

	2010, and consider whether to release the opinion thereafter. *Process and Criteria: The Planning Committee recommended that the Authority defer action on the consideration of additional ULL processes and criteria until the full Measure J GMP Implementation Documents are brought before the Planning Committee in Spring 2010.* *Response to Save Mount Diablo: The PC recommended that, given the limited information available, the Authority not take a position on Save Mount Diablo's Questions 1 and 2. The PC further recommended that the Authority respond to Question 3 to indicate that a change to Sphere of Influence outside of a local jurisdictions voter-approved ULL would not raise a compliance issue with the Measure J Growth Management Program (see detailed discussion below on page 2-7).*

BACKGROUND

Contra Costa County (the "County") first adopted an urban limit line (ULL) in November 1990, when the voters passed the County-sponsored Measure C ("County Measure C"), distinct from the Authority's enabling Measure C in 1988. County Measure C was placed on the ballot as an alternative to an initiative measure sponsored by the Greenbelt Alliance, Measure F, which would have constrained urban development in unincorporated areas more so than under Measure C~~precluded urban development in the unincorporated areas of Contra Costa~~.

Starting in 2002, the Authority began to consider renewing its local sales tax, which was set to expire on March 31, 2009. As part of the discussion, the Authority agreed to include a ULL provision in the Authority's Growth Management Program (GMP). The proposed (and subsequently adopted) ULL provision required every local jurisdiction to adopt and implement either a countywide mutually agreed-upon voter-approved ULL, or a local jurisdiction voter-approved ULL. In addition to the backing of the Board of Supervisors, the ULL provision was strongly supported by several environmental organizations and other interested parties. The ULL provision was an essential part of the agreement that facilitated the placement of the Authority's Measure J sales tax renewal on the November 2004 ballot, and its subsequent approval by 71 percent of the voters. The ULL provision was viewed as a fundamental tool to help reshape and focus growth within Contra Costa and link transportation investments to support infill in existing urban areas.

Following approval of Measure J in November 2004, the County was unable to come to agreement with the cities and towns on a mutually agreed-upon ULL to place before the voters. However, agreement was eventually reached on conforming the proposed November 2006 updated County ULL with changes that voters had subsequently approved to the urban growth boundaries of Antioch and Pittsburg, and to other changes desired by other local jurisdictions. As those agreements were being reached, the Authority suggested an approach that could be taken by all local jurisdictions to comply with the Measure J ULL requirement without the expense of preparing and submitting individual jurisdiction ULLs to the ballot. That approach, along with other largely clarifying refinements to the original Measure J ULL language, was incorporated into the Measure J Expenditure Plan by the Authority through adoption of Ordinance 06-04 on November 15, 2006.

MEASURE J ULL REQUIREMENT

Relevant Text

The ULL component of the Measure J Expenditure Plan is contained in Section 5 of the GMP requirements, as follows (with emphasis added in Bold):

5. "Beginning on April 1, 2009, **each jurisdiction must continuously comply with an applicable, voter approved ULL** ("applicable ULL") defined as one of the following:

   (i) A new mutually-agreed upon countywide ULL (MAC-ULL) approved by the voters countywide; or

   (ii) A Contra Costa County, voter approved ULL ("**County ULL**") that has also been **approved by a majority of the voters voting on the measure in the local jurisdiction seeking to rely upon the line as the growth boundary for local development**, provided that the local jurisdiction's legislative body has adopted the County ULL before or after the election at which the "County ULL" was approved; or

(iii) **A measure placed on the ballot and approved by a majority of the voters** within a local jurisdiction **fixing a local voter approved ULL** ("LV-ULL") **or equivalent urban growth boundary** for the jurisdiction. A jurisdiction may establish or revise its LV-ULL with local voter approval at any time prior to or during the term of Measure J. The LV-ULL will be used as of its effective date to meet the Measure J GMP ULL requirement."

The Expenditure Plan provides additional information regarding ULL adoption and compliance requirements in the form of Attachment A, Principles of Agreement for Establishing the Urban Limit Line. (the "ULL Principles"). The guiding statement of intent is summarized in the ULL Principles as follows (with emphasis added in Bold):

"An applicable **ULL shall be defined as an urban limit line**, urban growth boundary, **or other equivalent physical boundary judged by the Authority to clearly identify the physical limits** of the jurisdiction's area, **including future urban development**."

This introductory paragraph provides the Authority with discretion to assess whether a jurisdiction's voter-approved ULL effectively defines the physical limits of urban development. Other relevant sections:

8.(a)(iv) "A City or Town may adopt conditions for revising its adopted County ULL boundary by action of the City or Town's legislative body, **provided that the conditions limit the revisions of the physical boundary to adjustments of 30 or fewer acres**, and/or to address issues of unconstitutional takings, or conformance to state and federal law. Such conditions may be adopted at the time of adoption of the County ULL, or subsequently through amendment to the City or Town's Growth Management Element to its General Plan."

(b) "Local Voter ULL (LV-ULL). A local ULL or equivalent measure placed on the local jurisdiction ballot, approved by the jurisdiction's voters, and recognized by action of the local jurisdiction's legislative body as its applicable, voter approved ULL. A jurisdiction may revise or establish a new LV-ULL at any time using the procedure defined in this paragraph."

(c) "Adjustments of 30 Acres or Less. **A local jurisdiction can undertake adjustments of 30 acres or less to its adopted ULL**, consistent with these Principles, **without voter approval. However, any adjustment greater than 30 acres requires voter approval and completion of the full County ULL or LV-ULL procedure** as outlined above."

Measure J ULL Requirement Is Not A Limitation on Local Land Use Authority

The stated objectives of the Measure J Growth Management Program, including compliance with an applicable ULL, include the support of infill and redevelopment, efficient transportation planning, and cooperation between land use and transportation agencies in order to preserve and enhance the quality of life for the people of Contra Costa. Measure J recognizes the importance of "maintaining local authority over land use decisions" and functions only to condition a source of transportation funding, not land use entitlements. The GMP is not a land use planning document and the Authority has no legal control over land use decisions reserved to and made by local jurisdictions. The voter-approved ULL is a requirement that must be met in order for a jurisdiction to receive its share of 18 percent of the annual Measure J sales tax revenues, and in no way constitutes a limitation or control on the land use authority of a local jurisdiction. Should a jurisdiction wish to approve urban development and/or annex an area in violation of the GMP ULL requirements, it may do so either by (1) forfeiting Measure J funding, or (2) seeking and obtaining voter-approval for a modified ULL that includes the proposed development.

Considering Exceptions for Development Beyond the ULL

A ULL adopted by a local jurisdiction may include exceptions for certain types of projects beyond an adopted ULL such as cemeteries, golf courses, wineries and schools. However, staff is of the view that proposed projects beyond the physical boundary of an ULL seeking an exception should be considered exempt only if project components are consistent with the intent of the ULL requirement – for example, the proposed exceptions do not include components that are typical of urban/suburban uses such as clustered housing on small lots, or commercial or retail components that are not fundamentally "rural" or agricultural in nature.

Should a local jurisdiction approve a proposal, or apply to LAFCO to annex land for development that is not explicitly included within the boundaries of its applicable ULL, not explicitly exempted, or exempted but incorporates urban or suburban uses inconsistent with the intent of the ULL requirement, such action could be cause for the Authority to make a finding that the local jurisdiction is out of compliance with the Measure J ULL requirement.

Extension of Utility Services Outside of a Voter Approved ULL

Principle 9 of Attachment A (in the Measure J Growth Management Program) states, relative to the ULL requirement:

9. "Submittal of an annexation request by a local jurisdiction to LAFCO outside an applicable voter approved ULL will constitute non-compliance with the new Measure J Growth Management Plan."

Based both on the 30 acre constraint, and on staff's concern that extending water and sewer services across the ULL constitutes or may lead to "urban" development, staff believes an annexation request to a water or sanitary service provider by the County, city or town would constitute non-compliance under Section 9. Staff notes that the intent of the ULL requirement may imply the concept of a boundary across

which urban services, including water and sewer services, should not be extended except in the case of serving a development otherwise subject to a ULL exception.

Sphere of Influence Extension Outside of a ULL

Save Mount Diablo also asked whether an expansion of a sphere of influence of a local jurisdiction would constitute a violation of the ULL.

The Measure J GMP ULL requirement does not currently address whether a request submitted by a local jurisdiction to expand or otherwise modify its sphere of influence outside of the boundary of an applicable ULL constitutes a violation the GMP's ULL provision. A sphere of influence is an authorization for a jurisdiction to begin planning for a possible future incorporation of the area into its jurisdiction, and is not an annexation, nor is expressly a commitment to or entitlement of a future development. Therefore, staff's initial conclusion is that extending a sphere of influence outside of the ULL should not constitute a violation of the Measure J ULL requirement.

ULL COMPLIANCE EVALUATION BY THE AUTHORITY

Based on the questions raised by the letter from *Save Mount Diablo*, and the likelihood that broader issues regarding ULL compliance may arise in the future, staff believes the Authority may be best served by defining a transparent process for advising local jurisdictions regarding ULL compliance. The process should include criteria the Authority would use to evaluate whether a local jurisdiction has met the Measure J GMP obligation to "continuously comply" with its applicable ULL. Such policies would provide further and more detailed guidance to local jurisdictions contemplating development beyond the physical boundaries of its applicable ULL.

In the past, the Authority has used an "*Implementation Guide*" to convey policies and procedures relative to the GMP. Ordinance O6-04 refers to a jurisdiction's compliance with the requirements of the GMP, "consistent with the Authority's adopted policies and procedures."[1] The Measure J Growth Management Program *Implementation Guide* is currently under revision and is expected to be adopted following review and finalization of the Measure J General Plan Amendment (GPA) Review Process in February 2010. New guidelines that apply to the ULL could be amended into the *Implementation Guide*. Such amendments could be made either concurrent with the GPA review process update (expected in Spring 2010), or, if necessary, on an accelerated schedule.

The Authority has used a policy of "self-certification" for assessing compliance with the Measure C program through a checklist submitted by the jurisdiction. Under that approach, the Authority has relied on review of the checklists by its Citizens Advisory Committee (CAC) and considered other challenges to the checklist, but has not initiated "up-front" advisories or comments regarding compliance. However, because the ULL provisions were central to the support of Measure J by the voters, it may be desirable for the Authority to have a process to advise a local jurisdiction well in advance of a project approval or annexation request concerning whether or not the ULL provision violated. ~~It appears appropriate that t~~The Authority could, at a later date when the full *Implementation Guide* is brought back for review:

a. Clarify any ambiguities relative to criteria that will be applied in advance of a potential violation occurring;

[1] CCTA Ordinance 06-04, p. 3 of 6.

b. Clarify that an urban limit line or urban growth boundary needs to define the limits of urban or suburban growth within Contra Costa, both to protect open space and farmland and to encourage infill within the ULL;

c. Adopt 'bright line' tests, which are clear and further detail aspects of the requirements spelled out in Attachment A to the Measure J GMP that defines the ULL provisions;

d. Adopt a more proactive approach to advise a local jurisdiction early in the process if moving forward with a proposal would likely constitute non-compliance with the Measure J program. Such advance warning appears desirable to avoid a circumstance where approvals beyond the ULL might constitute a potential for inverse condemnation, thereby creating a conundrum for the Authority if it were to weigh in only after such approval; and

e. Incorporate, as appropriate, the proposed approach into the Authority policies and procedures, more specifically, the Measure J GMP Implementation Guide.

~~Accordingly, staff recommends that the Authority circulate for comment the process and specific criteria for compliance with the ULL proposed in Attachment B, drawn from the language and intent of Attachment A in the Measure J Growth Management Program. Following the receipt of comments, the provisions outlined in Attachment B would be incorporated into the Authority's Measure J Growth Management Program *Implementation Guide*.~~

PLANNING COMMITTEE (PC) DISCUSSION (New Subsection)

Closed Session: At its meeting on January 6, 2010, the PC met in closed session to review a draft legal opinion prepared by Authority Counsel regarding potential exposure to litigation pertaining to the Measure J ULL requirement. Following the closed session, the PC recommended that the full Authority Board also meet in closed session on January 20, 2010, to review Counsel's draft opinion. Subject to Authority review and approval, Counsel's opinion could be released during or after the full Authority meeting.

ULL Process and Criteria: The PC also discussed staff's proposed process and criteria for determining compliance with the ULL requirement of Measure J. During the discussion, PC members inquired about the status and schedule for adoption of the Measure J GMP implementation policies (called the *Implementation Guide*). Staff noted that the "Proposal for Adoption" *Implementation Guide*, released by the Authority in June 2008, included the ULL requirement as a "checklist" question. It did not, however, include additional procedures and criteria regarding the ULL requirement. In terms of the schedule, staff responded that, depending upon the extent of comments received on the General Plan Amendment Review Process that is currently out for circulation, the *Guide* could be ready for adoption in the May-June 2010 timeframe. Based upon that schedule, the PC recommended postponing consideration of adding new ULL policies and procedures to the *Guide* until after staff had completed the full draft document and brought it before the PC for review.

Response to Save Mount Diablo: The PC discussed the three questions in Save Mount Diablo's letter (Attachment A) as follows:

- Question 1: Is a discretionary act by a jurisdiction to approve or serve a development outside of the urban limit line that requires urban services such as water and sewer, a violation of the urban limit line and of Measure J?

Response: Measure J requires that "each local jurisdiction must continuously comply with an applicable, voter-approved ULL." Without specific information regarding the nature of "urban services," or the conditions leading up to the discretionary action taken by a local jurisdiction to enable provision of services, the Authority is unable to take a position on this matter.

- Question 2: Is this project (*the proposed "New Farm" development in the Tassajara Valley*), requiring urban services, a violation of the urban limit line and of Measure J?

  Response: Measure J requires that "each local jurisdiction must continuously comply with an applicable, voter-approved ULL." Without specific information regarding the nature of the project, the Authority is unable to take a position on this matter.

- Question 3: Is a Sphere of Influence expansion outside of an urban limit line, a violation of the urban limit line and of Measure J?

  Response: A Sphere of Influence (SOI) expansion by a local jurisdiction outside of a voter-approved ULL does not raise a compliance issue with the Measure J Growth Management Program. As noted above, a sphere of influence is an authorization for a jurisdiction to begin planning for a possible future incorporation of the area into its jurisdiction, and is not an annexation, nor is it expressly a commitment to or entitlement of a future development.

save MOUNT DIABLO

Mailing Address
1901 Olympic Blvd., # 220
Walnut Creek, CA 94596
Tel: (925) 947-3535
Fax: (925) 947-0642

Website
www.savemountdiablo.org

November 12, 2009

Maria Viramontes
Chair, Contra Costa Transportation Authority
3478 Buskirk Ave # 100
Pleasant Hill, CA 94523-7311

Re: Urban Growth Boundaries and Measure J compliance

Dear Chair Viramontes,

I'm writing in regard to Measure J compliance.

Save Mount Diablo and I were deeply involved in the passage of Measure J. We successfully facilitated support by many environmental groups and neutrality by others. Without our support it would have been much more difficult to reach the two-thirds vote needed for passage. Our highest priorities in the Measure were the growth management elements. Creation and defense of urban limit lines is a key environmental issue which is very important to us.

We would appreciate the Authority staff and legal counsel's opinion on the following:

1) Is a discretionary act by a jurisdiction to approve or serve a development outside of the urban limit line, that requires urban services such as water and sewer, a violation of the urban limit line and of Measure J?

The "New Farm" development[1] is proposed for the Tassajara Valley east of Danville and San Ramon, and outside both the county and city urban limit lines. It would include 186 units on 771 acres. The property is made up of several parcels, and is zoned A-80, or agricultural, 80 acre minimum—under the current county General Plan it can support 7 or 8 units. The county rezoned the area to 80-acre minimum many years ago because of water shortages—a strong indication that large development is not possible without urban services. The applicant has proposed a County General Plan amendment and a rezoning to an entirely new zoning category that they have proposed, tailor made for their project. The project would require both urban water and sewer service.

In July 2007 the County Board of Supervisors authorized a General Plan Amendment study[2] to look at these issues. The applicant only recently paid fees for the GPA study; but they haven't filed materials necessary to begin the study or to begin the CEQA process, for which further payment would be required but has not been submitted.

In the July 24, 2007 Contra Costa County staff report[3] for the General Plan Amendment study, County staff indicated: *"Contrary to the term "rural residential" as used in the General Plan, the proposed clustering of residential development would be quite urban in nature..."*, that the

[1] Contra Costa County File: GP#07-0009 (FT Land LLC, Tassajara area)
[2] Contra Costa County File: GP#07-0009 (FT Land LLC, Tassajara area)
[3] Contra Costa County File: GP#07-0009 (FT Land LLC, Tassajara area)

application *"is deemed an "urban" land use under the General Plan. Additionally, the proposal invokes a residential density bonus and includes 24 units of multi-family residential, each of which are more typically found in an urbanized setting. It is also apparent that the proposal would require urban services (e.g. water and sewer services) to the Tassajara area in order to support the residential development component. It is noted that the General Plan contains several policy statements and implementation measures specifically aimed at discouraging the extension of urban services across the Urban Limit Line, especially services such as water and sewer which could be deemed growth inducing. Taken together, the residential density issue and the need for urban services (water and sewer services), there is in staff's mind a substantial question as to whether certain aspects of the residential component under the proposal could be found consistent and not in conflict with the General Plan as a whole.[4]"*

2) Is this project, requiring urban services, a violation of the urban limit line and of Measure J?

Our expectations, consistent with our support of Measure J, is that this project can only be accomplished by breaking the urban limit line, or by voter approved amendment to the County, Danville and/or San Ramon urban limit lines. However, LAFCO is considering sphere changes for Danville and San Ramon including the project area. We are very concerned about this attempt to break the urban limit line.

We would like a clear determination by the Authority that this project would be a violation of the Urban Limit Line and Measure J, and that this violation will not be accepted or would result in a violation of Measure J which, if pursued, would result in loss of return to source funding by the involved jurisdictions.

Under LAFCO regulations, a proposal to expand a Sphere of Influence is an indication of an intent to serve. A sphere expansion indicates *"The present and probable need for public facilities and services in the area."*[5] *"The sphere of influence is an important benchmark because it defines the primary area within which urban development is to be encouraged."*[6]

3) Is a Sphere of Influence expansion outside of an urban limit line, a violation of the urban limit line and of Measure J?

If the applicants wish to pursue an urban development on their property, they should seek voter approval of a change in the ULL at the appropriate time. After the ULL has been changed, they should seek a change in their Sphere of Influence, annexation and entitlements.

Thank you for your consideration.

Sincerely,

Ron Brown
Executive Director

Cc: Robert McCleary, Executive Director

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[4] "CA Govt. Code section 65300.5 mandates that a Geeneral Plan be integrated and internally consistent among all elements and within each element."
[5] CA Govt. Code section 56425
[6] CA Govt. Code sections 56377(b) and 56841

CALIFORNIA DEPARTMENT OF TRANSPORTATION DISTRICT 4
TRANSPORTATION PLANNING GRANTS
FISCAL YEAR 2010-2011
APPLICATION AND WORKSHOP/OPEN HOUSE

- Environmental Justice: Context-Sensitive Planning
- Community-Based Transportation Planning
- Partnership Planning
- Transit Planning
  - ➢ Statewide or Urban Transit Planning Studies
  - ➢ Rural or Small Urban Transit Planning Studies
  - ➢ Transit Planning Student Internships

Bay Area Open House
Date: February 4, 2010
Time: 10:00 am to 12:00 pm
Location: Caltrans - District Office
111 Grand Avenue
Oakland, CA 94612

The Fiscal Year 2010-2011 Transportation Planning Grant application package is available on the California Department of Transportation, Division of Transportation Planning website: http://www.dot.ca.gov/hq/tpp/grants.html

To request a grant application by mail, please contact Becky Frank at (510) 286-5536, Becky_Frank@dot.ca.gov.

Application Deadlines
MARCH 1, 2010 FOR PARTNERSHIP PLANNING AND TRANSIT PLANNING
&
APRIL 1, 2010 FOR COMMUNITY-BASED TRANSPORATION PLANNING AND ENVIRONMENTAL JUSTICE

511 CONTRA COSTA

2300 Contra Costa Boulevard, Suite 360, Pleasant Hill, CA 94523 (925)969-0841 Fax (925)969-9135
www.511contracosta.org

FOR IMMEDIATE RELEASE:

Pleasant Hill, California – December 22, 2009 – 511 Contra Costa awarded a National Safe Routes to School Grant.

The National Center for Safe Routes to School announced today that 511 Contra Costa was one of 25 national applicants to receive a $1,000 mini-grant for spring 2010. 511 Contra Costa will be participating with Dallas Ranch Middle School Leadership Group in Antioch to encourage students to walk and bicycle safely to school.

511 Contra Costa has developed a number of tools to help schools in Contra Costa County implement Safe Routes to School programs. They include:

- **Walk and Roll 2 School** - A week-long promotion for elementary and middle school students that reinforces the benefits of walking and bicycling to school.
- **Bike Safety** – Bicycle rodeos that teach bicycle safety and basic mechanics to students.
- **Going Green Activity Wheel** – Includes fun and challenging activities to introduce carbon reduction strategies to children and families.
- **Children's Cartoon Booklet** – Engaging educational booklet that encourages carbon-reducing automobile use.
- **Bike and Skateboard Racks** – No-cost bicycle and skateboard racks available at schools and other public locations
- **School Transit Program** - Free bus tickets for students to take the public bus to and from school.
- **SchoolPool** – Web-based program that matches parents who are interested in carpooling their children to school.

511 Contra Costa has been providing programs to improve student health, safety and air quality around schools for years in Contra Costa County. Because of these programs, thousands of students now walk, bike and take the bus to get to school.

511 Contra Costa fulfills some of the Growth Management Program goals which are required of local jurisdictions, by reducing vehicle miles traveled through programs such as Safe Routes to School.

For more information about these and other 511 Contra Costa programs contact Matt Wood: mwood@511contracosta.org or 925-969-1083

NOTICE OF

ENVIRONMENTAL IMPACT REPORT

SCOPING SESSION

NOTICE IS HEREBY GIVEN BY THE CITY OF SAN RAMON
ZONING ADMINISTRATOR
THAT THERE WILL BE A SCOPING SESSION
HELD ON THURSDAY, JANUARY 28, 2010
TO OBTAIN PUBLIC INPUT ON THE CONTENTS OF
THE ENVIRONMENTAL IMPACT REPORT FOR THE
GENERAL PLAN 2030 UPDATE
(GPA# 09-400-001- filed February 24, 2009)

CEQA: An Environmental Impact Report will be prepared to analyze the environmental impacts of the project in accordance with the California Environmental Quality Act (CEQA) of 1970, as amended. This scoping session is being conducted only to obtain public input on the contents of the required Environmental Impact Report. **No decisions concerning the project will be made at this meeting.**

Project Description: The proposed project is a comprehensive update to the City of San Ramon General Plan. The current General Plan was adopted by the Voters in March 2002 and serves as a blueprint for development and land use activities within the City limits. The General Plan Update will address issues such as adjustments to the Urban Growth Boundary, land use designation changes, revisions of existing and additions of new General Plan goals and policies to reflect changes that have occurred during the past decade. The update will also include a new Air Quality Greenhouse Gas Element to conform to recent State Legislation (AB 32 and SB 375) to reduce Greenhouse Gas Emissions.

Location: Citywide

Posting Period: January 15, 2010 to January 27, 2010

SAID MEETING will be held by the Zoning Administrator, City of San Ramon, commencing at 3:00 p.m., on Thursday, January 28, 2010 in the Council Chamber at 2222 Camino Ramon.

City of San Ramon
2222 Camino Ramon
San Ramon, CA 94583

Debbie Chamberlain
Division Manager, Planning Services
(925) 973-2566

Patricia Edwards

Patricia Edwards, City Clerk
Dated: January 15, 2010

City of San Ramon
Notice of Preparation
City of San Ramon General Plan Update

Date: Thursday, January 14, 2010

To: Public Agencies and Interested Parties

From: Mr. Lauren Barr, Senior Planner

Subject: Notice of Preparation of a Draft Environmental Impact Report for the City of San Ramon General Plan Update

The City of San Ramon will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified below.

The project description, location, and probable environmental effects of the City of San Ramon General Plan Update are described in the attached materials. The City of San Ramon is soliciting comments regarding the scope and content of the environmental information, which are germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR when considering permitting or other approvals. Because of time limits mandated by State Law, your response must be received at the earliest possible date but not later than 30 days after receipt of this notice.

Please provide your written response to the address shown below by **5 p.m., Friday, February 12 2010**. We will need the name of a contact person in your agency.

City of San Ramon
Planning/Community Development Department
2226 Camino Ramon
San Ramon, CA 94583
Attn: Mr. Lauren Barr, Senior Planner
Phone: (925) 973-2567
Fax: (925) 806-0118
Email: lbarr@sanramon.ca.gov

CITY OF SAN RAMON GENERAL PLAN UPDATE

1.1 - Project Location

The project location consists of the San Ramon Planning Area located in Contra Costa County, California. The Planning Area consists of approximately 24,815 acres (38.77 square miles), bounded by Alameda County (west), the Town of Danville and unincorporated Contra Costa County (north), unincorporated Contra Costa County (east), and Alameda County/City of Dublin (south); refer to Exhibit 1. The Planning Area is located on the Diablo, California, United States Geological Survey 7.5-minute quadrangle, Township 2 South, Range 1 West (Latitude 37°46'00" North; Longitude 121°56'00" West).

1.2 - Existing Conditions

1.2.1 - Overview

The City of San Ramon is a suburban community located in the central portion of Contra Costa County, within the nine-county San Francisco Bay Area region. The City incorporated in 1983 and has experienced substantial growth during the past three decades. Relevant characteristics are provided in Table 1.

Table 1: City of San Ramon Characteristics (2009)

Population	Dwelling Units	Average Household Size	Labor Force
63,176	25,113	2.602	28,200
Source: California Department of Finance, 2009; California Employment Development Department, 2009.			

1.2.2 - Planning Area Characteristics

The current General Plan establishes a Planning Area, which consists of the area within the city limits, the area within Sphere of Influence (i.e., areas outside the City limits, but which can be annexed into the City), and the area outside the Sphere of Influence in which the City of San Ramon has a planning interest. The Planning Area characteristics are summarized in Table 2. The existing Planning Area is depicted in Exhibit 2.

Table 2: Existing Planning Area Characteristics

Planning Area	Sphere of Influence	City Limits
24,815 acres (38.77 square miles)	19,567 acres (30.57 square miles)	11,973 acres (18.43 square miles)
Source: City of San Ramon, 2010.		

As shown in Exhibit 2, the Planning Area encompasses all of the developed areas of San Ramon, as well as rural and undeveloped areas of unincorporated Contra Costa County located in Bollinger Canyon, the Tassajara Valley, and within the East Bay Hills along the Alameda County line.

The existing Sphere of Influence is generally coterminous with the existing city limits to the north and south and extends to the Alameda County line to the west and the eastern boundary of the Dougherty Valley Specific Plan to the east. The unincorporated Bollinger Canyon and Norris Canyon Estates areas are within the City's existing Sphere of Influence.

1.2.3 - Existing General Plan

The current General Plan, which was approved by the San Ramon electorate in March 2002, serves as a blueprint for development and land use activities within the city limits. The General Plan establishes goals, policies, and land use designations that are intended to facilitate orderly and planned growth within the city. The current General Plan anticipates a buildout population of 96,020 and a buildout labor force of 59,000.

There are four existing Specific Plans in place: Crow Canyon, Dougherty Valley, Northwest, and Westside. The existing General Plan contemplates a fifth, the Eastside Specific Plan, which would guide future development and land use activities in the Tassajara Valley.

The existing General Plan establishes an Urban Growth Boundary, which limits new urban development to either infill areas or undeveloped areas contiguous to existing development. General Plan Policy 4.6-I-3 requires voter review of the Urban Growth Boundary in 2010.

The existing General Plan land use map is shown in Exhibit 2.

1.3 - Project Description

The proposed project consists of a comprehensive update to the City of San Ramon General Plan. The update would encompass the following items, discussed in detail below:

- Urban Growth Boundary Adjustment
- Sphere of Influence Adjustment
- Review of Ordinance 197
- Land Use Map Amendments
- General Plan Element Updates

1.3.1 - Urban Growth Boundary Adjustment

The existing Urban Growth Boundary would be adjusted outward in three places to add 2,227 acres (3.48 square miles). Each adjustment is described below.

- **Eastside Specific Plan Area:** The boundary would be adjusted eastward to encompass 1,624 acres of the Tassajara Valley. The adjusted boundary would be bounded by a point north of Johnston Road (north), Camino Tassajara (east), and the Alameda County line (south). The area within the adjusted boundary would serve as the Eastside Specific Plan Area. This adjustment would be the next logical step to establish the City's probable future physical boundary, eliminate uncertainty in the planning process, and provide for a systematic approach to land use controls associated with any future development process.
- **Norris Canyon Estates:** The boundary would be adjusted to encompass the existing 588-acre Norris Canyon Estates residential community (371 units) and would be coterminous with the existing boundaries of the development. This adjustment seeks to reconcile the limits of the Urban Growth Boundary with this existing unincorporated development that is within the City's Sphere of Influence.
- **Laborer's Property:** The boundary would be adjusted to encompass the existing 15-acre Laborer's Property and would be conterminous with the existing property boundaries. This adjustment seeks to reconcile the limits of the Urban Growth Boundary with this existing development that is within the City limits.

The Urban Growth Boundary adjustments are shown in Exhibit 3. The proposed Urban Growth Boundary adjustment would be placed on the ballot for voter consideration.

1.3.2 - Sphere of Influence Adjustment

The existing Sphere of Influence would be adjusted to encompass the Eastside Specific Plan Area, which would be coterminous with the proposed Urban Growth Boundary adjustment.

1.3.3 - Review of Ordinance 197

In accordance with General Plan Policy 8.4-I-17, Ordinance 197 would be reviewed as part of the General Plan Update. The review would focus on consistency with the proposed Urban Growth Boundary adjustment as well as revisions to reflect changes that have occurred since it was last reviewed. Proposed revisions to Ordinance 197 would be placed on the ballot for voter consideration.

1.3.4 - Land Use Map Amendments

The following amendments would be made to the General Plan Land Use Map

- **North Camino Ramon Specific Plan Area:** All parcels within the proposed North Camino Ramon Specific Plan boundaries that are currently not designated Mixed Use would be re-designated to Mixed Use. This re-designation would achieve consistency with the densities and uses that are envisioned by the proposed North Camino Ramon Specific Plan.
- **El Nido Property:** Property owner-initiated request filed in June 2009 to re-designate the El Nido Property from Parks to Multi-Family High Density Residential.

- **Elimination of Land Use Designations:** The Manufacturing and Warehouse land use designation and the Commercial Service land use designation would be eliminated, as these designations would be obviated by the North Camino Ramon Specific Plan re-designation (see first bullet).

1.3.5 - General Plan Element Updates

The existing General Plan Elements would be revised and several new General Plan Elements would be created, as described below:

Existing General Plan Elements

Revisions would be made to the following existing elements as part of the General Plan Update:

- Economic Development
- Growth Management
- Land Use
- Traffic and Circulation
- Parks and Recreation
- Public Facilities and Utilities
- Open Space and Conservation
- Safety
- Noise
- Housing

Specific revisions are anticipated to include but are not limited to:

- Addition of policies associated with the proposed North Camino Ramon Specific Plan
- Addition and revision of policies associated with the proposed Eastside Specific Plan
- Addition and revision of policies associated with the Economic Development Strategic Plan Update

New General Plan Elements

Several new elements would be created as part of the General Plan Update:

- Air Quality and Greenhouse Gas Emissions
- Water Resources and Supply (optional)

In conjunction with the Air Quality and Greenhouse Gas Emissions Element, the City would prepare a Climate Action Plan to identify specific strategies to achieve greenhouse gas emissions reductions.

1.4 - Required Approvals and Intended Uses

The actions contemplated by General Plan Update require the following discretionary approvals:

- Plan Adoption – City Council
- Urban Growth Boundary Adjustment – City Council (placement on the ballot) and vote of San Ramon electorate

- Sphere of Influence Adjustment – City Council, and Contra Costa County Local Agency Formation Commission
- Review of Ordinance 197 – City Council (placement on the ballot) and vote of San Ramon electorate

Furthermore, the General Plan Update EIR is intended to provide coverage for the following activities that would occur concurrent with or after adoption of the General Plan Update:

- Annexations of Areas Within Sphere of Influence
- Municipal Code Revisions
- Climate Action Plan
- Housing Element Update
- Economic Development Strategic Plan Update
- Development Fee Schedule Update

1.5 - Environmental Review

1.5.1 - Potential Environmental Effects

The EIR will evaluate whether the proposed project may potentially result in one or more significant environmental effects. The topics listed below will be further analyzed in the EIR.

- Aesthetics, Light, and Glare
- Agricultural Resources
- Air Quality and Greenhouse Gas Emissions)
- Biological Resources
- Cultural Resources
- Geology, Soils, and Seismicity
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Utility Systems

1.5.2 - Effects Found Not To Be Significant

Based on project characteristics, the following topical areas will be scoped out to the Effects Found Not To Be Significant section of the EIR.

Mineral Resources

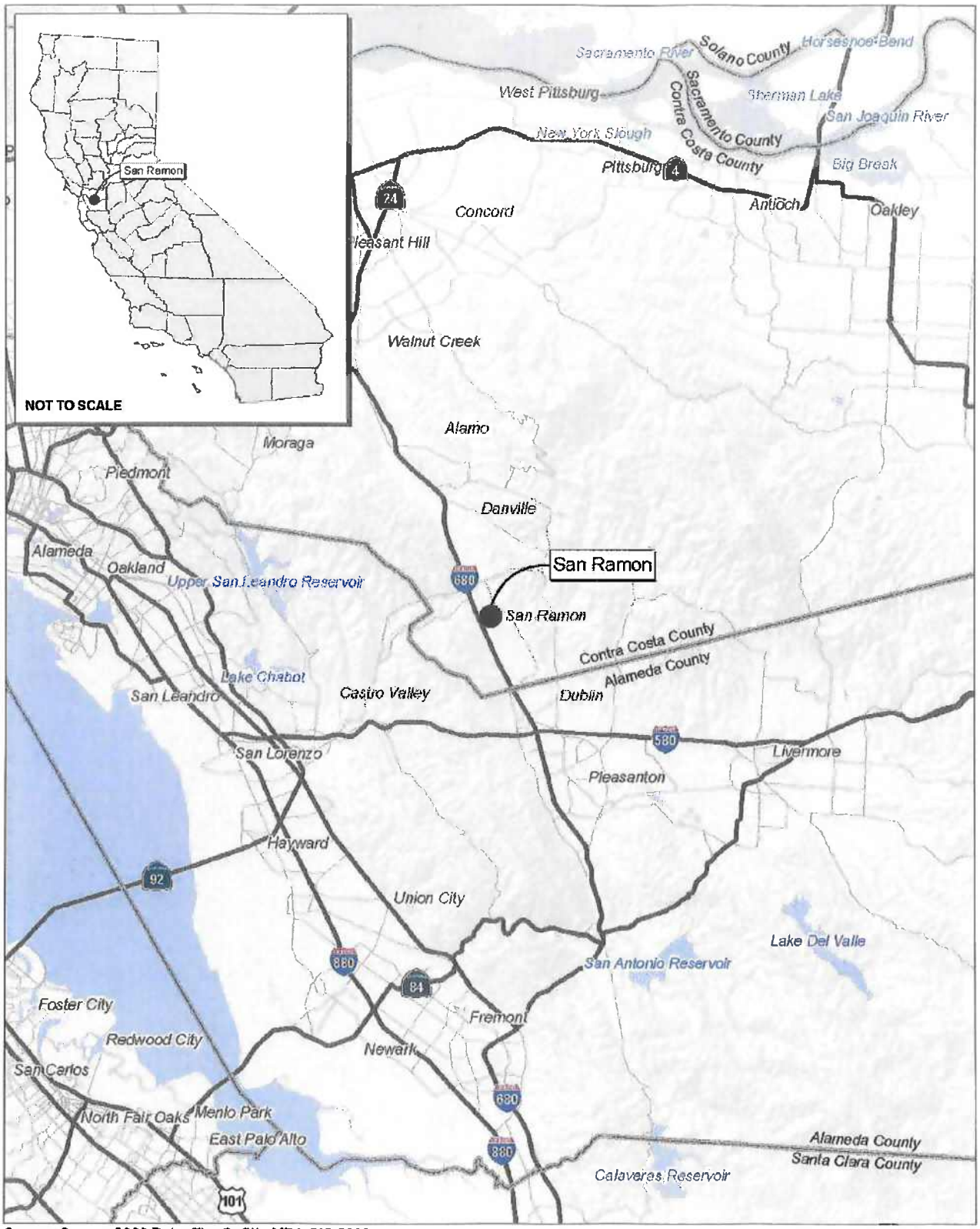
The Planning Area does not contain any known mineral deposits or active mineral extraction operations. This condition precludes the possibility of the loss of important mineral resources as a result of development and land use activities contemplated by the General Plan Update.

1.6 - Scoping Meeting

A public scoping meeting will be held by the City of San Ramon Zoning Administrator at **3 p.m., Thursday, January 28, 2010,** at the following location:

City of San Ramon
Council Chambers
2222 Camino Ramon
San Ramon, CA 94583

At this meeting, agencies, organizations, and members of the public will be able to review the proposed project and provide comments on the scope of the environmental review process.



Source: Census 2000 Data, The CaSIL, MBA GIS 2009.

NORTH

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Miles

Michael Brandman Associates

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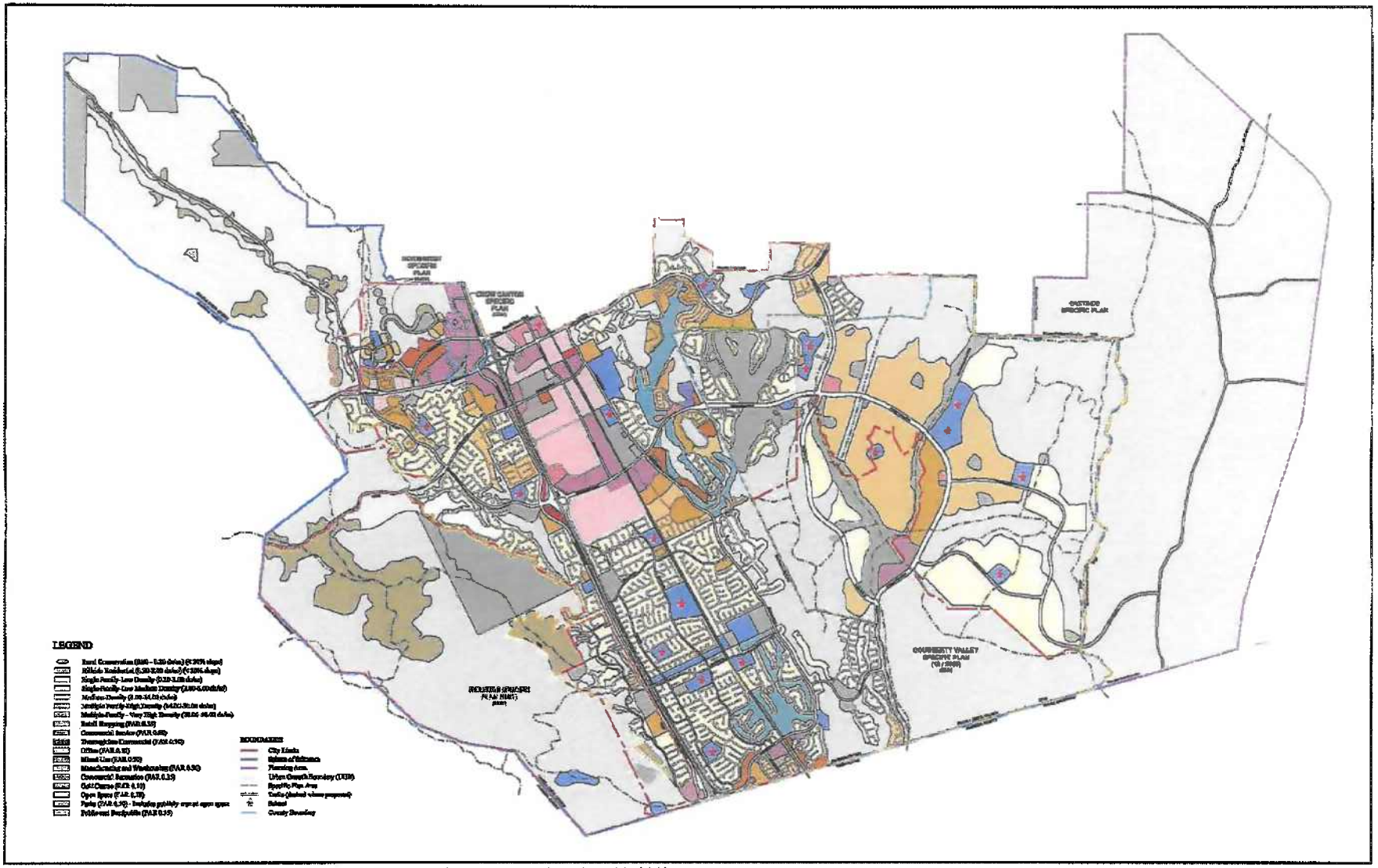
Exhibit 1
Regional Location Map



Source: City of San Ramon Planning Department, General Plan 2020 Land Use Map (April 10, 2009).

NORTH

6,000 3,000 0 6,000 Feet

Michael Brandman Associates

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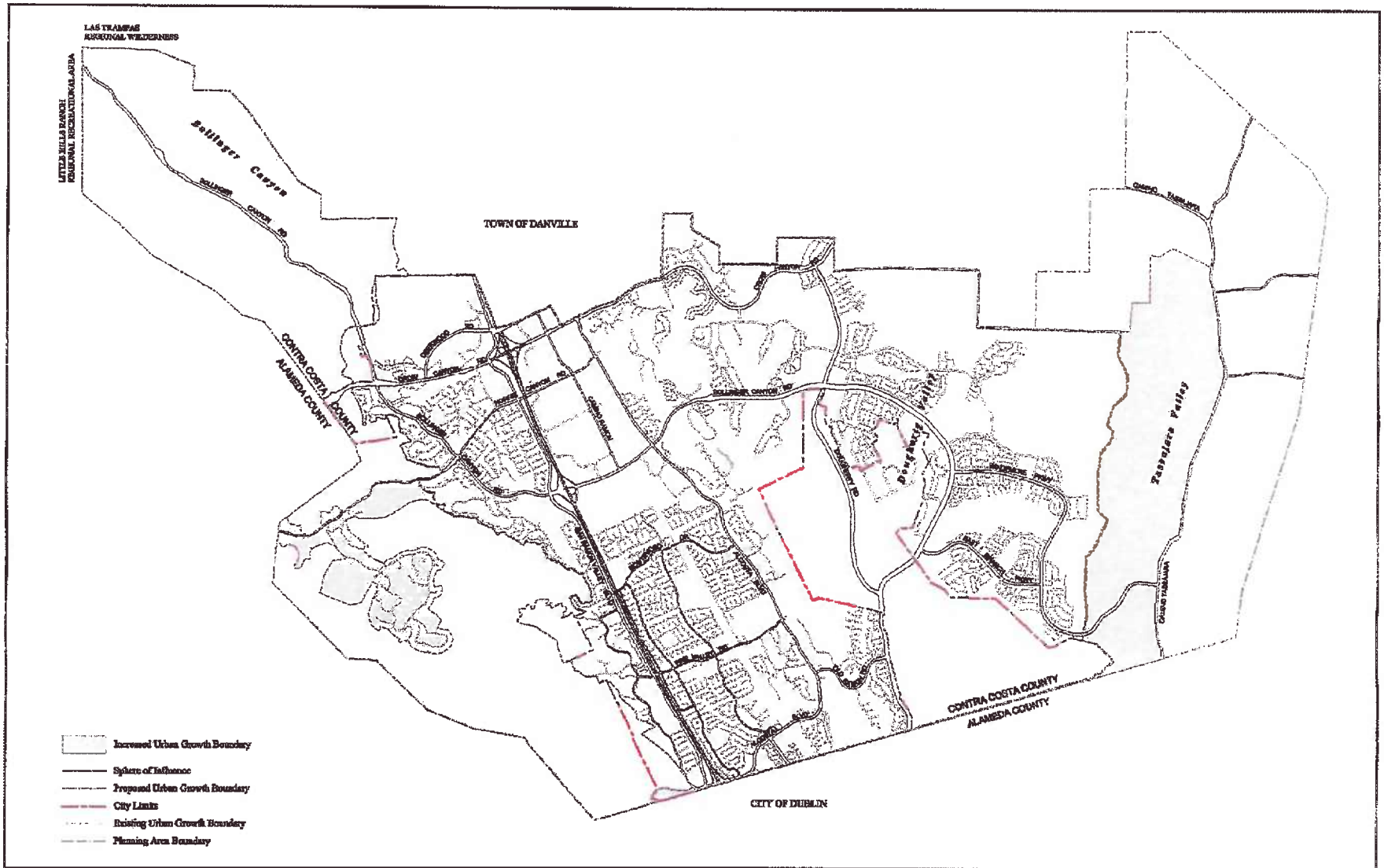
Exhibit 2
Existing General Plan Map



Source: City of San Ramon Planning Department, Planning Area and Urban Growth Boundaries (January 5, 2010).

NORTH 6,000 3,000 0 6,000 Feet

Michael Brandman Associates

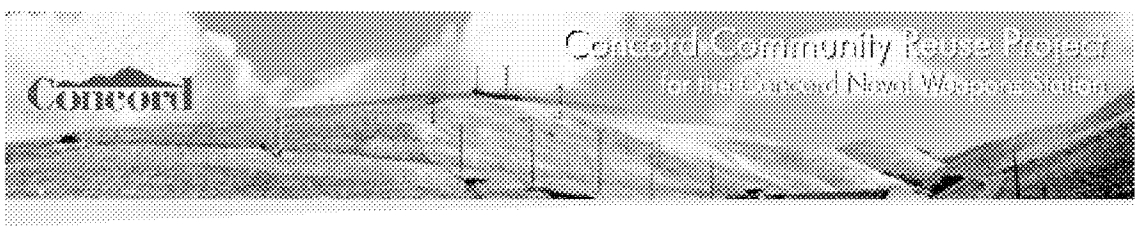
24910012 • 01/2010 | 2_UGB.ai

Exhibit 3
Proposed Urban Growth Boundary Adjustment

Andy Dillard

From: Barbara Neustadter [bantrans@sbcglobal.net]
Sent: Wednesday, January 13, 2010 4:41 PM
To: Julie Pierce; Guy Bjerke; Supervisor Susan Bonilla; David Durant; Cindy Silva; Mark Ross; Bob Armstrong; Diana Vavrek; Jon Malkovich; Michael Murray; Robert Hoag; 'DHeitma@bart.gov; Eric Hu; Corinne Dutra-Roberts; Lynn Osborn Overcashier; Julie Campero; Ray Kuzbari; TIM TUCKER; David Woltering; Jeremy Lochirco; Andy Dillard; Christina Atienza; John Cunningham; Leah Greenblat (E-mail)
Subject: [Fwd: Reuse Project Final EIR available Jan. 15]

-------- Original Message --------
Subject: Reuse Project Final EIR available Jan. 15
Date:13 Jan 2010 14:46:42 -0800
From: Reuse.Project@ci.concord.ca.us
To:bantrans@sbcglobal.net



Reuse Project Final EIR available Jan. 15

In January 2009, the Concord City Council, sitting as the Local Reuse Authority, designated a preferred reuse plan alternative for the Concord Community Reuse Project (CCRP) and directed staff to conduct further environmental impact review under the California Environmental Quality Act.

A draft Revised EIR was released for public review on August 28, 2009. Public comments were received through October 26, 2009.

A Final EIR will be released Friday, January 15. The Final EIR is composed of three volumes of material:

1. Final EIR with track notations reflecting changes to the project summary, impact analyses, and mitigations.
2. Response to Comments on the May 2008 draft EIR
3. Response to Comments on the August 2009 draft Revised EIR

The Concord City Council, sitting as the Local Reuse Authority, will consider these documents, staff recommendations and take public input on the CCRP at its regularly scheduled City Council meetings Tuesday, February 9 and Tuesday, February 23. Council action to certify the Final EIR and adopt the Reuse Plan is not anticipated until the February 23 meeting. Both meetings will start at 6:30 p.m. and will be held in the Council Chambers at Civic Center, 1950 Parkside Drive.

On Friday, January 15, copies of the Final EIR documents will be mailed to members of the public who have requested them.

City offices are closed Jan. 15 for a furlough day and Jan. 18 for the Martin Luther King, Jr. holiday. Printed and electronic copies of the documents will be available beginning Saturday January 16 at the Concord Public Library and Tuesday, January 19 at the Civic Center offices.

A compact disc containing all three documents can be obtained at the Reuse Project Office at 1950 Parkside Dr. Bldg A, Concord, Calif. or by calling Pamela Laperchia at (925) 671-3001 on January 19.

The documents will be posted to the Reuse Project website at concordreuseproject.org as soon as possible.

Please contact Michael Wright, Director of Community Reuse Planning, with questions at michael.wright@ci.concord.ca.us or (925) 671-3019.