TRANSPAC Transportation Partnership and Cooperation

Clayton, Concord, Martinez, Pleasant Hill, Walnut Creek and Contra Costa County
2300 Contra Costa Boulevard, Ste. 360 Pleasant Hill, CA 94523 (925) 969-0841 FAX (925) 969-9135

TRANSPAC MEETING NOTICE AND AGENDA
THURSDAY, FEBRUARY 11, 2010
9:00 AM TO 11:30 AM in the
COMMUNITY ROOM
CITY OF PLEASANT HILL CITY HALL
100 GREGORY LANE
PLEASANT HILL

TRANSPAC reserves the right to take formal action on any item included on this agenda, whether or not a form of resolution, motion or other indication that action will be taken is included on the agenda or attachments thereto.

1. **Convene meeting: Pledge of Allegiance/Self-Introductions**

2. **Public Comment**

   At this time, the public is welcome to address the Committee on any item not on this agenda. Please complete a speaker card and hand it to a member of the staff. Please begin by stating your name and address and indicate whether you are speaking for yourself or an organization. Please keep your comments brief. In fairness to others, please avoid repeating comments made by others and observe any time limits that may be announced.

3. **CONSENT AGENDA**

   Approval of the December 10, 2009 minutes (attachment)

   END CONSENT AGENDA

4. **Presentation on SR 4 and SR 24 Corridor System Management Plans (CSMP) – 40 minutes (attachments)**

   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 mechanism through which to maximize the State's investment in the corridor, via an assessment of current and future performance, identification of bottleneck locations and causes, and recommendation of a prioritized set of improvements to address the problem locations. SR-4 and SR-24 are part of the CSMP process based on the CMIA-funded Route 4 East Widening and the Caldecott Tunnel Fourth Bore projects, respectively. These two efforts were

initiated in the summer of 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 (including the Alameda County CMA on Route 24).

Freeway Performance Initiative: MTC's (Regional Transportation Plan) 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 major freeway corridors in the Bay Area, based on performance and cost-effectiveness. MTC, along with its consultant PBS&J, has been working in tandem with the Caltrans CSMP effort on SR-4 and SR-24 to develop a prioritized list of system management strategies and associated projects for these two corridors.

The FPI's approach to the corridor analysis includes a look 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;
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 been reviewed by the C-TAC as well as the TRANSPAC TAC (February 28, 2010) and are now being forwarded to TRANSPAC and other RTPCs for review.

Please note that the CSMP reports will be forwarded to the California Transportation Commission (CTC) by Caltrans and that MTC will use the analyses as part of the development of the Regional Transportation Plan (RTP). In Contra Costa, it also is anticipated that this information will be used in RTPC and CCTA planning processes.

Issues and comments offered by the TRANSPAC TAC included: merge issues on EB SR 4 to SB 680 need to be addressed including a review of accident data in this location (not included in the CSMP); the focus on ramp metering throughout both the SR 4 and SR 24 corridors was noted and Caltrans will convene a working group to discuss how ramp metering might be operated; how will parking at eBART stations be operated (only for eBART patrons or for general carpool formation and/or bus patrons?); in the SR 24 corridor, additional upstream BART parking is noted as an "Other Congestion Mitigation Strategy" (the freeway, not transit, is the focus of the study, not the specifics of providing additional parking at BART stations; based on study information, it appears that additional carpool parking at the Lafayette BART station is warranted as is the establishment of carpool parking at the Orinda BART station; other access mechanisms (shuttles, remote lots, etc.) should also be assessed for viability.

Comments on the technical documents are to be forwarded to CCTA by February 12, 2010.

The revised Draft CSMPs are expected to be released by Caltrans in February 2010, with final documents released in spring 2010.

ACTION: With thanks to CALTRANS, MTC, CCTA staff, and Tom Biggs, PBS&J consultants accept/offer comments on the CSMP reports for transmittal to CCTA and/or as determined

5. **Review of the Proposed General Plan Amendment (GPA) Review Process - 15 minutes (attachment)**

Attached are slides of an overview of the GPA review process which will be presented by Martin Engelmann, CCTA's Deputy Executive Director for Planning. Also attached is a December 2, 2009 CCTA Memo transmitting the proposed GPA Review process to Contra Costa Planning Directors and Transportation /Land Use Planners for comment.

Please note that behind the GPA report in the packet are three pages which describe specific issues of concern (highlighted) regarding steps 3, 12, 13 and 14 raised by County staff. County staff notes are outside the text boxes. On February 28, 2010, the TRANSPAC TAC reviewed the current GPA proposal and the County staff comments. The TAC's proposed revisions are shown in red on the same pages. From the TAC's perspective, these seemingly minor edits are necessary to ensure the clarity of the GPA process.

Comments are due to CCTA by February 12, 2010. RTPC comments will be sent to the General Plan Amendment Task Force for review and possible proposed revisions to the GPA language for consideration. Please also note that revisions to the Central County Action Plan and possibly other RTPC Actions Plans are expected to be necessary to incorporate the final revised GPA process.

ACTION: With thanks to Mr. Engelmann, accept/revise the TAC recommendations on language revisions to the GPA review process and/or as determined

6. **TRANSPAC and CCTA Representatives are requested to report on the most recent CCTA Administration and Projects Committee (Member Pierce), Planning Committee (Member Durant), and CCTA meetings (Members Pierce and Durant) [attachments]**

"Items approved by the Authority on December 16, 2009 and January 20, 2010 for Circulation to the Regional Transportation Planning Committees (RTPCs), and items of interest", the December 16, 2009 CCTA meeting minutes and the January 20, 2010 Executive Director's Report are attached.

ACTION: As determined

7. **Reports from Staff and Committees - information - 10 minutes (attachments)**

a) 511 Contra Costa report by Corinne Dutra-Roberts, Senior Transportation Analyst. Please also see attached 1/8/10 Clayton Pioneer article, "Local Commuter opts for two-wheeled transportation from Clayton to Lafayette" and 12/22/09 press release, 511 Contra Costa awarded a national Safe Routes to School Grant (attachments)

b) Update on Pacheco Transit Hub maintenance funding. At its December 10, 2009 meeting, TRANSPAC considered CCCTA's request to participate in funding the annual $30,000 maintenance cost for the new facility. TRANSPAC approved $15,000 annually and established a five year project review timeline. TRANSPLAN had already approved an allocation of $5,000 per

year for the life of Measure J and on December 11, 2009, WCCTAC approved $5,000 for three years. The remaining $5,000 was unfunded.

On January 4, 2010, Caltrans indicated that CCCTA can request permission to charge for parking at Caltrans lots provided that revenues are used for maintenance and operations. BART and AC Transit have recently obtained this permission. CCCTA staff filed its request on January 4, 2010. (attachment)

TRANSPAC and 511 Contra Costa staff plan on assisting County Connection in determining a parking fee collection/enforcement mechanism. Please note that the County and CCCTA are also expected to confer about possible Transit Hub parking fee impacts to on-street parking on Blum Road.

ACTION: Accept the 511 Contra Costa report, other reports and/or as determined

8. **TAC Staff Reports: Update on local jurisdiction and agency transportation projects since the last TRANSPAC meeting – 15 minutes (note: these are oral reports)**

ACTION: Accept reports and/or as determined

9. **Correspondence/Copies/Newsclips/Information - 5 minutes**

12/7/09 SWAT status letter to CCTA; 1/29/10 and 12/14/09 WCCTAC status letter to CCTA; 12/22/09 Chair Ross' TRANSPAC status letter to CCTA; 12/22/09 TRANSPAC Manager thank you letter to Tian Feng, BART District Architect; 1//25/10 TRANSPLAN status letter to CCTA; **CCTA:** January 2010 Project Status Report; **County Connection Reports:** December 2009 and November 2009 Fixed Route Operating Reports, 12/29/09 Fare Payment by Type, December 209 and November 2009 LINK Monthly Operating Reports; 12/30/09 LINK Transfer Trips Update.

Contra Costa Times: 1/23/10 "Vacaville's electric-vehicle guru moves on"; **San Francisco Chronicle:** 1/7/10 "A fast track to your wallet"; **San Francisco Examiner:** 1/3/10 "Rebranding TransLink"; **Oakland Tribune (Inside Bay Area):** 1/23/10 Editorial: "Study shows California's highways are a failure"; **Bay Area Council:** 12/3/09 "Bay Area Economy Finally Hits Bottom, According to Bay Area Council Survey.

ACTION: As determined

A meeting break may be called at the discretion of the Chair

10. **Election of TRANSPAC Chair and Vice Chair for the 2010 term commencing immediately - 10 minutes**

ACTIONS:
10. A. Election of TRANSPAC Chair for the 2010 term

10. B. Election of TRANSPAC Vice Chair for the 2010 term

10. C. Acknowledgment of Chair Ross' year of service as 2009 Chair

11. **TRANSPAC Appointment to the Contra Costa Transportation Authority for the 2010-12 term -10 minutes (attachment for items 11 and 12)**

NOTE: Pursuant to the TRANSPAC Joint Agreement, Section VI (e) (3) which is consistent with the CCTA Administrative Code, only elected officials may vote on this item
Appointment/reappointment of a TRANSPAC CCTA Representative for the 2010-12 term commencing February 1, 2010. Member Pierce currently holds this appointment.

ACTION: Appointment/reappointment of a TRANSPAC Representative to CCTA for the 2010 - 12 term commencing February 1, 2009.

12. **Appointment of TRANSPAC CCTA alternate(s) for the CCTA representative appointed to the 2010-12 term - 10 minutes**

NOTE: Pursuant to the TRANSPAC Joint Agreement, Section VI, (e) (3) which is consistent with the CCTA Administrative Code, only elected officials may vote on this item.

Appointment of TRANSPAC CCTA Alternates pursuant to the CCTA Administrative Code:

a) First alternate: Each TRANSPAC CCTA representative is the alternate for the other CCTA Representative when the assigned TRANSPAC representative cannot attend a standing CCTA Committee meeting (Administration and Projects Committee or Planning Committee).

b) Second alternate: The second named alternate for each TRANSPAC CCTA Representative will attend CCTA Committee and/or Board meetings or other necessary functions in the event that an appointed TRANSPAC CCTA representative is unable to do so. The current second alternate also may serve for both CCTA representatives. Member Silva is the current second designated alternate for both TRANSPAC CCTA representatives.

c) Third alternate: A third alternate may be appointed to serve if the designated second alternate(s) are not available. Member Bjerke is the current designated third alternate for both TRANSPAC CCTA representatives.

ACTIONS: 1) Continue current alternate second and third alternate appointments for the CCTA Representative appointed for the 2010-12 term; or
2) Appoint a designated second alternate for the CCTA Representative appointed for the 2010-11 term; and/or
3) Appoint a third alternate to serve if the second alternate(s) is not available

Please note that CCTA has a requirement that CCTA representative(s) notify the CCTA 72 hours in advance if unable to attend a scheduled meeting. The representative(s) is responsible to inform alternate(s) that the appointed CCTA representative(s) is unable to attend a meeting or function. Please note that TRANSPAC staff (Manager and Administrative Assistant) have traditionally handled CCTA notification and determined if an alternate is available to attend a meeting.

13. **For the Good of the Order (attachment) – 10 minutes**

- Clip and save 2010 TRANSPAC Meeting calendar – (attachment)
- An updated TRANSPAC roster will be distributed by e-mail after this meeting

- At the March 11, 2010 TRANSPAC meeting, Martin Engelmann, CCTA staff will provide an update on SB 375 Implementation: including a Proposed Scope of Work, Update on Guiding Principles, Appointments to the Joint Policy CEO and Working Group Committees

14. **Adjournment. The next TRANSPAC meeting is scheduled for March 11, 2010 at 9 a.m. in the Community Room, City Hall, City of Pleasant Hill unless otherwise determined.**

TRS 2 11 10

SUMMARY MINUTES
TRANSPAC Meeting – December 10, 2009

ATTENDANCE:
Elected Officials: Mark Ross, Martinez, TRANSPAC Chair; Cindy Silva, Walnut Creek, TRANSPAC Vice Chair; Julie Pierce, Clayton, CCTA Representative; David Durant, Pleasant Hill, CCTA Representative; Guy Bjerke, Concord. Absent: Susan Bonilla, Contra Costa County.
Planning Commissioners: Bob Armstrong, Clayton; Diana Vavrek, Pleasant Hill; Matt Francois for Jon Malkovich, Walnut Creek; Bob Hoag, Concord; Michael Murray, Contra Costa County. Vacant Seat: Martinez
Staff: Ray Kuzbari, Concord; Tim Tucker, Martinez; Deidre Heitman, BART; Martin Engelmann, CCTA; Eric Hu, Pleasant Hill; Jeremy Lochirco, Walnut Creek; Cindy Dahlgren, County Connection; Lynn Overcashier, Corinne Dutra-Roberts, 511 Contra Costa; Barbara Neustadter, Connie Peterson, TRANSPAC staff.

Meeting convened with a quorum by Chair Ross at 9:02 a.m.

1. **Convene meeting: Pledge of Allegiance/Self-Introductions - completed**

2. **Public Comment** – Gene DeMar stated that he was concerned about the impact that the Buskirk Avenue Project might have on the oak trees along Hookston and Iron Horse Trail bike access. He asked about the status of the review of the plans and if the public will have an opportunity to comment. Eric Hu said that this is tied to the realignment project, and plans are still in design and have not been released to the public. A series of public meetings will be conducted to give the public time to address City staff within the next six months.

3. **CONSENT AGENDA: Pierce/Silva/unanimous**
   Approved the November 12, 2009 minutes
   END CONSENT AGENDA

4. **Presentation by Tian Feng, BART District Architect, on Measure J Projects at Central County BART Stations**

   Deidre Heitman conveyed Director Gail Murray's apologies for not being able to attend TRANSPAC today due to the need to attend a previously unscheduled BART Board meeting. She introduced Tian Feng, who presented an overview of BART's plans for various improvements to Central County BART stations funded with Central County Measure J funds. Mr. Feng discussed some new ideas for station enhancements that focused on wayfinding, which strives to ensure that all patrons can easily access and use the transit system. BART is involved in a cooperative partnership with MTC to work on connectivity improvements.

   Mr. Feng's presentation described how the Embarcadero station is serving as the wayfinding improvement pilot project, using a series of standard directional signs with consistent colors and pictograms. BART is developing real-time information display prototypes including solar-powered kiosks located at key decision points and transit information displays. He noted that the LED solar-powered signs also require less maintenance.

   Mr. Feng continued with an overview of the proposed schedule and the budget, as well as examples of how the wayfinding elements will come together in all the Contra Costa stations. Mr. Feng said that wayfinding makes mobility options stronger and should make the system not only functional, but also be enjoyable and more equal to driving. Member Pierce said it was a good presentation and that wayfinding elements will be of help to her personally as well as to the general public.

   ACTION: With thanks to Mr. Feng, the report on Central County BART station improvements was accepted.

5. **Pacheco Transit Hub maintenance funding request presented by Cindy Dahlgren, Director of Administration, County Connection**

At its November 19, 2009 meeting, the TAC recommended that TRANSPAC consider approving an allocation of $15,000 per year for Pacheco Transit Hub maintenance, funded from TRANSPAC's Measure J line item 28, "Subregional Transportation Needs", provided that WCCTAC also approves a $10,000 annual allocation. TRANSPLAN has already approved an allocation of $5,000 per year for the life of Measure J. In addition, the TAC recommended that TRANSPAC review the project in ten years to assess project performance and to determine if there are any other fund sources to cover the cost of the RTPCs' contribution for maintenance funding.

Cindy Dahlgren described how the Pacheco Transit Hub is fully funded for construction, but County Connection is responsible for maintenance per the cooperative agreement with Caltrans. Her presentation outlined the design and layout that will accommodate bus bays, increase the number of park and ride spaces, as well as provide access for the current tenant and the eventual building of the new interchange to the east of the Hub site. In this transit hub there will be amenities such as lighting, landscaping, bike racks and shelters. It was assumed that Measure J could be used Express Bus money to help support the facility, but this is no longer an option. The Hub cannot be built without the commitment to fund maintenance costs. County Connection is actively seeking other sources of funding, but is asking the subregions for contributions to support this facility.

In the discussion, Bob Hoag asked why TRANSPAC is being asked to pay for half the cost of maintenance, and what will happen when costs increase. Ms. Dahlgren said this amount was determined based on the fact that that Central County will be the major beneficiary and should pay the largest portion. It is understood that costs will increase over time and County Connection is looking at other sources of funding.

Michael Murray asked if any consideration had been given to options for advertising or some other kind of revenue model that might offset the cost. Ms. Dahlgren said advertising such as in shelters or billboards has not been considered. Member Silva asked about the possibility of charging for parking, estimating that a $1/day parking fee would nearly pay for the cost of maintenance for a year. Ms. Dahlgren said that because this is a state owned property, Caltrans policy does not allow it. Member Silva agreed that this arrangement is acceptable for the first year in order to get approval, but would like charging for parking to be considered. Member Bjerke noted that Caltrans is charging their current tenant, and asked if the facility was designed with the anticipation that the tenant will leave at some point. Ms. Dahlgren said that when Interchange improvements are built, the tenant will leave. Chair Ross mentioned the development of a nearby CNWS transit hub, and it was noted that that the two transit hubs would probably serve different demographics.

Member Durant clarified that the concept of improving the transportation system means getting people out of their cars and into express buses, which is not done now because the system is not easy or accessible. CCCTA needs money for funds to implement this project, which could have a big impact and serve as a model of how to do it for similar facilities.

Ms. Dahlgren said that WCCTAC will consider a funding request tomorrow. However, it is possible that WCCTAC may reduce the amount it is willing to contribute. Lynn Overcashier suggested that Solano County also should be approached if it is going to use the hub.

ACTION: Approved $15,000 annually from Measure J line item 28 "Subregional Transportation Needs", established a five year project review timeline, and agreed to continue to work with County Connection on the implementation of this project. Durant/Bjerke/unanimous

6. 2009 Strategic Plan Update

The TRANSPAC TAC reviewed the final version of the Strategic Plan at its November 19, 2009 meeting and recommended approval. It was noted that Central Contra Costa's programming had not changed since last spring at the start of the Strategic Plan process.

ACTION: Approved the 2009 Strategic Plan. Bjerke/Pierce/unanimous

7. TRANSPAC and CCTA Representatives' Reports. Items approved by the Authority on November 18, 2009 for Circulation to the Regional Transportation Planning Committees (RTPCs), and items of interest as well as the October 21, 2009 CCTA Summary Meeting minutes were included in the packet.

a. CCTA meeting
Member Pierce reported that CCTA authorized the APC to hire search consultant Roberts Consulting to help find its new Executive Director. Resumes and applications will be received by early to mid-January, with an offer being extended by February. In the meantime, Paul Maxwell has been appointed Interim Executive Director. The Board discussed the Strategic Plan as well as the rewritten Mission, Vision and Values statement.

b. Administration and Projects Committee (APC) meeting
Member Pierce reported that the APC did not receive a legislative report this month. The Authority got a clean audit this year. The APC received a report on the Caldecott tunnel project, and approved agreements with Parsons for design support services and with PB Americas for construction management services. The 2009 Strategic Plan is expected to be approved after review by the RTPCs.

c. Planning Committee (PC) meeting
Member Durant reported that the Planning Committee discussed programming for STIP Transportation Enhancement funds and recommended funding for Pleasant Hill South End Pedestrian and Bicycle Safety Improvement Project, the Monument Corridor Pedestrian and Bikeway Pathway, and the BART Wayfinding Project. The PC was advised of the schedule of review for the Initial Measure J Growth Management Program (GMP) Biennial Compliance Checklist. Also discussed was the development of Guiding Principles for Implementation of SB375, noting that the Shaping Our Future principles could serve as a building block for these principles. The Authority's legal counsel will review questions raised by Save Mt. Diablo regarding Measure J Urban Limit Line requirements. The final 2009 Congestion Management Program was approved and forwarded to the next Authority Board for adoption. Member Pierce asked all cities to look carefully at the Measure J General Plan Review Amendment process which has been circulated to all the cities as it will be voted on soon. Member Pierce also urged all Planning Directors to attend the next Planning Directors meeting on Friday, at which ABAG staff will discuss SB375.

ACTION: Reports received

8. Reports from Staff and Committees

a. Lynn Overcashier, Program Manager of 511 Contra Costa reported that the MTC 511 Regional Rideshare Program has requested cities in which a BART/Caltrain station is located identify a point person to be part of an emergency plan for relaxing parking standards adjacent to the BART station. 511 Contra Costa has offered to assist with information dissemination and working with jurisdictions. It was recommended that MTC contact the County as the Pleasant Hill BART Station is in an unincorporated area. When this topic was discussed at the November 19th TAC meeting, it did not generate a great interest in developing an emergency plan for parking. 511 Contra Costa is trying to work with MTC on other elements of the

emergency toolkit plan. Establishing the ability to bag meters, lift parking restrictions or to take the actions necessary in a municipal code is determined at the local level and is not MTC's decision.

b. Meeting Schedule and Roster – TRANSPAC was asked to advise of any changes.

c. General Plan Amendment – The TAC will consider it again in January and TRANSPAC will review it on February 11 and any comments should be forwarded as soon as possible.

d. The unveiling of the electric charging station will follow this meeting. Chair Ross will speak briefly at this event.

ACTION: Reports accepted

9. **TAC Staff Reports on local jurisdiction and agency transportation projects.**

Ray Kuzbari, Concord, reported that the slide repair project on Ygnacio Valley Road is about 99% complete. Some overlay work is still required, but will be done at off peak hours to minimize the impact on traffic. The concrete divider will remain for safety reasons.

Cindy Dahlgren, County Connection, thanked the City of Concord and Ray Kuzbari, who was instrumental in getting the great transit accommodations and pedestrian access required for the building of the Lowe's center on Arnold Industrial Way. She also reported that the groundbreaking DVC transit center was held on November 17, and project construction is underway.

Tim Tucker, Martinez, reported that the City has opened the bids for the Marina Vista TLC project and will break ground in about three months. Property and business owner workshops were conducted at the beginning of project. The project includes amenities such as bike lanes, enhanced sidewalks and crosswalks, and decorative street lights. In addition, the bike lane gap will be finished.

Eric Hu, Pleasant Hill, reported that the Buskirk project is still in design approval and will soon begin public meetings with residents to inform them what's going on. The first step in construction will be the underground utilities.

Jeremy Lochirco, Walnut Creek, reported on an adaptive signal timing project on Ygnacio Valley Road in which detection cameras will be installed to replace several loop detectors. The technology will adjust signal timing and will affect all signals between I-680 and Oak Grove. Red light violation cameras are not included in this project.

ACTION: Reports accepted

10. **Correspondence/Copies/Newsclips/Information - Accepted**

11. **For the Good of the Order**
Chair Ross said that the Air District is considering revamping CEQA guidelines to make the requirements stricter. The Air District has notified Planners of upcoming planning sessions where it will be discussed. Member Pierce requested that the information be forwarded to Barbara Neustadter.

12. **The meeting was adjourned at 10:50 a.m.** The next TRANSPAC meeting is scheduled for February 11, 2010 at 9 a.m. in the Community Room, City Hall, City of Pleasant Hill.

State Route 4

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

TRANSPAC Board Meeting

February 11, 2010

Caltrans

METROPOLITAN TRANSPORTATION COMMISSION

Introduction

SR 4 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:

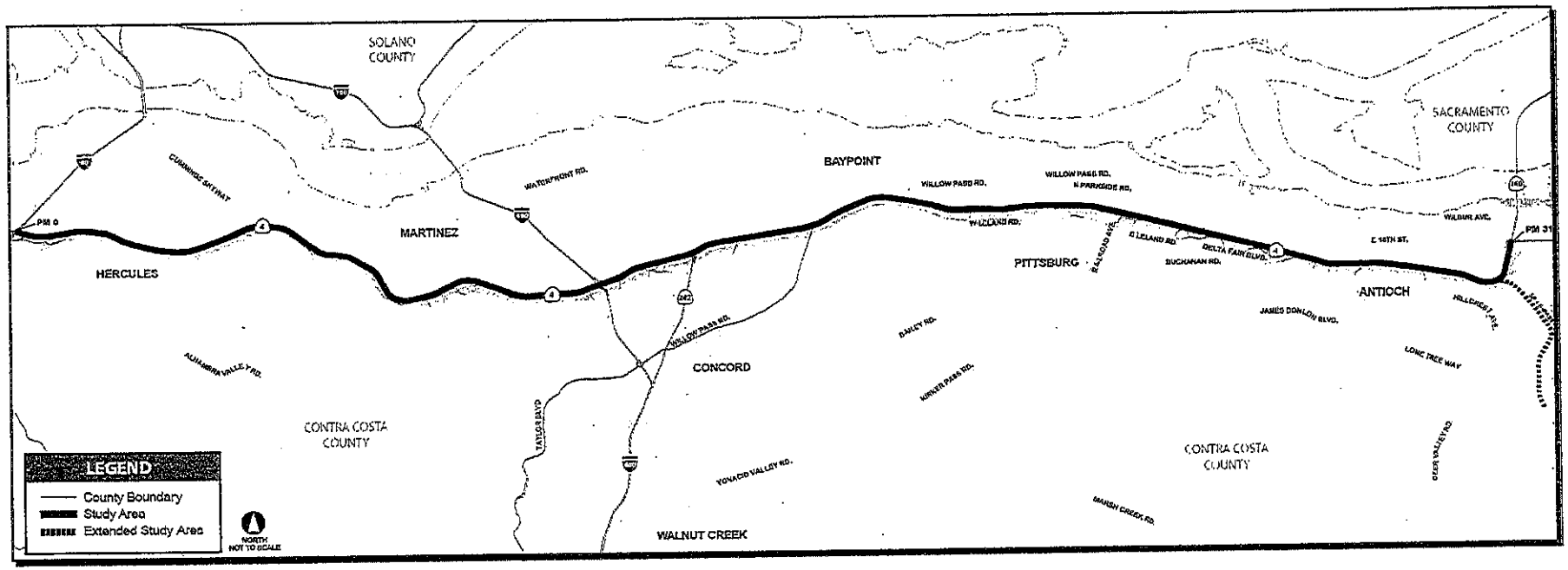
- Based on cost-effectiveness analysis

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 4 Corridor. Members included CCTA, local agency representatives, and BART.

SR 4 Corridor

Study Area



Slide 5

SR 4 Corridor

Existing Conditions

PBS&J

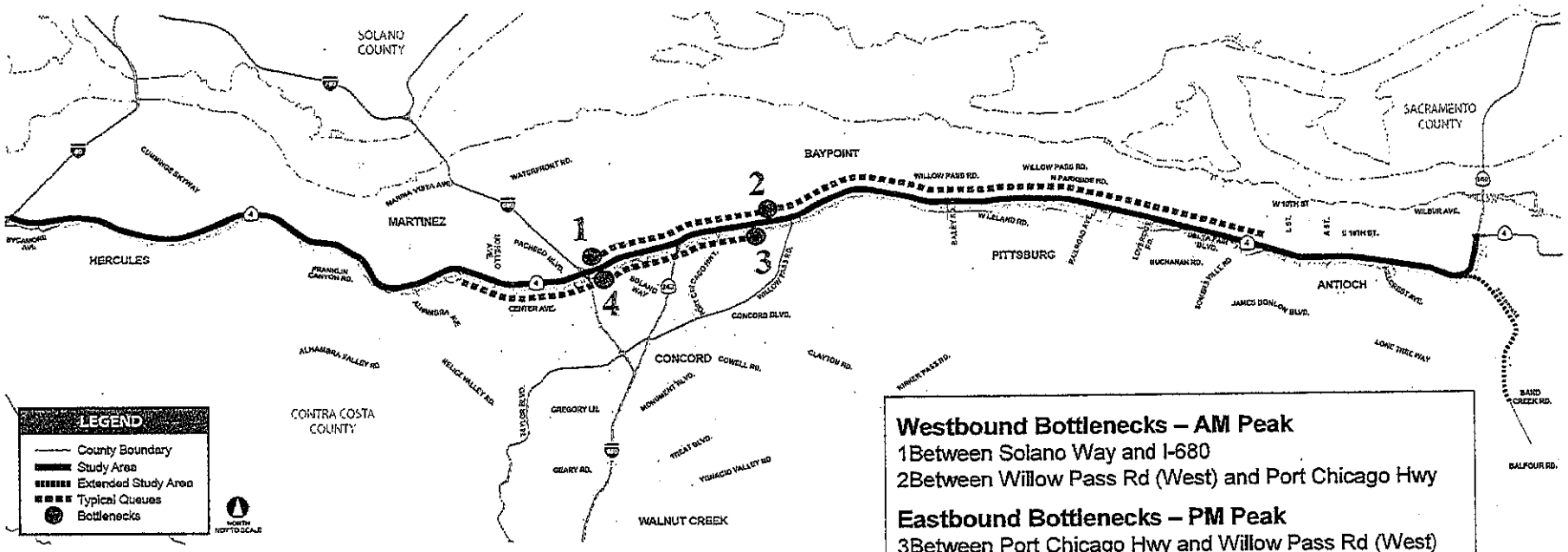
- **Highway Travel Characteristics**
  - 40,000 to 160,000 vehicles per day; 4% to 7% are trucks.
  - Average peak hour vehicle occupancy is 1.3 persons per vehicle.
  - 20% of auto trips in the corridor are HOV 2+ eligible.
- **Transit Service**
  - 19% of peak hour person trips are made via BART.
  - BART parking lot at Pittsburg/Bay Point fills-up at 6:30 am;
    North Concord/Martinez remains below capacity throughout the day.
  - Other transit service accounts for approximately 10% of peak hour person trips.
- **ITS Features**
  - ITS coverage is approximately 10% of Caltrans' standards;
    concentration of coverage east of I-680.
  - Caltrans has recently made substantial progress in filling detection gaps.

SR 4 Corridor

Congestion Mitigation Strategies – Short Term (2015)

Committed Improvements only

- **Westbound AM Peak Hour travel time will increase from 1:07 to 1:20 for 33-mile corridor**
- **Eastbound PM Peak Hour travel time will increase from 0:49 to 1:06 for 33-mile corridor**



Westbound Bottlenecks – AM Peak
1Between Solano Way and I-680
2Between Willow Pass Rd (West) and Port Chicago Hwy

Eastbound Bottlenecks – PM Peak
3Between Port Chicago Hwy and Willow Pass Rd (West)
4Between Solano Way and I-680

SR 4 Corridor

Congestion Mitigation Strategies – Short Term (2015)

Package A

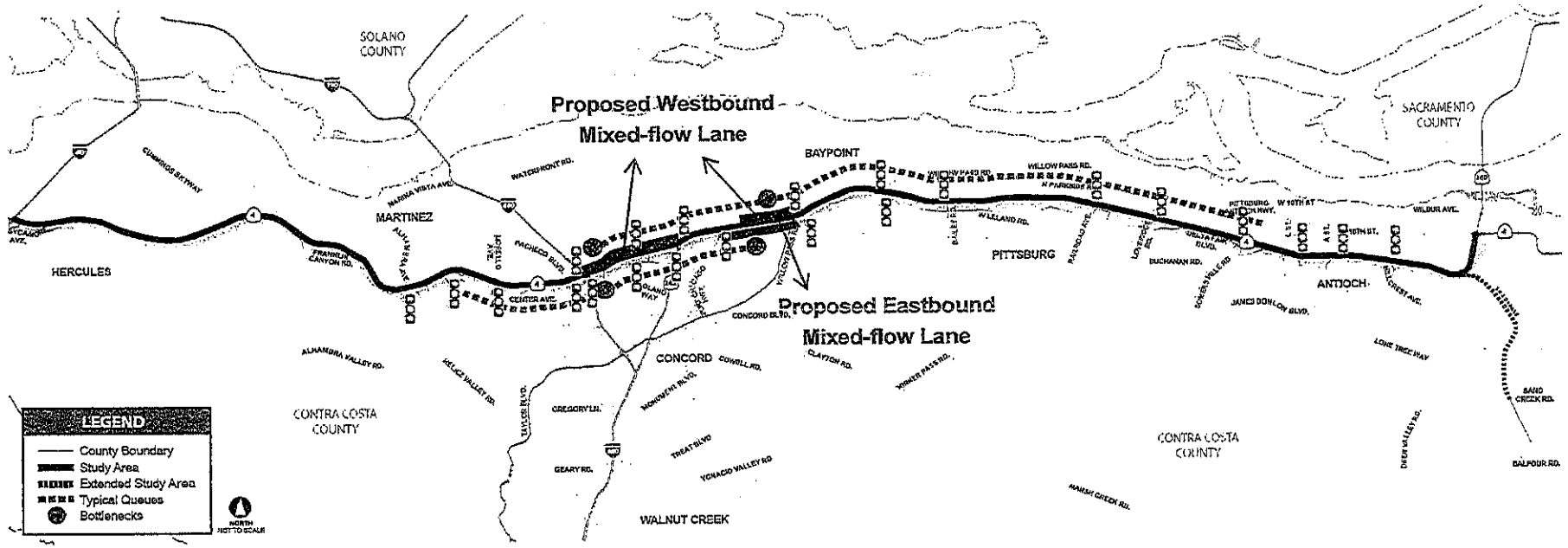
- Activate existing ITS.
- Fill gaps in ITS coverage as needed.

Package B

- WB ramp metering from SR 160 to I-680.
- WB mixed-flow lane from SR 242 to I-680.
- Extend WB mixed-flow lane from Willow Pass Rd (W) to Port Chicago Hwy.

Package C

- EB ramp metering from Alhambra Ave to Willow Pass Rd (E).
- Extend EB mixed-flow lane from Pt Chicago to Willow Pass Rd (W).



Reduction in Peak-Direction Delay	**Vehicle Hours**	12,900 hrs - 11,010 hrs = 1,890 hrs	85 % reduction
	Person Hours	14,800 hrs – 12,820 hrs = 1,980 hrs	87 % reduction

SR 4 Corridor

Congestion Mitigation Strategies – Long Term (2030)

Package D

- Extend WB mixed-flow lane from 0.7 mi east of Willow Pass Rd (E) to Willow Pass Rd (W).

Package E

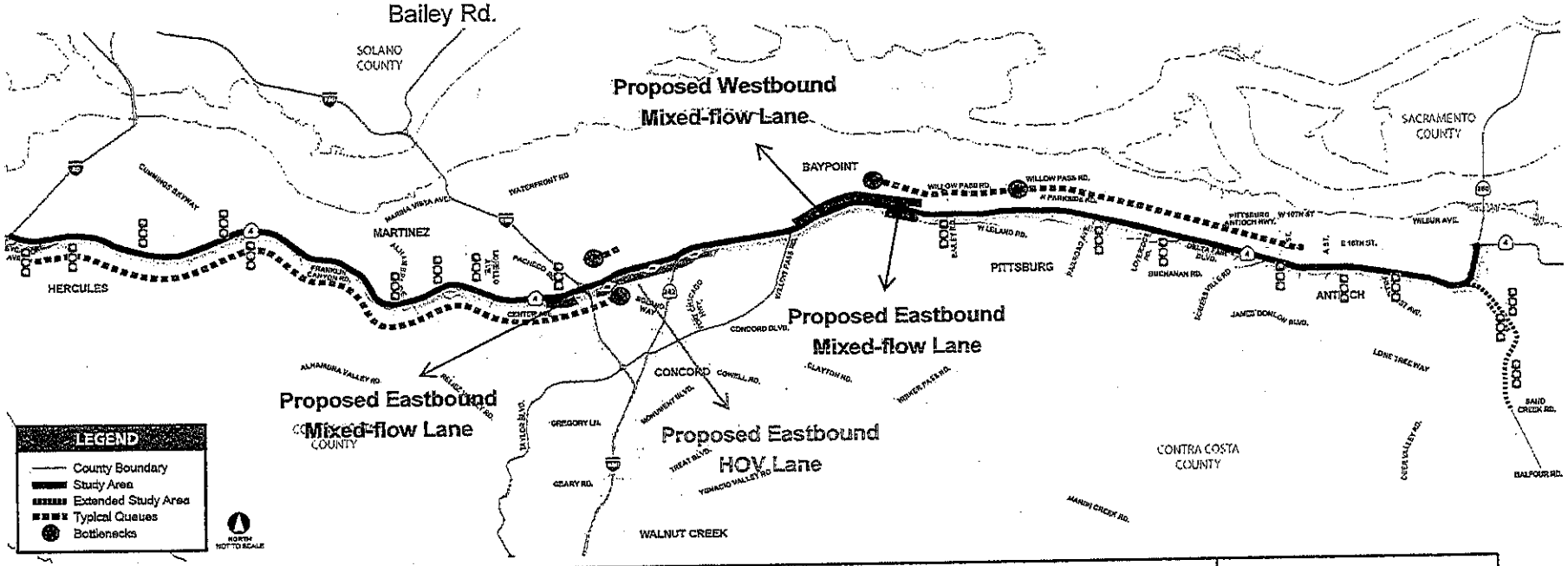
- Extend EB mixed-flow lane from 0.3 mi west of Pacheco Blvd to Pacheco Blvd.
- Extend EB HOV lane from I-680 to its start 0.1 mi east of the SR 4/SR 242 merge.
- Extend EB mixed-flow lane from Willow Pass Rd (E) to lane add 0.5 mi west of Bailey Rd.

Package F

- WB ramp metering on the SR 4 Bypass and from I-680 to I-80.

Package G

- EB ramp metering from I-80 to Alhambra Ave, from Willow Pass Rd (E) to SR 160 and on the SR 4 Bypass.



Reduction in Peak-Direction Delay	Vehicle Hours	24,900 hrs – 17,500 hrs = 7,400 hrs	70 % reduction
	Person Hours	28,600 hrs – 20,830 hrs = 7,770 hrs	73 % reduction

Other Congestion Mitigation Strategies

Transit Enhancements

- Additional BART parking capacity.
- Increased bus transit access to the BART stations within the SR 4 Corridor.
- Improvements to existing park-and-ride stations and new park-and-ride stations at proposed eBART stations
- 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%.

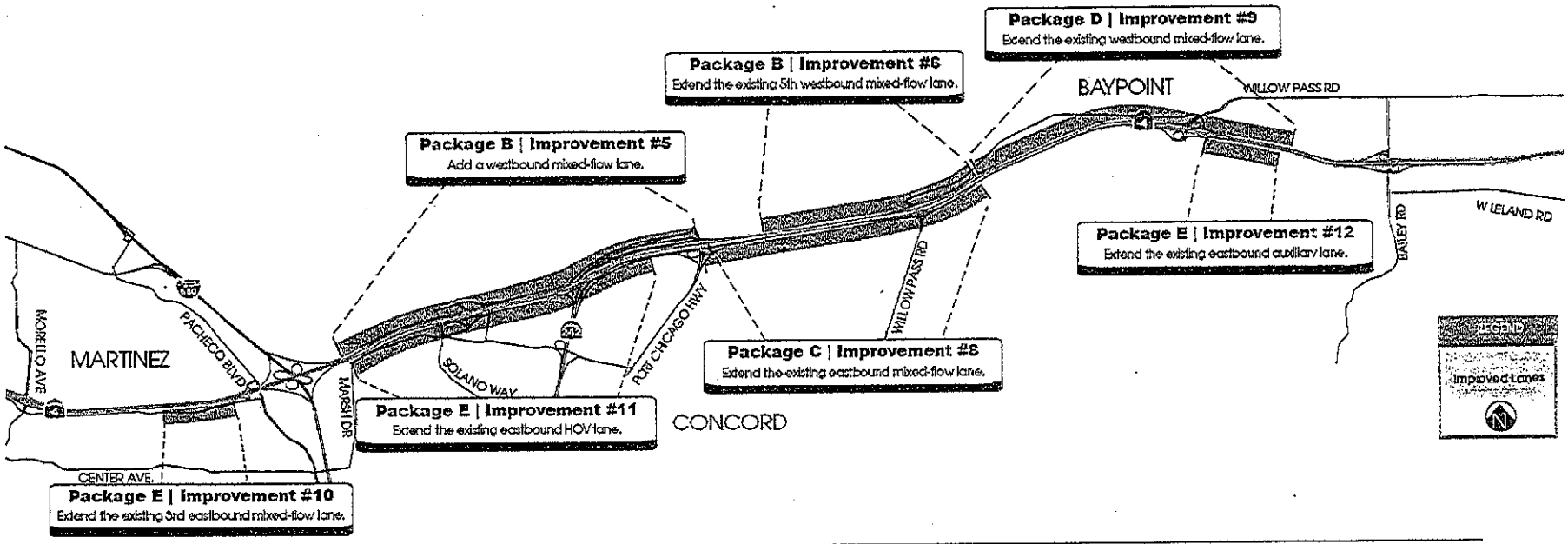
Express Lanes

- The limits of the SR 4 Express Lanes proposed in MTC's Regional Express Lane Network would extend from I-680 to SR 160.
- Express Lanes on SR 4 would utilize the existing and programmed HOV lanes to utilize any available surplus capacity.

SR 4 Corridor

Summary/Key Findings

- INCREASED CAPACITY: Packages B and C ranked the highest, addressing westbound and eastbound congestion approaching the SR 242 and I-680 interchanges.
- ITS ENHANCEMENTS: Package A also ranked high providing the full coverage of ITS technology and system management needed to address non-recurrent delay and safety.
- With the exception of ramp metering, no additional congestion mitigation strategies are proposed for the eastern portion (i.e., east of Bailey Rd) or the western portion (i.e., west of the I-680 Interchange) of the SR 4 Corridor.
- Congestion in the vicinity of the I-680 Interchange will affect the western portion of the corridor between I-80 and I-680 if not mitigated.



SR 4 Corridor

Summary/Key Findings

- ITS is a cost-effective strategy to address non-recurrent delay and manage system performance.
- Ramp metering can preserve mobility gains and improve freeway performance without negative consequences.
- Capacity improvements are focused on key bottlenecks between I-680 and Bailey Road.
- Transit strategies and Express Lanes should be evaluated in more detail.

PBSJ

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 4 Corridor in Contra Costa County

Prioritized 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 4 Corridor in Contra Costa County

Prioritized Congestion Mitigation Strategies Technical Memorandum

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Introduction

This report presents the cost-effectiveness analysis and prioritization of congestion mitigation strategies for the State Route 4 (SR 4) Corridor in Contra Costa County 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 4 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 10: Express Lane Mitigation Strategy.** Discussion of express lanes as a potential mitigation strategy.

Section 1: Key Findings

The cost-effectiveness analysis and the subsequent prioritization of congestion mitigation strategies along the SR 4 Corridor through Contra Costa County evaluated a total of 14 Improvements grouped into seven packages. These seven packages represent approximately 228 million hours of life-cycle benefits and $212 million in life-cycle costs.

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

Short-term Package Ranking

1. **Package B (Short-term, Westbound):**
   - Improvement #4: Implement ramp metering in the westbound direction on SR 4 between SR 160 and I-680.
   - Improvement #5: Add a westbound mixed-flow lane from the SR 242 off-ramp to the I-680 NB off-ramp.
   - Improvement #6: Extend the existing westbound mixed-flow lane from the Willow Pass Road (West) off-ramp to the lane-add located 4,200 feet west of the Willow Pass Road (West) on-ramp.

2. **Package C (Short-term, Eastbound):**
   - Improvement #7: Implement ramp metering in the eastbound direction between Alhambra Avenue and Willow Pass Road (East).[1]
   - Improvement #8: Add an eastbound mixed-flow lane from the lane drop located 1,500 feet west of Port Chicago Highway on-ramp to the Willow Pass Road (West) on-ramp.

3. **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-80 and I-680, and along the SR 4 Bypass.

Long-term Package Ranking

1. **Package G (Long-term, Eastbound):**
   - Improvement #14: Implement ramp metering in the eastbound direction between I-80 and Alhambra Avenue, between Willow Pass Road (East) and SR 160, and on the SR 4 Bypass.[2]

2. **Package E (Long-term, Eastbound):**
   - Improvement #10: Extend the existing eastbound mixed-flow lane from the lane drop located to 1,500 feet west of the Pacheco Boulevard off-ramp to the Pacheco Boulevard off-ramp.
   - Improvement #11: Extend the existing eastbound HOV lane from the I-680 NB off-ramp its start 3,000 feet west of the Port Chicago Highway on-ramp.
   - Improvement #12: Extend the existing eastbound mixed-flow lane from the Willow Pass Road (East) on-ramp to the lane add located 4,000 feet east of the Willow Pass Road (East) on-ramp.

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

2 Although listed here as a long-term strategy, some benefit may be gained by accelerating the implementation of ramp metering in the eastbound direction between Willow Pass Road (East) and SR 160 in that it would address congestion that will not be alleviated until construction of the SR 4 East Widening Project is completed.

3. **Package D (Long-term, Westbound):**

   - Improvement #9: Extend the existing westbound mixed-flow lane from the lane drop located 3,500 feet east of the Willow Pass Road (East) off-ramp to the Willow Pass Road (West) off-ramp.

4. **Package F (Long-term, Westbound):**

   - Improvement #13: Implement ramp metering in the westbound direction on the SR 4 Bypass and on SR 4 between I-680 and I-80.

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.

In addition to the freeway mitigation strategies, a package of short-term and long-term transit mitigation strategies, Package H, is also included. These unranked transit mitigation improvements are listed below and discussed further in Section 9.

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

- Improvement #15: eBART.
- Improvement #16: Additional BART parking capacity.
- Improvement #17: Increased bus transit access to the BART stations.
- Improvement #18: Improvements to existing park-and-ride facilities in Martinez (Pacheco Boulevard), Antioch (Hillcrest Avenue), and Pittsburg (Bliss Avenue), as well as investment in new park-and-ride facilities at proposed/potential eBART stations.
- Improvement #19: BART system-wide operational improvements.

Section 2: Proposed Congestion Mitigation Strategies

Congestion mitigation strategies for the SR 4 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 C are short-term improvement packages, and Packages D through G are long-term improvement packages. Those strategies that entail physical expansion of SR 4 to accommodate new HOV or mixed-flow facilities are illustrated in Appendix A.[3]

Exhibit 2-1: Proposed Mitigation Improvements on SR 4

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-80 and I-680, and along the SR 4 Bypass.
B	2015	WB	4	Implement ramp metering in the westbound direction on SR 4 between SR 160 and I-680.
			5	Add a westbound mixed-flow lane from the SR 242 off-ramp to the I-680 NB off-ramp.
			6	Extend the existing westbound mixed-flow lane from the Willow Pass Road (West) off-ramp to the lane-add located 4,200 feet west of the Willow Pass Road (West) on-ramp.
C	2015	EB	7	Implement ramp metering in the eastbound direction between Alhambra Avenue and Willow Pass Road (East).
			8	Add an eastbound mixed-flow lane from the lane drop located 1,500 feet west of Port Chicago Highway on-ramp to the Willow Pass Road (West) on-ramp.
D	2030	WB	9	Extend the existing westbound mixed-flow lane from the lane drop located 3,500 feet east of the Willow Pass Road (East) off-ramp to the Willow Pass Road (West) off-ramp.
E	2030	EB	10	Extend the existing eastbound mixed-flow lane from the lane drop located to 1,500 feet west of the Pacheco Boulevard off-ramp to the Pacheco Boulevard off-ramp.
			11	Extend the existing eastbound HOV lane from the I-680 NB off-ramp to its start 3,000 feet west of the Port Chicago Highway on-ramp.
			12	Extend the existing eastbound mixed-flow lane from the Willow Pass Road (East) on-ramp to the lane add located 4,000 feet east of the Willow Pass Road (East) on-ramp.
F	2030	WB	13	Implement ramp metering in the westbound direction on the SR 4 Bypass and on SR 4 between I-680 and I-80.
G	2030	EB	14	Implement ramp metering in the eastbound direction between I-80 and Alhambra Avenue, between Willow Pass Road (East) and SR 160, and on the SR 4 Bypass.

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 4 Corridor in Contra Costa County 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 4 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 4 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 4 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 signifies 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.

Costs

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

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 4 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 4 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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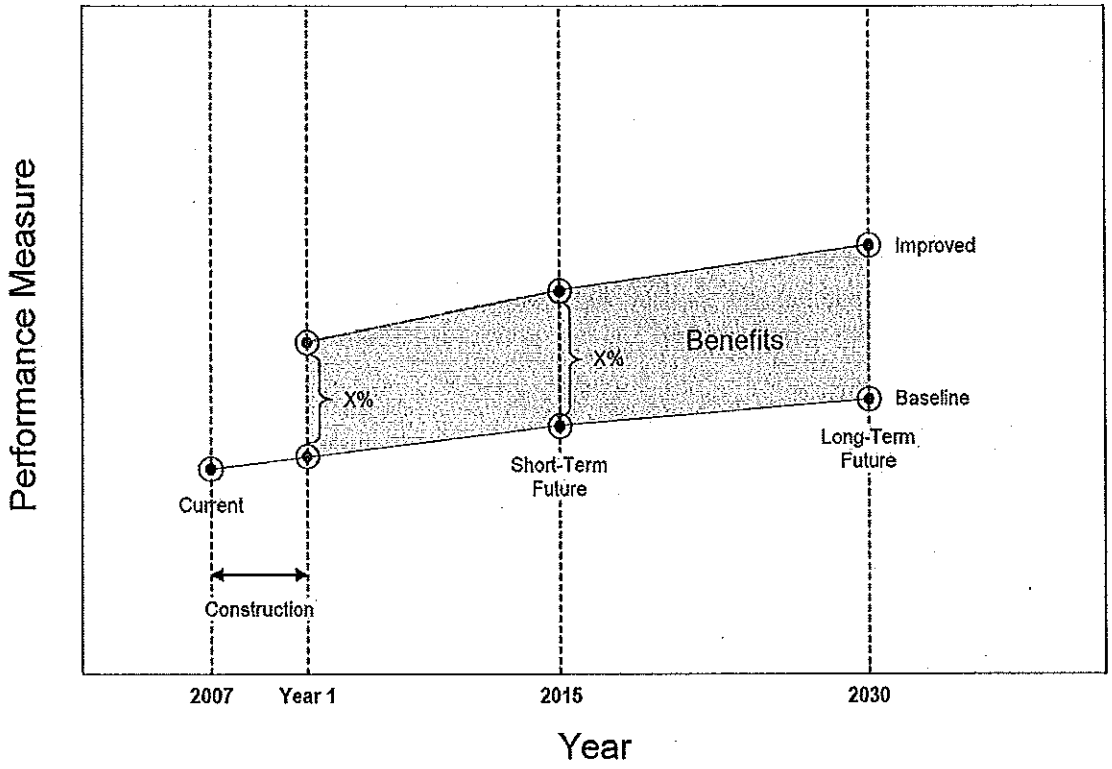
9 http://sv08data.dot.ca.gov/contractcost/

10 Committed projects are the (1) *SR 4 East Widening Project (Loveridge Road to SR160)*, and (2) Segments 1 and 2 of the SR 4 Bypass.

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	FREQ	Manual Calculation (based on IDAS methodology)
Mixed-Flow Lane		
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, mixed-flow 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 4 – Westbound – AM Peak Hour

Measure (Full Analysis Area – 33 miles)	SR 4 Westbound - AM Peak Hour						
	Baseline			Improved			
	2007	2015	2030	2015	Change	2030	Change
Veh. Hours of Travel (VHT)	3,700	5,300	7,800	2,400	-55%	3,400	-56%
Veh. Miles of Travel (VMT)	91,000	111,000	101,000	123,000	+11%	146,000	+45%
Average Speed (mph)	28 (HOV: 40)	25 (HOV: 49)	14 (HOV: 42)	52 (HOV: 58)	+108% (HOV: +18%)	43 (HOV: 56)	+207% (HOV: +33%)
Delay Index (free-flow speed of 60 mph / average speed)	2.1 (HOV: 1.5)	2.4 (HOV: 1.2)	4.3 (HOV: 1.4)	1.2 (HOV: 1.0)	---	1.4 (HOV: 1.1)	---
Average Corridor Travel Time (h:mm)	1:07 (HOV: 0:47)	1:20 (HOV: 0:41)	2:26 (HOV: 0:48)	0:39 (HOV: 0:34)	-51% (HOV: -17%)	0:46 (HOV: 0:36)	-68% (HOV: -25%)
Total Delay (VHT for speeds less than 60 mph)	2,180	3,440	6,190	430	-88%	1,060	-83%
Congestion Delay (VHT for speeds less than 35 mph)	1,690	2,730	5,450	190	-93%	570	-90%
Miles of Congested Segments (Speeds less than 35 mph)	8.0	12.0	17.0	2.0	-83%	5.0	-71%

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

Measure (Full Analysis Area – 33 miles)	SR 4 Eastbound - PM Peak Hour						
	Baseline			Improved			
	2007	2015	2030	2015	Change	2030	Change
Veh. Hours of Travel (VHT)	3,000	3,900	6,800	2,800	-28%	4,900	-28%
Veh. Miles of Travel (VMT)	118,000	132,000	142,000	137,000	+4%	162,000	+14%
Average Speed (mph)	38 (HOV: 45)	31 (HOV: 32)	13 (HOV: 13)	46 (HOV: 46)	+48% (HOV: +44%)	28 (HOV: 29)	+115% (HOV: +123%)
Delay Index (free-flow speed of 60 mph / average speed)	1.6 (HOV: 1.3)	1.9 (HOV: 1.9)	4.6 (HOV: 4.6)	1.3 (HOV: 1.3)	---	2.1 (HOV: 2.1)	---
Average Corridor Travel Time (h:mm)	0:49 (HOV: 0:42)	1:06 (HOV: 1:04)	2:32 (HOV: 2:29)	0:44 (HOV: 0:44)	-33% (HOV: -31%)	1:13 (HOV: 1:09)	-52% (HOV: -54%)
Total Delay (VHT for speeds less than 60 mph)	1,040	1,780	4,550	630	-65%	2,310	-49%
Congestion Delay (VHT for speeds less than 35 mph)	690	1,400	4,030	430	-69%	1,770	-56%
Miles of Congested Segments (Speeds less than 35 mph)	3.5	6.5	16.0	2.5	-62%	10.5	-34%

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

Measure (Full Analysis Area – 33 miles)	SR 4 Westbound - AM Peak Period						
	Baseline			Improved			
	2007	2015	2030	2015	Change	2030	Change
Veh. Hours of Travel (VHT)	11,000	16,500	22,700	8,700	-47%	11,700	-48%
Veh. Miles of Travel (VMT)	359,000	446,000	459,000	482,000	+8%	560,000	+22%
Average Speed (mph)	38 (HOV: 45)	34 (HOV: 53)	26 (HOV: 45)	54 (HOV: 58)	+59% (HOV: +9%)	48 (HOV: 57)	+85% (HOV: +27%)
Delay Index (free-flow speed of 60 mph / average speed)	1.6 (HOV: 1.3)	1.8 (HOV: 1.1)	2.3 (HOV: 1.3)	1.1 (HOV: 1.0)	---	1.3 (HOV: 1.1)	---
Average Corridor Travel Time (h:mm)	0:53 (HOV: 0:42)	1:05 (HOV: 0:38)	1:35 (HOV: 0:44)	0:37 (HOV: 0:34)	-43% (HOV: -11%)	0:42 (HOV: 0:35)	-56% (HOV: -20%)
Total Delay (VHT for speeds less than 60 mph)	5,170	9,270	15,140	1020	-89%	2,680	-82%
Congestion Delay (VHT for speeds less than 35 mph)	3,720	7,000	12,270	340	-95%	1,250	-90%
Miles of Congested Segments (Speeds less than 35 mph)	1.0 - 8.0 (Avg. 5.0)	3.0 - 12.0 (Avg. 8.5)	7.0 – 17.0 (Avg. 13.0)	0.0 - 2.0 (Avg. 1.0)	-88%	0.5 – 5.0 (Avg. 2.5)	-81%

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

Measure (Full Analysis Area – 33 miles)	SR 4 Eastbound - PM Peak Period						
	Baseline			Improved			
	2007	2015	2030	2015	Change	2030	Change
Veh. Hours of Travel (VHT)	10,200	12,100	19,400	9,900	-18%	15,100	-22%
Veh. Miles of Travel (VMT)	444,000	532,000	594,000	545,000	+2%	643,000	+8%
Average Speed (mph)	43 (HOV: 47)	44 (HOV: 45)	28 (HOV: 29)	53 (HOV: 53)	+20% (HOV: +18%)	41 (HOV: 43)	+46% (HOV: +48%)
Delay Index (free-flow speed of 60 mph / average speed)	1.4 (HOV: 1.3)	1.4 (HOV: 1.3)	2.1 (HOV: 2.1)	1.1 (HOV: 1.1)	---	1.5 (HOV: 1.4)	---
Average Corridor Travel Time (h:mm)	0:44 (HOV: 0:40)	0:49 (HOV: 0:47)	1:31 (HOV: 1:28)	0:38 (HOV: 0:38)	-22% (HOV: -19%)	0:54 (HOV: 0:51)	-41% (HOV: -42%)
Total Delay (VHT for speeds less than 60 mph)	2,980	3,580	9,780	1,210	-66%	4,700	-52%
Congestion Delay (VHT for speeds less than 35 mph)	1,900	2,430	8,070	590	-76%	3,330	-59%
Miles of Congested Segments (Speeds less than 35 mph)	1.5 – 3.5 (Avg. 2.0)	1.0 – 6.5 (Avg. 4.0)	4.0 – 16.0 (Avg. 10.0)	0.0 – 2.5 (Avg. 1.0)	-75%	0.5 – 10.5 (Avg. 5.0)	-50%

Exhibit 4-5: Locations of Bottlenecks and Recurrent Congestion on SR 4 - Baseline Conditions, 2007 (No Improvements)

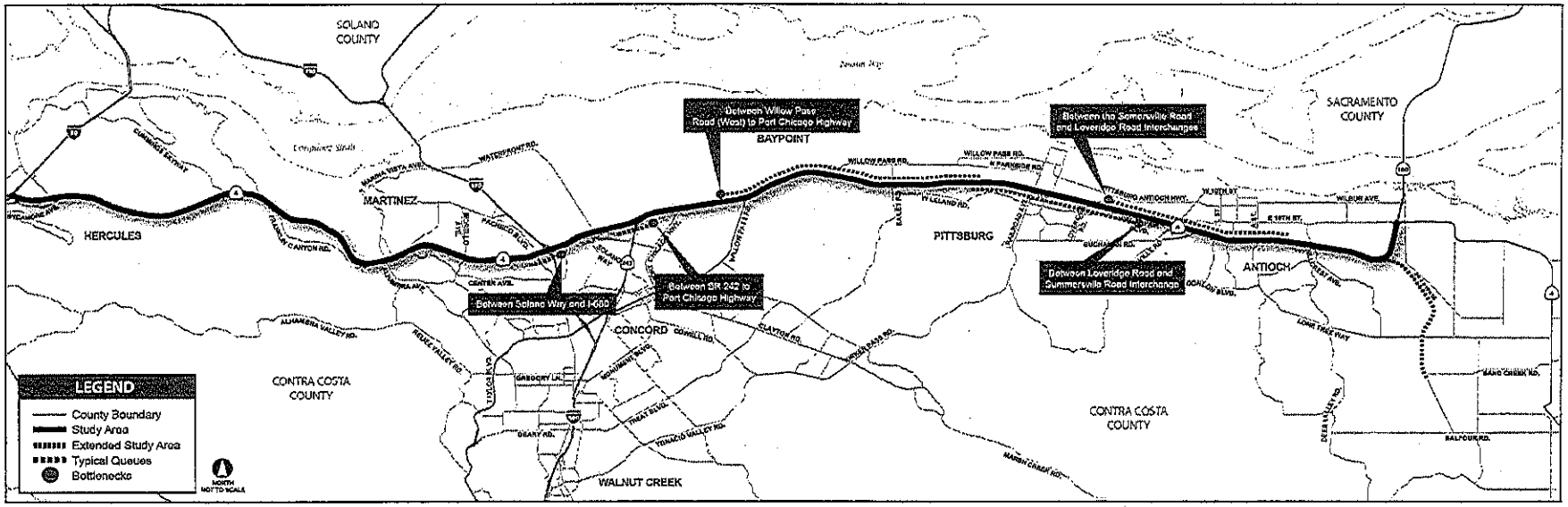


Exhibit 4-6: Locations of Bottlenecks and Recurrent Congestion on SR 4 - Baseline Conditions, 2015 (Committed Improvements)

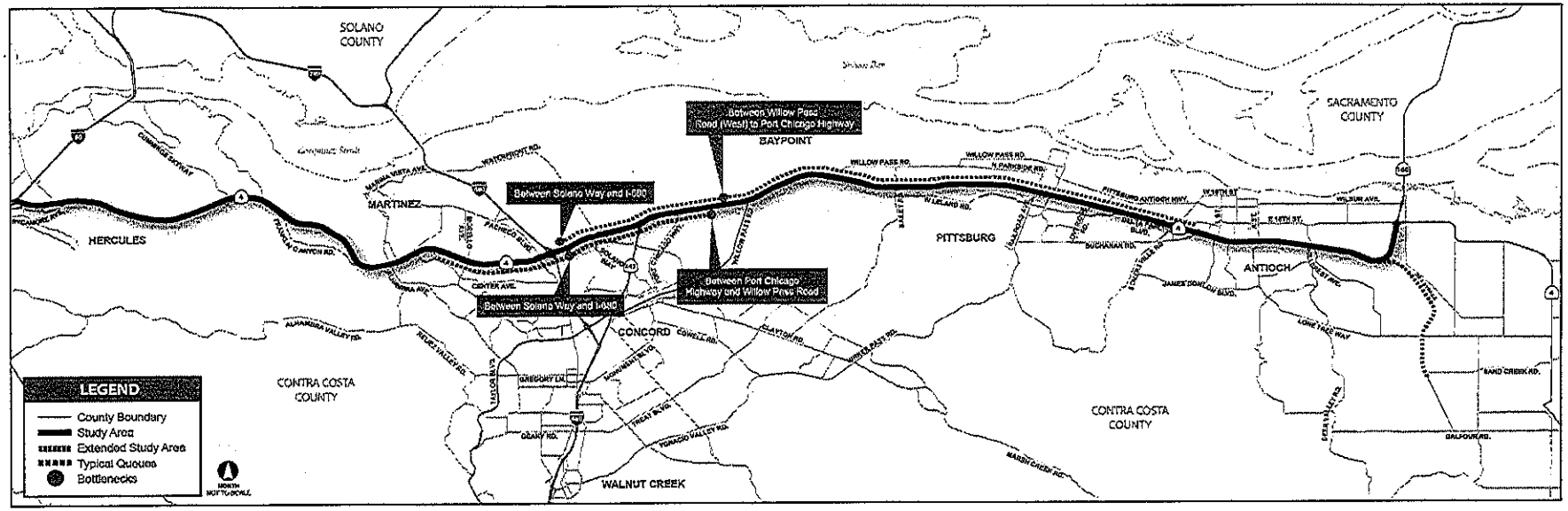


Exhibit 4-7: Locations of Bottlenecks and Recurrent Congestion on SR 4 - Improved Conditions, 2015 (Committed Improvements + Short-Term Strategies)

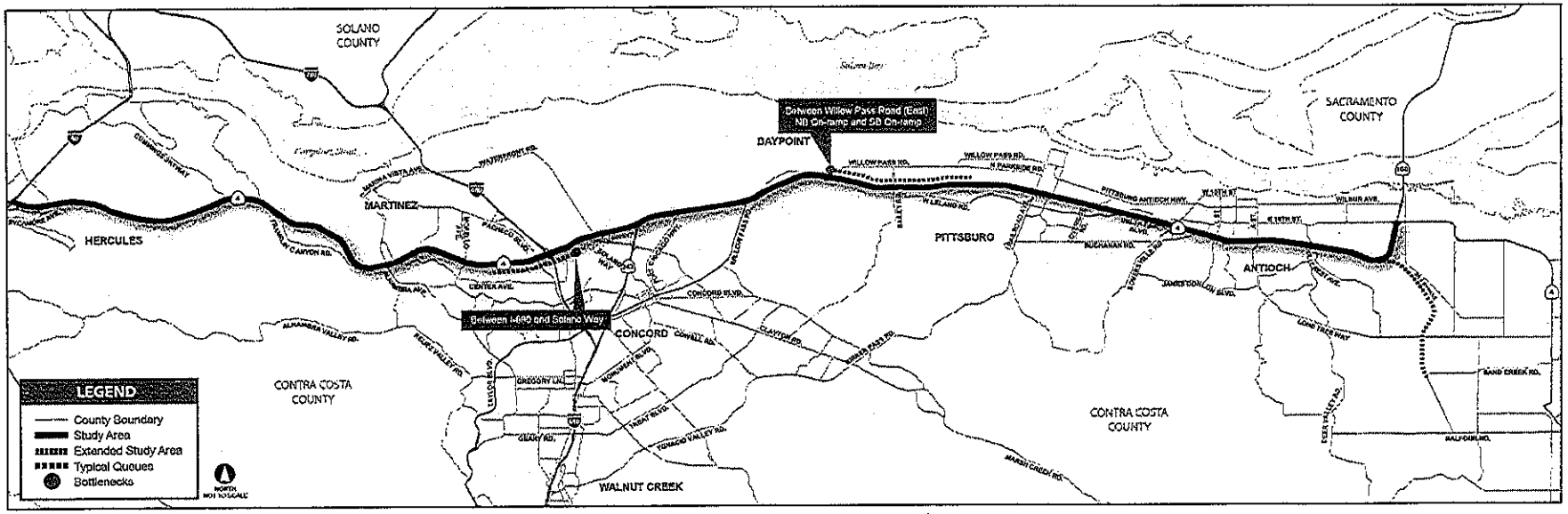


Exhibit 4-8: Locations of Bottlenecks and Recurrent Congestion on SR 4 - Baseline Conditions, 2030 (Committed Improvements)

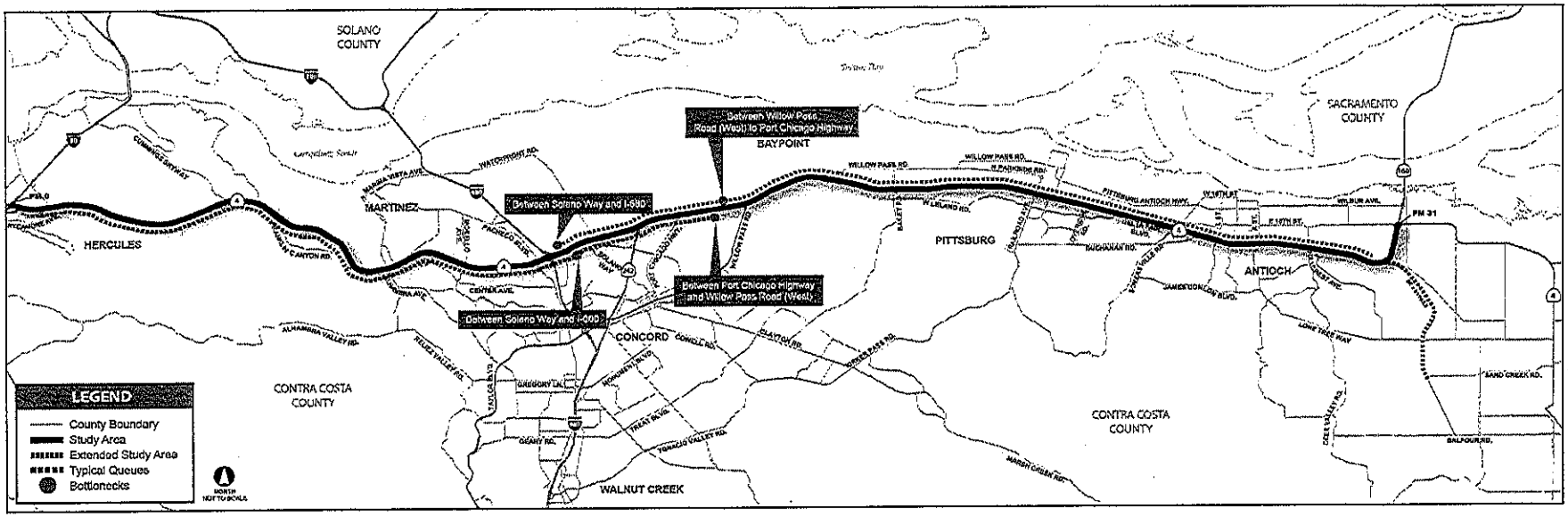
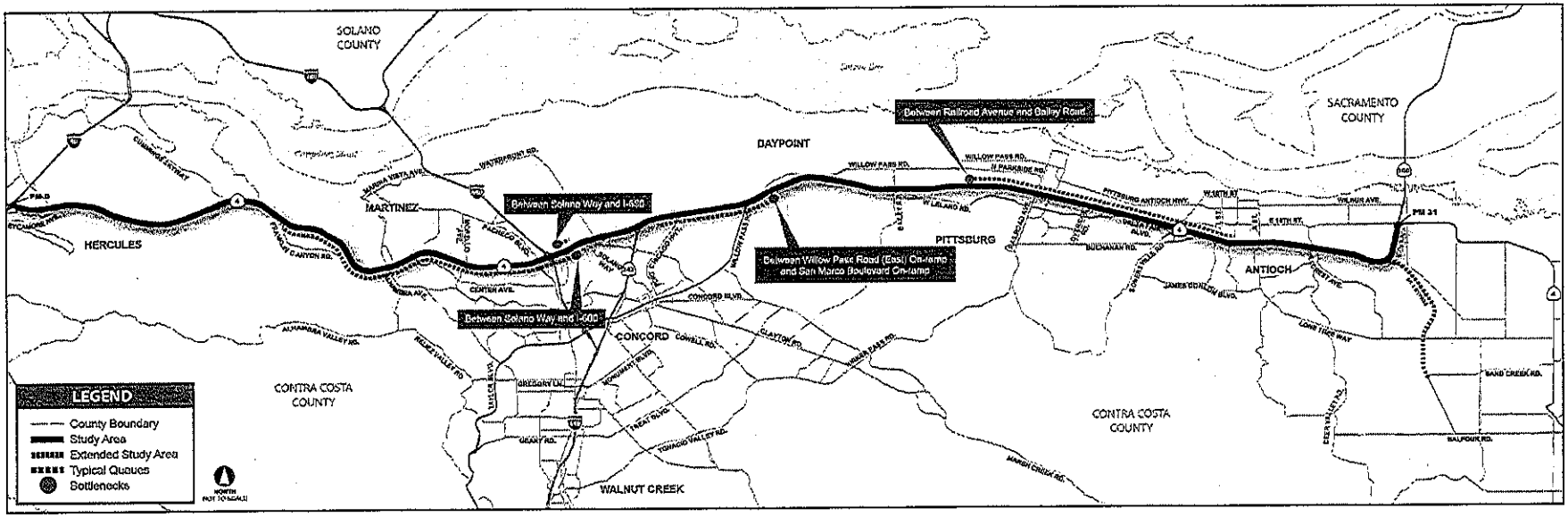


Exhibit 4-9: Locations of Bottlenecks and Recurrent Congestion on SR 4 - Improved Conditions, 2030 (Committed Improvements + Short-Term Strategies + Long-Term Strategies)



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., Loveridge Road on-ramp to Somersville Road off-ramp) and then summed for the entire SR 4 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 (per-hrs saved)	Reliability (per-hrs saved)	TOTAL (per-hrs saved)
A	2015	Both	1	Activate existing ITS installations that currently are not fully operational.	0	11,480,000	34,440,000
			2	Assess gaps in the current and programmed ITS installations and supplement as needed.			
			3	Extend ITS coverage to fill the gap between I-80 and I-680, and along the SR 4 Bypass.			
B	2015	WB	4	Implement ramp metering in the westbound direction on SR 4 between SR 160 and I-680.	77,809,000	7,243,000	99,538,000
			5	Add a westbound mixed-flow lane from the SR 242 off-ramp to the I-680 NB off-ramp.			
			6	Extend the existing westbound mixed-flow lane from the Willow Pass Road (West) off-ramp to the lane-add located 4,200 feet west of the Willow Pass Road (West) on-ramp.			
C	2015	EB	7	Implement ramp metering in the eastbound direction between Alhambra Avenue and Willow Pass Road (East).	22,324,000	5,270,000	38,134,000
			8	Add an eastbound mixed-flow lane from the lane drop located 1,500 feet west of Port Chicago Highway on-ramp to the Willow Pass Road (West) on-ramp.			
D	2030	WB	9	Extend the existing westbound mixed-flow lane from the lane drop located 3,500 feet east of the Willow Pass Road (East) off-ramp to the Willow Pass Road (West) off-ramp.	2,926,000	5,011,000	17,959,000
E	2030	EB	10	Extend the existing eastbound mixed-flow lane from the lane drop located to 1,500 feet west of the Pacheco Boulevard off-ramp to the Pacheco Boulevard off-ramp.	8,595,000	6,058,000	26,769,000
			11	Extend the existing eastbound HOV lane from the I-680 NB off-ramp to its start 3,000 feet west of the Port Chicago Highway on-ramp.			
			12	Extend the existing eastbound mixed-flow lane from the Willow Pass Road (East) on-ramp to the lane add located 4,000 feet east of the Willow Pass Road (East) on-ramp.			
F	2030	WB	13	Implement ramp metering in the westbound direction on the SR 4 Bypass and on SR 4 between I-680 and I-80.	367,000	368,000	1,471,000
G	2030	EB	14	Implement ramp metering in the eastbound direction between I-80 and Alhambra Avenue, between Willow Pass Road (East) and SR 160, and on the SR 4 Bypass.	1,551,000	2,607,000	9,372,000

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 Benefits" 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 4 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 4 is not designated as a goods movement corridor.

HOV System Connectivity

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

- Improvement #11 of Package E: Extend the existing eastbound HOV lane from the I-680 NB off-ramp its start 3,000 feet west of the Port Chicago Highway on-ramp.

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 4 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 and are presented in Exhibit 6-1. Details on the methodology of the 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.	$9,906,000	$297,200	$40,110,000
			2	Assess gaps in the current and programmed ITS installations and supplement as needed.			
			3	Extend ITS coverage to fill the gap between I-80 and I-680, and along the SR 4 Bypass.	$18,074,000	$542,200	
B	2015	WB	4	Implement ramp metering in the westbound direction on SR 4 between SR 160 and I-680.	$12,976,000	$648,800	$68,220,000
			5	Add a westbound mixed-flow lane from the SR 242 off-ramp to the I-680 NB off-ramp.	$23,851,000	$9,300	
			6	Extend the existing westbound mixed-flow lane from the Willow Pass Road (West) off-ramp to the lane-add located 4,200 feet west of the Willow Pass Road (West) on-ramp.	$21,577,000	$10,900	
C	2015	EB	7	Implement ramp metering in the eastbound direction between Alhambra Avenue and Willow Pass Road (East).	$2,978,000	$148,900	$33,070,000
			8	Add an eastbound mixed-flow lane from the lane drop located 1,500 feet west of Port Chicago Highway on-ramp to the Willow Pass Road (West) on-ramp.	$27,697,000	$9,000	
D	2030	WB	9	Extend the existing westbound mixed-flow lane from the lane drop located 3,500 feet east of the Willow Pass Road (East) off-ramp to the Willow Pass Road (West) off-ramp.	$22,172,000	$13,800	$22,400 ,000
E	2030	EB	10	Extend the existing eastbound mixed-flow lane from the lane drop located to 1,500 feet west of the Pacheco Boulevard off-ramp to the Pacheco Boulevard off-ramp.	$2,117,000	$1,800	$31,880,000
			11	Extend the existing eastbound HOV lane from the I-680 NB off-ramp to its start 3,000 feet west of the Port Chicago Highway on-ramp.	$25,687,000	$16,800	
			12	Extend the existing eastbound mixed-flow lane from the Willow Pass Road (East) on-ramp to the lane add located 4,000 feet east of the Willow Pass Road (East) on-ramp.	$3,757,000	$6,000	
F	2030	WB	13	Implement ramp metering in the westbound direction on the SR 4 Bypass and on SR 4 between I-680 and I-80.	$5,396,000	$7,600	$5,510,000
G	2030	EB	14	Implement ramp metering in the eastbound direction between I-80 and Alhambra Avenue, between Willow Pass Road (East) and SR 160, and on the SR 4 Bypass.	$10,448,000	$12,900	$10,640,000

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 benefit cost for all proposed mitigation improvement packages, with the exception of the transit improvement package (Package H), 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.	34,440,000 person-hours of delay saved	$40,110,000	$1.16 / 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-80 and I-680, and along the SR 4 Bypass.			
B	2015	WB	4	Implement ramp metering in the westbound direction on SR 4 between SR 160 and I-680.	99,538,000 person-hours of delay saved	$68,220,000	$0.69 / person-hour of delay saved
			5	Add a westbound mixed-flow lane from the SR 242 off-ramp to the I-680 NB off-ramp.			
			6	Extend the existing westbound mixed-flow lane from the Willow Pass Road (West) off-ramp to the lane-add located 4,200 feet west of the Willow Pass Road (West) on-ramp.			
C	2015	EB	7	Implement ramp metering in the eastbound direction between Alhambra Avenue and Willow Pass Road (East).	38,134,000 person-hours of delay saved	$33,070,000	$0.87 / person-hour of delay saved
			8	Add an eastbound mixed-flow lane from the lane drop located 1,500 feet west of Port Chicago Highway on-ramp to the Willow Pass Road (West) on-ramp.			
D	2030	WB	9	Extend the existing westbound mixed-flow lane from the lane drop located 3,500 feet east of the Wil ow Pass Road (East) off-ramp to the Willow Pass Road (West) off-ramp.	17,959,000 person-hours of delay saved	$22,400,000	$1.25 / person-hour of delay saved
E	2030	EB	10	Extend the existing eastbound mixed-flow lane from the lane drop located to 1,500 feet west of the Pacheco Boulevard off-ramp to the Pacheco Boulevard off-ramp.	26,769,000 person-hours of delay saved	$31,880,000	$1.19 / person-hour of delay saved
			11	Extend the existing eastbound HOV lane from the I-680 NB off-ramp to its start 3,000 feet west of the Port Chicago Highway on-ramp.			
			12	Extend the existing eastbound mixed-flow lane from the Willow Pass Road (East) on-ramp to the lane add located 4,000 feet east of the Willow Pass Road (East) on-ramp.			
F	2030	WB	13	Implement ramp metering in the westbound direction on the SR 4 Bypass and on SR 4 between I-680 and I-80.	1,471,000 person-hours of delay saved	$5,510,000	$3.75 / person-hour of delay saved
G	2030	EB	14	Implement ramp metering in the eastbound direction between I-80 and Alhambra Avenue, between Willow Pass Road (East) and SR 160, and on the SR 4 Bypass.	9,372,000 person-hours of delay saved	$10,640,000	$1.14 / 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
B	2015	WB	4	Implement ramp metering in the westbound direction on SR 4 between SR 160 and I-680.	1	---
			5	Add a westbound mixed-flow lane from the SR 242 off-ramp to the I-680 NB off-ramp.		
			6	Extend the existing westbound mixed-flow lane from the Willow Pass Road (West) off-ramp to the lane-add located 4,200 feet west of the Willow Pass Road (West) on-ramp.		
C	2015	EB	7	Implement ramp metering in the eastbound direction between Alhambra Avenue and Willow Pass Road (East). [12]	2	---
			8	Add an eastbound mixed-flow lane from the lane drop located 1,500 feet west of Port Chicago Highway on-ramp to the Willow Pass Road (West) on-ramp.		
A	2015	Both	1	Activate existing ITS installations that currently are not fully operational.	3	---
			2	Assess gaps in the current and programmed ITS installations and supplement as needed.		
			3	Extend ITS coverage to fill the gap between I-80 and I-680, and along the SR 4 Bypass.		
G	2030	EB	14	Implement ramp metering in the eastbound direction between I-80 and Alhambra Avenue, between Willow Pass Road (East) and SR 160, and on the SR 4 Bypass.	---	1
E	2030	EB	10	Extend the existing eastbound mixed-flow lane from the lane drop located to 1,500 feet west of the Pacheco Boulevard off-ramp to the Pacheco Boulevard off-ramp. [13]	---	2
			11	Extend the existing eastbound HOV lane from the I-680 NB off-ramp to its start 3,000 feet west of the Port Chicago Highway on-ramp.		
			12	Extend the existing eastbound mixed-flow lane from the Willow Pass Road (East) on-ramp to the lane add located 4,000 feet east of the Willow Pass Road (East) on-ramp.		
D	2030	WB	9	Extend the existing westbound mixed-flow lane from the lane drop located 3,500 feet east of the Willow Pass Road (East) off-ramp to the Willow Pass Road (West) off-ramp.	---	3
F	2030	WB	13	Implement ramp metering in the westbound direction on the SR 4 Bypass and on SR 4 between I-680 and I-80.	---	4

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

Package B and Package C ranked the highest of all the mitigation strategy packages, addressing westbound and eastbound congestion approaching the SR 242 and I-680 interchanges. The ITS package, Package A, also ranked high providing the full coverage of ITS technology and management needed to address nonrecurrent delay and safety on the SR 4 Corridor.

[12] ITS Installations in Package A may be considered for implementation before the ramp metering mitigation (Improvement #7) in Package C, to so that the benefit of the ramp metering can be fully realized.

[13] Notwithstanding the ranking of this mixed-flow lane extension (Improvement #10) in Package E, this project may be advanced in the regional planning and programming process to advance it in conjunction with the Pacheco Transit Center expansion.

Note that within the analysis period (2007 to 2030) no congestion mitigations exist in the eastern portion of the SR 4 Corridor because the committed SR 4 East Widening Project and SR 4 Bypass Project will mitigate future traffic demands.

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 4 corridor. In the case of SR 4 these services include eBART and general strategies to increase transit access, including additional parking at BART stations in 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.[14]

eBART

The East Contra Costa BART Extension (eBART) project is included in the Regional Transportation Plan (RTP). The proposed project is a Diesel Multiple Vehicle (DMU) with expanded service from the Pittsburg/Bay Point BART station to a new station at Railroad Avenue and a terminus station east of Hillcrest Avenue in Antioch. The eBART project includes 300 parking spaces for the proposed station at Railroad Avenue and 2,600 parking spaces for the proposed station at Hillcrest Avenue. Life-cycle benefits and life-cycle costs were not estimated for eBART.

Additional Transit Strategies

As mentioned earlier, the short-term and long-term transit mitigation strategies in Package H include additional BART parking capacity, increased bus transit access to the BART stations, improvements to existing park-and-ride facilities in Martinez (Pacheco Boulevard), Antioch (Hillcrest Avenue), and Pittsburg (Bliss Avenue), as well as investment in new park-and-ride facilities at proposed/potential eBART stations, and BART system-wide operational improvements. 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
H	15	eBART
	16	Additional BART parking capacity.
	17	Increased bus transit access to the BART stations.
	18	Improvements to existing park-and-ride facilities in Martinez (Pacheco Boulevard), Antioch (Hillcrest Avenue), and Pittsburg (Bliss Avenue), as well as investment in new park-and-ride facilities at proposed/potential eBART stations.
	19	BART system-wide operational improvements.

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

Section 10: Express Lanes

As described in the *Congestion Mitigation Strategies Technical Memorandum*, (PBS&J, November 9, 2009), in addition to the physical roadway mitigation improvements described in previous sections of this memorandum and the transit mitigation improvement measures described in Section 9, the option of converting the HOV lanes on SR 4 to Express Lanes (also referred to as High-Occupancy Toll Lanes, or HOT Lanes) is discussed here. Express Lanes allow HOV users to continue to use the carpool lane for free, but also allow single-occupant vehicles to access the carpool lane by paying a toll.

MTC's *Transportation 2035 Plan for the San Francisco Bay Area* (T-2035) proposes a Regional Express Lane Network for the Bay Area, which includes Express Lanes on SR 4 between I-680 and SR 160.[15] On July 16, 2009, the California Senate Transportation and Housing Committee passed Assembly Bill 744 (Torrico), which authorizes the creation of an 800-mile express lane network on Bay Area freeways. This bill must still be passed by the Senate Appropriations Committee before moving on to the Senate floor for authorization.

The conversion of HOV lanes to Express Lanes on SR 4 would increase the total number of vehicles using the HOV lanes, provided those lanes have available "vacant" capacity that can be "bought" by single-occupant drivers who are willing to pay a toll in exchange for a faster trip in the HOV lane. Toll-paying single-occupant vehicles are allowed to enter the HOV lane; however, as the volume of traffic in the lane begins to reach a pre-determined capacity level, the toll amount charged to single-occupant users increases dynamically in response to the demand. Real-time, variable pricing of the "vacant" capacity in the HOV lanes is used as a mechanism to limit the number of vehicles entering the lane. The Express Lane operator is required, through pricing and changeable message signs, to maintain free-flow conditions in the Express Lane at all times.

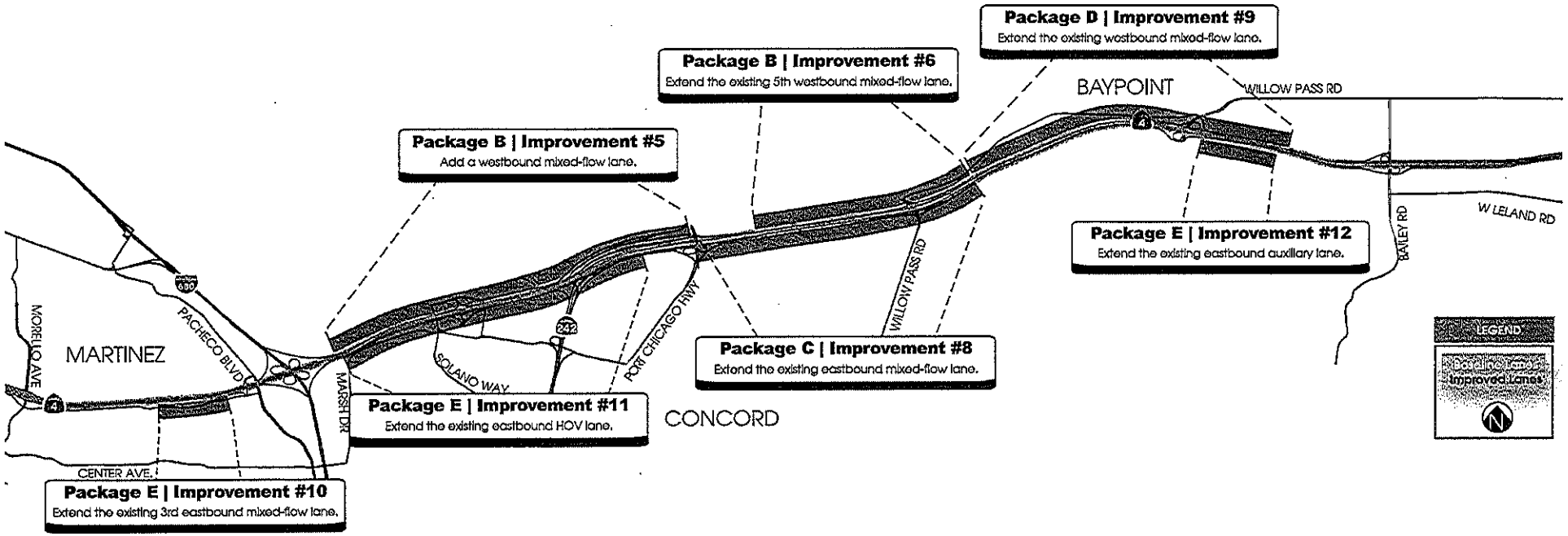
All existing Express Lanes in the United States are limited access facilities. In the Bay Area design, Express Lanes are separated from the adjacent mixed-flow lanes by a double-stripe line, similar to facilities in Seattle and Minneapolis. Lane markings, such as a single-dashed stripe or transition lane, designate ingress and egress zones. Non-carpools using the Express Lanes pay their tolls using electronic FasTrak® toll tags, which are already in use on the region's eight toll bridges; as a vehicle enters the Express Lane, an electronic reader detects the toll tag and deducts the toll from a prepaid account.

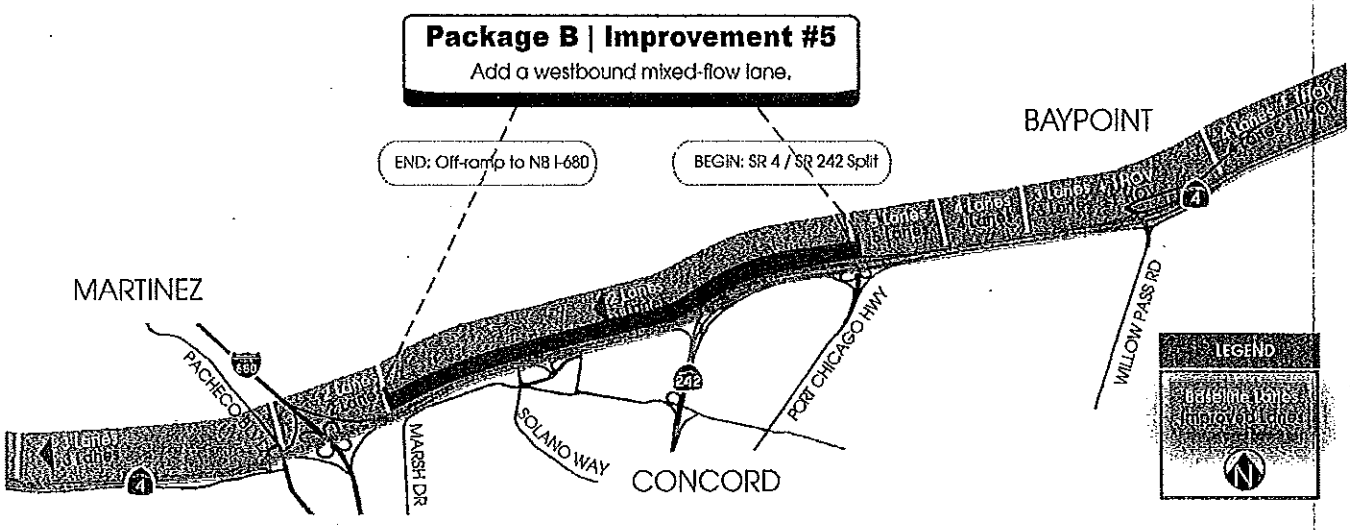
Documented benefits of Express Lanes in operation in the United States include: improved travel speeds in the mixed-flow lanes; increased corridor throughput; ability to provide a reliable travel option that can be used when most needed (most express lane travelers use the lanes no more than a few times a week); and, in some cases, revenue to support transit service. Further, there is no evidence that Express Lanes reduce carpool levels or transit ridership.

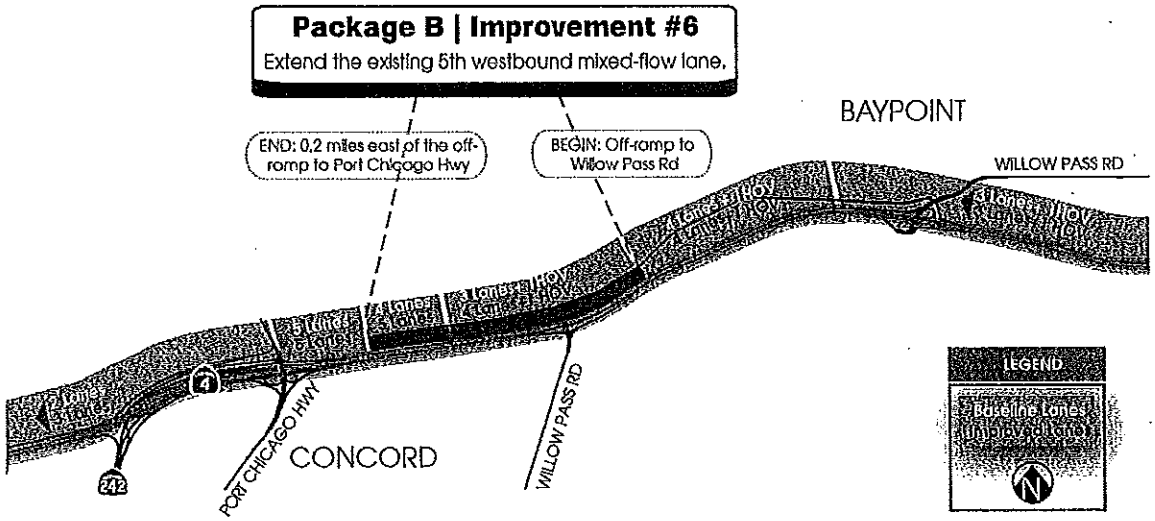
Should AB 744 or similar legislation be signed into law at some point in the future, significant further analysis and consultation with affected jurisdictions along the corridor will be required to determine the feasibility, cost-effectiveness and appropriateness of converting the HOV lanes to Express Lanes in the SR 4 Corridor. This process will inform whether and how (e.g., timing and phasing, design and operations policies) to pursue Express Lanes in the corridor.

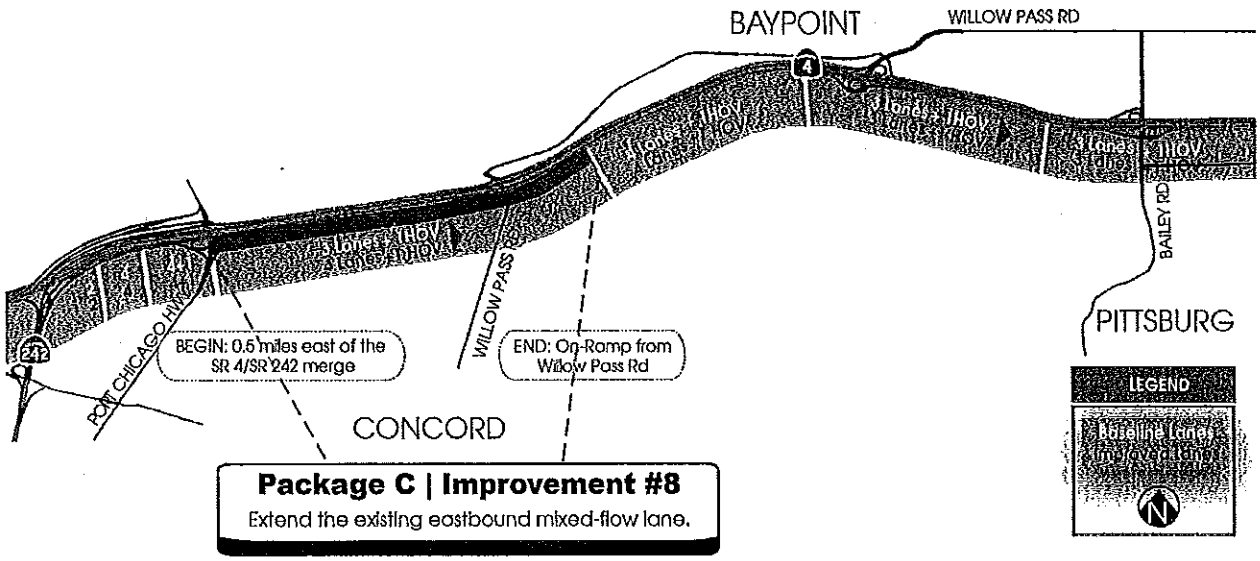
[15] http://www.mtc.ca.gov/planning/hov/index.htm

Appendix A: Illustration of Selected Mitigation Strategies


Package D | Improvement #9
Extend the existing westbound mixed-flow lane.
Package B | Improvement #6
Extend the existing 5th westbound mixed-flow lane.
Package B | Improvement #5
Add a westbound mixed-flow lane.
BAYPOINT
WILLOW PASS RD
Package E | Improvement #12
Extend the existing eastbound auxiliary lane.
W LELAND RD
BAILEY RD
MORELLO AVE
MARTINEZ
PACHECO BLVD
MARSH DR
SOLANO WAY
PORT CHICAGO HWY
WILLOW PASS RD
Package C | Improvement #8
Extend the existing eastbound mixed-flow lane.
Package E | Improvement #11
Extend the existing eastbound HOV lane.
CONCORD
CENTER AVE.
Package E | Improvement #10
Extend the existing 3rd eastbound mixed-flow lane.
LEGEND
Improved Lanes

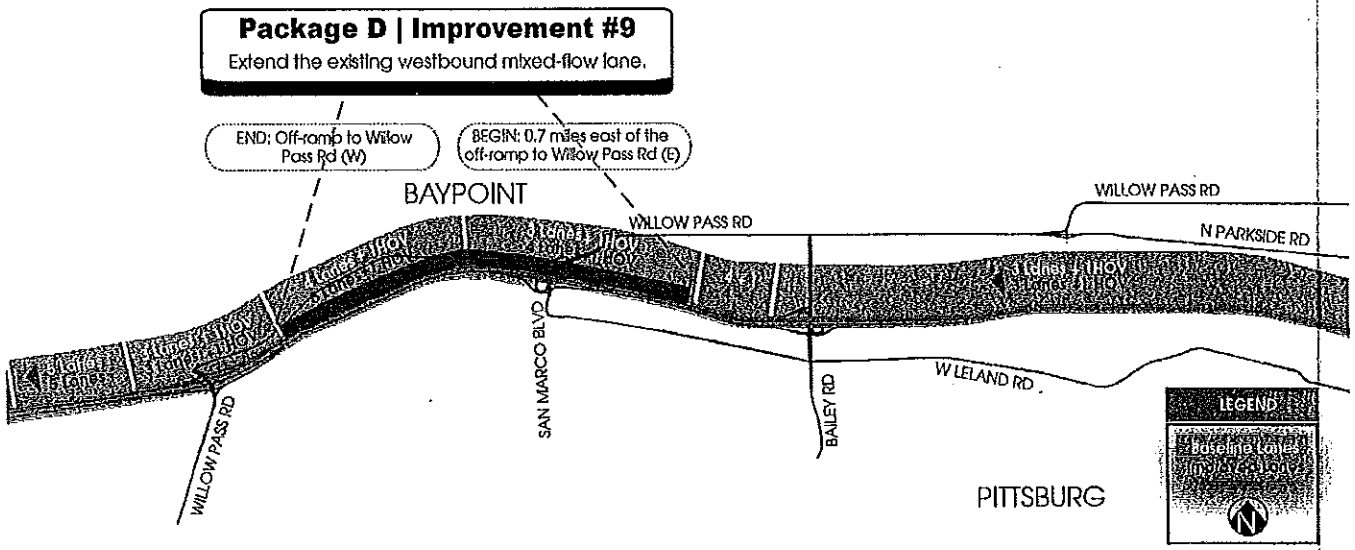

Package B | Improvement #5
Add a westbound mixed-flow lane.
END: Off-ramp to NB I-680
BEGIN: SR 4 / SR 242 Split
BAYPOINT
MARTINEZ
PACHECO BLVD
MARSH DR
SOLANO WAY
CONCORD
PORT CHICAGO HWY
WILLOW PASS RD
LEGEND


Package B | Improvement #6
Extend the existing 5th westbound mixed-flow lane.
END: 0.2 miles east of the off-ramp to Port Chicago Hwy
BEGIN: Off-ramp to Willow Pass Rd
BAYPOINT
WILLOW PASS RD
CONCORD
PORT CHICAGO HWY
LEGEND



Package C | Improvement #8

Extend the existing eastbound mixed-flow lane.

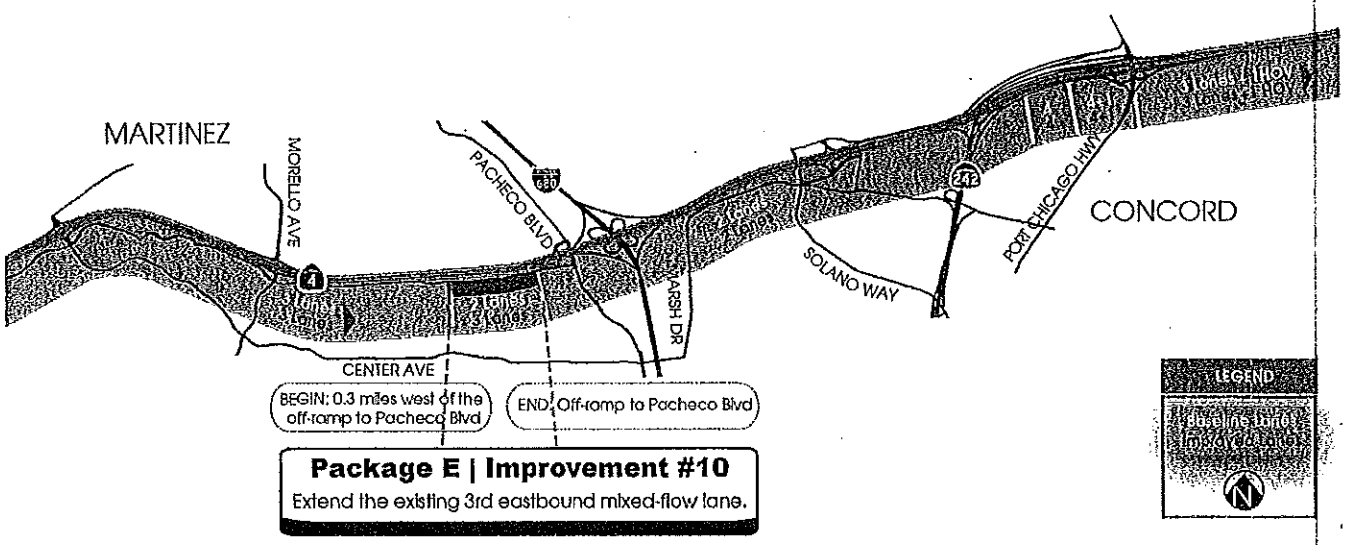


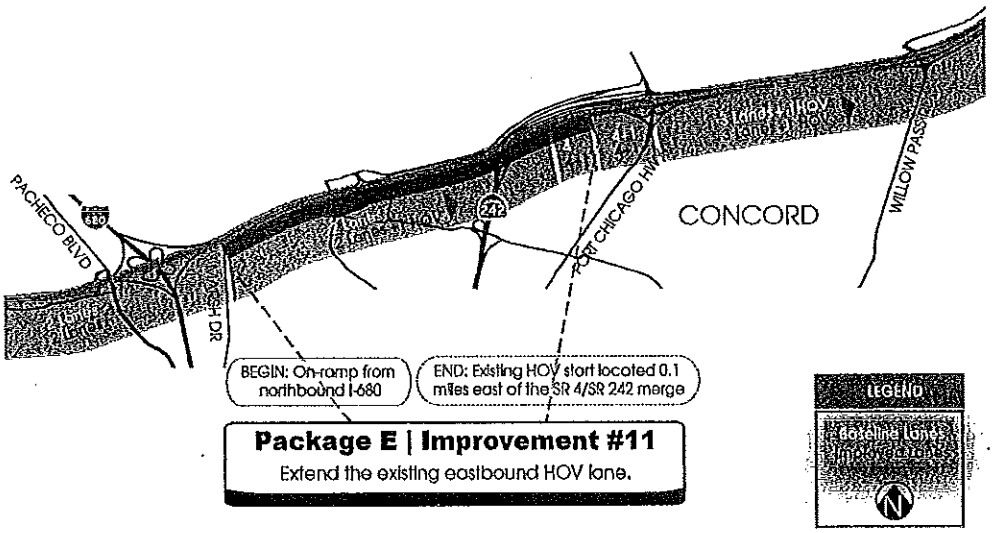
Package D | Improvement #9

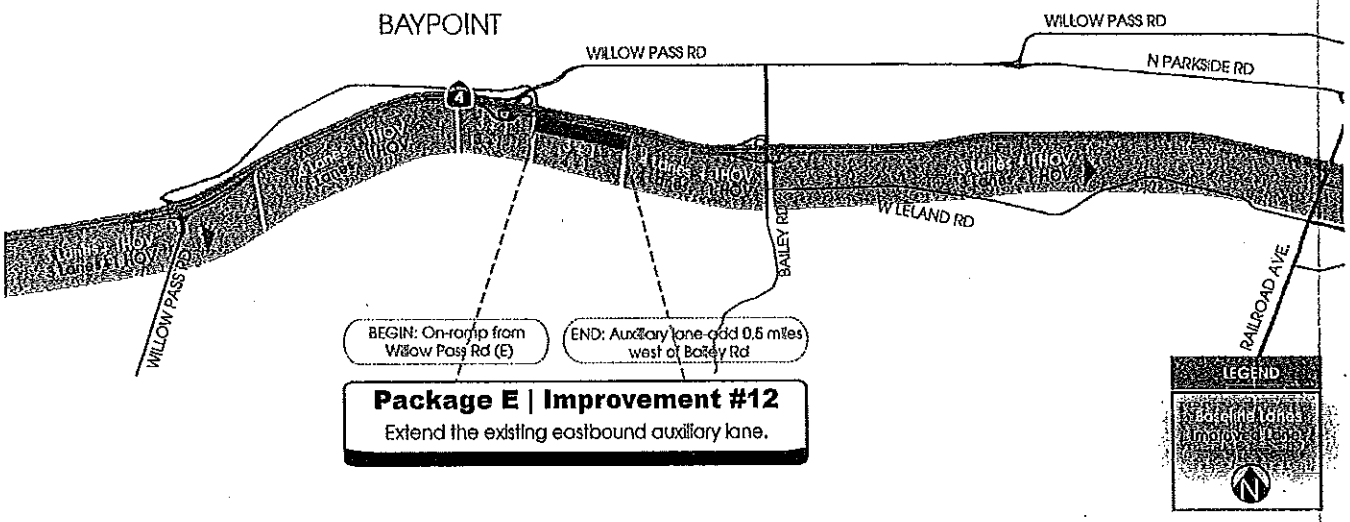
Extend the existing westbound mixed-flow lane.

END: Off-ramp to Willow Pass Rd (W)

BEGIN: 0.7 miles east of the off-ramp to Willow Pass Rd (E)


MARTINEZ
MORELLO AVE
PACHECO BLVD
CONCORD
SOLANO WAY
PORT CHICAGO HWY
MARSH DR
CENTER AVE
BEGIN: 0.3 miles west of the off-ramp to Pacheco Blvd
END: Off-ramp to Pacheco Blvd
Package E | Improvement #10
Extend the existing 3rd eastbound mixed-flow lane.
LEGEND


PACHECO BLVD
CONCORD
PORT CHICAGO HWY
WILLOW PASS
MARSH DR
BEGIN: On-ramp from northbound I-680
END: Existing HOV start located 0.1 miles east of the SR 4/SR 242 merge
Package E | Improvement #11
Extend the existing eastbound HOV lane.
LEGEND


BAYPOINT
WILLOW PASS RD
WILLOW PASS RD
N PARKSIDE RD
WILLOW PASS RD
BAILEY RD
W LELAND RD
RAILROAD AVE
BEGIN: On-ramp from Willow Pass Rd (E)
END: Auxiliary lane-add 0.6 miles west of Bailey Rd
Package E | Improvement #12
Extend the existing eastbound auxiliary lane.
LEGEND
Existing Lanes
Improved Lanes
N

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

SR 4 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 (2009-2015) 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. 3 Extend ITS coverage to fill the gap from I-80 to I-680, to on the SR 4 Bypass.	0	11,480,000	34,440,000	$40,110,000	$1.16 / per-hr of delay saved	3	—
Short-term Strategies Package B							
4 Implement WB ramp metering from SR 160 to I-680. 5 Add a WB mixed-flow lane from the SR 242 off-ramp to the I-680 NB off-ramp. 6 Extend the WB mixed-flow lane from the the Willow Pass Rd (W) off-ramp to the lane-add 0.8 mi west of the Willow Pass (W) on-ramp.	77,809,000	7,243,000	99,538,000	$68,220,000	$0.69 / per-hr of delay saved	1	—
Short-term Strategies Package C							
7 Implement EB ramp metering from Alhambra Ave to Willow Pass Rd (E). 8 Add an EB mixed-flow lane from the lane drop located 0.3 mi west of Port Chicago Hwy on-ramp to the Willow Pass Rd (W) on-ramp.	22,324,000	5,270,000	38,134,000	$33,070,000	$0.87 / per-hr of delay saved	2	—
LONG-TERM (2016-2030) MITIGATION STRATEGIES							
Long-term Strategies Package D							
9 Extend the WB mixed-flow lane from the lane drop 0.7 mi east of the Willow Pass Rd (E) off-ramp to the Willow Pass Rd (W) off-ramp.	2,926,000	5,011,000	17,959,000	$22,400,000	$1.25 / per-hr of delay saved	—	3
Long-term Strategies Package E							
10 Extend the EB mixed-flow lane from the lane drop 0.3 mi west of the Pacheco Blvd off-ramp to the Pacheco Blvd off-ramp. 11 Extend the EB HOV lane from the I-680 NB off-ramp to its start 0.6 mi west of the Port Chicago Hwy on-ramp. 12 Extend the EB mixed-flow lane from the Willow Pass Rd (E) on-ramp to the lane add 0.8 mi east of the Willow Pass Rd (E) on-ramp.	8,595,000	6,058,000	26,769,000	$31,880,000	$1.19 / per-hr of delay saved	—	2
Long-term Strategies Package F							
13 Implement ramp metering in the WB direction on the SR 4 Bypass and on SR 4 from I-680 to I-80.	367,000	368,000	1,471,000	$5,510,000	$3.75 / per-hr of delay saved	—	4
Long-term Strategies Package G							
14 Implement EB ramp metering from I-80 to Alhambra Ave, Willow Pass Rd (E) to SR 160, and on the SR 4 Bypass.	1,551,000	2,607,000	9,372,000	$10,640,000	$1.14 / per-hr of delay saved	—	1
ALL MITIGATION STRATEGIES							
	113,572,000	38,037,000	227,583,000	$211,830,000	$0.93 / per-hr of delay saved	—	—

Source: PBS&J, October 2009.

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.

Section 10: Express Lanes

As described in the *Congestion Mitigation Strategies Technical Memorandum*, (PBS&J, November 9, 2009), in addition to the physical roadway mitigation improvements described in previous sections of this memorandum and the transit mitigation improvement measures described in Section 9, the option of converting the HOV lanes on SR 4 to Express Lanes (also referred to as High-Occupancy Toll Lanes, or HOT Lanes) is discussed here. Express Lanes allow HOV users to continue to use the carpool lane for free, but also allow single-occupant vehicles to access the carpool lane by paying a toll.

MTC's *Transportation 2035 Plan for the San Francisco Bay Area* (T-2035) proposes a Regional Express Lane Network for the Bay Area, which includes Express Lanes on SR 4 between I-680 and SR 160.[15] On July 16, 2009, the California Senate Transportation and Housing Committee passed Assembly Bill 744 (Torrico), which authorizes the creation of an 800-mile express lane network on Bay Area freeways. This bill must still be passed by the Senate Appropriations Committee before moving on to the Senate floor for authorization.

The conversion of HOV lanes to Express Lanes on SR 4 would increase the total number of vehicles using the HOV lanes, provided those lanes have available "vacant" capacity that can be "bought" by single-occupant drivers who are willing to pay a toll in exchange for a faster trip in the HOV lane. Toll-paying single-occupant vehicles are allowed to enter the HOV lane; however, as the volume of traffic in the lane begins to reach a pre-determined capacity level, the toll amount charged to single-occupant users increases dynamically in response to the demand. Real-time, variable pricing of the "vacant" capacity in the HOV lanes is used as a mechanism to limit the number of vehicles entering the lane. The Express Lane operator is required, through pricing and changeable message signs, to maintain free-flow conditions in the Express Lane at all times.

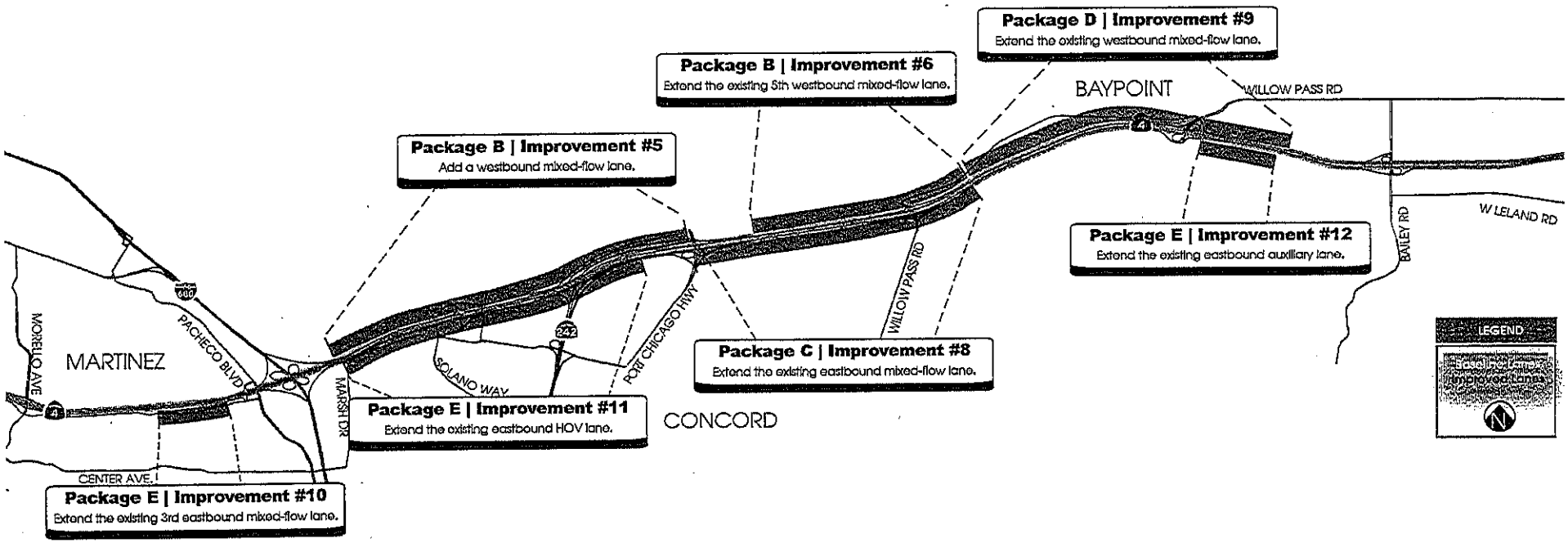
All existing Express Lanes in the United States are limited access facilities. In the Bay Area design, Express Lanes are separated from the adjacent mixed-flow lanes by a double-stripe line, similar to facilities in Seattle and Minneapolis. Lane markings, such as a single-dashed stripe or transition lane, designate ingress and egress zones. Non-carpools using the Express Lanes pay their tolls using electronic FasTrak® toll tags, which are already in use on the region's eight toll bridges; as a vehicle enters the Express Lane, an electronic reader detects the toll tag and deducts the toll from a prepaid account.

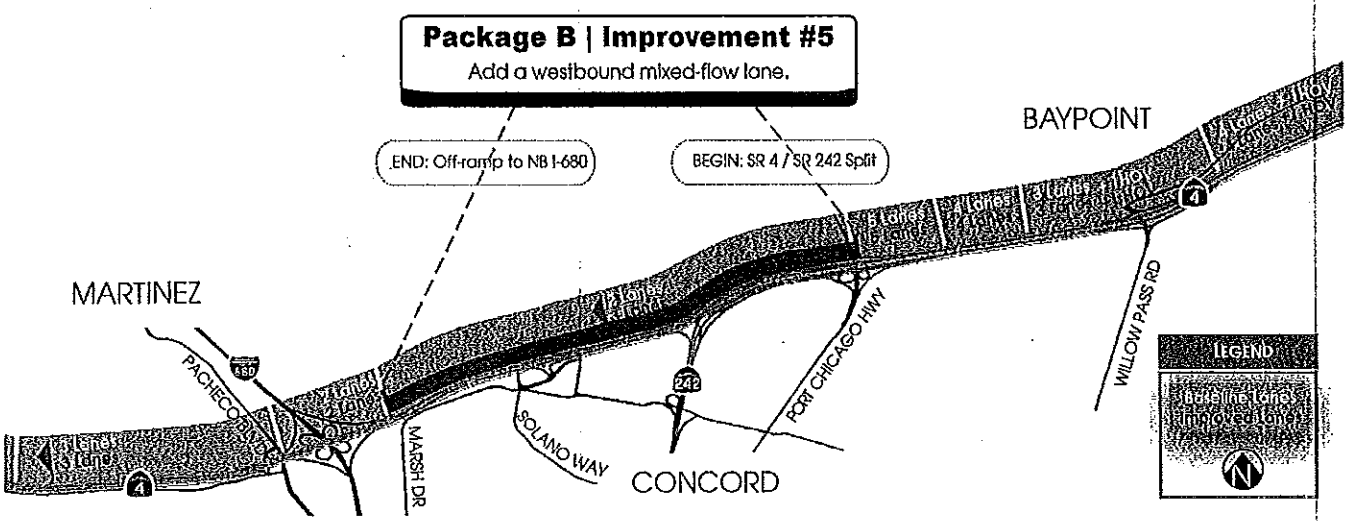
Documented benefits of Express Lanes in operation in the United States include: improved travel speeds in the mixed-flow lanes; increased corridor throughput; ability to provide a reliable travel option that can be used when most needed (most express lane travelers use the lanes no more than a few times a week); and, in some cases, revenue to support transit service. Further, there is no evidence that Express Lanes reduce carpool levels or transit ridership.

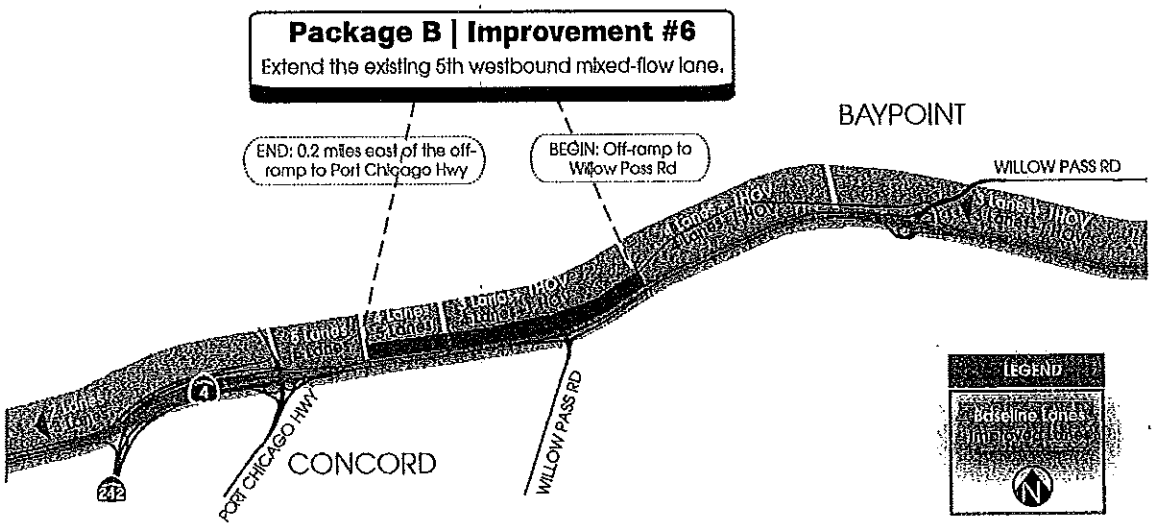
Should AB 744 or similar legislation be signed into law at some point in the future, significant further analysis and consultation with affected jurisdictions along the corridor will be required to determine the feasibility, cost-effectiveness and appropriateness of converting the HOV lanes to Express Lanes in the SR 4 Corridor. This process will inform whether and how (e.g., timing and phasing, design and operations policies) to pursue Express Lanes in the corridor.

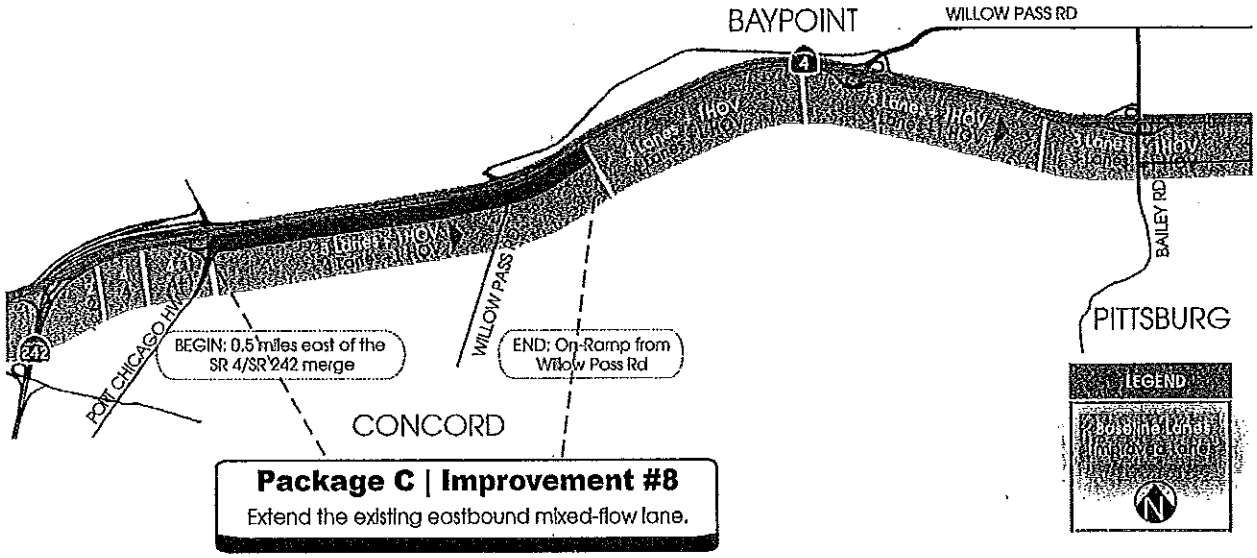
[15] http://www.mtc.ca.gov/planning/hov/index.htm

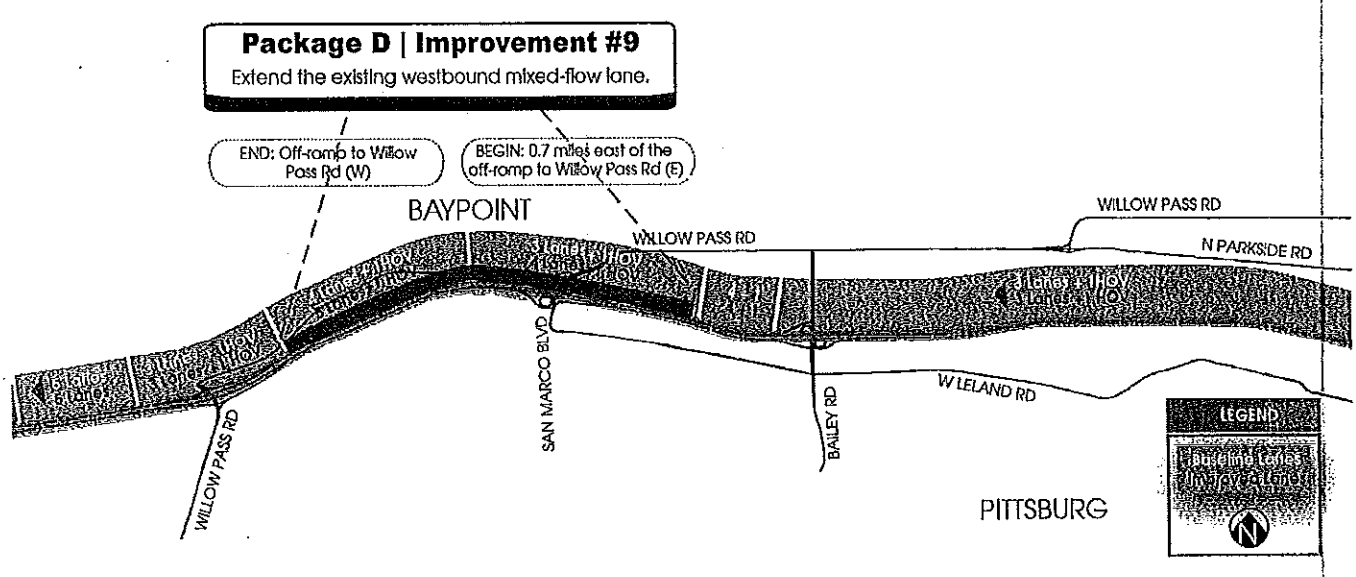
Appendix A: Illustration of Selected Mitigation Strategies

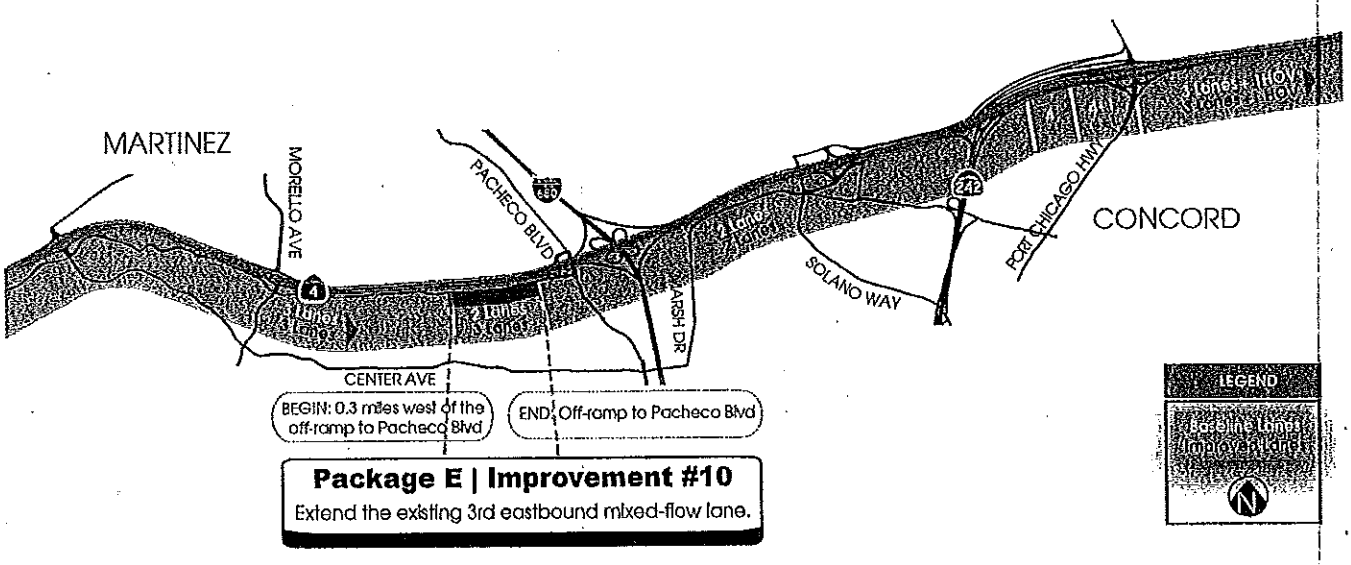

Package D | Improvement #9
Extend the existing westbound mixed-flow lane.
Package B | Improvement #6
Extend the existing 5th westbound mixed-flow lane.
BAYPOINT
WILLOW PASS RD
Package B | Improvement #5
Add a westbound mixed-flow lane.
Package E | Improvement #12
Extend the existing eastbound auxiliary lane.
BAILEY RD
W LELAND RD
MORELLO AVE
MARTINEZ
PACHECO BLVD
SOLANO WAY
PORT CHICAGO HWY
WILLOW PASS RD
Package C | Improvement #8
Extend the existing eastbound mixed-flow lane.
Package E | Improvement #11
Extend the existing eastbound HOV lane.
MARSH DR
CONCORD
CENTER AVE
Package E | Improvement #10
Extend the existing 3rd eastbound mixed-flow lane.
LEGEND
Improvement Area
N

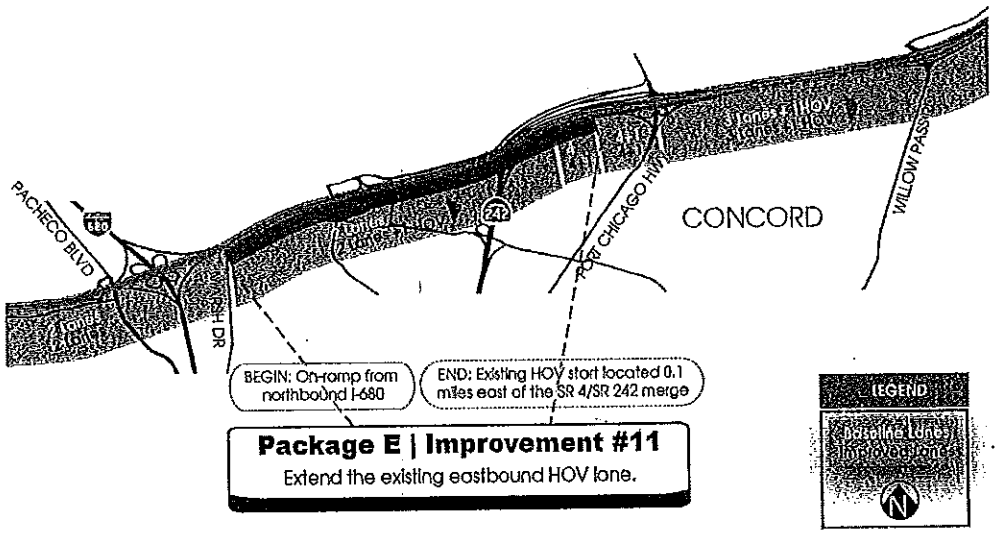

Package B | Improvement #5
Add a westbound mixed-flow lane.
END: Off-ramp to NB I-680
BEGIN: SR 4 / SR 242 Split
BAYPOINT
MARTINEZ
PACHECO BLVD
MARSH DR
SOLANO WAY
CONCORD
PORT CHICAGO HWY
WILLOW PASS RD
LEGEND

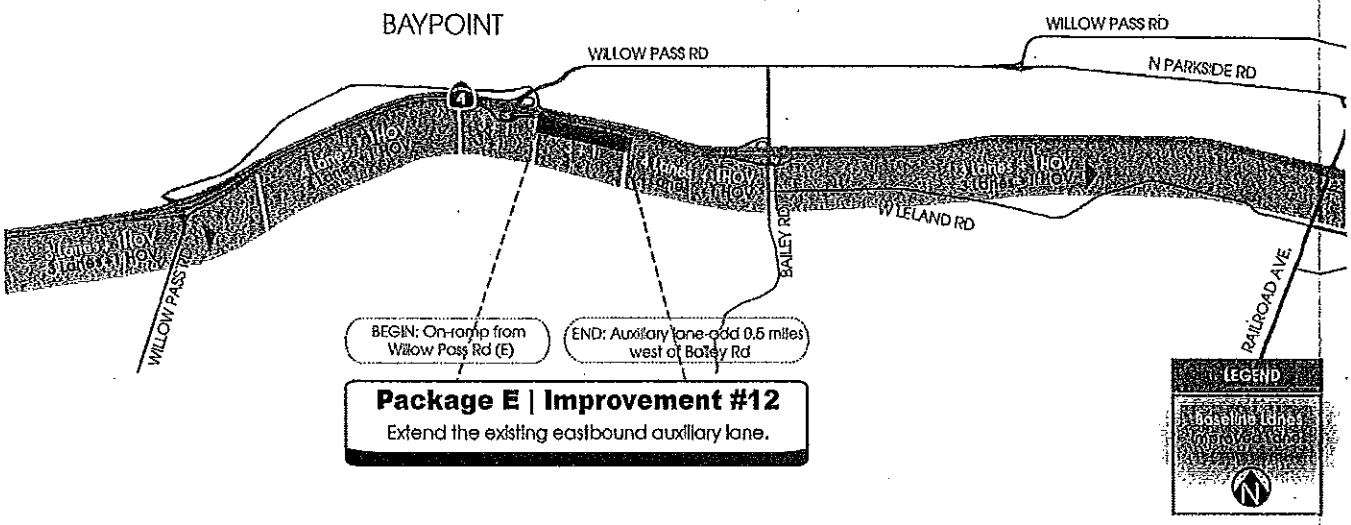

Package B | Improvement #6
Extend the existing 5th westbound mixed-flow lane.
END: 0.2 miles east of the off-ramp to Port Chicago Hwy
BEGIN: Off-ramp to Willow Pass Rd
BAYPOINT
WILLOW PASS RD
CONCORD
PORT CHICAGO HWY
WILLOW PASS RD
LEGEND


BAYPOINT
WILLOW PASS RD
BAILEY RD
PITTSBURG
CONCORD
PORT CHICAGO HWY
WILLOW PASS RD
BEGIN: 0.5 miles east of the SR 4/SR 242 merge
END: On-Ramp from Willow Pass Rd
LEGEND
Package C | Improvement #8
Extend the existing eastbound mixed-flow lane.


Package D | Improvement #9
Extend the existing westbound mixed-flow lane.
END: Off-ramp to Willow Pass Rd (W)
BEGIN: 0.7 miles east of the off-ramp to Willow Pass Rd (E)
BAYPOINT
WILLOW PASS RD
N PARKSIDE RD
SAN MARCO BLVD
BAILEY RD
W LELAND RD
PITTSBURG
LEGEND


MARTINEZ
MORELLO AVE
PACHECO BLVD
CONCORD
SOLANO WAY
PORT CHICAGO HWY
MARSH DR
CENTER AVE
BEGIN: 0.3 miles west of the off-ramp to Pacheco Blvd
END: Off-ramp to Pacheco Blvd
Package E | Improvement #10
Extend the existing 3rd eastbound mixed-flow lane.
LEGEND
Baseline Lanes
Improved Lanes
N


PACHECO BLVD
CONCORD
PORT CHICAGO HWY
WILLOW PASS
MARSH DR
BEGIN: On-ramp from northbound I-680
END: Existing HOV start located 0.1 miles east of the SR 4/SR 242 merge
Package E | Improvement #11
Extend the existing eastbound HOV lane.
LEGEND
Baseline Lanes
Improved Lanes
N


BAYPOINT
WILLOW PASS RD
WILLOW PASS RD
N PARKSIDE RD
W LELAND RD
BAILEY RD
RAILROAD AVE
WILLOW PASS RD
BEGIN: On-ramp from Willow Pass Rd (E)
END: Auxiliary lane-add 0.5 miles west of Bailey Rd
Package E | Improvement #12
Extend the existing eastbound auxiliary lane.
LEGEND

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

SR 4 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 (2009-2015) 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. 3 Extend ITS coverage to fill the gap from I-80 to I-680, to on the SR 4 Bypass.	0	11,480,000	34,440,000	$40,110,000	$1.16 / per-hr of delay saved	3	—
Short-term Strategies Package B							
4 Implement WB ramp metering from SR 160 to I-680. 5 Add a WB mixed-flow lane from the SR 242 off-ramp to the I-680 NB off-ramp. 6 Extend the WB mixed-flow lane from the the Willow Pass Rd (W) off-ramp to the lane-add 0.8 mi west of the Willow Pass (W) on-ramp.	77,809,000	7,243,000	99,538,000	$68,220,000	$0.69 / per-hr of delay saved	1	—
Short-term Strategies Package C							
7 Implement EB ramp metering from Alhambra Ave to Willow Pass Rd (E). 8 Add an EB mixed-flow lane from the lane drop located 0.3 mi west of Port Chicago Hwy on-ramp to the Willow Pass Rd (W) on-ramp.	22,324,000	5,270,000	38,134,000	$33,070,000	$0.87 / per-hr of delay saved	2	—
LONG-TERM (2016-2030) MITIGATION STRATEGIES							
Long-term Strategies Package D							
9 Extend the WB mixed-flow lane from the lane drop 0.7 mi east of the Willow Pass Rd (E) off-ramp to the Willow Pass Rd (W) off-ramp.	2,926,000	5,011,000	17,959,000	$22,400,000	$1.25 / per-hr of delay saved	—	3
Long-term Strategies Package E							
10 Extend the EB mixed-flow lane from the lane drop 0.3 mi west of the Pacheco Blvd off-ramp to the Pacheco Blvd off-ramp. 11 Extend the EB HOV lane from the I-680 NB off-ramp to its start 0.6 mi west of the Port Chicago Hwy on-ramp. 12 Extend the EB mixed-flow lane from the Willow Pass Rd (E) on-ramp to the lane add 0.8 mi east of the Willow Pass Rd (E) on-ramp.	8,595,000	6,058,000	26,769,000	$31,880,000	$1.19 / per-hr of delay saved	—	2
Long-term Strategies Package F							
13 Implement ramp metering in the WB direction on the SR 4 Bypass and on SR 4 from I-680 to I-80.	367,000	368,000	1,471,000	$5,510,000	$3.75 / per-hr of delay saved	—	4
Long-term Strategies Package G							
14 Implement EB ramp metering from I-80 to Alhambra Ave, Willow Pass Rd (E) to SR 160, and on the SR 4 Bypass.	1,551,000	2,607,000	9,372,000	$10,640,000	$1.14 / per-hr of delay saved	—	1
ALL MITIGATION STRATEGIES							
	113,572,000	38,037,000	227,683,000	$211,830,000	$0.93 / per-hr of delay saved	—	—

Source: PBS&J, October 2008.

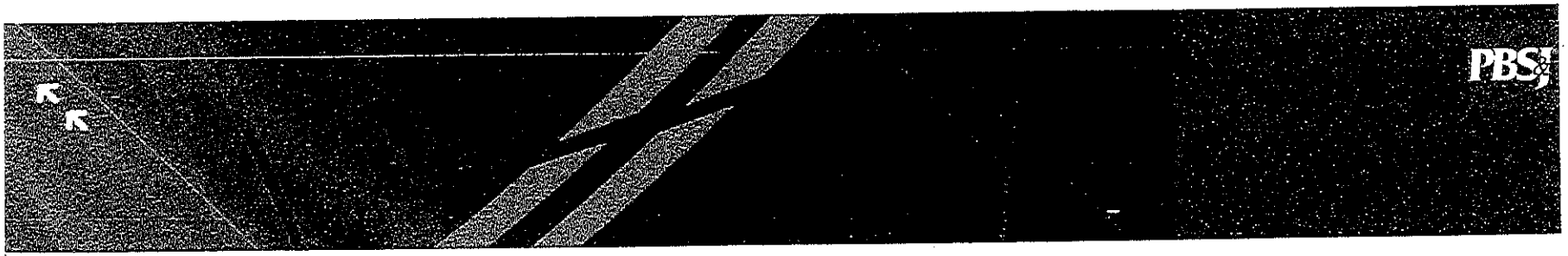
Notes: 1. Life-Cycle benefits only include mobility and reliability. (No safety or qualitative benefit measures.)

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.

State Route 24



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

TRANSPAC Board Meeting

February 11, 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.

SR 24 Corridor

FPI Study Process

PBS&J

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:

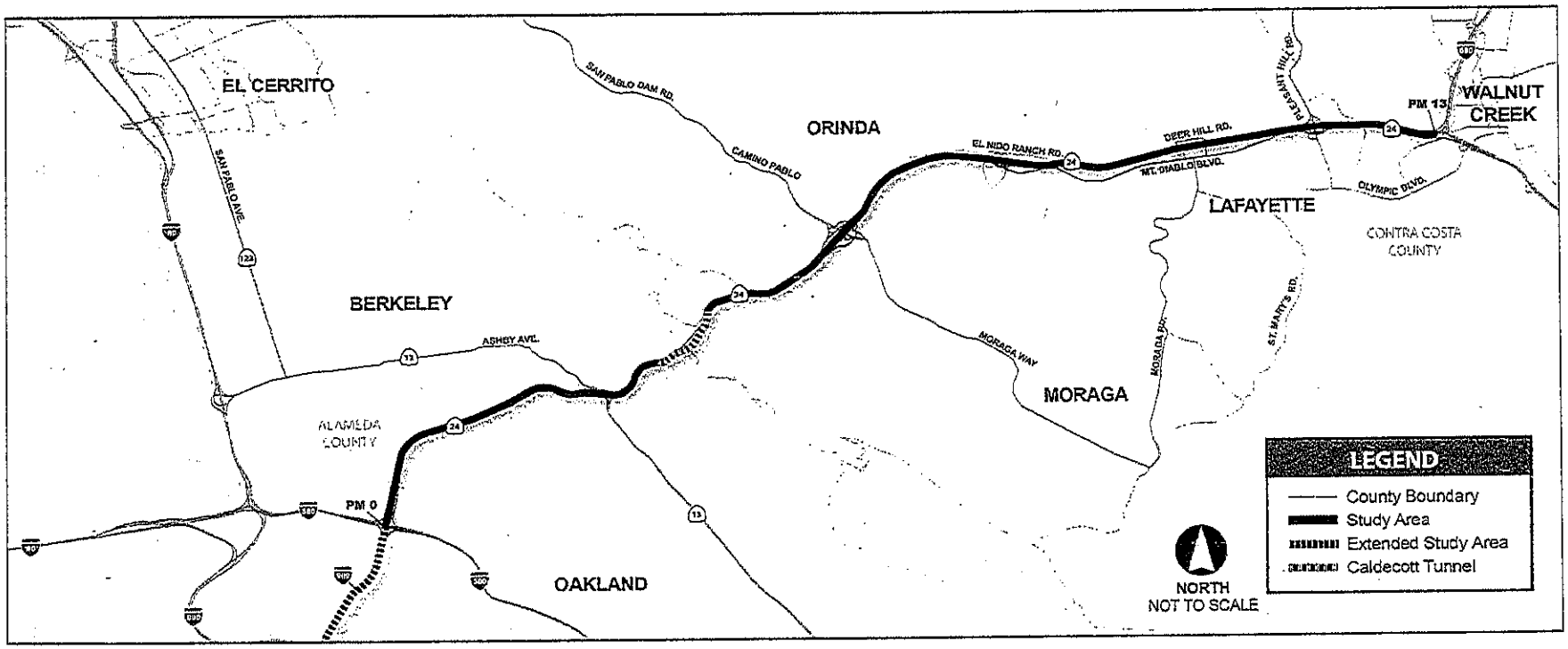
- Based on cost-effectiveness analysis

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



Slide 5

Existing Conditions

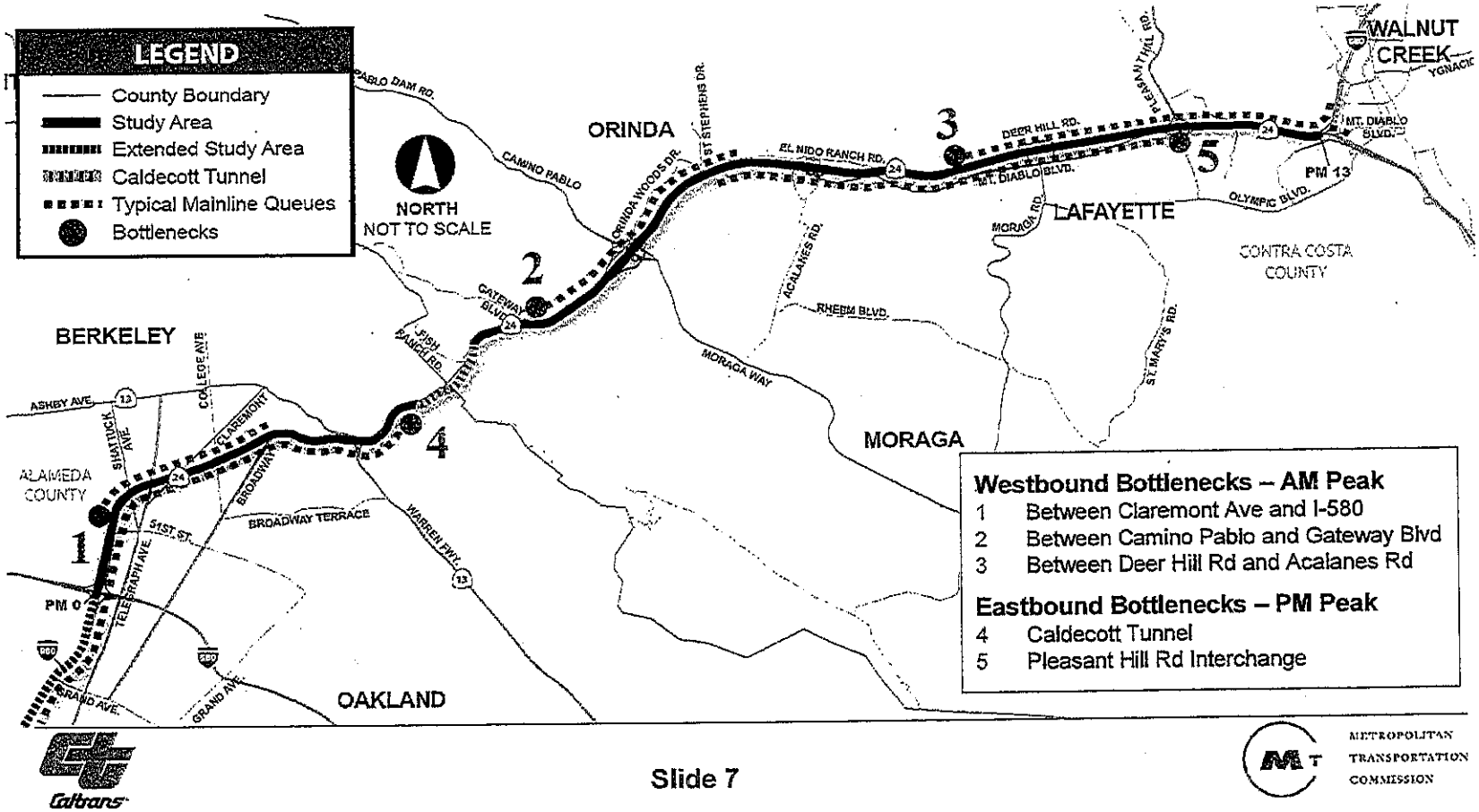
- **Highway Travel Characteristics**
  - 130,000 to 190,000 vehicles per day; 2% to 3% are trucks.
  - Over 60% of westbound AM peak period commuters through the Caldecott Tunnel travel by car, and a majority of them drive alone.
  - 12% of auto trips in the corridor are HOV 2+ eligible.
  - Average 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.

SR 24 Corridor

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**



Slide 7

SR 24 Corridor

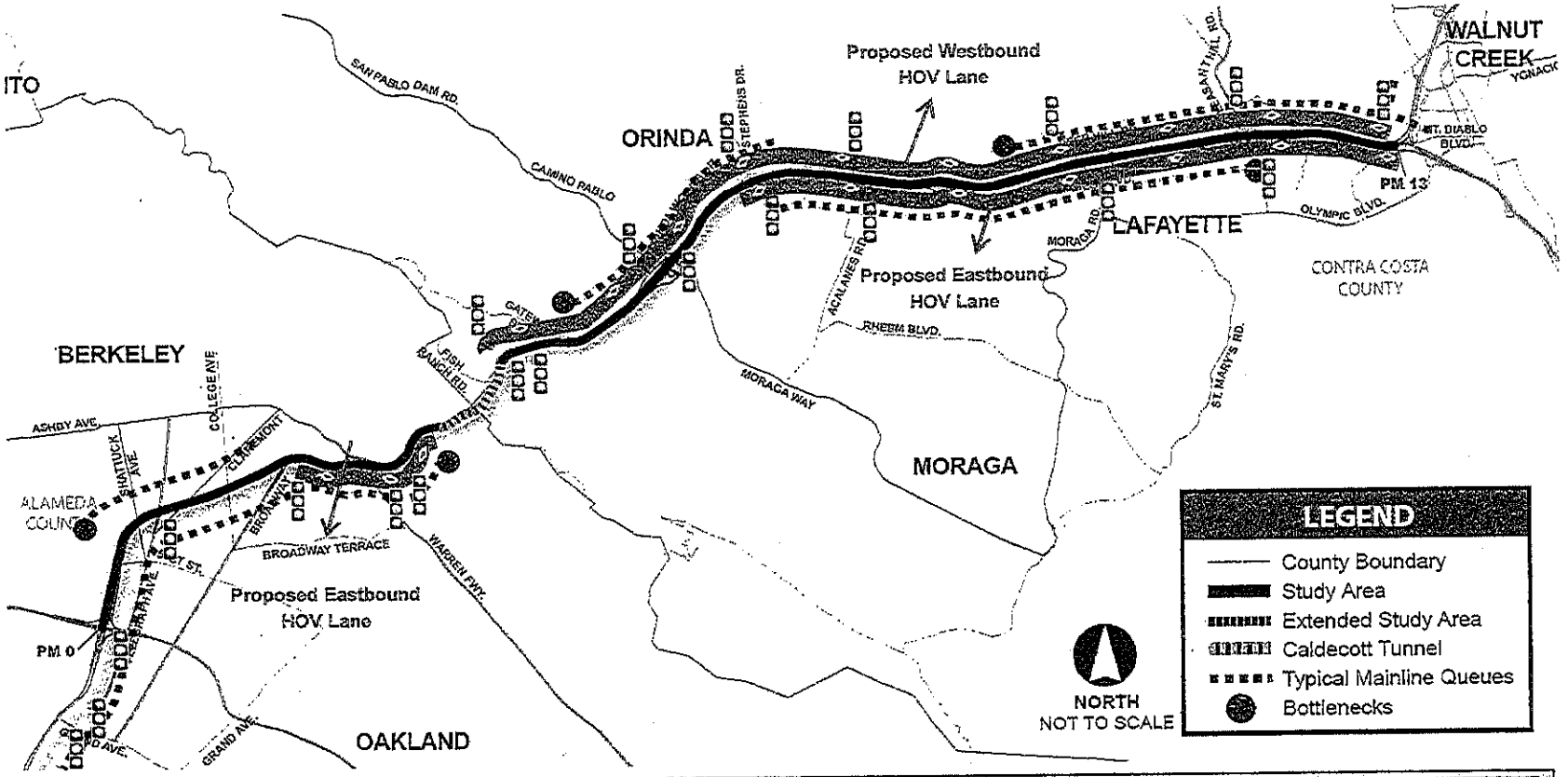
Congestion Mitigation Strategies – Short Term (2015)

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.



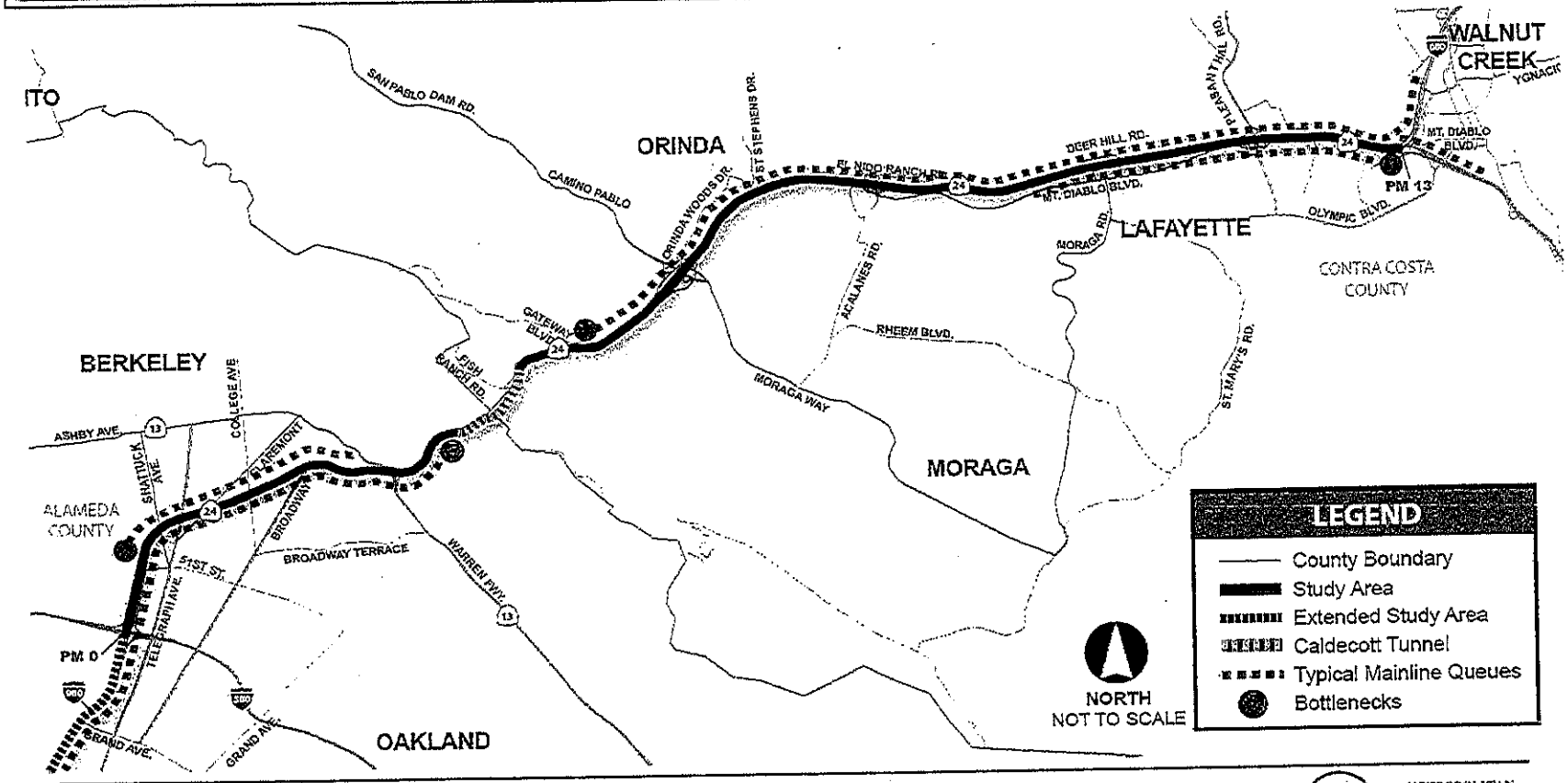
Reduction in Peak-Direction Delay	**Vehicle Hours**	16,200 hrs - 4,140 hrs = 12,060 hrs	26 % reduction
	Person Hours	17,700 hrs - 5,040 hrs = 12,660 hrs	28 % reduction

SR 24 Corridor

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



Caltrans

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METROPOLITAN TRANSPORTATION COMMISSION

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.

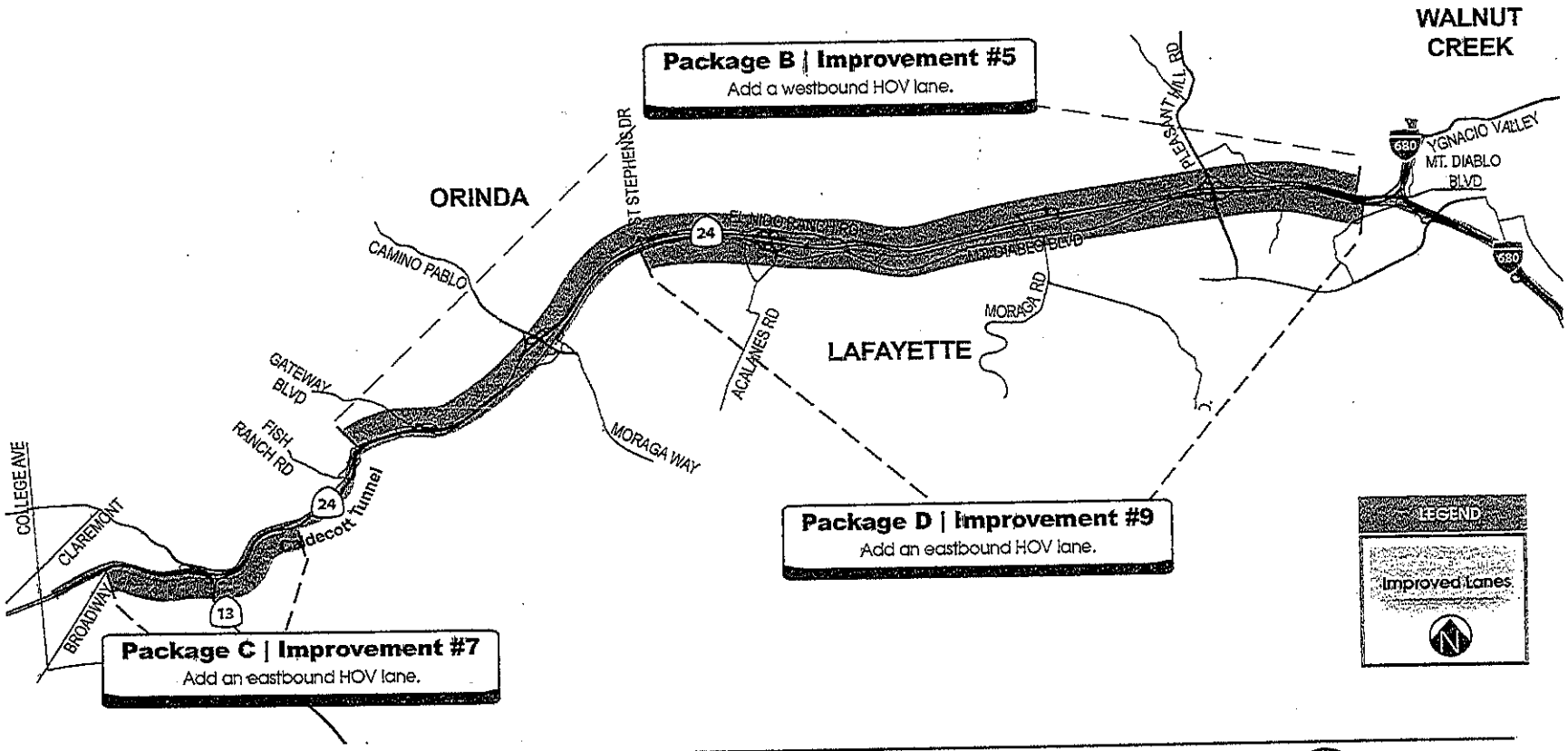
SR 24 Corridor

Summary/Key Findings

PBS

- 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.



Caltrans

Slide 11

METROPOLITAN TRANSPORTATION COMMISSION

SR 24 Corridor

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

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Metropolitan Transportation Commission

SR 24 Corridor in Alameda and Contra Costa Counties

Prioritized Congestion Mitigation Strategies Technical Memorandum

Prepared by: PBS&J
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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-580 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-580 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-980) from I-880 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-980) from I-580 to I-880.
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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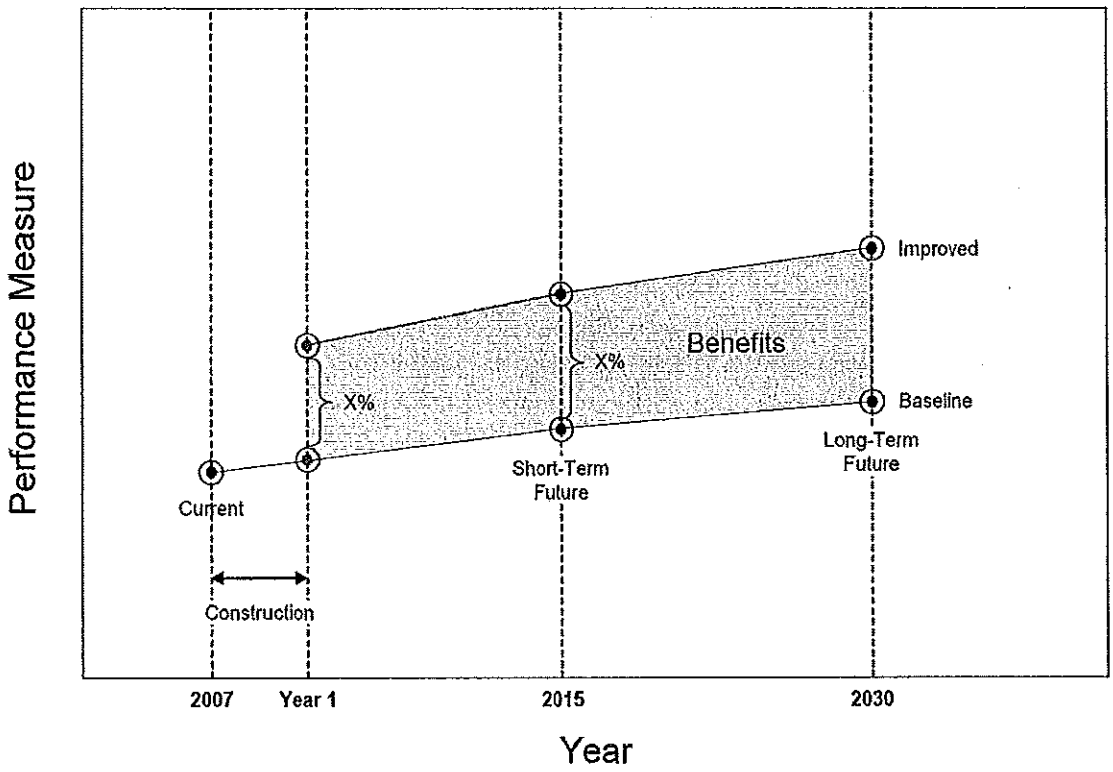
9 http://sv08data.dot.ca.gov/contractcost/

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	FREQ	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	6,100	11,300	5,400	-11%	9,500	-16%
Veh. Miles of Travel (VMT)	225,000	230,000	199,000	234,000	+2%	204,000	+3%
Average Speed (mph)	48	31	16	35 (HOV: 52)	+13% (HOV: +68%)	20 (HOV: 40)	+25% (HOV: +150%)
Delay Index (free-flow speed of 60 mph / average speed)	1.3	1.9	3.8	1.7 (HOV: 1.2)	---	3.0 (HOV: 1.5)	---
Average Corridor Travel Time (h:mm)	0:20	0:31	00:59	0:28 (HOV: 0:19)	-10% (HOV: -39%)	0:49 (HOV: 0:24)	-17% (HOV: -59%)
Total Delay (VHT for speeds less than 60 mph)	580	2,270	8,020	1,570	-31%	6,200	-23%
Congestion Delay (VHT for speeds less than 35 mph)	290	1,330	6,300	1,110	-17%	4,500	-29%
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	5,800	8,000	5,300	-9%	5,600	-30%
Veh. Miles of Travel (VMT)	136,000	130,000	135,000	140,000	+8%	149,000	+10%
Average Speed (mph)	22	17	15	21 (HOV: 25)	+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)	-19% (HOV: -33%)	0:44 (HOV: 0:33)	-28% (HOV: -46%)
Total Delay (VHT for speeds less than 60 mph)	2,420	3,620	5,720	2,980	-18%	3,160	-45%
Congestion Delay (VHT for speeds less than 35 mph)	1,990	2,550	4,250	2,170	-15%	2,270	-47%
Miles of Congested Segments (Speeds less than 35 mph)	6.0	9.0	13.5	6.0	-33%	8.0	-41%

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)	15,400	21,100	32,900	19,000	-10%	29,800	-9%
Veh. Miles of Travel (VMT)	866,000	913,000	837,000	922,000	+1%	871,000	+4%
Average Speed (mph)	54	39	26	44 (HOV: 54)	13% (HOV: +38%)	26 (HOV: 44)	0% (HOV: +69%)
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)	0:18	0:26	0:42	0:23 (HOV: 0:18)	-12% (HOV: -31%)	0:42 (HOV: 0:22)	0% (HOV: -48%)
Total Delay (VHT for speeds less than 60 mph)	1,330	6,000	19,100	3,870	-36%	15,580	-18%
Congestion Delay (VHT for speeds less than 35 mph)	540	3,200	13,620	2,650	-17%	11,370	-17%
Miles of Congested Segments (Speeds less than 35 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. 6.0)	-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)	15,600	19,500	22,200	17,400	-11%	16,900	-24%
Veh. Miles of Travel (VMT)	548,000	560,000	551,000	565,000	+1%	575,000	+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	0:43	0:37 (HOV: 0:30)	-5% (HOV: -23%)	0:33 (HOV: 0:27)	-23% (HOV: -37%)
Total Delay (VHT for speeds less than 60 mph)	6,500	10,200	13,100	8,190	-20%	7,440	-43%
Congestion Delay (VHT for speeds less than 35 mph)	5,160	6,800	8,800	6,200	-9%	5,260	-40%
Miles of Congested Segments (Speeds less than 35 mph)	2.0 - 6.0 (Avg. 4.5)	3.5 - 9.5 (Avg. 7.0)	4.5 - 13.5 (Avg. 10.5)	2.0 - 6.0 (Avg. 4.5)	-36%	1.0 - 8.0 (Avg. 5.0)	-52%

Exhibit 4-5: Location of Bottlenecks and Recurrent Congestion on SR 24 - Baseline Conditions, 2007 (No Improvements)

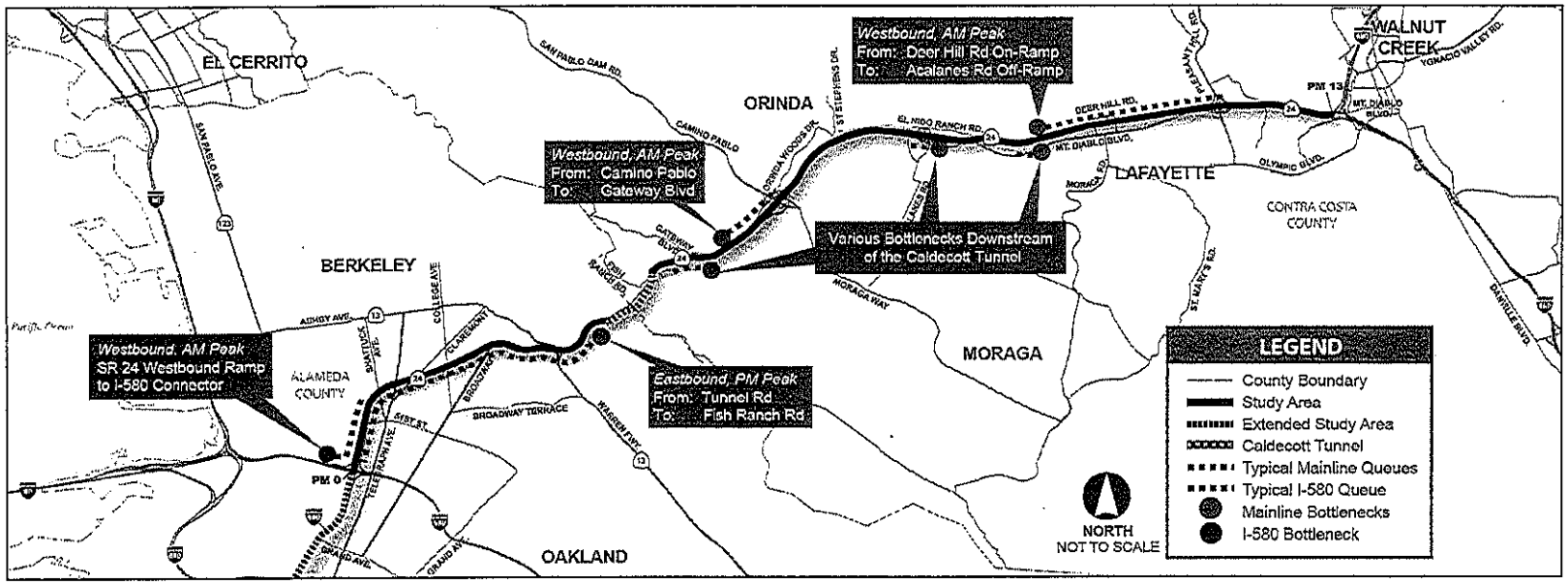


Exhibit 4-6: Location of Bottlenecks and Recurrent Congestion on SR 24 - Baseline Conditions, 2015 (Committed Improvements)

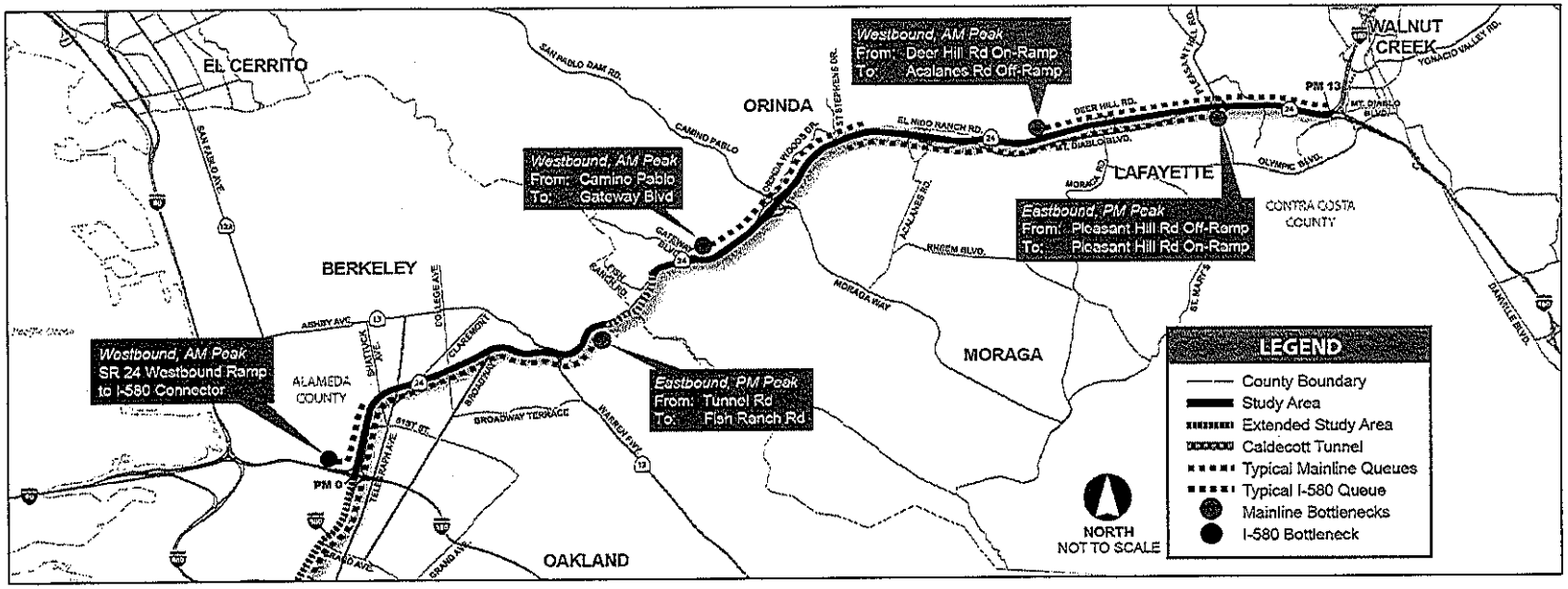


Exhibit 4-7: Location of Bottlenecks and Recurrent Congestion on SR 24 - Improved Conditions, 2015 (Committed Improvements + Short-Term Strategies)

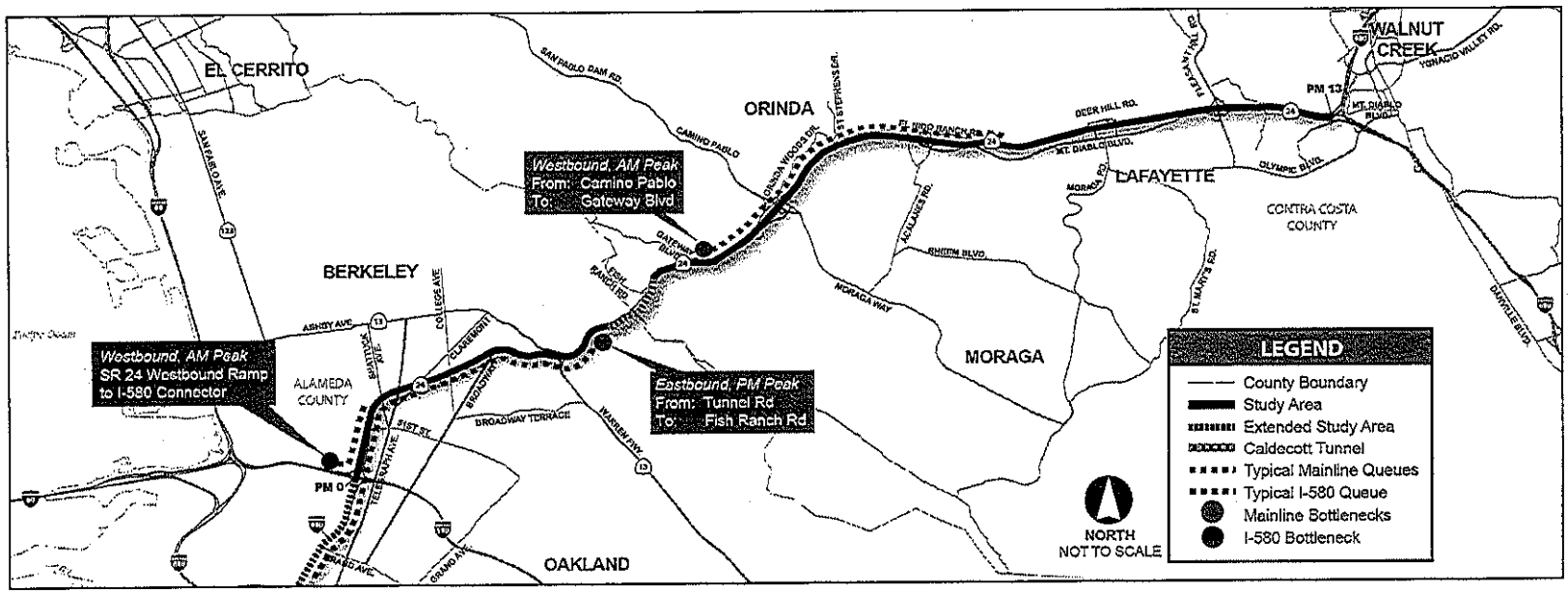


Exhibit 4-8: Location of Bottlenecks and Recurrent Congestion on SR 24 - Baseline Conditions, 2030 (Committed Improvements)

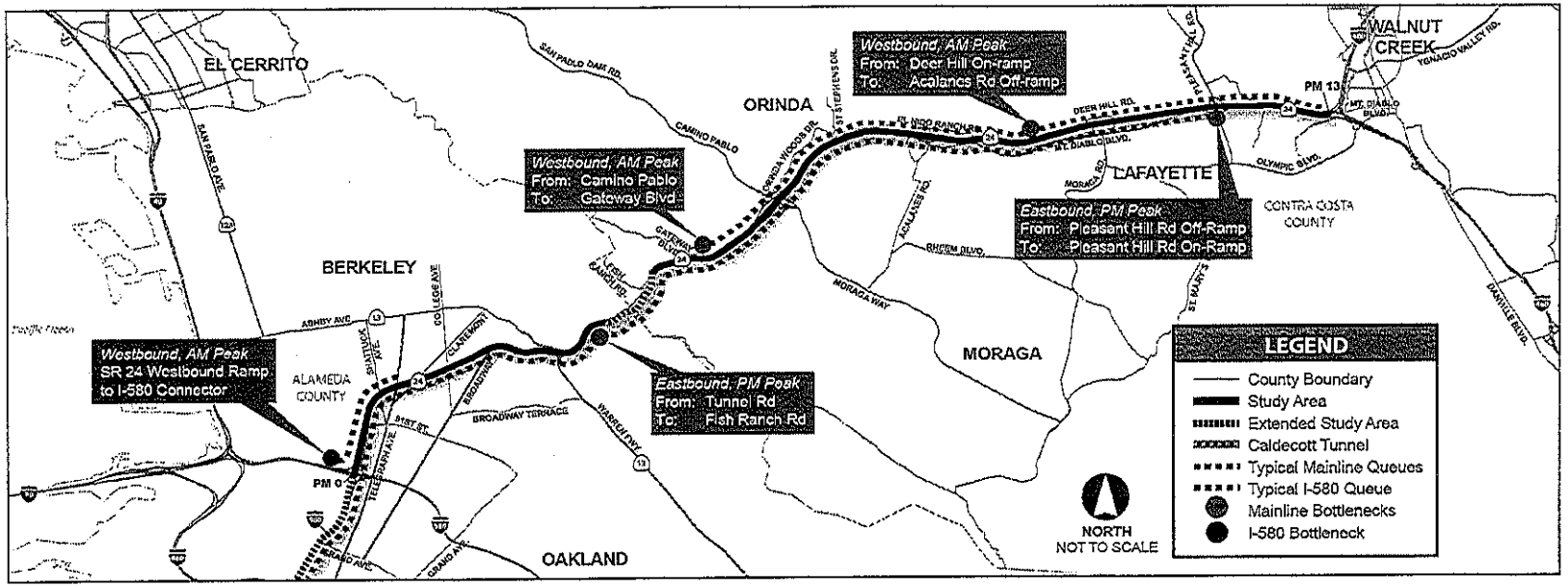
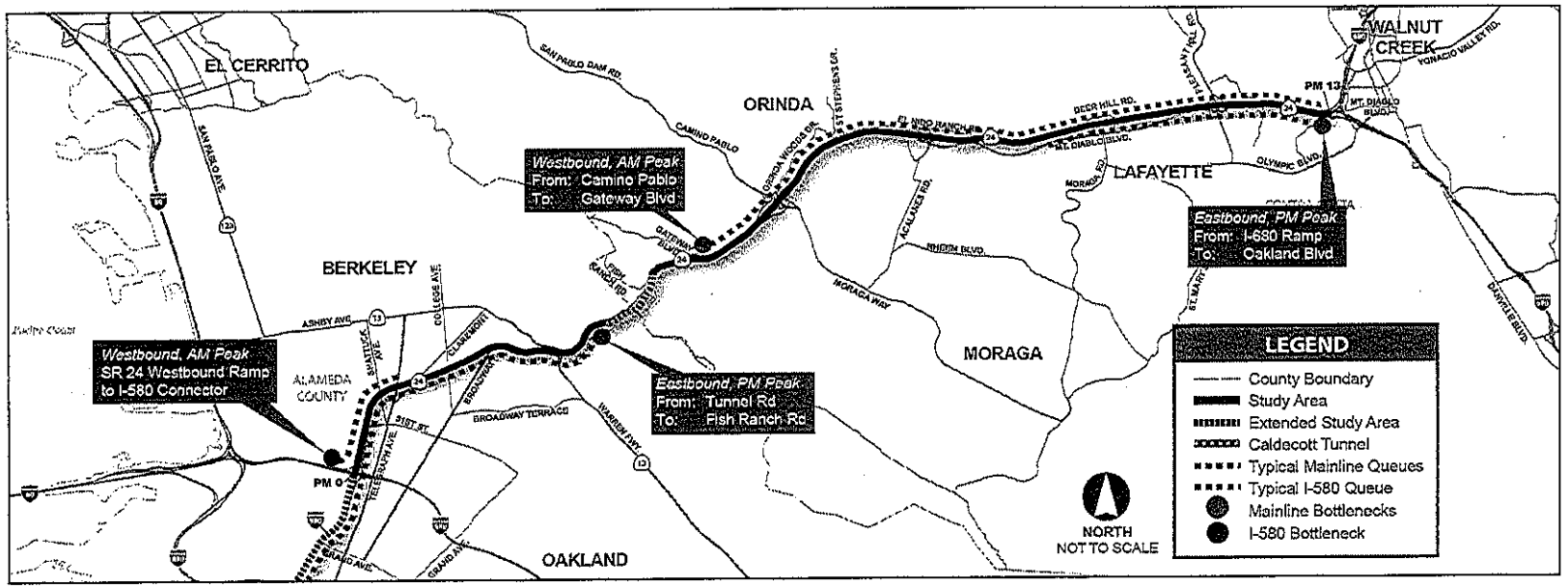


Exhibit 4-9: Location of Bottlenecks and Recurrent Congestion on SR 24 - Improved Conditions, 2030 (Committed Improvements + Short-Term Strategies + Long-Term Strategies)



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 (per-hrs saved)	Reliability (per-hrs saved)	TOTAL (per-hrs saved)
A	2015	Both	1	Activate existing ITS installations that currently are not fully operational.	0	9,946,000	29,838,000
			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-680 and the Caldecott Tunnel.	17,858,000	14,355,000	60,923,000
			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.	5,927,000	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.	16,668,000	10,605,000	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-880.	412,000	1,095,000	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 Benefits" 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	$ 154,500	$ 17,580,000
			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.	$ 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-580 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-980) from I-880 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	$ 69,730,000
			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.	29,838,000 person-hours of delay saved	$ 17,580,000	$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-580 and the Caldecott Tunnel.			
B	2015	WB	4	Implement ramp metering in the westbound direction between I-680 and the Caldecott Tunnel.	60,923,000 person-hours of delay saved	$ 112,950,000	$1.85 / 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.	13,946,000 person-hours of delay saved	$ 36,650,000	$2.63 / 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	8	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
			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-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-580 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-580 and the Caldecott Tunnel and on the SR 24 Extended Corridor (I-980) from I-880 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-980) from I-580 to I-880.	---	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]

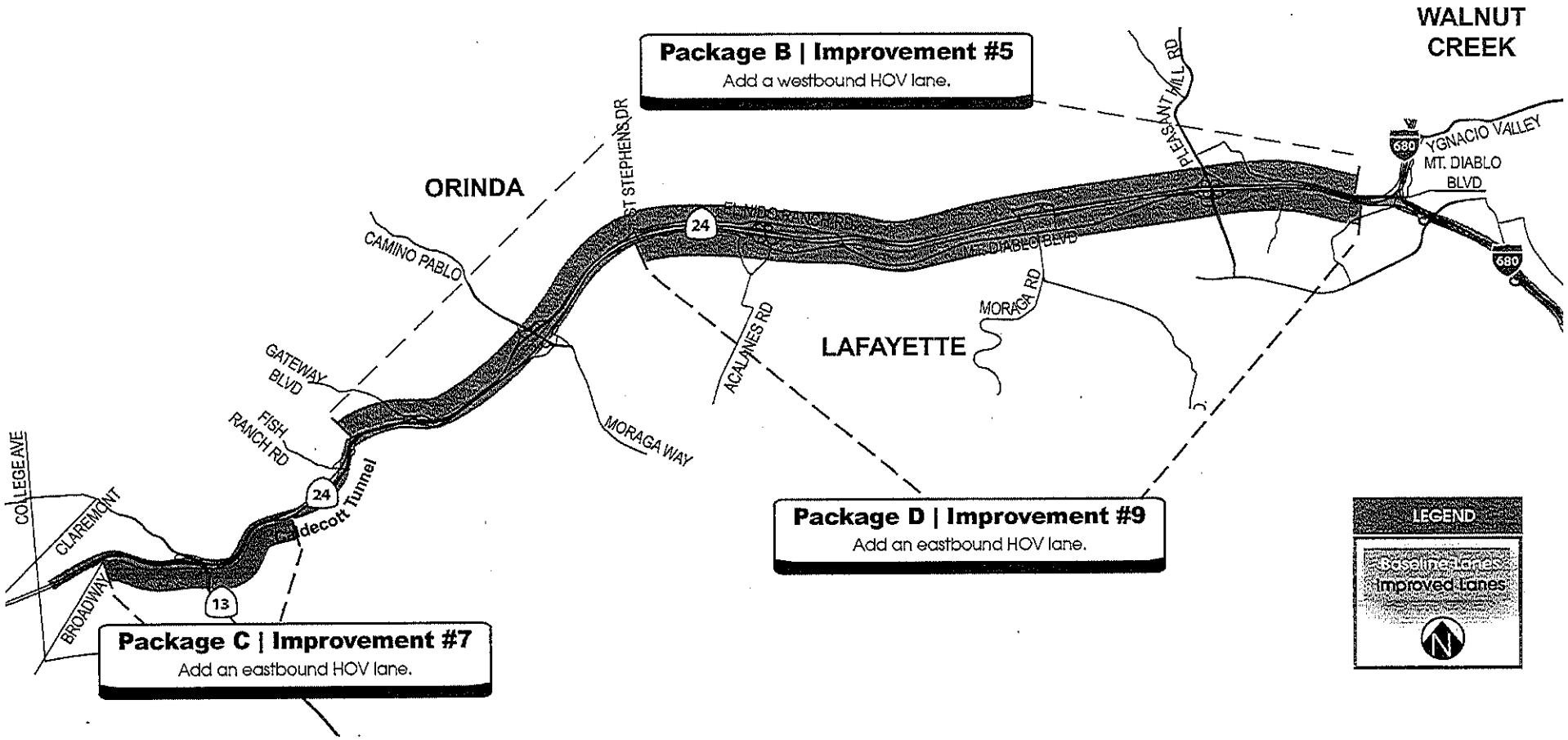
The transit mitigation strategies in Package F include both short-term and long-term strategies. A benefit cost ratio could not be estimated for this report, and thus these transit mitigation strategies cannot be ranked against other mitigation strategies for which life-cycle benefits and costs were 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.

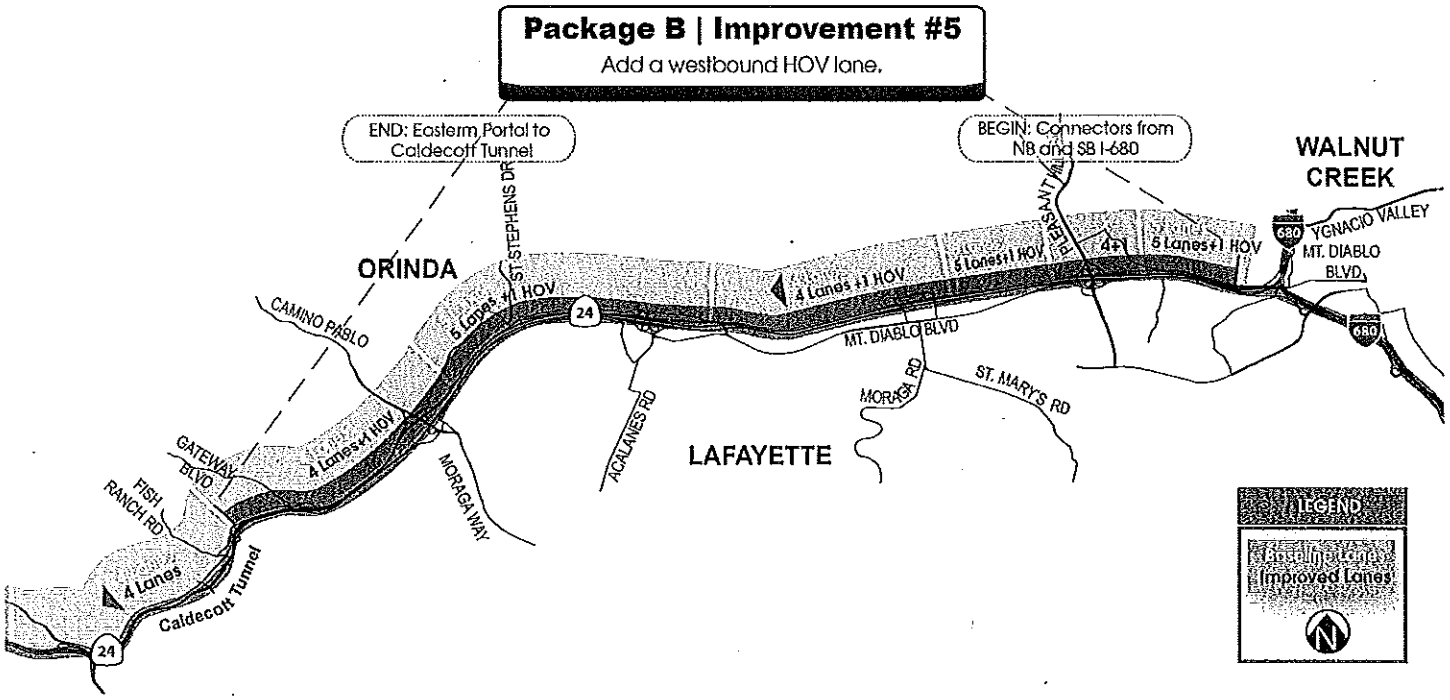
Exhibit 9-1: Transit Mitigation Improvements

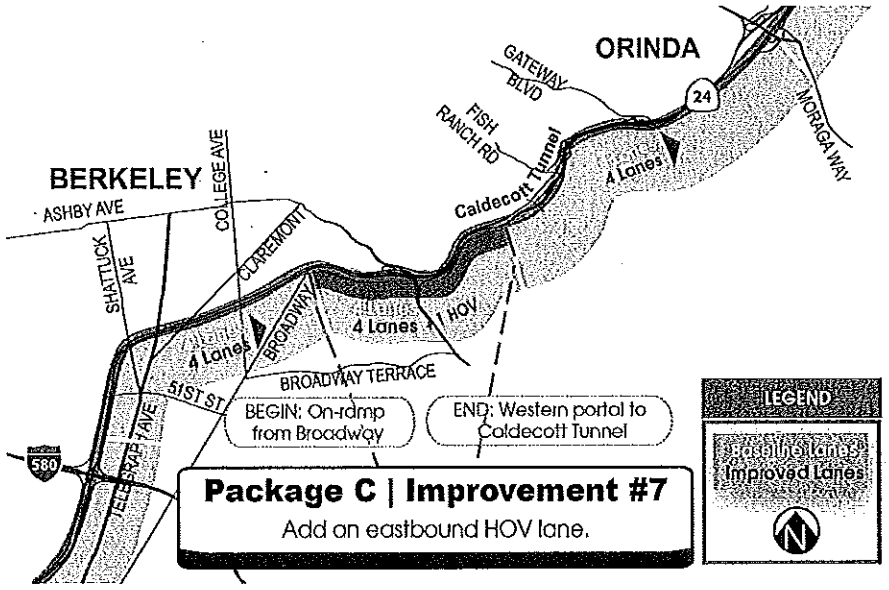
Pkg	ID	Mitigation Improvement
F	11	Additional BART parking capacity at upstream BART stations.
	12	Increased bus transit access to the BART stations within the SR 24 Corridor.
	13	BART system-wide operational improvements.

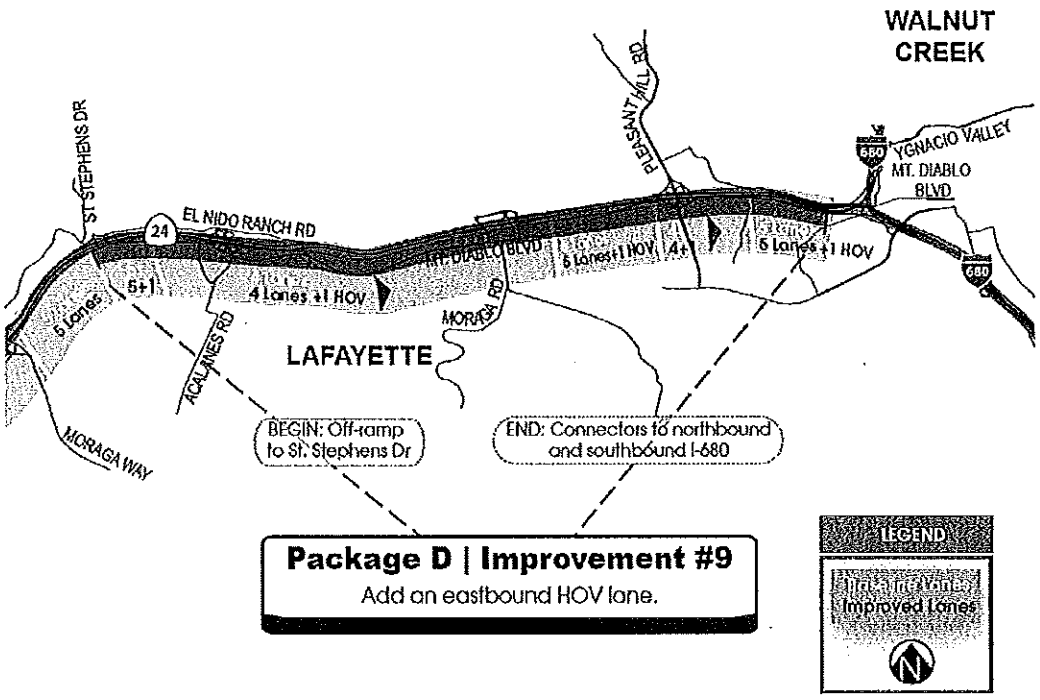
[12] The feasibility of accommodating ridership increases in this range was discussed with BART as part of the stakeholder coordination process.

Appendix A: Illustration of Selected Mitigation Strategies


Package B | Improvement #5
Add a westbound HOV lane.
WALNUT CREEK
ORINDA
ST STEPHENS DR
CAMINO PABLO
24
FISH RANCH RD
DIABLO BLVD
PLEASANT HILL RD
680
YGNACIO VALLEY
MT. DIABLO BLVD
GATEWAY BLVD
MORAGA WAY
ACALANES RD
MORAGA RD
LAFAYETTE
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
Baseline Lanes
Improved Lanes
N


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


ORINDA
GATEWAY BLVD
FISH RANCH RD
24
MORAGA WAY
Caldecott Tunnel
4 Lanes
BERKELEY
ASHBY AVE
COLLEGE AVE
SHATTUCK AVE
CLAREMONT
BROADWAY
4 Lanes +1 HOV
4 Lanes
BROADWAY TERRACE
51ST ST
BEGIN: On-ramp from Broadway
END: Western portal to Caldecott Tunnel
580
TELEGRAPH AVE
Package C | Improvement #7
Add an eastbound HOV lane.
LEGEND
Improved Lanes


WALNUT CREEK
ST STEPHENS DR
EL NIDO RANCH RD
24
PLEASANT HILL RD
YGNACIO VALLEY
MT. DIABLO BLVD
680
5 Lanes
5+1
4 Lanes + 1 HOV
MT. DIABLO BLVD
5 Lanes + 1 HOV
4+1
5 Lanes + 1 HOV
MORAGA RD
LAFAYETTE
ACALANES 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.
LEGEND
Improved Lanes
N

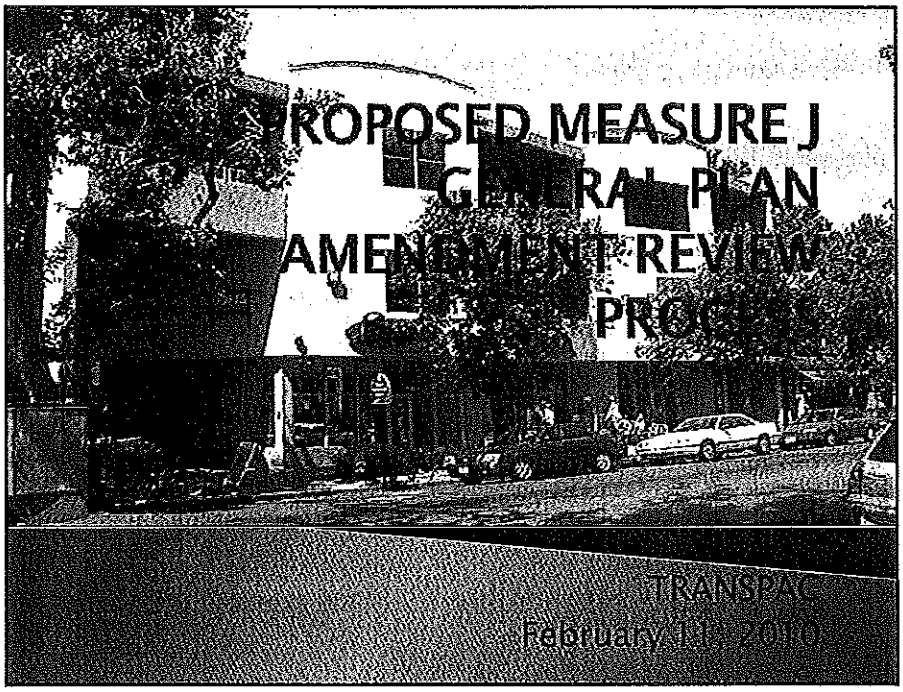
Appendix B: Life-Cycle Cost-Effectiveness Analysis and Prioritization

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 (2009-2015) 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. 3 Extend ITS coverage to fill the gap from I-580 to the Tunnel.	0	9,946,000	29,838,000	$17,580,000	$0.59 / per-hr of delay saved	1	—
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 (2016-2030) 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 2009.

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.

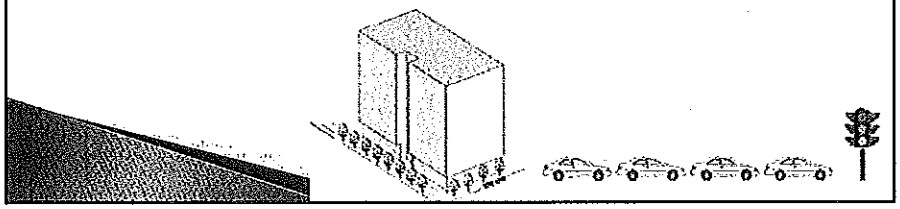


Overview

- 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"

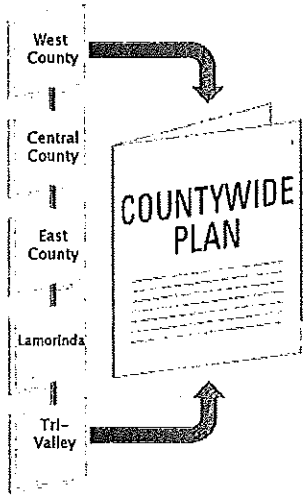


Measure J GMP Requirements

- 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

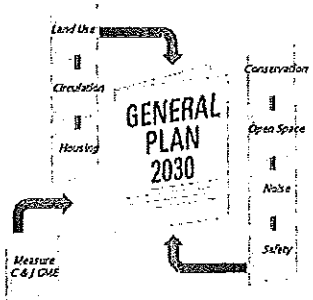
Role of the Action Plans

- 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?

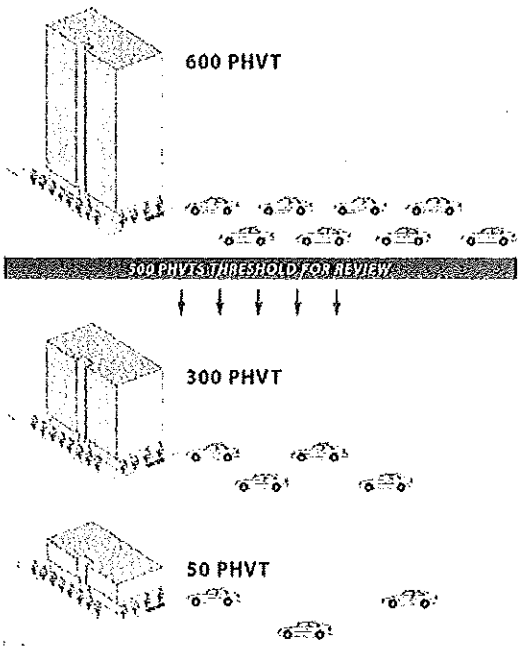
- Local General Plans serve as a guide in land use decisions
- GPs are a statement of policy goals which define the way a community desires to grow in the future
- GP *amendments* can significantly effect future traffic on the local and regional transportation system.
- These changes could hamper a local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



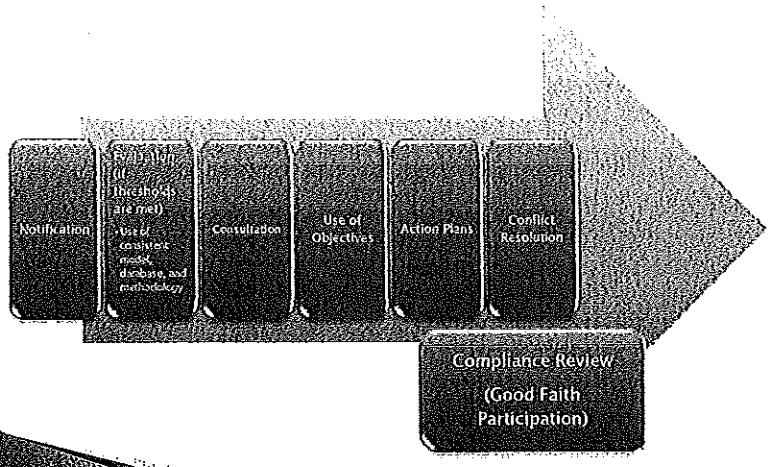
Trip Generation Ceiling

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

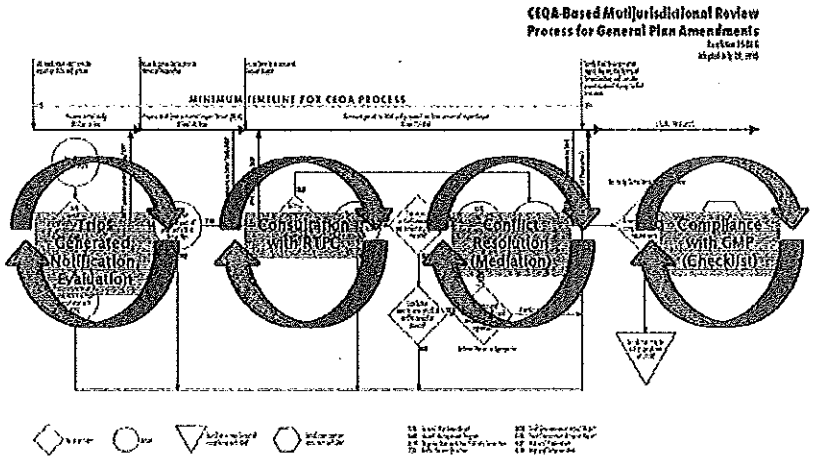
RTPCs may set a more stringent threshold



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

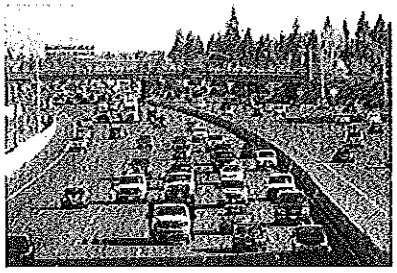
Development Process

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

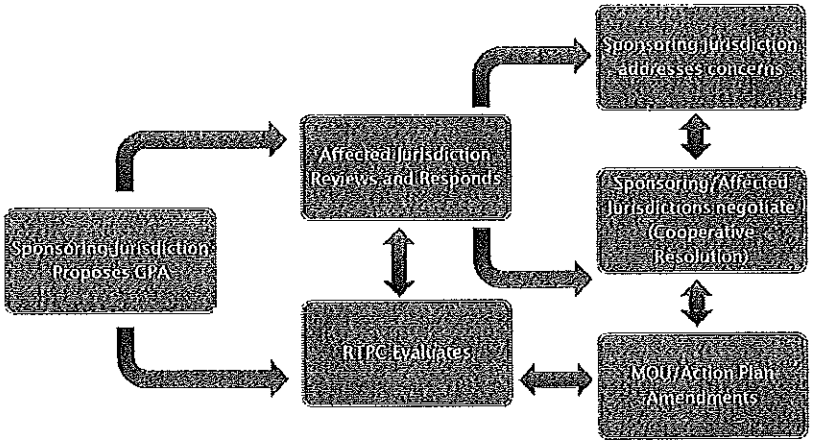
What Threshold Should Local Jurisdictions Use to Identify Impacts?

- 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

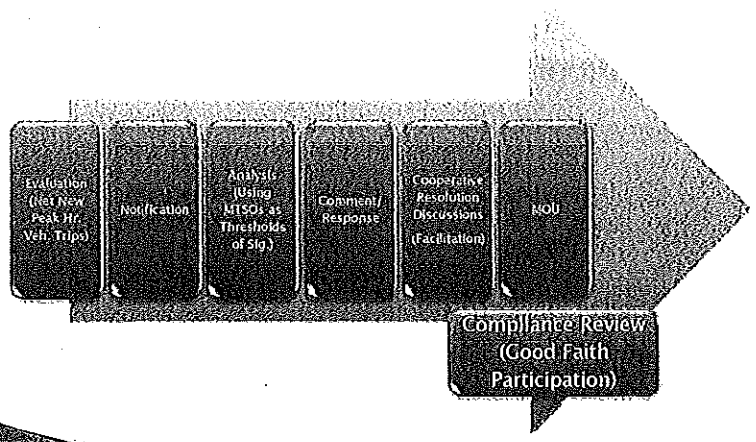


RTPCs have adopted a Level of Service "D" as an MTSO for many routes in Contra Costa

Basic Relationships



Proposed Process Summary



Summary Description

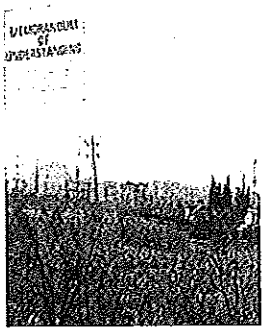
Steps	Action	Responsible Parties			
		Sponsor Jurisdiction	Affected Jurisdiction	RTPC	CCTA
1	Evaluate Proposed GPA	√			
2	Notify Affected Jurisdiction	√			
3	Analyze Traffic Impact	√			
4	Prepare Comment Letter		√	√	
5	Respond to Comment Letter	√			
6-7	File a Letter of Concern		√		
8	Respond to Letter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

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

Role of the MOU

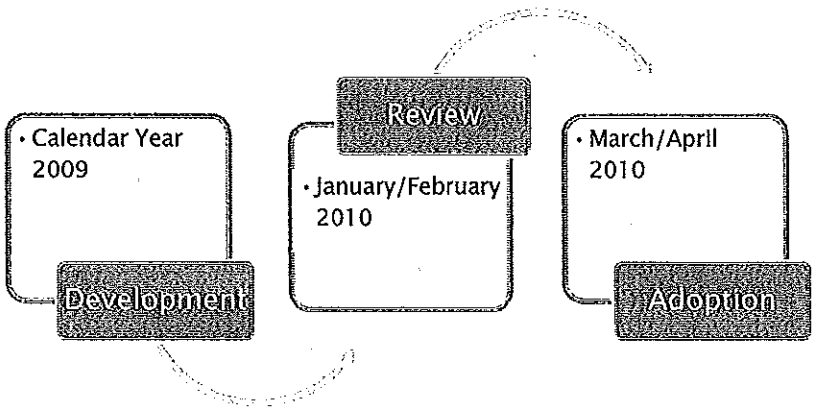
- Acknowledgement that GPAs may take years (or decades) to reach fruition
- Project's impacts may change over time
- More realistic than "on the spot" settlement agreement
- Incorporates Principles of Agreement on how conflicts will be managed
- Specifies actions, timing, responsibilities for monitoring,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



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.

Contra Costa Transportation Authority, 3478 Buskirk Ave., Ste. 100, Pleasant Hill, CA 94523
Phone: 925-256-4700 Fax: 925-256-4701 Website: www.ccta.net

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	Job Title
Atienza	Christina	WCCTAC	Executive Director
Bhat	Aruna	Contra Costa County	Deputy Dir. of Conservation & Development
Cunningham	John	Contra Costa County - CD	RTPC Mgr./ Sr. Transportation Planner
Gangapuram	Avan	City of San Pablo	Planning Manager
Goetz	Steven	Contra Costa County	Deputy Dir.- Transportation Planning
Greenblat	Leah	City of Lafayette	Transportation Planner
Hammon	Lisa	City of Hercules	Assistant City Manager
Kuzbari	Ray	City of Concord	Transportation Manager
Lochirco	Jeremy	City of Walnut Creek	Senior Planner
Neustadter	Barbara	TRANSPAC	RTPC Manager
Reinders	Paul	City of Pittsburg	Senior Civil Engineer
Roche	Patrick	Contra Costa County	Planning Chief
Rudolph	John	WCCTAC	Project Manager
Salamack	Lori	Town of Moraga	Planning Director
Schmidt	Leigha	City of Pittsburg	Planner
Smith	Andrew	City of Walnut Creek	Sr. Planner/ Code Enforcement Supervisor
Tagashira	Dennis	City of Hercules	Planning Director
Williams	Tai	Town of Danville	Transportation Services 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.)

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~~ the Sponsoring Jurisdiction 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 informed response.	Released with Draft Environmental Document (Sec. 15087)

This paragraph is not consistent with the discussion that occurred at the GM Task Force. My understanding is the MTSOs in our action plans (under this option) would be revised if needed in order to meet CEQA requirements. This would be done cooperatively by the jurisdictions in each RTPC. There is no need for each jurisdiction to unilaterally determine when congestion occurs on a regional route. The cooperative planning process suggests that each RTPC can determine if our existing MTSOs are suitable for CEQA analysis, and if not, determine a revised MTSO that would be suitable for evaluating congestion in all our CEQA documents.

11 **Initiate Cooperative ~~Planning~~ Resolution 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~~ resolution 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).

The above sentence in Step 11 suggests that we need to decide whether the exhibit for examples of good faith should specifically include a requirement to participate in facilitated cooperative discussion if requested by a jurisdiction. Currently, the exhibit suggests such a request should be considered, but is not described as a condition of compliance.

TRANSPAC TAC PROPOSED CHANGES IN RED

Step 12 and 13 contain text that mandate revisions to Action Plans to reflect any agreement reached on a GPA. Revision to Action Plans should be an option rather than a requirement. Why should an Action Plan be revised if the participating jurisdictions and the RTPC believe it is not necessary?

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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 if necessary, 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.

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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").

The TRANSPAC TAC suggests that the GMP Task Force review Exhibit 1 (attached to this document).

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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.~~ Through the GMP Biennial Compliance Checklist, the Authority will evaluate good faith participation in the GPA review process as described in Exhibit 1. If principles are adopted, future compliance would be assessed based on ~~continuing~~ ongoing adherence of the sponsoring and affected jurisdiction to the principles of agreement.

The above sentence in Step 14 needs to clarify that if the GPA remains the subject of dispute, the CCTA will make a determination of compliance SOLELY on whether a jurisdiction has participated in good faith. The current text suggests there will be other measures of compliance as well.

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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	192G	CCTA		0		19,450							19,450	(1)
PPM (MTC)	2118	MTC	74	74	74	74	74	77	79				526	(2)
PPM (CCTA) Programmed	2011O	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

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SUMMARY MINUTES
December 16, 2009

Commissioners Present:	Janet Abelson, Newell Arnerich, Ed Balico, David Durant, Federal Glover, Julie Pierce, Robert Taylor, Maria Viramontes
Commissioners Absent:	Susan Bonilla, Michael Kee, Mike Metcalf
Alternates Present:	Gayle Uilkema for Susan Bonilla
Ex-Officios Present:	Gail Murray for Joel Keller, Bob Simmons, Amy Worth
Staff Present:	Bob McCleary, Paul Maxwell, Brad Beck, Martin Engelmann, Amin AbuAmara, Arielle Bourgart, Randall Carlton, Erick Cheung, Peter Engel, Jack Hall, Matt Kelly, Susan Miller, Hisham Noeimi, Stan Taylor (Authority Counsel), Danice Rosenbohm (Executive Secretary)

A. **CONVENE MEETING:** *Chair Viramontes* convened the meeting at 6:04 p.m.

B. **PLEDGE OF ALLEGIANCE:**

C. **PUBLIC COMMENT:** There were no public comments on items not on the agenda.

Bob McCleary welcomed *Bob Simmons* to the Authority, Walnut Creek City Council Member recently appointed as Ex-Officio Representative by the Public Transit Bus Operators. *Representative Simmons* said that he was happy to be joining the Authority. He noted that Mr. McCleary would be recognized at County Connection's meeting of December 17th.

D. **COMMENDATION TO ROBERT K. McCLEARY:** Chair Viramontes will make a presentation to Bob McCleary. **Resolution 09-99-A.**

Chair Viramontes presented Bob McCleary with a framed Authority Resolution passed in honor of Mr. McCleary's contributions to the Authority and Contra Costa County, with photos representing significant transportation accomplishments throughout the county.

E. **COMMENDATION TO ROBERT K. McCLEARY:** Gail Murray, BART Director, will make a presentation to Bob McCleary.

Gail Murray, BART Director, presented Bob McCleary a Resolution passed by the BART Board, and a gift of BART rail bookends. She thanked Mr. McCleary for his vision and leadership in the development of cooperative and comprehensive transportation solutions for the Bay Area. *Representative Worth* noted that Ex-Officio representation on the Authority Board was attributable to Bob McCleary.

Bill Gray, representing Contra Costa Council, stated that Bob McCleary had long been a friend of the business community and that he had very much enjoyed working with Mr. McCleary. Mr. Gray

presented a Resolution that had been passed by Contra Costa Council's Board of Directors honoring Mr. McCleary.

Mr. Gray stated that Ellen Tauscher, former U.S. Congressional Representative, had also forwarded a personal note of gratitude to Mr. McCleary for his support to her during her thirteen years as a member of Congress.

Christina Atienza, WCCTAC Executive Director, said that although her time with Bob McCleary was brief, West County was very grateful for all of Mr. McCleary's support.

Commissioner Abelson acknowledged Bob McCleary's appreciation for the county's diversity, and thanked him for the concern shown for her personal safety after many late night meetings.

Commissioner Balico thanked Bob McCleary for making sure that critical Highway 4 improvements were constructed on time and on budget.

Chair Viramontes presented Bob McCleary with a gift of a clock from the City of Richmond, noting that her city had the first road project ready for construction after Measure C passed.

Commissioner Taylor commented that Bob McCleary had recently been honored at the Mayors Conference Holiday Dinner, and thanked him for his contributions throughout Contra Costa County.

Alternate Uilkema stated that the Board of Supervisors had honored Bob McCleary at its meeting of December 8th, at which Mr. McCleary was commended for his many accomplishments and talent for encouraging collaboration among commissioners, colleagues, and staff.

Commissioner Glover said that MTC had also passed a resolution in honor of Bob McCleary's contributions to Contra Costa County and the region as a whole. *Commissioner Glover* said that he was very proud and honored to have worked with Mr. McCleary.

Commissioner Arnerich said that the Town of Danville had honored Bob McCleary at its Town Council Meeting. He commended Bob for his intelligence and knowledge, and said that staff's dedication was a testament to his character.

Representative Worth said that Bob McCleary had recently been honored by the City of Orinda, also noting that he also served on the City's Infrastructure Committee. *Representative Worth* said that she was grateful for the opportunity to work with Mr. McCleary on Measure C and Measure J. She acknowledged Mr. McCleary's wisdom, integrity, and commitment, and said that she would miss him very much.

Commissioner Pierce stated that she met Bob McCleary while still a Planning Commissioner in 1992. She said that the Authority and staff had grown with Mr. McCleary's leadership, culture of respect, responsibility, (and frugality). She noted that Mr. McCleary's personal investment in the Authority was particularly appreciated, and that the Authority and the county should be very proud of his accomplishments.

Bob McCleary graciously thanked the Authority for the opportunity to work with such a respectful Board. He also acknowledged Authority staff, and said that because of the flexibility and discretion allowed to him by the Board, he had been able to attract and retain quality staff.

F. **PUBLIC HEARING: 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. (Agenda Item 4.B.7) Chair Viramontes opened the Public Hearing.

STAFF REPORT:
Brad Beck, Senior Transportation Planner, stated that as the Congestion Management Agency for Contra Costa, the Authority was responsible for preparing and updating the Congestion Management Program (CMP). He said that the 2009 CMP would be the Authority's tenth.

Mr. Beck stated that the Authority had released a draft of the 2009 CMP Update in September, and that updates on projects and corrections resulting from comments received from MTC had been incorporated.

Mr. Beck said that staff was requesting Authority approval of Resolution 09-63-G, adopting the 2009 Contra Costa Congestion Management Program.

There were no public comments. *Chair Viramontes* moved to close the Public Hearing, seconded by *Alternate Uilkema.* The motion passed unanimously, 8-0. *(Commissioner Durant had not yet arrived.)*

ACTION: *Alternate Uilkema* moved to adopt Resolution 09-63-G, seconded by *Commissioner Balico.* The motion passed unanimously, 8-0. *(Commissioner Durant had not yet arrived.)*

1. **APPROVAL OF MINUTES:** Authority Meeting Minutes of November 18, 2009.

ACTION: *Commissioner Arnerich* moved to approve the Authority Minutes of November 18, 2009, seconded by *Commissioner Abelson.* The motion passed unanimously, 8-0. *(Commissioner Durant had not yet arrived.)*

2. **CONSENT CALENDAR**: Consent Items recommended by the following committees:

Chair Viramontes stated that Item 2.A.17 would be removed from the Consent Calendar for public comment.

ACTION: *Commissioner Arnerich* moved to approve the Consent Calendar excluding Item 2.A.17, seconded by *Commissioner Abelson.* The motion passed unanimously, 8-0. *(Commissioner Durant had not yet arrived.)*

2.A **Administration & Projects Committee**:

2.A.1 Monthly Project Status Report.

2.A.2 Monthly Accounts Payable Invoice Report for October 2009. This report also includes the summary of payroll and benefits costs by organizational unit.

2.A.3 Monthly Investment Report for October 2009. The Authority's Investment Policy requires this report.

2.A.4 State Route 4 Widening (Loveridge Road to Somersville Road) – UPRR Team Track Facility – Contingency Funds for Construction Contract 258 (Project 1406). Staff seeks authorization to increase the contingency funds in the amount of $330,000 for identified extra work under construction Contract 258 with William G. McCullough Co. **Resolution No. 09-15-P, Revision No. 1**

2.A.5 State Route 4 Gap Closure Project - Amendment No. 14 to Contract No. 87 with Contra Costa County for Right of Way Services (Project 1501). Staff seeks authorization to augment Contract No. 87 by $50,000 to include additional Right of Way closeout activities.

2.A.6 **I-680 Auxiliary Lanes Project – Segments 1 & 3 Landscaping Irrigation Costs (Project 1106).** Consistent with Cooperative Agreement No. 90.11.14 between Caltrans and the Authority, staff seeks approval to fund the irrigation costs for the landscaping and plant establishment phases of the project through December 31, 2013. **Resolution No. 09-57-P**

2.A.7 **State Route 4 Widening Project – Loveridge Road to Somersville (Project 1406):**

2.A.7.1 **Amendment No. 6 to Cooperative Agreement 90.14.13 with Caltrans for Design and Right of Way Acquisition.** Staff seeks authorization to increase the budget for right of way capital acquisition costs.

2.A.7.2 **Memorandum of Understanding between the Authority and BART for Highway Project Construction. MOU 14.06.05.**

2.A.8 **State Route 4 Widening Project – Somersville to SR160 - Amendment No. 1 to Cooperative Agreement 90.14.16 with Caltrans for Design Services (Project 1407/3001)** – Staff seeks authorization to augment Cooperative Agreement No. 90.14.16 with Caltrans by $600,000 to provide additional drainage design and construction management support during the design phase.

2.A.9 **Contra Costa County – Vasco Road Safety Improvements - Phase 1 (Project 5006).**

2.A.9.1 **Peer Review of Final Design Plans:** A peer review committee completed review of the final design plans on February 26, 2009. Staff recommends approval of peer review recommendations.

2.A.9.2 **Authorization to execute Cooperative Agreement 05E.02 and approve Appropriation Resolution 09-58-P.** Contra Costa County is requesting an appropriation of $647,000 in Measure J funds for construction and construction management. Staff recommends approval of the appropriation request and is requesting authorization to enter into **Cooperative Agreement No. 05E.02** with Contra Costa County. **Resolution No. 09-58-P.**

2.A.10 **2008 Measure C Strategic Plan:**

2.A.10.1 **Amendment No. 2 to the 2008 Measure C Strategic Plan.** This amendment reprograms $174,097 in 1988 dollars ($327,309 escalated) from Lafayette Carpool Lots (Project 1613) to Lamorinda School Bus Program (Project 1603). **Resolution No. 09-61-P.**

2.A.10.2 **Amendment No. 5 to Cooperative Agreement No. 16.00.07 and appropriation of funds to the Lamorinda School Bus Program.** Staff seeks authorization to amend Cooperative Agreement 16.00.07 and approve Resolution No. 09-50-P, Rev. 1 allowing the Authority to make payments to the Lamorinda School Bus program under Measure C. **Resolution No. 09-50-P, Rev. 1.**

2.A.11 **Bay Area Rapid Transit District.**

2.A.11.1 **Cooperative Agreement 10CO.01 with BART Parking, Station Access, and Other Improvements.** Approval of this Cooperative Agreement is a pre-requisite for BART to request subsequent appropriation requests for Measure J funds.

2.A.11.2 **Cooperative Agreement 02E.01 with BART for eBART Measure J Funding and appropriation of capital funds for the project. Resolution No. 09-59-P.** BART is seeking $20 million in Measure J funds for construction of the first phase of eBART.

(Summary Attachment-Action)

2.A.11.3 **Concurrence with BART Regional Measure 2 (RM-2) and AB1171 Allocation Request to MTC. Resolution No. 09-62-P.** MTC requires the Authority's approval of BART's funding request.

2.A.12 **Consultant Agreement Amendments.** Staff has identified a number of Consultant Agreements which have expired or are due to expire within the upcoming months. Staff seeks authorization to extend the terms of these Agreements. No other changes are proposed, and there are no financial implications to the amendments.

2.A.13 **Final Arbitrage Rebate Liability Calculation for the Contra Costa Transportation Authority Commercial Paper Notes Series A.** This is an informational item to note that the Authority has complied with regulations to rebate excess earnings to the IRS on the 2007 Commercial Paper Notes which were paid off on September 23, 2009.

2.A.14 **Legislation.** Staff may report and the Committee may take action on any matter related to the Authority's legislative objectives. *This item was deferred to January.*

2.A.16 **Caldecott Tunnel Improvement Project. (Project 1001)**

2.A.16.1 **Project Status Report.** APC has requested periodic updates on the project.

2.A.16.2 **Cooperative Agreement 01CS.01 with Alameda County Congestion Management Association relative to project enhancements.** This agreement spells out how the additional enhancements in Berkeley and Oakland are to be funded.

2.A.16.3 **Amendment No. 1 to Agreement No. 261 with Parsons for on-call Design Support Services during Construction.** This amendment will allow Parsons to be available to respond to questions from the construction management team during construction.

2.A.16.4 **Amendment No. 1 to Agreement No. 262 with PB Americas for Construction Management Services.** This agreement covers construction management services for the duration of the Fourth Bore Construction.

2.1 **NEW ITEM: State Route 4 Widening (Railroad Avenue to Loveridge Road) – Contingency Funds for Construction Contract #241 (Project 1405).** Staff seeks authorization to increase the contingency funds in the amount of $ 150,000 for identified extra work under construction contract #241 with Watkin & Bortolussi, Inc., in order to clear trees in a timely way for the Loveridge Road Interchange project **Resolution No. 09-53-P rev. 1.**

2.B <u>Planning Committee:</u>

(No Item 2.B.1)

2.B.3 **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.

2.B.4 Status Report on the Initial Measure J Growth Management Program (GMP) Biennial Compliance Checklist. The next compliance reporting period will cover Calendar Years 2008 and 2009. The first 15 months of the compliance period corresponds with Measure C, and the last nine months (beginning on April 1, 2009) corresponds with Measure J. Accordingly, both a Final Measure C, and an Initial Measure J Compliance Checklist will need to be released to local jurisdictions in early 2010. TCC has delegated the detailed discussion of the Initial Measure J Checklist questions to the Growth Management Program Task Force for preliminary discussion. Concurrently, the Authority's Citizen's Advisory Committee discussed the Measure J Checklist at its meeting on December 9, 2009.

2.B.6 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.

End of Consent Calendar

2.A.17 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.**

ACTION: *Commissioner Abelson* moved to approve the 2009 Measure J Strategic Plan, seconded by *Commissioner Glover.* The motion passed unanimously, 8-0. *(Commissioner Durant had not yet arrived.)*

PUBLIC COMMENT:
Olivia DeBree, representing TransForm, thanked Bob McCleary and Authority staff for their efforts on the final Strategic Plan. She also acknowledged *Commissioners Glover, Taylor, Kee, and Representative Worth* for their consideration and commitment to East County's Transportation for Livable Communities (TLC) funding needs.

3.0 MAJOR DISCUSSION ITEMS: *None*

4.0 REGULAR AGENDA ITEMS:

4.A Administration & Projects Committee:

4.A.15 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, will provide a brief overview of the statements.

ACTION: *Commissioner Taylor* moved to accept the Fiscal Audit and Management Letter for the year ended June 30, 2009, seconded by *Commissioner Arnerich.* The motion passed unanimously, 8-0. *(Commissioner Durant had not yet arrived.)*

Commissioner Pierce stated that Randall Carlton, Chief Financial Officer, deserved much credit for the clean audit and smooth transition to the Authority's new, in-house Financial Management System and preparation for the September 2009 bond issue.

4.B Planning Committee:

4.B.2 **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.

ACTION: *Commissioner Abelson* moved to approve the recommended projects, seconded by *Alternate Uilkema*. The motion passed unanimously, 8-0. *(Commissioner Durant had not yet arrived.)*

STAFF REPORT:
Brad Beck, Senior Transportation Planner, stated that in response to a "call for projects" issued in early October, the Authority had received eleven applications for a variety of bicycle and pedestrian transportation system improvement projects. He said that the applications had been reviewed and evaluated by a subcommittee of the TCC, and recommended funding four projects. Mr. Beck stated that although the TCC concurred with the recommended projects, it recommended some changes in project funding levels.

Mr. Beck stated that the recommended projects included (1) Monument Corridor Pedestrian and Bikeway Improvements; (2) Improvements to Moeser and Ashbury Pedestrian and Bicycle Corridors; (3) Pleasant Hill Road South End Pedestrian and Bicycle Safety Improvement Project, Phases 3 & 4; and (4) BART Station Wayfinding.

Mr. Beck said that the Planning Committee had reviewed and approved the recommendations at its meeting in December, but also suggested that the next highest-rated project, the Hercules Bio-Rad Segment Project, be given highest priority in any subsequent funding opportunities.

After preliminary lists of projects were submitted to MTC, Mr. Beck said that Authority staff was reminded that an additional $1 million in TE funds were still available for allocation. Therefore, Mr. Beck said that staff was requesting Authority approval to submit the original four projects as well as the Hercules Bio-Rad Segment Project to MTC and Caltrans for funding.

4.B.5 **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.

ACTION: *Commissioner Arnerich* moved to authorize staff to work with the city, town, and County Planning Directors on proposed revisions to the Draft Guiding Principles, seek technical support from BAAQMD/ABAG staff, incorporate language that involves transit, and return to the Planning Committee in February, seconded by *Commissioner Abelson.* The motion passed unanimously 9-0.

STAFF REPORT:
Martin Engelmann, Deputy Executive Director for Planning, stated that the Draft Guiding Principles for Implementation of SB 375 were developed at the recommendation of *Alternate Uilkema.* He said that draft principles were presented to the Planning Committee, and then referred to the Planning Directors for review and feedback at its meeting of December 11th.

Mr. Engelmann stated that the at the Planning Directors Meeting, Paul Fassinger and Christy Riviere from ABAG gave a presentation on SB 375 and Sustainable Communities Strategies (SCS). The Draft Guiding Principles were distributed, a draft scope of work for consultant assistance was reviewed, and that the Measure J General Plan Review Procedure was also discussed. Mr. Engelmann stated that ABAG's Joint Policy Committee – Regional Planning Program requesting that each of the county congestion management agencies make an appointment to the CEO Committee, and appoint one staff person to participate on an SCS-related Regional Advisory Working Group, as outlined in ABAG's December 10th letter to the Authority, which was distributed as a meeting handout.

Mr. Engelmann said that comments on the Draft Guiding Principles had been received from a number of jurisdictions, and that there was much concern about adoption of a SCS that does not necessarily reflect the adopted General Plan. He referenced feedback on the Draft Guiding Principles received from the City of Brentwood, which was distributed as a meeting handout.

Mr. Engelmann said that the Scope of Work for SB 375 Implementation, Draft Guiding Principles, and appointments would be discussed by the Planning Committee in January. He recommended that the Planning Directors reconvene on January 8th to further discuss these items, after which they would again be reviewed by the Planning Committee and Authority in February.

Alternate Uilkema stated that is was important that all jurisdictions and agencies stick together. She also stated that she had heard from County Planning that the Authority's work program should include an evaluation of the General Plan for greenhouse gas (GHG) emissions from mobile sources, and believed it was important to know where its adopted General Plan stands in relation to the GHG emission targets that will be established pursuant to SB 375 for the SCS.

Chair Viramontes asked for clarification of what a jurisdiction's "fundamental socio-economic character" encompassed (as referenced in Item 11 of the Draft Guiding Principles), and its potential relationship to Affordable Housing. A brief discussion related to affordable housing provisions of State law and the RHNA process followed.

Representative Murray noted that because transit was an integral part of a Sustainable Communities Strategy, it should be included in the Draft Guiding Principles. *Representative Worth* added that Contra Costa's principles of transit equity to diverse areas of the county also be emphasized.

Commissioner Durant arrived at 7:20 p.m.

4.B.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**

(Action on this item was taken immediately after the Public Hearing – Agenda Item F)

5.0 **CORRESPONDENCE AND COMMUNICATIONS:**

5.1 Letter Dated December 2, 2009 from Bingham McCutchen LLP RE: Response to Save Mt. Diablo's Request for CCTA to Determine Whether the New Farm Project Complies with the ULL and Measure J.

6.0 **ASSOCIATED COMMITTEE REPORTS:**

6.1 Central County **(TRANSPAC):** *Report of November 12, 2009*

6.2 East County (**TRANSPLAN**): *(Meeting of November 12, 2009 Canceled)*
6.3 Southwest County (**SWAT**): *Report of November 2, 2009*
6.4 West County (**WCCTAC**): *Report of December 11, 2009*
6.5 Conference of Mayors (**COM**):
6.6 Contra Costa County (**COUNTY**)
6.7 CCTA Citizen Advisory Committee (**CAC**)

7.0 COMMISSIONER AND STAFF COMMENTS:

7.1 Chair's Comments and Reports

7.2 Commissioners' Comments and Reports

Commissioner Durant commended Bob McCleary on his skill for rallying support and building consensus throughout the county, and thanked him for his fine work.

7.3 Executive Director Report and Staff Comments

8.0 CALENDAR: January/February/March 2010

9.0 ADJOURNMENT: to Wednesday, January 20th at 6:00 p.m.

Chair Viramontes adjourned the meeting at 7:25 p.m. to the Authority meeting scheduled for January 20th at 6:00 p.m. in honor of Bob McCleary.

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TO: Barbara Neustadter, TRANSPAC; Andy Dillard, SWAT; John Cunningham, TRANSPLAN; Christina Atienza, WCCTAC; Jaimee Bourgois, TVTC; 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.*

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EXECUTIVE DIRECTOR'S REPORT
January 20, 2010

Route 4 Widening, *December 22, 2009*
Susan Miller and I met with Caltrans' District 4 Director Bijan Sartipi on December 22, 2009 and secured agreement for an expedited review of the final plans for the Somersville Road interchange project. In order to take advantage of a competitive bidding climate, Caltrans has agreed to deviate from its standard procedures and consolidate the final "Office Engineer's" review of the final plans at District 4. The project should be ready for advertising in June/July timeframe. (Bid opening for the Loveridge interchange project is scheduled for February 10).

Transit Sustainability Study, *January 6, 2010*
Peter Engel hosted a meeting of Contra Costa's transit operators with Ann Flemer, MTC's Deputy Director for Policy, on January 6, 2010. The meeting afforded all parties an opportunity to share concerns and ideas for the conduct of the study which may result in far reaching implications for transit operations.

Richmond Paratransit Funding Issues, *January 6, 2010*
Peter Engel met with Richmond City Manager Bill Lindsay and WCCTA Executive Director Christina Atienza on January 6, 2010 to explore options for reducing the cost to the City of Richmond for continuing paratransit services in Richmond. Additional discussions are planned.

Congressman Garamendi Visit, *January 7, 2010*
Authority staff participated in a "Transportation Day" for Congressman Garamendi and his staff on January 7, 2010. Along with Hisham Noeimi and Vice Chair Taylor, I briefed the Congressman on the Route 4 corridor and eBART at a morning meeting at his Antioch office, followed by a short tour. At lunchtime we hosted a transportation "roundtable" discussion for Mr. Garamendi at our office. Commissioner Pierce and MTC Representative Worth helped to facilitate the discussion. Transit General Managers Anderson (Westcat), Dugger (BART), Krieg (Tri-Delta) and Ramacier (County Connection) participated along with AC Transit Board-member Peeples. Bijan Sartipi (Caltrans) and Randy Rentschler (MTC) rounded out the panel discussion. The Congressman was pleased with the information, and we took the opportunity to develop contacts with his new staff.

Transportation Research Board Annual Meeting, Washington DC, *January 11—13, 2010*
Susan Miller and I attended the annual TRB meeting during the week of January 11, 2010. Attendance at such national meetings allows us to learn how other agencies approach transportation planning, funding and implantation issues. It was also an opportunity to hear from key Administration officials about the prospects and timing for federal reauthorization. Being in Washington gave us the chance to meet with staff for both Congressmen Miller and Garamendi, as a follow-up to the earlier "roundtable".

Contra Costa Public Managers' Association (PMA) Meeting, *January 14, 2010*
Martin Engelmann and I attended the January 14, 2010 meeting of the PMA. We briefed the city managers on the implications of SB 375 and how it may affect their respective jurisdictions – particularly with respect to land use. We also sought input on how Contra Costa wished to be represented at the regional level such as the MTC-ABAG Joint Policy Committee and its working groups.

Planning Directors' Forum, *January 8, 2010*
Martin Engelmann met with the Planning Directors to review the draft SB 375 Guiding Principles on January 8, 2010. The revised principles will be forwarded to the Planning Committee in February.

Contra Costa Transportation Authority, 3478 Buskirk Ave., Ste. 100, Pleasant Hill, CA 94523
Phone: 925-256-4700 Fax: 925-256-4701 Website: www.ccta.net

511 Contra Costa Update to TRANSPAC for February 2010

511 Contra Costa Website

The website was redesigned and launched in January 2009 and is state of the art. In the past year 511 Contra Costa has taken advantage of various open source platforms that allow for low-cost information dissemination to the public. Examples include: Google Maps for the Contra Costa Cities Map, Bike Locker locator map, Bay Area Transit locator maps, Contra Costa Park and Ride Lot locator map, *Where is My BART* real-time arrival map, and a Senior Transit Services locator map. Google Docs is being used to capture data from on-line forms. In addition, the website has utilized the latest social networking tools to help spread the word on transportation-related alerts, news, and promotions.

Website Visit Stats

Monthly visits doubled from January 09 – December 09 from 1,216 to 2,565

- Percentage of new visits per month is 73% which means we are constantly attracting new visitors.
- The average number of web page views per visitor is 3.
- Overall highest traffic occurred during the months of August 09 – November 09. In August the SchoolPool promotion accounted for approximately 10% of total page views and 13% of total visits for the year.
- In August 09 the SchoolPool promotion increased the number of monthly web page visits to the Schools web page by 700% (compared to the previous month).
- In November the Transit Incentive web page drew 8% of total web page views for the year and the Bike Maps web page drew approximately 6% of the total web page views.

How Does the Public Find the 511contracosta.org Website?

30% of the traffic for the year came from referral sites. The referrals are promising because they attract a significant number of visits, have a high percentage of new visits, and have approximately 2-3 pages per visit.

The Top 25 Referring Websites Are:

zipsurvey.com
bicycling.511.org
rideshare.511.org
bishopranch.com
ow.ly – a Twitter-related source
511.org
twitter.com
mdusd.k12.ca.us – MDUSD
dvc.edu – Diablo Valley College
ci.pleasant-hill.ca.us – Pleasant Hill
ci.danville.ca.us – Danville
google.com
contracostatimes.com
images.google.com
cityofmartinez.org – Martinez
ccta.net – CCTA
blinktaginc.com –internal use
ci.san-ramon.ca.us – San Ramon
coulombtech.com – Coulomb
mail.google.com
sanramon.ca.gov – San Ramon
walnut-creek.org – Walnut Creek
co.contra-costa.ca.us – CCC
nctr.usf.edu – Natl Center for Transit Research at USF
losmedanos.edu – LMC

511 Contra Costa Update continued

Search Engine Key Words

An upward trend in visits coming from key word searches is due in part from the high ranks on search engines that are driving traffic to the website. The most meaningful keyword search other than "511 Contra Costa" was "school pool.org" resulting in a 70% increase of new visitors to the website. Many of the top searches included "511 Contra Costa" which may indicate an increase in brand equity.

Search Engine Key Phrases

The most popular key phrase was "BART strike update" driving 605 visits with an average of 1.86 page views per visit and 95% of them were new visitors. The second highest key phrase was "Spare the Air Contra Costa" which drove 340 visits with approximately 2 page views per visit.

iSmog App: Over 500 people have downloaded the iSmog application.

Electric Charging Stations: 511 Contra Costa is working with the cites of Martinez, Pittsburg, Hercules and the County to install electric plug-in vehicle charging stations resulting in an expanded network of charging stations for the public to use along the I-680 and Hwy 4 corridors.

511 Contra Costa is the coordinator for Bike to Work Day, May 13, 2010. Thus far staff has received commitments from most of the past year's energizer station hosts to participate again this year. 511 Contra Costa is developing an evening event that will be held on Bike-to-Work Day to encourage families and children to explore their local communities via bicycle or foot.

WestCAT Lynx Buy-One Get-One Free Promotion. 511 Contra Costa, through the Countywide Transit Incentive element worked with WestCAT staff to develop a special Buy-One Get-One Free bus pass promotion to increase ridership on the Lynx Express Commuter Bus that operates along the I-80 corridor from Hercules to downtown San Francisco. The program began January 4th and thus far 150 new Lynx passengers have taken advantage of the Buy-One Get-One offer. The express bus operates every 15 minutes from 5 AM to 10 AM and from 3:30 PM-8:30P M (30-minute headways in the non-peak). In December the route carried a total of 10,707 passengers.

Local commuter opts for two-wheeled transportation from Clayton to Lafayette

Photo courtesy of 511 Contra Costa

CLAYTON RESIDENT STEVE BIGGS has been biking to his office in Lafayette since May.

While the snow in early December forced Clayton resident Steve Biggs into his car for a day, there's hardly a weekday that passes when he isn't navigating the area's extensive network of bike trails and back roads to get to his job in downtown Lafayette.

Biggs started making the 34-mile round trip commute during May's annual Bike to Work Day, which he had heard about through the news. The event is organized locally by 511 Contra Costa, a county agency that encourages individuals to use commute alternatives.

"It's so much more relaxing to ride than to sit in traffic, and I feel refreshed when I arrive at the office," Biggs says.

Biggs is a recreational bicyclist who used to do some racing in his college days. This is the first job he's had where it's made sense to ride his bike three to four days a week. While drenching rain may force him into his car, neither drizzle nor cold can keep Biggs off the saddle.

"In California, we're fortunate to have weather that's conducive to biking most of the year," notes Corinne Dutra-Roberts, who runs 511 Contra Costa's commute assistance programs. "The well-maintained bike trails also add to the convenience and safety of bicycling."

Biking extends Biggs' commute by 20 minutes to half an hour, but he doesn't need to spend additional time and money at the gym. Plus, he estimates saving about $100 per month on commute costs.

For many people, the biggest hurdle to biking to work is the logistics of getting started. Before Bike to Work Day, Biggs wasn't sure what route he would take or how he would shower and change into work clothes. "You just have to do it a few times, and then you figure it out," he advises.

Biggs mapped out his 17-mile, one-way route with Google Maps. He typed in his origin and destination and chose the "walking" route, which includes biking and walking trails. He also uses the East Bay Bicycle Coalition's comprehensive bike trail map that he picked up at 511 Contra Costa's energizer station on Bike to Work Day.

His commute takes about an hour and involves riding along three of the area's main bike trails – the Canal, Iron Horse and Lafayette Moraga trails. He carries his work necessities in a messenger bag slung over his shoulder and keeps work clothes and shoes at the office, so he can shower and change.

His bike has reflectors and bright lights for riding in the dark. Biggs retrofitted his bike with puncture-resistant tires and switched to more casual mountain-biking shoes that can clip onto the pedals, but that he can also use for walking.

If a rainstorm blows in during the day, he calls his wife for a ride home. However, 511 Contra Costa also has given him vouchers for a cab ride home as part of the Guaranteed Ride Home program.

As Bike to Work Day 2010 comes this May, Biggs will be wiser and more confident. "I try to keep it fun," he says. "As long as I enjoy doing it, I'll keep doing it."

For more information about biking to work and other commute assistance programs, visit 511contracosta.org or contact Dutra-Roberts at Corinne@511contracosta.org. Read Biggs' biking blog at 511contracosta.org/commuting-to-work-is-recreation-for-clayton-cyclist.

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

The County Connection
2477 Arnold Industrial Way Concord, CA 94520-5326 (925) 676-7500 www.cccta.org

4 January 2010

Mr. Lee Taubeneck
Deputy District Director
Cal Trans District 4
Transportation Planning and Local Assistance
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Taubeneck,

CCCTA is seeking authorization from the State Department of Transportation to charge weekday parking fees at the planned Pacheco Transit Hub located on Caltrans property along Blum Road in Pacheco (North Central Contra Costa County), near the intersection of SR 4 and Highway 680.

As you may be aware, CCCTA in partnership with the Contra Costa Transportation Authority, has been working on the design and construction of this expanded and improved facility since 2002. The intent of the facility is to accommodate both park and ride vehicles through expansion of the xisting park and ride lot, and provide a convenient staging and transfer location for express bus service in the I-680/SR 4 corridors. In 2008, Caltrans signed off on the PSR/PR for this project, CCCTA and Caltrans executed a Co Op Agreement, and the final round of review and permitting is now underway. CCCTA has amassed enough funding to construct the facility from Regional Measure 2 (Bridge Toll) funds, PTMISEA bond funds, and local sales tax funds (Measure C).

However, the expected source of funding for the operation and maintenance of the new facility has yet to be fully identified, and as the project proponent, the CCCTA Board of Directors will not authorize construction until this last piece of the puzzle is in place.

It is estimated that approximately $30,000 per year will be needed to provide power and water to the site, maintain the landscaping, and provide clean up and maintenance of the grounds and bus hub facility shelters, signage, lighting, bike racks, and loading areas.

Through a cooperative effort, the three subregional planning bodies whose residents stand to benefit from this facility have agreed to contribute initial maintenance funding for at last three years up to $25,000 combined. All three have instructed CCCTA to investigate other funding sources for these costs as soon as possible.

If CCCTA were allowed to charge $1 per weekday for parking, and if it is assumed that at least 75% of the 144 parking places at the facility were filled with either carpool vehicles or express bus rider vehicles, at least $25,000 could be generated in a year to

assist in covering maintenance costs. If permission is granted from Caltrans to allow these fees to be charged, CCCTA will begin to investigate the most efficient way to collect and manage the funds collected when the facility opens, hopefully by the end of 2010.

Please let me know if I can assist you with any additional information that might help you make a decision about our request. I can be reached at (925) 680-2045, or via email at dahlgren@cccta.org. Hamid Fathollahi at District 4 is the current project manager with whom I have been working on this project.

Sincerely yours,

Celinda Dahlgren
Director of Administration

cc: Wingate Lew, Caltrans District 4
Jean Finney, Office of Transit & Community Planning, Caltrans District 4

SWAT

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

December 7, 2009

Robert K. McCleary
Contra Costa Transportation Authority
3478 Buskirk Avenue, Suite 100
Pleasant Hill, CA 94523

RE: SWAT Meeting Summary Report for December 2009

Dear Mr. McCleary:

At the **December 7, 2009** Southwest Area Transportation Committee (SWAT) meeting, the following issues were discussed that may be of interest to the Authority:

Appoint SWAT Chair and Vice Chair for 2010: The Committee took action to appoint the Danville SWAT representative Chair, and the Orinda SWAT representative Vice Chair, of SWAT for 2010. 2010 SWAT meetings will be held in Danville at the Town Offices, located at 510 La Gonda Way, Danville.

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

The next SWAT meeting is tentatively scheduled for Monday, January 4, 2009 at the Danville Town Offices, Large Conference Room, 510 La Gonda Way, Danville. Please contact me at (925) 314-3384 if you have any questions.

Sincerely,

Andy Dillard
SWAT Administrative Staff

Cc: SWAT and SWAT TAC
TRANSPLAN, c/o John Cunningham, 651 Pine St, 4th Floor - North Wing, Martinez, CA 94553
WCCTAC, Christina Atienza, 13831 San Pablo Avenue, CA 94806
TRANSPAC, Barbara Neustadter, 2300 Contra Costa Blvd. Suite 360, Pleasant Hill, CA 94523
CCTA, Danice Rosenbohm, 3478 Buskirk Avenue, Suite 100, Pleasant Hill, CA 94523
CCTA, Martin Engelmann, 3478 Buskirk Avenue, Suite 100, Pleasant Hill, CA 94523

WCCTAC
West Contra Costa Transportation Advisory Committee

El Cerrito

Hercules

Pinole

Richmond

San Pablo

Contra Costa County

AC Transit

BART

WestCAT

February 1, 2010

Mr. Paul Maxwell, Interim Executive Director
Contra Costa Transportation Authority
3478 Buskirk Avenue, Suite 100
Pleasant Hill, CA 94523

RE: WCCTAC Meeting Summary

Dear Mr. Maxwell:

At its January 29, 2010 meeting, the WCCTAC Board took the following actions that may be of interest to the Authority:

1) Re-elected Maria Viramontes as Chair, Roy Swearingen as Vice-Chair, and Janet Abelson as CCTA even-year representative.
2) Formed ad hoc subcommittees to develop as appropriate a West County position on CCTA's proposed Guiding Principles for SB 375 Implementation, and to guide the development of an Agency Strategic Plan and an update to the Subregional Transportation Mitigation Fee Program (STMP) Strategic Plan.
3) Received an update on WCCTAC and CCTA staff's efforts to provide assistance to Richmond in their efforts to reduce the City's General Fund subsidy to their paratransit program, which in part is funded with Measure J.
4) Received a presentation from Caltrans on construction and detour plans for the I-80 eastbound HOV lane.
5) Received a presentation and approved comments on the proposed recommendations under the SR 4 Corridor System Management Plan, including identification of the need to further study transit expansion alternatives, the impacts on local streets of the proposed strategies, and cooperative funding strategies for major projects.
6) Received a presentation and approved comments on the proposed Measure J General Plan Amendment Review Process.
7) Approved preparation of a Caltrans Transportation Planning Grant application for the West County Community-Based Transportation Plan; and authorized staff to request from CCTA the allocation of Measure J Program 28b, West County's Subregional Transportation Needs, in the amount of $18,750 to fulfill local match requirements for the grant application. The CBTP will define sub-regional transportation needs and strategies for strengthening transportation-land use coordination within the sub-region by knitting together various general, specific, and priority development area plans. The study would also conceptually consider wBART and other major transportation expansion projects.

Sincerely,

Christina M. Atienza
Executive Director

cc: Danice Rosenbohm, CCTA; Barbara Neustadter, TRANSPAC; John Cunningham, TRANSPLAN; Andy Dillard, SWAT

13831 San Pablo Avenue, San Pablo, CA 94806
Ph: 510.215.3035 ~ Fx: 510.237.7059 ~ www.wcctac.org

WCCTAC
West Contra Costa Transportation Advisory Committee

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Richmond

San Pablo

Contra Costa County

AC Transit

BART

WestCAT

December 14, 2009

Mr. Robert McCleary, Executive Director
Contra Costa Transportation Authority
3478 Buskirk Avenue, Suite 100
Pleasant Hill, CA 94523

RE: WCCTAC Meeting Summary

Dear Mr. McCleary:

At its December 11 meeting, the WCCTAC Board took the following actions that may be of interest to the Authority:

1) Approved, as part of the consent calendar:
   a. Receipt of staff's report on the I-80 Integrated Corridor Mobility subcommittee meeting held on November 20;
   b. Receipt of staff's report on the adoption of the Measure J 2009 Strategic Plan;
   c. Receipt of staff's report on CCTA's new mission, vision, and values statements; and,
   d. Appointment of Mr. Edric Kwan to CCTA's Technical Coordinating Committee to take the place of Mr. Rich Davidson, who is retiring this year.
2) Received a presentation on the proposed Richmond Ultra Light Rail Transit (ULRT) demonstration project.
3) Received an update on the implementation of the Measure J Student Bus Pass Program in West Contra Costa Unified School District's jurisdiction.
4) Approved a three-year, $5,000 per year contribution, from West County's share of Measure J Commute Alternatives Program funds to County Connection, to help defray the maintenance costs of the Pacheco Transit Hub.
5) Approved an offer of assistance to Richmond in the evaluation of alternatives to restructure their paratransit program to reduce the general fund subsidy to it, in order to ensure continued compliance with Measure J funding requirements, determine the impacts on the demand for East Bay Paratransit Consortium services, and to inform the Measure J-funded West County Paratransit Study.
6) Commended and thanked Rich Davidson and Bob McCleary for their outstanding years of public service and wished them the best in their retirement.

Sincerely,

Christina M. Atienza
Executive Director

cc: WCCTAC Board; Danice Rosenbohm, CCTA; Barbara Neustadter, TRANSPAC; John Cunningham, TRANSPLAN; Andy Dillard, SWAT

13831 San Pablo Avenue, San Pablo, CA 94806
Ph: 510.215.3035 ~ Fx: 510.237.7059 ~ www.wcctac.org

TRANSPAC Transportation Partnership and Cooperation

Clayton, Concord, Martinez, Pleasant Hill, Walnut Creek and Contra Costa County
2300 Contra Costa Boulevard, Pleasant Hill, CA 94523 (925) 969-0841

December 22, 2009

The Honorable Maria Viramontes, Chair
Contra Costa Transportation Authority
3478 Buskirk Avenue, Suite 100
Pleasant Hill, California 94523

Dear Chair Viramontes:

At its meeting on December 10, 2009, TRANSPAC took the following actions that may be of interest to the Transportation Authority.

1. Received a presentation by Tian Feng, BART Architect, on Transit Wayfinding projects at Central County BART stations.

2. Accepted the TAC's recommendation to fund $15,000 of the $30,000 annual maintenance cost for County Connection's Pacheco Transit Hub project with Measure J line item 28 "Subregional Transportation Needs" funds. TRANSPAC will continue to work with County Connection on the project and will review project performance and funding in five years.

3. Approved the 2009 Strategic Plan update.

TRANSPAC hopes that this information is useful to you.

Sincerely,

Mark Ross

Mark Ross
TRANSPAC Chair

cc: TRANSPAC Representatives
TRANSPAC TAC and staff
Don Tatzin, Chair, SWAT
Federal Glover, Chair, TRANSPLAN
Maria Viramontes, Chair, WCCTAC
Robert McCleary, Paul Maxwell, Martin Engelmann, Arielle Bourgart, Hisham Noeimi, Danice Rosenbohm, CCTA
Christina Atienza, WCCTAC
John Cunningham, TRANSPLAN
Andy Dillard, SWAT
Steve Wallace, City of Pleasant Hill

TRANSPAC Transportation Partnership and Cooperation

Clayton, Concord, Martinez, Pleasant Hill, Walnut Creek and Contra Costa County

2300 Contra Costa Boulevard, Suite 360, Pleasant Hill, CA 94523 (925) 969-0841

December 22, 2009

Mr. Tian Feng
BART District Architect
300 Lakeside Drive, LKS 16
Oakland, CA 94612

Dear Mr. Feng:

Thank you so much for a great presentation at the December TRANSPAC meeting. We appreciate the amount of effort and time that you put into making your presentation so informative. As I hope you could surmise, there is a lot of interest in the proposed station enhancements at Central Contra Costa BART stations.

Many thanks once again for making time to present BART's ideas for station improvements to TRANSPAC.

Sincerely,

Barbara Neustadter

Barbara Neustadter
TRANSPAC Manager

cc: Mark Ross, Chair
TRANSPAC Representatives
TRANSPAC TAC

TRANSPLAN COMMITTEE
EAST COUNTY TRANSPORTATION PLANNING
Antioch • Brentwood • Oakley • Pittsburg • Contra Costa County
651 Pine Street -- North Wing 4TH Floor, Martinez, CA 94553-0095

January 25, 2010

Mr. Paul F. Maxwell, Interim Executive Director
Contra Costa Transportation Authority
3478 Buskirk Avenue, Suite 100
Pleasant Hill, CA 94523

Dear Mr. Maxwell:

This correspondence reports on the actions and discussions at the TRANSPLAN Committee during their meeting on January 14, 2010.

Elect Chair and Vice-Chair for 2010: The Committee moved to elect Robert Taylor (Brentwood) Chair and Brian Kalinowski (Antioch) Vice-Chair.

Appoint TRANSPLAN Representatives to the Contra Costa Transportation Authority (CCTA) Board: The Committee moved to appoint Jim Frazier (Oakley) to the "odd-year" seat on the CCTA Board and reappoint Robert Taylor to the "even-year" seat. The Committee will address alternates at the February 11th TRANSPLAN meeting.

Receive Report and Consider Comments on State Route 4 Corridor Systems Management Plan (CSMP): The Committee heard a report from CCTA, a consultant team, and TRANSPLAN staff on the subject plan and moved to forward comments to CCTA. The Committee expressed concern with the project packages in the plan and thought that each city council would need to consider the recommendations before any implementation took place.

Cybertran Presentation: The Committee received a report from Cybertran, an Oakland based company, on a new ultra-light rail system the company has developed.

The next regularly scheduled TRANSPLAN Committee meeting will be on Thursday, February 11, 2010 at 6:30 p.m.

Sincerely,

John W. Cunningham
TRANSPLAN Staff

c:
TRANSPLAN Committee
TRANSPLAN Technical Advisory Committee
A. Dillard, SWAT
B. Neustadter, TRANSPAC
C. Atienza, WCCTAC
L Bobadilla, TVTC
D. Rosenbohm CCTA
E. Smith, BART
H. Noeimi, CCTA

G:\Transportation\Committees\Transplan\2010\letters\cctа-status\summary letter CCTA jan 2010.doc

Phone: 925.335.1243 Fax: 925.335.1300 jcunn@cd.cccounty.us www.transplan.us

CONTRA COSTA transportation authority

PROJECT STATUS REPORT
January 2010

Table of Contents

I. ACTIVE PROJECTS

SOUTHWEST COUNTY

a. Caldecott Tunnel Improvement Project (1001/1698)

CCTA Fund Source: Measure J

Lead Agency: CCTA

Project Description: Construction of a fourth bore between Contra Costa and Alameda Counties.

Current Project Phases: Construction.

Project Status: The 4th Bore construction activities began in mid-January 2010, and a well-attended groundbreaking ceremony was held on January 20, 2010. The 4th Bore is expected to be opened to traffic in spring/summer 2013.

Construction contracts for two small projects, the Kay/Broadway Signal and SR 24/SR 13 Ramp projects were awarded to the lowest bidders in late-December 2009. Construction activities for these small contracts also began in mid-January 2010 and are expected to last up to a year.

Issues/Concerns: None.

b. Moraga Way Rehabilitation & Improvements (1625/1625SW)

CCTA Fund Source: Measure C

Lead Agency: City of Orinda

Project Description: The project will improve pedestrian facilities and rehabilitate the pavement on Moraga Way between Camino Encinas and the SR24 on-ramp at Bryant Way.

Current Project Phases: Design

Project Status: Authority allocated $211,302 for project development activities in May 2009. Design is 95% complete. The Peer review was held on November 19, 2009.

Issues/Concerns: Project costs exceed available funding.

c. I-680 /Norris Canyon Carpool/Bus Ramps (8003) - *No changes from last month.*

CCTA Fund Source: Measure J

Lead Agency: CCTA

Project Description: To provide direct HOV connector ramps from/to I-680 at Norris Canyon Road.

Current Project Phase: Project Study Report (PSR).

Project Status: Caltrans and FHWA have provided comments on the final draft PSR. CH2M Hill is currently preparing the final PSR and response to comments.

Issues/Areas of Concern: The project team is working with Caltrans to confirm coordination necessary with FHWA in finalizing the PSR.

CENTRAL COUNTY

d. Alhambra Avenue Widening (1203)

CCTA Fund Source: Measure C

Lead Agency: City of Martinez

Project Description: The second phase of the project will install additional lanes, traffic signals and soundwalls at major intersections on Alhambra Avenue from MacAlvey to SR4.

Current Project Phase: Complete.

Project Status: Construction is complete. The City decided to complete the slope grading behind a retaining wall in a subsequent project.
City Council is tentatively scheduled to accept project in February 2010.

Issues/Areas of Concern: None.

e. Commerce Avenue Extension (1214)

CCTA Fund Source: Measure C

Lead Agency: Concord

Project Description: The project will extend Commerce Avenue between Pine Creek and Waterworld Parkway and will rehabilitate the pavement section between Concord Avenue and its end near the cul de sac.

Current Project Phase: Design & Right of Way (ROW)

Project Status: The project's environmental clearance was obtained on November 10, 2009. The right of way phase is now underway and is expected to take until summer 2010. The City's ROW agent sent out letters to the property owners about the intent of the City to acquire ROW and will be setting up interviews to talk to property owners and assembling appraisals. The 90% Plans are complete. Construction is scheduled for the summer of 2010 but may be delayed depending on the length of the ROW process.

Issues/Areas of Concern: None

f. Pacheco Boulevard Widening (1216/24003) - ***No changes from last month.***

CCTA Fund Source: Measure C/Measure J

Lead Agency: Contra Costa County

Project Description: This project consists of widening of Pacheco Boulevard from Blum Road to Arthur Road in the Martinez area to provide a two way center left-turn lane and bicycle lanes.

Current Project Phase: Environmental clearance (started but now on hold).

Project Status: Measure C funds were used to environmentally clear a portion of the project near the Railroad overcrossing and acquire part of the right of way. However, due to the significant funding needs, the project is now on hold.

Issues/Areas of Concern: Project has a funding shortfall and requires coordination with the State to replace the railroad overcrossing. $5.2 million is programmed for the project in the 2009 Measure J Strategic Plan.

g. **Iron Horse Trail Crossing at Treat Boulevard (1219)** - ***No changes from last month.***

CCTA Fund Source: Measure C

Lead Agency: Contra Costa County

Project Description: This project will construct a bicycle/pedestrian bridge along the Iron Horse Trail alignment crossing Treat Boulevard in the vicinity of Jones Road.

Current Project Phase: Construction.

Project Status: The County awarded the project in May 2009, and construction started in June 2009. The project is expected to be completed in the summer of 2010.

Issues/Areas of Concern: None.

h. Martinez Intermodal Station – Phase 3 (2208A/4002)

CCTA Fund Source: Measure C and J

Lead Agency: City of Martinez

Project Description: Project will acquire land north of the railroad tracks (already acquired), construct new road access to the north parking lot, add 425 parking spaces, and build a pedestrian bridge over the tracks.

Current Project Phase: Construction of first stage (interim parking lot).

Project Status: The Authority allocated funds to start demolition of some existing structures and eventually build an interim surface parking lot. Demolition work is complete. Some interim surface parking lot work has started; striping of approximately 45 parking stalls is complete, some parking lot

lighting is complete. The remaining interim surface parking lot work is still scheduled to be done in summer 2010.

Issues/Areas of Concern: None.

i. **Pacheco Transit Hub (2210)**

CCTA Fund Source: Measure C

Lead Agency: CCCTA

Project Description: Construct a transit hub at Pacheco Boulevard and Blum Road. The project will relocate and expand the existing Park & Ride lot to provide 116 parking spaces and provide six bus bays for express and local bus service.

Current Project Phase: Design.

Project Status: The Authority appropriated $823,820 for construction in January 2009.

Issues/Areas of Concern: Because of the existing economic crisis, planned funding for maintaining the facility has been redirected to other areas. Until an additional $5,000 per year of maintenance funds are identified, construction is on hold.

j. **Ygnacio Valley Road Permanent Restoration – Phase 2 (24027)** - ***No changes from last month.***

CCTA Fund Source: Measure J

Lead Agency: City of Concord

Project Description: Approximately 1,000 feet of hillside along Ygnacio Valley Road, just west of Cowell Road is marginally stable. Due to restrictions on the use of Federal emergency relief funds, only 420 feet of restoration work was completed as part of Phase 1. Phase 2 completes the restoration project by constructing a pier wall and repair of the damaged roadway. There will also be some grading of the slide area above the roadway to remove depressions and to repair the damaged Ohlone Trail.

Current Phase: Tie-back Wall – Construction is complete except for final pavement work; Ohlone Trail - Environmental/Preliminary Engineering.

Project Status: The Authority appropriated $500,000 for environmental clearance work and preliminary engineering on June 18, 2008, and appropriated $200,000 for final design on February 18, 2009. A decision to divide the project into two parts was made in order to expedite the wall construction. On April 15, 2009, the Authority appropriated $2,691,000 for construction activities. The construction contract was awarded to Top Grade Construction for $1,372,740 on June 22, 2009. Tie-back wall construction is complete with the exception of the final pavement work

Issues/Areas of Concern: None.

k. **Comprehensive Wayfinding System for Central County BART Stations (10001-03)**

CCTA Fund Source: Measure J

Lead Agency: Bay Area Rapid Transit District (BART)

Project Description: Create and implement a cohesive, integrated wayfinding system for Central County BART stations. This project will provide overhead and wall signage, transit information displays, and real time transit information at each of the four Central County BART stations.

Current Phase: Design

Project Status: The Authority appropriated $2,600,000 for design and construction of improvements on January 20, 2010. Design is expected to be complete in March, 2011, and construction is scheduled for completion in December, 2012.

Issues/Areas of Concern: None.

l. **Electronic Bicycle Facilities at Concord, North Concord, Walnut Creek and Pleasant Hill BART Stations (10001-04)**

CCTA Fund Source: Measure J

Lead Agency: Bay Area Rapid Transit District (BART)

Project Description: This project will provide bicycle storage facilities (electronic lockers, cages, racks, etc.) at the four Central County BART stations to meet projected 2015 demand.

Current Phase: Design

Project Status: The Authority appropriated $905,000 for design and construction of improvements on January 20, 2010. Design is expected to be complete in November, 2010, and construction is scheduled for completion in July, 2011.

Issues/Areas of Concern: None.

WEST COUNTY

m. **Richmond Transit Village BART Parking Structure (2302)** - ***No changes from last month.***

CCTA Fund Source: Measure C

Lead Agency: Richmond Redevelopment Agency

Project Description: The project will construct a 769-space, six level parking structure at the Richmond BART station. The project will replace most of the surface parking (leaving a small area of 44 parking spaces) and free up land for building 99 residential units on the east side of the station. 193 parking spaces will be added at the station when this project is complete.

Current Project Phase: Construction.

Project Status: The CTC allocated $10.2 million for construction in October 2009. Project was advertised on October 20th and bid opening was rescheduled to December 4th. Tentative lowest responsive bid is approximately 13% lower than the Engineer's Estimate. Construction contract award is targeted in February 2010 and construction is targeted to start in spring 2010.

Issues/Areas of Concern: None

n. **I-80/San Pablo Dam Road Interchange (7002) - *No changes from last month.***

CCTA Fund Source: Measure J

Lead Agency: CCTA/City of San Pablo

Project Description: Reconstruct existing interchange to provide improved pedestrian and bicycle access.

Current Project Phase: Preliminary Engineering and Environmental Clearance stage.

Project Status: The project's Draft Environmental Document was signed and released for public review on August 5, 2009. A public meeting on the draft environmental document was held on August 19, 2009. Alternative 2 was determined to be the preferred alternative. The Final Environmental Document is expected to be signed in January/February 2010.

Issues/Areas of Concern: The scope of the project, and hence the cost, has increased significantly since the development of the Project Study Report. A significant funding shortfall exists.

o. **I-80/Central Avenue Interchange (7003) - *No changes from last month.***

CCTA Fund Source: Measure J

Lead Agency: CCTA

Project Description: To study possible improvements of overall traffic operations at the I-80/Central Avenue Interchange and along Central Avenue between Jacuzzi Street and San Pablo Avenue.

Current Project Phase: Feasibility Study.

Project Status: The Feasibility Study was completed in July 2009. Two projects have been identified: a traffic management element that would provide near-term benefit, especially during the weekend peak periods; and a local road realignment that would provide longer-term benefit during peak periods. The first project is moving forward as part of the ongoing I-80/Integrated Corridor Management Project, which is planned for construction in mid 2011. The second project will be led by one or both of the cities of El Cerrito and Richmond.

Issues/Areas of Concern: None.

p. **Marina Bay Parkway Grade Separation (9003) - *No changes from last month.***

CCTA Fund Source: Measure J

Lead Agency: Richmond Redevelopment Agency

Project Description: The project will construct a roadway undercrossing at the intersection of Marina Bay Parkway and BNSF/UP railroad tracks between Regatta Boulevard and Meeker Avenue in the City of Richmond. The undercrossing will replace existing at-grade crossing.

Current Project Phase: Design.

Project Status: The Authority appropriated $2,700,000 for design and engineering services work on September 16, 2009. Design is expected to be complete in October 2010, with construction starting in December 2010.

Issues/Areas of Concern: None.

q. **Electronic Bicycle Facilities at El Cerrito Del Norte, El Cerrito Plaza, and Richmond BART Stations (10002-03)**

CCTA Fund Source: Measure J

Lead Agency: Bay Area Rapid Transit District (BART)

Project Description: This project will provide bicycle storage facilities (electronic lockers, cages, racks, etc.) at the three West County BART stations to meet projected 2015 demand.

Current Project Phase: Design.

Project Status: The Authority appropriated $402,000 for design and construction of improvements on January 20, 2010. Design is expected to be complete in November, 2010, and construction is scheduled for completion in July, 2011.

Issues/Areas of Concern: None.

r. **Comprehensive Wayfinding System for West Contra Costa BART Stations (10002-05)**

CCTA Fund Source: Measure J

Lead Agency: Bay Area Rapid Transit District (BART)

Project Description: Create and implement a cohesive, integrated wayfinding system for West County BART stations. This project will provide overhead and wall signage, transit information displays, and real time transit information at each of the three West County BART stations.

Current Project Phase: Design.

Project Status: The Authority appropriated $1,600,000 for design and construction of improvements on January 20, 2010. Design is expected to be complete in March, 2011, and construction is scheduled for completion in December, 2012.

Issues/Areas of Concern: None.

EAST COUNTY

s. **SR4 Widening: Railroad Avenue to Loveridge Road (1405)**

CCTA Fund Source: Measure C

Lead Agency: CCTA

Project Description: The project widened Route 4 to four lanes in each direction (including HOV lanes) from approximately one mile west of Railroad Avenue to approximately ¾ mile west of Loveridge Road and provided a median for future transit.

Current Project Phase: Highway Landscaping.

Project Status: Landscaping of the freeway mainline started in December 2009 and is expected to be completed by August 2010. The initial mainline landscape construction will be followed by a three-year plant establishment period.

Issues/Areas of Concern: None.

t. **SR4 Widening: Loveridge Road to Somersville Road (1406)**

CCTA Fund Source: Measure C

Lead Agency: CCTA

Project Description: The project will widen State Route 4 (e) from two to four lanes in each direction (including HOV Lanes) between Loveridge Road and Somersville Road. The project provides a median for future mass transit. The environmental document also addresses future widening to SR 160.

Current Project Phase: Construction of Team Track, Utility Relocation and mainline construction.

Project Status: The mainline construction project was advertised on October 26, 2009, bid opening has been re scheduled for February 10, 2010 due to the issuance of a large addendum for additional eBART items of work. Construction is anticipated to start in April 2010. The construction management team is in place and a field office has been secured with a lease option to extend for use as other SR4 projects come "on line".

The construction of the gas line is complete. The electrical transmission line is complete except for two western poles/foundations. This work is dependent upon electrical distribution progressing with the underground and overhead operations. Electrical distribution line relocation has also started and should be complete by late February.

The team track construction contract is largely complete. UPRR inspection should occur in January 2010 and punch list items/acceptance following in February 2010. The contractor finished work at the Loveridge interchange location on a few minor items associated with the mainline work and may complete a few more small items of work ahead of the mainline contract.

Issues/Areas of Concern: None.

u. **SR4 Widening: Somersville Road to SR 160 (1407/3001)**

CCTA Fund Source: Measure C and J

Lead Agency: CCTA

Project Description: This project will widen State Route 4 (e) from two to four lanes in each direction (including HOV Lanes) from Somersville Road to Hillcrest Avenue and then six lanes to SR 160, including a wide median for transit. The project includes the reconstruction of the Somersville Road Interchange, Contra Loma/L Street Interchange, G Street Overcrossing, Lone Tree Way/A Street Interchange, Cavallo Undercrossing and Hillcrest Avenue Interchange.

Current Project Phase: Right of Way Acquisition, Utility Relocation & Final Design.

Project Status: The final design (PS&E) for this project is divided into four segments: 1) Somersville Interchange; 2) Contra Loma Interchange and G Street Overcrossing; 3A) A Street Interchange and Cavallo Undercrossing and 3B) Hillcrest Avenue to Route 160. Monthly design coordination meetings are on-going with Caltrans, City of Antioch and PG&E.

Segment 1 design is nearing completion. 100% PS&E documents were transmitted to Caltrans for review in early December. Once District 4 approves the documents, they normally would have been sent to Caltrans Headquarters in Sacramento for final review prior to advertisement. However, District 4 has obtained delegation approval from Headquarters to perform final review before advertising which should accelerate the overall project schedule. Concurrently, final right of way acquisition activities are proceeding on all parcels. PG&E utility relocations needed in advance of the freeway construction project are under construction. The construction contract for Segment 1 remains on schedule, with anticipated advertisement for contractor bids by summer 2010.

95% PS&E documents were submitted to Caltrans in September 2009 for Segment 3A and in October for Segment 2. The design teams for both of these Segments are currently working on their 100% submittal documents. Right of way sufficiency approval was received from Caltrans for both segments and right of acquisition is proceeding. Some full take parcels have already been acquired in both segments. PG&E is working on design of all utility relocations necessary for these segments as well.

Segment 3B, the Hillcrest Interchange area, was delayed pending resolution of issues related to the future transit station. Most of those issues have been resolved. The design team is proceeding on an alternative to construct the ultimate interchange at Hillcrest Avenue, while still retaining the existing bridge structures.

Two construction management firms have been retained to provide constructability/bidability reviews prior to advertising the projects for construction. These firms will assist the designers with any construction related issues. Staff is currently working towards establishing a team that will provide corridor-wide public relations and traffic management services and ensure that there are no schedule conflicts between each construction contract and ramp/lane closures.

Issues/Areas of Concern: Allocation of state funding continues to be a concern for the SR 4 projects. If STATE funds are delayed, the overall project schedule may be compromised. The delay of the freeway project will affect construction of eBART, which will run in the newly constructed median of SR4.

v. **SR4 Bypass: Widen Bypass to 4 Lanes – Laurel Road to Sand Creek Road (5002) - *No changes from last month.***

CCTA Fund Source: Measure J

Lead Agency: State Route 4 Bypass Authority

Project Description: Widen the State Route 4 Bypass from 2 to 4 lanes (2 in each direction) from Laurel Road to Sand Creek Road.

Current Phase: Final Design.

Project Status: The Authority appropriated $2,983,000 for design and $1,000,000 for right-of-way activities on May 16, 2007. Final design is nearing completion and the project could be advertised at anytime, subject to available funding.

Issues/Areas of Concern: Construction schedule is subject to available funding.

w. **SR4 Bypass: Sand Creek Road Interchange – Phase 1 (5003) – *No changes from last month.***

CCTA Fund Source: Measure J

Lead Agency: State Route 4 Bypass Authority

Project Description: The project is currently planned to be constructed in two phases: Phase 1 consists of constructing the crossover for Sand Creek Road via a single bridge with loop for Westbound Sand Creek Road to access the Eastbound Bypass segment. The interchange will have diamond ramps in all quadrants with the exception of the southwest quadrant. Phase 1 will be further divided into two stages. Stage 1 will lower the existing Sand Creek Intersection by approximately 5 feet. Stage 2 will complete all movements except at the southwest quadrant. Phase 2 of the project will construct the southwest quadrant of the interchange.

Current Phase: Phase 1/ Stage 2 – Design and Right-of-Way Acquisition.

Project Status: Phase 1/ Stage 1 – Construction is complete, and the project has been closed out. Phase 1/ Stage 2 – Final design is nearing completion and the project could be advertised at anytime, subject to available funding.

Issues/Areas of Concern: Construction schedule is subject to available funding.

x. **Vasco Road Safety Improvements Project - Phase 1 (5006)**

CCTA Fund Source: Measure J

Lead Agency: Contra Costa County

Project Description: The project will provide a consistent cross section with a passing lane in the southbound direction through the Brushy Creek area. The project also improves safety with the installation of a solid median barrier to prevent cross median collisions.

Current Project Phase: Design.

Project Status: The project is advertised with bid opening scheduled for February 2, 2010 and award scheduled for March 9, 2010. Project completion is scheduled for fall 2011.

Issues/Areas of Concern: None.

y. **SR4 Bypass: Segments 1 and 3 (5010) - *No changes from last month.***

CCTA Fund Source: Measure J

Lead Agency: State Route 4 Bypass Authority

Project Description: Complete the remaining two of three segments planned for the State Route 4 Bypass. Segment 1 – Construct a partial interchange at the SR4/SR4 Bypass (SR4BP) junction (no connection from the SR4BP to SR160) with six lanes of freeway to Laurel Road and four lanes of freeway to Lone Tree Way. Segment 3 – Construct a two-lane expressway which begins at Balfour Road and extends south approximately 2.6 miles to Marsh Creek Road. Connect back to existing State Route 4 via an improved Marsh Creek Road (conventional highway standards), approximately 4 miles. Segment 3 also includes a direct connection to Vasco Road.

Current Phase: Construction – Final asphalt lift for Segment 3.

Project Status: Segment 3 is open for automobile traffic only. Truck traffic will be allowed after application of the final asphalt lift on the remaining portion of Segment 3 (Marsh Creek Road to SR4).

Issues/Areas of Concern: None.

z. **East County Rail Extension (eBART) (2104/2001)**

CCTA Fund Source: Measure C and J

Lead Agency: BART/CCTA

Project Description: Implement rail transit improvements in the State Route 4 corridor from the Pittsburg Bay Point station in the west to a station in Antioch in the vicinity of Hillcrest in the east.

Current Project Phase: Final Design and Construction. BART is the lead agency for this phase.

Project Status: BART Board certified the EIR on April 23, 2009.

Coordination is ongoing between BART and CCTA consultants working on the design of the SR4 Widening Project. Meetings have occurred with all parties including Caltrans and MTC to define schedule, costs and cash flows by funding source. Cooperative agreements with Caltrans are currently underway.

BART continues to work on engineering documents for the transfer station at Pittsburg Bay Point and improvements in the median to Railroad. BART expects to advertise this first package in the spring of 2010.

Issues/Areas of Concern: None.

aa. **Big Break Regional Trail (3112) - *No changes from last month.***

CCTA Fund Source: Measure C

Lead Agency: East Bay Regional Park District

Project Description: The Big Break Regional Trail connects the shoreline from the Antioch Bridge to downtown Oakley and the delta in eastern Contra Costa County. The trail is part of the newly designated Great California Delta Trail. Measure C funds will be used to construct a bridge over the Vintage Parkway Creek Channel and make trail improvements along 1/2 mile of shoreline from Piper Land to the existing trail at Fetzer Lane within the Vintage Parkway housing development in Oakley. The project will construct the bridge first, then the trail improvements.

Current Project Phase: Bridge portion is complete; trail portion is in Construction.

Project Status: Construction of the bridge part of the project is complete and the project is open to the public.

Issues/Areas of Concern: The trail part of the project went to bid on April 19, 2009 and was awarded on May 19, 2009. Construction did not start due to delay in obtaining Army Corps permit. Construction contract will be extended to summer 2010. .

II. COMPLETED PROJECTS:

SOUTHWEST COUNTY

Measure C:

1104: I-680/Stone Valley Road I/C, *1998*
1105: I-680/El Cerro Blvd. I/C Ramp Signalization, *1994*
1106: I-680 Auxiliary Lanes: Segments 1 & 3, *2008*
1107: I-680/Fosteria Wy Overcrossing, *1994*
1600: Moraga Rd. Safety Improvements, *2005*
1602: Camino Pablo Carpool Lots, *1996*
1607: Moraga Wy. at Glorietta Blvd. & Camino Encinas, *2001*
1608: Moraga Wy. Safety Improvements, *2002*
1609: Moraga Wy./Ivy Dr. Roadway Improvements, *2004*
1611: Mt. Diablo Corridor Improvements, *2001*
1612: Moraga Rd. Corridor Improvements, *2005*
1621: St. Mary's Rd. – Phase 2, *1999*
1622: Moraga Rd. Structural & Safety Imp., *2005*
1624: Bryant Way/Moraga Way Improvements, *2005*
1711: St. Mary's Rd. Improvements, *1995*
1715: San Ramon Valley Blvd. Imp. – Phase 1, *1996*
1716: Stone Valley Rd. Circulation Improvements, *2006*
1717: Camino Tassajara Circulation Improvements, *2004*

1718: Crow Canyon Rd. Improvements, *2001*
1719: Sycamore Valley Rd. Improvements, *2008*
1720: San Ramon Valley Blvd. Widening – Phase 1, *1997*
1801: Camino Pablo (San Pablo Dam Corridor), *1996*
3101: Iron Horse Trail – Monument to Alameda County Line, *1994*

CENTRAL COUNTY

Measure C:
1101: I-680/Burnett Ave. Ramps, *1995*
1103: I-680/North Main Street Bypass, *1996*
1108: Route 242/Concord Ave. Interchange, *1997*
1113: Route 242 Widening, *2001*
1116: I-680 HOV Lanes, *2005*
1117: I-680/SR4 Interchange, 2009
1205: Taylor Blvd./Pleasant Hill Rd./Alhambra Rd. Intersection Imp., *2000*
2208: Martinez Intermodal Facility – Phase 1, *2001*
2208: Martinez Intermodal Facility - Phase 2, *2006*
2296: Martinez Bay Trail, *2007*
3102: Walnut Creek Channel to CC Shoreline Trail, *2002*
1209: South Broadway Extension, *1996*
1210: Monument Blvd./Contra Costa Blvd./Buskirk Ave. Imp., *1996*
1215: Geary Rd. Improvements, *2002*
1217: Bancroft/Hookston Intersection, *2004*
1218: Buskirk Ave. Improvements, *2005*
1220: Ygnacio Valley Rd. Slide Repair, *2008*
1221 Contra Costa Blvd Signal Coordination *2009*

WEST COUNTY

Measure C:
1300: Richmond Parkway, *1996*
1501: SR4 (W) Gap Closure – Phase 1, *2004*
1503: SR4 (W) Willow Ave. Overcrossing, *1996*
2303: Hercules Transit Center, 2009

Measure J:
9001: Richmond Parkway Upgrade Study, *2008*

EAST COUNTY

Measure C:
1401: SR4 (E) Willow Pass Grade Lowering, *1995*
1402: SR4 (E) Bailey Rd. Interchange, *1996*
1403: SR4 (E) Bailey Rd. to Railroad Ave., *2006*
2101: BART Extension to Pittsburg/Bay Point, *1996*
3108: Delta De Anza Trail, *2006*
3110: Marsh Creek Trail Overcrossing at SR4, *1997*

The County Connection

Inter-Office Memo

Agenda Item 7.a

TO: O&S Committee **DATE:** January 12, 2010

FROM: Anne Muzzini **SUBJ:** Fixed Route Reports
Director of Planning & Technical Services

Fixed Route Operating Statistical Reports for December 2009

1. Monthly Boarding's Data

The following represent the numbers that are most important to staff in evaluating the performance of the fixed route system.

	FY 2009		
Title	Current Month	YTD Avg	Annual Goal
Total Passengers	262,763		
Average Weekday	11,108	11,644	FY09 Goal 15,600 Pass
Pass/Rev Hour	14.3	14.9	FY09 Goal 17.0 Pass/RHr
Missed Trips	0.09%	0.09%	FY09 Goal 0.25%
Miles between Road Calls	30,085	22,590	FY09 Goal >18,000 miles

** Based on FY08 Standards from updated SRTP*

Analysis

Average weekday ridership in December (11,108 passengers) dropped slightly from the prior months ridership of 12,408 per average weekday. This is to be expected in December when school is out and many people take vacations. See the attached table showing weekday boardings trend. Productivity dropped from 16 passengers per hour in November to 14.3 passengers per hour in December. The most productive routes remain the #20, #4, #10, and the 600 series of school tripper routes. A table showing the ranking of route by productivity is attached.

The percentage of missed trips was equal to 0.09% in December slightly up from the prior month but still well within the goal set by the Board. The YTD average is 0.08% missed trips.

The number of miles between roadcalls was equal to 30,085 miles which is the best performance in six months. This compares to the year to date average of 21,313 miles between roadcalls. The new buses began to be placed in service on the 28th of December.

MONTHLY BOARDINGS
Operations Data Summary

Fixed Route Boardings		Passengers by Revenue Hrs/Miles			Service Days		Fiscal YTD Comparison	
Dec09 - Fixed Route Boardings	262,763	Revenue Hours -	Dec 09	18,369	Weekdays - Dec 09	22		
Pavilion	0		Dec 08	24,861	Dec 08	22	Fiscal 2010 YTD	263,395
Bus Bridge	0	Revenue Miles -	Dec 09	194,946	Saturdays - Dec 09	4		
Special (Chase Bus)	632		Dec 08	300,422	Dec 08	4	Fiscal 2009 YTD	2,249,304
					Sundays - Dec 09	4		
					Dec 08	4		
December 2009 Total Boardings	263,395	Passengers per Mile		1.35	Total Days - 2009	30	YTD Trend	11.7%
December 2008 Total Boardings	309,255	Passengers per Hour		14.34	2008	30	Monthly Trend	85.2%

Route	Destination Information	December 2009 Fixed Route Passenger Total Weekday	Saturday	Sunday	Total	December 2009 Weekday Average	December 2009 Passengers per Revenue hour
1	Rossmoor / Shadelands	8,476			8,476	385	15.0
2	Rudgear / Walnut Creek	980			980	45	5.3
4	Walnut Creek Downtown Shuttle	21,924	1,938	1,613	25,476	997	27.5
4H	Walnut Creek Extended Holiday Service	810	199		1,009	37	5.3
5	Creekside / Walnut Creek	1,668			1,668	76	8.0
6	Lafayette / Moraga / Orinda	6,882	318	1,255	7,456	313	10.3
6L	Orinda / Orinda Village	95			95	4	4.2
7	Shadelands / Pleasant Hill / Walnut Creek	4,773			4,773	217	6.8
8*	Monument Shuttle	2,757			2,757	125	5.6
9	DVC / Walnut Creek	12,749			12,749	580	14.0
10	Concord / Clayton Rd	20,233			20,233	920	23.8
11	Treat Blvd / Oak Grove	5,730			5,730	260	14.9
14	Monument Blvd	15,567			15,567	708	18.0
15	Treat Boulevard	10,508			10,508	478	16.6
16	Alhambra Ave / Monument Blvd	13,330			13,330	606	11.4
17	Olivera/Solano / Salvio / North Concord	6,498			6,498	295	15.2
18	Amtrak / Merello / Pleasant Hill	8,692			8,692	395	13.3
19	Amtrak / Pacheco Blvd / Concord	3,075			3,075	140	10.2
20	DVC / Concord	20,794			20,794	945	23.7
21	Walnut Creek / San Ramon Transit Center	13,661			13,661	621	13.7
25	Lafayette / Walnut Creek	769			769	35	3.0
28	North Concord / Martinez	6,447			6,447	293	10.0
35	Dougherty Valley	6,648			6,648	302	9.8
36	San Ramon / Dublin	4,870			4,870	221	8.3
91X	Concord Commuter Express	884			884	40	11.2
92X	Ace Shuttle Express	2,736			2,736	124	15.0
93X	Kirker Pass Express	3,365			3,365	153	12.4
95X	San Ramon / Danville Express	2,283			2,283	104	10.2
96X	Bishop Ranch Express	7,526			7,526	342	10.9
97X	Bishop Ranch Express	1,866			1,866	85	8.4
98X	Martinez Express	7,748			7,748	352	11.1
250*	Gael Real Service	29	35	28	92	1	1.1
301	Rossmoor / John Muir Medical Center		400	218	619	0	8.7
311	Concord / Oak Grove / Treat Blvd / WC		716	569	1,284	0	10.7
314	Clayton Rd / Monument Blvd / PH		4,058	2,763	6,821	0	20.9
315	Concord / Willow Pass / Landana		277	125	402	0	7.2
316	Alhambra / Merello / Pleasant Hill		1,179	907	2,086	0	15.9
320	DVC / Concord		624	378	1,002	0	10.2
321	San Ramon / Walnut Creek		1,090	687	1,777	0	12.7
600's	Select Service	20,011			20,011	910	27.8
	TOTALS	244,384	10,835	7,544	262,763	11,108	14.3

TRANSPORTATION and MAINTENANCE
Operations Data Summary

TRANSPORTATION	2008 November	2008 December	2009 January	2009 February	2009 March	2009 April	2009 May	2009 June	2009 July	2009 August	2009 September	2009 October	2009 November	2009 December	FY10 FISCAL YTD
Number of Buses	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131
Totals Miles	360,781	377,985	362,920	343,213	349,992	283,369	266,246	271,311	260,739	257,833	272,474	283,616	253,077	270,769	1,598,508
Work Days	30	30	30	28	31	30	30	30	30	31	29	31	29	30	180
Revenue Hours	23,406	21,447	23,634	22,317	22,541	18,020	16,835	20,433	17,982	17,698	17,806	18,646	16,903	18,369	107,404
Operator Pay Hours	39,488	53,403	39,879	36,512	44,650	30,975	32,369	41,187	43,981	30,598	30,423	31,546	30,191	40,098	196,930
Number of Operators	212	212	211	211	211	172	172	172	172	172	171	170	168	167	170
FT Extra Board	67	64	65	87	58	50	17	62	18	27	41	62	20	21	188
Unscheduled Absences	482	470	424	467	387	401	325	393	398	367	299	332	331	331	2,058
Worker Comp.	123	219	168	152	152	124	117	141	158	138	87	120	117	97	737
Sick leave	359	251	256	315	235	277	208	252	240	229	212	212	214	239	1,321
Collision Accidents	6	5	4	3	4	8	8	5	8	5	6	5	9	2	35
Passenger Accidents	12	12	9	8	9	8	9	5	8	8	5	13	9	3	46
Total Chargeable Collisions	2	0	1	1	1	5	4	4	6	0	3	3	4	1	17
Chargeable/100K Miles	0.55	0.00	0.27	0.29	0.28	1.76	1.50	1.47	2.30	0.00	1.10	1.05	1.58	0.36	1.06
Number of Trips Scheduled	30,834	32,321	30,307	28,595	30,021	26,592	24,840	25,108	23,848	24,042	23,777	24,534	22,502	24,064	142,767
Number of Trips Missed	15	91	40	68	32	42	18	18	18	27	28	23	11	21	118
Of Trips Scheduled - % Missed	0.05%	0.28%	0.13%	0.24%	0.11%	0.16%	0.07%	0.07%	0.08%	0.11%	0.12%	0.09%	0.05%	0.09%	0.08%
Of Trips Missed - Mechanical	13	30	17	11	21	15	8	17	16	24	7	16	4	15	71
On Time Performance %	91%	93%	96%	93%	91%	91%	93%	93%	91%	91%	90%	90%	93%	96%	91%
MAINTENANCE															
A/C Operative - Avg. %	100%	100%	100%	100%	100%	100%	100%	100%	99%	100%	100%	100%	100%	100%	100%
Lifts Operative - Ave %	100%	100%	100%	100%	99%	100%	99%	100%	99%	99%	100%	100%	100%	100%	100%
PM Complete on Schedule	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total Road Calls	19	18	20	18	20	17	8	17	17	23	12	17	14	13	96
Road Calls for Mechanical	12	11	15	10	12	13	6	8	12	19	10	13	12	9	75
Road Calls for Other	7	7	5	8	8	4	2	9	5	4	2	4	2	4	21
Miles Between Mechanical Road Calls Bus Numbers															
100 - 199	13,935	14,429	7,052	14,164	16,297	9,240	6,365	12,656	11,821	10,725	11,794	12,515	10,438	10,307	
200 - 299	41,347	17,106	16,478	47,358	45,295	36,476	40,039	42,233	37,872	13,300	37,266	12,499	36,215	37,499	
300 - 399	48,814	26,988	24,463	24,075	46,146	21,572	40,455	36,485	12,327	35,328	21,976	45,475	36,422	14,228	
400 - 499	34,500	40,299	20,032	33,515	20,141	12,052	36,628	34,079	34,380	30,344	11,603	31,240	14,296	29,763	
500 - 519	64,552	62,771	14,252	28,926	15,095	33,406	55,743	66,053	56,294	9,933	57,760	18,995	54,431	62,963	
900 - 939														3,639	*Bus add - 12/09*
2000 - 2099	26,610	26,096	26,237	22,386	27,348	16,853	17,476	16,039	19,553	18,001	19,955	18,170	16,523	10,803	
9600 - 9629	15,529	26,280	52,796	24,319	30,127	20,526	50,458	8,834	10,024	6,578	19,390	23,132	6,993	17,855	
9800 - 9809	11,161	11,990	21,559	22,512	11,932	13,110	12,718	10,765	3,692	11,311	8,768	12,337	14,513	8,745	
Fleet Avg.	30,065	34,362	24,195	34,321	29,166	21,798	44,374	33,914	21,728	13,570	27,247	21,817	21,090	30,085	21,313
Maintenance Pay Hours	4,357	4,407	4,765	4,238	4,716	4,370	4,770	4,167	4,288	4,330	4,108	4,358	4,345	4,395	25,774
No. Maint. Employees	25	27	28	28	27	26	26	26	26	25	25	24	26	27	26
Maint. Emps/100K Miles	7	7	8	8	8	9	10	10	10	10	9	8	10	10	2
Unscheduled Absences	0	1	1	4	6	1	3	4	1	2	4	5	3	1	3

Note: Some statistics may not be available (n/a) at this time. These will be brought current in future reports.

AVERAGE WEEKDAY BOARDINGS TREND

Route	Destination Information	Mar-09 (3/22-3/31)	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
1	Rossmoor / Shadelands	396	484	458	442	371	342	429	436	413	385			
2	Rudgear / Walnut Creek	60	85	75	59	55	54	66	66	52	45			
4	Walnut Creek Downtown Shuttle	843	1,042	1,061	1,045	977	941	1,027	997	1,038	997			
** 4H	Walnut Creek Extended Holiday Shuttle									2	37			
5	Creekside / Walnut Creek	68	97	86	76	71	66	83	81	82	76			
6	Lafayette / Moraga / Orinda	450	487	477	353	290	286	551	527	481	313			
6L	Orinda / Orinda Village	7	20	11	6	2	4	4	1	2	4			
7	Shadelands / Pleasant Hill / Walnut Creek	203	251	239	221	188	181	251	250	235	217			
* 8	Monument Shuttle	105	90	88	103	89	94	110	109	117	125			
9	DVC / Walnut Creek	615	671	667	534	497	529	709	633	635	580			
10	Concord / Clayton Rd	945	999	1,042	940	837	773	1,083	1,072	1,042	920			
11	Treat Blvd / Oak Grove	347	383	453	312	252	236	352	313	298	260			
14	Monument Blvd	920	803	782	703	615	569	830	825	743	708			
15	Treat Boulevard	721	658	694	559	449	448	715	696	617	478			
16	Alhambra Ave / Monument Blvd	464	516	568	547	488	489	637	624	619	606			
17	Olivera/Solano / Salvio / North Concord	334	334	360	280	221	230	329	330	316	295			
18	Amtrak / Merello / Pleasant Hill	423	400	444	356	357	351	517	488	442	395			
19	Amtrak / Pacheco Blvd / Concord	128	143	125	131	111	116	154	155	134	140			
20	DVC / Concord	1,205	1,216	1,172	1,031	968	942	1,218	1,177	1,139	945			
** 20W	Waterworld				21	50	24							
21	Walnut Creek / San Ramon Transit Center	626	695	694	641	559	552	836	778	648	621			
25	Lafayette / Walnut Creek	22	67	54	38	30	38	34	36	34	35			
28	North Concord / Martinez	332	415	398	328	290	307	365	332	337	293			
35	Dougherty Valley	322	370	355	350	351	311	446	359	382	302			
36	San Ramon / Dublin	255	293	273	235	203	193	246	238	236	221			
91X	Concord Commuter Express	52	62	52	52	46	48	47	51	50	40			
92X	Ace Shuttle Express	147	118	132	174	144	152	160	151	134	124			
93X	Kirker Pass Express	156	183	191	172	173	164	206	191	169	153			
95X	San Ramon / Danville Express	95	116	121	124	102	105	117	108	115	104			
96X	Bishop Ranch Express	347	423	397	440	379	299	415	408	395	342			
97X	Bishop Ranch Express	91	121	106	109	115	116	114	106	90	85			
98X	Martinez Express	326	422	409	324	287	215	423	406	389	352			
* 250	St Mary's College Gael Rail Shuttle	4	3	3				3	5	3	4			
600's	Select Service	1,127	1,322	1,463	549	96	220	1,538	1,333	1,018	910			
	TOTALS	12,134	13,292	13,450	11,256	9,658	9,393	14,014	13,283	12,408	11,111	0	0	0

*NOTE: * Data comes from Link Operators* *** These are seasonal routes*

DECEMBER 2009 PRODUCTIVITY

Route	Destination Information	Total	Wkday Avg	Pass / Rev Hr
600's	Select Service	20,011	910	27.8
4	Walnut Creek Downtown Shuttle	25,476	997	27.5
10	Concord / Clayton Rd	20,233	920	23.8
20	DVC / Concord	20,794	945	23.7
314	Clayton Rd / Monument Blvd / Pleasant Hill	6,821		20.9
14	Monument Blvd	15,567	708	18.0
15	Treat Boulevard	10,508	478	16.6
316	Alhambra / Merello / Pleasant Hill	2,086		15.9
17	Olivera/Solano / Salvio / North Concord	6,498	295	15.2
92X	Ace Shuttle Express	2,736	124	15.0
1	Rossmoor / Shadelands	8,476	385	15.0
11	Treat Blvd / Oak Grove	5,730	260	14.9
9	DVC / Walnut Creek	12,749	580	14.0
21	Walnut Creek / San Ramon Transit Center	13,661	621	13.7
18	Amtrak / Merello / Pleasant Hill	8,692	395	13.3
321	San Ramon / Walnut Creek	1,777		12.7
93X	Kirker Pass Express	3,365	153	12.4
16	Alhambra Ave / Monument Blvd	13,330	606	11.4
91X	Concord Commuter Express	884	40	11.2
98X	Martinez Express	7,748	352	11.1
96X	Bishop Ranch Express	7,526	342	10.9
311	Concord / Oak Grove / Treat Blvd / Walnut Creek	1,284		10.7
6	Lafayette / Moraga / Orinda	7,456	313	10.3
95X	San Ramon / Danville Express	2,283	104	10.2
19	Amtrak / Pacheco Blvd / Concord	3,075	140	10.2
320	DVC / Concord	1,002		10.2
28	North Concord / Martinez	6,447	293	10.0
35	Dougherty Valley	6,648	302	9.8
301	Rossmoor / John Muir Medical Center	619		8.7
97X	Bishop Ranch Express	1,866	85	8.4
36	San Ramon / Dublin	4,870	221	8.3
5	Creekside / Walnut Creek	1,668	76	8.0
315	Concord / Willow Pass / Landana	402		7.2
7	Shadelands / Pleasant Hill / Walnut Creek	4,773	217	6.8
8*	Monument Shuttle	2,757	125	5.6
4H**	Walnut Creek Extended Holiday Shuttle	1,009	37	5.3
2	Rudgear / Walnut Creek	980	45	5.3
6L	Orinda / Orinda Village	95	4	4.2
25	Lafayette / Walnut Creek	769	35	3.0
250*	St Mary's College Gael Rail Shuttle	92	4	1.1

NOTE: ** Rts 8 & 250 data comes from Link Operators*

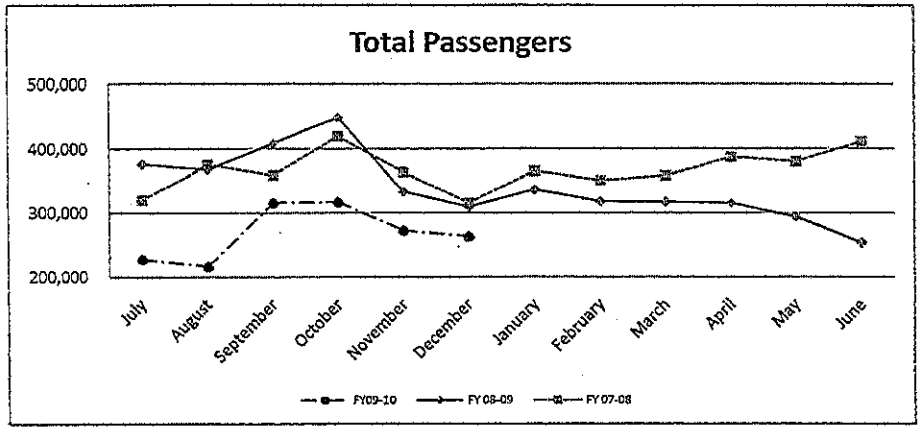
*** Rts 4H & 20W are seasonal routes*

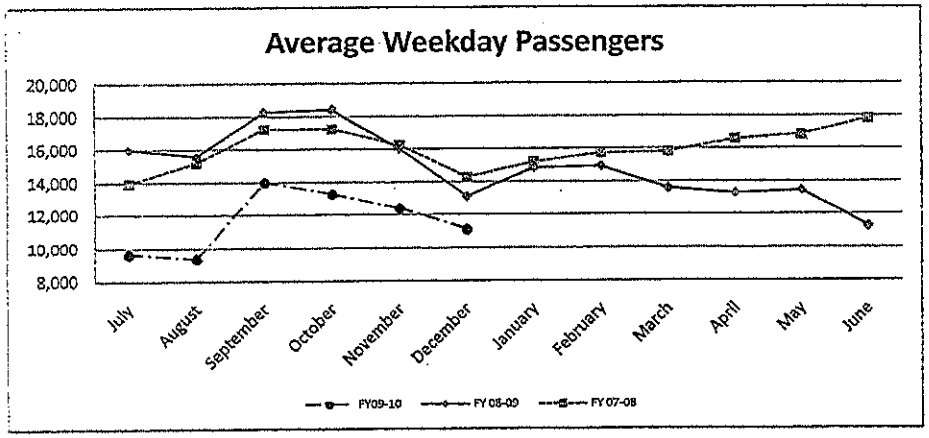
AVERAGE WEEKEND BOARDINGS TREND

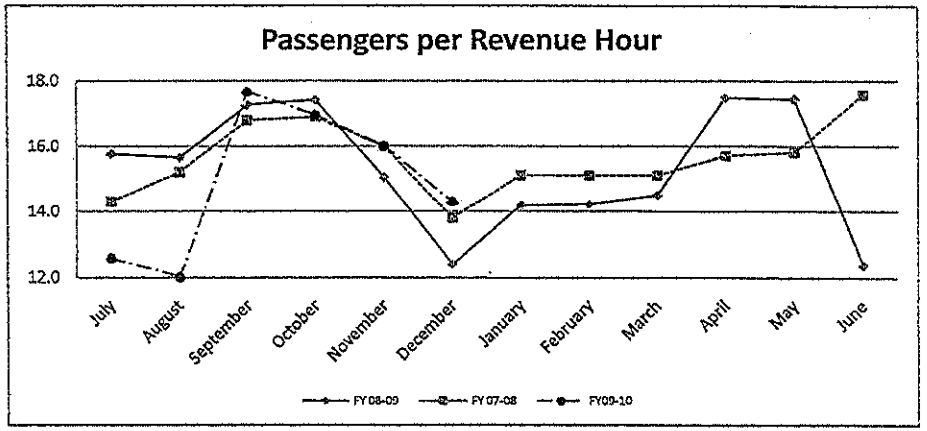
Route	Destination Information	Mar-09 (3/22-3/31)	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
	SATURDAY	*1 Day*	*4 Days*	*5 Days*	*5 Days*	*4 Days*	*5 Days*	*4 Days*	*5 Days*	*4 Days*	*4 Days*			
4	Walnut Creek Downtown Shuttle	537	705	636	400	328	427	569	535	599	485			
** 4H	Walnut Creek Extended Holiday Shuttle									14	50			
6	Lafayette / Moraga / Orinda	0	118	111	56	87	89	192	162	139	80			
** 20W	Waterworld				15	44	43				0			
* 250	St Mary's College Gael Rail Shuttle	16	20	15	0	0	7	51	33	31	9			
301	Rossmoor / John Muir Medical Center	82	139	103	85	98	94	112	111	96	100			
311	Concord / Oak Grove / Treat Blvd / WC	173	238	180	135	166	130	214	212	238	179			
314	Clayton Rd / Monument Blvd / PH	629	1,153	1,071	748	766	748	1,120	1,185	1,138	1,015			
315	Concord / Willow Pass / Landana	66	124	74	54	68	64	92	102	92	69			
316	Alhambra / Merello / Pleasant Hill	224	396	336	238	261	264	297	360	302	295			
320	DVC / Concord	99	221	187	115	141	123	176	215	204	156			
321	San Ramon / Walnut Creek	114	325	328	208	269	256	281	272	263	272			
	TOTALS	**1,940**	**3,439**	**3,041**	**2,054**	**2,226**	**2,245**	**3,103**	**3,189**	**3,117**	**2,709**	**0**	**0**	**0**

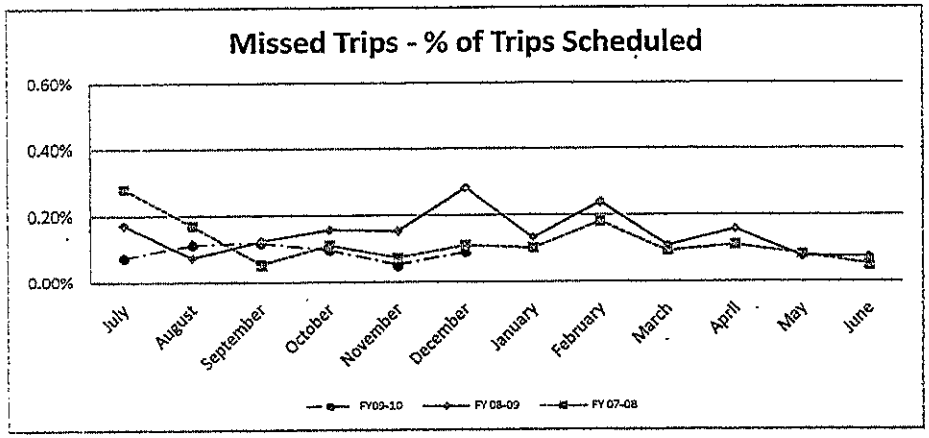
Route	Destination Information	Mar-09 (3/22-3/31)	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
	SUNDAY	*2 Days*	*4 Days*	*5 Days*	*4 Days*	*4 Days*	*5 Days*	*4 Days*	*4 Days*	*5 Days*	*4 Days*			
4	Walnut Creek Downtown Shuttle	298	558	395	313	193	361	394	393	489	403			
6	Lafayette / Moraga / Orinda	13	49	61	41	29	71	119	96	146	64			
** 20W	Waterworld				26	32	22							
* 250	St Mary's College Gael Rail Shuttle	25	17	10	0	0	7	24	20	25	7			
301	Rossmoor / John Muir Medical Center	38	77	57	45	46	39	53	45	79	55			
311	Concord / Oak Grove / Treat Blvd / WC	79	146	82	110	99	100	135	156	171	142			
314	Clayton Rd / Monument Blvd / PH	604	687	666	580	507	521	693	780	944	691			
315	Concord / Willow Pass / Landana	23	84	37	44	42	43	50	50	74	31			
316	Alhambra / Merello / Pleasant Hill	112	204	165	150	146	161	190	204	230	227			
320	DVC / Concord	60	133	84	62	68	73	103	81	135	94			
321	San Ramon / Walnut Creek	127	216	176	172	128	133	196	186	237	172			
	TOTALS	**1,376**	**2,169**	**1,733**	**1,541**	**1,289**	**1,531**	**1,958**	**2,012**	**2,529**	**1,886**	**0**	**0**	**0**

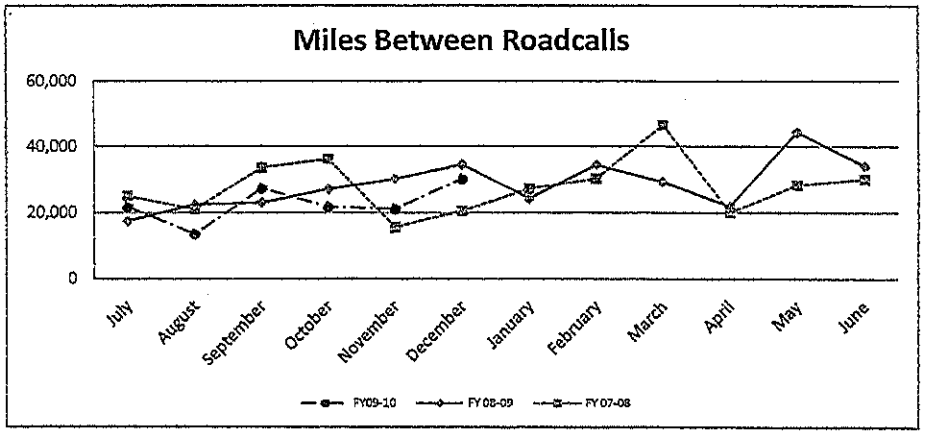
*NOTE: * Data comes from Link Operators* *** These are seasonal routes*


Total Passengers
500,000
400,000
300,000
200,000
July
August
September
October
November
December
January
February
March
April
May
June
FY09-10
FY 08-09
FY 07-08


Average Weekday Passengers
20,000
18,000
16,000
14,000
12,000
10,000
8,000
July
August
September
October
November
December
January
February
March
April
May
June
FY09-10
FY 08-09
FY 07-08


Passengers per Revenue Hour
18.0
16.0
14.0
12.0
July
August
September
October
November
December
January
February
March
April
May
June
FY 08-09
FY 07-08
FY09-10


Missed Trips - % of Trips Scheduled
0.60%
0.40%
0.20%
0.00%
July
August
September
October
November
December
January
February
March
April
May
June
FY09-10
FY 08-09
FY 07-08


Miles Between Roadcalls
60,000
40,000
20,000
0
July
August
September
October
November
December
January
February
March
April
May
June
FY09-10
FY 08-09
FY 07-08

The County Connection

Inter Office Memo

Agenda Item 7.a

TO: O&S Committee **DATE:** December 10, 2009

FROM: Anne Muzzini **SUBJ:** Fixed Route Reports
Director of Planning & Technical Services

Fixed Route Operating Report - November 2009

1. Monthly Boarding's Data

The following represent the numbers that are most important to staff in evaluating the performance of the fixed route system.

	FY 2009-10		
Title	Current Month	YTD Avg	Annual Goal
Total Passengers	271,467		
Avg. Weekday Passengers	12,408	11,752	15,600 Passengers
Pass/Rev Hour	16.0	15.1	17 Pass/Rev Hour
Missed Trips	0.05%	0.09%	Less than 0.25%
Miles between Road Calls	21,090	21,090	Less than 18,000

Analysis

Average weekday ridership in November (12,408 passengers) dropped slightly from the prior months ridership of 13,283 per average weekday. See the attached table showing weekday boardings trend. Productivity dropped slightly from 17 passengers per hour in October to 16 passengers per hour in November. The most productive routes remain the #20, #4, #10, and the 600 series of school tripper routes. A table showing the ranking of route by productivity is attached.

The percentage of missed trips was equal to 0.05% in November the lowest level since November 2008. The YTD average is 0.09% missed trips.

The number of miles between roadcalls was equal to 21,090 miles which compares to the year to date average of 20,117 miles.

MONTHLY BOARDINGS
Operations Data Summary

Fixed Route Boardings		Passengers by Revenue Hrs/Miles			Service Days		Fiscal YTD Comparison	
Nov09 - Fixed Route Boardings	270,751	Revenue Hours -	Nov 09	16,903	Weekdays - Nov 09	20		
Pavilion	0		Nov 08	22,090	Nov 08	19	Fiscal 2010 YTD	1,346,978
Bus Bridge	0	Revenue Miles -	Nov 09	169,133	Saturdays - Nov 09	4		
Special (Chase Bus)	716		Nov 08	267,865	Nov 08	5	Fiscal 2009 YTD	1,940,049
					Sundays - Nov 09	5		
					Nov 08	5		
Nov 2009 Total Boardings	**271,467**	**Passengers per Mile**		**1.61**	**Total Days - 2009**	**29**	**YTD Trend**	**69.4%**
Nov 2008 Total Boardings	**332,492**	**Passengers per Hour**		**16.06**	**2008**	**29**	**Monthly Trend**	**81.6%**

November 2009 Fixed Route Passenger Total						November 2009 Weekday Average	November 2009 Passengers per Revenue hour
Route	Destination Information	Weekday	Saturday	Sunday	Total		
1	Rossmoor / Shadelands	8,264			8,264	413	16.0
2	Rudgear / Walnut Creek	1,045			1,045	52	6.2
4	Walnut Creek Downtown Shuttle	20,751	2,398	1,956	25,105	1,038	28.8
4H	Walnut Creek Extended Holiday Service	31	57		88	16	13.8
5	Creekside / Walnut Creek	1,637			1,637	82	8.6
6	Lafayette / Moraga / Orinda	9,625	558	582	10,765	481	16.3
6L	Orinda / Orinda Village	49			49	2	3.9
7	Shadelands / Pleasant Hill / Walnut Creek	4,697			4,697	235	7.4
8*	Monument Shuttle	2,343			2,343	117	4.8
9	DVC / Walnut Creek	12,697			12,697	635	15.4
10	Concord / Clayton Rd	20,842			20,842	1,042	26.7
11	Treat Blvd / Oak Grove	5,953			5,953	298	17.1
14	Monument Blvd	14,863			14,863	743	18.9
15	Treat Boulevard	12,348			12,348	617	21.4
16	Alhambra Ave / Monument Blvd	12,376			12,376	619	11.7
17	Olivera/Solano / Salvio / North Concord	6,317			6,317	316	16.2
18	Amtrak / Merello / Pleasant Hill	8,837			8,837	442	14.9
19	Amtrak / Pacheco Blvd / Concord	2,686			2,686	134	9.8
20	DVC / Concord	22,779			22,779	1,139	28.7
21	Walnut Creek / San Ramon Transit Center	12,969			12,969	648	14.5
25	Lafayette / Walnut Creek	676			676	34	2.9
28	North Concord / Martinez	6,735			6,735	337	11.5
35	Dougherty Valley	7,646			7,646	382	12.2
36	San Ramon / Dublin	4,724			4,724	236	8.8
91X	Concord Commuter Express	1,008			1,008	50	14.1
92X	Ace Shuttle Express	2,683			2,683	134	16.2
93X	Kirker Pass Express	3,385			3,385	169	13.7
95X	San Ramon / Danville Express	2,295			2,295	115	11.3
96X	Bishop Ranch Express	7,908			7,908	395	12.9
97X	Bishop Ranch Express	1,793			1,793	90	9.1
98X	Martinez Express	7,782			7,782	389	12.2
250 *	Gael Real Service	69	122	98	289	3	3.3
301	Rossmoor / John Muir Medical Center		386	314	700	0	8.6
311	Concord / Oak Grove / Treat Blvd / WC		952	683	1,635	0	12.0
314	Clayton Rd / Monument Blvd / PH		4,552	3,777	8,329	0	22.7
315	Concord / Willow Pass / Landana		367	294	662	0	10.9
316	Alhambra / Merello / Pleasant Hill		1,209	921	2,130	0	14.1
320	DVC / Concord		814	542	1,356	0	12.1
321	San Ramon / Walnut Creek		1,054	948	2,002	0	12.7
600's	Select Service	20,355			20,355	1,018	26.4
	TOTALS	248,167	12,470	10,115	270,751	12,408	16.0

TRANSPORTATION and MAINTENANCE
Operations Data Summary

TRANSPORTATION	2008 October	2008 November	2008 December	2009 January	2009 February	2009 March	2009 April	2009 May	2009 June	2009 July	2009 August	2009 September	2009 October	2009 November	FY10 FISCAL YTD
Number of Buses	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131
Totals Miles	403,187	360,781	377,985	362,920	343,213	349,992	283,369	266,246	271,311	260,739	257,833	272,474	283,616	253,077	1,327,739
Work Days	31	30	30	30	28	31	30	30	30	30	31	29	31	29	150
Revenue Hours	25,786	23,406	21,447	23,634	22,317	22,541	18,020	16,835	20,433	17,982	17,698	17,806	18,646	16,903	89,035
Operator Pay Hours	40,369	39,488	53,403	39,879	36,512	44,650	30,975	32,369	41,187	43,981	30,598	30,423	31,546	30,191	178,742
Number of Operators	212	212	212	211	211	211	172	172	172	172	172	171	170	168	171
FT Extra Board	104	67	64	65	87	58	50	17	62	18	27	41	62	20	168
Unscheduled Absences	**443**	**482**	**470**	**424**	**467**	**387**	**401**	**325**	**393**	**398**	**367**	**299**	**332**	**331**	**1,727**
Worker Comp.	204	123	219	168	152	152	124	117	141	158	138	87	120	117	620
Sick leave	239	359	251	256	315	235	277	208	252	240	229	212	212	214	1,107
Collision Accidents	8	6	5	4	3	4	8	8	5	8	5	6	5	9	33
Passenger Accidents	12	12	12	9	8	9	8	9	5	8	8	5	13	9	43
Total Chargeable Collisions	3	2	0	1	1	1	5	4	4	6	0	3	3	4	16
Chargeable/100K Miles	**0.74**	**0.55**	**0.00**	**0.27**	**0.29**	**0.28**	**1.76**	**1.50**	**1.47**	**2.30**	**0.00**	**1.10**	**1.05**	**1.58**	**1.20**
Number of Trips Scheduled	33,145	30,834	32,321	30,307	28,595	30,021	26,592	24,840	25,108	23,848	24,042	23,777	24,534	22,502	118,703
Number of Trips Missed	52	15	91	40	68	32	42	18	18	18	27	28	23	11	107
Of Trips Scheduled - % Missed	**0.16%**	**0.05%**	**0.28%**	**0.13%**	**0.24%**	**0.11%**	**0.16%**	**0.07%**	**0.07%**	**0.08%**	**0.11%**	**0.12%**	**0.09%**	**0.05%**	**0.09%**
Of Trips Missed - Mechanical	26	13	30	17	11	21	15	8	17	16	24	7	16	4	67
On Time Performance %	90%	91%	93%	96%	93%	91%	91%	93%	93%	91%	91%	90%	90%	93%	91%
MAINTENANCE															
A/C Operative - Avg. %	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	100%	100%	100%	100%	100%
Lifts Operative - Ave %	100%	100%	100%	100%	100%	99%	100%	99%	100%	99%	99%	100%	100%	100%	100%
PM Complete on Schedule	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total Road Calls	21	19	18	20	18	20	17	8	17	17	23	12	17	14	83
Road Calls for Mechanical	15	12	11	15	10	12	13	6	8	12	19	10	13	12	66
Road Calls for Other	**6**	**7**	**7**	**5**	**8**	**8**	**4**	**2**	**9**	**5**	**4**	**2**	**4**	**2**	**17**
Miles Between Mechanical Road Calls Bus Numbers															
100 - 199	17,103	13,935	14,429	7,052	14,164	16,297	9,240	6,365	12,656	11,821	10,725	11,794	12,515	10,438	
200 - 299	16,728	41,347	17,106	16,478	47,358	45,295	36,476	40,039	42,233	37,872	13,300	37,266	12,499	36,215	
300 - 399	28,672	48,814	26,988	24,463	24,075	46,146	21,572	40,455	36,485	12,327	35,328	21,976	45,475	36,422	
400-499	13,515	34,500	40,299	20,032	33,515	20,141	12,052	36,628	34,079	34,380	30,344	11,603	31,240	14,296	
500-519	73,641	64,552	62,771	14,252	28,926	15,095	33,406	55,743	66,053	56,294	9,933	57,760	18,995	54,431	
2000-2099	25,100	26,610	26,096	26,237	22,386	27,348	16,853	17,476	16,039	19,553	18,001	19,955	18,170	16,523	
9600-9629	38,343	15,529	26,280	52,796	24,319	30,127	20,526	50,458	8,834	10,024	6,578	19,390	23,132	6,993	
9800-9809	12,121	11,161	11,990	21,559	22,512	11,932	13,110	12,718	10,765	3,692	11,311	8,768	12,337	14,513	
Fleet Avg.	26,879	30,065	34,362	24,195	34,321	29,166	21,798	44,374	33,914	21,728	13,570	27,247	21,817	21,090	20,117
Maintenance Pay Hours	4,512	4,357	4,407	4,765	4,238	4,716	4,370	4,770	4,167	4,288	4,330	4,108	4,358	4,345	21,433
No. Maint. Employees	27	25	27	28	28	27	26	26	26	26	25	25	24	26	25
Maint. Emps/100K Miles	**7**	**7**	**7**	**8**	**8**	**8**	**9**	**10**	**10**	**10**	**10**	**9**	**8**	**10**	**2**
Unscheduled Absences	3	0	1	1	4	6	1	3	4	1	2	4	5	3	3

Note: Some statistics may not be available (n/a) at this time. These will be brought current in future reports.

NOVEMBER 2009 PRODUCTIVITY

Route	Destination Information	Total	Wkday Avg	Pass / Rev Hr
4	Walnut Creek Downtown Shuttle	25,105	1,038	28.8
20	DVC / Concord	22,779	1,139	28.7
10	Concord / Clayton Rd	20,842	1,042	26.7
600's	Select Service	20,355	1,018	26.4
314	Clayton Rd / Monument Blvd / Pleasant Hill	8,329		22.7
15	Treat Boulevard	12,348	617	21.4
14	Monument Blvd	14,863	743	18.9
11	Treat Blvd / Oak Grove	5,953	298	17.1
6	Lafayette / Moraga / Orinda	10,765	481	16.3
17	Olivera/Solano / Salvio / North Concord	6,317	316	16.2
92X	Ace Shuttle Express	2,683	134	16.2
1	Rossmoor / Shadelands	8,264	413	16.0
9	DVC / Walnut Creek	12,697	635	15.4
18	Amtrak / Merello / Pleasant Hill	8,837	442	14.9
21	Walnut Creek / San Ramon Transit Center	12,969	648	14.5
316	Alhambra / Merello / Pleasant Hill	2,130		14.1
91X	Concord Commuter Express	1,008	50	14.1
4H**	Walnut Creek Extended Holiday Shuttle	88	16	13.8
93X	Kirker Pass Express	3,385	169	13.7
96X	Bishop Ranch Express	7,908	395	12.9
321	San Ramon / Walnut Creek	2,002		12.7
35	Dougherty Valley	7,646	382	12.2
98X	Martinez Express	7,782	389	12.2
320	DVC / Concord	1,356		12.1
311	Concord / Oak Grove / Treat Blvd / Walnut Creek	1,635		12.0
16	Alhambra Ave / Monument Blvd	12,376	619	11.7
28	North Concord / Martinez	6,735	337	11.5
95X	San Ramon / Danville Express	2,295	115	11.3
315	Concord / Willow Pass / Landana	662		10.9
19	Amtrak / Pacheco Blvd / Concord	2,686	134	9.8
97X	Bishop Ranch Express	1,793	90	9.1
36	San Ramon / Dublin	4,724	236	8.8
5	Creekside / Walnut Creek	1,637	82	8.6
301	Rossmoor / John Muir Medical Center	700		8.6
7	Shadelands / Pleasant Hill / Walnut Creek	4,697	235	7.4
2	Rudgear / Walnut Creek	1,045	52	6.2
8*	Monument Shuttle	2,343	117	4.8
6L	Orinda / Orinda Village	49	2	3.9
250*	St Mary's College Gael Rail Shuttle	289	3	3.3
25	Lafayette / Walnut Creek	676	34	2.9

NOTE: ** Rts 8 & 250 data comes from Link Operators*

*** Rts 4H & 20W are seasonal routes*

AVERAGE WEEKDAY BOARDINGS TREND

Route	Destination Information	Mar-09 (3/22-3/31)	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
1	Rossmoor / Shadelands	396	484	458	442	371	342	429	436	413				
2	Rudgear / Walnut Creek	60	85	75	59	55	54	66	66	52				
4	Walnut Creek Downtown Shuttle	843	1,042	1,061	1,045	977	941	1,027	997	1,038				
** 4H	Walnut Creek Extended Holiday Shuttle									2				
5	Creekside / Walnut Creek	68	97	86	76	71	66	83	81	82				
6	Lafayette / Moraga / Orinda	450	487	477	353	290	286	551	527	481				
6L	Orinda / Orinda Village	7	20	11	6	2	4	4	1	2				
7	Shadelands / Pleasant Hill / Walnut Cre	203	251	239	221	188	181	251	250	235				
* 8	Monument Shuttle	105	90	88	103	89	94	110	109	117				
9	DVC / Walnut Creek	615	671	667	534	497	529	709	633	635				
10	Concord / Clayton Rd	945	999	1,042	940	837	773	1,083	1,072	1,042				
11	Treat Blvd / Oak Grove	347	383	453	312	252	236	352	313	298				
14	Monument Blvd	920	803	782	703	615	569	830	825	743				
15	Treat Boulevard	721	658	694	559	449	448	715	696	617				
16	Alhambra Ave / Monument Blvd	464	516	568	547	488	489	637	624	619				
17	Olivera/Solano / Salvio / North Concorc	334	334	360	280	221	230	329	330	316				
18	Amtrak / Merello / Pleasant Hill	423	400	444	356	357	351	517	488	442				
19	Amtrak / Pacheco Blvd / Concord	128	143	125	131	111	116	154	155	134				
20	DVC / Concord	1,205	1,216	1,172	1,031	968	942	1,218	1,177	1,139				
** 20W	Waterworld				21	50	24							
21	Walnut Creek / San Ramon Transit Cen	626	695	694	641	559	552	836	778	648				
25	Lafayette / Walnut Creek	22	67	54	38	30	38	34	36	34				
28	North Concord / Martinez	332	415	398	328	290	307	365	332	337				
35	Dougherty Valley	322	370	355	350	351	311	446	359	382				
36	San Ramon / Dublin	255	293	273	235	203	193	246	238	236				
91X	Concord Commuter Express	52	62	52	52	46	48	47	51	50				
92X	Ace Shuttle Express	147	118	132	174	144	152	160	151	134				
93X	Kirker Pass Express	156	183	191	172	173	164	206	191	169				
95X	San Ramon / Danville Express	95	116	121	124	102	105	117	108	115				
96X	Bishop Ranch Express	347	423	397	440	379	299	415	408	395				
97X	Bishop Ranch Express	91	121	106	109	115	116	114	106	90				
98X	Martinez Express	326	422	409	324	287	215	423	406	389				
* 250	St Mary's College Gael Rail Shuttle	4	3	3				3	5	3				
600's	Select Service	1,127	1,322	1,463	549	96	220	1,538	1,333	1,018				
	TOTALS	**12,134**	**13,292**	**13,450**	**11,256**	**9,658**	**9,393**	**14,014**	**13,283**	**12,408**	**0**	**0**	**0**	**0**

*NOTE: * Data comes from Link Operators*

*** These are seasonal routes*

AVERAGE WEEKEND BOARDINGS TREND

Route	Destination Information	Mar-09 (3/22-3/31)	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
	SATURDAY	*1 Day*	*4 Days*	*5 Days*	*5 Days*	*4 Days*	*5 Days*	*4 Days*	*5 Days*	*4 Days*				
4	Walnut Creek Downtown Shuttle	537	705	636	400	328	427	569	535	599				
** 4H	Walnut Creek Extended Holiday Shuttle									14				
6	Lafayette / Moraga / Orinda	0	118	111	56	87	89	192	162	139				
** 20W	Waterworld				15	44	43							
* 250	St Mary's College Gael Rail Shuttle	16	20	15	0	0	7	51	33	31				
301	Rossmoor / John Muir Medical Center	82	139	103	85	98	94	112	111	96				
311	Concord / Oak Grove / Treat Blvd / WC	173	238	180	135	166	130	214	212	238				
314	Clayton Rd / Monument Blvd / PH	629	1,153	1,071	748	766	748	1,120	1,185	1,138				
315	Concord / Willow Pass / Landana	66	124	74	54	68	64	92	102	92				
316	Alhambra / Merello / Pleasant Hill	224	396	336	238	261	264	297	360	302				
320	DVC / Concord	99	221	187	115	141	123	176	215	204				
321	San Ramon / Walnut Creek	114	325	328	208	269	256	281	272	263				
	TOTALS	**1,940**	**3,439**	**3,041**	**2,054**	**2,226**	**2,245**	**3,103**	**3,189**	**3,117**	**0**	**0**	**0**	**0**

Route	Destination Information	Mar-09 (3/22-3/31)	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
	SUNDAY	*2 Days*	*4 Days*	*5 Days*	*4 Days*	*4 Days*	*5 Days*	*4 Days*	*4 Days*	*5 Days*				
4	Walnut Creek Downtown Shuttle	298	558	395	313	193	361	394	393	489				
** 4H	Walnut Creek Extended Holiday Shuttle													
6	Lafayette / Moraga / Orinda	13	49	61	41	29	71	119	96	146				
** 20W	Waterworld				26	32	22			0				
* 250	St Mary's College Gael Rail Shuttle	25	17	10	0	0	7	24	20	25				
301	Rossmoor / John Muir Medical Center	38	77	57	45	46	39	53	45	79				
311	Concord / Oak Grove / Treat Blvd / WC	79	146	82	110	99	100	135	156	171				
314	Clayton Rd / Monument Blvd / PH	604	687	666	580	507	521	693	780	944				
315	Concord / Willow Pass / Landana	23	84	37	44	42	43	50	50	74				
316	Alhambra / Merello / Pleasant Hill	112	204	165	150	146	161	190	204	230				
320	DVC / Concord	60	133	84	62	68	73	103	81	135				
321	San Ramon / Walnut Creek	127	216	176	172	128	133	196	186	237				
	TOTALS	**1,376**	**2,169**	**1,733**	**1,541**	**1,289**	**1,531**	**1,958**	**2,012**	**2,529**	**0**	**0**	**0**	**0**

*NOTE: * Data comes from Link Operators*
*** These are seasonal routes*

AVERAGE WEEKEND BOARDINGS TREND

Route	Destination Information	Mar-09 (3/22-3/31)	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
	SATURDAY	*1 Day*	*4 Days*	*5 Days*	*5 Days*	*4 Days*	*5 Days*	*4 Days*	*5 Days*	*4 Days*				
4	Walnut Creek Downtown Shuttle	537	705	636	400	328	427	569	535	599				
** 4H	Walnut Creek Extended Holiday Shuttle									14				
6	Lafayette / Moraga / Orinda	0	118	111	56	87	89	192	162	139				
** 20W	Waterworld				15	44	43							
* 250	St Mary's College Gael Rail Shuttle	16	20	15	0	0	7	51	33	31				
301	Rossmoor / John Muir Medical Center	82	139	103	85	98	94	112	111	96				
311	Concord / Oak Grove / Treat Blvd / WC	173	238	180	135	166	130	214	212	238				
314	Clayton Rd / Monument Blvd / PH	629	1,153	1,071	748	766	748	1,120	1,185	1,138				
315	Concord / Willow Pass / Landana	66	124	74	54	68	64	92	102	92				
316	Alhambra / Merello / Pleasant Hill	224	396	336	238	261	264	297	360	302				
320	DVC / Concord	99	221	187	115	141	123	176	215	204				
321	San Ramon / Walnut Creek	114	325	328	208	269	256	281	272	263				
	TOTALS	**1,940**	**3,439**	**3,041**	**2,054**	**2,226**	**2,245**	**3,103**	**3,189**	**3,117**	**0**	**0**	**0**	**0**

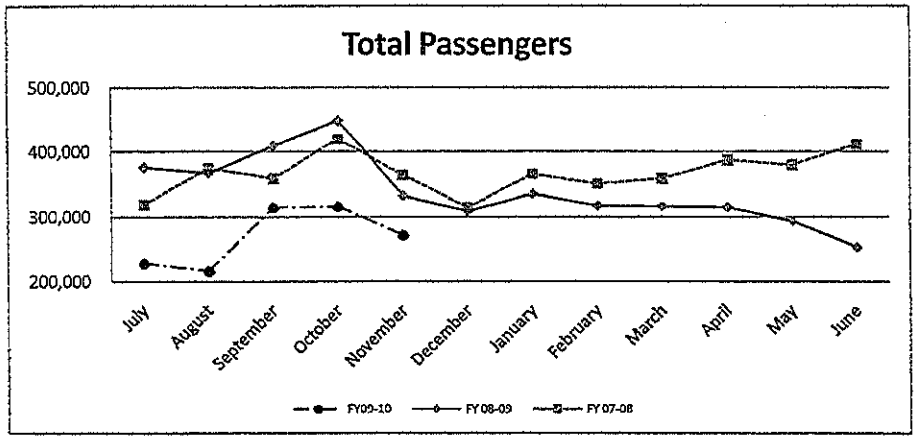
Route	Destination Information	Mar-09 (3/22-3/31)	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
	SUNDAY	*2 Days*	*4 Days*	*5 Days*	*4 Days*	*4 Days*	*5 Days*	*4 Days*	*4 Days*	*5 Days*				
4	Walnut Creek Downtown Shuttle	298	558	395	313	193	361	394	393	391				
6	Lafayette / Moraga / Orinda	13	49	61	41	29	71	119	96	116				
** 20W	Waterworld				26	32	22							
* 250	St Mary's College Gael Rail Shuttle	25	17	10	0	0	7	24	20	20				
301	Rossmoor / John Muir Medical Center	38	77	57	45	46	39	53	45	63				
311	Concord / Oak Grove / Treat Blvd / WC	79	146	82	110	99	100	135	156	137				
314	Clayton Rd / Monument Blvd / PH	604	687	666	580	507	521	693	780	755				
315	Concord / Willow Pass / Landana	23	84	37	44	42	43	50	50	59				
316	Alhambra / Merello / Pleasant Hill	112	204	165	150	146	161	190	204	184				
320	DVC / Concord	60	133	84	62	68	73	103	81	108				
321	San Ramon / Walnut Creek	127	216	176	172	128	133	196	186	190				
	TOTALS	**1,376**	**2,169**	**1,733**	**1,541**	**1,289**	**1,531**	**1,958**	**2,012**	**2,023**	**0**	**0**	**0**	**0**

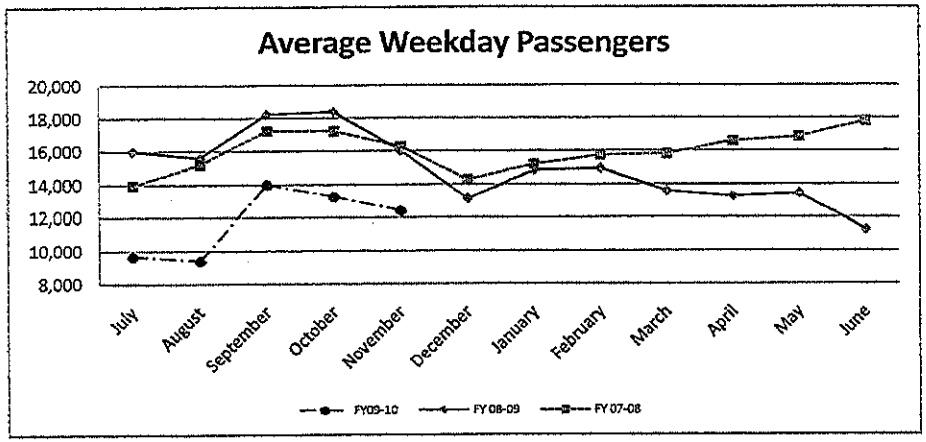
*NOTE: * Data comes from Link Operators*
*** These are seasonal routes*

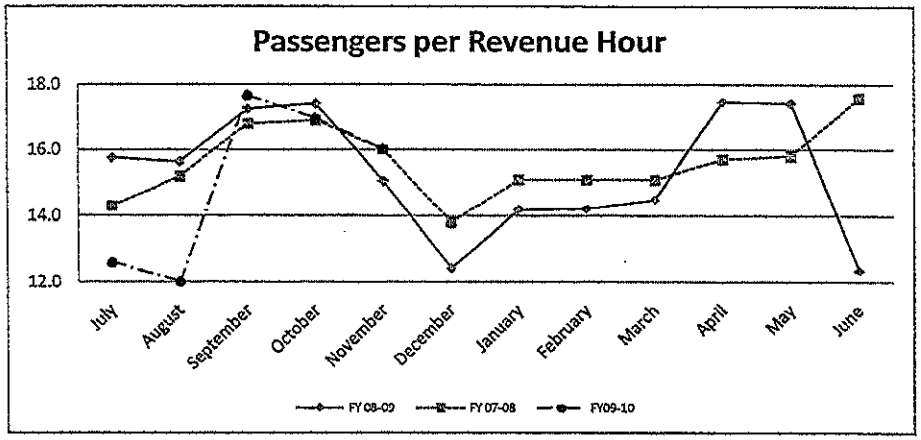
RAMP EVENTS BY ROUTE

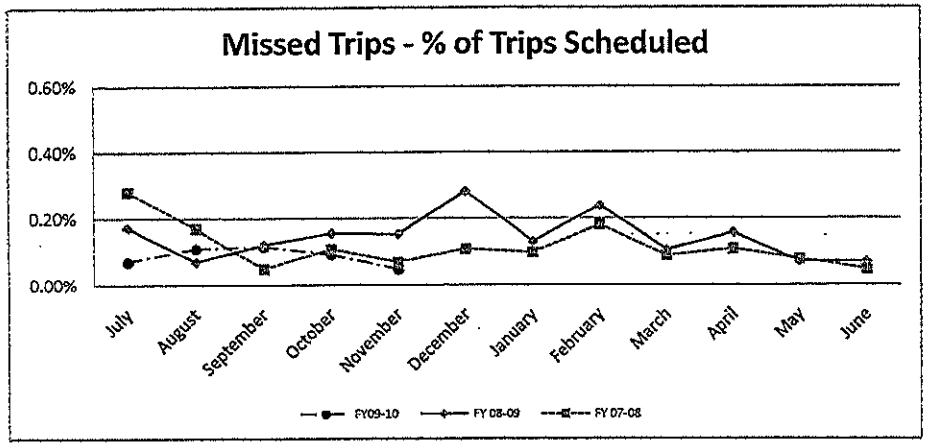
November 2009

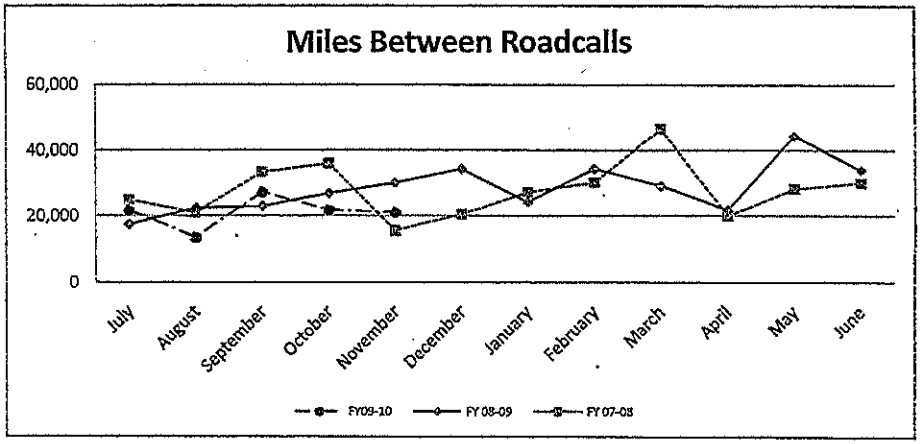
Route	Ramp Events
20	285
28	260
16	229
10	197
9	189
4	160
6	137
14	135
1	112
98X	94
21	91
314	68
15	65
18	60
17	48
2	44
11	38
5	35
35	33
316	33
320	32
96X	25
93X	24
311	23
19	15
321	15
600's	15
92X	11
7	8
36	8
315	5
95X	2
97X	1
Total	2,497


Total Passengers
500,000
400,000
300,000
200,000
July
August
September
October
November
December
January
February
March
April
May
June
FY09-10
FY 08-09
FY 07-08


Average Weekday Passengers
20,000
18,000
16,000
14,000
12,000
10,000
8,000
July
August
September
October
November
December
January
February
March
April
May
June
FY09-10
FY 08-09
FY 07-08


Passengers per Revenue Hour
18.0
16.0
14.0
12.0
July
August
September
October
November
December
January
February
March
April
May
June
FY 08-09
FY 07-08
FY09-10


Missed Trips - % of Trips Scheduled
0.60%
0.40%
0.20%
0.00%
July
August
September
October
November
December
January
February
March
April
May
June
FY09-10
FY 08-09
FY 07-08


Miles Between Roadcalls
60,000
40,000
20,000
0
July
August
September
October
November
December
January
February
March
April
May
June
FY09-10
FY 08-09
FY 07-08

Route Descriptions

Route #	Description
1	Rossmoor Shopping Center, Tice Valley Blvd, Boulevard Wy, Oakland Blvd, Trinity Ave , BART Walnut Creek, Ygnacio Valley, Montego, John Muir Medical Center, N Wiget Ln, Shadelands Office Park
2	Rudgear Rd, Stewart Ave, Trotter Wy, Dapplegray Rd, Palmer Rd, Mountain View Blvd, San Miguel Dr, N & S California Blvd, BART Walnut Creek
4	BART Walnut Creek, N California Blvd, Locust St, Mt Diablo Blvd, Broadway Plaza, S Main St, Pringle Ave
4H	Walnut Creek Extended Holiday Service (November 27 thru December 31)
5	BART Walnut Creek, Riviera Ave, Parkside Dr, N Civic Dr, N Broadway, Lincoln Ave, Mt Pisgah St, S Main St, Creekside Dr
6	BART Orinda, Moraga Wy, Moraga Rd, St Marys Rd, St Mary's College, Mt Diablo Blvd, BART Lafayette
6L	BART Orinda, Orinda Wy
7	BART Pleasant Hill, Treat Blvd, Bancroft Rd, Ygnacio Valley Rd, Shadelands Office Park, Marchbanks, BART Walnut Creek, Riviera Ave, Buena Vista, Geary Rd
8	Monument Blvd, Peach St, Virginia Ln, Robin Ln, Meadow Ln, Sunshine Dr, Detroit Ave, Walters Wy, San Miguel Rd, Galindo, Clayton Rd, Gateway Blvd, Willow Pass Rd, Sun Valley Blvd, Contra Costa Blvd
9	DVC, Contra Costa Blvd, Ellinwood Wy, JFK University, Gregory Ln, Cleaveland Rd, Boyd Rd, W Hookston Rd, Patterson Blvd, Oak Park Blvd, Coggins Dr, BART Pleasant Hill, N Main St, N California Blvd, BART Walnut Creek
10	BART Concord, Clayton Rd, Center St, Marsh Creek Rd
11	BART Concord, Port Chicago Highway, Salvio St, Mira Vista Terrace, Fry Wy, Clayton Rd, Market St, Meadow Ln, Oak Grove Rd, Treat Blvd, BART Pleasant Hill
14	BART Concord, Oak St, Laguna St, Detroit Ave, Monument Blvd, Mohr Ln, David Ave, Bancroft Rd, Treat Blvd, BART Pleasant Hill
15	BART Concord, Port Chicago Highway, Salvio St, Parkside Dr, Willow Pass Rd, Landana Dr, West St, Clayton Rd, Treat Blvd, BART Pleasant Hill, Oak Rd, N Civic Dr, Ygnacio Valley Rd, BART Walnut Creek
16	BART Concord, Oak St, Galindo St, Monument Blvd, Crescent Plaza, Cleaveland Rd, Gregory Ln, Pleasant Hill Rd, Alhambra Ave, Berrellesa St, Escobar St, Court St, Martinez Amtrak
17	BART Concord, Grant St, East St, Solano Wy, Olivera Rd, Port Chicago Highway, BART North Concord
18	BART Pleasant Hill, Oak Rd, Buskirk Ave, Crescent Plaza, Gregory Ln, Pleasant Hill Rd, Taylor Blvd, Morello Ave, Viking Dr, Contra Costa Blvd, DVC, Old Quarry Rd, Pacheco Blvd, Muir Rd, Arnold Dr, Morello, Pacheco Blvd, Martinez Amtrak
19	BART Concord, Galindo St, Concord Ave, Bisso Ln, Stanwell Dr, John Glenn Dr, Galaxy Wy, Diamond Blvd, Contra Costa Blvd, Pacheco Blvd, Martinez Amtrak
20	BART Concord, Grant St, Concord Blvd, Clayton Rd, Gateway Blvd, Willow Pass Rd, Sun Valley Blvd, Golf Club Rd, DVC
21	BART Walnut Creek, N & S California Blvd, Newell Ave, S Main St, Danville Blvd, Railroad Ave, San Ramon Valley Blvd, Danville Park & Ride, Camino Ramon, Fostoria Wy, San Ramon Transit Center
25	BART Lafayette, Mt Diablo Blvd, Highway 24, Highway 680, BART Walnut Creek
28	BART North Concord, Port Chicago Highway, Bates Ave, Commercial Cir, Pike Ln, Arnold Industrial Wy, Marsh Dr, Contra Costa Blvd, Chilpancinco Pkwy, Old Quarry Rd, DVC, Highway 680, Highway 4, Center Ave, VA Clinic, Howe Rd, Pacheco Blvd, Martinez Amtrak
35	BART Dublin, Dublin Blvd, Dougherty Rd, Bollinger Canyon Rd, E Branch Pkwy, Windemere Pkwy, Sunset Dr, Bishop Dr, Executive Pkwy, San Ramon Transit Center
36	BART Dublin, Dublin Blvd, Village Pkwy, Alcosta Blvd, Fircrest Ln, San Ramon Valley Blvd, Tareyton Ave, Bollinger Canyon Rd, Crow Canyon Rd, Executive Pkwy, San Ramon Transit Center
91X	BART Concord, Galindo St, Concord Ave, John Glenn Dr, Galaxy Wy, Chevron, Diamond Blvd, Willow Pass Rd, Gateway Blvd, Clayton Rd, Oak St
92X	Shadelands Office Park, Ygnacio Valley Rd, Highway 680, Danville Park & Ride, Crow Canyon Rd, Bishop Ranch 15, San Ramon Transit Center, Camino Ramon, ATT, Sunset Dr, Chevron, Ace Train Station Pleasanton
93X	BART Walnut Creek, Ygnacio Valley Rd, Shadelands Office Park, Oak Grove Rd, Kirker Pass Rode, Railroad Ave, Buchanan Rd, Somersville Rd, Fairview Dr, Delta Fair Blvd, Highway 4, Hillcrest Park & Ride
95X	BART Walnut Creek, Highway 680, Crow Canyon Pl, Fostoria Wy, Camino Ramon, San Ramon Transit Center
96X	BART Walnut Creek, Highway 680, Chevron, Bishop Ranch 1, Bishop Ranch 3, Bishop Ranch 6, San Ramon Transit Center, Bishop Ranch 15, Annabel Ln, Bishop Ranch 8, Bishop Dr, Sunset Dr
97X	BART Dublin, Highway 680, Highway 580, Chevron, Bishop Ranch 1, Bishop Ranch 3, Bishop Ranch 6, San Ramon Transit Center, Bishop Ranch 15, Annabel Ln, Bishop Ranch 8, Bishop Dr, Sunset Dr
98X	BART Walnut Creek, N Main St, Highway 680, Sun Valley Blvd, Contra Costa Blvd, Concord Ave, Diamond Blvd., Highway 680, Highway 4, Alhambra Ave, Berrellesa St, Escobar St, Court St, Martinez Amtrak

Route Descriptions

250	St Mary's College, St Marys Rd, Moraga Rd, Mt Diablo Blvd, BART Lafayette
301	Rossmoor Shopping Center, Tice Valley Blvd, Boulevard Wy, Oakland Blvd, Trinity Ave , BART Walnut Creek, Ygnacio Valley, Montego, John Muir Medical Center
311	BART Concord, Port Chicago Highway, Salvio St, Mira Vista Terrace, Fry Wy, Clayton Rd, Market St, Meadow Ln, Oak Grove Rd, Treat Blvd, BART Pleasant Hill
314	Ayers Rd, Concord Blvd, Kirker Pass Rd, Clayton Rd, BART Concord, Oak St, Laguna St, Detroit Ave, Monument Blvd, Mohr Ln, David Ave, Crescent Plaza, Cleaveland Rd, Gregory Ln, Contra Costa Blvd, DVC
315	BART Concord, Port Chicago Highway, Salvio St, Parkside Dr, Willow Pass Rd, Landana Dr, West St, Clayton Rd
316	BART Pleasant Hill, Oak Rd, Buskirk Ave, Crescent Plaza, Gregory Ln, Contra Costa Blvd, Golf Club Rd, DVC, Old Quarry Rd, Pacheco Blvd, Muir Rd, Arnold Dr, Pacheco Blvd, Morrelo Ave, Martinez Amtrak, Berrellesa St, Alhambra Ave
320	BART Concord, Grant St, Concord Blvd, Clayton Rd, Gateway Blvd, Willow Pass Rd, Diamond Blvd, Concord Ave, Chilpancinco Pkwy, Old Quarry Rd, DVC
321	BART Walnut Creek, N & S California Blvd, Newell Ave, S Main St, Danville Blvd, Railroad Ave, San Ramon Valley Blvd, Camino Ramon, Fostoria Wy, San Ramon Transit Center- Shops at BR.
601	N Civic Dr, Parkside Dr, Riveria Ave, BART Walnut Creek, Trinity Ave, Oakland Blvd, Boulevard Wy, Tice Valley Blvd, Meadow Rd, Castle Hill Rd, Danville Blvd, Hillgrade Ave,, Crest Ave, Rossmoor Shopping Center
602	Walnut Blvd, Oro Valley Cir, Mountain View Blvd, Rudgear Rd, Stewart Ave, Trotter Wy, Dapplegray Rd, Palmer Rd, Mountain View Blvd, San Miguel Dr, N & S California Blvd, BART Walnut Creek
603	Camino Pablo, Moraga Rd, St Marys Rd, St Mary's College, Mt Diablo Blvd, BART Lafayette
605	N Civic Dr, N Broadway, Lincoln Ave, Mt Pisgah St, Newell Ave, Lilac Dr, S Main St, Creekside Dr
606	BART Orinda, Orinda Wy, Miner Rd, Honey Hill Rd, Via Las Cruces, Saint Stephens Dr, Orinda Woods Dr, Moraga Wy, Ivy Dr, Moraga Rd, St Marys Rd, St Mary's College, Mt Diablo Blvd, BART Lafayette
607	BART Pleasant Hill, Treat Blvd, Bancroft Rd, Ygnacio Valley Rd, Oak Grove Rd, Walnut Ave
608	VA Clinic, Center Ave, Pacheco Blvd, Contra Costa Blvd, Chilpancinco Pkwy, Old Quarry Rd, DVC
609	BART Walnut Creek, Ygnacio Valley Rd, Marchbanks Dr, Walnut Ave
610	BART Concord, Clayton Rd, Ayers Rd, Concord Blvd, Kirkwood Dr, Oakhurst Dr, Center St, Marsh Creek Rd, Mountaire Pkwy, Mountaire Cir
611	BART Concord, Port Chicago Highway, Salvio St, Mira Vista Terrace, Fry Wy, Clayton Rd, Market St, Meadow Ln, Oak Grove Rd, Treat Blvd, Bancroft Rd, Minert Rd.
612	BART Concord, Clayton Rd, Ayers Rd, Concord Blvd, Kirker Pass Rd, Washington Blvd, Pennsylvania Blvd, Pine Hollow Rd, El Camino Dr, Michigan Blvd
613	Minert Rd, Oak Grove Rd, Monument Blvd, Detroit Ave, Laguna St, Oak St, BART Concord
614	BART Concord, Clayton Rd, Michigan Blvd, Pennsylvania Blvd, Pine Hollow Rd, El Camino Dr
615	Concord Blvd, Landana Dr., Willow Pass Rd., Parkside Dr., Salvio St., East St., clayton Rd., Oakland Ave., Mount Diablo St., BART Concord
616	Treat Blvd, Bancroft Rd, Minert Rd, Oak Grove Rd, Monument Blvd, San Miguel Rd, Galindo St, Oak St, BART Concord
619	Minert Rd, Oak Grove Rd, Monument Blvd, Mohr Ln, David Ave, Bancroft Rd, Treat Blvd, BART Pleasant Hill
622	Pine Valley Rd, Broadmoor Dr, Montevideo Dr, Alcosta Blvd, Crow Canyon Rd, Tassajara Ranch Rd, Camino Tassajara
623	Danville Blvd, Stone Valley Rd, Green Valley Rd, Diablo Rd, Hartz Ave, San Ramon Valley Blvd, Sycamore Valley Rd, Camino Tassajara, Tassajara Ranch Rd, Crow Canyon Rd, Anabel Ln
625	Rossmoor Shopping Center, Tice Valley Blvd, Olympic Blvd, Pleasant Hill Rd, Acalanes Ave, Stanley Blvd, Mt Diablo Blvd, BART Lafayette, Happy Valley Rd, Upper Happy Valley Rd, El Nido Ranch Rd, Hidden Valley Rd, Acalanes Rd
626	St Mary's College, St Marys Rd, Rohrer Dr, Moraga Rd, Mt Diablo Blvd, BART Lafayette, Happy Valley Rd, Upper Happy Valley Rd, El Nido Ranch Rd, Hidden Valley Rd, Acalanes Rd
627	BART North Concord, Port Chicago Highway, Bates Ave, Mason Cir
635	Bollinger Canyon Rd, Dougherty Rd, Crow Canyon Rd, Tassajara Ranch Rd, Camino Tassajara, Lusitano St, Charbray St
636	San Ramon Transit Center, Executive Pkwy, Crow Canyon Rd, Bollinger Canyon Rd, San Ramon Valley Blvd, Broadmoor Dr, Alcosta Blvd, Fircrest Ln, Village Pkwy, Dublin Blvd, BART Dublin

The County Connection

Inter Office Memo

To: Operations and Scheduling Committee **Date:** December 29, 2009

From: Anne Muzzini, Director of Planning and Tech Services

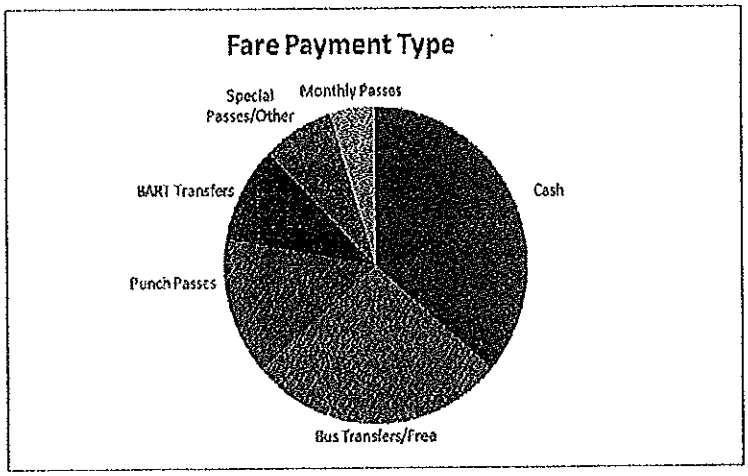
Reviewed By:

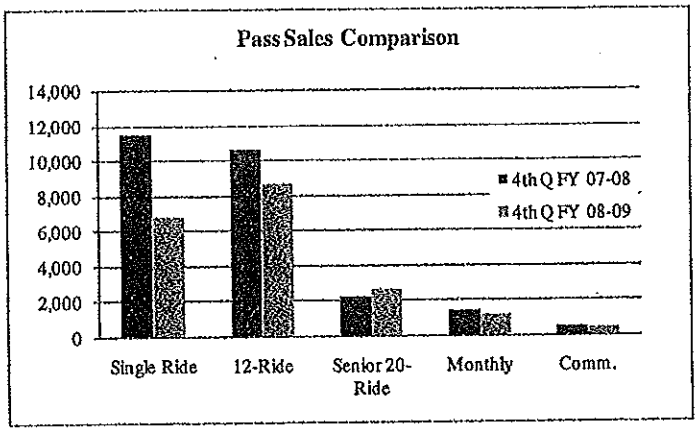
SUBJECT: Fare Payment by Type

SUMMARY OF ISSUES:

In November the Committee discussed their desire to evaluate how our different fare payment media were being used by the rider. There was a desire to simplify the number of passes and tickets sold. This memo presents information to the Committee about how riders are choosing to pay and the impact on their choice since the fare increase in March of 2009.

In summary, most passengers 36% pay with cash (or single ride tickets) and 14% pay with a punch pass and 5% pay with the monthly pass.



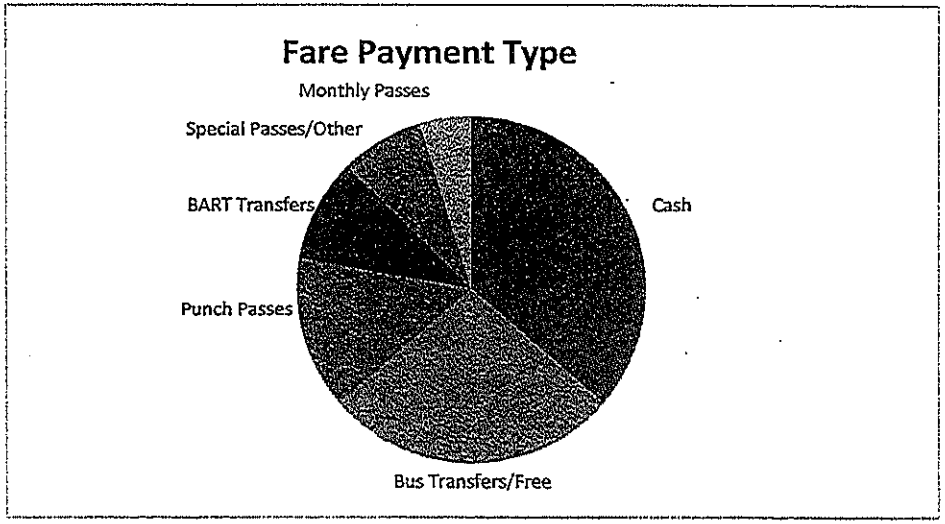


Ridership by Fare Payment

Route	Adult/Youth Cash	Bus Transfer	Free	12 Ride Punch	Bart Transfer	Senior Cash	Monthly Pass	Other/Special Passes	Senior 20 Ride Punch	Commuter Cash	Commuter Card	Bart Plus	Promo	
Jul-09	71,584	37,714	26,270	10,691	23,043	15,806	10,171	13,252	9,362	2,374	1,338	3,301	1,641	
Aug-09	71,167	35,214	28,512	11,828	21,413	13,712	7,843	10,529	8,616	1,530	1,390	2,796	1,596	
Sep-09	88,307	48,536	31,648	36,109	29,250	19,426	14,961	17,044	10,492	6,098	1,639	3,907	7,132	
Oct-09	82,285	50,749	32,989	39,489	31,171	18,409	18,236	17,659	12,448	5,792	2,168	4,480	340	
Nov-09	70,389	45,135	31,186	32,106	26,961	16,434	13,499	14,248	10,217	4,879	1,903	3,634	160	
Total	383,732	217,348	150,605	130,224	131,838	83,788	64,710	72,731	51,135	20,674	8,438	18,118	10,869	1,344,209
Percent	29%	16%	11%	10%	10%	6%	5%	5%	4%	2%	1%	1%	1%	

Grouped by Type of Payment

	July - Nov	Percent
Cash	488,193	36%
Bus Transfers/Free	367,952	27%
Punch Passes	189,796	14%
BART Transfers	131,838	10%
Special Passes/Other	101,718	8%
Monthly Passes	64,710	5%
	1,344,209	



The County Connection

Inter Office Memo

To: Operations and Scheduling Committee **Date:** 27 January 2010
From: Celinda Dahlgren, Director of Administration **Reviewed By:**

SUBJECT: LINK Monthly Operating Report – December 2009

SUMMARY OF ISSUES:	Presented for your review is the monthly operating report for LINK for December, 2009
RECOMMENDATIONS:	Information only
FINANCIAL IMPLICATIONS:	N/A
OPTIONS:	Information only
ACTION REQUESTED:	Information only
ATTACHMENTS:	*CCCTA LINK Monthly Operating Summary, December 2009*

ADDITIONAL INFORMATION:

As compared to last December, there was a significant drop in total ridership on LINK with an accompanying drop in both revenue and service hours and miles. However, this drop is almost entirely attributable to a nearly 42% drop in attendants. This is likely due to the database clean up that began several months ago to be sure that all attendants counted were actually needed by the client, and were actually riding with the client for the particular trip.

Subscription trips make up 70% of all client trips, and the number of wheelchair users actually rose by 6% over last December. The quarterly spot check of lift deployments indicate that 72% of all LINK passengers, even those who are ambulatory, need the lift to board.

On the down side, schedule adherence, no shows, complaints, and driver turnover are slightly higher than they were one year ago.

The migration to Trapeze® 9 was completed and went live on January 27, 2010, and seems to be working well. Over the next several weeks, staff will be working to refine the LINK service parameter polygons so that a scheduler will know electronically whether or not a requested trips is within the LINK service area.

CCCTA LINK
MONTHLY OPERATING SUMMARY
December FY09-10

SUMMARY	December FY08/09	December FY09/10	YTD FY08/09	YTD FY09/10
TOTAL CLIENTS	12,772	12,684	78,507	78,950
TOTAL ATTENDANTS	1,686	983	7,954	6,622
TOTAL COMPANIONS	120	73	648	499
TOTAL PASSENGERS	14,578	13,740	87,109	86,071
TOTAL SERVICE DAYS	30	30	180	180
VEHICLE REVENUE HOURS	7278.6	6917.5	43880.9	42252.4
VEHICLE SERVICE HOURS	8958.5	8460.8	53627.5	51351.6
VEHICLE NON REV HOURS	1679.9	1543.3	9746.5	9033.8
VEHICLE SERVICE MILES	144227.0	129447.0	868073.0	830047.0
VEHICLE REVENUE MILES	118857.0	106002.0	720005.0	686631.0
VEHICLE NON REV MILES	25370.0	24713.0	126068.0	144684.0
PASS. PER REVENUE HOUR	2.00	1.99	1.99	2.04
CLIENT PER REVENUE HOUR	1.75	1.83	1.79	1.87
PASS. PER SERVICE HOUR	1.63	1.62	1.62	1.68
PASS. PER SERVICE MILE	0.10	0.11	0.10	0.10
PASS. PER REVENUE MILE	0.12	0.13	0.12	0.13
TOTAL TRANSFER TRIPS	1,126	1,080	7,909	7,767
SAME DAY TRIPS	99	135	502	546
*SUBSCRIPTION TRIPS	N/A	8,869	N/A	17,439
*DEMAND	N/A	3,815	N/A	7,402
FAREBOX REVENUE	$15,593.25	$15,402.63	$99,355.28	$98,008.63
PREPAID CLIENTS	$16,571.75	$21,372.00	$98,887.05	$124,996.72
COLLECTED BILLING	$20,692.00	$1,200.00	$66,005.00	$56,740.00
TOTAL REVENUE COLLECTED	$52,857.00	$37,974.63	$264,247.33	$279,745.35
CHARGEABLE ACCIDENTS	1	2	6	8
SERVICE COMPLAINTS	0	1	3	4
SERVICE COMMENDATIONS	0	4	12	16
SERVICE DENIALS	0	0	0	0
ROAD CALLS	1	4	13	17
DRIVER TURNOVER	0.0	1.3	4.0	5.3
SCHEDULE ADHERENCE	98%	97%	98%	97%
WHEELCHAIR BOARDINGS	3,460	3,663	21,946	22,497
W/C LIFT AVAILABILITY	100%	100%	100%	100%
REGISTERED CLIENTS	8,015	8,665	N/A	N/A
UNDUPLICATED CLIENTS	1,182	1,126	N/A	N/A
NO-SHOWS	33	47	360	201
CANCELS	3,690	2,217	19,388	11,225
AVG. TRIP LENGTH (MILES)	9.9	9.4	10.0	9.6
AVG. SM BUSES IN SERVICE	3	3	3	3
AVG. BUSES IN SERVICE	48	48	48	48
TOTAL FUEL/GALLONS	19,176	22,268	114,788	119,319
FLEET M.P.G.	7.5	9.0	7.6	7.0
AMB LIFT BOARDINGS	5310	5476	10696	10884
*DRIVER ROAD CHECK	N/A	28	N/A	64
*RIDER SURVEY'S	N/A	0	N/A	2

*FIRST MONTH REPORTING THESE FIGURES

The County Connection

Inter Office Memo

To: Operations and Scheduling Committee **Date:** 16 December 2009
From: Celinda Dahlgren, Director of Administration **Reviewed By:**

SUBJECT: LINK Monthly Operating Report – November 2009

SUMMARY OF ISSUES:	Presented for your review is the monthly operating report for LINK for November 2009
RECOMMENDATIONS:	Information only
FINANCIAL IMPLICATIONS:	N/A
OPTIONS:	Information only
ACTION REQUESTED:	Information only
ATTACHMENTS:	*CCCTA LINK Monthly Operating Summary, November 2009* *Rider Survey Form* *Driver Road Check and Evaluation Form*

ADDITIONAL INFORMATION:

Trips for the month and year to date are running slightly behind last year, with the same number of total service days.

"No Shows" are at an all time low of only ten "no shows" for the entire month. Year to date "no shows" are less than half of what they were last year by this time. Cancellations are also only 57% of what they were last year at this time. For November, transfer trips were up by 21%, but slightly down overall year to date.

As a result of reviewing contract requirements for reporting, new report categories are included in this month's report: Subscription Trips, Demand Trips, Drive Road Checks, and Rider Surveys. The Rider Surveys are done during the monthly on board trips that reservationists are required to make as part of the First Transit "knock your socks off" customer service program to evaluate customer experience with the service. A copy of the survey, and the Driver Road Check form, are attached for your information.

CCCTA LINK
MONTHLY OPERATING SUMMARY
November FY09-10

	SUMMARY	November FY08/09	November FY09/10	YTD FY08/09	YTD FY09/10
1	TOTAL CLIENTS	11,829	12,157	65,735	66,266
2	TOTAL ATTENDANTS	1,208	995	6,268	5,639
3	TOTAL COMPANIONS	114	76	528	426
4	TOTAL PASSENGERS	13,151	13,228	72,531	72,331
5	TOTAL SERVICE DAYS	29	29	150	150
6	VEHICLE REVENUE HOURS	6583.4	6524.7	36602.3	35334.9
7	VEHICLE SERVICE HOURS	8018.6	7998.5	44669.0	42890.8
8	VEHICLE NON REV HOURS	1435.1	1473.8	8066.6	7490.5
9	VEHICLE SERVICE MILES	129423.0	125553.0	723846.0	700600.0
10	VEHICLE REVENUE MILES	107303.0	108004.0	601148.0	580629.0
11	VEHICLE NON REV MILES	22120.0	17549.0	100698.0	119971.0
12	PASS. PER REVENUE HOUR	2.00	2.03	1.98	2.05
13	CLIENT PER REVENUE HOUR	1.80	1.86	1.80	1.88
14	PASS. PER SERVICE HOUR	1.64	1.65	1.62	1.69
15	PASS. PER SERVICE MILE	0.10	0.11	0.10	0.10
16	PASS. PER REVENUE MILE	0.12	0.12	0.12	0.12
17	TOTAL TRANSFER TRIPS	1,189	1,446	6,783	6,687
18	SAME DAY TRIPS	63	88	403	411
19	*SUBSCRIPTION TRIPS	N/A	8,570	N/A	8,570
20	*DEMAND	N/A	3,587	N/A	3,587
21	FAREBOX REVENUE	$14,938.00	$15,060.00	$83,762.03	$82,606.00
22	PREPAID CLIENTS	$12,141.30	$22,507.00	$82,315.30	$103,624.72
23	COLLECTED BILLING	$10,654.00	$17,748.00	$45,313.00	$55,540.00
24	TOTAL REVENUE COLLECTED	$37,733.30	$55,315.00	$211,390.33	$241,770.72
25	CHARGEABLE ACCIDENTS	1	2	5	3
26	SERVICE COMPLAINTS	0	1	3	5
27	SERVICE COMMENDATIONS	2	0	12	4
28	SERVICE DENIALS	0	0	0	0
29	ROAD CALLS	0	4	12	17
30	DRIVER TURNOVER	0.0	0.0	4.0	4.0
31	SCHEDULE ADHERENCE	96%	94%	96%	94%
32	WHEELCHAIR BOARDINGS	3,211	3,586	18,486	18,834
33	W/C LIFT AVAILABILITY	100%	100%	100%	100%
34	REGISTERED CLIENTS	8,007	8,546	N/A	N/A
35	UNDUPLICATED CLIENTS	1,204	1,130	N/A	N/A
36	NO-SHOWS	35	10	327	154
37	CANCELS	2,872	1,864	15,698	9,008
38	AVG. TRIP LENGTH (MILES)	9.8	9.5	10.0	9.7
39	AVG. SM BUSES IN SERVICE	3	3	3	3
40	AVG. BUSES IN SERVICE	48	48	48	48
41	TOTAL FUEL/GALLONS	18,687	14,565	95,612	97,051
42	FLEET M.P.G.	6.9	9.0	7.6	7.2
43	*DRIVER ROAD CHECK	N/A	36	N/A	36
44	*RIDER SURVEY'S	N/A	2	N/A	2

*FIRST MONTH REPORTING THESE FIGURES

The County Connection

Inter Office Memo

To: Operations and Scheduling Committee **Date:** 30 December 2009
From: Celinda Dahlgren, Director of Administration **Reviewed By:**

SUBJECT: LINK Transfer Trips Update

SUMMARY OF ISSUES:	At the December 2009 meeting, the Committee requested an update and further information regarding interjurisdictional LINK transfer trips. The attached report shows a summary of all LINK transfer trips for FY 2008/09. The LINK number is the number of trips requested by our riders to other providers, and the numbers from the other providers reflect the number of transfers to LINK from those providers. The largest number of transfer trips is between LINK and Tri Delta Transit.
RECOMMENDATIONS:	Information only
FINANCIAL IMPLICATIONS:	Staff is beginning to explore options for providing transfer trips in a more cost-effective manner, beginning with Tri Delta Transit trips. At this time, potential cost savings are unknown.
OPTIONS:	N/A – Information only
ACTION REQUESTED:	N/A
ATTACHMENTS:	*Transfer Trip Report – Year End 08/09*

ADDITIONAL INFORMATION:

In FY 2009, LINK provided 15,499 transfer trips. Of those, 29% were requested by LINK riders to other providers, and 31% were transfers from Tri Delta to LINK. Almost all transfers between LINK and Tri Delta occur at the North Concord BART station.

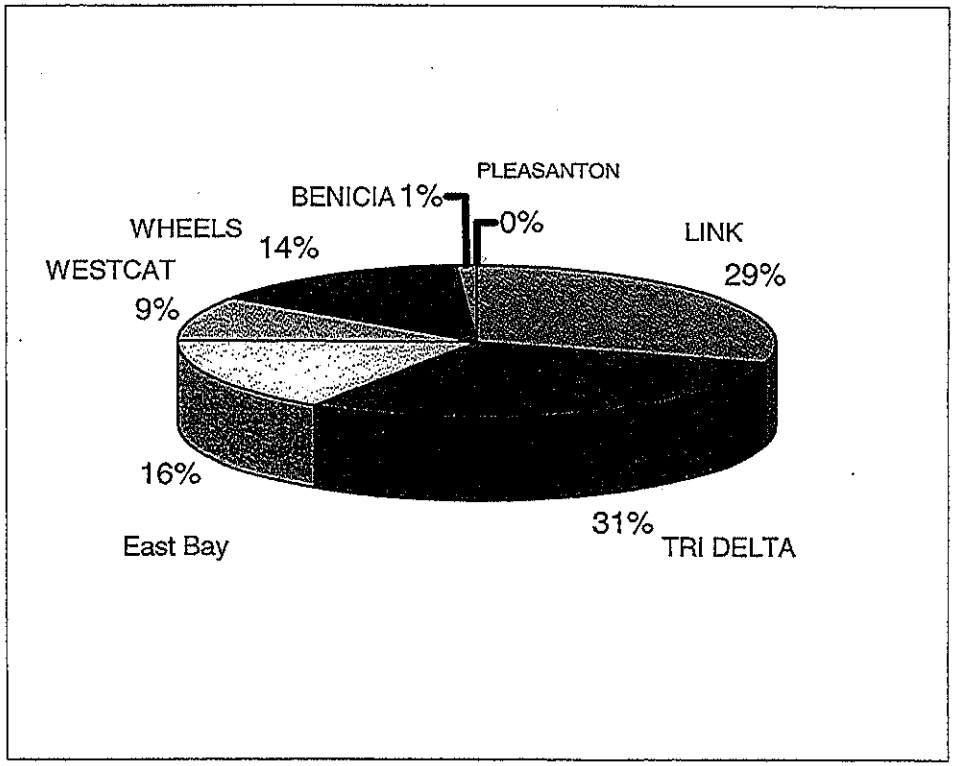
Staff looked at the transfer trips provided in March 2009 to determine an average cost per trip, of which 318 were transfers from Tri Delta. The total cost for these trips was $5,717.64 based on marginal costs (hourly plus fuel) paid to First Transit during that month for all paid trips (clients + companions), minus fares , divided by total number of trips, for a cost of $21.48 per trip. Tri Delta's cost per trip was $22.08 per trip.

TRANSFER TRIP REPORT
YEAR END 08/09

First Transit

AGENCY	# TRIPS
LINK	4521
TRI-DELTA	4656
East Bay Para-Transit	2492
WEST-CAT	1455
WHEELS	2204
BENICIA	150
PLEASANTON	21
TOTAL=	15499

DENIALS	
Link Denials	0
Tri-Delta Denials	0
East Bay Para-Transit Denials	0
West Cat Denials	0
Wheels Denials	0
Benicia Transit Denials	0



Vacaville's electric-vehicle guru moves on

By Melissa Murphy
The (Vacaville) Reporter
Posted: 01/21/2010 01:18:52 PM PST
Updated: 01/23/2010 12:27:21 PM PST

Owning an electric grill, electric lawn mower and electric car doesn't make Vacaville resident Edward Huestis an environmentalist, he says.

"Yes, it does help out the environment, but it just makes sense to me," he said. "I'm very conservative — a Republican and a Catholic. I'm not what some people would consider a tree hugger."

Leading Vacaville to be on the cutting edge of using electric vehicles, Huestis played a major role in why the city is becoming known as "Voltage-ville."

But now, Huestis, who was manager of the city's electric vehicle program, is taking a different route since his early retirement in December.

"I've heard people are busier after they retire," he said from his electric Toyota RAV4 EV.

While Huestis plans on spending time with his wife and possibly picking up the hobby of bowling again, he's looking forward to some consulting work and has already been contacted by major auto manufacturers.

He worked for Vacaville for more than 17 years and was originally hired as part of a congestion management agency to help businesses reduce employees' trips to the work site.

When that ended, Vacaville created a job for Huestis that allowed him to look for grants for the city. He also helped employers connect with their employees in neighborhood telecenters, which linked people via the Internet.

"Looking back, we were probably ahead of our time," he said. "But it let people explore the possibility of working from home."

Huestis was also the first person in Solano County to drive a General Motors EV1, a sports coupe that just fit two people.

"It was so unequally designed," he recalled. "People wanted to know about them. We had to plan extra time to go the grocery store because people wanted to ask us questions."

Eventually the lease ran out and the cars were returned to GM and destroyed, a process highlighted in the 2006 documentary, "Who Killed the Electric Car?"

However, in 1999 and 2000 the electric car was back on the scene and Huestis was instrumental in bringing down the price for Vacaville customers

through grants and city incentives.

Today, Vacaville's municipal fleet — including cars used by the volunteer police force — includes 24 electric-powered vehicles. The city also has 40 charging stations, believed to be the largest number per capita in the nation.

Mayor Len Augustine said he is very thankful for Huestis' hard work.

"He's really devoted to alternative fuel," Augustine said. "He is the key to Vacaville being Voltage-ville. He didn't just work at alternative fuel, he lives it. He's definitely a pioneer in electric vehicles and I've got nothing but high praise for him. He lived and breathed his job."

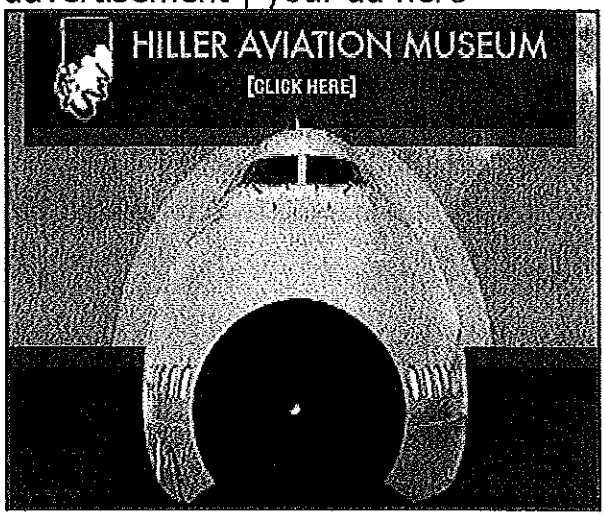
In the near future, Vacaville will have the only Level 3 charging station in the nation, part of a pilot program with the Tokyo Electric Power Co. and PG&E. The charging station will allow electric cars to be fully charged within 20 to 25 minutes instead of five hours, using energy from solar panels already installed atop car stall canopies.

Huestis said that he's most pleased with being able to get more than $10 million back to the city to help with capital improvement projects, including solar panels on top of City Hall.

Besides helping out the environment, electric cars are quieter, drivers can use the car pool lane anytime and don't have to pay tolls, he said.

"It just makes sense," Huestis said.

SFGate.com



A fast track to your wallet

John Diaz

Sunday, January 17, 2010

I have a theory about FasTrak, the electronic toll-collection system that allows motorists to flow onto bridges without stopping to dig into their wallets. As much as it is a convenience for drivers, I suspect it is even more of a convenience to government agencies that want to raise our tolls without provoking a public outcry. Last week, a committee of the Bay Area Toll Authority proposed raising the fee on carpool lanes to $2.50 - it's free today - and few seemed to care.

"I felt badly that no one was there to speak on behalf of those people who take the carpool lanes," said Berkeley Mayor Tom Bates, a toll authority member who argued - unsuccessfully - that the new toll, if necessary, should at least be rounded off to $2.

Bates was thinking of the impracticality for casual carpoolers - commuters who pick up strangers to qualify for the three-and-more lane - trying to deal with the new toll. If the toll were $2, he suggested, each rider might be expected to chip in $1.

"Come on, 50 cents is not going to make that much difference" to helping cover the costs of bridge construction and maintenance, Bates said in a phone interview last week.

It seems that the four-bit difference does not necessarily bother those who will be paying the bill either. Not a single toll payer showed up at last week's meeting in opposition; only one letter in protest reached The Chronicle.

Therein lies the "FasTrak factor." With most rush-hour commuters having their tolls deducted electronically from their prepaid credit-card deposits, the difference between $2 and $2.50 is not nearly as significant as it would have been if people had to rifle through their pockets and ashtrays to pay a toll.

Don't misunderstand, I'm not reflexively against higher tolls or the concept that the people who use the bridges should do more to cover the burden of building and maintaining them. I particularly like the toll authority's plan to move toward "congestion pricing," with tolls rising to $6 on the bridge during rush hours and lowering to $4 on nonpeak times. This plan amounts to a smarter use of a scarce resource.

What concerns me is that this fascination with technology - with the ultimate bill tucked deep into monthly credit card bills - might allow our transportation costs to escalate beneath the radar. As of today, a FasTrack transponder can not only be used on Bay Area bridges but also activate on toll lanes in Southern California (deducting charges at the rate of 12 to 50 cents a mile, depending on conditions) and for parking at San Francisco International Airport's long-term structure.

By early September, toll lanes are scheduled to open on Interstate 680 between Route 84 in Sunol and Route 237 in Milpitas. A stretch of Interstate 580 in the Tri-Valley area is expected to have a pay-to-glide lane by 2011.

The Golden Gate Bridge, where 70 percent of vehicles now use FasTrak, is hoping to go to an all-electronic toll system within a few years - eliminating the 33 toll collector positions. It's not a fantasy. Colorado bade farewell to its last toll collector on Dec. 31.

It won't be long before there will be pressure in California, as there has been in other states, to require all vehicles to have toll-collecting devices. The technology exists to have readable chips embedded in license registration stickers.

The easier tolls become to collect, the easier they become to justify. Over Christmas vacation, I was driving between Mexico City and Oaxaca, where the difference between taking the *cuota* (toll) and the *libre* (free) roads could be measured in both hours and wear and tear on one's suspension system. How long before the United States moves toward a two-tier system of road trips?

In San Francisco, the intermittent talk of charging drivers to enter the city's downtown core assumes the deployment of electronic toll collection. How much further can this go? Is it only a matter of time until coin-operated parking meters are replaced with "smart readers" that detect your transponders and assess a fee based on the hour of the day? Will these transponders eventually report how many miles we've driven and assess a carbon tax for exceeding a state-sanctioned ration?

If all this gets out of hand sometime, remember the day when the bureaucracy established a $2.50 bridge toll, and no one worried about the small change or the big implications.

John Diaz is The Chronicle's editorial page editor. You can e-mail him at jdiaz@sfchronicle.com.

http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2010/01/17/INJN1BH474.DTL

This article appeared on page **E - 4** of the San Francisco Chronicle

The Examiner

PRINTTHIS

Jan. 3, 2010

Local

Rebranding TransLink

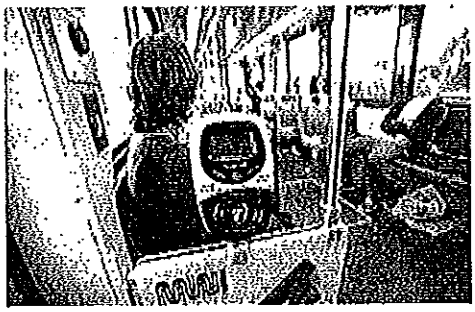
By: Will Reisman
Examiner Staff Writer
January 3, 2010

SAN FRANCISCO — *As a multiregion transit fare card finally starts to gain momentum two decades after the idea was proposed, officials make a push to build up public enthusiasm by changing its name to Clipper.*

With a history of delays, unfulfilled promises and cost overruns, mentioning the word "TransLink" to a Bay Area resident would likely draw a frustrated sigh.

With the planning and implementation for the multi-agency transit fare card about to enter its third decade, officials are seemingly trying to change the image of the TransLink brand by changing its name.

By the middle of next year, the TransLink card will be called Clipper, a change intended to usher in a new era for the fare card that officials say will eventually be usable on all public transportation systems in the nine-county Bay Area.



Widening reach: The TransLink fare payment service is currently accepted by Muni, BART, Caltrain, AC Transit and Golden Gate Transit, with more transit providers to come. (Cindy Chew/The Examiner)

Brian Key, a 44-year-old San Francisco resident who has been using TransLink for more than a year, said he doesn't quite see the point in making the switch to Clipper.

"You know, I love TransLink for what it does for me right now, so I don't really know why they're trying to change the name," Key said. "But if they think that it's going to get more people using the card, then I guess you can't fault them for trying something new."

A reloadable plastic transit pass, the TransLink card can currently be used on Golden Gate Transit and Ferry, the Dumbarton Express, AC Transit and Muni. It is also being rolled out at limited locations on BART and Caltrain.

According to the Metropolitan Transportation Commission, the regional group in charge of managing the program, calling it Clipper will allow the agency to "re-launch TransLink as an improved product

and better establish the brand with the Bay Area public."

TransLink is also a name used by several transit agencies across the world, most notably in Vancouver, British Columbia.

While the Clipper name could conjure up thoughts of a woeful pro basketball franchise, MTC officials prefer to believe the name will evoke images of the Clipper ships of yore, which played a key role in developing the Bay Area as a vital West Coast port.

"We look forward to working with the MTC and all our regional transit providers to make the smart card project successful," Muni spokesman Judson True said of the name change.

Getting the public to abandon the TransLink name, which was first unveiled in the early 1990s, will not be easy or cheap. All the equipment and signage that bears the current name will have to be changed and the MTC plans on spending $500,000 in public outreach and maintenance costs to initiate the rebranding effort.

The idea for the regional transit fare card was set in motion in the months following the Loma Prieta earthquake, which crippled the Bay Area's infrastructure and put new emphasis on establishing a more efficient transit network, MTC spokesman John Goodwin said.

Creating a method that connects transit agencies — from Santa Clara County to Sonoma County — into one seamless network, the TransLink card aims to ease public transportation travel, particularly for those riders who use multiple routes and transit systems for their commutes. TransLink, which can be automatically reloaded with more fare value when linked to a credit card or bank account, aims to ultimately allow riders to carry just one card for use within 26 transit systems.

With $4 million in grant funding, the MTC began developing the TransLink idea in 1993; at that time, officials said they expected that the regional ticket program would be operational in most transit vehicles by 2001. The first magnetic stripe ticket prototype, however, posed too many technical problems and the initial program was discontinued.

In the mid-1990s, officials began looking at "smart card" technology, which would give the system greater capacity to allow the card to work with multiple transit agencies and the differing fare systems.

It wasn't until 2001 that the MTC was able to run a successful test pilot program in a select group of transit vehicles; six years later, only five Bay Area transit agencies — Golden Gate Transit, AC Transit, BART, Muni and Caltrain — had the TransLink equipment installed.

Originally projected to cost about $25 million for full implementation, the total cost of the project has ballooned to around $408 million.

The MTC has said that the main challenge to full TransLink implementation has been getting the region's host of competing transit agencies — which includes ferry, bus and train services — on the same page. In Washington, D.C., where there is a similar one-stop card, the region is served by one major transit system. In the Bay Area, there are 26 such agencies.

Along with the region's political issues, the card has also been beset by technological and manufacturing problems. ERG, the company in charge of installing TransLink, has consistently pushed back launch dates for the software, citing glitches in the technology and problems with testing the hardware.

The company, which has suffered a series of financial setbacks this decade, was sued by Sydney for $88 million for failing to deliver on a promise to introduce a TransLink-type system to the city.

The MTC was also embroiled in a legal showdown with San Diego-based manufacturer Cubic Corp., which sued the agency, claiming it showed unfair practices in awarding its contract to ERG. Although the conflict was eventually resolved, it contributed to TransLink's scheduling woes.

Despite the setbacks, the TransLink effort made strides this year. Muni fully implemented TransLink this summer. The San Francisco transit agency, which carries more than 670,000 passengers each day, currently has nearly 10,000 people using the TransLink card on its system, according to spokesman Judson True.

With BART and Caltrain also onboard, and SamTrans scheduled to be integrated within months, the TransLink program has unprecedented momentum behind it.

In November, an average of 44,250 riders used TransLink, a 135 percent increase is users from November 2008.

BART unsettled about Clipper transition

While the Metropolitan Transportation Commission has been working the kinks out of TransLink, BART, which carries an average of 350,000 passengers each weekday, was creating its own reloadable fare card system called EZ Rider.

At one point, some of BART's board members suggested that the transit agency should stick with the EZ Rider card, and drop out of the regional effort to integrate TransLink into its system.

Although there is still discontent among some BART officials, the transit agency has said it remains committed to TransLink, which will be renamed Clipper this year.

"We hope our customers find that the Clipper card delivers on its promises of providing simple, seamless access to multiple transit systems across the Bay," BART spokesman Linton Johnson said.

Connecting the Bay Area

TransLink's goal is to provide a common payment utility for all Bay Area transit services.

The following transit providers are currently using TransLink:

- AC Transit
- BART
- Caltrain
- Golden Gate Transit

- Muni

Eventually, all of the following Bay Area transit agencies expected to accept TransLink:

- Alameda/Oakland Ferry
- American Canyon Transit
- Benicia Breeze
- Cloverdale Transit
- County Connection
- Dixon Transit
- Fairfield-Suisun Transit
- Healdsburg In-City Transit
- Petaluma Transit
- Rio Vista Delta Breeze
- SamTrans
- Santa Clara VTA
- Santa Rosa CityBus
- Sonoma County Transit
- Tri Delta Transit
- Union City Transit
- Vacaville City Coach
- Vallejo Transit
- VINE (Napa County)
- WestCAT
- WHEELS
- Yountville Shuttle

Source: Metropolitan Transportation Commission

Card-carrying riders

Facts and figures about TransLink:

44,250 Average weekday riders using TransLink in November

40,550 Average weekday riders using TransLink in October

9,450 TransLink holders using Muni

4,975 TransLink holders using BART

$25 million Original projected cost of TransLink

$408 million Current cost of TransLink

26 Transit agencies expected to eventually use TransLink

$500,000 Estimated cost of changing the name from TransLink to Clipper

Source: Metropolitan Transportation Commission

Find this article at:
http://www.sfexaminer.com/local/Rebranding-TransLink-80384712.html

☐ Check the box to include the list of links referenced in the article.

Editorial: Study shows California's highways are a failure

MediaNews editorial
Posted: 12/23/2009 12:00:00 AM PST

IT'S NO SECRET to anyone who has driven in California that our state roads have deteriorated and congestion has worsened over the past couple of decades.

In a state that had among the best highway systems in the nation a generation ago, it is dismaying to read two recent studies about the current condition of our state highways.

The Road Information Program, a national research group, found the Bay Area's highway conditions and congestion to be the second worst in the nation, just behind those in Los Angeles.

The report said 83 percent of state highways in the San Francisco-Oakland area are in less than adequate condition, as are 61 percent of the highways in the San Jose area.

But the TRIP report was hardly the most unsettling. The Reason Foundation's 18th annual report on the nation's highways ranked California's state-controlled highways as the third worst in the country.

The foundation examined each of the 50 states' highway systems in a number of categories that assessed road conditions, congestion, cost efficiency, overall spending, administration costs and bridge conditions.

The findings were based on information gleaned from the states in 2007. California placed at or near the bottom in many categories.

Just over 16 percent of California's rural interstate highways are in poor condition, making us the worst state in the nation.

Even worse, 24.7 percent of the state's urban interstate highways are in poor condition. That's more than four times the national average, making California the second worst state in that category. California also ranked dead last when it comes to urban interstate congestion.

The state fared better in the Reason report on bridge deficiencies, but was still way below the national average in percentage of bridges that need repair or replacement.

What makes the above findings even more worrisome is the fact that California spends more per mile on state-controlled roads than almost all other states.

The national average spending on bridges and capital improvements to highways is $76,726 per mile, according to the foundation. California spends $264,175 per mile, the third highest in the country. This state ranks 12th in spending per mile for maintenance.

We also spend an inordinate sum on administrative costs, ranking second. The national average is $9,705 per highway mile. California spends $62,640 per mile on administration.

Overall, this state spends $455,529 per state-controlled highway mile, more than three times the national average of $134,535, and more than all but three other states.

Clearly, for too many years, California has not invested nearly enough in its highway system. Federal stimulus money can help in some areas, but it is not a long-term solution, nor is it nearly enough money.

As the state recovers from the recession, greater attention must be made to our highways. But increasing highway budgets is not enough. There has to be far greater efficiency as to how the funds are spent.

California cannot afford to be among the worst states in effectively spending on highways, regardless of how much revenue it has, if we are ever to make real progress on improving our most important transportation system.

EMBARGOED: For release at 12:01 a.m., Thursday, December 3, 2009

Contact:
Melanie de La Grange
Bay Area Council
415-946-8725
mdelagrange@bayareacouncil.org

BAY AREA COUNCIL
BUSINESS CONFIDENCE SURVEY

Bay Area Economy Finally Hits Bottom, According to Bay Area Council Survey

Business Confidence Index rises into positive territory for the first time in two years
Executives see national economy leading the Region in the recovery

SAN FRANCISCO, December 3, 2009 — Today the Bay Area Council announced that business confidence among Bay Area business leaders has hit bottom and may move into positive territory for the first time since the summer of 2007, according to results of its quarterly *Business Confidence Survey*. The business confidence index – the number that distills the survey findings – registered at 53 out of 100, rising 6 points since the last reading. A reading over 50 signals a positive economic direction and below 50 is negative.

"It looks like we have finally hit rock bottom and are now looking up," said Jim Wunderman, President and CEO of the Bay Area Council. "This shift into positive territory shows that a majority of respondents – albeit a slight one – are looking down the road and finally seeing a turn for the better. Unfortunately, a healthy percentage predict the same or worse conditions ahead."

The *Survey* responses of the 475 CEO's and top executives in the nine Bay Area counties surveyed between November 2-19, 2009, predict the Bay Area will lag behind the national economy in the recovery. Indeed, 52 percent of respondents think that national economic conditions are better than they were six months ago, 28 percent think conditions have been stable and 20 percent feel conditions have worsened. This is in sharp contrast to their opinions of the Bay Area's economic conditions where only 33 percent of business leaders saw improvement in the region's economy compared to six months ago, 39 percent saw no change, and 28 percent think conditions are worse.

Looking ahead, respondents show increased optimism in the Bay Area's economy. Forty-seven percent of Bay Area business leaders expect the Bay Area's economy to improve over the next six months, 37 percent expect no change and 15 percent expect conditions to worsen. This shows a vast improvement in confidence compared to this time last year when 52 percent of executives expected economic conditions to worsen in the Bay Area, 25 percent expected no change and 23 percent expected improvement.

"At this point, the new found optimism does not appear to be translating into new jobs," said Jim Wunderman. "The business leaders are becoming more confident in the economy, but are not yet willing to bet jobs on it."

Layoffs outweigh hires in almost every corner of the Bay Area, the *Survey* shows. Overall, 23 percent of respondents expect to see their workforce decrease over the next six months, while 18 percent expect an increase and 56 percent expect no change. The hardest hit area, jobs-wise, appears to be Contra Costa and Solano counties where 35 percent expect workforce decreases, only eight percent expect to see increases and 53 percent expect to hold steady. The Bay Area county with the best job outlook this quarter appears to be San Mateo where layoffs and hires are equal. Indeed, 14 percent expect decreases in their workforce, 14 percent expect increases, and 64 percent expect no change.

Larger Bay Area companies seem to be suffering the most in this downturn. Fully, 40 percent of companies with 1,000 or more Bay Area employees are cutting local workers, while 11 percent are hiring. Yet, the smaller the Bay Area workforce, the less likely a company is to see layoffs. Indeed, 21 percent of companies with less than 500 workers plan reductions and 18 percent are actually planning increases.

Construction and transportation – perhaps the hardest hit sectors in the Bay Area – may significantly rebound, according to the *Survey*. Thirty-four percent of construction and transportation executives surveyed expect their workforce to increase over the next six months while only 14 percent expect layoffs. Fifty-two percent expect no change. Information technology professionals are also expecting positive job growth. Twenty-one percent are expecting to increase their workforce, 11 percent are planning decreases and 62 percent expect to hold steady.

On the other side of the spectrum, respondents from the retail and government sectors expect more layoffs. Of all retail executives surveyed, 40 percent expect to see layoffs in their companies, zero percent expect to hire and 53 percent expect no change to their workforce. Forty-one percent of government respondents expect decreases, eight percent expect increase and 48 percent expect no change.

"While I'm heartened to see increased optimism, it is not yet time to celebrate," said Lenny Mendonca, Director at McKinsey & Company and Chairman Emeritus of the Bay Area Council. "The Bay Area continues to stagger under the weight of this world-wide economic downturn with job loss and the state's budget woes continuing to impede business confidence."

# # #

Bay Area Business Confidence Survey
The Bay Area Council developed the Bay Area Business Confidence Survey to measure employer expectations of the Bay Area economy. The confidential survey of Bay Area business executives is conducted quarterly by EMC Research. All members in the database were invited to participate through e-mail and the Internet. The Survey results are weighted to reflect the approximate percentage of employees in each Bay Area county.

Bay Area Council
Founded in 1945, the Bay Area Council (www.bayareacouncil.org) develops and drives regional public policy initiatives and researches critical infrastructure issues. Led by CEOs, the Bay Area Council presents a strong, united voice for hundreds of major employers throughout the Bay Area region whom employ more than 500,000 workers, or 1 of every six private sector employees in the Bay Area.

McKinsey & Company
McKinsey & Company (www.mckinsey.com) is an international management consulting firm that helps leading corporations and organizations make substantial and lasting improvements in their performance. With approximately 6,000 consultants deployed from eighty-two offices in forty-three countries, McKinsey has expertise on strategic, operational and technological issues.

# # #

CONTRA COSTA
transportation
authority

November 5, 2009

Hon. Mark Ross, Chair
TRANSPAC
City of Martinez
928 Main Street
Martinez, CA 94553

Subject: Expiration of Authority Member Term and Appointment of Representative for the February 1, 2010 through January 31, 2012 Period

Dear Chair Ross:

CCTA Commissioner Julie Pierce's term will be expiring on January 31, 2010. TRANSPAC will need to either reappoint or replace Commissioner Pierce as representative to the Authority for the two-year period from February 1, 2010 through January 31, 2012. First and second alternates must also be reappointed or replaced.

Please notify the Authority in writing of your appointments. We would also appreciate if you would provide us with the mailing addresses, phone/fax numbers and a current W-4 tax form for any new appointees. If any changes occur during the two-year terms, please advise us in writing. We anticipate seating new members at the Authority's Planning Committee and Administration & Projects Committee meetings in February (February 3rd and February 4th, respectively), and then formally at the Authority meeting on February 17, 2010.

Thank you for your attention to this matter. Please feel free to call me at (925) 256-4724, or Danice Rosenbohm at (925) 256-4722 if you have any questions.

Sincerely,

Robert K McCleary
Executive Director

cc: Barbara Neustadter, TRANSPAC Staff
Commissioner's file
Chron File

3478 Buskirk Ave.
Suite 100

Pleasant Hill
CA 94523

PHONE:
925/ 256-4700

FAX:
925/ 256-4701

http://www.ccta.net

TRANSPAC Transportation Partnership and Cooperation

2010 MEETING SCHEDULE

Unless otherwise notified, all meetings are held at 9 a.m. at Pleasant Hill City Hall, Community Room, 100 Gregory Lane, Pleasant Hill.

TRANSPAC Meetings

Second Thursday of every month or as notified. Other meetings as scheduled.

January 14 (proposed vacation)	July 8
February 11	August 12 (proposed vacation)
March 11	September 9
April 8	October 14
May 13	November 10 – NOTE DATE CHANGE
June 10	December 9

TAC Meetings

Fourth Thursday of every month or as notified. NOTE: The November and December TAC meetings are scheduled for alternate dates in a location to be determined.

January 28	July 22
February 25	August 26 (proposed vacation)
March 25	September 23
April 22	October 28
May 27	November 18 (alternate date – location TBD)
June 24	December 16 (alternate date – location TBD)

TRANSPAC Backup Meetings

Held only as needed on the third Thursday of the month.

January 21	July 15
February 18	August 19 (proposed vacation)
March 18	September 16
April 14	October 21
May 20	November 18
June 17	December 16

TAC Backup Meetings

Held only as needed on the first Thursday of the month.

January 7	July 1
February 4	August 5 (proposed vacation)
March 4	September 2
April 1	October 7
May 6	November 4
June 3	December 2