

# Meeting Notice

1111 Broadway, Suite 800, Oakland, CA 94607

PH: (510) 208-7400

www.AlamedaCTC.org

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# City of Union City

Mayor Carol Dutra-Vernaci

# **Executive Director**

Arthur L. Dao

# Planning, Policy and Legislation Committee

Monday, November 4, 2013, 10:30 a.m. 1111 Broadway, Suite 800 Oakland, CA 94607

# **Mission Statement**

The mission of the Alameda County Transportation Commission (Alameda CTC) is to plan, fund and deliver transportation programs and projects that expand access and improve mobility to foster a vibrant and livable Alameda County.

# **Public Comments**

Public comments are limited to 3 minutes. Items not on the agenda are covered during the Public Comment section of the meeting, and items specific to an agenda item are covered during that agenda item discussion. If you wish to make a comment, fill out a speaker card, hand it to the clerk of the Commission, and wait until the chair calls your name. When you are summoned, come to the microphone and give your name and comment.

# Reminder

Please turn off your cell phones during the meeting. Please do not wear scented products so individuals with environmental sensitivities may attend the meeting.

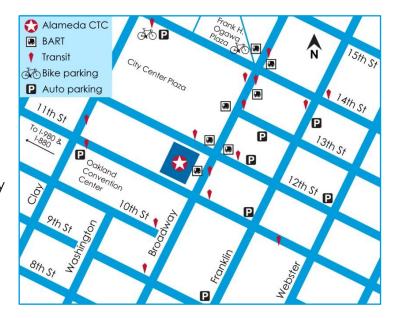
# Glossary of Acronyms

A glossary that includes frequently used acronyms is available on the Alameda CTC website at <a href="https://www.AlamedaCTC.org/app\_pages/view/8081">www.AlamedaCTC.org/app\_pages/view/8081</a>.

# **Location Map**

Alameda CTC
1111 Broadway, Suite 800
Oakland, CA 94607

Alameda CTC is accessible by multiple transportation modes. The office is conveniently located near the 12th Street/City Center BART station and many AC Transit bus lines. Bicycle parking is available on the street and in the BART station as well as in electronic lockers at 14th Street and Broadway near Frank Ogawa Plaza (requires purchase of key card from bikelink.org).



Garage parking is located beneath City Center, accessible via entrances on 14th Street between 1300 Clay Street and 505 14th Street buildings, or via 11th Street just past Clay Street.

To plan your trip to Alameda CTC visit www.511.org.

# **Accessibility**

Public meetings at Alameda CTC are wheelchair accessible under the Americans with Disabilities Act. Guide and assistance dogs are welcome. Call 510-893-3347 (Voice) or 510-834-6754 (TTD) five days in advance to request a sign-language interpreter.









# **Meeting Schedule**

The Alameda CTC meeting calendar lists all public meetings and is available at <a href="https://www.AlamedaCTC.org/events/upcoming/now">www.AlamedaCTC.org/events/upcoming/now</a>.

# **Paperless Policy**

On March 28, 2013, the Alameda CTC Commission approved the implementation of paperless meeting packet distribution. Hard copies are available by request only. Agendas and all accompanying staff reports are available electronically on the Alameda CTC website at <a href="https://www.AlamedaCTC.org/events/month/now">www.AlamedaCTC.org/events/month/now</a>.

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# Planning, Policy and Legislation Committee Meeting Agenda Monday, November 4, 2013, 10:30 a.m.

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1.	Pled	ge of Allegiance	Chair: Mayor Tim Sbranti, City of Dublin	Carrat Dia	ما ما ت
	Roll (	Call ic Comment	Vice Chair: Supervisor Keith Carson, Alameda Commissioners: Wilma Chan, Michael Gregory, Marchand, Elsa Ortiz, Marvin Peixoto, Jerry Thorest Cardinary Commissioners: Scott Haggerty, Rebecco Staff Liaisons: Tess Lengyel, Beth Walukas Executive Director: Arthur L. Dao Clerk: Vanessa Lee	y, John rne	IIICI 3
4.	Con	sent Calendar		Page	A/I
	4.1.	October 14, 2013 PPLC Meeting	<u>Minutes</u>	1	Α
		Recommendation: Approve t meeting minutes.	he October 14, 2013 PPLC		
	4.2.		am: Summary of the Alameda CTC's	5	I
		Plan Amendments  Plan Amendments	onmental Documents and General		
5.	Legis	slation			
	5.1.	Draft 2014 Alameda CTC Legisla	tive Program	7	A/I
6.	Plan	ning and Policy			
	6.1.	Transportation Expenditure Plan	Update (Verbal)		A/I
	6.2.	Goods Movement Collaborative	e and Plan Update	23	I
	6.3.	Cap and Trade Principles and Al		37	Α
		Recommendation: Approve (	·	4.5	
	6.4.	2014 Level of Service Monitoring	· · · · · · · · · · · · · · · · · · ·	45	Α
		(RFP) for preparation of the 20 Study and authorize the Exec Executive Director, to negotic services agreement with cons	the release of a Request for Proposals 014 Level of Service (LOS) Monitoring utive Director, or a designee of the ste and execute a professional sultants or consultant teams selected in accordance with procurement		
	6.5.	Presentation of Priority Developm Strategy Implementation (Verba			I

- 7. Committee Member Reports (Verbal)
- 8. Staff Reports (Verbal)
- 9. Adjournment

Next Meeting: January 13, 2014

All items on the agenda are subject to action and/or change by the Commission.



# Planning, Policy and Legislation Committee Meeting Minutes Monday, July 8, 2013, 6:30 p.m.

4.1

1111 Broadway, Suite 800, Oakland, CA 94607

PH: (510) 208-7400

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# 1. Pledge of Allegiance

# 2. Roll Call

A roll call was conducted and a quorum was confirmed.

# 3. Public Comment

There were no public comments.

# 4. Consent Calendar

- 4.1. September 9, 2013 PPLC Meeting Minutes
- 4.2. Congestion Management Program: Summary of the Alameda CTC's Review and Comments on Environmental Documents and General Plan Amendments

Commissioner Peixoto motioned to approve the consent calendar. Commissioner Thorne seconded the motion. The motion passed unanimously.

# 5. Legislation

# 5.1. Legislative Update

Tess Lengyel gave a brief update on federal and state legislative initiatives. She provided an overview of state bills and updated the committee on the AB 32 scoping plan update. Tess reviewed the five categories in the legislative program; transportation funding, project delivery, multimodal transportation and land use, climate change partnerships and made a recommendation to include goods movement into the new program.

This item was for information only.

# 6. Planning and Policy

# 6.1. Transportation Expenditure Plan Update

Tess provided an update on the Transportation Expenditure Plan. She stated that the TEP ad-Hoc committee met and discussed focus groups and polling. Tess stated that a recommendation was made and approved at the September 24 Commission meeting to have a 30 year sunset date and to create a 13-member TEP Steering committee (SC). The TEP SC will convene in October to receive more detailed info on polling and make decisions regarding when to move forward with ballot placement and finalization of the TEP.

This item was for information only.

# 6.2. Draft 2013 Congestion Management Program

Tess Lengyel introduced this item by informing the committee that state law requires that the CMP be update every two years. She stated that the program was developed in partnership with local jurisdictions, transit agencies and partner regional agencies. Tess reviewed the timetable and schedule for the CMP and provided an overview of the main elements in the program.

Saravana Suthanthira discussed the technical review, findings and changes to the LOS standards, deficiency plans, transportation demand management, multi-modal performance elements, land use analysis program evaluation and capital improvement program. She highlighted key actions including policy and legislation actions, enhanced land use and transportation connection in the county to incorporate into the 2013. Saravana recommended that the Commission approve the draft CMP with ACTAC's recommendations to address rural needs and priority conservation areas.

Commissioner Peixoto wanted to know if the CMP addresses PDA and growth development in relation to traffic congestion. Kara stated that it is an issue that is addressed in the Priority Development Area and growth strategy.

Commissioner Marchand wanted to make sure that staff considers the difference between commute cycling versus recreational cycling. Saravana stated that this is considered in the plan and Art Dao stated that staff is still transitioning into a more multi-modal analysis approach to the plan.

Commissioner Haggerty requested that staff provided a map that displays roads that go through other counties and requested to see maps of Tier 2 and Tier 1 roads and that staff evaluate selection criteria for the CMP roadway to address the needs of rural roads. Tess stated that staff would include those maps at the October Commission Meeting.

Commissioner Haggerty motioned to approve this item. Commissioner Peixoto seconded the motion. The motion passed unanimously.

# 6.3. Congestion Management Program: Final 2013 Annual Conformity Requirements

Kara Vuicich recommended that Commission approve the finding that all local jurisdictions are in conformance with the Congestion Management Program (CMP) annual conformity requirements and approve the Deficiency Plan status reports regarding SR 260 Posey Tube eastbound to I-880 northbound freeway connection, SR 185 northbound between 46th and 42nd Avenues, and Mowry Avenue eastbound from Peralta Boulevard to SR 238/Mission Boulevard. She stated that all jurisdictions have complied with the reporting requirements.

Commissioner Cutter motioned to approve this item. Commissioner Marchand seconded the motion. The motion passed unanimously.

# 6.4. Authorization for Alameda CTC Executive Director to Negotiate and Execute a Professional Services Contract for the Goods Movement Collaborative and Plan

Tess Lengyel recommended that the Commission authorize the Executive Director to negotiate and execute a contract with the highest ranked team. Cambridge Systematics, for development of a Countywide Goods Movement Collaborative and Plan. Tess provided an overview of the selection panel and interview process and stated that Cambridge Systematic was the firm selected to perform the work.

Commissioner Kaplan wanted to know if Cambridge Systematic had performed prior goods movement plan development work. Tess stated that the firm has extensive history of providing goods movement development throughout the nation including in Alameda County and in the Bay Area.

Commissioner Cutter wanted to know if the contracted amount was budgeted. Tess stated that there is funding available to cover the contract over the next three years.

Commissioner Kaplan wanted to know how soon the consultant team will come on board to start performing the work. Tess stated that the consultant team can begin work November 1, 2013 and she also stated that staff can introduce the team to the Commission in November.

Commissioner Marchand motioned to approve this item. Commissioner Peixoto seconded the motion. The motion passed unanimously.

# 6.5. Sustainable Communities Technical Assistance Program (SCTAP) List of Applications Received

Kara Vuicich reviewed the applications received for the Sustainable Communities Technical Assistance Program (SCTAP). She stated that a call for projects was released on June 4, 2013 and twenty-two applications were received by ten jurisdiction, AC transit and LAVTA. Kara stated that recommendations are being developed and the final program listing will be brought back to the commission in January 2014.

Commissioner Biddle wanted to know the SCTAP budget. Kara stated that the budget is approximately 44 million.

This item was for information only.

# 7. Committee Member Reports

Commissioner Cutter had comments on the I-580 Express Lane corridor. She wanted to ensure sure that staff does extensive outreach and marketing to the public to garner support for the new measure including being cognizant of the timing for implementation of an innovation project at the same time as asking voters to approve a \$7.8 billion measure.

# 8. Staff Reports

There were no staff reports.

# 9. Adjournment/ Next Meeting

The meeting adjourned at 11:40 a.m. The next meeting is:

Date/Time: Monday, November 4, 2013 @10:30 a.m.

Location: Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA 94607

Attested by:

Vanessa Lee,

Clerk of the Commission



# Memorandum

4.2

1111 Broadway, Suite 800, Oakland, CA 94607

PH: (510) 208-7400

www.AlamedaCTC.org

**DATE:** October 28, 2013

**SUBJECT:** Congestion Management Program (CMP): Summary of the Alameda

CTC's Review and Comments on Environmental Documents and

General Plan Amendments

**RECOMMENDATION:** Receive an update on the Alameda CTC's Review and Comments on

Environmental Documents and General Plan Amendments

# **Summary**

This item fulfills one of the requirements under the Land Use Analysis Program (LUAP) element of the Congestion Management Program (CMP). As part of the LUAP, Alameda CTC is required to review Notices of Preparations (NOPs), General Plan Amendments (GPAs), and Environmental Impact Reports (EIRs) prepared by local jurisdictions and comment on them regarding the potential impact of proposed land development on the regional transportation system.

Since the last monthly update on October 14, 2013, staff reviewed one NOP and one DEIR. No comments were submitted for these documents.

**Fiscal Impact:** There is no fiscal impact.

# **Staff Contact**

Tess Lengyel, Deputy Director of Planning and Policy

Matthew Bomberg, Assistant Transportation Planner

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# Memorandum

www.AlamedaCTC.org

1111 Broadway, Suite 800, Oakland, CA 94607

PH: (510) 208-7400

DATE: October 28, 2013

SUBJECT: Draft 2014 Alameda CTC Legislative Program

**RECOMMENDATION:** Approve Draft 2014 Alameda CTC Legislative Program.

# Summary

Alameda CTC's 2014 Legislative Program will guide legislative actions and policy direction on legislative issues during the upcoming calendar year. Some of the highest priorities in 2014 will be to participate in efforts regarding the development and the next federal surface transportation bill, adoption and placement of the Transportation Expenditure Plan on a future ballot, implementation of Alameda County's transportation and land use activities to support the region's Sustainable Communities Strategy, development and allocation of a Cap-and-Trade Program for transportation funding, goods movement planning and advocacy, and an expansion of legislative and policy partnerships throughout the Bay Area and California.

# **Background**

Each year, Alameda CTC adopts a legislative program to provide direction for its legislative and policy activities for the year. The purpose of the legislative program is to establish funding, regulatory, and administrative principles to guide Alameda CTC's legislative advocacy. The program is designed to be broad and flexible to allow Alameda CTC the opportunity to pursue legislative and administrative opportunities that may arise during the year, and to respond to political processes in Sacramento and Washington, DC.

The Draft 2014 Alameda CTC Legislative Program is divided into six sections and retains many of the previous priorities and adds Goods Movement as a new category:

- Transportation Funding
- Project Delivery
- Multimodal Transportation and Land Use
- Climate Change
- Goods Movement
- Partnerships

Attachment A described background on each of the legislative categories. Attachment B summarizes the proposed legislative platform. Alameda CTC's state and federal lobbyists will schedule meetings in early spring with various legislators and agency staff in Sacramento and Washington, D.C. to discuss the Alameda County legislative needs in 2014. We invite Commissioners who are interested to participate in these meetings.

**Fiscal Impact**: There is no fiscal impact.

# **Attachments**

- A. Draft 2014 Alameda County Legislative Program
- B. Summary table of proposed 2014 Legislative Program

# Staff Contact

Tess Lengyel, Deputy Director of Planning and Policy

# DRAFT 2014 ALAMEDA CTC LEGISLATIVE PROGRAM

# Introduction

Each year, the Alameda County Transportation Commission (Alameda CTC) adopts a Legislative Program to provide direction for its legislative and policy activities for the year. The purpose of the 2014 Alameda CTC Legislative Program is to establish funding, regulatory, and administrative principles to guide Alameda CTC's legislative advocacy in the coming year. The program is developed to be flexible, allowing opportunities to pursue legislative and administrative opportunities that may arise during the year, and to respond to the changing political processes at the regional level and in Sacramento and Washington, DC.

The legislative program supports Alameda CTC in its required role as manager of the county's voter-mandated transportation expenditure plans and as the county's congestion management agency. Alameda CTC relies on its legislative program to advance transportation programs and projects that will maintain and improve Alameda County's multimodal transportation system. Some of the main factors that will influence the 2014 Legislative Program include:

- The need for new, secure funding sources;
- Implementation of recent legislative mandates, including the federal transportation bill Moving Ahead for Progress in the 21st Century (MAP-21) through 2014, and the development of a new federal surface transportation bill;
- Adoption and placement of the Transportation Expenditure Plan on a future ballot;
- Implementation of Alameda County's transportation and land use activities to support the region's Sustainable Communities Strategy;
- Development and allocation of a Cap-and-Trade Program for transportation funding;
- Goods movement planning and advocacy;
- Expansion of legislative and policy partnerships throughout the Bay Area and California.

Additional funding and policy decisions supported through a legislative program will advance Alameda CTC projects and programs, particularly if the Commission chooses to place a measure on the 2014 ballot and voters approve an extension of the current transportation sales tax measure in November 2014.

The draft 2014 Legislative Program is divided into six sections:

- Transportation Funding
- Project Delivery
- Multimodal Transportation and Land Use

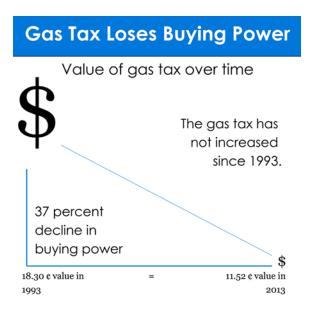
- Climate Change
- Goods Movement
- Partnerships

The following legislative areas are related to federal, state, and regional policy and legislative efforts as applicable.

# **Transportation Funding**

California represents the largest economy in the U.S., and is the ninth largest in the world. Its diverse industries range from agriculture to mining to biotechnology to the Internet—all of which serve as a source of the state's economic strength. Each of these industries relies on a backbone of transportation to move people, goods, and services. Over the past 20 years, the state and federal gas taxes have not been raised, and since that time, vehicle miles traveled in California have increased by 25 percent.

Fuel prices fluctuate significantly in California, but the gas tax remains flat with no index to inflation. The federal Highway Trust Fund has had to borrow almost \$50 billion since 2008 to meet federally authorized expenditures, and the federal transportation bill Moving Ahead for Progress in the 21st Century (MAP-21) did not increase revenues for transportation, nor address a future funding mechanism to create a reliable funding stream. As a consequence, the purchasing power for transportation has diminished, and infrastructure and operations have been seriously compromised by reduced buying power. In the absence of state and federal funding increases for transportation,



funding solutions have increasingly become reliant on voter-approved measures, many of which have the highest voter threshold requirement for passage.

Over the past several years, voters have supported statewide bond measures to fund transportation infrastructure throughout the state. One such measure, California's Proposition 1B developed the State-Local Partnership Program (SLPP) in 2008 to provide \$1 billion over five years to match local funds for transportation improvements. The purpose of the SLPP is to reward "self-help" agencies and to provide funds for capital projects typically funded in local or regional voter-approved expenditure plans that provide mobility, accessibility, system connectivity, safety, or improve air quality. Alameda CTC supports these types of measures and advocates for local, regional, state and federal recognition of these contributions to reward and grow the funding commitment made by local taxpayers.

In November 2010, five out of seven counties in the Bay Area approved increasing the vehicle registration fees to fund transportation improvements. These advances in funding demonstrate the public's willingness to support essential infrastructure and transportation programs, which underscores the need for improving the quality of our transportation systems.

In August 2013, Assembly Bill 210, extended the authority of the County of Alameda, and authorized the County of Contra Costa to impose the transactions and use tax for countywide transportation programs until December 31, 2020 that may exceed the 2% sales tax threshold in both counties by one-half cent. This will allow potential placement of a Transportation Expenditure Plan on the ballot in 2014 that will fund more than \$7.8 billion in transportation investments.

However, while voters are willing to support measures to increase funding and some local sales tax measures have surpassed the two-thirds voter hurdle, Alameda County, the state, and country continue to face transportation funding challenges, which worsen over time. Alameda CTC's legislative priorities for transportation funding include the following:

# Increase transportation funding

- Support efforts to lower the two-thirds threshhold for voter-approved transportation measures.
- Support increasing the buying power of the gas tax and/or increasing transportation revenues through vehicle license fees, vehicle miles traveled, or other reliable means.
- Support efforts that protect against transportation funding diversions.

# Protect and enhance voter-approved funding

- Support legislation that protects and provides increased funding to Alameda County for operating, maintaining, rehabilitating, and improving transportation infrastructure and operations, including state highways, public transit and paratransit, local streets and roads, bicycle and pedestrian facilities, seismic safety upgrades, and goods movement, including making the use of these funds more flexible from different fund sources.
- Support increased funding from new and/or flexible funding sources to Alameda County for operating, maintaining, restoring, and improving transportation infrastructure and operations.
- Support increases in federal, state, and regional funding to expedite delivery of Alameda CTC projects and programs.
- Support efforts that give priority funding to voter-approved measures and oppose those that negatively affect the ability to implement voter-approved measures that are locally funded and locally managed.

- Support rewarding Self-Help Counties and states that provide significant transportation funding into transportation systems.
- Seek, acquire, and implement grants to advance project and program delivery.

# **Project Delivery**

Delivery of transportation infrastructure expeditiously is critical for ensuring cost-effective mobility of people and goods while protecting air and environmental quality, creating jobs, and improving local communities. However, delivery of projects is often bogged down by the multiple stages and long time frames for current project delivery processes, including environmental clearance and mitigation, design, right of way, and project financing.

In addition, Alameda County's population is expected to grow by 30% by 2042 which will affect congestion and the demand on the transportation system. Innovative projects such as the implementation of express lanes and intelligent transportation systems can mitigate congestion, improve traffic flow and safety, and enhance crosscounty connections. Looking at capital projects from a regional perspective and closely partnering with other implementation agencies can improve the region's ability to mitigate congestion challenges, offer travelers an array of choices and enhance the economic, community and environmental health of Alameda County.

As part of its Congestion Management Program, Alameda CTC has developed a Capital Improvement Program that includes system-management strategies designed to improve the use and safety of the existing multimodal transportation system, in the most cost-effective manner possible. Preservation and maintenance of the existing system in Alameda County—including local roads and transit—remains essential and is a key component among the many objectives to achieve in programming discretionary funds. Alameda CTC supports innovative ways to deliver projects quickly, which reduce costs to taxpayers and provide essential transportation mobility options.

# Advance innovative project delivery

- Support environmental streamlining and expedited project delivery.
- Support contracting flexibility and innovative project delivery methods.
- Support high-occupancy toll (HOT) lane expansion in Alameda County and the Bay Area, and efforts that promote effective implementation.
- Support efforts to allow local agencies to advertise, award, and administer state highway system contracts largely funded by local agencies.

# Ensure cost-effective project delivery

- Support efforts that reduce project and program implementation costs by reducing or eliminating the requirements for state or other agency reimbursements to implement projects on state/regional systems.
- Support accelerating funding and policies to implement transportation projects that create jobs and economic growth.

# Multimodal Transportation and Land Use

Transportation in the Bay Area must serve multiple needs. It must efficiently deliver food and goods, and move people from one place to another. Multimodal options offer the traveling public choices. Effective implementation of multi-modal transportation systems relies on how local development supports these types of investments. Linking land use and transportation decisions can result in economic investments and expanded mobility for local residents and businesses.

Further, legislation such as Senate Bill 375, which requires a reduction of greenhouse gas emissions from the transportation sector and requires housing all sectors of the population in the region, strengthens the link between transportation and land use planning, funding, and implementation.

As part of the regional Plan Bay Area's requirement to develop a Sustainable Communities Strategy (SCS) to accommodate future population growth and reduce greenhouse gas emissions from cars and light trucks, Alameda CTC has created a Priority Development Area Investment and Growth Strategy that emphasizes the link between transportation and land use and supports and encourages residential and commercial development in the region's PDAs. Alameda CTC is helping local jurisdictions to meet their SCS requirement and is supporting local PDA investments.

In addition, as part of its Congestion Management Program, Alameda CTC has comprehensively reviewed and reorganized the Alameda County Land Use Analysis Program to better document the various related efforts of the agency and incorporate regional Plan Bay Area goals. Alameda CTC has also developed a 2012 Performance Report on the multimodal performance of Alameda County's transportation system.

Alameda CTC supports efforts that encourage, fund, and provide incentives and/or reduce barriers to integrating transportation, housing, and jobs development in areas that foster effective transportation use. In addition, since transportation systems must serve all of society to meet the mobility needs of youth, seniors, people with disabilities, working people, and people at all income levels in our communities, Alameda CTC supports a balanced, flexible system with multiple transportation options that expand access for all transportation users.

# Reduce barriers to the implementation of transportation and land use investments

- Support legislation that increases flexibility and reduces technical and funding barriers to investments linking transportation, housing, and jobs.
- Support local flexibility and decision-making on land-use for transit oriented development and priority development areas.
- Support innovative financing opportunities to fund TOD and PDA implementation.

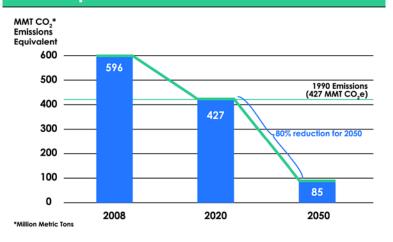
# Expand multimodal systems and flexibility

- Support policies that provide increased flexibility for transportation service delivery through innovative, flexible programs that address the needs of commuters, youth, seniors, people with disabilities and low-income people and do not create unfunded mandates.
- Support investments in transportation for transit-dependent communities that provide enhanced access to goods, services, jobs and education.
- Support parity in pre-tax fringe benefits for public transit/vanpooling and parking.

# **Climate Change**

The enactment of Assembly Bill 32 and SB 375 to reduce the state's greenhouse emissions, link transportation and housing, and create a funding stream to pay for projects and programs that reduce GHG emissions (the state's Cap-and-Trade Program) affect transportation planning, funding, and delivery in Alameda County and throughout the state. Assembly Bill 1532 and its companion bill Senate Bill 535, both signed by Governor Brown in late September 2012, define how cap-and-trade funds may be spent, including on transportation, and require that 25 percent of revenues be spent that benefit disadvantaged communities and 10% directly within these communities (as defined by the California Air Resources Board [CARB]).

# AB 32 Emission Reduction Goals: 80 percent reduction for 2050



In addition, CARB is leading the 2013 AB 32 Scoping Plan Update to evaluate the performance of the existing Scoping Plan's policies to ensure that California is on track to achieve the 2020 greenhouse gas (GHG) reduction goal and to update the plan to address the next set of goals to achieve the 2050 goal of reducing GHG by 80 percent below 1990 levels.

Alameda CTC and the other Bay Area Congestion Management Agencies support this update and actively support investments in sustainable communities and clean transportation, sustainable freight investments, and clean fuels. In 2015 Cap and Trade funds will apply to industries that transport transportation fuels. Alameda CTC supported in 2013 that cap-and-trade funds derived from motor vehicle fuels should be used for transportation purposes. This concept was supported in AB 574, which did not make it through the first year of the 2012- 2014 Legislative session. This bill memorialized the advocacy principles of the Transportation Coalition for Livable Communities efforts regarding Cap-and-Trade eligible uses. In addition, Alameda CTC has supported investments from new revenue streams for transportation, while also supporting legislative options to increase funding for housing. However, Alameda CTC has recognized the need to keep these funding sources separate and to ensure that they do not compete and potentially result in a reduction of transportation funding.

Alameda CTC's long-range 2012 Countywide Transportation Plan also supports the SB 375 mandates and the region's Sustainable Communities Strategy.

# Support climate change legislation

- Support funding for innovative infrastructure, operations, and programs that relieve congestion, improve air quality, reduce emissions, and support economic development.
- Support the expansion of funding for housing that does not conflict with or reduce transportation funding.

# Support cap-and-trade expenditure plan

• Support cap-and-trade funds derived from transportation fuels for transportation purposes.

# Support emerging technologies

• Support incentives for emerging technologies, such as alternative fuels and fueling technology, and research for transportation opportunities to reduce GHG emissions.

# **Goods Movement**

Efficient goods movement expands job opportunities, supports local communities, and undergirds the economy of Alameda County, the Bay Area, and the nation. Alameda CTC is spearheading a Goods Movement Collaborative in Northern California that brings together partners and stakeholders in a unified effort to support and advocate for freight and goods movement. Alameda CTC is also developing a Countywide Goods Movement Plan to identify and plan for goods movement projects and programs in Alameda County and the region. A series of technical studies will inform the plan and identify needs and priorities. Alameda CTC has initiated work on the plan and will coordinate it with regional, state, and federal freight planning efforts.

# Expand goods movement funding and policy development

- Support goods movement efforts that enhance the economy, local communities. and the environment, and reduce impacts.
- Support a designated funding stream for goods movement.
- Support goods movement policies that enhance Bay Area goods movement planning, funding, delivery, and advocacy.
- Ensure that Bay Area transportation systems are included in and prioritized in state and federal planning and funding processes.

# **Partnerships**

In the coming year, Alameda CTC seeks to expand and strengthen its partnerships at the local, regional, state, and federal levels for policy development, planning, funding, and project and programs delivery opportunities.

On a regional level, Alameda CTC is facilitating coordination with a number of agencies to leverage funding and efficiently partner on transportation projects and programs. Alameda CTC hosts quarterly countywide Legislative Roundtable Meetings that give local cities, transit agencies, business partners, and Alameda County the opportunity to discuss federal, state and regional activities, the legislative program, policy and platform development and priorities, and grant opportunities.

Alameda CTC is also participating at the regional level in partnerships with the Bay Area Congestion Management Agencies and the regional agencies: Metropolitan Transportation Commission, Association of Bay Area Governments, Bay Area Air Quality Management District, and Bay Conservation and Development Commission. In addition, Alameda CTC is coordination at the state level with the Self-Help Counties Coalition and the California Association of Councils of Government. Alameda CTC views these efforts as essential to having more impact at the policy and planning levels, and unifying efforts to help ensure common policies and practices that can translate into more effective transportation project and program advocacy and implementation.

In addition, Alameda CTC will continue to partner on many multi-county transportation efforts, such as transit planning, freight corridor planning, express lane implementation and other types of transportation projects or programs implemented in more than one county to provide a system of transportation infrastructure or services for the traveling public that can be developed so that the region is ready to receive federal, state, or other grants as they become available. Finally, Alameda CTC supports efforts that expand job opportunities for contracting with local and small businesses in the delivery of transportation projects and programs.

# Expand partnerships at the local, regional, state, and federal levels.

- Support efforts that encourage regional cooperation and coordination to develop, promote and fund solutions to regional transportation problems, and support governmental efficiencies and cost savings in transportation.
- Support policy development to influence transportation planning, policy, and funding at the county, regional, state, and federal levels.
- Support efforts to maintain and expand local-, women-, minority- and small-business participation in competing for contracts.

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1111 Broadway, Suites 800 Oakland, CA 94607 (510) 208-7400

# Draft 2014 Alameda County Legislative Program

The legislative program herein supports Alameda CTC's transportation vision adopted in the 2012 Countywide Transportation Plan described below:

transportation system promoting sustainability, access, transit operations, public health and economic opportunities. Our vision recognizes the need to maintain and operate in Alameda County will be guided by transparent decision-making and measureable performance indicators. Our transportation system will be: Multimodal; Accessible, Affordable and our existing transportation infrastructure and services while developing new investments that are targeted, effective, financially sound and supported by appropriate land uses. Mobility Equitable for people of all ages, incomes, abilities and geographies; Integrated with land use patterns and local decision-making; Connected across the county, within and across the "Alameda County will be served by a premier transportation system that supports a vibrant and livable Alameda County through a connected and integrated multimodal network of streets, highways and transit, bicycle and pedestrian routes; Reliable and Efficient; Cost Effective; Well Maintained; Safe; Supportive of a Healthy and Clean Environment." ALAMEDA County Transportation

[A final legislative platform will be adopted by Alameda CTC in December 2014]

Issue	Priority	Strategy Concepts
	Increase transportation funding	<ul> <li>Support efforts to lower the two-thirds-voter threshold for voter-approved transportation measures.</li> <li>Support increasing the buying power of the gas tax and/or increasing transportation revenues through vehicle license fees, vehicle miles traveled or other reliable means.</li> </ul>
Transportation Funding	Protect and enhance voter-approved funding	<ul> <li>Support increased funding from new and/or flexible funding sources to Alameda County for operating, maintaining, restoring and improving transportation infrastructure and operations.</li> <li>Support efforts that protects against transportation funding diversions.</li> <li>Support efforts that give priority funding to voter-approved measures and oppose those that negatively affect the ability to implement voter-approved measures.</li> <li>Support rewarding Self-Help Counties and states that provide significant transportation funding into transportation systems.</li> <li>Support and implement grants to advance project and program delivery.</li> <li>Seek, acquire and implement grants to funds to implement grants and pilot programs.</li> </ul>
Project Delivery	Advance innovative project delivery	<ul> <li>Support environmental streamlining and expedited project delivery.</li> <li>Support contracting flexibility and innovative project delivery methods.</li> <li>Support HOT lane expansion in Alameda County and the Bay Area, and efforts that promote effective implementation.</li> <li>Support HOT lane expansion in Alameda County and the Bay Area, and efforts that promote effective implementation.</li> <li>Support efforts to allow local agencies to advertise, award and administer state highway system contracts largely funded by locals.</li> </ul>
	Ensure cost-effective project delivery	<ul> <li>Support efforts that reduce project and program implementation costs by reducing or eliminating the requirements for state or other agency reimbursements to implement projects on state/regional systems.</li> <li>Support accelerating funding and policies to implement transportation projects that create jobs and economic growth</li> </ul>
Multimodal	Reduce barriers to the implementation of transportation and land use investments	<ul> <li>Support legislation that increases flexibility and reduces technical and funding barriers to investments linking transportation, housing and jobs.</li> <li>Support local flexibility and decision-making on land-use for transit oriented development and priority development areas.</li> <li>Support innovative financing opportunities to fund TOD and PDA implementation</li> </ul>
Transportation and Land Use	Expand multimodal systems and flexibility	<ul> <li>Support policies that provide increased flexibility for transportation service delivery through innovative, flexible programs that address the needs of commuters, youth, seniors, people with disabilities and low-income people and do not create unfunded mandates.</li> <li>Support investments in transportation for transit-dependent communities that provide enhanced access to goods, services, jobs and education.</li> <li>Support parity in pre-tax fringe benefits for public transit/vanpooling and parking.</li> </ul>

R:\AlaCTC\_Meetings\Commission\PPLC\20131104\5.1\_2014\_Legislative\_Program\5.1A\_2014\_Legislative\_Platform\_Table\_20131021.docx

Issue	Priority	Strategy Concepts
( a a a d )	Support climate change legislation	<ul> <li>Support funding for innovative infrastructure, operations, and programs that relieve congestion, improve air quality, reduce emissions and support economic development.</li> <li>Support the expansion of funding for housing that does not conflict with or reduce transportation funding</li> </ul>
	Support cap-and-trade expenditure plan	• Support cap and trade funds derived from transportation fuels for transportation purposes.
	Support emerging technologies	• Support incentives for emerging technologies, such as alternative fuels and fueling technology, and research for transportation opportunities to reduce GHG emissions.
Goods Movement	Expand goods movement funding and policy development	<ul> <li>Support goods movement efforts that enhance the economy, local communities. and the environment, and reduce impacts.</li> <li>Support a designated funding stream for goods movement.</li> <li>Support goods movement policies that enhance Bay Area goods movement planning, funding, delivery, and advocacy.</li> <li>Ensure that Bay Area transportation systems are included in and prioritized in state and federal planning and funding processes.</li> </ul>
Partnerships	Expand partnerships at the local, regional, state and federal levels	<ul> <li>Support efforts that encourage regional cooperation and coordination to develop, promote and fund solutions to regional transportation problems and that support governmental efficiencies and cost savings in transportation.</li> <li>Support policy development to influence transportation planning, policy and funding at the county, regional, state and federal levels.</li> <li>Support efforts to maintain and expand local-, women-, minority- and small-business participation in competing for contracts.</li> </ul>

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# ative Priorities 2013 Alameda County Legisl

ALAMEDA County Transportation

This legislative program supports Alameda CTC's transportation vision adopted in the 2012 Countywide Transportation Plan described below:

"Alameda County will be served by a premier transportation system that supports a vibrant and livable Alameda County through a connected and integrated multimodal transportation system promoting sustainability, access, transit operations, public health and economic opportunities. Our vision recognizes the need to maintain and operate our existing transportation infrastructure and services while developing new investments that are targeted, effective, financially sound and supported by appropriate land uses. Mobility in geographies; Integrated with land use patterns and local decision-making; Connected across the county, within and across the network of streets, highways and transit, bicycle and pedestrian routes; Reliable and Efficient; Cost Effective; Well [This legislative program table will be updated on a monthly basis] Alameda County will be guided by transparent decision-making and measureable performance indicators. Our transportation system will be: Multimodal; Accessible, Affordable and Equitable for people of all ages, incomes, abilities and Maintained; Safe; Supportive of a Healthy and Clean Environment"

Issue	Priority	Strategy	Actions	Legislation
	Increase transportation funding	<ul> <li>Support efforts to lower the two-thirds-voter threshhold for voter-approved transportation measures.</li> <li>Support legislation that increases the buying power of the gas tax</li> <li>Support efforts to increase transportation revenues through vehicle license fees, vehicle miles traveled or other reliable means.</li> <li>Support legislation for alternative financing methods such as high-occupancy toll lanes, and allow funds collected on the HOT lanes by the California Highway Patrol to be reinvested within that corridor.</li> </ul>	• Leading a portion of Self-Help Counties Coalition (SHCC) efforts to reduce voter- threshold requirements	• Support positions on SCA 8 (Corbett), SCA 4 (Liu), SCA 11 (Hancock) to reduce voter threshold to 55 percent: these bills were held in Senate Appropriations; AB 210 (Wieckowski) to allow Alameda CTC to place another measure on the ballot: signed by the Governor
Transportation Funding	Protect and enhance voter-approved funding	<ul> <li>Support legislation that provides increased funding from new and/or flexible funding sources to Alameda County for operating, maintaining, restoring and improving transportation infrastructure and operations.</li> <li>Support legislation that protects against transportation funding diversions to the General Fund.</li> <li>Support legislation that protects against transportation funding diversions to the Alameda CTC projects and programs.</li> <li>Support efforts that give priority funding to voter-approved measures and oppose those that negatively affect the ability to implement voter-approved measures.</li> <li>Support rewarding Self-Help Counties and states that provide significant transportation funding into transportation systems.</li> <li>Seek, acquire and implement grants to advance project and program delivery.</li> <li>Support Alameda County as the recipient of funds to implement pilot programs with innovative project implementation or transportation-funding mechanisms.</li> </ul>	On-going monitoring	<ul> <li>AB 431: Oppose MPO authority to place sales tax measures on the ballot for transportation, housing and open spaces: two-year bill</li> <li>AB466: Support CMAQ current funding allocation: this bill passed through the legislature and is on the Governor's desk</li> <li>AB 791: Oppose changes to current methods for adjusting the excise fuel tax: two-year bill</li> </ul>
Project Delivery	Advance innovative project delivery	<ul> <li>Support legislation and policies that improve environmental streamlining and project reviews to expedite project delivery.</li> <li>Support legislation that improves the ability to deliver projects and programs in a timely, cost effective manner using contracting flexibility.</li> <li>Support innovative project delivery methods.</li> <li>Support HOT lane expansion in Alameda County and the Bay Area.</li> <li>Support policies that allow local agencies to advertise, award and administer state highway system contracts largely funded by locals</li> </ul>	On-going monitoring	
	Ensure cost-effective project delivery	<ul> <li>Support legislation that reduces project and program implementation costs by reducing or eliminating the requirements for state or other agency reimbursements to implement projects on state/regional systems.</li> <li>Support legislation that accelerates funding for transportation infrastructure projects that create jobs and economic growth in Alameda County.</li> </ul>	On-going monitoring, and work through the SHCC to provide input to the Secretary of Transportation on streamlining project delivery	•

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Issue	Priority	Strategy	Actions	Legislation
	Reduce barriers to the implementation of transportation and land use investments	<ul> <li>Support legislation that increases flexibility and reduces technical and funding barriers to investments linking transportation, housing and jobs.</li> <li>Support local flexibility and decision-making on land-use for transit oriented development and priority development areas.</li> <li>Support innovative financing opportunities to fund TOD and PDA implementation that will increase mobility and jobs and reduce GHGs.</li> </ul>	On-going monitoring	• SB 391: Support ability to create a revenue stream for low-income housing that will assist with SB 375 requirements to house all income levels of the population within the region: two-year bill
Multimodal Transportation and Land Use	Expand multimodal systems and flexibility	<ul> <li>Support policies that provide multimodal transportation systems with multiple choices and better access for all kinds of transportation users.</li> <li>Support policies that provide increased flexibility for transportation service delivery through innovative, flexible programs that address the needs of commuters, youth, seniors, people with disabilities and low-income people.</li> <li>Support flexibility in transportation delivery to address climate change, senior population growth and transit maintenance and security, without creating unfunded mandates or dramatically increasing costs.</li> <li>Support investments in transportation for transit-dependent communities that provide enhanced access to goods, services, jobs and education.</li> <li>Support parity in pre-tax fringe benefits for public transit/vanpooling and parking.</li> </ul>	On-going work with agency coordination, grant development and legislative advocacy	
	Support climate change legislation	<ul> <li>Support climate change legislation that provides funding for innovative infrastructure, operations, programs that relieve congestion, improve air quality, reduce emissions and support economic development.</li> <li>Support climate change legislation that expands transit services and supports safe, efficient, clear connections to transit services, including bike/ped infrastructure.</li> <li>To achieve necessary increases in public transit ridership to address GHG emissions from transportation sources, support legislation that augments but does not replace transit funding, nor create unfunded mandates.</li> </ul>	On-going monitoring	
Climate Change	Support cap-and- trade expenditure plan	<ul> <li>Engage in development of the statewide cap-and-trade expenditure plan and advocate increased transportation funding statewide and in Alameda County.</li> </ul>	• Working with the SHCC, MTC the CMAs and local agencies on this effort. Submitted a letter to CARB on March 8 supporting the Transportation Coalition for Livable Communities platform	• AB 574: Support allocation of Cap & Trade funds to the region for distribution to support implementation of the SCS: two-year bill
	Support legislation and policies that support emerging technologies	<ul> <li>Support legislation that offers incentives for emerging technologies, such as alternative fuels and fueling technology, and research for transportation opportunities to reduce GHG emissions.</li> </ul>	<ul> <li>On-going monitoring</li> </ul>	
Partnerships	Expand partnerships at the local, regional, state and federal levels	<ul> <li>Support efforts that encourage regional cooperation and coordination to develop, promote and fund solutions to regional transportation problems.</li> <li>Support legislation and policies that promote governmental efficiencies and cost savings in transportation.</li> <li>Support legislation that improves the ability to enhance or augment Alameda CTC projects and programs that affect bordering counties or regional networks.</li> <li>Support efforts to maintain and expand local-, women-, minority- and small-business participation in competing for state and local contracts.</li> </ul>	<ul> <li>On-going coordination at the SHCC, the Bay Area CMAs, and with Alameda CTC's local partners legislative roundtable.</li> <li>An updated Alameda CTC procurement policy will support business participation efforts.</li> </ul>	• Support AB 14 (Lowenthal) for the creation of a state freight plan and advisory committee: Bill was signed by the Governor
		- 600 000 000 - H		



# Memorandum

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www.AlamedaCTC.org

**DATE:** October 28, 2013

**SUBJECT:** Goods Movement Collaborative and Plan Update and Project

Screening Criteria and List

**RECOMMENDATION:** Receive an update on the Goods Movement Collaborative and Plan

development

# **Summary**

Freight and goods movement are central to a strong economy in Alameda County, the Bay Area and the nation. To ensure that Alameda County's economy and the Bay Area as a whole (by virtue of Alameda County's central location, freeways and the location of the Port of Oakland) are supported by a robust goods movement system, Alameda CTC has embarked on the creation of a goods movement collaborative that will bring together partners and stakeholders to create a unified effort to support and advocate for freight and goods movement, and technical studies that will result in an Alameda Countywide Goods Movement Plan to identify needs and short and long term priorities. These efforts will directly feed into state and federal freight planning efforts that are also currently underway, including the development of the California Freight Mobility Plan (CFMP) and a National Strategic Freight Plan.

This memo provides an update on the progress of the Goods Movement Collaborative and Plan implementation efforts.

# **Background**

Freight and goods movement planning is underway at the local, regional, state and federal levels. Alameda CTC and its partners have engaged at all levels of these processes.

**Federal Process:** The Federal surface transportation act, Moving Ahead for Progress in the 21st Century (MAP-21), was signed into law in 2012 and included the development of a national freight policy that will establish a national freight network and create a national freight strategic plan. The development of the network and strategic plan will be done with a National Freight Advisory Committee (NFAC). NFAC representatives from California include: Kristin Decas, CEO & Port Director, Port of Hueneme; Genevieve Giuliano, Professor, Director and Senior Associate Dean, University of Southern California; Fran Inman, Senior Vice President, Majestic Realty Company and Member, California

Transportation Commission; Randy Iwasaki, Executive Director, Contra Costa Transportation Authority; and Bonnie Lowenthal, State Assembly Member.

The federal process requires the establishment of an initial primary freight network (PFN) of 27,000 centerline miles of existing roadway that are most critical to the movement of freight. The federal Department of Transportation (DOT) will be working with states to define the PFN, as well as identify critical rural freight corridors that meet specific criteria defined in MAP-21 freight provisions. The DOT is required to develop the PFN within a year of issuance of the MAP-21 freight provisions, and the strategic plan within three years. However, at the time of this writing, the PFN has not yet been released. The strategic plan will be updated thereafter every five years. MAP-21 encourages states to develop freight plans that address immediate and long-range freight needs. In California, the development of a CFMP was initiated in spring 2013 as described below, and will feed into the federal process.

State Process: The California Department of Transportation (Caltrans) has established a California Freight Advisory Committee (CFAC), including Art Dao as a member, to assist with the development of the CFMP. This plan will provide input into the national plan and will be incorporated into the overall California Transportation Plan which will be completed in 2015. The state is guiding its developmental effort using the same strategic goals and definitions as those that are included in Map 21 to address capital, operational, policy and innovative technology needs in the freight network.

# • Goals include:

- Improve the contribution of the freight system to economic efficiency, productivity and competitiveness
- o Reduce congestion on the freight system
- o Improve safety, security and resiliency of system
- o Improve state of good repair
- Use advance technology, performance management and innovation, competition and accountability in operating the freight system
- o Reduce adverse environmental and community impacts

Caltrans is working with each of its District offices to identify freight projects and each of the Districts is working with their Metropolitan Planning Organizations (MPO). In the Bay Area, MTC and Caltrans are collaborating on a Bay Area Goods Movement Plan that will help to inform the state process. In order to be eligible for consideration in the CFMP, projects must be in the Regional Transportation Plan and part of a national freight network. Alameda CTC worked with Caltrans and MTC to develop a project list for initial inclusion in the state freight plan which was approved by the Commission in September and submitted to MTC. This list is included in Attachment A.

In Alameda County, the highway segments currently being identified as part of the national network include I-238, I-580, I-80, and I-880.

The following schedule includes high level milestones for the development of the CFMP:

- October/November: Draft initial list of freight projects from statewide Caltrans
   Districts and Metropolitan Planning Organizations
- December 2013: Initial draft CFMP
- Summer 2014 (June –August): Final Draft CFMP issued for 60-day public comment period and public workshops
- Fall 2014 (September October): Final CFMP that that will be incorporated into the California Transportation Plan scheduled for adoption in 2015.

Regional and Local Process: Caltrans District 4 and MTC are coordinating on a short-term Bay Area Goods Movement Plan that will facilitate development of a list of projects for inclusion in the CFMP. Alameda CTC worked closely with MTC and District 4 on this effort to ensure that a list was submitted to the state by October 2013. In addition, Alameda CTC has kicked off the development of the Alameda County long range Goods Movement Collaborative and Plan, which will be performance based and identify needs and gaps in the goods movement system, identify new projects and programs to foster economic competitiveness, and promote local community vibrancy and protect the environment. The countywide Collaborative and Plan will include extensive input from Alameda CTC stakeholders and partners. A draft plan will be developed by Spring 2015 in time to inform the 2016 Countywide Transportation Plan and the next Regional Transportation Plan.

**Update on Alameda CTC Goods Movement Collaborative and Plan:** The Alameda CTC has moved forward with Goods Movement Collaborative and Plan Development. In July the Goods Movement Leadership Team held its kick off meeting with executive staff from the following partners:

- Alameda County Transportation Commission
- Port of Oakland
- Metropolitan Transportation Commission
- Caltrans
- East Bay EDA

The Leadership Team is working on the identification and developent of the technical team, focus group stakeholders, and the Goods Movement Roundtable participants and structure. In addition the Leadership team is finalizing a schedule for development and implementation of key milestones for the Collaborative process.

An RFP for the Goods Movement Plan was released on July 1<sup>st</sup> and a pre-bid meeting was held on July 24<sup>th</sup>. Proposals were submitted to Alameda CTC on August 15<sup>th</sup> and the Commission approved the highest ranked team, Cambridge Systematics, in October 2013. Staff will present an updated project implementation schedule overview in November and a more refined schedule at the December meeting, after the Leadership Team has the opportunity to review it at its November 12<sup>th</sup> meeting.

Fiscal Impact: There is no fiscal impact.

# **Attachments**

A. Alameda County Project Inventory approved by the Commission in October 2013 and submitted to MTC

# **Staff Contacts**

<u>Tess Lengyel</u>, Deputy Director of Policy, Public Affairs and Legislation <u>Matt Bomberg</u>, Assistant Transportation Planner

# Attachment A: Alameda County Goods Movement Project Inventory

# List of Plans and Acronyms

# **Plans**

CWTP Alameda CTC 2012 Countywide Transportation Plan

GMAP Goods Movement Action Plan (State Plan conducted by Department of

Business Transportation and Housing and California Environmental Protection

Agency 2005-2007)

TCIF Trade Corridors Improvement Fund (Proposition 1B projects funded based on

GMAP)

2004 MTC 2004 MTC Regional Goods Movement Study

Plan

State Rail Caltrans' 2012 Draft State Rail Plan being prepared for 2040 California

Plan Transportation Plan

SJV IRGMS San Joaquin Valley Interregional Goods Movement Study (recently concluded

study led by 8 Congestion Management Agencies/Metropolitan Planning

Organizations)

# Acronyms

OHIT Outer Harbor Intermodal Terminal

PSR Project Scoping Report
UPRR Union Pacific Railroad

BNSF Burlington Northern Santa Fe (Railroad)

RTP Regional Transportation Plan

I/C Interchange

OAK Oakland International Airport

ROW Right of Way

JLS Jack London Square

CCJPA Capitol Corridor Joint Powers Authority
SJRRC San Joaquin Regional Railroad Commission

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Alameda County Goods Movement Project Inventory

Developed by Alameda County Transportation Commission - DRAFT Version - 9/23/2013

New grade separated rail crossings of 7th Street for BNSF and UP terminals, including replacement of the damaged freeway widening to provide for the completion of HOV lanes from Alameda County to the Santa Clara County line. In conjunction with the grade separation over Decoto Road (Project #230101) continued grade separations of both Construct a grade separation structure on Central Avenue (4-lane arterial street) at Union Pacific Railroad crossing. eliminate a sub standard grade crossing that will provide direct benefits and improvements to pedestrian safety as well as vehicle and train safety. This project is very similar to the Harder Road underpass project completed by the railroad gate improvements, and sidewalk. Rail crossing locations are: Fremont Blvd., Maple St., Dusterberry Way., Improve highway-rail crossing safety at four at-grade crossings in the City of Fremont by installing raised medians, Reconstruct interchange to accommodate widening of A Street from 5 Ianes to six Ianes underneath the overpass. Final alignment would be two continuous through lanes and one continuous LT lane in each direction. This would section, between Cedar Street and Maritime Street, reconfiguration of 7th /Maritime Street intersection into 23-This application is for the Phase 2 project - Grade Separation of Warren Avenue and Union Pacific Railroad tracks. Examples include rail crossings, roadway crossings, etc. (Part of RTP Local Road Improvements Program #240386) way intersections, realignment of Maritime Street, and bicycle and pedestrian access improvements. The project Serves as Phase 2 of the State Route 262/I-880 Freeway Interchange Reconstruction and I-880 Widening Project. Rail safety improvements consisting of 4-quad gates and detection technology at local roadway crossings at the Grade separations at rail lines and major roadways for safety for auto/bike/pedestrians (Part of RTP Local Road Phases 1a & 1b includes direct connectors between Route 262 with HOV bypass lanes along the on-ramps, and grade cross-track sidewalk access and ADA access, paving, signage, pavement markings (Part of RTP Local Road Alleviate existing traffic hazards cuased by conflicts between vehicles and trains. The proposed underpass witll expands roadway capacity through the reconstruction of 7th Street along a new alignment, in a deeper trench Improving Railroad Crossings - existing rail crossings are generally deficient in gate arms and warning lights, at former Southern Pacific overhead and the addition of rail expansion capacity. Improve traffic operations and UPRR main line at 65th, 66th, and 67th Streets consistent with Quiet Zone approval (Part of RTP Local Road also will separate truck traffic on 7th St. thereby eliminating conflicts between trucks and trains at a major intersection adjacent to OHIT. Improves roadway safety and clearance through existing underpass. rail lines through the residential neighborhood of Decoto Major component of Oakland Army Base Phase 2 Project is an enhancement. (Coast subdivision) Improvements Program #240386) Improvements Program #240386 City several years ago. Description Committed Status in Plan Program (CWTP) Program (CWTP) rogram (CWTP) Program (CWTP) Fier 1 (CWTP) Tier 1 (CWTP) Tier 1 (CWTP) Tier 1 (CWTP) Fier 1 (CWTP) Tier 1 (CWTP) Tier 1 (CWTP) **Estimate in** Plan (\$M) Fund \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$1.2 \$0.0 \$0.0 Estimate in Plan (\$M) \$304.8 \$191.7 \$14.0 \$64.0 Cost \$80.5 \$18.7 \$3.2 \$4.9 \$7.5 Area/CWTP, 2004 Area/CWTP, 2004 GMAP, 2004 MTC Bay Area, CWTP, (Inactive), Plan Area/CWTP Area/CWTP Area/CWTP Area/CWTP Area/CWTP Area/CWTP Area/CWTP Area/CWTP TCIF Tier 1 MTC Plan Alameda Countywide Transportation Plan Tier 1 - Major International Trade Corridor Truck Projects Plan Bay County Plans Plan ALA ΑLΑ ALA ALA ΑP ΑLΑ ALA٩۲٧ 4 ٩F ٩ Intermodal Alameda Countywide Transportation Plan Tier 1 - Intermodal Terminal Projects Truck/Rail Truck/Rail Truck/Rail ruck/Rail Truck/Rail Truck/Rail Truck/Rail Truck/Rail Mode Truck of Union City City of Emeryville of Hayward City of Fremont of Fremont of Oakland of Newark Oakland/MTC Alameda CTC Alameda Countywide Transportation Plan Tier 1 - Rail Projects Port of City cit City City City Construct grade separation at Warren Avenue/Union Pa cific RR as Phase 2 of the Route 262/I-880 interchange i Local Road Safety Program: Railroad Crossings, Street Local Road Safety - rail improvements at 65th, 66th, Grade Separation in the Decoto neighborhood Highway-Rail Grade Crossing Improvements Grade separations improvement program I-880/A St interchange improvements **Central Avenue Railroad Overcrossing** Tennyson Road grade separatior Safety improvements program 7th Street Grade Separation mprovements Realignments 67th streets RTPID 22082 240208 240386 240386 240047 240055 240386 240386 230103 22779 21103

NB and SB 880 between West A and Winton		
Commited (CWTP)	(LATIP)	
\$23.00		
\$23.00		
Plan Bay	Area/CWTP	
ALA		
Truck		
Alameda CTC		
I-880 NB and SB Auxillary Lanes		
230052		

Notes: Major International Trade Highway Corridors are I-880, I-238, I-80, and I-580 (as identified in Caltrans Goods Movement Action Plan); Programmatic Projects included with Tier 1

Implements the recommendations of the ACTC Board adopted Truck Parking Facility Feasibility and Location Study

(December 2008) funded by Caltrans and managed by the CMA. (Part of RTP Goods Movement Programmatic

Project #240394)

Program (CWTP)

\$0.0

\$5.0

Area/CWTP

Plan Bay

ΑP

Truck

Alameda CTC

Implementation of 2008 Truck Parking Study

MTC Plan

also involve intersection and signal modifications. Would benefit trucks turning onto I-880 ramps. Area has high

volumes of trucks, half of them 5-axle.

240394

Alameda County Goods Movement Project Inventory
Developed by Alameda County Transportation Commission - DRAFT Version - 9/23/2013

MTC	Project	Sponsor	Mode	County	Plans	Cost	nitted	Status in Plan	Description
RTPID						Estimate in	Fund		
						Plan (\$M)	Estimate in		
230054	I-880 Auxiliary Lanes between Whipple and Industrial Par, kway West	Alameda CTC	Truck	ALA	Plan Bay Area/CWTP	\$9.50	(NI <b>\$)</b> (\$9.50	Commited (CWTP)	NB 880 between A Street and Paseo Grande
21144	n Ave Reconfiguration	Alameda CTC / City of Berkeley	Truck	ALA	Plan Bay Area/CWTP	\$26.0	\$1.4	Tier 1 (CWTP)	Reconfigure the I-80/Gilman interchange located in northwest Berkeley, near its boundary with the City of Albany. Capacity constraint and vehicular safety due to the current stop sign controlled ramps are serious issues at this interchange. The project design will also provide adequate pedestrian, bicycle, and public transit movements through the interchange area. The proposed reconfiguration is likely a dual roundabout that has a roundabout on each side of the interchange with a connecting segment.
230684	Widen I-580/I-680 interchange in each direction for HOV/HOT lanes	Alameda CTC/MTC	Truck	ALA	Plan Bay Area/CWTP	\$310.0	\$0.0	Tier 1 (CWTP)	Widen to add one HOV/HOT lane for WB 580 to SB 680 and NB 680 to EB 580 movements at connector and to Tassaiara Road
240037	ton Ave interchange improvements	City of Hayward	Truck	ALA	Plan Bay Area/CWTP	\$25.8	\$0.0	Tier 1 (CWTP)	Reconstructing ramps to create a partial cloverleaf interchange with signalized foot of ramp intersections. Project would reconfigure eastbound to southbound on ramp and a new connection to Southland Mall Drive opposite the southbound off ramp.
240025	I-880/Industrial Parkway interchange improvements	City of Hayward	Truck	ALA	Plan Bay Area/CWTP, MTC Plan	\$65.00	\$65.00	Commited (CWTP) (LATIP)	Reconstruct Interchange to provide a northbound off ramp and a southbound HOV bypass lane on the southbound loop off ramp. Reconstruct bridge over I-880. Project would provide a direct link from I-880 northbound to an industrial area with many wholesale/distribution businesses.
21100	I-580/Vasco Road interchange improvements	City of Livermore	Truck	ALA	Plan Bay Area/CWTP	\$63.9	\$55.0	Tier 1 (CWTP)	Modify I–580/Vasco Rd. Interchange. Widen I–580 overcrossing to provide 8 traffic lanes and bike lanes/shoulders. Construct auxiliary lanes on I-580 between Vasco and First Street. Add new loop ramp in southwest quadrant. Includes widening Vasco Road to 8 lanes between Northfront Road and Las Positas Road, and other local roadway improvements
21475	I-580/First St Interchange Improvements	City of Livermore	Truck	ALA	Plan Bay Area/CWTP	\$44.0	\$38.5	Tier 1 (CWTP)	To improve safety and reduce congestion on and near the I-580/First Street interchange.
21477	I-580/Greenville Rd Interchange Improvements	City of Livermore	Truck	ALA	Plan Bay Area/CWTP	\$53.8	\$43.3	Tier 1 (CWTP)	To improve safety and reduce congestion on and near the I-580/Greenville Road interchange.
230132	I-580/Isabel Avenue Interchange, Phase 2	City of Livermore	Truck	ALA	Plan Bay Area/CWTP	\$31.0	\$26.0	Tier 1 (CWTP)	Complete ultimate improvements at I-580/Isabel/Route 84 Interchange to provide 6-lanes over 580 at Isabel/84 Interchange and 4-lanes over 580 at Portola flyover.
230170	I-880/High St Interchange Improvements	City of Oakland	Truck	ALA	GMAP, Plan Bay Area/CWTP	\$17.6	\$6.1	Tier 1 (CWTP)	Extend and align 42nd Avenue with Alameda Avenue to provide a road parallel to High Street; widen High Street to provide additional capacity at the intersections of the freeway connector roads of Oakport Street and Coliseum Way; realign E. 8th Street near Alameda Avenue; and extend and realign Jensen and Howard Streets to connect High Street and 42nd Avenue. Includes modified traffic signals and intersection improvements. Improvements also proposed for Howard St./Jensen St. and E. 8th St. as well as the intersections of High St. at Oakport St. and Coliseum Way
240394	Truck Services at Oakland Army Base (ROW)	City of Oakland	Intermodal	ALA	Plan Bay Area/CWTP	\$20.0	\$0.0	Program (CWTP)	Truck Parking is mentioned as part of Oakland Army Base Phase 2. This cost estimate is for component of the RTP Goods Movement Programmatic Project #240394.
240394	Goods Movement: Truck Facilities, Truck Route Rehabilitation	City of Oakland	Truck	ALA	Plan Bay Area/CWTP	\$21.8	\$0.0	Program (CWTP)	Provision of truck storage facilities away from residential areas and improvement/re-routing of regional truck routes on Oakland City streets. Improve industrial load-bearing streets to withstand impact of truck movement. (Part of RTP Goods Movement Programmatic Project #240394)
21489	I-580/San Ramon Road/Foothill Road interchange improvements	City of Pleasanton	Truck	ALA	Plan Bay Area/CWTP	\$3.7	\$2.6	Tier 1 (CWTP)	I-580/San Ramon Road/Foothill Road interchange improvements. Elimination of eastbound diagonal off ramp and e astbound loop off ramp. Construction of new signalized intersection for off ramp vehicles
22100	I-880/Davis St Overcrossing	City of San Leandro	Truck	ALA	GMAP, Plan Bay Area/CWTP, MTC Plan	\$11.00	\$11.00	Commited (CWTP) (LATIP)	Replaces the existing overcrossing structure with a new structure, providing higher clearance for I-880 traffic and additional travel lanes on Davis St. to improve capacity and safety along with ramp, intersection and signal improvements.
230066	S	City of San Leandro	Truck	ALA	Plan Bay Area/CWTP, MTC Plan	\$34.00	00	Commited (CWTP) (LATIP)	Improvements to the I-880/Marina Blvd Interchange including on/off ramp improvements, overcrossing modification and street improvements. May include replacing existing overcrossing to provide higher clearance on I-880.
240052	I-880/Whipple Rd interchange improvement	City of Union City	Truck	ALA	Plan Bay Area/CWTP	\$61.9	\$0.0	Tier 1 (CWTP)	Full interchange improvements at Whipple Road/I-880, including northbound off-ramp, surface street improvements and realignment (Union City and Hayward city limits)

Notes: Major International Trade Highway Corridors are I-880, I-238, I-80, and I-580 (as identified in Caltrans Goods Movement Action Plan); Programmatic Projects included with Tier 1

Alameda County Goods Movement Project Inventory
Developed by Alameda County Transportation Commission - DRAFT Version - 9/23/2013

				-		-			
MTC	Project	Sponsor	Mode	County	Plans	Cost	nitted	Status in Plan	Description
RTPID						<b>Estimate in</b>	Fund		
						Plan (ŚM)	<b>Estimate in</b>		
							Plan (\$M)		
Alamed	Alameda Countywide Transportation Plan Tier 1 - Other Truck Projects								
230110	Route 262 Mission Blvd Cross Connector Improvements between I-680 and Warm Springs Blvd/SR 262 Mission Blvd Improvements	Alameda CTC/City of Fremont	Truck	ALA	Plan Bay Area/CWTP, 2004 MTC Plan	\$20.0	0.0\$	Tier 1 (CWTP)	This project will increase the mobility between I-680 and I-880 by improving the most direct and heavily used eastwest cross-connector corridor in Alameda County. This project will widen Mission Blvd to 3 lanes in each direction throughout the I-680 interchange. It will extend the WB right turn lane from Warm Springs to Mohave. It will extend both WB left turn lanes at Warm Springs an additional 130 ft. It will regrade and rebuild the NB and SB I-680 on and off ramps. It will install 2 new intersections with street lights and storm drain treatment at the NB and SB I-680 on and off ramps. It will relocate existing facilities on WB Mission Blvd between Warm Springs and Mohave. I-680/I-880 Cross Connector Project.
230114	Auto Mall Parkway Cross Connector widening between I-680 and I-880	City of Fremont	Truck	ALA	Plan Bay Area/CWTP, 2004 MTC Plan	\$25.0	\$0.0	Tier 1 (CWTP)	Improves mobility options in area with high truck volumes and numerous freight reliant businesses. I-680/I-880 Cross Connector Project.
240264	Widen Fremont Blvd from I-880 to Grimmer Blvd	City of Fremont	Truck	ALA	Plan Bay Area/CWTP, 2004 MTC Plan	\$5.0	\$0.0	Tier 1 (CWTP)	Widen Fremont Blvd to 6 lanes and 2 bike lanes from Grimmer Blvd to I-880, install new traffic signals at Grimmer Blvd intersection and Industrial Drive intersection. I-680 to I-880 Cross Connector route. Improves mobility options in area with high truck volumes and numerous freight reliant businesses.
240394	Melrose - Coliseum District Street Reconstruction	City of Oakland	Truck	ALA	Plan Bay Area/CWTP	\$13.8	\$1.0 Pr	Program (CWTP)	Reconstruct Coliseum Way and 50th Avenue to handle heavy truck traffic, reduce safety hazards due to sight distance, and provide bicycle and pedestrian safety facilities. (Part of RTP Goods Movement Programmatic Project #240394)
Alamed	Alameda Countywide Transportation Plan Tier 2 - Rail Projects	rojects							
22009	Expand Capitol Corridor intercity rail service from Oakland to San Jose - project development		Rail	ALA/SCL	Plan Bay Area/CWTP	\$579.0	\$17.9 Ti	Tier 2 (CWTP)	Resolution 3434 Project. Project scope includes Oakland-San Jose track improvements to increase service from 7 to 16 round trips and associated rolling stock. Overlap with specific improvements listed in CCJPA Business Plans and State Rail Plan
230116	Berkeley Railroad Crossing Improvements	City of Berkeley	Truck/Rail	ALA	Plan Bay Area/CWTP	\$111.7	\$0.0	Tier 2 (CWTP)	Design and construct railway crossing improvements, including grade separation at Gilman Avenue and quadrant gates, road closures, and at-grade improvements at other crossings, per Quiet Zone Study
240273	240273 Mowry Ave Railroad Overpass  Alameda Countswide Transportation Plan Tier 2 - Maior	City of Newark Truck/Rail ALA Plan Bay Area/CW	Truck/Rail	ALA Or Trick	<u>a</u>	\$13.6	\$0.0	Tier 2 (CWTP)	Construct a grade separation structure on Mowry Avenue at the Union Pacific Railroad crossing to provide access to Area 4 in Newark. (Coast subdivision)
230086		City of Dublin	Truck	ALA	<u>e</u>	\$38.8	\$22.3 Ti	Tier 2 (CWTP)	1-580/Fallon Road I/C Improvements (Phase 2): Reconstruction of overcrossing to provide four lanes in each direction; reconstruction of the southbound to eastbound loop on-ramp; widening of the eastbound off-ramp to provide two exit lanes with two left turn and two right turn lanes; widening of the eastbound on-ramp; widening of the westbound off-ramp to provide two left turn and two right turn lanes; widening the westbound on-ramp.  1-580/Hacienda Drive I/C Improvements: Reconstruction of overcrossing to provide additional northbound lane; widening of the eastbound off-ramp to include a third left turn lane; modifying the westbound loop on-ramp; and widening the westbound off-ramp to include a third left turn lane
Alamed	Alameda Countywide Transportation Plan Tier 2 - Other	ther Truck Projects							
240280	Woodland - 81st Avenue Industrial Zone street reconstruction	City of Oakland	Truck	ALA	Plan Bay Area/CWTP	\$11.9	\$0.0	Tier 2 (CWTP)	Reconstruct goods movement streets within the Woodland-81st Avenue industrial area to withstand heavy truck traffic; modify gateways, provide at-grade safe RR crossings (listed separately and as part of RTP programmatic project #240394)
240282	Tidewater District Street Reconstruction	City of Oakland	Truck	ALA	Plan Bay Area/CWTP	\$5.2	\$0.4 TI	Tier 2 (CWTP)	Reconstruct Oakport, Lesser, Tidewater, and High Streets in Oakland west of the I-880 Freeway. Do major reconstruction of streets to serve heavy truck traffic, reconfigure roadway intersection configurations, and provide public sidewalks (also bikeway on High, Lesser, and Tidewalter Streets)

Alameda County Goods Movement Project Inventory
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MTC	Project	Sponsor	Mode	County	Plans	Cost	Committed	Status in Plan	Description
RTPID						Estimate in			
						Plan (\$M)	Fetimate in		
						ridii (şivi)	Plan (\$M)		
Alamed	Alameda Countywide Transportation Plan Vision and Other Agency Plans - Intermodal Terminal Projects	ther Agency Pla	ns - Interm	odal Term	inal Projects				
	Phase II Intermodal Railyard	Port of Oakland	Intermodal	ALA		\$150.0	\$0.0	No Timeline Identified in Plan	Major component of Oakland Army Base Phase 2 Project consists of new state of the art, high efficiency intermodal rail facility. Project is subject to market demand for expanded intermodal rail services.
	North Airport Air Cargo (Infield) Road Access Improvements	Port of Oakland	Intermodal	ALA	TCIF Tier 2, GMAP, 2004 MTC Plan	\$10.0		No Timeline Identified in Plan	Phase 1 - Widen and connect SR 61 (Doolittle Drive) with Earhart Rd and extend into the Infield area at North Field. Another \$8.4M second phase for a later date. Improves capacity and access to North Airport air cargo tenants.
	Reconstruction of the Adeline St Overpass	Port of Oakland	Intermodal	ALA	GMAP, 2004 MTC Plan	\$60.0		No Timeline Identified in Plan	Replace the existing Adeline St overpass (over the railroad tracks at 3rd St and Adeline St) to reduce the grade of the overpass and improve structure so it can accommodate overweight trucks.
	Oakland Airport Area ITS Project	Port of Oakland	Intermodal	Y P P P P P P P P P P P P P P P P P P P	2004 MTC Plan	\$15.0		No Timeline Identified in Plan	Design and implement ITS along 98th Ave and Hegenberger Rd from I-880 to OAK. Includes installation of CCTV cameras, vehicle detectors, dynamic message signs, transit priority, real-time traveler information displays, etc. to improve management of the corridors leading to/from OAK and the I-880/Coliseum area. This project would interconnect the signals along these routes to minimize delay and improve traffic flow, and provide the Port and City with centralized control for incident management. Real-time traffic-responsive systems would be considered. ITS linkages would benefit OAK access to significant numbers of trucks traversing the arterial linkages to and from I-880, including many high-value air freight shipments.
	Port of Oakland ITS	Port of Oakland	Intermodal	ALA	2004 MTC Plan	\$5.1		No Timeline Identified in Plan	Project would construct infrastructure and variable message boars at three locations en route to the Port's maritime facilities. It is assumed that the Central Communications Center will be located at a facility in the Maritime Support Center. Cost does not include the facility.
Alamed	Alameda Countywide Transportation Plan Vision and Other Agency Plans - Rail Projects	ther Agency Pla	ns - Rail Pro	ojects					
	Newark-Albrae siding connection and south switching lead Extension for Newark yard	CCJPA	Rail	ALA	State Rail Plan (CCJPA Improvements)	\$22.80		Mid Term (State Rail Plan)	
	Niles Canyon Railroad mainline track upgrade (New Niles Wye to former SP mainline at CP Hears) and Radum second main track upgrade on UPRR Oakland Sub	Niles CCJPA	Rail	ALA		\$45.70		Mid Term (State Rail Plan)	
	Oakland JLS - Elmhurst 3rd Track	CCJPA	Rail	ALA	State Rail Plan (CCJPA Improvements), CCJPA FY08/09 - FY09/10 Business Plan	\$41.7		Long Term (State Rail Plan)	Add 3rd track from Oakland JLS Station to Elmhurst (near Oakland Coliseum) for added track capacity for more service between Oakland and San Jose
	Newark - Alviso Added main tracks	ССЈРА	Rail	ALA	A FY08/09 - /10 Business	\$169.0		No Timeline Identified in Plan	Add 2nd (and possible 3rd) main line tracks from Albrae through wildlife refuge/wetlands area to Alviso (design plans will be sensitive to environmental needs and wetlands areas)
	Oakland JLS - Embarcadero 3rd Main Track	CCJPA	Rail	ALA	State Rail Plan (CCJPA Improvements), CCJPA FY08/09 - FY09/10 Business Plan	\$29.6		Long Term (State Rail Plan)	Add third main track in the Oakland Jack London Embarcadero area to improve conflicting movements of freight and passenger trains
	Grade Crossing Projects	CCJPA	Truck/Rail	ALA	CCJPA FY08/09 - FY09/10 Business Plan	\$67.0		No Timeline Identified in Plan	Implement High Street, Davis Street, and Hesperian Street Grade separation projects

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MTC	Project	Sponsor	Mode	County	Plans	Cost	nitted	Status in Plan	Description
RTPID						Estimate in	Fund		
						Plan (\$M)	Estimate in		
	Niles Junction bypass	CCJPA	Rail	ALA	Statewide Rail Plan (CCJPA Improvements)	\$76.80	(Mic) Hall	Long Term (State Rail Plan)	
	Niles Subdivision third main track (Niles Junction to Newark Junction or Shinn Connection to Newark Junction)	CCJPA	Rail	ALA	Statewide Rail Plan (CCJPA Improvements)			Long Term (State Rail Plan)	
	- Pinole 3rd Track	CCJPA	Rail	ALA/CC	CCJPA FY08/09 - FY09/10 Business Plan	\$32.0		No Timeline Identified in Plan	Reactivate and extend 3rd main line track from Port of Oakland to Point Pinole
22009	Hayward Double Track	CCJPA	Rail	ALA/CC	State Rail Plan (CCJPA Improvements), CCJPA FY08/09 - FY09/10 Business Plan	\$98.0		Long Term (State Rail Plan)	Add 2nd track between Elmhurst and Industrial Parkway (Union City) to allow for up to 16 roundtrips between Oakland and San Jose (also supports Dumbarton Rail). Some overlap with RTP/CWTP project 22009.
	Oakland - San Jose Track Improvement Program	CCJPA	Rail	ALA/SCL	State Rail Plan (CCJPA Improvements), CCJPA FY08/09 - FY09/10 Business	\$18.6		Mid Term (State Rail Plan)	Replace and upgrade track infrastructure (rail, subgrade, and ties) to maintain travel times, ride quality, and system reliability
	Oakland - San Jose Track Improvement Program, Phase 2 CCJPA	CCJPA	Rail	ALA/SCL	State Rail Plan (CCJPA Improvements), CCJPA FY12/13 - FY13/14 Business Plan	\$18.6		Mid Term (State Rail Plan)	
	Fremont/Centreville Station full platform extension (Track 2)	CCJPA	Rail	ALA	State Rail Plan (CCJPA Improvements)	\$0.90		Mid Term (State Rail Plan)	
230101	Union City Passenger Rail Station & Dumbarton Rail Segment G Improvement	City of Union City	Rail	ALA	Plan Bay Area/CWTP	\$231.0	\$50.5	Vision (CWTP)	Passenger rail improvements from Industrial Parkway in Hayward to the Shinn Yards in Fremont. Includes rail connections, grade separate the UPRR Oakland Subdivision over Decoto Road (a major arterial roadway) in a Priority Development Area, and a passenger rail station that connects to and interfaces with Union City BART. These improvements will help separate freight and passenger rail, improve connectivity among transit providers (passenger rail, BART and bus).
	Oakland Subdivision acquisition (Fremont to Oakland)	City of Union City	Rail	ALA	TCIF Tier 2.	\$135.0	\$35.0	No Timeline Identified in Plan	Short haul rail alignment option- links Niles Junction to Port of Oakland. The acquisition of ROW provides the opportunity to separate passenger and freight rail, and thus reduces these conflicts from Industrial Parkway in Hayward to the Shinn Yards in Fremont. Match would rely on larger Dumbarton project, which is underfunded and the project status unclear. Final cost is unclear as it will be a negotiation with UP. Not a top priority for the Port of Oakland. Cost estimate shown here is from CWTP submission which was eventually withdrawn (RTPID 230102)
240738	Martinez Subdivision Rail Improvements	MTC/Port of Oakland	Rail	ALA	Plan Bay Area, CWTP, GMAP, TCIF Tier 1 (later withdrawn), 2004 MTC Plan, State Rail Plan (CCJPA Improvements)	\$100.0		Vision (CWTP)	Augments rail access to Port by providing opportunity and scope for growth. Increases efficiency and reliability of both BNSF and UPRR who use this corridor (along with Capitol Corridor). Includes the addition of two additional mainline tracks from the Port of Oakland (milepost 2.75), to Stege in Richmond (milepost 9.35). There are approximately 18 to 20 cargo trains per day on the system; however that number is expected to double by 2020. There are also currently 44 passengers' trains per day on the system. The additional two mainline tracks will add the capacity to the system to allow the additional 22 freight trains per day anticipated by 2020. The project will also construct numerous crossovers and additional signaling, as well as retaining walls to support the additional track.
	Capitol Corridor Operational Improvements	MTC/SACOG	Rail	ALA/CC/S OL/SAC	TCIF Tier 2	\$60.0		No Timeline Identified in Plan	Various rail upgrades along the corridor from Oakland to Sacramento. Improves service for both UP and Capitols. This is the project that was nominated to TCIF - not clear which elements from CCJPA business plan it overlaps with. (See Non-Alameda Rail Projects).

Notes: Major International Trade Highway Corridors are I-880, I-238, I-80, and I-580 (as identified in Caltrans Goods Movement Action Plan); Programmatic Projects included with Tier 1

Alameda County Goods Movement Project Inventory Developed by Alameda County Transportation Commission - DRAFT Version - 9/23/2013

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Automatical Code bridge   Service (Cite) Mannels   Automatical Control Valences   Country Valences   Count	MTC	Project					nate in	nitted	_	Description
Carleting   Carl								stimate in		
Cultiman intering and intermedal Service (CIRS) whiled San Johanness		Alameda Creek Bridge								Short haul rail alignment option- provides connection at Niles Junction to the Oakland Sub separating passenger and freight service.
Extension of Altamont Saling   SIRRC   Rail   ALA   Streewise half   \$9.83   Most Term (State Rail Plan ALE RAIL Rail Plan ALE RAIL RAIL RAIL RAIL RAIL RAIL RAIL RAIL		Inland	San Joaquin County/ Alameda County	Rail		SJV IRGMS, related TCIF Tier 1 (inactive) projects	\$12.0	<u>                                     </u>	bility study bleted in 2006. ect was drawn from	Short haul rail between Central Valley and Port of Oakland. Requires ROW acquisition and contracted operator. Envisioned as PPP. ACCMA participated in a feasibility study for this service in 2000s.
Track cealignment UP-NR Obskand State MP SS.5 to MP   SIRRC   Rail   ALA   Stateworde Rail   S10.93   Multi-Term (State Rail Pain Act   Pain				Rail		vide Rail ACE vements), ont Corridor	\$9.83	<u> </u>	erm (State Rail	
Not the present or pleasant or second main track and slding   SIRRC   Rail   ALA/SI   Plan (ACE   Rail   ALA/SI   Plan (ACE   Rail   ALA/SI   ACE   Rail   ALA/SI   ACE   Rail   ALA/SI   ALA/SI   ACE   Rail   ALA/SI   ACE		Track realignment UPRR Oakland Sub MP 55.5 to MP 54.0		Rail		vide Rail ACE vements)	\$10.93		erm (State	
No Timeline				Rail			\$11.00	1 N	ong Term (State (ail Plan)	
Upgrade Radum Stiding to Mainline Standards   SIRRC   Rail   ALA/Si Statewide Rail   S4.33   Multi-Permission of Miles Junction signal upgrades   SIRRC   Rail   ALA/Si Statewide Rail   S4.33   Multi-Permission of Miles Junction of ACE corridor between Lathrop and Miles   SIRRC   Rail   ALA/Si Statewide Rail   S45.00   Multi-Permission of Miles Miles Rail   ALA/Si Statewide Rail   S45.00   Multi-Permission of Miles Miles Rail   Multi-Permission of Miles Miles Miles Miles Miles Miles Rail   Multi-Permission of Miles Miles Rail   ALA/Si Statewide Rail   S45.00   Multi-Permission of Miles Miles Miles Rail   Multi-Permission of				Rail		GMAP, SJV IRGMS, TCIF Tier 1 [Inactive]	\$300.0	<u> </u>		Acquisition of the UPRR Oakland Subdivision and right-of-way between Stockton and Niles Junction (Fremont). This is a critical step to allow for eventual short haul rail service connecting the Central Valley to the Port. UP negotiations ongoing; therefore project cost in flux. ACE operates on this ROW; multiple benefits from ownership. GMAP recommended continued investment on the Altamont Rail Corridor; project provides foundation for rail shuttle.
Cathrop to Niles Junction signal upgrades   SIRRC   Rail   ALA/SI   Plan Acquisition of ACE corridor between Lathrop and Niles   SIRRC   Rail   ALA/SI   Plan Acquisition of ACE corridor between Lathrop and Niles   SIRRC   Rail   ALA/SI   Plan Acquisition of ACE corridor between Lathrop and Niles   SIRRC   Rail   ALA/SI   Plan Acquisition of Mildway siding   SIRRC   Rail   ALA/SI   Plan Acquisition of Mildway siding   SIRRC   Rail   ALA/SI   Ratewide Rail   S9.83   Mild Term (State Rail   Plan)		Upgrade Radum Siding to Mainline standards		Rail		ont Corridor	\$7.0	<u> </u>		Capacity/reliability benefits for ACE rail
Acquisition of ACE corridor between Lathrop and Niles   SIRRC   Rail   ALA/SI   Statewide Rail   S45.00   Mild Term (State Rail   Plan   Plan   Plan   Mild Term (State Rail   Plan   Mild Term (State Rail   Plan   Plan   Plan   Mild Term (State Rail   Mild Term (State Rail   Plan   Mild Term (State Rail   Mild Term (State R		Lathrop to Niles Junction signal upgrades		Rail		vide Rail ACE vements)	\$4.33	N G	erm (State	
Extension of Midway siding  Ex				Rail		Rail ents)	\$45.00		erm (State	
Oakland - Martinez Track Improvement   Rail   ALA   CCIPA FY08/09 - \$75.0   No Timeline   FY09/10 Business   Plan   Pla		Extension of Midway siding		Rail		), idor	\$9.83	<u> </u>	erm (State	
1-238/1-580 truck bypass lane   Caltrans   Truck   ALA   GMAP, 2004 MTC   \$120.0   PSR completed as component of 1-238    -238/1-580 truck bypass lane   Caltrans   Truck   ALA/SI   Truck   ALA   Plan Bay   \$3.0   \$1.0   Vision (CWTP)    -580/Santa Rita Rd interchange improvements   City of Pleasanton   Truck   ALA   Plan Bay   \$3.0   \$1.0   Vision (CWTP)		Oakland - Martinez Track Improvement		Rail	ALA	CCJPA FY08/09 - -Y09/10 Business Jan	\$75.0		_	Replace and upgrade track infrastructure (rail, subgrade, ties, and drainage ditches) to maintain travel times, ride quality, and system reliability
1-238/1-580 truck bypass lane	Alamed	a Countywide Transportation Plan Vision and O	ther Agency Plan	ıs - Major II	nternation	al Trade Corrido	or Truck Projec		Ī	
WB I-580 Truck Climbing Lane Over Altamont Pass Caltrans Truck ALA/Si Truck ALA/Si Truck Climbing Lane Over Altamont Pass Caltrans staff was SIV IRGMS, 2004 MTC Plan MTC Plan ALA Plan Bay \$3.0 \$1.0 Vision (CWTP) Area/CWTP		I-238/I-580 truck bypass lane		Truck		GMAP, 2004 MTC Jan	\$120.0	<u>a ū \$</u>		Construct a truck bypass lane from I-580 to I-238; would have capacity benefits as well as safety benefits by leliminating current left merge
I-580/Santa Rita Rd interchange improvements City of Pleasanton Truck ALA Plan Bay \$3.0 \$1.0 Vision (CWTP) Area/CWTP		WB I-580 Truck Climbing Lane Over Altamont Pass				TCIF Tier 2, GMAP, SJV IRGMS, 2004 VTC Plan	\$70.0	<u> </u>	was oject	Truck climbing lane between the I-205/Hansen Rd overcrossing and the summit of Altamont Pass. Strong support from Central Valley agricultural community. Caltrans staff is working on project development.
	240144	I-580/Santa Rita Rd interchange improvements		Truck						This project will reconstruct the southbound approach of Santa Rita at Pimlico/ I-580 eastbound off ramp to add a second southbound left turn lane. This reconstruction will include alteration to the southbound loop ramp

Notes: Major International Trade Highway Corridors are I-880, I-238, I-80, and I-580 (as identified in Caltrans Goods Movement Action Plan); Programmatic Projects included with Tier 1

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MTC	Project	Sponsor	Mode	County Plans	Plans	Cost	Committed Status in Plan	us in Plan	Description
RTPID						Estimate in Fund Plan (\$M) Estim Plan (	Estimate in Fund Plan (\$M) Estimate in Plan (\$M)		
Alameda	Alameda Countywide Transportation Plan Vision and Other Agency Plans - Other Truck Projects	ther Agency Pl	ans - Other 1	ruck Proje	cts				
	Clement Avenue Extension	City of Alameda Truck	Truck	ALA	2004 MTC Plan	\$6.1	No Tir Identii	No Timeline Identified in Plan	Signalization improvements, ROW acquisition, and new construction, as well as resurfacing of a segment between Broadway and Grand St. Improves connection between Alameda and nearby industrial area. Also provides a direct connection along the City of Alameda's northern truck route, which would improve efficiency in movement.
240279	Mandela Parkway and 3rd Street Corridor Commercial/Industrial Area Street Reconstruction	City of Oakland Truck	Truck	ALA	Plan Bay Area/CWTP	\$157.0	\$0.0 Vision	Vision (CWTP)	Reconstruct roadway network to address traffic safety concerns, rehabilitate the roadway surfaces to withstand truck traffic and address rail crossings, and provide streetscapes conducive to commercial and industrial

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# Memorandum

6.3

www.AlamedaCTC.org

1111 Broadway, Suite 800, Oakland, CA 94607

PH: (510) 208-7400

**DATE:** October 28, 2013

**SUBJECT:** Cap and Trade Principles and AB 32 Scoping Plan Update

**RECOMMENDATION:** Approve the Cap and Trade Principles

### **Summary**

In 2006, Governor Schwarzenegger signed AB 32, the Global Solutions Warming Act, which established a goal for reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. To do so, AB 32 required several actions to support attainment of these goals and directed the California Air Resources Board (CARB) to develop early actions and a scoping plan that would guide how to reach the 2020 emissions reductions goal. AB 32 required several actions, including the development of a scoping plan to identify technologically feasible and cost effective GHG reduction methods through the use of regulations, market mechanisms and other actions.

The market mechanism includes a Cap and Trade program to eventuate declining aggregate emissions limits for GHG emitting sources to ultimately reduce GHG emissions. The Cap and Trade program is in effect in California from 2012 through 2020. Auctions of emission allowances, which are tradable permits that are equal to the emissions allowed under the cap, began in 2012 and occur thus far four times per year. The funds received from these auctions go to the State of California. In 2013, CARB adopted an expenditure plan to direct the use of the funds; however, in the 2013/14 budget, the State borrowed from these funds and did not allocate them for other purposes. It is anticipated that the Governor's proposed 2014/15 budget, which will be released in January 2014 will include proposals for how to allocate the funds.

The Alameda CTC has coordinated with Bay Area partners on the development of principles for the use of the Cap and Trade funds. The principles support allocation of the Cap and Trade funds derived from transportation fuels to be allocated on a per capita basis to regional agencies and to allow the regions to determine how the funds should be spent. The principles also support collaboration between MTC and the Bay Area Congestion Management Agencies regarding development of the allocation methods for any Cap and

Trade funds that come to the region. Staff recommends Commission approval of the Bay Area Cap and Trade principles included in Attachment A.

#### **Background**

California's greenhouse gas (GHG) cap-and-trade program is a central element of California's Global Warming Solutions Act (<u>Assembly Bill 32</u>) and covers major sources of GHG emissions in the state such as refineries, power plants, industrial facilities and transportation fuels. The regulation includes an enforceable GHG cap that will decline over time. CARB distributes allowances, which are tradable permits, equal to the emission allowed under the cap.

Producers of about 80 percent of the state's GHG emissions are subject to the state's cap as part of the Cap and Trade Program, which is expected to reduce emissions by about 20 percent compared to business-as-usual. Motor vehicle fuels will be subject to the cap starting in 2015. The remaining 20 percent of emissions occur from industries such as agriculture and forestry, and are referred to as the uncapped sectors. The first auction was held in November 2012, with subsequent auctions typically scheduled on a quarterly basis.

The following provides background on actions taken over the past year related to Cap and Trade funds. Over the past year, several pieces of legislation were introduced aimed at defining how the cap and trade funds should be spent in the State. All of these bills were held and did not make it through the Legislature during the first year of this two-year session. The Alameda CTC supported AB 574 (Lowenthal) which required that Cap and Trade funds derived from motor fuels should be used for transportation purposes that support GHG reductions, supporting a nexus between the source and use of the funds. AB 574 included the advocacy principles of the Transportation Coalition for Livable Communities, which was developed and supported by transportation interest and advocacy groups across the state.

The Transportation Coalition for Livable Communities proposal, integrated into AB 574, supports ongoing efforts of regions and local communities to reduce GHG emissions as part AB 32 efforts and the Sustainable Communities Strategies adopted across the state. Cities, counties and regional agencies have worked closely together to develop plans that support the reduction of GHG. This proposal would allocate funds equitably to regions to implement integrated strategies to support livable communities. The proposed Bay Area Cap and Trade principles support allocation of the funds to the regional level and to allow the region, working with local partners, to define how the funds are allocated to cities, counties and transit operators.

#### Cap and Trade Expenditure Plan

On April 16, 2013, the California Air Resources Board released its draft <u>Cap & Trade</u> <u>Investment Plan</u> and adopted a final plan on April 25<sup>th</sup> with no changes. The final

expenditure plan was submitted to the Governor for his May Budget Revise. However, in the 2013/14 budget, the State borrowed from these funds and did not allocate them for other purposes. It is anticipated that the Governor's proposed 2014/15 budget, which will be released in January 2014 will include proposals for how to allocate the funds.

The Cap and Trade expenditure plan identifies priority programs for the use of the funds. The plan does not specify any dollar or percentage amounts for the funding categories identified, but identifies three priority investment sectors. These sectors include, from largest to smallest, the following:

- Sustainable Communities & Clean Transportation
- Energy Efficiency & Clean Energy, and
- Natural Resources & Water Diversion.

The Sustainable Communities & Clean Transportation sector prioritizes funding for livable communities investments such as funding to increase transit mode share, rail modernization, active transportation, and infrastructure investments in complete streets, traffic management, and pavement improvements. The expenditure plan also includes in each proposed area a percentage goal for projects benefiting disadvantaged communities as required by state law.

In addition, as required by SB 535, an allocation of 25% of the available funds derived from Cap and Trade auctions must go to projects that provide benefits to disadvantaged communities, and a minimum of 10% of the available funds must support projects located within disadvantaged communities. Cal EPA is responsible for defining disadvantaged communities and has used a process called CalEnviro Screen to create maps of these communities based upon the evaluation of a multitude of factors by zip code across California.

#### AB 32 Scoping Plan Update

On June 13<sup>th</sup>, the Air Resources Board held its "kick-off" workshop on updating the AB 32 Scoping Plan. The existing AB 32 Scoping Plan was adopted in 2008 and focused on 2020 reduction goals. The updated plan will set the path to achieve 2050 reduction goals.

The AB 32 Scoping Plan update provides an opportunity to review and revise the 2008 Scoping Plan, and establish near and long term goals for reducing greenhouse gas emissions. The update focuses on six sectors, which include 1) transportation and fuels (including infrastructure and land use); 2) energy generation (including transmission infrastructure and efficiency); 3) waste; 4) water; 5) natural lands; and 6) agriculture.

On October 1, CARB released an <u>AB 32 Scoping Plan update draft</u> discussion document which addresses recommended actions for all sectors. For transportation, the update

recommends actions in planning, funding and market transitions, and regulations. The planning actions specifically support "regional planning, local leadership, and implementation of adopted SCSs to help ensure that the expected GHG reductions are achieved." The proposed principles specifically support this targeted action.

The Alameda CTC provided general comments on the Scoping Plan regarding transportation emissions, including:

- Fund transportation now to achieve 80% GHG reduction targets required from the transportation sector
- Direct transportation fuels funds for transportation investments to support public expectation regarding a nexus for payment of fuels to the types of investments funded
- Administer regionally and allocate to regions on a per capita basis to leverage and expand current investments
- Build on successes of planning and investment strategies developed and delivered by the regions and local agencies
- Recognize and support cities and counties for the hard work they do regarding land use and transportation decision-making that supports SCS implementation

### Bay Area Regional Transportation Plan and Sustainable Communities Strategy

The Bay Area's RTP/SCS, known as Plan Bay Area, was adopted in July 2013 and assumes \$3.1 billion dollars in Cap and Trade revenue. These funds represent the Bay Area's share of funds that are expected to be administered by the state's metropolitan planning organizations.

Plan Bay Area includes a description of eligible uses, including, but not limited to "transit operating and capital rehabilitation/replacement, local street and road rehabilitation, goods movement, and transit-oriented affordable housing, consistent with the focused land use strategy outlined in Plan Bay Area." PBA further notes that the "share of funds reserved for these purposes, the specific project sponsors and investment requirements will be subject to further deliberation with partner agencies and public input following adoption of Plan Bay Area."

Regarding support for communities of concern, PBA states that Cap and Trade revenues will be allocated to specific programs through a transparent and inclusive regional public process that "will specifically ensure that at least 25 percent of these revenues will be spent to benefit disadvantaged communities in the Bay Area, and to achieve the goals of Plan Bay Area."

In addition, PBA states that the plan will direct a "significant portion" of the revenue generated from Cap and Trade to unmet transit needs.

The proposed principles support Cap and Trade fund delegation to MTC and additional collaboration and coordination at the regional level to determine how the funding allocations within the region should be made.

### Fiscal Impact:

There is no fiscal impact.

#### **Attachments**

A. Bay Area Cap and Trade Principles

#### **Staff Contact**

Tess Lengyel, Deputy Director of Planning and Policy

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# Bay Area Cap & Trade Principles<sup>1</sup>

- Transportation is the largest contributor of GHG emissions in the State of California.
- 2050 GHG reduction target requires an 80% decrease in GHG emissions from the transportation sector below 1990 levels.
- The Bay Area is moving forward with Sustainable Communities Strategy (SCS) implementation.
  - SCS implementation relies largely on cities and counties to achieve GHG
     reduction targets by implementing transportation and land use changes.
  - o Transit is a critical element in supporting the implementation of the SCS.
- Funding is needed now for investment that will make significant changes.
- The Bay Area strongly supports the use of Cap and Trade funds derived from motor vehicle fuels for transportation purposes only.
  - The public understands the nexus between paying taxes and fees for transportation and using those funds to improve transportation.
  - The CMAs and MTC should protect funds for transportation and develop a strategy that supports additional funding for housing that is not in competition with or at the expense of transportation funding.
- Cap and Trade funds to implement SCS projects should be allocated to regions on a per capita basis and authority delegated to the regions for implementation.
- Funding for projects in disadvantaged communities should remain at the state level or potentially off the top at the regions. [Per current law, 25% of the Cap & Trade funds need to be expended in areas the benefit disadvantaged communities and 10% needs to be spent directly within those communities]
- Bay Area agencies need to work closely together to advocate that Cap and
   Trade funds are delegated to the regions for SCS implementation.

<sup>&</sup>lt;sup>1</sup> These principles are based upon those adopted by the Transportation Coalition for Livable Communities and AB 574

- CMAs and MTC should work closely together to develop allocation formulas
  that can be vetted with the elected officials and the public to implement the
  SCS.
- The Bay Area supports transportation investments that directly link to GHG
  reductions including [most below are AB 574 eligible investments]. Projects
  should be selected based upon their ability to reduce GHG emissions.
  - Transportation Demand Management, including supporting employer based alternative commute programs and transportation pricing programs
  - Transit operations, maintenance and capital, including capital replacement
  - o Road and bridge maintenance, operations and retrofits
  - Complete streets and safe routes to schools
  - o Bike and pedestrian
  - Clean transportation fueling infrastructure and support (low carbon fuels, alternative fuels, electric vehicle charging infrastructure and technology)
  - o Multi-modal network connectivity and multi-use facilities
  - Development of local plans and policies that support regional SCS implementation
  - Interregional rail
  - Transportation investments supporting TOD
  - o Administrative costs for development, implementation and monitoring
  - o Transportation System Management (Not in AB 574)
  - Clean freight investments (fuels, vessel shorepower, goods movement efficiency, truck retrofits and zero emission vehicles, expanded system capacity, freight integration that supports healthy, livable communities) – [Note that freight is not included in AB 574]
- The transportation community is already moving forward with investments that reduce GHG emissions
- If the transportation sector is to achieve the 80% goals, investments must happen now.
- At the regional level, we are committed and have a strong record of delivery.
- MTC and the CMAs are essential partners in facilitating regional achievement of GHG reduction goals.
- Cities and Counties make land use decisions that actualize the SCS. They should be recognized and supported for the significant level of effort required to get this work done.



# Memorandum

6.4

1111 Broadway, Suite 800, Oakland, CA 94607

PH: (510) 208-7400

www.AlamedaCTC.org

**DATE:** October 28, 2013

**SUBJECT:** Request for Proposals for Preparation of the 2014 Level of Service (LOS)

Monitoring Study

**RECOMMENDATION:** Approve the release of a Request for Proposals (RFP) for preparation of

the 2014 Level of Service (LOS) Monitoring Study and authorize the Executive Director, or a designee of the Executive Director, to negotiate and execute a professional services agreement with

consultants or consultant teams selected as a result of the RFP process

in accordance with procurement procedures

#### Summary

Level of Service (LOS) on the Congestion Management Program (CMP) roadways in Alameda County is monitored biennially for both the morning and the evening peak periods. The data for evening peak period on the CMP network (Tier 1) that is subject to CMP Conformity is used to identify deficient segments as required by statute. All other data collected is used for information purposes only. This memo summarizes the scope of work and schedule for the 2014 LOS Monitoring study.

#### **Background**

California Government Code Section 65089 requires that each urban county in the state biennially prepare a CMP. In Alameda County, preparation of the CMP is the responsibility of the Alameda County Transportation Commission (Alameda CTC). The <u>2013 CMP</u> is available on the Alameda CTC website.

The statute referenced above requires that Level of Service (LOS) standards on the CMP roadway network be established and periodically monitored. The CMA is required to issue a determination relative to the attainment of the CMP's LOS standards. Failure to attain these standards may lead to the requirement for the preparation of a deficiency plan. Failure to prepare or participate in the preparation of a deficiency plan can result in a finding of non-conformance affecting the jurisdiction(s) where the standards are not maintained.

The Alameda County CMP process requires biennial monitoring of LOS on the CMP roadway network. The CMP network, shown in Attachment A, contains 232 miles of roadways. Of this total, 134 miles (58 percent) are interstate freeways, 71 miles (31 percent) are conventional state highways, and 27 miles (11 percent) are city/county arterials. Copies of LOS Monitoring

Studies from previous years are available upon request, and the <u>2012 LOS Monitoring report</u>, which is the most recent, is available online for review.

#### Scope of Work and Deliverables

The following tasks summarize the general scope of services needed for the preparation of the 2014 LOS Monitoring study on the Alameda County transportation network, including data collection, analysis and reporting.

#### 1. Develop Work Plan

Develop a work plan for collecting, analyzing and reporting on (1) travel time and speeds on the Tier 1 and Tier 2 CMP network, (2) travel time data for ten origin-destination auto and transit trip pairs including bicycle trip for one of them, and for the three bay crossing bridges connecting Alameda County and San Francisco and the Peninsula and (3) free flow speed data on the Tier 2 network as shown in Attachment A. Data will be collected between March 1 and May 31, 2013 for the a.m. and p.m. peak and weekend periods and take into consideration the following:

- Holidays and school and university schedules in the area;
- The need to split longer routes into smaller segment to ensure that the entire route can be covered with the peak period on different days and for varying time periods; and
- The use of commercially available travel time data to replace actual field surveys.

A sample data collection schedule used in the 2012 LOS monitoring cycle is found in Attachment B. Alameda CTC is in the process of conducting a comparison of commercially available travel time data to 2012 LOS Monitoring results to determine the suitability of collecting data from existing and commercially available sources to augment or replace conducting field surveys. In the last LOS Monitoring effort, Alameda CTC's network grew from 232 miles to 322 miles. While collecting data on a larger network contributes to identifying and prioritizing transportation improvements in Alameda County, it also is more expensive and time consuming to monitor. Other CMAs, such as the San Francisco County Transportation Authority, have already begun collecting the majority of their LOS data through commercially available data. Alameda CTC is exploring similar avenues to achieve cost savings by eliminating the need to drive each roadway segment multiple times. The result of the pre-analysis will be available in early December when a decision regarding the suitability of this approach and the extent of the CMP network on which this can be applied will be made.

The work plan will clearly indicate how data entry will be managed and checked for reasonableness throughout the data collection period, so that additional data can be collected if necessary in a timely way, and will demonstrate how the data analysis and reporting will be completed in time to present draft results to the Commission in July 2013

and final results in September 2013. Adequate review time by agency staff will be built in to the work plan and schedule.

#### Deliverables:

 Technical memorandum documenting the work plan and schedule for collecting travel time and speed using applicable methodologies data on the Tier 1 and Tier 2 CMP network and ten origin-destination pairs, collecting free flow speed data on the Tier 2 network, conducting data analysis and preparing a draft and final report

#### 2. Collect Data and Develop Database

The selected consultant will (1) collect travel time and speed data on the CMP Tier 1 and Tier 2 CMP network, travel time data for ten origin-destination auto and transit trip pairs and free flow speed data on the Tier 2 network and (2) develop a database consistent with the databases for previous cycles to be used for analysis purposes.

The CMP requires that measurement of LOS for each facility type, for the purpose of this work, be based on average travel speed consistent with the method described in the CMP Level of Service Standards found in Attachment C. The consultant will collect speed data, either through field surveys ("floating car method") or commercially available data, for all freeway segments and selected arterial and ramp segments during the afternoon (4:00 p.m. to 6:00 p.m.) and morning (7:00 a.m. to 9:00 a.m.) peak periods. It should be noted that data on a particular segment must span a range of days and time of day as specified in the CMP Data Collection and Requirements found in Attachment C. This means that test car runs should not be bunched on the same day of the week or taken on separate days at the same time. Runs should be conducted only on days during the 5-day work week and should not be conducted on holidays, days when school is not in session, or when major events or accidents are occurring. If commercially available data is used, data for the weekend peak period will also be collected and entered. The details of the roadway segments and ramp segments are found in Attachment D.

The consultant will also conduct travel time runs for 10 origin/destination pairs and the three Bay crossing bridges (Bay Bridge, San Mateo Bridge and Dumbarton Bridges). The Performance Element of the CMP requires that Alameda CTC evaluate the performance of the transportation system within Alameda County. One method for evaluating performance is travel time. This task includes providing travel time runs by both auto and transit for 10 origin/destination pairs including bicycle trips for one of them. The travel time for the three bridges will be based on auto runs. The details on the origin and destination pairs and the three bridges in terms of data collected for previous LOS monitoring cycles is shown in Attachment E.

The consultant will be responsible for the entry of all speed and travel time data collected on all freeway segments and selected arterial and ramp segments during the a.m. and p.m.

peak and weekend peak periods and the 10 origin-destination pairs into a database. The Alameda CTC will provide programmed electronic MS Excel files from previous LOS monitoring cycles to the consultant for this purpose as information. A sample data entry sheet is found in Attachment F. The database should be structured so that there is one file for each roadway. The current MS Excel data sheet files are programmed in such a way that when data (time) is entered into the first sheet, the last sheet will show the resulting speed and the related Level of Service.

#### Deliverables:

 Technical memorandum, tables and database documenting the data collected and entered for the Tier 1 and Tier 2 CMP network, ten origindestination pairs and free flow speed data for Tier 2 CMP network.

#### 3. Analyze Data and Develop Initial Results

Based on the data collected in Task 2, the selected consultant will analyze the speed and travel time data on the CMP Tier 1 and Tier 2 CMP network, analyze the travel time data for ten origin-destination auto and transit trip pairs and apply free flow speed data on the Tier 2 network for 2012 and 2014 cycles. Based on the analysis, initial LOS results will be developed by the consultant, tabulated and presented to the Alameda County Technical Advisory Committee (ACTAC) for review and comment in May and June 2013. In addition, weekly updates will be provided throughout the data collection period to the Alameda CTC project manager so that additional data collection can be scheduled and collected, if needed. The data collection period for this purpose may be extended to early June depending on school schedules and need and if approved by the Alameda CTC project manager.

#### Deliverables:

 Technical memorandum, tables and appendices documenting the initial results and weekly review of data input with Alameda CTC project manager

#### 4. Prepare Draft Results and Documentation

The consultant will prepare the draft results and report consistent with the 2012 LOS Monitoring Report, including all graphics, mapping, tables and appendices. The draft report will be reviewed by ACTAC and the Commission in July, and any CMP deficiencies identified.

#### Deliverables:

Draft report with all graphics, mapping, tables and appendices

#### 5. Prepare Final Results and Documentation

Based on comment received on the Draft Report, prepare the final report, including all graphics, mapping, tables and appendices. The final report will be reviewed by ACTAC and the Commission in September 2013. 25 copies and an electronic version of the final

report will be provided once the Commission approves the final document. All source data files and databases will also be delivered to Alameda CTC.

#### Deliverables:

 Final report with all graphics, mapping, tables and appendices in hard copy and electronic copy, including data and databases

#### Schedule

The general schedule for the 2014 LOS Monitoring Study is expected to be as follows:

- Complete Pre-Analysis to Determine if Commercially Available Data can be used in the 2014 LOS Monitoring cycle – December 2013
- Release RFP December 2013
- Select consultant team February 2014
- Project kick-off and work plan finalized February 2014
- Data Collection March 1 through May 31, 2014
- Data Analysis April through June 2014
- Interim Results and Documentation May and June 2014
- Draft Results and Documentation July 2014
- Final Results and Documentation September 2014

**Fiscal Impact:** The fiscal impact for approving this item is \$225,000, of which \$200,000 was included in the budget adopted for FY 13-14. The additional \$25,000 will be included in future budgets if needed. Cost savings are anticipated depending on the extent of use of commecially available travel time data.

#### **Attachments**

- A. CMP Tiers 1 and 2 Network
- B. Sample data collection schedule
- C. 2013 CMP Level of Service Element
- D. CMP network Roadway and Ramp Seaments
- E. Ten Origin and Destination Pairs and the three Bay crossing bridges
- F. Sample Data Entry Sheet

#### **Staff Contacts**

Tess Lengyel, Deputy Director of Planning and Policy

Saravana Suthanthira, Senior Transportation Planner

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Table 1: Tier 1—Alameda County CMP Designated Roadway Network<sup>1</sup> Routes and Estimated Mileage by Jurisdiction

Jurisdiction	Freeway	Miles	urisdiction Other State Highways	Miles	Other Arterials	Miles
Albany	I-80 I-580	0.61 0.92	SR 123 (San Pablo Ave.)	1.22	None	_
Berkeley	I-80	3.14	SR 123 (San Pablo Ave.) SR 13 (Ashby/Tunnel Rd.)	2.36 3.87	University Ave. Shattuck Ave. MLK Jr. Blvd. Adeline	2.04 1.84
Emeryville	I-80	1.31	SR 123 (San Pablo Ave.)	0.68	None	_
Oakland	I-80 I-880 I-980 I-580 SR 24 SR 13	4.09 7.66 2.30 11.28 4.50 5.43	SR 123 (San Pablo Ave.) SR 13 (Tunnel Rd.) SR 61/260 (Tubes) SR 61 (Doolittle Dr.) SR 77 (42nd Ave.) SR 185 (E 14th St.)	1.19 0.10 0.66 2.39 0.31 3.98	MLK Jr. Blvd. Hegenberger Rd. 29th Ave./23rd Ave. -(See Park St- Alameda)	0.89 2.52 0.85
Piedmont	None	_	None	_	None	_
Alameda	None	_	SR 61 (Doolittle Dr., Otis, Webster St) SR 61/260 (Tubes)	4.47 0.65	Atlantic Ave. Park St.	0.80 0.55
San Leandro	I-880 I-580	3.78 2.95	SR 61 (Doolittle Dr.) SR 61/112 (Davis St.) SR 185 (E 14th St.)	0.70 1.78 3.16	150th Ave. Hesperian Blvd.	0.49 0.97
Hayward	I-880 SR 92	4.23 6.36	SR 185 (Mission Blvd.) SR 238 (Mission Blvd.) SR 238 (Foothill Blvd.) SR 92 (Jackson St.)	0.85 3.29 1.50 1.58	A St. Hesperian Blvd. Tennyson Rd.	1.61 2.60 2.32
Union City	I-880	1.70	SR 238 (Mission Blvd.)	2.57	Decoto Rd.	1.76
Fremont	I-680 I-880 SR 84	6.20 11.96 3.17	SR 238 (Mission Blvd.) SR 262 (Mission Blvd.) SR 84 (Thornton, Fremont, Mowry Ave.)	5.03 1.22 10.99	Decoto Rd. Mowry Ave.	1.15 2.96
Newark	SR 84	1.99	None	_	None	_
Pleasanton	I-580 I-680	4.65 5.26	None	_	None	_
Livermore	I-580	4.61	SR 84	5.29	1st Street	1.66
Dublin	I-680	1.84	None	_	None	_
Unincorporated Areas	I-680 I-580 I-238 I-880	7.91 22.50 1.99 1.93	SR 84 (Vallecitos Rd.) SR 185 (Mission Blvd & E 14th) SR 238 (Foothill Blvd.)	7.97 2.47 0.79	Hesperian Blvd.	1.99
Totals		134 mi		71 mi		27 mi

 $<sup>^{\</sup>scriptscriptstyle 1}$  As adopted in October 24, 1991 (except for the re-aligned SR 84 and 1st Street in Livermore, which were changed in 2004 and 2006 studies, respectively; and Hegenberger Road between I-880 and Doolittle Drive in Oakland, which was added in the 2008 study).

Table 2: Tier 2—Alameda County CMP Designated Network\*\* Routes and Estimated Mileage by Jurisdiction

Jurisdiction	Distance (miles)	Route
	0.9	A Street*
Alameda	7.0	Crow Canyon Road
County	2.7	Sunol Blvd.–1st Street–Stanley Blvd.*
	1.0	Grove Way
Alameda	1.2	High Street
	0.7	Bancroft
	1.4	College Avenue*
Berkeley	0.5	Shattuck Avenue*
	1.4	Telegraph Avenue*
	0.8	Powell Street–Stanford Avenue
	1.9	Dougherty Road
5 1 1	3.6	Dublin Blvd.
Dublin	1.7	San Ramon Road
	2.8	Tassajara Road
F '''	1.5	40th Street–Shellmound Avenue
Emeryville	0.6	Powell Street–Stanford Avenue
F	1.6	Automall Parkway
Fremont	8.8	Fremont Boulevard
	0.3	A Street*
Hayward	1.6	Hesperian Boulevard–Union City Blvd.*
	2.2	Winton Avenue–D Street
	4.2	E. Stanley Blvd–Railroad Avenue–1st Street
Livermore	5.7	Vasco Road
	2.4	12th Street–Lakeshore Avenue
	0.8	51st Street
	3.1	Broadway
	1.0	College Avenue*
	1.0	E. 15th Street
	5.3	Foothill Boulevard
Oakland	2.3	High Street
	2.9	International Boulevard
	0.8	Powell Street–Stanford Avenue
	1.0	Shattuck Avenue*
	0.8	Telegraph Avenue*
	3.1	W. Grand Avenue to Grand Avenue
	1.1	73rd Avenue
	1.2	Santa Rita Road
Pleasanton	2.5	Stoneridge Drive
	2.9	Sunol Blvd.–1st Street–Stanley Blvd.*
Union City	2.2	Alvarado Blvd.
Union City	1.3	Hesperian Boulevard–Union City Blvd.*
TOTAL	89.8	
_		

<sup>\*</sup> Denotes that roadway traverses more than one jurisdiction. \*\*As adopted by Alameda CTC in December 2011.

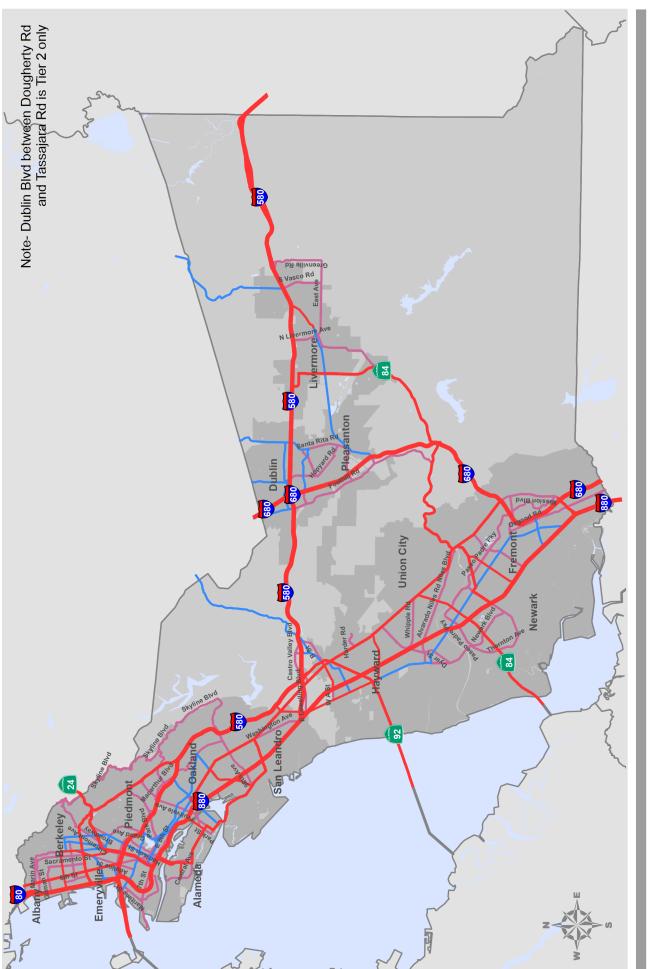


Figure 1: Designated Countywide System Map

Interstate/Freeway (CMP - Tier 1 & MTS)
 State Highway (CMP - Tier 1 & MTS)
 Principal Arterial (CMP - Tier 1 & MTS)
 Principal Arterial (CMP - Tier 2 & MTS)

Legend

MTS Routes



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# **ALAMEDA COUNTY CMP**

# ALAMEDA CTC

LOS Monitoring Study
Sample Schedule of Travel Time Runs (shown for P.M. Peak Period only)

						Schedule			DATE O					
Index	State		_		Survey	Week	Run	Run	Run	Run	Run	Run	Run	Rur
lumber	Route	Street Name	Between	And	Directions	Starting	1	2	3	4	5	6	7	8
M D	EAK DEG	PIOD (1:00 - 6:00 D M )												
		RIOD (4:00 - 6:00 P.M.) ND ARTERIAL STREE												
NEEV	VA 13 AI	ND ANTENIAL STREE	13											
1	SR 24	FREEWAY	I-580	Fish Ranch Road	Both	4/4	4/6	4/6	4/14	4/14	5/6	5/6		
2	-	FREEWAY	I-580	Hiller	Both									
3	I-580	FREEWAY	Macarthur/Estudillo	I-80 Junction	Both									
4	1.00		Con Francisco County Line	Control Avenue	Doth				-					
4	I-80	FREEWAY	San Francisco County Line	Central Avenue	Both									
5	SR 123	San Pablo Avenue	35th Street	Carlson Blvd.	Both				1					
6	OK 120	Martin Luther King	SR 24 Ramps	Adeline Street	Both									
		Adeline Street	Martin Luther King	Shattuck Avenue	Both									
		Shattuck Avenue	Adeline Street	University Avenue	Both									
	1.500	University Avenue	Shattuck Avenue	I-80 Southbound Ramps	Both									
7 8	I-580 SR 13	FREEWAY Tunnel Road	I-80 Junction Hiller Road	Central Avenue  Domingo Avenue	Both Both									
0		Ashby Avenue	Domingo Avenue	I-80 Ramps	Both									
9		FREEWAY	I-880 Junction	I-580	Both									
10		Doolittle Drive	Harbor Bay Pkwy.	High Street	Both									
	SR 61	Otis Drive	High Street	Park Street	Both									
		Park Street	Otis Drive	Encinal Avenue	Both									
		Encinal Avenue	Park Street	Central/Sherman	Both									
	SR 61 SR 61	Central Avenue Webster Street	Sherman Street Central Avenue	Webster Street	Both Both				Ī					
11	<b></b>	Davis Street	East 14th Street	Atlantic Avenue  Doolittle Drive	Both	<u> </u>								
		Doolittle Drive	Davis Street	Harbor Bay Parkway	Both									
12		Webster Street	7th Street (Oakland)	Atlantic Avenue (Alameda)	Both									
		Atlantic Avenue	Webster Street	Main Street	Both									
13		Hegenberger Road	East 14th Street	Edgewater Drive	Both									
		FREEWAY	Hegenberger Road	I-980 Junction	Both									
14		East 14th Street	98th Avenue	42nd Avenue	Both									
	SR 77	42nd Avenue 23rd Avenue	East 14th Street East 11th Street	I-880 Junction Kennedy Street	Both Both									
		Park Street	Kennedy Street	Encinal Avenue (Alameda)	Both									
15	I-680	FREEWAY	SR 84/Vallecitos Road	Alcosta Boulevard	Both									
16		FREEWAY	Scott Creek Road	SR 84/Vallecitos Road	Both							ļ		
17	SR 238	Mission Boulevard	I-680	Nursery Road	Both							ļ——		
40	1 000		Tananan Baad	Hananhannan Baad	Dath									
18 19		FREEWAY FREEWAY	Tennyson Road Stevenson Boulevard	Hegenberger Road Tennyson Road	Both Both									
20		FREEWAY	Dixon Landing Road	Stevenson Boulevard	Both									
21		Mission Boulevard	I-880 Junction	I-680 Northbound Ramps	Both									
22	I-580	FREEWAY	SR 238 Junction	I-680	Both							ļ		
23	I-580	FREEWAY	I-680	SR 84/First Street	Both				-					
24		FREEWAY	SR 84/First Street	San Joaquin County Line	Both									
25	SR 84	Holmes Street	Concannon Blvd.	Murietta Blvd.	Both									
00		First Street	Murietta Blvd.	I-580	Both									
26	SR 84 SR 84	Vallecitos Road Holmes Street	Vallecitos Nuclear Center Vallecitos Road	Holmes Street Concannon Blvd.	Both Both									
27		Vallecitos Road	Pleasanton-Sunol Road	Vallecitos Nuclear Center	Both									
28		Niles Canyon Road	Mission Boulevard	Pleasanton-Sunol Road	Both									
29		Hesperian Boulevard	Springlake Drive	East 14th Street	Both									
		East 14th Street	Hesperian Boulevard	98th Avenue	Both							ļ		
30		Mission Boulevard	Jackson Street	170th Avenue	Both							]		
	SR 185	East 14th Street	170th Avenue	Hesperian Boulevard	Both									
	<b></b>	150th Avenue	East 14th Street	I-580	Both	<u> </u>								
31	SR 238	Foothill Boulevard	Mission Boulevard	I-580 Junction	Both				Ī					
J 1		FREEWAY	SR 238 Junction	Macarthur/Estudillo	Both									
32		FREEWAY	I-580	I-880 North Junction	Both									
33		Hesperian Boulevard	Tennyson Road	Springlake Drive	Both									
34		A Street	I-880	Foothill Boulevard	Both							ļ		
35		San Mateo Bridge	San Mateo County Line	Toll Plaza	Both									
		FREEWAY	Toll Plaza	I-880 Mission Boulevard	Both Both									
36	SR 92 SR 84	Jackson Street Dumbarton Bridge	I-880 San Mateo County Line	Toll Plaza	Both Both	<u> </u>								
50		FREEWAY	Toll Plaza	I-880	Both				Ī					
37	OIX O4	Tennyson Road	Hesperian Boulevard	Mission Boulevard	Both									
38	SR 238	Mission Boulevard	Nursery Road	Jackson Street	Both									
												- <del></del>		
		Decoto Road	I-880	Mission Boulevard	Both							ļ		
39	SR 84	Thornton Avenue	I-880	Fremont Boulevard	Both									
40				Harolto Doulovard	Both	Ī	I	1	Ī	Ī				
	SR 84	Fremont Boulevard	Thornton Avenue	Peralta Boulevard								1		
	SR 84 SR 84	Fremont Boulevard Peralta Boulevard Mowry Avenue	Thornton Avenue Fremont Boulevard Peralta Boulevard	Mowry Avenue Mission Boulevard	Both Both									

# **ALAMEDA COUNTY CMP**

# **ALAMEDA CTC**

LOS Monitoring Study
Sample Schedule of Travel Time Runs (shown for P.M. Peak Period only)

						Schedule			DATE O	F RUNS	COMPL	ETED		
Index	State				Survey	Week	Run	Run	Run	Run	Run	Run	Run	Run
Number	Route	Street Name	Between	And	Directions	Starting	1	2	3	4	5	6	7	8
PM PE	AK PERI	IOD (4:00 - 6:00 P.M.)												
		PECIAL SEGMENTS												
48	I-80	I-80/I-580 Interchange	I-80 Southbound	I-580 Eastbound		5/2								
49	I-580	I-80/I-580 Interchange	I-580 Westbound	I-80 Northbound										
50	SR 24	I-580/SR 24 Interchange	SR 24 On	I-580 Off		5/2								
51	I-580	I-580/SR 24 Interchange	I-580 Westbound	SR 24 Eastbound										
52	SR 24		SR 24 Westbound	I-580 Eastbound										
53	SR 13	SR 13/SR 24 Interchange	SR 13 Northbound	SR 24 Eastbound		4/4								
54	SR 24		SR 24 Westbound	SR 13 Southbound										
55	I-880	I-238/I-880 Interchange	I-880 Southbound	I-238 Eastbound		4/4								
56	I-238		I-238 Westbound	I-880 Northbound										
57	I-880		I-880 Northbound	I-238 Eastbound										
58	I-238		I-238 Westbound	I-880 Southbound										
59	I-580	I-580/I-238 Interchange	I-580 Southbound	I-238 Eastbound		5/2								
60	I-238		I-238 Westbound	I-580 Northbound										
61	I-580	I-580/I-680 Interchange	I-580 Eastbound	I-680 Northbound		5/2								
62	I-580		I-580 Eastbound	I-680 Southbound										
63	I-680		I-680 Northbound	I-580 Eastbound										
64	I-680		I-680 Northbound	I-580 Westbound										
65	I-580		I-580 Westbound	I-680 Northbound										
66	I-580		I-580 Westbound	I-680 Southbound										
67	I-680		I-680 Southbound	I-580 Eastbound										
68	I-680		I-680 Southbound	I-580 Westbound										
69	I-880	Alameda Tube Interchange	I-880 Southbound	SR 260 Tube Westbound		4/4								
70	I-880		SR 260 Tube Eastbound	I-880 Northbound										

# 3 Level of Service Standards

State law requires that level of service (LOS) standards be established to monitor the CMP roadway network's LOS as part of the CMP process. <sup>20</sup> The legislation leaves the choice of LOS measurement methodology to the CMAs, but mandates that the LOS be measured by the most recent version of the Transportation Research Board's Highway Capacity Manual (HCM) or a uniform methodology adopted by the CMA, Alameda CTC for Alameda County, that is consistent with the HCM.

LOS definitions generally describe traffic conditions in terms of speed and travel time, volume and capacity, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. LOS is represented by letter designations, ranging from A to F, with LOS A representing the best operating conditions and LOS F representing the worst (see Appendix C for graphic representation of LOS).

The purpose of setting LOS standards for the CMP network is to provide a quantitative tool to analyze the effects of land use changes on the transportation network's performance (i.e., congestion). If the actual network performance falls below the standard (i.e., congestion worsens below LOS E), actions must be taken to improve the LOS.

Alameda CTC contracts with a consultant to perform the necessary LOS monitoring for the CMP network. Initially, the CMP network was monitored annually, but in 1998 a policy was adopted to perform the LOS monitoring every two years, which has proven to be the most cost-effective approach. The next monitoring study will be performed in spring 2014.

Additionally, to provide a basis for more definitive strategies for maintaining LOS standards in subareas of Alameda County, Alameda CTC has completed the following corridor studies on high-priority corridors, such as I-80, I-238, 1-580, I-680, and I-880:

- Central County Freeway Study (SR 238 Local Area TIP)
- I-580 Corridor BART to Livermore
- I-680 Value Pricing
- North I-880 Safety and Operations Study
- San Pablo and I-880 SMART Corridor programs
- SR 84 Local Area Transportation Improvement Program
- Tri-Valley Triangle Study

To comprehensively identify and address the multimodal transportation needs of the county as a whole, Alameda CTC is undertaking development of comprehensive countywide modal plans, specifically development is underway for a Countywide Goods Movement Plan, a Countywide Multimodal Arterial Corridor Plan, a Countywide Transit Plan, and updates to Community Based Transportation Plans.

<sup>&</sup>lt;sup>20</sup> California Government Code Section 65089(b)(1)(A).

#### STANDARDS AND APPROACH FOR LOS MONITORING

LOS is an indication of traffic growth trends using vehicular volumes, capacity, and measurement of average speed and delay. The goal is to develop a consistent approach for monitoring LOS that is easy to use, non-duplicative, and compatible with local government data and travel-demand models. Table 4 describes the approach for monitoring LOS in Alameda County and defines the facility classifications.

**Table 4—Approach to LOS Monitoring** 

Element	Approach
Level of Service	As defined in the California Government Code Section 65089.3, the LOS standard is E, except where F was the LOS when originally measured, in which case the standard is F. The methods employed constitute a uniform methodology adopted that is consistent with the 1985 HCM that includes speed-based LOS methodology. Methods described in HCM Chapter 8 (Two-Lane Highways) and Chapter 11 (Urban and Suburban Arterials) were the basis for establishing the level of service on the CMP network. LOS is assessed based on the average speed observed along a roadway segment (link speeds) or total volumes approaching an intersection (link volumes). These methods are not designed to replace the more detailed procedures that local agencies are likely to use for non-CMP purposes (such as local impact studies). Such procedures typically focus on an intersection's ability to handle individual turning movements rather than average speed on a roadway segment.
Facility Classifications	The HCM provides methods for determining LOS on several types of facilities. These facilities are grouped into "interrupted-flow" and "uninterrupted-flow" facilities. Interrupted-flow facilities include city streets and surface highways (for example, State Route 123/San Pablo Avenue) that are part of the state highway system. Freeways are uninterrupted-flow facilities. For the purposes of LOS monitoring, the CMP network can be classified into three functional types of facilities: 1) freeways; 2) two-lane roadways; and 3) urban/suburban arterials.
1) Freeways	Freeways are uninterrupted-flow facilities, since traffic never stops (except during the most congested periods or when incidents occur). The 1991 CMP, in coordination with local jurisdictions, defined appropriate segments and performed the necessary "floating car" runs on the freeways to obtain travel speed data (refer to "Data Collection and Requirements" in this chapter for information on this data collection method). This allowed the establishment of a baseline LOS for the roadway network, including identification of segments operating at LOS F.
2) Two-Lane Roadways	Two-lane roadways are uninterrupted-flow facilities. The criteria for including principal arterials in the CMP network specify a minimum of four lanes; therefore, two-lane roadways are not included as principal arterials. However, since all state highways must be in the system, two-lane state highways located in the county are also included. These two-lane roads constitute a fairly small portion of the CMP network mileage. For two-lane roads without interruptions (signals or stop signs), the methodology in HCM Chapter 8 is used, based on average travel speed.

Suburban Arterials  spaced no more than two miles apart on average. Urban and suburban arterials are characterized by platoon flows. Operational quality is controlled primarily by the efficiency of signal coordination and is affected by how individual signalized intersections operate along the arterial. LOS is primarily a function of travel speed along segments and is calculated from field data. Because the CMP legislation emphasizes systems-level planning, HCM Chapter 11 is used to estimate arterial LOS. Advantages include the need for relatively little input data, simple applied calculations, and the results of explicitly determined LOS (A, B, C, etc.).  Monitoring  Alameda CTC will conduct LOS monitoring. The state statute <sup>21</sup> requires Caltrans to monitor LOS on the freeway network, unless Alameda CTC designates that responsibility to another entity. Monitoring will be conducted biennially, recognizing that other surveys could be done for development impact studies (e.g., intersection turning movement counts). The data collection method is the floating car technique of recording travel times between checkpoints based on actual travel time during the peak period. Data from several runs in all non-high-occupancy vehicle lanes are averaged for each roadway segment.  Interregional Trips  As defined by the statute, "interregional travel means any trip that originates from outside" Alameda County. A trip means a one-direction vehicle movement. The origin of any trip is the starting point of that trip. In accordance with the Metropolitan Transportation Commission (MTC)		1
Arterials  arterials are characterized by platoon flows. Operational quality is controlled primarily by the efficiency of signal coordination and is affected by how individual signalized intersections operate along the arterial. LOS is primarily a function of travel speed along segments and is calculated from field data.  Because the CMP legislation emphasizes systems-level planning, HCM Chapter 11 is used to estimate arterial LOS. Advantages include the need for relatively little input data, simple applied calculations, and the results of explicitly determined LOS (A, B, C, etc.).  Monitoring  Alameda CTC will conduct LOS monitoring. The state statute <sup>21</sup> requires Caltrans to monitor LOS on the freeway network, unless Alameda CTC designates that responsibility to another entity. Monitoring will be conducted biennially, recognizing that other surveys could be done for development impact studies (e.g., intersection turning movement counts). The data collection method is the floating car technique of recording travel times between checkpoints based on actual travel time during the peak period. Data from several runs in all non-high-occupancy vehicle lanes are averaged for each roadway segment.  Interregional Trips  As defined by the statute, "interregional travel means any trip that originates from outside" Alameda County. A trip means a one-direction vehicle movement. The origin of any trip is the starting point of that trip. In accordance with the Metropolitan Transportation Commission (MTC)	•	Urban and suburban arterials are multilane streets that have traffic signals
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from outside" Alameda County. A trip means a one-direction vehicle movement. The origin of any trip is the starting point of that trip. In accordance with the Metropolitan Transportation Commission (MTC)		for each roadway segment.
movement. The origin of any trip is the starting point of that trip. In accordance with the Metropolitan Transportation Commission (MTC)	Interregional Trips	As defined by the statute, "interregional travel means any trip that originates
accordance with the Metropolitan Transportation Commission (MTC)		from outside" Alameda County. A trip means a one-direction vehicle
· · · · · · · · · · · · · · · · · · ·		movement. The origin of any trip is the starting point of that trip. In
		accordance with the Metropolitan Transportation Commission (MTC)
guidelines, trips with no trip end in Alameda County (through trips) are not		guidelines, trips with no trip end in Alameda County (through trips) are not
subtracted for monitoring reports.		subtracted for monitoring reports.

# **Highway Capacity Manual (HCM) and LOS Standards**

The Congestion Management Program legislation requires that the LOS monitoring on CMP roadways be measured by the most recent version of the HCM or by a uniform methodology adopted by the CMA, consistent with the HCM. For LOS Monitoring and Deficiency Plan purposes, Alameda CTC uses speed-based LOS methods included in the 1985 HCM to determine LOS for the CMP roadways, as shown in Table 5, (adopted in 1991 and updated in 2004).

To transition to using the most recent HCM for the purposes of LOS monitoring and Land Use Analysis Programs of the CMP, efforts were made in 2005 to use 2000 HCM and in 2013 to use 2000 or 2010 HCM through comparative analyses. Based on the evaluation, the following observations were made:

 Different methodologies would hinder conformity. For freeways, the differences between the 1985 HCM and the 2000 and 2010 HCM methodologies were significant. Specifically, the basis for determining LOS has changed from speed-based LOS in 1985 HCM to density-based LOS in the 2000 and 2010 HCMs. This eliminates the ability to track previous LOS trends, monitoring of existing deficiency plans, and consistency in determining deficiency; hence, this affects conformity.

<sup>&</sup>lt;sup>21</sup> California Government Code Section 65089.3.

Classification changes would affect conformity. For arterials, the roadway classifications changed
after the 1985 HCM. Classifications were added in the 2000 HCM, and later classifications were
eliminated in the 2010 HCM. Further, in the 2010 HCM, free-flow speed, which is the basis for
estimating LOS in all HCM versions, requires additional facility-specific data that is excessive for
large-scale use such as LOS monitoring on the countywide CMP network.

Using the later 2000 and 2010 HCM versions would result in applying density-based LOS methodology for freeways and changed classifications for arterials. This would not provide any benefits and would hinder conformity and the ability to compare past performance trends. For the Tier 1 network, which is subject to conformity, Alameda CTC will continue to use speed-based LOS methodology to monitor freeways and existing roadway classifications for arterials included in the 1985 HCM. For the Tier 2 network, since it has been only monitored for informational purposes since 2012, and no previous performance is available to compare, LOS will be reported using both 1985 and 2000 HCMs in 2014 LOS monitoring to make determination on future application in 2015 CMP.

As part of the 2013 CMP update, Alameda CTC identified LOS standards to monitor alternative modes in a comparable way to auto performance. Since HCM2010 also included LOS standards for monitoring alternative modes, such as Multi Modal Level of Service (MMLOS), Alameda CTC evaluated MMLOS for monitoring performance of transit and bicycle and pedestrian modes. A summary of evaluation and comparison of using 1985, 2000 and 2010 HCMs for LOS monitoring purposes and recommendation, including comparison of approaches adopted by various large CMAs in the Bay Area is provided in Appendix B. It was found that using the 2010 HCM-based MMLOS is data and resource intensive and costly for large-scale applications such as monitoring countywide performance of the alternative modes; therefore, it is not suitable for LOS monitoring purposes. Alameda CTC will assess how to best include the performance measurement metrics for monitoring alternative modal performance in the 2015 CMP, based on the outcomes of the following countywide modal plans—Goods Movement Plan, Multimodal Arterial Corridor Plan, and Transit Plan.

Table 5—Relationship Between Average Travel Speed and LOS

Arterials			
Arterial Class	1	II	III
Range of Free Flow	35 to 45	30 to 35	25 to 35
Speeds (mph)			
Typical Free Flow Speed	40	33	27
(mph)			
Level of Service		Average Travel Speed (m	iph)
A	≥ 35	≥ 30	≥ 25
В	≥ 28	≥ 24	≥ 19
С	≥ 22	≥ 18	≥ 13
D	≥ 17	≥ 14	≥9
Е	≥ 13	≥ 10	≥ 7
F	< 13	< 10	< 7
Freeway			
	Average Travel Speed	Volume To Canacity	Maximum Traffic
LOS	Average Travel Speed	Volume-To-Capacity Ratio	Volume (vehicles/
	(mph)	Katio	hour/lane)
A	≥ 60	0.35	700
В	≥ 55	0.58	1,000
С	≥ 49	0.75	1,500
D	≥ 41	0.90	1,800
Е	≥ 30	1.00	2,000
F	< 30	Variable	-

Source: Highway Capacity Manual, Transportation Research Board, 1985.

Range for LOS F for Freeway Sections:

- F30 Average Travel Speed < 30 mph
- F20 Average Travel Speed < 20 mph
- F10 Average Travel Speed < 10 mph

#### TRAFFIC MONITORING PROGRAM

Alameda CTC currently conducts LOS monitoring on the Alameda County CMP network. For this purpose, the CMP route segments were determined for travel-time analysis, with input from the Alameda County Technical Advisory Committee (ACTAC) and appropriate local jurisdiction departments (traffic engineering, planning department, etc.). Data collection time periods were determined based on the general congested peak periods on most of the CMP roadway network.

### **Definition of Roadway Segments**

Alameda CTC used the following guidelines to determine the segments:

Segments should be at least one mile and not more than five miles in length; and

Logical segment break-points include jurisdictional boundaries, points where the basic number
of travel lanes change, locations where land use changes occur (e.g., commercial areas versus
residential), and points where the posted speed limit changes or where the number of adjacent
driveways is significantly different.

Since the adoption of the CMP roadway segments in 1991, the intensity and location of congestion throughout the county has changed. In 2007, the CMP roadway segment lengths and criteria for designating the CMP roadway segments to develop new segments were updated to better reflect existing land use and travel patterns.

At this time, many long segments were found to be operating at better levels of service because speeds were averaged over the length of longer segments. Splitting these segments using the approved criteria revealed congestion hot spots and more accurately identified congested segments. Because the original check points were retained, all new segments nest within the pre-2007 roadway segments. This approach was important so that trends can be evaluated over time. Many of the shorter segments were located on I-580 in the Tri-valley area. During the 2009 CMP Update, SR 84 in East County was segmented into shorter segments based on the same criteria. From a field and operating perspective, the CMP roadway segmentation criteria are still appropriate; therefore, no changes are recommended for this update.

# **Data Collection and Requirements**

The traffic monitoring program requires information about average travel speed, which is the basis for measuring level of service on all facility types (i.e., freeways, two-lane highways, and urban/suburban arterials). For a given roadway segment, speed data must be collected and reported separately for each travel direction. Travel speed studies for this purpose are conducted using "floating cars" that drive at the posted speed collecting travel time data or, if constrained by traffic conditions, at the average speed of traffic. Starting in 2008, a Global Positioning System (GPS) was used to record travel time data in the "floating car" method. In view of the increased availability of commercially available traffic data and its use in transportation planning and monitoring around the country and in the region, Alameda CTC is currently exploring the feasibility of using commercially available traffic data for the CMP purposes, particularly related to LOS monitoring. If it is feasible, floating car runs will be done to augment commercially available data beginning in 2014. This should result in a time and cost savings in data collection. For any float car runs that are due, the following methodology should be used.

Monitoring time periods are 4:00 p.m. to 6:00 p.m. during the p.m. peak hours and 7:00 a.m. to 9:00 a.m. during the a.m. peak hours. Generally, p.m. peak period monitoring is used for conformity purposes, with the exception of monitoring the Tier 2 network, where both morning and afternoon peak periods are monitored for informational purposes only. Monitoring during the a.m. peak period for all CMP roadways is for informational purposes only. Until 2004, LOS monitoring was conducted for all the CMP segments during the p.m. peak hours and for selected freeway CMP segments during the a.m. peak hours. Starting in 2006 all CMP roadway segments were monitored during both peak periods.

The existing approach to ensure acceptable monitoring is based on the Institute of Transportation Engineer's *Manual of Transportation Engineering Studies for Test Car Method*. Alameda CTC uses the following guidelines to determine the acceptability of data for use in the CMP:

- A test car is driven six times in each direction on the entire CMP network. This frequency may be adjusted later for roadway segments found to consistently perform at LOS A or B. More than six test car runs are performed on roadway segments operating at LOS E or F, because a greater range or fluctuation in data typically occurs.
- Test car runs must be made on a Tuesday, Wednesday, and/or Thursday, because these days are most indicative of average weekday conditions.
- Test car runs on a particular segment must span a range of days and time of day. This means that test car runs should not be bunched on the same day of the week or taken on separate days at the same time.
- Runs near holidays, when school is not in session, or when roadway construction is under way, must be avoided.
- Consistent monitoring periods must be observed for each roadway segment. For example, a comparison between April 2010 and April 2011 is likely to be more valid than a comparison between January 2010 and August 2011.
- If special generators are located within a few miles of the monitoring location, it must be determined whether unusual or unwanted activity levels are occurring at the special generators. A call to a shopping center management company, for example, could be made to ascertain that the test days were reasonably close to average, and that no retailers were holding major sales.

#### **Self-Certification Process**

By June 15 of each year, a set of travel time runs are to be submitted to Alameda CTC for the CMP network. A city or the county, if it assumes responsibility, would submit the information, except for the freeways, within its jurisdictional limits. If Caltrans assumes responsibility for the freeways, it would similarly submit summary data to Alameda CTC by June 15. Local jurisdictions or Caltrans will also be responsible for calculating LOS according to HCM 1985. Local agencies or Caltrans will keep raw field data available for Alameda CTC to examine for at least 3 years. Travel time runs will be completed by mid-May each year. ACTAC will provide technical guidance and assistance in reviewing methodology and interpreting LOS monitoring results

# **Grandfathered LOS F Roadway Segments**

CMP legislation exempts congested CMP roadway segments that did not meet the minimum LOS standards (LOS E) when the CMP network was formed (in 1991 and 1992) from deficiency identification and preparing a deficiency plan. These grandfathered segments were identified based on the LOS monitoring performed in 1991 for the CMP roadway segments and in 1992 for the CMP freeway-to-freeway connectors during the p.m. peak period, which is used for conformity. According to the study results, a total of 15 freeway segments (excluding freeway to freeway connectors) and 15 arterial segments were operating at LOS F in 1991 and five freeway-to-freeway connectors were operating at

LOS F in 1992. Tables 6, 7, 8, and Figure 8 show the grandfathered CMP segments including the freeway-to-freeway connectors.

Although these segments are grandfathered by statute, they are not exempt from analysis and mitigation for purpose of satisfying the Land Use Analysis Program (Chapter 6), the California Environmental Quality Act (CEQA), and the federal National Environmental Protection Act. The CMP focuses on existing congestion; therefore, Alameda CTC will consider strategies and/or improvements to address grandfathered segments in corridor studies as well as investments in the Countywide Transportation Plan and in the CMP Capital Improvement Program.

Table 6—LOS F Freeways for Alameda County CMP-Designated Roadway Network

	Roadway		Limits	Jurisdiction	Average Speed (mph)
1	I-80	WB	From University to I-80/I-580 Split	Berkeley/Emeryville	16.6
2	I-80	WB	From I-80/I-580 Split to Bay Bridge Toll Plaza	Oakland	29.7
3	I-80	EB	From I-580/I-80 Split to University	Emeryville/Berkeley	25.8
4	I-80	EB	From University to Central	Berkeley/Albany	25.8
5	SR-24	EB	From I-580 to Fish Ranch Road	Oakland	28.5
6	I-580	SB	From I-80/I-580 to I-980/Hwy 24	Oakland	25.6
7	I-980	EB	From I-880 to SR-24/I-580	Oakland	28.5
8	I-238	EB	From I-880 to I-580	County/San Leandro	29.8
9	I-880	SB	From Hegenberger to Washington	San Leandro/Oakland	29.2
10	I-880	SB	From Washington to A Street	County/Hayward	24.3
11	I-880	NB	From Tennyson to SR-92 (Jackson)	Hayward	18.2
12	I-880	NB	From SR-92 to Lewelling	Hayward	23.2
13	I-880	NB	From Dixon Landing to SR-262/Mission	Fremont	29.3
14	SR-92	WB	From Clawiter to Toll Gate	Hayward/County	27.1
15	SR-92	EB	From Toll Gate to I-880	Hayward/County	27.5

Note: Data is based on surveys taken during the afternoon peak period in September/October, 1992.

Table 7—LOS F Freeway-to-Freeway Connectors, Alameda County CMP-Designated Roadway Network

	Freeway-to-Freeway Connectors	Jurisdiction	Length (miles)	Average Speed	Free Flow Speed
1	I-80 SB to I-580 EB*	Oakland	0.30	18.7	45.0
2	I-580 WB to I-80 NB*	Oakland	0.21	16.0	45.0
3	I-680 SB to I-580 EB	Pleasanton	0.67	16.3	35.0
4	SR-13 NB to SR-24 EB	Oakland	0.35	14.4	45.0
5	I-580 WB; SR-24 WB to I-80 NB	Oakland	0.69	22.1	45.0

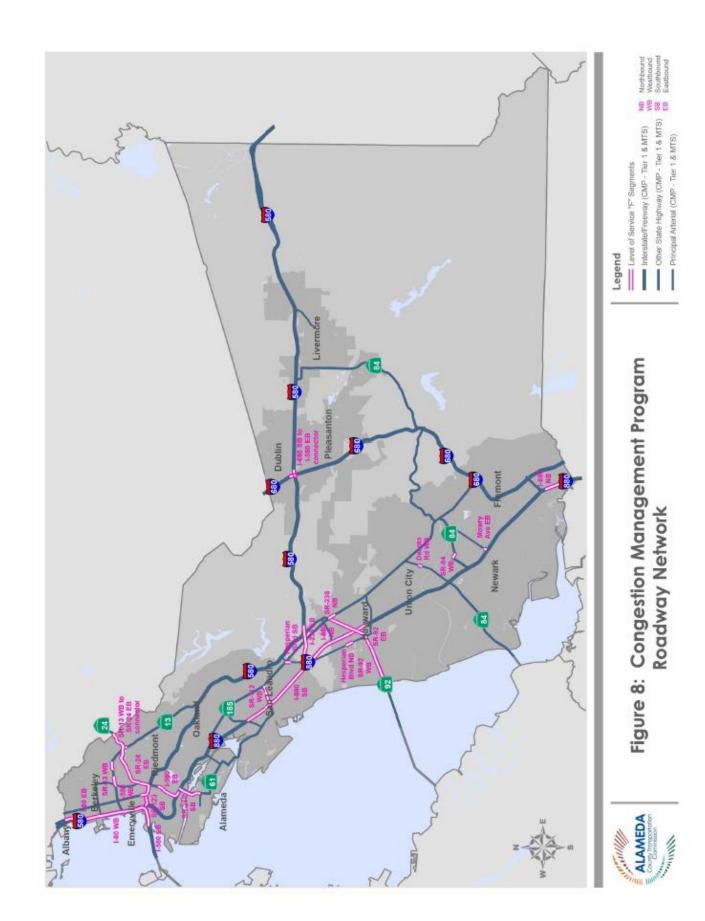
Note: Data is based on surveys taken during the afternoon peak period in September/October, 1992.

<sup>\*</sup> LOS condition was first reported during the 1991 surveys.

Table 8—LOS F Arterial Segments, Alameda County CMP-Designated Roadway Network

Roa	dway		Limits	Juris.	Arterial Class	Avg. Speed (mph)	
1	SR-13 (Ashby Ave.)	WB	From: Telegraph To: Shattuck	Berkeley	III	8.7	
2	SR-13 (Ashby Ave.)	WB	From: Shattuck To: MLK, Jr. Way	Berkeley	III	9.3	
3	SR-13 (Ashby Ave.)	EB	From: College To: Domingo	Berkeley	III	6.8	
4	SR-123 (San Pablo Ave.)	SB	From: Park Avenue To: 35th Street	Emeryville/ Oakland	II	9.4	
5	SR-260	SB	From: 7th/Webster To: Atlantic	Oakland/ Alameda	I	12.3	
6	SR-238 (Mission Blvd.)	NB	From: Sycamore To: Jackson	Hayward	II	8.8	
7	SR-92 (Jackson St.)	ЕВ	From: I-880 To: Winton	Hayward	II	8.6	
8	SR-92 (Jackson St.)	ЕВ	From: Winton Ave. To: Mission	Hayward	II	4.5	
9	Hesperian Blvd.	NB	From: La Playa To: Winton	Hayward	1	11.1	
10	Hesperian Blvd.	SB	From: 14th St. To: Fairmont	San Leandro	II	9.9	
11	Hesperian Blvd.	SB	From: Spring lake To: Lewelling	Unincorp.	II	9.6	
12	SR-112 (Davis St.)	WB	From: I-880 To: San Leandro Blvd.	San Leandro	II	5.2	
13	Decoto Road	WB	From: Union Square To: Alvarado-Niles	Union City	II	8.6	
14	SR-84 (Fremont Blvd.)	WB	From: Peralta Blvd To: Thornton Ave.	Fremont	II	7.2	
15	Mowry Avenue	EB	From: I-880 To: Farwell Dr.	Fremont	II	9.6	

Note: Based on surveys during the afternoon peak period (4 p.m. to 6 p.m.) in July-August and October, 1991.



### **Comparison with Previous LOS Results**

The results of LOS monitoring over the last two decades for the key commute corridors in Alameda County appear in Table 9, which shows overall traffic conditions and comparisons of trends for long-distance trips on the CMP freeway network. The 2012 LOS Monitoring Study reported that congestion on the CMP network increased in 2012 as compared to 2010, as shown in the increased number of LOS F segments from 2010 and decreased average speed on freeways and arterials. Some areas that showed improvements appear to be related to the improvement projects completed since 2010 after the LOS monitoring was complete. Alameda CTC concluded that the congestion increase could be likely due to the economy that is beginning to show improvement, combined with many construction activities occurring across the county.

Analysis of performance trends since 1991 shows that congestion on the Alameda County CMP network is stable, while vehicle miles traveled has increased. Further, as employment increases, freeway speed decreases, resulting in a corresponding increase in congestion. More details are available in the 2012 LOS Monitoring Study on the Alameda CTC website.

Table 9—LOS Trends on the CMP Network (afternoon peak period)

	Year/Miles per Hour															
Road		Limits	mi.	08/ 91	10/ 91	92	94	96	98	00	02	04	06	08	10	12
I-80	EB	Bay Bridge Toll Plaza to Contra Costa line	6	-	23	20	22	21	20	27	19	32	23	21	29	22
I-80	WB	Contra Costa line to Bay Bridge Toll Plaza	6	26	25	24	23	25	28	18	22	28	28	36	27	26
I-580	EB	I-238 to I-205	31	-	56	55	55	55	na	41	31	34	36	35	31	40
I-580	WB	I-205 to I-238	31	-	57	56	57	61	na	55	55	60	58	61	66	65
I-580	EB	I-80 to I-238	16	-	53	52	44	53	60	63	55	43	34	47	42	41
I-580	WB	I-238 to I-80	16	-	58	55	51	52	61	63	60	57	55	63	60	54
I-680	NB	Scott Creek Rd. to Alcosta Blvd.	21	-	58	57	57	52	51	58	51	42	53	43	40	42
I-680	SB	Alcosta Blvd. to Scott Creek Rd.	21	-	59	58	55	61	67	63	62	66	58	63	66	66
I-880	NB	Dixon Landing Rd. to I- 980	30	42	45	44	43	46	38	48	38	49	45	43	42	42
I-880	SB	I-980 to Dixon Landing Rd.	30	47	43	40	38	46	50	49	41	37	37	48	46	48
SR-13	NB	Mountain Blvd to Hiller Dr.	6	51	54	50	49	48	53	51	50	35	39	51	41	35
SR-13	SB	Hiller Dr. to Mountain Blvd	6	57	56	59	53	47	59	59	55	54	57	49	39	57
SR-24	EB	I-580 to Fish Ranch Rd.	5	29	30	29	30	24	39	33	21	40	25	24	18	17
SR-24	WB	Fish Ranch Rd. to I-580	5	53	54	58	54	50	60	57	61	59	59	58	67	66

### **Infill Opportunity Zones**

Senate Bill 1636 (Figueroa), signed by the Governor in 2002, established "infill opportunity zones" (IOZs) to encourage transit supportive and infill developments. The statute exempted infill opportunity zones from the requirements to maintain the LOS E. None of the local jurisdictions within Alameda County established or adopted infill opportunity zones by the statute's sunset period of December 2009. However, Senate Bill 743, passed in September 2013, instituted key changes to the CMP statute that will support infill development, including lifting the sunset date on designating IOZs and directing the governor's Office of Planning and Research to develop new metrics for assessment of transportation impacts to replace the LOS measure. Alameda CTC will closely follow implementation of and provide input on this law. The 2015 CMP update will incorporate the outcome of implantation of SB 743 and how it impacts the CMP LOS Monitoring element. Chapter 6, Land Use Analysis Program provides more information on Alameda CTC's efforts in supporting infill development.

#### LOCAL GOVERNMENT RESPONSIBILITIES AND CONFORMANCE

Alameda CTC is responsible for monitoring conformance of local jurisdictions with the adopted CMP. Among the requirements, Alameda CTC must monitor compliance with the LOS standards. If a roadway segment does not conform to the LOS standards based on the biennial monitoring, Alameda CTC will notify the affected local jurisdiction that may elect to remedy the LOS problem or prepare a deficiency plan (see Chapter 8). If after 90 days the local jurisdiction is still in non-conformance, Alameda CTC is required to follow the conformance process as identified in Chapter 8, Program Conformance, Monitoring, and Implementation Considerations. When a deficiency plan is adopted, status reports on the implementation of the deficiency plan showing progress must be submitted to the Alameda CTC annually as part of the annual conformity process. The detailed process for finding of non-conformance and resulting withholding of Proposition 111 funds is described in Chapter 8.

#### **NEXT STEPS**

- Apply HCM1985 and HCM2000 for the Tier 2 network to assign the LOS in the 2014 LOS
  Monitoring cycle. Based on the comparison, determine the appropriate HCM version for the
  future LOS monitoring application and incorporate the determination in the 2015 CMP.
- Use countywide modal studies to identify countywide facilities and metrics for monitoring alternative modes, and incorporate these in the 2015 CMP for future LOS monitoring efforts.
- Closely follow and participate in the implementation of SB 743 including development of the
  replacement measure to assess the impact on the transportation system within and outside the
  infill development areas and identify impact to the CMP LOS monitoring element and update it
  in the 2015 CMP.
- Based on the validation efforts for the commercially available travel time database, identify the CMP roadways that will use the commercially available travel time data and the remaining CMP roads that will continue to use the floating care runs for LOS monitoring purposes, and apply this approach in the 2014 LOS Monitoring Study.

<sup>&</sup>lt;sup>22</sup> California Government Code Section 65089.3.

	Resu	ults for 2012 LOS M	onitoring Study for Fr	eeways - PM P	eak Pe	eriod	
		Sear	nent Limits		Plan	Length	No of
	<b>CMP</b> Route		То	Jurisdiction	Area	(miles)	Lanes
1	I-80 - EB	SF County Line	Toll Plaza	Oak	1	2.06	10
2	I-80 - EB	Toll Plaza	I-580 SB Merge	Oak	1	1.15	10
3	I-80 - EB	I-80/I-580 (Merge)	Powell	Emery - Berk	1	0.79	10
4	I-80 - EB	Powell	Ashby	Emery - Berk	1	0.67	10
5	I-80 - EB	Ashby	University	Emery - Berk	1	1.34	10
6	I-80 - EB	University	Jct I-580 (off)	Berk - Alb	1	1.51	10
7	I-80 - EB	Jct I-580 (off)	Central (on)	Berk - Alb	1	1.12	10
8	I-80 - WB	Central	Jct I-580	Berk - Alb	1	0.70	10
9	I-80 - WB	Jct I-580	University	Berk - Alb	1	1.49	10
10	I-80 - WB	University	Ashby	Emery - Berk	1	1.36	10
	I-80 - WB	Ashby	Powell	Emery - Berk	1	0.64	10
	I-80 - WB	Powell	I-80/I-580 (Split)	Emery - Berk	1	0.42	10
	I-80 - WB	I-580 Split	Toll Plaza	Oak	1	1.20	10
	I-80 - WB	Toll Plaza	SF County	Oak	1	2.00	10
'-	. 00 110	1 311 1 1020	or Journey	Juk	'	2.00	10
15	I-238 - EB	I-880	I-580	Uninc-San L	2	2.28	6
	I-238 - WB	I-580	1-880	Uninc-San L	2	1.60	6
10	1250 VID	1 300	1 000	Offilio Gail E		1.00	-
17	I-580 - EB	I-238/Fthl Off	Grove	Unincorp	2	2.88	8
	I-580 EB	Grove	Eden Canyon	Uninc - Pleas	4	2.17	8
	I-580 EB	Eden Canyon	San Ramon/ Foothill	Uninc - Pleas	4	4.80	8
	I-580 EB	San Ramon/ Foothill	I-680	Uninc - Pleas	4	0.77	8
	I-580 EB	I-680		Plea			8
	I-580 EB		Hopyard		4	0.76	
-		Hopyard	Santa Rita	Plea	4	1.96	8
	I-580 EB	Santa Rita	El Charro	Uninc-Pleas	4	1.24	8
-	I-580 EB	El Charro	SR 84/Airway Blvd.	Liv	4	1.52	8
	I-580 EB	SR 84/Airway Blvd.	Portola	Liv	4	1.71	8
	I-580 - EB	Portola	1st St	Liv	4	2.70	8
	I-580 - EB	1st St	Greenville	Liv-Uninc	4	1.98	8
	I-580 - EB	Greenville	N.Flynn	Uninc	4	1.50	8
	I-580 - EB	N.Flynn	Grant Line	Uninc	4	3.19	8
	I-580 - EB	Grant Line	I-205 (SJ Co) Off	Uninc	4	1.11	8
	I-580 - WB	I-205 (SJ Co)	Grant Line	Liv - Uninc	4	0.89	8
	I-580 - WB	Grant Line	N Flynn	Liv - Uninc	4	4.56	8
	I-580 - WB	N Flynn	Greenville Rd	Liv - Uninc	4	2.34	8
	I-580 - WB	Greenville Rd	1st St	Liv - Uninc	4	2.30	8
35	I-580 - WB	1st St	Portola Ave	Liv	4	2.52	8
	I-580 - WB	Portola	SR 84/Airway Blvd	Liv	4	1.76	8
37	I-580 - WB	SR 84/Airway Blvd	Fallon Rd/El Charro	Liv	4	1.78	8
38	I-580 - WB	Fallon Rd/El Charro	Tassajara	Plea	4	1.16	8
39	I-580 - WB	Tassajara Rd	I-680	Plea	4	2.87	8
40	I-580 - WB	I-680	San Ramon Rd	Plea - Uninc	4	0.69	8
41	I-580 - WB	San Ramon Rd	Eden Caynon	Plea - Uninc	4	4.75	8
42	I-580 - WB	Eden Canyon	Center St	Plea - Uninc	4	2.28	8

	Resu	ılts for 2012 LOS M	onitoring Study for Fre	eways - PM P	eak Pe	eriod	
		Segn	nent Limits		Plan	Length	No of
	<b>CMP</b> Route		То	Jurisdiction	Area	(miles)	Lanes
43	I-580 - WB	Center	I-580/238	Unincorp	2	1.94	8
44	I-580 - EB	I-80	I-980	Oak	1	1.24	8
45	I-580 - EB	I-980	Harrison	Oak	1	0.95	8
46	I-580 - EB	Harrison	Lakeshore	Oak	1	0.69	8
47	I-580 - EB	Lakeshore	Coolidge	Oak	1	2.25	8
48	I-580 - EB	Coolidge	SH 13 Off	Oak	1	2.15	8
49	I-580 - EB	SH 13 Off	MacArthur	Foothill	1	4.09	8
50	I-580 - EB	MacArthur	I-580/238	SL - Hay	2	4.33	8
51	I-580 - WB	I-238	Foothill/MacArthur	Oak -SL	2	4.42	8
52	I-580 - WB	Foothill/MacArthur	SH 13 Off	Oak -SL	1	3.89	8
53	I-580 - WB	SH 13 Off	Fruitvale	Oak	1	2.36	8
54	I-580 - WB	Fruitvale	Harrison	Oak	1	2.21	8
55	I-580 - WB	Harrison	SH 24 On-ramp	Oak	1	1.16	8
56	I-580 - WB	SH-24 On-ramp	I-80/580 Split	Oak	1	0.69	8
57	I-580 - EB	Central	I-80 Jct	Alb	1	0.77	4
58	I-580 - WB	I-80 Jct	Central	Alb	1	1.07	4
59	I-680 - NB	Scott Creek Rd	Rt 262/Mission	Fre	3	2.20	6
60	I-680 - NB	Rt 262/Mission	Durham Rd	Fre	3	1.34	6
61	I-680 - NB	Durham Rd	Washington Blvd	Fre	3	1.54	6
62	I-680 - NB	Washington Blvd	Rt 238/Mission	Fre	3	0.89	6
63	I-680 NB	SR 238/Mission	Vargas Rd	Unincorp	3	0.82	6
64	I-680 NB	Vargas Rd	Andrade Rd	Unincorp	3	2.64	6
65	I-680 NB	Andrade Rd	Calaveras	Unincorp	3	1.13	6
66	I-680 NB	Calaveras	Rt.84/Vallecitos	Unincorp	3	0.30	6
67	I-680 NB	SR 84	Sunol Blvd	Plea - Uninc	4	3.45	6
68	I-680 NB	Sunol Blvd.	Bernal Ave	Plea - Uninc	4	1.52	6
69	I-680 NB	Bernal Ave	Stoneridge Dr	Plea	4	2.39	6
70	I-680 NB	Stoneridge Dr	I-580	Plea	4	0.84	6
71	I-680 - NB	I-580	Alcosta	Dub	4	1.83	6
72	I-680 - SB	Alcosta	I-580	Dub	4	1.84	6
73	I-680 SB	I-580	Stoneridge Dr	Plea	4	0.76	6
74	I-680 SB	Stoneridge Dr	Bernal	Plea	4	2.55	6
75	I-680 SB	Bernal Ave.	Sunol Blvd	Unincorp	4	1.31	6
	I-680 SB	Sunol Blvd.	SR 84	Unincorp	4	3.82	6
	I-680 SB	SR 84 (Niles Canyon)	Andrade Rd	Unincorp	3	1.32	6
	I-680 SB	Andrade Rd	Sheridon Rd	Unincorp	3	1.39	6
	I-680 SB	Sheridon Rd	Vargas Rd	Unincorp	3	0.81	6
-	I-680 SB	Vargas Rd	SR 238/Mission	Unincorp	3	1.08	6
	I-680 - SB	Rt 238/Mission	Washington Blvd	Fre	3	1.04	6
	I-680 - SB	Washington Blvd	Durham Rd	Fre	3	1.52	6
	I-680 - SB	Durham Rd	Rt 2262/Mission	Fre	3	1.67	6
	I-680 - SB	Rt 262/Mission	Scott Creek Rd	Fre	3	2.19	6

		Se	gment Limits	Ī	Plan	Length	No of
	CMP Route	From	To	Jurisdiction	Area	(miles)	Lanes
85	I-880 - NB	Dix Landing	SR 262/Mission	Fre	3	2.08	8
86	I-880 - NB	SR 262/Mission	AutoMall Pkwy	Fre	3	2.44	8
87	I-880 - NB	AutoMall Pkwy	Stevenson	Fre	3	1.54	8
88	I-880 - NB	Stevenson	Decoto	Fre	3	4.04	8
89	I-880 - NB	Decota	Alvarado Blvd	Fre - Un Cty	3	1.17	8
90	I-880 - NB	Alcarado Blvd	Alvarado-Niles Blvd	Fre- Uni Cty	3	1.17	8
91	I-880 - NB	Alv-Niles	Tennyson	Un Cty - Hay	3	2.65	8
92	I-880 - NB	Tennyson	SR 92	Hay	2	1.14	8
93	I-880 - NB	SR 92	A St	Hay	2	1.52	8
94	I-880 - NB	A St	I-238	Unincorp	2	1.82	8
95	I-880 - NB	I-880/I238 (split)	Marina Blvd	Oak -SL	2	2.66	8
96	I-880 - NB	Marina Blvd	SR 112/Davis	Oak - SL	2	0.79	8
97	I-880 - NB	SR 112/Davis	Hegenberger	Oak - SL	2	1.88	8
98	I-880 - NB	Hegenberger	High/42nd	Oak	1	2.47	8
99	I-880 - NB	High/42nd	23rd (1st on)	Oak	1	1.06	8
100	I-880 - NB	23RD (1ST on)	Jct 980 (off)	Oak	1	2.64	8
101	I-880 - NB	Jct 980 (off)	I-880/I-80 split	Oak	1	2.38	8
102	I-880 - NB	I-880/I 80 (split)	I-880/I-80 (merge)	Oak	1	1.40	8
				Oak	1	3.17	6
103	I-880 - SB	I-880/I-80 split	I-880/I-80 merge	Oak	1	1.63	8
104	I-880 - SB	I-880/I-80 merge	Jct 980	Oak	1	2.65	8
105	I-880 - SB	I-980	23rd	Oak	1	2.79	8
106	I-880 - SB	23rd St	High/42nd	Oak	1	1.35	8
107	I-880 - SB	High/42nd	Hegenberger	Oak	1	2.27	8
108	I-880 - SB	Hegenberger	SR 112/Davis	Oak - SL	1	1.69	8
109	I-880 - SB	SR 112/Davis	Marina Blvd	Oak - SL	1	0.87	8
110	I-880 - SB	Marina Blvd	SR 238 WB (merge)	Oak - SL	1	2.41	8
111	I-880 - SB	I-238	A St	SL-Uninc	2	2.03	8
112	I-880 - SB	A St	Rt 92	Hay	2	1.81	8
113	I-880 - SB	Rt 92	Tennyson	Hay	2	0.96	8
114	I-880 - SB	Tennyson	Alv-Niles	Hay - UC	2	2.49	8
115	I-880 - SB	Alv-Niles	Alvarado	UC - Fre	3		8
116	I-880 - SB	Alvarado	Decoto	UC - Fre	3		8
117	I-880 - SB	Decoto	Stevenson	Fre	3	4.07	8
	I-880 - SB	Stevenson	AutoMall Pkwy	Fre	2	1.26	8
	I-880 - SB	AutoMall Pkwy	Rt 262/Mission	Fre	2	3.04	8
	I-880 - SB	SR 262/Mission	Dix Landing(off)	Fre	3	1.27	8
121	I-980 - WB	SR 24 @ 580	I-880	Oak	1	2.27	8
122	I-980 - EB	I-880	SR 24 @ 580	Oak	1	2.32	8
123	SR 13 - NB	Mountain On	Carson/Redwood (1) (off)	Oak	1	1.20	4

	Resu	ılts for 2012 LOS N	lonitoring Study for Fre	eways - PM P	eak Pe	eriod	
		Segr	nent Limits		Plan	Length	No of
	<b>CMP</b> Route		То	Jurisdiction	Area	(miles)	Lanes
		Carson/Redwood (1)					
124	SR 13 - NB	(off)	Joaquin Miller	Oak	1	1.09	4
125	SR 13 - NB	Joa Miller/Linc	Moraga Ave	Oak	1	1.77	4
126	SR 13 - NB	Moraga Ave	Hiller (Sig)	Oak	1	1.57	4
127	SR 13 - SB	Hiller Sig	Moraga Ave	Oak	1	1.66	4
128	SR 13 - SB	Moraga Ave	Joa Miller/Linc	Oak	1	2.04	4
129	SR 13 - SB	Joaq Miller/Lincoln	Redwood	Oak	1	1.34	4
130	SR 13 - SB	Redwood	Jct I-580 (EB Merge)	Oak	1	0.89	4
131	SR 24 - EB	I-580 (on ramp)	Broadway/SR 13	Oak	1	2.08	8
-	SR 24 - EB	Broadway/SR 13	Caldecott (enter)	Oak	1	1.41	8
	SR 24 - EB	Caldecott (enter)	Fish Ranch Road	Oak	1	1.03	8
	SR 24 - WB	Fish Ranch Road	Caldecott (exit)	Oak	1	0.99	8
-	SR 24 - WB	Caldecott (exit)	Broadway	Oak	1	1.77	8
	SR 24 - WB	Broadway	Jct I-580 (on)	Oak	1	2.19	8
		·	, ,				
137	SR 84 - EB	San M CL	Toll Plaza	Fremont	3	2.97	6
138	SR 84 - EB	Toll Plaza	Thornton	Fremont	3	0.27	6
			Newark Blvd/Ardenwood				
139	SR 84 - EB	Thornton	Blvd	Newark	3	1.23	6
140	SR 84 - EB	Newark Blvd/Ardenwood Blvd	I-880 NB (off)	Newark	3	0.97	6
		I-880 NB (off)	Ardenwood/Newark	Newark	3	0.99	6
		Ardenwood/Newark	Paseo Padre Pkwy	110110111	3	1.15	6
	SR 84 - WB	Paseo Padre Pkwy	Toll Gate		3	0.75	6
	SR 84 - WB	Toll Plaza	San M CL	Fremont	2	3.17	6
	SR 92 - EB	San M CL	Toll Plaza	Uninc - Hay	2	2.61	6
	SR 92 - EB	Toll Plaza	Clawiter	Uninc - Hay	2	1.76	6
	SR 92 - EB	Clawiter	I-880	Hay	2	2.10	6
	SR 92 - WB	I-880	Clawiter	Hay	2	2.01	6
	SR 92 - WB	Clawiter	Toll Plaza	Uninc - Hay	2	1.87	6
150	SR 92 - WB	Toll Plaza	San M CL	Uninc - Hay	2	2.61	6

	2012	LOS Monitoring St	tudy Results - Art	terials PM P	eak Peri	od		
		Segment Limits			Length	Arterial	Plan	No of
#	CMP Route	From	То	Juris	(miles)	Class	Area	Lanes
1	150th St - EB	Hesperian	I-580	SL	0.51	II	2	2
2	150th St - WB	I-580	Hesperian	SL	0.51	II	2	2
3	A Street - EB	I-880	Western	Hay	1.08	II	2	2
4	A Street - EB	Western	SR 238	Hay	0.53	III	2	2
5	A Street - WB	SR 238	Western	Hay	0.53	III	2	2
6	A Street - WB	Western	I-880	Hay	1.08	II	2	2
7	Atlantic - EB	Main	Webster	Ala	0.80	II	1	2
	Atlantic - WB	Webster	Main	Ala	0.80	II	1	2
9	Hegenberger - EB	SR 61	Edgewater	Oak	0.76			
10	Hegenberger - EB	Edgewater	Baldwin	Oak	0.73	I	1	3
11	Hegenberger - EB	Baldwin	E 14th	Oak	1.03	I	1	3
12	Hegenberger - WB	E 14th	Baldwin	Oak	1.03	I	1	3
13	Hegenberger - WB	Baldwin	Edgewater	Oak	0.73	I	1	3
14	Hegenberger - WB	Edgewater	SR 61	Oak	0.76			
15	Hesperian - NB	Tennyson	SH 92 - WB	Hay	0.47	I	2	3
16	Hesperian - NB	SH 92	La Playa	Hay	0.79	II	2	3
17	Hesperian - NB	La Playa	W.Winton Ave.	Hay	0.44	II	2	3
18	Hesperian - NB	W.Winton Ave	A St	Hay	0.96	II	2	3
19	Hesperian - NB	A St	Hacienda	Unin	0.65	II	2	2
20	Hesperian - NB	Hacienda	Grant	Unin	0.65	II	2	2
21	Hesperian - NB	Grant	Llewelling	Unin	0.28	II	2	2
22	Hesperian - NB	Llewelling	Springlake	Unin	0.40	II	2	2
23	Hesperian - NB	Springlake	Fairmont	SL	0.66	II	2	2
24	Hesperian - NB	Fairmont	14th	SL	0.32	II	2	2
25	Hesperian - SB	14th	Fairmont	SL	0.31	II	2	2
26	Hesperian - SB	Fairmont	Springlake	SL	0.65	11	2	2
27	Hesperian - SB	Springlake	Llewelling	Unin	0.40	II	2	2
28	Hesperian - SB	Llewelling	Grant	Unin	0.28	П	2	2
29	Hesperian - SB	Grant	Hacienda	Unin	0.65	II	2	2
30	Hesperian - SB	Hacienda	A St	Unin	0.65	II	2	2
31	Hesperian - SB	A St	W.Winton Ave.	Hay	0.96	II		
32	Hesperian - SB	W.Winton Ave	La Playa	Hay	0.44	II		
33	Hesperian - SB	La Playa	SH 92	Hay	0.79	II		
34	Hesperian - SB	SH 92 - WB	Tennyson	Hay	0.47	I	2	3
35	Mowry - EB	I-880	Farwell	Fre	0.34	II	3	2
36	Mowry - EB	Farwell	SH 84	Fre	2.63	II	3	2
	Mowry - WB	SH 84	Farwell	Fre	2.63	II	3	2
	Mowry - WB	Farwell	I-880	Fre	0.34	II	3	2

	2012 L	OS Monitoring St	udy Results - Arte	rials PM Pe	eak Peri	od		
		Segment Limits			Length	Arterial	Plan	No of
#	CMP Route	From	То	Juris	(miles)	Class	Area	Lanes
39	Park/23rd - EB	Encinal	Santa Clara	Ala	0.23	III	1	2
40	Park/23rd - EB	Santa Clara	Kennedy	Ala	0.66	III	1	2
41	Park/23rd - EB	Kennedy	E 11th	Ala - Oak	0.45	II	1	2
42	Park/23rd - WB	E 11th	Kennedy	Ala - Oak	0.45	II	1	2
43	Park/23rd - WB	Kennedy	Santa Clara	Ala	0.66	III	1	2
44	Park/23rd - WB	Santa Clara	Encinal	Ala	0.23	III	1	2
45	MLK Jr Way -NB	SH 24	Adeline	Oak	0.90	II	1	2
46	Adeline - NB	MLK Jr - South	MLK Jr - North	Berk	0.30	II	1	2
47	Adeline - NB	MLK Jr - North	Shattuck/Adeline	Berk	0.63	II	1	2
48	Shattuck NB	Shattuck/Adeline	Dwight	Berk	0.32	II	1	2
49	Shattuck NB	Dwight	University	Berk	0.63	III	1	2
50	Shattuck SB	University	Dwight	Berk	0.63	III	1	2
51	Shattuck SB	Dwight	Shattuck/Adeline	Berk	0.32	II	1	2
52	Adeline - SB	Shattuck/Adeline	MLK Jr - North	Berk	0.63	II	1	2
53	Adeline - SB	MLK Jr - North	MLK Jr - South	Berk	0.30	II	1	2
54	MLK Jr Way -SB	Adeline	SH 24	Oak	0.88	II	1	2
55	Tennyson - EB	Hesperian	I-880	Hay	0.88	I	2	2
56	Tennyson - EB	I-880 NB	Rt 238	Hay	1.55	II	2	2
57	Tennyson - WB	Rt 238	I-880	Hay	1.63	II	2	2
58	Tennyson - WB	I-880	Hesperian	Hay	0.85	I	2	2
59	University - EB	I-80 SB	6th	Berk	0.40	II	1	2
60	University - EB	6th	San Pablo	Berk	0.31	II	1	2
61	University - EB	San Pablo	Sacramento	Berk	0.56	II	1	2
62	University - EB	Sacramento	ML King	Berk	0.48	- II	1	2
63	University - EB	ML King	Shattck PI	Berk	0.30	III	1	2
64	University - WB	Shattck PI	ML King	Berk	0.30	III	1	2
65	University - WB	ML King	Sacramento	Berk	0.48	II	1	2
66	University - WB	Sacramento	San Pablo	Berk	0.56	II	1	2
67	University - WB	San Pablo	6th	Berk	0.31	II	1	2
68	University - WB	6th	I-80 SB	Berk	0.40	II	1	2
69	SR 13 Ashby - WB	Hiller	Domingo	Oak - Berk	0.79	II	1	2
70	SR 13 Ashby - WB	Domingo	College	Berk	0.50	III	1	1
71	SR 13 Ashby - WB	College	Telegraph	Berk	0.38	III	1	1
72	SR 13 Ashby - WB	Telegraph	Shattuck	Berk	0.38	Ш	1	1
73	SR 13 Ashby - WB	Shattuck	ML King	Berk	0.24	III	1	1
74	SR 13 Ashby - WB	ML King	San Pablo	Berk	0.87	III	1	1
75	SR 13 Ashby - WB	San Pablo	I-80 Ramps	Berk	0.64	II	1	2

	2012 L	OS Monitoring St	udy Results - Arte	erials PM Pe	eak Perio	od		
		Segment Limits			Length	Arterial	Plan	No of
#	CMP Route	From	То	Juris	(miles)	Class	Area	Lanes
76	SR 13 Ashby - EB	I-80	San Pablo	Berk	0.61	II	1	2
77	SR 13 Ashby - EB	San Pablo	ML King	Berk	0.87	III	1	1
78	SR 13 Ashby - EB	ML King	Shattuck	Berk	0.24	III	1	1
79	SR 13 Ashby - EB	Shattuck	Telegraph	Berk	0.38	III	1	1
80	SR 13 Ashby - EB	Telegraph	College	Berk	0.38	Ш	1	1
81	SR 13 Ashby - EB	College	Domingo	Berk	0.50	Ш	1	1
82	SR 13 Ashby - EB	Domingo	Hiller	Berk - Oak	0.79	II	1	2
83	SR 61 - SB	Atlantic	Cent/Webster	Ala	0.55	II	1	2
84	SR 61 - SB	Cent/Webster	Sher/Encino	Ala	0.73	II	1	2
85	SR 61 - SB	Sher/Encino	Park	Ala	1.22	ll l	1	1
86	SR 61 - SB	Park	High/Otis	Ala	1.06	ll l	1	1
87	SR 61 (Doolittle) - SB*	High	Island Dr	Ala	0.41	II	1	2
	SR 61 (Doolittle) - SB*	Island Dr	Harbor Bay Pkwy	Ala	0.50	I	1	2
89	SR 61 - SB	Harbor Bay	Airport Dr	Oak	2.15	I	1	1
90	SR 61 (Doolittle) - SB	Airport	Davis	Oak - SL	0.95	I	1	2
91	SR 61 (Doolittle) - NB	Davis	Airport	SL - Oak	0.95	I	2	2
92	SR 61 - NB	Airport Dr	Harbor Bay	Ala	2.15	I	1	1
93	SR 61 (Doolittle)-NB*	Harbor Bay	Island Dr	Ala	0.50	I	1	2
94	SR 61 (Doolittle)-NB*	Island Dr	High/Otis	Ala	0.41	II	1	2
95	SR 61 - NB	High/Otis	Park	Ala	1.06	II	1	1
96	SR 61 - NB	Park/Encinal	Sher/Cent	Ala	1.22	II	1	1
97	SR 61 - NB	Sher/Cent	Web/Cent	Ala	0.73	II	1	2
98	SR 61 - NB	Cent/Web	Atlantic	Ala	0.55	III	1	2
99	SR 77 (42nd) - EB	I-880 NB	E 14th	Oak	0.32	I	1	2
100	SR 77 (42nd) - WB	E 14 th	I-880 NB	Oak	0.30	I	1	2
101	Decoto - WB	SH 238/Mission	Union Square	UC	0.85	II	3	2
102	Decoto - WB	Union Square	Alv-Niles Rd	UC	0.25	II	3	2
103	Decoto - WB	Alv-Niles Rd	Fremont CL	UC	0.66	II	3	2
104	Decoto - WB	Fremont CL	I-880 NB (off)	Fre	1.15	II	3	2
105	Decoto - EB	I-880 NB (off)	Union City CL	Fre	1.15	II	3	2
106	Decoto - EB	Union City CL	Alv-Niles Rd	UC	0.66	II	3	2
	Decoto - EB	Alv-Niles Rd	Union Square	UC	0.25	II	3	2
108	Decoto - EB	Union Square	SH 238/Mission	UC	0.85	II	3	2
	SR 84/Mowry (Fre)-WB	SH 238	Peralta	Fre	0.78	I	3	
	SR 84/Peralta (Fre)-WB	Mowry	Fremont	Fre	1.66	I	3	
	SR 84/Fremont(Fre)-WB	Peralta	Thornton	Fre	0.33	II	3	
112	SR 84/Thornton(Fre)-WB	Fremont	I-880 SB	Fre	1.29	II	3	

	2012 L	OS Monitoring St	udy Results - Arter	ials PM P	eak Peri	od		
		Segment Limits			Length	Arterial	Plan	No of
#	CMP Route	From	То	Juris	(miles)	Class	Area	Lanes
113	SR 84/Thornton (Fre)-EB	I-880 SB	Fremont	Fre	1.29	II	3	4
114	SR 84/Fremont (Fre)-EB	Thornton	Peralta	Fre	0.32	II	3	4
	SR 84/Peralta (Fre) - EB	Fremont	Mowry	Fre	1.64	ı	3	2
	SR 84/Mowry (Fre) - EB	Peralta	SH 238	Fre	0.87	i	3	4(2)
110	OK 04/MOWIY (FIE) - LB	r Craita	311 230	116	0.07		3	4(2)
117	1st Street - SB	I-580 Off	N Mines	Liv	0.61	I		
118	1st Street - SB	N Mines	Inman	Liv	1.05	ı		
	1st Street - NB	Inman	N Mines	Liv	1.05	ı		
	1st Street - NB	N Mines	I-580 Off	Liv	0.61	<u>'</u>		
120	1St Street - IND	IN MILLES	1-560 OII	LIV	0.01	ı		
121	SR 84 - EB	SR 238/Mission	Union City Limit	Fre	1.59	41.9	3	2
	SR 84 - EB	Union City Limit	Palamoras	Fre	0.94	44.5	3	2
	SR 84 - EB	Palamoras	Niles Cnyn Quarry	Fre	2.16	43.8	3	2
	SR 84 - EB	Niles Cnyn Quarry	Sunol Rd	Fre	1.75	46.7	3	2
125	SR 84 - EB	Sunol Rd	Plea-Sunol Rd	Fre	0.53	27.6	3	2
	SR 84 - EB	Ple-Sunol Rd	SR 84 (Off)/I-680	Unin	0.77	42.9	4	2
127	SR 84 - EB	SR 84 (Off)/I-680	Vallecitos Ln	Unin	1.07	50.8	4	2
128	SR 84 - EB	Vallecitos Ln	Vallecitos Nuc.Cntr	Unin	1.14	57.5	4	2
129	SR 84 - EB	Vallecitos Nuc Center	Culvert (Lat/Long: 37.6	Unin	1.65	58.3	4	2
130	SR 84 - EB	Culvert (Lat/Long: 37.	Ruby Hill /Kaithoff	Unin	1.62	59.2	4	2
	SR 84 - EB	Ruby Hill./Kaithoff	Isabel/Vallecitos	Unin	0.38	ı	4	2
	SR 84 (Liv) - NB	Isabel/Vallecitos	Vineyard	Liv	1.12	l	4	2
	SR 84 (Liv) - NB	Vineyard	Concannon	Liv	0.60	l	4	2
	SR 84 (Liv) - NB	Concannon	Stanley	Liv	1.07	I	4	2
	SR 84 (Liv) - NB	Stanley	W. Jack London Blvd.	Liv	0.88	I	4	2
	SR 84 (Liv) - NB	W. Jack London Blvd		Liv	0.49	I	4	2
137	SR 84 (Liv) - NB	Airway/Kitty	I-580 (Off)	Liv	1.06	I	4	2
138	SR 84 (Liv) - SB	I-580 (On)	Airway/Kitty Hawk	Liv	1.06	I	4	2
	SR 84 (Liv) - SB	Airway/Kitty	W. Jack London Blvd.	Liv	0.49	i	4	2
	SR 84 (Liv) - SB	W. Jack London Blvd		Liv	0.90	i	4	2
	SR 84 (Liv) - SB	Stanley	Concannon	Liv	1.05	İ	4	2
	SR 84 (Liv) - SB	Concannon	Vineyard	Liv	0.60	i	4	2
	SR 84 (Liv) - SB	Vineyard	Isabel/Vallecitos	Liv	1.12	i	4	2
	SR 84 - WB	Isabel/Vallecitos	Ruby Hill /Kaithoff	Liv	0.38	i	4	2
	SR 84 - WB	Ruby Hill /Kaithoff	Culvert (Lat/Long: 37.6		1.62	55.8	4	2
	SR 84 - WB	Culvert (Lat/Long: 37.	Vallecitos Nuc.Cntr	Unin	1.65	56.5	4	2
	SR 84 - WB	Vallecitos Nuc.Cntr	Vallecitos Ln	Unin	1.14	52.5	3	2
	SR 84 - WB	Vallecitos Ln	SR 84/I-680 NB On	Unin	0.21	55.3	3	2
	SR 84 - WB	SR 84/I-680 NB On	Ple-Sunol Rd	Fre	1.27	41.4	3	2
	SR 84 - WB	Ple-Sunol Rd	Sunol Rd	Fre	0.53	41.9	3	2
	SR 84 - WB	Sunol Rd	Niles Canyon Quarry	Fre	1.75	48.5	3	2
152	SR 84 - WB	Niles Canyon Quarry	Fremont City Limit	Fre	1.00	47.5	3	2
153	SR 84 - WB	Fremont City Limit	Union City Limit	Fre	2.10	41.8	3	2
154	SR 84 - WB	Union City Limit	SR 238	Fre	1.62	31.7	3	2

	2012 L	OS Monitoring St	udy Results - Ar	terials PM Pe	ak Peri	od		
		Segment Limits			Length	Arterial	Plan	No of
#	CMP Route	From	То	Juris	(miles)	Class	Area	Lanes
155	SR 92 - EB	I-880	Mission	Hay	1.59	II	2	3
156	SR 92 - WB	Mission	I-880	Hay	1.59	II	2	3
157	SR 112 (Davis) - EB	Doolittle/Davis	I-880	SL	0.51	II	2	2
158	SR 112 (Davis) - EB	I-880	San Leandro	SL	1.01	II	2	2
159	SR 112 (Davis) - EB	San Leandro	E 14th	SL	0.28	III	2	2
160	SR 112 (Davis) - WB	E 14th	San Leandro	SL	0.28	III	2	2
	SR 112 (Davis) - WB	San Leandro	I-880	SL	1.00	ll l	2	2
	SR 112 (Davis) - WB	I-880	Doolittle	SL	0.51	ll l	2	2
	SR 123 San Pablo - SB	Carlson	Washington	Alb	0.53	ll ll	1	2
	SR 123 San Pablo - SB	Washington	Marin	Alb	0.44	III	1	2
	SR 123 San Pablo - SB	Marin	Gilman	Alb - Berk	0.47	II	1	2
	SR 123 San Pablo - SB	Gilman	University	Berk	0.86	II	1	2
	SR 123 San Pablo - SB	University	Allston	Berk	0.20	III	1	2
	SR 123 San Pablo - SB	Allston	Dwight	Berk	0.20	II	'	
	SR 123 San Pablo - SB	Dwight	Ashby	Berk	0.68	ll ll		
	SR 123 San Pablo - SB	Ashby	Stanford	Berk	0.81	"	1	2
	SR 123 San Pablo - SB		53rd				1	2
		Stanford		Oak	0.27			2
	SR 123 San Pablo - SB	53rd	Park	Emer	0.34	II 	1	2
1/3	SR 123 San Pablo - SB	Park	35th	Emer - Oak	0.45	II	1	2
174	SR 123 San Pablo - NB	35th	Park	Oak - Emer	0.45	II	1	2
175	SR 123 San Pablo - NB	Park	53rd	Emer	0.34	II	1	2
176	SR 123 San Pablo - NB	53rd	Stanford	Oak	0.27	II	1	2
177	SR 123 San Pablo - NB	Stanford	Ashby	Oak	0.81	ll l	1	2
178	SR 123 San Pablo - NB	Ashby	Dwight	Berk	0.68	ll		
179	SR 123 San Pablo - NB	Dwight	Allston	Berk	0.4	ll l		
180	SR 123 San Pablo - NB	Allston	University	Berk	0.20	III	1	2
181	SR 123 San Pablo - NB	University	Gilman	Berk	0.86	ll l	1	2
182	SR 123 San Pablo - NB	Gilman	Marin	Alb - Berk	0.47	ll l	1	2
	SR 123 San Pablo - NB	Marin	Washington	Alb	0.45	III	1	2
	SR 123 San Pablo - NB	Washington	Carlson	Alb	0.53	II	1	2
185	SR 185 (14th) - SB	42nd	46th St	Oak	0.26	II		
186	SR 185 (14th) - SB	46th St	Seminary	Oak	0.79	II		
187	SR 185 (14th) - SB	Seminary	73rd	Oak	0.80	II	1	2
188	SR 185 (14th) - SB	73rd Ave	98th Ave	Oak	1.39	II	1	2
189	SR 185 (14th) - SB	98th	Broadmoor	Oak	0.74	II	1	2
190	SR 185 (14th) - SB	Broadmoor	Davis	SL	0.73	II	2	2
	SR 185 (14th) - SB	Davis	San Leandro	SL	1.04	III	2	2
	SR 185 (14th) - SB	San L Blvd	Hesperian	SL	0.94	ll	2	2
	SR 185 (14th) - SB	Hesperian	Bayfair	SL	0.46	II	2	2

	2012 L	OS Monitoring St	udy Results - Arte	rials PM Po	eak Peri	od		
		Segment Limits			Length	Arterial	Plan	No of
#	CMP Route	From	То	Juris	(miles)	Class	Area	Lanes
	SR 185 (14th) - SB	Bayfair	170th	Unin	1.24	II	3	2
	SR 185 (14th) - SB	170th	Llewelling	Unin	0.21	II	3	2
	SR 185 (14th) - SB	Llewelling	Sunset	Unin	1.02	II	3	2
	SR 185 Hayward - SB	Sunset	SR 92/238	Hay	0.84	III	2	2
198	SR 185 Hayward - NB	SR 92/238	Sunset	Hay	0.84	III	2	2
199	SR 185 (14th) - NB	Sunset	Llewelling	Unin	1.11	II	3	2
	SR 185 (14th) - NB	Llewelling	170th	Unin	0.21	II	3	2
201	SR 185 (14th) - NB	170th	Bayfair	Unin	1.24	II	3	2
202	SR 185 (14th) - NB	Bayfair	Hesperian	SL	0.47	II	2	2
	SR 185 (14th) - NB	Hesperian	San L Blvd	SL	0.94	ll l	2	2
	SR 185 (14th) - NB	San Leandro	Davis	SL	1.02	III	2	2
	SR 185 (14th) - NB	Davis	Broadmoor	SL	0.72	II	2	2
	SR 185 (14th) - NB	Broadmoor	98th	Oak	0.74	II 	1	2
	SR 185 (14th) - NB	98th Ave	73rd Ave	Oak	1.37	II 	1	2
	SR 185 (14th) - NB	73rd Ave	Seminary	Oak	0.60		1	2
	SR 185 (14th) - NB	Seminary	46th St	Oak	0.79	ļļ ļļ		
	SR 185 (14th) - NB	46th St	42nd	Oak	0.26	II		
211	SR 238 (Foothill) - NB	Jackson	City Center	Hay	0.62	III	2	3
212	SR 238 (Foothill) - NB	City Center	I-580	Unin-Hay	0.73	11	3	3
213	SR 238 (Foothill) - NB	I-580 Ramp	I-580 Merge	Unin	0.71	I	3	
214	SR 238 (Foothill) - SB	I-580	Cstro V Blvd	Unin	0.86	I	3	
215	SR 238 (Foothill) - SB	Cstro V Blvd	City Center	Hay-Unin	1.03	II	2	3
216	SR 238 (Foothill) - SB	City Center	Jackson	Hay	0.62	III	2	3
217	SR 238 (Mission) - NB	680 NB Rmp	Stevenson	Fre	2.46	I	3	2
218	SR 238 (Mission) - NB	Stevenson	Nursery	Fre	2.57	I	3	2
219	SR 238 (Mission) - NB	Nursery	Tamarack	UC	2.10	I	3	2
220	SR 238 (Mission) - NB	Tamarack	Industrial	UC-Hay	1.96	I	3	2
221	SR 238 (Mission) - NB	Industrial	Sorenson	Hay	1.47	II	2	2
222	SR 238 (Mission) - NB	Sorenson	Jackson	Hay	1.83	II	2	2
				Hay				
	SR 238 (Mission) - SB	Jackson	Sorenson	Hay	1.83	II	2	2
	SR 238 (Mission) - SB	Sorenson	Industrial	Hay	1.47	II	2	2
	SR 238 (Mission) - SB	Industrial	Tamarack	Hay-UC	1.96	l	2	2
	SR 238 (Mission) - SB	Tamarack	Nursery	UC	2.07		3	2
	SR 238 (Mission) - SB	Nursery	Stevenson	Fre	2.57		3	2
	SR 238 (Mission) - SB	Stevenson	680 NB Rmp	Fre	2.46		3	2
229	SR 260 (Tubes) - NB	Atlantic	7th/Web	Oak	1.31		1	2
230	SR 260 (Tubes) - SB	7th/Web	Atlantic	Oak	1.31	I	1	2
231	SR 262 (Mission) - EB	I-880 NB	I-680 NB	Fre	1.33	I	3	2
232	SR 262 (Mission) - WB	I-680 NB	I-880 SB	Fre	1.11	I	3	2

	2012 LOS Monitori	ng Study Resu	lts - Ramps and	l Special Segmer	nts for PM	Peak Period	
		<del>- 1</del>	ent Limits		Plan	Length	No of
#	CMP Route	From:	To:	Jurisdiction	Area	(miles)	Lanes
1	I-80/I-580 Interchange	I-80 SB	I-580 EB	Oak	1	0.30	1
2	I-80/I-580 Interchange	I-580 WB	I-80 NB	Oak	1	0.41	1
3	SR 24 WB/I-580 WB	SR 24 ON	I-580 OFF	Oak	1	0.69	2
4	I-580/SR 24 Interchange	I-580 WB	SR-24 EB	Oak	1	0.51	2
5	I-580/SR 24 Interchange	SR-24 WB	I-580 EB	Oak	1	0.74	2
6	SR13/SR 24 Interchange	SR-13 NB	SR-24 EB	Oak	1	0.32	1
7	SR13/SR 24 Interchange	SR-24 WB	SR-13 SB	Oak	1	0.16	1
8	I-880/I-238 Interchange	I-880 SB	I-238 EB	SL	2	0.74	2
9	I-880/I-238 Interchange	I-238 WB	I-880 NB	SL	2	0.54	1
10	I-880/I-238 Interchange	I-880 NB	I-238 EB	SL	2	0.42	1
11	I-880/I-238 Interchange	I-238 WB	I-880 SB	SL	2	0.76	1
12	I-580 /I-238 Interchange	I-580 SB	I-238 EB	Hay	2	0.35	1
13	I-580 /I-238 Interchange	I-238 WB	I-580 NB	Hay	2	0.32	1
25	I-580/I-680 Interchange	I-580 EB	I-680 NB	Pleas	4	0.46	1
15	I-580/I-680 Interchange	I-580 EB	I-680 SB	Pleas	4	0.28	1
16	I-580/I-680 Interchange	I-680 NB	I-580 EB	Pleas	4	0.90	2
17	I-580/I-680 Interchange	I-680 NB	I-580 WB	Pleas	4	0.66	1
18	I-580/I-680 Interchange	I-580 WB	I-680 NB	Pleas	4	0.41	1
19	I-580/I-680 Interchange	I-580 WB	I-680 SB	Pleas	4	0.66	1
20	I-580/I-680 Interchange	I-680 SB	I-580 EB	Pleas	4	1.23	2
21	I-580/I-680 Interchange	I-680 SB	I-580 WB	Pleas	4	0.43	1
22	I-880/SR 260 Connection*	I-880 SB	SR-260 WB	Oak	1	0.99	1
23	I-880/SR 260 Connection	SR-260 EB	I-880 NB	Oak	1	0.36	1

<sup>\*</sup>Starting from the 2010 LOS Monitoring runs, the travel route has been changed to the correct route of I-880 SB ramp exit to 5th Street and then connecting to Webster Tube from Broadway/5th Street intersection under the I-880 bridge.

CMP Tier 2 Route	Segme	ent Limits	- Jurisdiction	Plan Area	Lengtl
CIMP TIEL 2 ROULE	From	То	Jurisdiction	Pian Area	(miles
1 W.Grand Ave - Grand Ave -EB	I-80/Maritime St	San Pablo Ave	Oakland	1	1.09
2 W.Grand Ave - Grand Ave -EB	San Pablo Ave	Broadway	Oakland	1	0.40
3 W.Grand Ave - Grand Ave -EB	Broadway	I-580	Oakland	1	1.62
4 W.Grand Ave - Grand Ave -WB	I-580	Broadway	Oakland	1	1.62
5 W.Grand Ave - Grand Ave -WB	Broadway	San Pablo Ave	Oakland	1	0.40
6 W.Grand Ave - Grand Ave -WB	San Pablo Ave	I-80/Maritime St	Oakland	1	1.09
7 12th St - Lakeshore Ave-EB	I-980 OFF Ramp/Brush St	Webster	Oakland	1	0.46
8 12th St - Lakeshore Ave-EB	Webster	Lake Merrit Blvd	Oakland	1	0.59
9 12th St - Lakeshore Ave-EB	Lake Merrit Blvd	MacArthur Blvd/I-580 ON Ramp	Oakland	1	1.30
0 12th St - Lakeshore Ave-WB	MacArthur Blvd/I-580 ON Ramp	Lake Merrit Blvd	Oakland	1	1.20
1 12th St - Lakeshore Ave-WB	Lake Merrit Blvd	Webster	Oakland	1	0.61
2 12th St - Lakeshore Ave-WB	Webster	I-980 OFF Ramp/Brush St	Oakland	1	0.51
		Russell St		1	
3 Telegraph Ave-NB	51st Street		Oakland, Berkeley	1	1.41
4 Telegraph Ave-NB	Russell St	Bancroft Way	Oakland, Berkeley	1	0.77
5 Telegraph Ave-SB	Bancroft Way	Russell St	Oakland, Berkeley	1	0.75
6 Telegraph Ave-SB	Russell St	51st Street	Oakland, Berkeley	1	1.50
7 Broadway-EB	Broadway/College Ave	Grand Ave	Oakland	1	1.91
8 Broadway-EB	Grand Ave	14th St	Oakland	1	0.55
9 Broadway-EB	14th St	5th St/Broadway	Oakland	1	0.48
0 Broadway-EB	5th St/Broadway	I-880 OFF Ramp	Oakland	1	0.06
1 Broadway-WB	I-880 OFF Ramp	5th St/Broadway	Oakland	1	0.07
2 Broadway-WB	5th St/Broadway	14th St	Oakland	1	0.48
3 Broadway-WB	14th St	Grand Ave	Oakland	1	0.55
4 Broadway-WB	Grand Ave	Broadway/College Ave	Oakland	1	1.91
5 College Avenue-EB	Bancroft Way/College Ave	Ashby Ave	Oakland	1	1.04
6 College Avenue-EB	Ashby Ave	Miles Ave/SR 24 OFF Ramp	Oakland, Berkeley	1	0.83
7 College Avenue-EB	Miles Ave/SR 24 OFF Ramp	Broadway/College Ave	Berkeley	1	0.60
8 College Avenue-WB	Broadway/College Ave	Miles Ave/SR 24 OFF Ramp	Berkeley	1	0.60
9 College Avenue-WB	Miles Ave/SR 24 OFF Ramp	Ashby Ave	Oakland, Berkeley	1	0.83
0 College Avenue-WB	Ashby Ave	Bancroft Way/College Ave	Oakland	1	0.03
1 Bancroft-EB	Shattuck	-	Berkeley	1	0.38
		Bancroft Way/College Ave	·	1 1	
2 Bancroft-WB	College Ave.	Shattuck	Berkeley	1	0.73
3 51st Street-EB	SR 24 Off Ramp/52nd St	Broadway	Oakland	1	0.81
4 51st Street-WB	Broadway	SR 24 Off Ramp/52nd St	Oakland	1	0.81
5 Shattuck Avenue-NB	51st	Alcatraz Ave.	Oakland, Berkeley	1	0.81
6 Shattuck Avenue-NB	Alcatraz Ave.	Adeline St.	Berkeley	1	0.69
7 Shattuck Avenue-SB	Adeline St.	Alcatraz Ave.	Berkeley	1	0.69
8 Shattuck Avenue-SB	Alcatraz Ave.	51st	Oakland, Berkeley	1	0.81
9 Powel Street-Stanford Avenue-EB	NB I-80 OFF Ramp	San Pablo Ave	Emeryville	1	0.75
O Powel Street-Stanford Avenue-EB	San Pablo Ave	MLK Jr Way	Emeryville,Berkeley	1	0.76
1 Powel Street-Stanford Avenue-WB	MLK Jr Way	San Pablo Ave	Emeryville,Berkeley	1	0.76
Powel Street-Stanford Avenue-WB	San Pablo Ave	NB I-80 OFF Ramp	Emeryville	1	0.75
	Shellmound Way (north of Powell				
3 40thStreet-Shellmound Avenue-EB	St)	40th St	Emeryville	1	0.82
4 40thStreet-Shellmound Avenue-EB	40th St	San Pablo Ave	Emeryville	1	0.64
5 40thStreet-Shellmound Avenue-WB	San Pablo Ave	40th St	Emeryville	1	0.64
6 40thStreet-Shellmound Avenue-WB	40th St	Shellmound Way (north of Powell St)	Emeryville	1	0.82
7 International Boulevard-NB	42nd Ave	Fruitvale Ave	Oakland	1	0.62
8 International Boulevard-NB	Fruitvale Ave	14th Ave	Oakland	1	1.38
9 International Boulevard-NB	14th Ave	Lake Merrit Blvd	Oakland	1	0.88
O International Boulevard-SB	Lake Merrit Blvd	14th Ave	Oakland	1 4	
				1	0.88
1 International Boulevard-SB	14th Ave	Fruitvale Ave	Oakland	1	1.38
2 International Boulevard-SB	Fruitvale Ave	42nd Ave	Oakland	1	0.62
3 Foothill Boulevard-NB	International Blvd/73rd Ave	73rd Ave/Foothill Blvd	Oakland	1	1.07
4 Foothill Boulevard-NB	73rd Ave/Foothill Blvd	Seminary Ave	Oakland	1	1.01
5 Foothill Boulevard-NB	Seminary Ave	High Street	Oakland	1	1.22
6 Foothill Boulevard-NB	High Street	-			

	Results for 2012	LOS Monitoring Study for	the Tier 2 CMP Roadways -	PM Peak Period		
	CMP Tier 2 Route	Segmen	nt Limits	- Jurisdiction	Plan Area	Length
		From	То			(miles)
58	Foothill Boulevard-NB	14th Ave	1st Ave/Lake Shore Blvd	Oakland	1	0.87
59	Foothill Boulevard-SB	1st Ave/Lake Shore Blvd	14th Ave	Oakland	1	0.99
60	Foothill Boulevard-SB	14th Ave	Fruitvale Ave	Oakland	1	1.30
61	Foothill Boulevard-SB	Fruitvale Ave	High Street	Oakland	1	0.89
62	Foothill Boulevard-SB	High Street	Seminary Ave	Oakland	1	1.22
63	Foothill Boulevard-SB	Seminary Ave	73rd Ave/Foothill Blvd	Oakland	1	1.01
64	Foothill Boulevard-SB	73rd Ave/Foothill Blvd	International Blvd/73rd Ave	Oakland	1	1.04
65	E. 15th Street-SB	1st Avenue	14th Avenue	Oakland	1	0.99
66	High Street-EB	Otis Drive	Central Ave	Alameda	1	0.58
67	High Street-EB	Central Ave	Fernside Blvd	Alameda	1	0.48
68	High Street-EB	Fernside Blvd	NB I-880 OFF Ramp	Alameda, Oakland	1	0.49
	High Street-EB	NB I-880 OFF Ramp	Foothill Blvd	Oakland	1	0.62
	High Street-EB	Foothill Blvd	MacArthur Blvd/WB I-580 OFF Ramp	Oakland	1	1.30
71	High Street-WB	MacArthur Blvd/WB I-580 OFF Ramp	Foothill Blvd	Oakland	1	1.73
	High Street-WB	Foothill Blvd	NB I-880 OFF Ramp	Oakland	1	0.62
	High Street-WB	NB I-880 OFF Ramp	Fernside Blvd	Alameda, Oakland	1	0.49
	High Street-WB	Fernside Blvd	Central Ave	Alameda	1	0.48
	High Street-WB	Central Ave	Otis Drive	Alameda	1	0.58
_	Crow Canyon Road-NB	A Street/Redwood Road	EB I-580 ON Ramp/Grove Way	Alameda County	2	0.93
	Crow Canyon Road-NB	EB I-580 ON Ramp/Grove Way	Cull Canyon	Alameda County	2	0.83
	Crow Canyon Road-NB	Cull Canyon	Cold Water Dr	Alameda County	2	0.89
79	Crow Canyon Road-NB	Cold Water Dr	New Checkpoint (Driver to identify)	Alameda County	2	1.48
80	Crow Canyon Road-NB	New Checkpoint (Driver to identify)	County Line	Alameda County	2	3.90
81	Crow Canyon Road-SB	County Line	New Checkpoint (Driver to identify)	Alameda County	2	3.90
	Crow Canyon Road-SB	New Checkpoint (Driver to identify)		Alameda County	2	1.48
	Crow Canyon Road-SB	Cold Water Dr	Cull Canyon	Alameda County	2	0.89
	Crow Canyon Road-SB	Cull Canyon	EB I-580 ON Ramp/Grove Way	Alameda County	2	0.83
	Crow Canyon Road-SB	EB I-580 ON Ramp/Grove Way	A Street/Redwood Road	Alameda County	2	0.93
	Winton Avenue - D Street-EB	Hesperian Blvd.	SB I-880 ON Ramp	Hayward	2	0.41
	Winton Avenue - D Street-EB	SB I-880 ON Ramp	Santa Clara St	Hayward	2	0.33
	Winton Avenue - D Street-EB	Santa Clara St	Soto Rd	Hayward	2	0.55
	Winton Avenue - D Street-EB	Soto Rd	Foothill Boulevard/D St	Hayward	2	0.91
	Winton Avenue - D Street-WB	Foothill Boulevard/D St	Soto Rd	Hayward	2	0.91
•	Winton Avenue - D Street-WB	Soto Rd	Santa Clara St	Hayward	2	0.55
	Winton Avenue - D Street-WB	Santa Clara St	SB I-880 ON Ramp	Hayward	2	0.33
	Winton Avenue - D Street-WB	SB I-880 ON Ramp	Hesperian Blvd.	Hayward	2	0.41
	A Street-EB	Foothill Boulevard/A St	Redwood Rd/Grove Way	Hayward	2	0.80
	A Street-EB	Redwood Rd/Grove Way	EB I-580 ON Ramp/Grove Way	Hayward	2	0.41
	A Street-WB	EB I-580 ON Ramp/Grove Way	Redwood Rd/Grove Way	Hayward	2	0.41
	A Street-WB	Redwood Rd/Grove Way	Foothill Boulevard/A St	Hayward	2	0.80
	Hesperian Boulevard-Union City Blvd-NB	Union City/Alvarado Blvd	Whipple Rd Hesperian/Union City	Union City	3	0.98
	Hesperian Boulevard-Union City Blvd-NB	Whipple Rd Hesperian/Union City	Blvd/overbridge	Union City	3	0.30
	Hesperian Boulevard-Union City Blvd-NB	Blvd/overbridge	Industrial Blvd	Union City	3	0.57
	Hesperian Boulevard-Union City Blvd-NB Hesperian Boulevard-Union City Blvd-SB	Industrial Blvd Tennyson/Hesperian	Tennyson/Hesperian Industrial Blvd	Union City Union City	3	1.04
	Hesperian Boulevard-Union City Blvd-SB Hesperian Boulevard-Union City Blvd-SB	I ennyson/Hesperian Industrial Blvd	Hesperian/Union City Blvd/overbridge	Union City Union City	3	0.57
	Hesperian Boulevard-Union City Blvd-SB	Hesperian/Union City Blvd/overbridge	Whipple Rd	Union City	3	0.30
	,	Whipple Rd	Union City/Alvarado Blvd	Union City	3	0.98
	Alvarado BlvdNB	NB I-880 ON Ramp	Ramp	Union City	<u> </u>	0.21

Tier 2 Arterials 2012 - PM Page D - 13

	<b></b>	Seamer	nt Limits			Length
	CMP Tier 2 Route	From	То	Jurisdiction	Plan Area	(miles)
107	Alvarado BlvdNB	Ramp	Fair Ranch Rd	Union City	3	1.42
	Alvarado BlvdNB	Fair Ranch Rd	Union City/Alvarado Blvd	Union City	3	0.52
	Alvarado BlvdSB	Union City/Alvarado Blvd	Fair Ranch Rd	Union City	3	0.52
	Alvarado BlvdSB	Fair Ranch Rd	Ramp	Union City	3	1.43
	Alvarado BlvdSB	Ramp	NB I-880 ON Ramp	Union City	3	0.21
	Fremont Boulevard-NB	NB I-880 OFF Ramp	Automall Parkway	Fremont	3	1.27
	Fremont Boulevard-NB	Automall Parkway	Blacow Rd	Fremont	3	0.90
	Fremont Boulevard-NB	Blacow Rd	Adams Ave	Fremont	3	0.38
	Fremont Boulevard-NB	Adams Ave	Stevenson Rd	Fremont	3	1.17
	Fremont Boulevard-NB	Stevenson Rd	Mowry Ave	Fremont	3	1.00
	Fremont Boulevard-NB	Mowry Ave	Peralta Blvd	Fremont	3	1.21
	Fremont Boulevard-NB	Peralta Blvd	Thornton Ave	Fremont	3	0.32
	Fremont Boulevard-NB	Thornton Ave	Decoto Rd	Fremont	3	1.34
	Fremont Boulevard-NB	Decoto Rd	Paseo Padre Pkwy	Fremont	3	0.55
	Fremont Boulevard-NB	Paseo Padre Pkwy	SB I-880 OFF Ramp	Fremont	3	0.61
	Fremont Boulevard-NB	SB I-880 OFF Ramp	Paseo Padre Pkwy	Fremont	3	0.40
	Fremont Boulevard-SB	Paseo Padre Pkwy	Decoto Rd	Fremont	3	0.40
	Fremont Boulevard-SB	Decoto Rd	Thornton Ave	Fremont	3	1.34
	Fremont Boulevard-SB	Thornton Ave	Peralta Blvd	Fremont	3	0.32
	Fremont Boulevard-SB	Peralta Blvd	Mowry Ave	Fremont		
	Fremont Boulevard-SB	Mowry Ave	Stevenson Rd	Fremont	3	1.21
		<u> </u>			3	1.00
	Fremont Boulevard-SB	Stevenson Rd	Adams Ave	Fremont	3	1.17
	Fremont Boulevard-SB	Adams Ave	Blacow Rd	Fremont	3	0.38
	Fremont Boulevard-SB	Blacow Rd	Automall Parkway	Fremont	3	0.90
	Fremont Boulevard-SB	Automall Parkway	NB I-880 OFF Ramp	Fremont	3	1.25
	Automall Parkway-EB	NB I-880 OFF Ramp	Fremont Blvd	Fremont	3	0.85
	Automall Parkway-EB	Fremont Blvd	NB I-680 ON Ramp	Fremont	3	0.75
	Automall Parkway-WB	NB I-680 ON Ramp	Fremont Blvd	Fremont	3	0.75
	Automall Parkway-WB	Fremont Blvd	NB I-880 OFF Ramp	Fremont	3	0.77
	Vasco Road-NB	WB I-580 OFF Ramp	Scenic Ave	Livermore	4	0.51
	Vasco Road-NB	Scenic Ave	Dalton Ave/City-County Line	Livermore	4	0.69
	Vasco Road-NB	Dalton Ave/City-County Line	N. Vasco Rd/Vasco Rd	Livermore	4	1.75
139	Vasco Road-NB	N. Vasco Rd/Vasco Rd	Local Road underpass/County Line	Livermore	4	2.80
	Variation Dated OD	l a a l B a a l a a la ma a a /O a a a l i a a	N Vara Bilavara Bil	1.5		
	Vasco Road-SB	Local Road underpass/County Line		Livermore	4	2.80
	Vasco Road-SB	N. Vasco Rd/Vasco Rd	Dalton Ave/City-County Line	Livermore	4	1.75
	Vasco Road-SB	Dalton Ave/City-County Line	Scenic Ave	Livermore	4	0.69
	Vasco Road-SB	Scenic Ave	WB I-580 OFF Ramp	Livermore	4	0.51
	Dublin BlvdEB	San Ramon Road	Village Parkway	Dublin	4	0.73
	Dublin BlvdEB	Village Parkway	Dougherty Rd	Dublin	4	0.81
	Dublin BlvdEB	Dougherty Rd	Hacienda Dr	Dublin	4	1.20
	Dublin BlvdEB	Hacienda Dr	Tassajara Dr	Dublin	4	0.88
	Dublin BlvdWB	Tassajara Dr	Hacienda Dr	Dublin	4	0.88
	Dublin BlvdWB	Hacienda Dr	Dougherty Rd	Dublin	4	1.20
	Dublin BlvdWB	Dougherty Rd	Village Parkway	Dublin	4	0.81
	Dublin BlvdWB	Village Parkway	San Ramon Road	Dublin	4	0.73
	San Ramon Road-NB	WB I-580 OFF ramp	Silvergate Dr	Dublin	4	0.67
	San Ramon Road-NB	Silvergate Dr Alcosta Blvd/Westside Dr/County	Line	Dublin	4	0.98
	San Ramon Road-SB	Line	Silvergate Dr	Dublin	4	0.98
	San Ramon Road-SB	Silvergate Dr	WB I-580 OFF ramp	Dublin	4	0.67
	Dougherty Road-NB	WB I-580 OFF ramp	Amador Valley Blvd on SB	Dublin	4	1.15
	Dougherty Road-NB	Amador Valley Blvd on SB	Fallcreek Rd on SB/County Line	Dublin	4	0.78
158	Dougherty Road-SB	Fallcreek Rd on SB/County Line	Amador Valley Blvd on SB	Dublin	4	0.78
159	Dougherty Road-SB	Amador Valley Blvd on SB	WB I-580 OFF ramp	Dublin	4	1.15
160	Tassajara Road-NB	WB I-580 OFF ramp	Central Parkway	Dublin	4	0.60
161	Tassajara Road-NB	Central Parkway	Somerset Ln/N Dublin Ranch Dr	Dublin	4	0.68
	Tassajara Road-NB	Somerset Ln/N Dublin Ranch Dr	Fallon Rd	Dublin	4	1.05
	Tassajara Road-NB	Fallon Rd	County Line	Alameda County	4	0.50

165 Ta	CMP Tier 2 Route assajara Road-SB	From	То	<ul><li>Jurisdiction</li></ul>	Plan Area	(miles)
165 Ta	assaiara Road-SB		10			(
	,	County Line	Fallon Rd	Alameda County	4	0.50
COLTO	assajara Road-SB	Fallon Rd	Somerset Ln/N Dublin Ranch Dr	Dublin	4	1.05
00 15	assajara Road-SB	Somerset Ln/N Dublin Ranch Dr	Central Parkway	Dublin	4	0.68
67 Ta	assajara Road-SB	Central Parkway	WB I-580 OFF ramp	Dublin	4	0.63
	Stanley Blvd - Railroad Avenue - 1st	SR 84/Isabel Ave	Murrita Blvd	Pleasanton, Alameda County	4	0.98
	. Stanley Blvd - Railroad Avenue - 1st treet-NB	Murrita Blvd	S Livermore Ave	Livermore	4	1.07
	. Stanley Blvd - Railroad Avenue - 1st treet-NB	S Livermore Ave	Inman St	Livermore	4	0.46
	. Stanley Blvd - Railroad Avenue - 1st treet-SB	Inman St	S Livermore Ave	Livermore	4	0.46
172 St	Stanley Blvd - Railroad Avenue - 1st treet-SB	S Livermore Ave	Murrita Blvd	Livermore	4	1.07
173 St	Stanley Blvd - Railroad Avenue - 1st treet-SB	Murrita Blvd	SR 84/Isabel Ave	Pleasanton, Alameda County	4	0.98
	toneridge Drive-EB	NB I-680 OFF Ramp	Hopyard Rd	Pleasanton	4	0.93
	toneridge Drive-EB	Hopyard Rd	Hacienda Dr	Pleasanton	4	0.49
	toneridge Drive-EB	Hacienda Dr	W. Las Positas Blvd	Pleasanton	4	0.64
	toneridge Drive-EB	W. Las Positas Blvd	Santa Rita Road	Pleasanton	4	0.43
	toneridge Drive-EB	Stoneridge Dr/Santa Rita Road	W. Los Positas Blvd	Pleasanton	4	0.29
	toneridge Drive-EB	W. Los Positas Blvd	EB I-580 ON	Pleasanton	4	0.77
	toneridge Drive-WB	EB I-580 ON	W. Los Positas Blvd	Pleasanton	4	0.74
81 St	toneridge Drive-WB	W. Los Positas Blvd	Santa Rita Road	Pleasanton	4	0.29
82 St	toneridge Drive-WB	Santa Rita Road	W. Las Positas Blvd	Pleasanton	4	0.43
83 St	toneridge Drive-WB	W. Las Positas Blvd	Hacienda Dr	Pleasanton	4	0.64
84 St	toneridge Drive-WB	Hacienda Dr	Hopyard Rd	Pleasanton	4	0.49
85 St	toneridge Drive-WB	Hopyard Rd	NB I-680 OFF Ramp	Pleasanton	4	0.66
86 Sı	unol Blvd 1st Street- Stanley BlvdNB	NB I-680 OFF	Bernal Ave	Pleasanton	4	1.22
87 Sı	unol Blvd 1st Street- Stanley BlvdNB	Bernal Ave	Ray/Vineyard	Pleasanton	4	0.64
88 Sı	unol Blvd 1st Street- Stanley BlvdNB	Ray/Vineyard	Bernal Ave/Valley Ave	Pleasanton	4	0.84
89 Sı	unol Blvd 1st Street- Stanley BlvdNB	Bernal Ave/Valley Ave	SR 84/Isabel Ave	Pleasanton, Alameda County	4	2.91
90 Sı	unol Blvd 1st Street- Stanley BlvdSB	SR 84/Isabel Ave	Bernal Ave/Valley Ave	Pleasanton, Alameda County	4	2.91
91 Sı	unol Blvd 1st Street- Stanley BlvdSB	Bernal Ave/Valley Ave	Ray/Vineyard	Pleasanton	4	0.85
92 Sı	unol Blvd 1st Street- Stanley BlvdSB	Ray/Vineyard	Bernal Ave	Pleasanton	4	0.63
	unol Blvd 1st Street- Stanley BlvdSB	Bernal Ave	NB I-680 OFF	Pleasanton	4	1.23

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Table	15: Origin-E	Table 15: Origin-Destination Pair Travel Times	Travel Tin	nes	1998	2000	2002	2004	2006	2008	2010		2012		
O-D Pair	Origin	Destination	Mode	Driving Distance	Avg. (min)	2012 Avg. (min)	No. of Runs	Range of Times	Percent Variation from						
*	- -		Auto	11.2 mi	24	22	22	16	19	14	15	14	4	13-16	
p.m.	Haywara	Newark	Transit		88	92	79	90	98	74	27	76	2	65-88	33
2 p.m.	Emeryville	Berkeley	Auto	4.8 mi	25	26	25	28	22	22	24	N/A	N/A	A/N	
			Transit		61	n/a	26	53	45	70	29	N/A	N/A	N/A	data
			Bike		33	30	30	33	30	32	47	N/A	N/A	N/A	
*8			Auto	34.5 mi	53	45	49	19	19	54	51	38	4	34-45	-25
p.m.			Transit		144	152	141	120	113	143	N/A	112	2	101-124	22**
4		San	Auto	10.8 mi	35	29	32	41	34	27	27	24	4	22-28	-11
p.m.	Oaklaria	Leandro	Transit		74	64	99	20	99	78	29	9/	2	69-84	13
2*			Auto	18.0 mi	31	34	33	27	39	26	37	N/A	N/A	N/A	Unqualified
p.m.	цещош	riedsanion	Transit		130	122	125	146	181	145	154	N/A	N/A	A/N	data
9	, , , , , , , , , , , , , , , , , , ,	9	Auto	14.8 mi	39	22	49	30	33	27	28	28	4	22-37	0
a.m.		san Jose	Transit		129	104	118	94	111	82	73	93	2	86-68	27
a.m.	Fremont	San Jose	Auto	14.8 mi		35	34	27	25	23	23	25	4	21-30	6
*		; ; ; ;	Auto	26.6 mi	28	09	62	45	27	41	52	N/A	N/A	N/A	Unqualified
р.п.	Oaklaria	riedsariiori	Transit		81	96	91	77	7.5	107	74	N/A	N/A	∀/Z	data
6		\(\frac{7}{2}\)	Auto	25.2 mi	20	27	53	64	52	43	48	40	4	34-46	-17
p.m.		Aldilledd	Transit		98	74	70	123	102	94	16	88	2	84-92	-3
10			Auto	6.8 mi	21	17	21	22	21	22	24	N/A	N/A	N/A	Unqualified
р. Э.	ם ב	Oakidid	Transit		51	47	45	45	43	51	52	N/A	N/A	N/A	data

<sup>\*</sup> Destination for these four O-D pairs changed since 2004. \*\* Comparison made with 2008 data as 2010 data was not available. Note: For details on unqualified data, please refer to Appendix F.

Table 16: Travel Times on Bay Bridge Crossings

Bridge	Time	From-To	200	)1	200	03	2009	2012	Percent
	Period		Segment	Total	Segment	Total	Total	Total	Difference
			Travel	Travel	Travel	Travel	Travel	Travel	between
			Time	Time	Time	Time	Time	Time	2009-2012
Dumbarton	Westbou	ınd (toward San Mateo Count	y)						
Bridge	a.m.	2001-03: I-880 - US 101	25	32	7	14	9.7	12.2	26%
(SR 84)	a.m.	2009-12: I-880 - SR 84 @	7		7				
	p.m.	University Ave	6	12	6	11	8.8	9.7	10%
	p.m.		6		5				
	Eastbour	nd (toward Alameda County)							
	a.m.	2001-03: US 101 - I-880	6	12	5	11	10.8	12.3	14%
	a.m.	2009-12: SR 84 @ University	6		6				
	p.m.	Ave - I-880	17	26	14	23.5	11.1	13.9	25%
	p.m.		9		9.5				
San Mateo	Westbou	ind							
Bridge	a.m.	2001-03: I-880 - US 101	20	27	8	15.5	12.3	15.3	24%
(SR 92)	a.m.	2009-12: I-880 - SR 92 @	7		7				
	p.m.	Foster City Blvd	8	15	7	14.5	10.9	10.8	-1%
	p.m.		7		7.5				
	Eastbour	nd							
	a.m.	2001-03: US 101 - I-880	7	13	7	14	10.5	10.9	4%
		2009-12: SR 92 @ Foster City	6		7				
	p.m.	BIvd - I-880	20	39	7	24	16.5*	13.4	-19%
			19		17				
Bay Bridge	Westbou	ind							
(1-80)	a.m.	2001-09: I-580 merge - 5th	_	31	_	26	12.8*	13.6	6%
		St Off-ramp	_		_				
	p.m.	2009-12: I-880@ 7th St to	_	17	_	23.5	12.6*	16.1	28%
		I-80 @ Fremont St	_		_				
	Eastbour	nd							
	a.m.	2001-03: Sterling St On-	_	8	_	8	7.9*	8.2	4%
		ramp - I-580 Off-ramp	_						
	p.m.	2009-12: I-80 @ 4th St to	_	14	_	17.5	12.2*	14	15%
		I-880 @ Grand Ave							

 $<sup>^{\</sup>ast}$  Reflects computation error correction to previously reported data

### SR 24 EB - AM

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	Run Number							
	Date							
	Start Time							
	Driver							
Checkpoint	Distance							
<u>Eastbound</u>								
Jct I-880 Ramp (off)	0.00							
12th St.	0.58							
19th	0.26							
Jct I-580 (off)	0.62							
Jct I-580 (on)	0.86							
Claremont/Telegraph	0.93							
Broadway/ SR 13	1.15							
SR 13 Ramp (on)	1.34							
Caldecott (Enter)	0.07							
Fish Ranch Road	1.03							
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# Alameda CMA 2010 LOS Monitoring

**SR 24 EB - AM** 

	Run Number	1	2	3	4	5	6
	Date		3/8/2012	3/21/2012	3/21/2012	5/1/2012	5/24/2012
	Start Time		8:41 AM			8:08 AM	
	Driver						
		8022-370-591521a8bd8f_Part2					
Checkpoint	Distance	Wednesday				Tuesday	
•					,	¥	,
Jct I-880 Ramp (off)	0.00	8:15:53 AM	8:41:58 AM	7:34:30 AM	7:55:07 AM	8:08:47 AM	7:02:26 AM
12th St.	0.58	8:16:26 AM	8:42:34 AM	7:35:01 AM		8:09:24 AM	
19th	0.26	8:16:48 AM	8:42:54 AM	7:35:20 AM	7:56:02 AM	8:09:46 AM	7:03:21 AM
Jct I-580 (off)	0.62	8:17:28 AM	8:43:28 AM	7:35:54 AM	7:56:35 AM	8:10:24 AM	7:03:58 AM
Jct I-580 (on)	0.86	8:18:17 AM	8:44:15 AM	7:36:40 AM	7:57:22 AM	8:11:11 AM	7:04:48 AM
Claremont/Telegraph	0.93	8:19:08 AM	8:45:05 AM	7:37:30 AM	7:58:12 AM	8:12:02 AM	7:05:44 AM
Broadway/ SR 13	1.15	8:20:10 AM	8:46:06 AM	7:38:33 AM	7:59:15 AM	8:13:06 AM	7:06:52 AM
SR 13 Ramp (on)	1.34	8:23:06 AM	8:52:06 AM	7:40:54 AM	8:01:51 AM	8:16:51 AM	7:07:52 AM
Caldecott (Enter)	0.07	8:25:25 AM	8:53:17 AM	7:42:36 AM		8:18:45 AM	7:08:22 AM
Fish Ranch Road	1.03	8:26:49 AM	8:54:53 AM	7:44:12 AM	8:04:59 AM	8:20:26 AM	7:09:43 AM
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## SR 24 EB - AM

	Run Number	1	2	3	4	5	6	7	8	9	10	11	12	Average
	Date				-						1			11,614.90
	Start Time													1
	Driver	0	0	0	0	0	0	C	0					
Checkpoint	Distance													
Jct I-880 Ramp (off)	0.00													
12th St.	0.58	0:00:33	0:00:36	0:00:31	0:00:35	0:00:37	0:00:34							0:00:34
19th	0.26	0:00:22	0:00:20	0:00:19	0:00:20	0:00:22	0:00:21							0:00:21
Jct I-580 (off)	0.62	0:00:40	0:00:34		0:00:33	0:00:38								0:00:36
Jct I-580 (on)	0.86	0:00:49	0:00:47	0:00:46	0:00:47	0:00:47								0:00:48
Claremont/Telegraph	0.93	0:00:51	0:00:50	0:00:50	0:00:50	0:00:51	0:00:56							0:00:51
Broadway/ SR 13	1.15	0:01:02	0:01:01	0:01:03	0:01:03	0:01:04								0:01:04
SR 13 Ramp (on)	1.34	0:02:56	0:06:00	0:02:21	0:02:36	0:03:45								0:03:06
Caldecott (Enter)	0.07	0:02:19	0:01:11	0:01:42	0:01:33	0:01:54	0:00:30							0:01:31
Fish Ranch Road	1.03	0:01:24	0:01:36	0:01:36	0:01:35		0:01:21							0:01:32
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### Alameda CMA 2006 LOS Monitoring

### SR 24 EB - AM

	Run Number	1	2	3	4	5	6	7	8	9	10	Average	Standard
	Date												Deviation
	Start Time												
	Driver	0	0	0	0	0	0	0	0				
Checkpoint	Distance												
Jct I-880 Ramp (off)	0.00												
12th St.	0.58	63.3	58.0	67.4	59.7	56.4	61.4					61.0	3.9
19th	0.26	42.5	46.8	49.3	46.8	42.5	44.6					45.4	2.7
Jct I-580 (off)	0.62	55.8	65.6	65.6	67.6	58.7	60.3					62.3	4.7
Jct I-580 (on)	0.86	63.2	65.9	67.3	65.9	65.9	61.9					65.0	2.0
Claremont/Telegraph	0.93	65.6	67.0	67.0	67.0	65.6	59.8					65.3	2.8
Broadway/ SR 13	1.15	66.8	67.9	65.7	65.7	64.7	60.9					65.3	2.4
SR 13 Ramp (on)	1.34	27.4	13.4	34.2	30.9	21.4	80.4					34.6	23.6
Caldecott (Enter)	0.07	1.8	3.5	2.5	2.7	2.2	8.4					3.5	
Fish Ranch Road	1.03	44.1	38.6	38.6	39.0	36.7	45.8					40.5	
	1												

# Alameda CMA 2006 LOS Monitoring

SR 24 EB - AM

Checkpoint	Total Distance	Jurisdiction	Number of Runs	Average Elapsed Time	Average Speed	Arterial Class	Level of Service	Segment Number	Segment Distance	Segment Time	
Jct I-880 Ramp (off)		Oak	9								Jct I-880 Ra
12th St.		Oak	9					1	0.58	0:00:34	12th St.
19th		Oak	9					1	0.84	0:00:55	19th
Jct I-580 (off)		Oak	9					1	1.46	0:01:31	0:01:31 Jct I-580 (of
Jct I-580 (on)	2.32	Oak	9	0:02:19	60.23		Α	1	2.32	0:02:19	Jct I-580 (oı
Claremont/Telegraph		Oak	9					2-a	0.93	0:00:51	0:00:51   Claremont/
Broadway/ SR 13	2.08	Oak	9	0:01:55	65.21		A	2-a	2.08	0:01:55	Broadway/ ;
SR 13 Ramp (on)		Oak	9					2-b	1.34	0:03:06	0:03:06 SR 13 Ram
Caldecott (Enter)	1.41	Oak	9	0:04:38	18.27		F	2-b	1.41	0:04:38	0:04:38 Caldecott (F
Fish Ranch Road	1.03	Oak	9	0:01:32	40.23		Е	2-c	1.03	0:01:32	0:01:32 Fish Ranch

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