

1333 Broadway, Suites 220 & 300

www.AlamedaCTC.org

Community Advisory Working Group Meeting Agenda

Thursday, April 7, 2011, 2:30 to 5 p.m. 1333 Broadway, Suite 300, Oakland, CA 94612

Meeting Outcomes:

- Receive an update on the Countywide Transportation Plan and Transportation Expenditure Plan (CWTP-TEP) activities since the last meeting
- Discuss the transportation issue papers and best practices
- Receive a presentation of polling results
- Receive an update on call for projects and programs and discuss methods for packaging transportation projects and programs for CWTP
- Discuss outreach outcomes and next steps
- Receive an update on the Sustainable Communities Strategy (SCS)/Regional Transportation Plan (RTP) process

2:30 – 2:35 p.m.	1.	Welcome and Introductions
2.00 E.00 p		

2:35 – 2:40 p.m.	2.	Public Comment	I
2:40 – 2:45 p.m.	3.	Review of March 3, 2011 Minutes <u>03 CAWG Meeting Minutes 030311.pdf</u> – Page 1 <u>03A Summary CAWG Comments in Breakout Session 030311.pdf</u> – Page 7 <u>03B Summary TAWG Comments on PerfMeas and IssPapers</u> <u>031011.pdf</u> – Page 11	Ι
2:45 – 2:50 p.m.	4.	Update on CWTP-TEP Activities Since Last Meeting	I
2:50 – 3:00 p.m.	5.	Discussion on Transportation Issue Papers and Best Practices <u>05 Memo Transportation Issues Overview.pdf</u> – Page 13 <u>05A Sustainability Principles.pdf</u> – Page 15 <u>05B Innovative Funding Opportunities.pdf</u> – Page 29 <u>05C Transit Integration and Sustainability.pdf</u> – Page 45 The following will be posted on the website prior to the meeting: <u>05D Transportation Demand and Parking Management.pdf</u> <u>05E Goods Movement.pdf</u>	Ι

05F Land Use and CWTP.pdf

3:00 – 3:30 p.m.	6. Presentation on Polling Results and Outreach Outcomes <u>O6 Polling Results Presentation.pdf</u> – Page 61 <u>O6A Memo Outreach Update.pdf</u> – Page 79 <u>O6B Outreach Presentation.pdf</u> – (handout at meeting)	I
3:30 – 4:30 p.m.	 7. Breakout Session Discussion: A. Call for Projects and Programs Update and Methods for Packaging Transportation Projects and Programs for CWTP 07A Memo on Programs and Projects Packaging.pdf – Page 85 07A1 Preliminary List of Programs and Projects.pdf – (handout at meeting) 07A2 Adopted Performance Measures.pdf – Page 89 07A3 CWTP-SCS-RTP Process Flowchart.pdf – Page 91 	I
4:30 – 4:50 p.m.	8. Report Back from Breakout Session	I
4:50 – 4:55 p.m.	9. SCS/RTP: Update on Countywide and Regional Processes <u>09 Memo Regional SCS-RTP CWTP-TEP Process.pdf</u> – Page 93 <u>09A Summary CW Regional Planning Activities</u> – Page 97 <u>09B CWTP-TEP-SCS Development Impl Schedule.pdf</u> – Page 99 <u>09C ABAG Memo on Initial Vision Scenario.pdf</u> – Page 103 <u>09D ABAG IVS Presentation.pdf</u> – Page 105 <u>09E RTP-SCS Overview and Schedule.pdf</u> – Page 127	I
4:55 - 5:00 p.m.	10. Update: Steering Committee, CAWG, and TAWG and Other Items/Next Steps <u>10 CWTP-TEP Committee Meetings Schedule.pdf</u> – Page 131 <u>10A CAWG Roster.pdf</u> – Page 135	I
5:00 p.m.	11. Adjournment	

Key: A – Action Item; I – Information/Discussion Item; full packet available at <u>www.alamedactc.org</u>

Next Meeting:

Date:	May 5, 2011
Time:	2:30 to 5 p.m.
Location:	Alameda CTC Offices, 1333 Broadway, Suite 300, Oakland, CA 94612

Staff Liaisons:

Tess Lengyel, Manager of Programs and Public Affairs (510) 208-7428 <u>tlengyel@alamedactc.org</u>

Beth Walukas, Manager of Planning (510) 208-7405 <u>bwalukas@alamedactc.org</u> Diane Stark, Senior Transportation Planner CAWG Coordinator (510) 208-7410 <u>dstark@alamedactc.org</u>

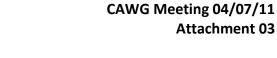
Saravana Suthanthira, Senior Transportation Planner TAWG Coordinator (510) 208-7426 <u>ssuthanthira@alamedactc.org</u>

Location Information: Alameda CTC is located in Downtown Oakland at the intersection of 14th Street and Broadway. The office is just a few steps away from the City Center/12th Street BART station. Bicycle parking is available inside the building, and in electronic lockers at 14th and Broadway near Frank Ogawa Plaza (requires purchase of key card from bikelink.org). There is garage parking for autos and bicycles in the City Center Garage (enter on 14th Street between Broadway and Clay). Visit the Alameda CTC website for more information on how to get to the Alameda CTC: <u>http://www.alamedactc.org/directions.html</u>.

Public Comment: Members of the public may address the committee regarding any item, including an item not on the agenda. All items on the agenda are subject to action and/or change by the committee. The chair may change the order of items.

Accommodations/Accessibility: Meetings are wheelchair accessible. Please do not wear scented products so that individuals with environmental sensitivities may attend. Call (510) 893-3347 (Voice) or (510) 834-6754 (TTD) five days in advance to request a sign-language interpreter.

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www.AlamedaCTC.org

Alameda CTC Community Advisory Working Group Meeting Minutes Thursday, March 3, 2011, 2:30 p.m., 1333 Broadway, Suite 300, Oakland

Atte	ndance Key (A = Absent, P = Present)					
CAWG Members:						
<u>P</u> Lindsay Arnold	<u> P JoAnn Lew</u>	<u>P</u> Carmen Rivera-				
<u>A</u> Joseph Cruz	<u>A</u> Teresa McGill	Hendrickson				
P_ Charissa Frank	P_Gabrielle Miller	P Anthony Rodgers				
<u>A</u> Arthur Geen	<u>P</u> Betsy Morris	<u> </u>				
A_ Chaka-Khan Gordon	P_Betty Mulholland	P Diane Shaw				
<u> </u>	<u> </u>	<u>P</u> Sylvia Stadmire				
P_ Unique Holland	P_Carli Paine (Joel Ramos	<u> </u>				
<u>P</u> Lindsay Imai Hong	attended)	<u> </u>				
<u>A</u> Roop Jindal	P_James Paxson					
<u>A</u> David Kakishiba	<u>P</u> Patrisha Piras					
Staff:						
<u>P</u> Tess Lengyel, Programs and Public Affairs Manager		Roesel, Cambridge Systematics				
P Beth Walukas, Manager of Planning	P Diane Stark, Senior Transportation Planner P Saravana Suthanthira, Senior Transportation Planner					
P Joan Chaplick, MIG	P Angie Ayers, Acumen Building Enterprise, Inc.					
P_ Stephen Decker, Cambridge Systematics						
P Bonnie Nelson, Nelson\Nygaard						

1. Welcome and Introductions

Tess Lengyel called the Community Advisory Working Group meeting to order at 2:40 p.m.

Guests Present: Dave Campbell, East Bay Bicycle Coalition; and Barry Ferrier, Alameda CTC Citizens Advisory Committee (CAC).

2. Public Comments

There were no public comments.

3. Review of February 3, 2011 Meeting Minutes

CAWG members reviewed the meeting minutes from the February 3, 2011 meeting and approved them as written.

4. Update on CWTP-TEP Activities Since Last Meeting

Tess Lengyel gave an update on the CWTP-TEP activities since the last meeting. She mentioned that the first public workshop was held on Thursday, February 24, 2011 in Oakland, and approximately 50 people attended. Mayor Green gave an introduction, and the attendees separated into groups to provide feedback on transportation needs and

priorities in Alameda County. Tess stated that the information is being documented and will be available on the website. She mentioned that about 25 people attended the meeting on Monday, February 28 in Fremont. She stated that a great deal of technical work is on-going and that several items will be presented at this CAWG meeting and feedback is requested.

5. Finalizing Briefing Book

Bonnie Nelson stated that the Briefing Book was updated to include the responses from CAWG, TAWG, and the Steering Committee. She informed the committee that the Briefing Book was uploaded on the website this morning. Bonnie mentioned that the Briefing Book was restructured significantly, because many people thought it did not address the needs of the youth and low-income community. She stated that chapters 5 *Transit* and 6 *Paratransit* were combined into chapter 5 *Transit*. The new chapter 6 is titled *Communities of Concern,* which addresses mobility needs of the low income community, seniors and people with disabilities. Bonnie stated that many of the other comments were technical and factual in nature. Bonnie informed the committee that the Briefing Book will go before the Steering Committee on March 24 for approval. A summary of all comments received and how they were addressed was handed out to CAWG members and is also available on the Alameda CTC website.

6. Discussion of Committed Funding and Project Policy Comments to MTC

Beth stated that last month at CAWG, Alameda CTC discussed the Metropolitan Transportation Commission's (MTC) preliminary draft committed fund and projects policy. She informed the committee that in February, the Steering Committee gave Alameda CTC direction on drafting comments to MTC regarding the definition of a committed project, specifically to recommend projects be committed when the environmental documentation is completed and not when it's under construction. Beth mentioned that MTC will review the draft committee fund and project policy on March 11 and will finalize it in April. She informed the committee that the comments to MTC will be posted to the Alameda CTC website, and CAWG members will receive a copy via e-mail once the document is available.

Questions/feedback from the members:

- Will all projects be evaluated (both committed and non-committed)? Staff said the call for projects and programs is open to committed and non-committed projects. They will be screened as part of MTC's Regional Transportation Plan (RTP) Call for Projects process. How they will be evaluated will be discussed by the committees in April and May and depends on the policy that MTC adopts. Will Alameda CTC do a project-level screening outside of the Regional Transportation Plan (RTP)? Yes, an evaluation of projects will be done in May and June for the Countywide Transportation Plan concurrent with MTC Regional Transportation Plan performance assessment.
- Will all existing projects need to re-apply? Will all projects start from scratch and go through the screening process? Beth said that we are not starting from scratch, and the question will be answered in the agenda item 7 discussion. Projects that are

new will have to enter information, but projects that are carried over from previous RTPs just need to be updated.

7. Review and Discussion of Call for Projects

Tess reviewed the Alameda CTC call for projects process on page 49 of the agenda packet. She discussed how Alameda CTC will meet the requirements of MTC's call for projects. Tess stated that the deadline for Alameda CTC to submit projects to MTC is April 29, 2011. The deadline for the jurisdictions and transit operators to submit projects to Alameda CTC is April 12, 2011. She mentioned that MTC allocated Alameda County a target budget of \$11.76 billion; however, the amount the county will actually receive will be less. Tess explained that the Federal Transportation Bill has not been reauthorized, and that its final passage will impact the amount the counties will receive for federally funded transportation projects.

Tess explained the submittal for projects and programs will take place in two steps: 1) Alameda CTC will submit a draft list of projects and programs to meet the April 29 deadline, which staff will present to the Steering Committee at the April 28 meeting for approval; and 2) Alameda CTC will present a final list of projects and programs in May 2011 to Alameda CTC committees (the advisory and Commission-related committees) with a public hearing at the May 26 Steering Committee meeting. The Steering Committee will request that the Commission approve the list of projects at the May 26 meeting. Staff will forward the approved final list to MTC on May 27.

Tess stated the specific call for project and programs activities that are required to be implemented by the county congestion management agencies according to MTC guidance:

- Public Involvement and Outreach
- Agency Coordination
- Title VI Responsibilities
- County Target Budgets
- Cost Estimation Review
- General Project Criteria
- Programmatic Categories

Tess informed the committee that the Steering Committee and the Commission approved staff's recommendation of the Alameda CTC call for projects process and timeline for implementation of the MTC-directed call for projects.

Questions/feedback from the members:

 Will the agencies perform a gatekeeper function? Is there a way for projects/programs collected through public meetings to be included? Tess noted that all information gathered from the outreach process is being shared with project sponsors and that Alameda CTC can assist connecting non-governmental agencies interested in submitting projects with eligible public agencies, but that the Alameda CTC cannot require that a public agency serve as a sponsor. Alameda CTC is serving as the gatekeeper for Alameda County project submittals and will be coordinating with Caltrans and the transit operators.

- How can we ensure the public that we are not ignoring them? Tess said that comments will be uploaded to the website. Can we reach people who do not have a website? Tess mentioned that the Alameda CTC will use different mechanisms to reach people, including through general agency outreach and presentations as well as the agency newsletter as a communication vehicle. She informed the group that the next major outreach step will be in the fall when Alameda CTC will have a draft of the CWTP and TEP. The goal is to create a transparent trail so people can see progress during the process.
- The description for the Title VI reference is regarding the input process only. How the final plans meet Title VI also will be addressed.
- Can Alameda CTC get the word out about the public hearing? Alameda CTC will use newspapers, e-mails, and send mailings to notify the public about the public hearing.
- Does the \$11.76 billion include local, federal, and state funds? Beth said that it is a target number that includes federal, state and local funds.

Beth gave a presentation on how projects and programs will be evaluated for the regional and countywide transportation plans. She detailed the land use and transportation evaluation approach and presented a timeline that showed how the process would converge to one land use and transportation project/program list for the CWTP-TEP and inform the RTP/SCS process. Beth explained that the purpose of project and program evaluation is to measure whether projects meet CWTP/RTP goals and other criteria.

8. Breakout Session Discussions: Finalize Performance Measures, Transportation Issues for CWTP, and Transportations Programs

The CAWG members separated into three groups to give input on the final performance measures, transportation issues, and transportation programs.

9 Report Back from Breakout Session

At the end of the breakout session, each group gave a summary of the information covered in its individual group to the full CAWG group. Summaries of comments of members' input are attached. See attachment 03A.

Staff informed the committee that the notes will be typed and given to TAWG as well as placed on the website by March 10, 2011.

10. Update on Outreach Activities including a Polling Update

Tess gave an update on the outreach status. She stated to date, 88 people participated in the outreach toolkit activities, 95 toolkits were distributed at the toolkit training sessions, 250 paper questionnaires were completed, and 225 online questionnaire responses were submitted.

Tess mentioned that the comments from CAWG, TAWG, and the Steering Committee on the draft poll questions were incorporated to create a final list of polling questions. The first poll, which will serve as a baseline study will be conducted the week of March 7.

11. Update on Countywide and Regional Processes

Due to time constraints, this item was not covered. Staff requested that members read the material in the packet.

12. Steering Committee, CAWG, and TAWG Update

Staff informed the committee that the Steering Committee meeting on March 24 will be from 11 a.m. to 1 p.m. TAWG will have a special meeting on March 18 from 11:30 a.m. to 2 p.m. at Hayward City Hall. At this meeting, the Planning Directors will receive a presentation from ABAG on the Initial Vision Scenario.

13. Adjournment.

The meeting adjourned at 5 p.m.

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CAWG Summary of Breakout Sessions on: Performance Measures, Issues Papers, and Programs March 3, 2011

The following summarizes comments across three discussion groups held at the March 3rd, 2011 meeting of the Community Advisory Working Group for the Alameda Countywide Transportation Plan and Transportation Expenditure Plan (CWTP-TEP). The groups discussed three topics: Draft Performance Measures, Transportation Issues Paper Outlines, and identification of Transportation Programs. Their comments are presented by topic below.

Draft Performance Measures

- Include measures of personal security
- For the multi-modal measure, include trips by trucks to capture goods movement
- For accessible, affordable, and equitable:
 - Projects that are part of a plan (Bike/Ped) should get priority
 - Consider breaking out the transit portion by operator
- For integrated with land use patterns measure:
 - Break out by bus vs rail
 - How to measure pedestrian/disabled infrastructure?
- Measure by geographical areas
 - Neighborhood level?
 - MTC tried in T2035
 - Snap shot analysis
- Use 2010 Census Measurement tools should not restrict Performance Measurement
- Use complete streets as a measure
 - Included under connectivity?
 - Tie in under cost effectiveness
- For Equity, consider social equity, such as reducing equity gaps in transportation system so that more people have access to the same basic service (how will this be measured?)
- In general, need to measure flexible access to "use" the transportation system (e.g., freedom of using multiple transport modes)
- Measure whether modal connectivity is being improved (e.g, bus, car connectivity)
- Measure whether complexity of transit transfers is being reduced
 - This goes back to complete streets
 - Maybe it's a policy rather than a specific performance measure

Transportation Issue Paper Outlines

Issue Paper 1: Sustainability Principles

- Include health public health as case studies
- Consider the Robert Wood Johnson Foundation as a case study
- Alameda County case studies
 - o Fruitvale Village
 - Hayward TOD

Issue Paper 2: Land Use and Countywide Transportation Plan

- Include analysis on what the true cost of free parking is
- Consider parking revenue to offset transit costs
- Include case studies of cities that have used parking pricing
- Alameda County cities could serve as pilot programs

Issue Paper 3: Transit Integration and Sustainability

- Address air quality issues with regard to infill development
- When addressing transit sustainability, include faster, speedier transit services

In general address the following in the Issues Papers:

- Transportation investments to support existing and promote new affordable housing as well as connectivity in neighborhoods and to jobs
- Identify where partnerships of various jurisdictions could support sharing resources
- Review and possibly use as a case study, the Victoria Transport Policy Institute (VTPI) study regarding increasing transit funding and how this investment in transit provided increased effectiveness
- Sustainability Portland and Vancouver as example case studies
- What is the impact of redevelopment funding shortfall or elimination on transit improvements
- Redevelopment in underdeveloped areas, this is an emerging financing and funding issue, as well as an equity issue, if people are displaced
- Include design guidelines policy
- Address the need for street furniture
 - o Racks (papers)
 - o Benches
 - o Loading points for bikes
 - Focus on configuring streets to meet transit user needs
 - Apply context sensitive solutions
- Develop guidelines for public rights of way
- Identify other funding options
 - Vehicle registration fees
 - o Innovative strategies
 - o Gas tax
 - Pricing
 - Private partnerships
 - Impact fees

• Free Transit Downtown

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- Parking restrictions (coupled with free transit)
- Park and ride schemes
- Street Parking should not be free
- Parking Management
- Goods Movement Issues
 - o Private operation rules
 - Better access try to avoid delivery trucks occupying bus stops
 - Truck route enforcement
 - o Local street loading
 - Double parking issues
 - Enforcement or plan for adequate loading zone
 - Could be part of complete streets
- Provide links (web) to National Cooperative Highway Research Program (NCHRP) documents from sustainability white papers

Transportation Programs

Group A

- Free bus passes for youth (get youth to school)
- Transit Operations "Think 80's"
 - Restore service levels
 - Serve new housing
 - Focus service on people
- Highway Maintenance
- Local Road Maintenance
- Education & Promotion for active transportation and transit
 - o Seniors
 - o Youth/students
- Regional/local greenhouse gas reduction
- Pedestrian friendly intersections

Group B

- Safe Routes to School
- Noise abatement
- Well maintained streets
- Program supporting seniors mobility
- Program to prevent displacement in transit rich areas TOD
- First mile/last mile shuttles

Group C

- Free bus pass for students
 - Eco pass, aimed at students
 - 6-12 grades
- How to represent TOD?
 - Could be tagged in multiple categories
- Travel Choice
- Safety (could fall under safe routes to school)
- Safe Place
 - o Transit vehicle connection w/people/kids in distress (seniors, kids)
- Expanded Guaranteed Ride Home Program
 - o Beyond work
 - Senior social service
- Educational Program
 - o Associated w/transit safety

TAWG Summary on: Draft Performance Measures and Issues Papers March 10, 2011 Meeting

The following summarizes comments from the March 10, 2011 meeting of the Technical Advisory Working Group for the Alameda Countywide Transportation Plan and Transportation Expenditure Plan (CWTP-TEP). The group discussed: Draft Performance Measures and Transportation Issues Paper Outlines. Their comments are presented by topic below.

Draft Performance Measures

- 1. A question was raised regarding how rural roads will be evaluated. There are many rural roads in some parts of the county and safety is a major concern.
- 2. With regard to the proposed multimodal measure, there was a request to include all modes; autos are not currently included.
- 3. With regard to discussion of certain measures being calculated per capita, someone wanted a definition of per capita, which means per person.
- 4. A comment was made that pedestrian and bike connectivity is not addressed by these measures.
- 5. With regard to the safety measure, there was a request that injuries and fatalities be calculated using rates (e.g. X injuries and fatalities per million vehicles).
- 6. There was a request to add density as a measure for housing affordability. It was mentioned that according to the California Department of Housing and Community Development, in order for housing to be considered affordable, it has to contain at least 30 units/acre.
- 7. There was a question regarding how "major activity centers" would be defined. It was suggested that the countywide pedestrian plan contains a definition that may be useful.

Transportation Issues Paper Outlines

- Add Transportation System Management and include pricing as a way to manage congestion.
- Provide examples of best practices for each of the key transportation issues and use local examples when possible.

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785 Market Street, Suite 1300 San Francisco, CA 94103 (415) 284-1544 FAX: (415) 284-1554

MEMORANDUM

To: Community Advisory Working Group (CAWG) and Technical Advisory Working Group (TAWG) and CWTP-TEP Steering Committee

From: Bonnie Nelson, Nelson\Nygaard

Date: March 25, 2011

Subject: Transportation Issue Papers

The transportation issue papers are intended to provide a bridge between the big picture needs/issues/priorities discussions that have been the topic of much of our discussions and outreach to date and the next stages of the Countywide Transportation Plan (CWTP) and Transportation Expenditure Plan (TEP) development that will occur over the next few months. These issue papers provide case studies and additional background on key issues for the CWTP as well as providing a framework to think about how to approach transportation in the Plans.

The issue papers are intended to stimulate thinking and discussions around some of the important and challenging issues that we are facing in development of these Plans. Ultimately, we hope these can spur innovative thinking about project and program packaging and evaluation as we prioritize projects for both the CWTP and refine our list of projects for the Regional Transportation Plan.

Three of the six draft papers are attached. They are:

- Sustainability Principles
- Innovative Funding Opportunities
- Transit Integration and Sustainability

The remaining three issue papers are not included with this agenda item and will be posted on the Alameda CTC website at <u>http://www.alamedactc.org/app_pages/view/816</u>.

- Transportation Demand Management and Parking Management
- Goods Movement
- Land Use and the Countywide Transportation Plan

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ISSUE PAPER: SUSTAINABILITY PRINCIPLES

INTRODUCTION

This report outlines principles of sustainability and how they could be implemented in Alameda County through the Countywide Transportation Program (CWTP). Key conclusions include:

- A sustainable transportation system is one that meets the needs of the present without compromising the needs of future generations. This can include both an environmental dimension (e.g. ensuring protection of air quality and minimizing climate change impacts) and a financial dimension (ensuring future generations aren't financially burdened by choices made today). Sustainability can also include the concepts of equity and economic health.
- Sustainability is increasingly becoming a fundamental principle by which transportation agencies and local governments guide their operations, policies, and investment decisions. The passage of greenhouse gas legislation in California (AB 32 and SB 375) has created an additional impetus to focus on improving sustainability by reducing greenhouse gas emissions that contribute to climate change and sea level rise.
- The CWTP can support sustainability principles by focusing investments on environmental protection and cost-effective use of transportation resources. Examples of cost-effective strategies include transportation demand management (TDM) and systems management strategies (such as Intelligent Transportation Systems, or ITS) that enhance mobility while reducing environmental impacts and infrastructure costs. New investments should be targeted to support efficient travel patterns, in part by concentrating high capacity services in corridors that can support that type of investment, and focusing regionally on alternatives to increasing auto vehicle miles traveled.
- Sustainability cannot be achieved just through transportation actions, but must be linked with decisions in other sectors, especially land use and environmental planning. "Sustainable communities" include compact, walkable neighborhoods that provide good transportation options and minimize the need for driving.
- The Alameda County Transportation Commission (CTC) can further support sustainability by tracking sustainability metrics over time; ensuring that CWTP investments yield expected outcomes; ensuring the CTC applies sustainability principles to its daily operations; and by creating grant programs that foster innovative approaches to improving sustainability.

The goals of this white paper are to:

- Define sustainability and explain how it applies to transportation;
- Provide examples of how other transportation agencies and their plans have supported sustainability principles; and
- Identify specific ways in which the CWTP can support sustainability principles.



What is Sustainability?

Sustainability means meeting the needs of the present without compromising the ability of future generations to meet their own needs.⁷ An expanded definition is based on three sustainability principles – environment, economy, and social systems, which include quality of life and equity (see Figure 1): "Sustainability means meeting human needs for the present and future, while preserving environmental and ecological systems, improving quality of life, promoting economic development, and ensuring equity between and among population groups and over generations."²

Figure 1 Three Dimensions of Sustainability



Source: Caltrans

Sustainability also commonly includes the notion of fiscal prudence. Sustainable transportation investment decisions are those that avoid disproportionately burdening future generations and endangering the financial health of public agencies.

Although sustainability can be achieved many different ways and through many different types of investments, the role of community design, not just transportation systems, is key. Some define sustainable communities as compact, walkable neighborhoods that provide transportation options and minimize the need for driving. Such communities weave together all the dimensions of sustainability. Sustainable communities that support walking and bicycling not only improve air quality and reduce energy use and GHG emissions, but also improve public health through opportunities for "active transportation" and recreation. This in turn supports fiscal sustainability by reducing health care costs. The importance of sustainable transportation and community design is underscored by the involvement of organizations such as the Robert Wood Johnson Foundation, which has documented these linkages in briefs such as "Linking Policies to Prevent Climate Change and Childhood Obesity,"³ and provides tools and resources to promote healthy communities.

Why Does Sustainability Matter?

Two issues related to sustainability are particularly important in Alameda County: climate change and financial resource limitations. Climate change is of great concern throughout California and in Alameda

¹ World Commission on Environment and Development 1987. *Our Common Future.* Oxford University Press, Oxford, p 41.

² Working definition from research in progress for NCHRP Project 8-74, Sustainability Performance Measures for State Departments of Transportation and Other Transportation Agencies.

³ http://www.leadershipforhealthycommunities.org/

County specifically, not only because it threatens human health and natural ecosystems, but because it endangers infrastructure and communities in low-lying areas such as Oakland Airport and the Port of Oakland that will be affected by sea-level rise. Proactive response to these threats is critical for Alameda County, and is also required by recent greenhouse gas legislation (SB 375) mandating the Bay Area Metropolitan Transportation Commission to work with local governments to demonstrate that the Regional Transportation Plan will meet greenhouse gas reduction targets.

Financial sustainability is another key issue for the CWTP. Due to the economic recession, tax revenues have declined and may continue to do so. Federal funding is uncertain due to the delayed reauthorization of federal transportation legislation (SAFETEA-LU). The CWTP must respond to these challenges by focusing on cost-effective investments that support improved environment, quality of life, and economic health while protecting the future financial stability of Alameda County and its constituent cities.

GOALS & AVAILABLE STRATEGIES

Existing Efforts

Alameda County and its constituent cities are already taking steps towards supporting sustainability for the transportation system and other aspects of public agency operation:

- Environment/Sustainability is identified as one of five priorities in the County's Strategic Vision, adopted by the Board of Supervisors in 2008.
- The County is currently engaged in creating a Community Climate Action Plan, which addresses transportation, land use, building energy, water, waste, and green infrastructure for unincorporated communities.
- In May 2010, the Alameda County Climate Action Plan for Government Services and Operations was adopted, with a goal of a 15 percent GHG reduction in County government emissions by 2020. The County also has various initiatives related to ecosystem protection, energy efficiency, green buildings, conservation planning, recycling/waste reduction, and water protection.
- Several cities within Alameda County have undertaken their own Climate Action Plans.

Future Strategies

How can Alameda County and its cities do more to ensure the sustainability of the transportation system? The following general approaches can be followed.

- **Prioritize cost-effective investments in sustainability.** Maximizing sustainability outcomes such as climate change and air pollution reduction within financial constraints requires aggressive pursuit of the most cost effective sustainability strategies. Management and operations strategies including Intelligent Transportation Systems and travel demand management should be undertaken to maintain and improve mobility and accessibility while minimizing fiscal burden and social and environmental impacts.
- **Invest in technology to support sustainable futures.** The County and constituent cities can think beyond traditional transportation infrastructure planning to consider how to meet future transportation needs with sustainable technologies. This should include technologies to promote efficient travel patterns and system operations, as well as advanced vehicle and fuel technologies that can reduce energy use and GHG emissions.
- **Support integrated planning.** To reduce greenhouse gases and ensure cost-effective use of resources, planning efforts should be coordinated with local governments as well as other county and state agencies. For example, transit should be planned to serve the highest-density areas and these areas should be designed to support multi-modal access to transit. Bicycle and pedestrian investments should be targeted in areas where land uses support bicycling and walking. In Alameda County, the CWTP should be consistent with the regional Sustainable



Communities Strategy, the East Alameda County Conservation Strategy, the County's Climate Action Plan, and other regional and County planning efforts focused on sustainability. Additionally, County transportation investments should be coordinated with efforts to identify infrastructure vulnerable to the impacts of sea-level rise.

- Integrate sustainability metrics into County activities. Ongoing tracking of sustainability related-performance measures will help the County assess whether it is moving towards or away from a more sustainable system, whether specific objectives or targets are being met, and where improvement is needed.
- **Exercise fiscal constraint.** Achieving the outcomes described above should not come at the expense of over spending the transportation program, or require such costly investments that they cannot be realistically funded. Best management practices should be applied to maintain the existing transportation system (including highways, transit, and non-motorized facilities) in a state of good repair, at the lowest long-term cost.

CASE STUDIES

Three case studies are presented here – the City of Portland, Oregon, the City of Alexandria, Virginia, and Fruitvale Transit Village. The first two case studies illustrate a multi-sector sustainability effort undertaken by a municipal government, including sustainable transportation as well as coordinated land use and environmental planning. The third case study illustrates how a partnership between a community-based organization and public agencies created an inner-city transit-oriented development that met the needs of local residents and supported environmental and social sustainability through infill development and a community-based process.

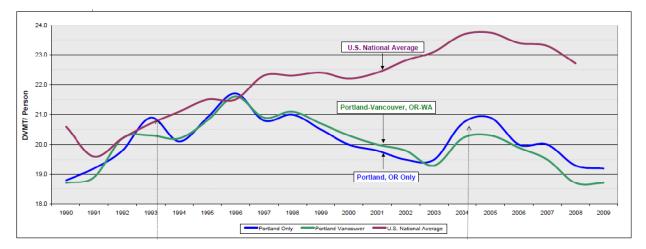
Case Study #1 – Portland, Oregon

The City of Portland, Oregon has been pursuing sustainability for decades with a focus on integrated transportation and land use planning. The city's policies have completed a regional focus on growth management, led by Portland Metro, the regional government. The City has integrated sustainability functions into its planning department, which is now titled the Bureau of Planning and Sustainability. The mission of the Bureau is to create a "prosperous, equitable, and healthy city." The City's Planning and Sustainability Commission advises City Council on the City's long-range goals, policies and programs for land use, planning and sustainability. The Bureau's 2011 – 2013 Strategic Plan outlines six goals, which include the following elements directly related to transportation:

- Affordable housing and transportation options;
- Healthy, walkable and bikeable, and prosperous "20-minute neighborhoods" that encourage and enable Portlanders to meet their daily needs locally; the concept is that most life needs can be fulfilled within 20-minutes of home.
- Green streets and boulevards throughout the city; and
- Reducing greenhouse gas emissions through urban design and complete neighborhoods.

A 1994 study found that residents in areas with good transit and mixed land use walked for 27 percent of trips and took transit for 12 percent, compared with outlying neighborhoods in the region with poor transit or land use where the combined walk and transit mode share was under 8 percent. VMT per capita in these core neighborhoods was less than half that in outlying areas. Supported by these data, the city has coordinated transportation and land use planning to achieve conditions that support reductions in vehicle travel. Through its land use and transportation plans, including the Comprehensive Plan and the Transportation System Plan (TSP), city policies and investment priorities have supported transit-oriented development (TOD), infill, and neighborhood revitalization. The TSP focuses on reducing automobile travel and providing alternative modes that will help sustain air quality and other environmental resources. Likely due to city and regional transportation and growth management

policies, per capita VMT in the Portland metro area, which was about the same as U.S. average VMT in the mid-1990s, has declined to about 15 percent lower than this average (Figure 2).





Source: David Horowitz, Metro Regional Government, Portland, OR, based on FHWA Highway Performance Monitoring System Data. See: library.oregonmetro.gov/files//1990-2009_dvmt-portland-us.pdf

City codes establish *minimum* densities for mixed-use areas where transit service is provided or planned in the future. Tools such as density bonuses, transfer of development rights, and tax abatements have been used to facilitate transit-oriented development (TOD) around the region's growing light rail system, which now includes four lines covering 52 miles. Major infill projects such as the Pearl District and South Waterfront, coordinated with the introduction of streetcar service, have added over 8,000 new housing units to the downtown area.

The City has also invested heavily in pedestrian improvements as well as bicycle facilities and other supportive infrastructure and outreach programs. The TSP's modal plans include a Pedestrian Plan and a Bicycle Plan. The city now has in place 324 miles of bike lanes, bike boulevards, off-street paths, and cycle tracks (Figure 3). As a result, Portland has the highest bicycle mode share – 6 to 8 percent – of any large city. An extensive traffic calming has made neighborhoods more livable and improved pedestrian safety.

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Figure 3 A "Bike Box" in Downtown Portland



Finally, Portland has taken an aggressive approach to maximizing the efficiency of the existing roadway system. The TSP includes a plan that addresses TDM and parking, and a plan for transportation system management (TSM). The TDM plan includes parking management measures, such as elimination of parking minimums downtown and reductions in transit station areas; as well as support for transportation management associations. A TSM policy calls for giving preference to transportation improvements that "use existing roadway capacity efficiently and improve the safety of the system." Measures include synchronizing signals, access management, transit signal priority, and ITS along major corridors. A city-wide program to develop coordinated signal timings at 135 signals has been estimated to reduce GHG emissions by 50 metric tons of carbon per signal per year.⁴

Lessons learned from Portland's experience include:

- Sustainability requires long-term commitment. The City's successes as measured in terms of VMT per capita, bicycle mode shares, and other factors are a result of over 30 years of local and regional planning.
- Use policies and investments to support infill and neighborhood revitalization. Portland has used transportation funds to improve the quality of life in its urban neighborhoods through measures such as streetscaping, traffic calming, and bicycle boulevards.
- Coordinate development with transit. Portland has adopted transit-friendly land use policies and zoning measures such as high floor-area ratios, density bonuses, by-right mixed-use development, and parking reductions in locations with rail or frequent bus service.
- Focus on operations as well as demand. Low-cost efficiency measures such as traffic signal improvements have saved travelers time as well as reducing energy use, GHG emissions, and air pollution.

Case Study #2 – City of Alexandria, Virginia

Alexandria is the seventh largest city in the Commonwealth of Virginia, with a population of about 140,000. Sustainability is considered a shared responsibility across the City's governmental structure, but the Office of Environmental Quality in the Department of Transportation & Environmental Services has lead responsibility for this topic. Many Alexandria neighborhoods are compact, walkable, high-income suburbs of Washington D.C., and the city government operates its own bus system as well as being served by regional rail.

⁴ Peters, J.; R. McCourt and R. Hurtado (2009). *Reducing Carbon Emissions and Congestion by Coordinating Traffic Signals*. ITE Journal, April 2009.

Beginning in 2007, the City worked with Virginia Tech to develop a definition of "sustainability" that provides the foundation of Alexandria's efforts to define itself as an "eco-city." The City views sustainability as having three components – ecological, economic, and social. The City has developed an Environmental Action Plan 2030 (EAP) that provides the foundation for incorporating sustainability principles into all the City's programs and plans. The Plan identified the challenges of climate change and energy/peak oil as the primary policy and political drivers over the next 20 years. As illustrated in Figure 4, these primary issues will also greatly influence the need to address related issues, such as water and air quality, land use planning, and transportation.

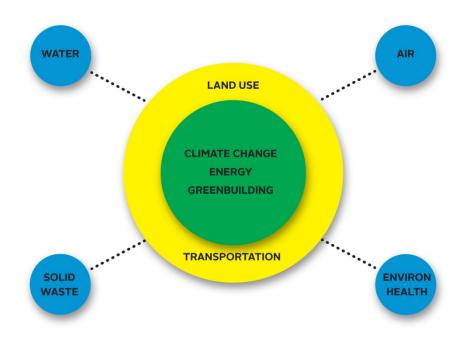


Figure 4 Key Issues in Alexandria, VA Environmental Action Plan

Source: City of Alexandria, VA (2008). *Environmental Action Plan 2030*.

The transportation principles and goals in the EAP are shown below:

Transportation - Encourage modes of transportation that reduce dependence upon the private automobile by promoting mass transit and pedestrian- and bike-friendly transportation networks. The city will integrate transportation options with land use decisions in order to ensure a healthy environment while continuing economic growth.

- Goal 1: Move aggressively toward a culture of city streets that puts "people first" by implementing development and transportation projects consistent with the following level of precedence: pedestrians, bicyclists, public transportation, shared motor vehicles, and private motor vehicles.
- Goal 2: Educate individuals and organizations on the availability of transportation alternatives that will reduce dependency on single occupancy vehicles.
- Goal 3: Improve and expand an integrated rapid transportation system that includes intercity passenger rail, heavy rail, trolleys, streetcars, and buses.
- Goal 4: Develop a city-wide environmentally sustainable comprehensive parking strategy.

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The plan also identifies nine broad strategies for supporting cross cutting connections among important sustainability-related topics, such as land use, transportation, open space, energy and environmental health. For example, these include:

- 1. Establish a city-wide network of high quality, affordable, and accessible eco-sustainable neighborhoods and villages with optimal densities to balance land use and transportation policies with open space, green infrastructure, and energy efficient building policies.
- 2. Develop a holistic city transportation system that puts the health, mobility, and accessibility of "people first" by implementing development and transportation programs and projects consistent with the following level of precedence: pedestrians, bicyclists, public transportation, shared motor vehicles and private motor vehicles.

With the EAP in place, the City of Alexandria is working to incorporate the concepts of sustainability into its Master Plan and Area Plans as they are updated. For example, the North Potomac Yard Small Area Plan includes a transportation network with a Metrorail station, dedicated high capacity transit corridor, buses, shuttles, car sharing, and bicycle facilities. An aggressive Transportation Management Plan will be required and parking will be managed, shared, priced, and designed to reduce car trips. The Plan is designed to allow employees and residents access to essential services within a five minute walk. The measures are expected to keep auto mode share in the area at less than 50 percent.

Lessons learned from Alexandria's experience include:

- Take a holistic approach to sustainability. The City has identified actions for each of its program areas including transportation, air quality, water resources, environmental health, energy, land use and open space, and solid waste. Performance targets for other areas, including environment, energy, and land use, relate to transportation.
- Transportation and land use strategies are inseparable. This is evident, for example, through the City's policies that call for land use patterns that support accessibility by all modes, and integrating transportation options with land use decisions.
- Performance targets should be considered aspirational. Some of the performance targets in the EAP represent a major change in behavior, but the City included them because citizens encouraged them to push for changes.

For more information, see: http://alexandriava.gov/Eco-City

Case Study #3 – Fruitvale Transit Village

Fruitvale Village, a transit-oriented development project in Oakland, California, that broke ground in 1999, illustrates how a community-based process can revitalize an economically-depressed area and provide access to public transportation. Fruitvale, an ethnically diverse neighborhood of approximately 53,000 people, with just over half of its residents identifying themselves as Latino, is located southeast of downtown Oakland. It is a low-income community, with an average household income of \$36,266.⁵ At the time the project began, Fruitvale was also seen as a high-crime area.

Fruitvale Village is a multi-phase development. To date, Phase 1 has been completed, with an area of 257,000 square feet, including the following components:

- Retail space (40,000 square feet);
- Commercial space that houses community services including a clinic, library, senior center, and the Unity Council's headquarters (114,000 square feet);
- Mixed-income housing (47 units); and
- 150-car parking garage in addition to parking for BART.

⁵ 1990 U.S. Census. Retrieved from http://www.fhwa.dot.gov/environment/ejustice/case/case6.htm

The project began in 1991, when the local transit authority, Bay Area Rapid Transit (BART), announced plans to build a multi-layered parking structure next to the existing Fruitvale station (Figure 5).

Figure 5 Parking Lot Before Fruitvale Transit Village Development



Source: Federal Highway Administration.

The community opposed BART's parking design due to fears of increased traffic and pollution as well as the creation of a barrier between the Fruitvale station and the community. Based on the strong opposition to the project, BART withdrew its proposal. The Unity Council, a community development corporation created in 1964, was central to the success of this project as the organization entered into a partnership with BART to create a project plan through a community-based process.

Many years of work contributed to this project's success. In 1992, the Unity Council won a Community Development Block Grant to create an alternative plan for Fruitvale station. An economic study commissioned by the Unity Council found that businesses were leaving the area and that a real estate development near the transit station could help combat the vacancy problem.⁶ Over the next several years, the Unity Council participated in other fundraising efforts and led the visioning and planning process. Partnerships between the Unity Council and BART as well as with other entities were central to the success of this project. In 1993, the Unity Council and the University of California at Berkeley's National Transit Access Center (UC NTRAC) held a community design symposium to help illustrate how community members' ideas could be translated into design elements for the transit station. By the time the project broke ground in 1999, many partners had contributed to the effort including: The Unity Council, National Transit Access Center, University of California at Berkeley, Bay Area Rapid Transit District (BART), City of Oakland, Metropolitan Transportation Commission (MPO for Bay Area), Federal Transit Administration, U.S. Department of Housing & Urban Development, and U.S. Environmental Protection Agency.⁷

⁶ Oakland City Magazine. (2005.) "The Fruits of Village Unity." Retrieved from http://www.unitycouncil.org/download/article_reviving_fruitvale.pdf

⁷ Federal Highway Administration. "Fruitvale Transit Village Project." http://www.fhwa.dot.gov/environment/ejustice/case/case6.htm



Figure 6 View of Fruitvale Transit Village from Above

Source: Federal Transit Administration.

Lessons learned from Fruitvale Transit Village include:

- Partnerships are powerful tools that can help overcome legal, financial and regulatory barriers. In the case of Fruitvale Transit Village, contributions on the part of the Unity Council, the City of Oakland, and BART helped tackle issues such as development rights, fundraising and zoning changes necessary to prepare for the project construction.
- Community-based organizations can be allies to government agencies when discussing neighborhood-level issues and projects. Because these organizations have close ties to a community, they can identify community members' needs and anticipate their reactions to a particular issue or proposal.
- Providing retail space near transit provides more than just economic benefits. In this inner-city area that struggled with crime, more foot traffic in the transit village and to the surrounding commercial districts has helped create a feeling of safety and the addition of shops in the area has given people more incentive to use BART.
- Achieving support from the community on a transit project has helped improve many aspects of the community, not just transportation. In Fruitvale, crime rates have decreased, retail vacancy is less than 1 percent and the area provides a large source of city sales tax revenue for Oakland.⁸

⁸ Oakland City Magazine. (2005.) "The Fruits of Village Unity." Retrieved from http://www.unitycouncil.org/download/article_reviving_fruitvale.pdf

CHALLENGES

This section discusses the most significant challenges that transportation agencies have faced in incorporating sustainability principles into transportation planning and programming. Case studies of a dozen transportation agencies for NCHRP Project 8-74, which is focused on sustainability performance measurement at transportation agencies, indicated the following challenges were most significant:

- **Turning goals into measurable actions** Many agencies are able to identify, agree upon and set goals that include concepts of sustainability, but are finding it more difficult to implement programs that will help lead to these goals. Identifying ways to effectively track progress towards these goals is also challenging.
- **Outside agency scope** Achieving sustainability requires the cooperation of many agencies and entities with a range of responsibilities.
- **Measurement at the project level** Sustainability impacts are often easier to measure at a regional scale, and more difficult to measure on a project by project basis. For example, regional travel demand models currently do not provide meaningful energy or air quality calculations for small scale projects.

Additional challenges for Alameda County include:

- Integrating land use and transportation planning. SB 375 is intended to encourage integration of land use development with transportation investments to reduce vehicle miles traveled and greenhouse gases. However, land use planning cycles are out of sync with transportation planning cycles, and the authority for land use and transportation planning decisions resides in separate agencies. Coordinating these is an ongoing challenge for the CWTP and beyond.
- **Trading off equity and environmental protection.** Some definitions of sustainability include both environmental protection (e.g. greenhouse gas reduction and air quality improvement) and preservation of social and geographic equity. These aspects of sustainability do not always work in harmony. The goal of achieving equitable distribution of funds among local governments in Alameda County may conflict at times with a desire to maximize the greenhouse gas reduction and air quality improvement benefits of specific types of transportation projects (particularly transit investments). This could be addressed in part by ensuring that overall investments among communities are balanced, but that investments are appropriate for each community. For example, in the context of a low-density community, signal timing improvements or incentivizing carpooling are likely to yield more cost-effective reductions in greenhouse gases than is expanding transit service.
- **Trading off mobility and energy/GHG reduction.** While reducing VMT clearly supports environmental sustainability, there is disagreement over the extent to which VMT can be reduced without negatively impacting economic growth and personal mobility. The challenge is to develop land use and transportation systems that maximize the *accessibility* of people and businesses to jobs, workforce, goods, services, and markets (i.e., the opportunities that can be reached within a given travel time) while minimizing the *distances* that must be traveled. This can be done through compact, balanced, and mixed-use land use patterns that allow shorter trips and increase connectivity within neighborhoods, combined with improved transit, bicycle, and pedestrian infrastructure. Pricing strategies can also ensure that the capacity of the transportation system is used most efficiently to support economic growth.
- Meeting LOS/congestion standards vs. reducing VMT. Closely tied in with the previous issue is the question of how traffic impacts associated with new development are mitigated. California has long had in place requirements for county-level congestion management systems to meet level of service (LOS) standards as well as requirements in California Environmental Quality Act (CEQA) review to evaluate whether projects would result in exceedance of LOS standards. However, these requirements provide incentives for capacity expansion (as a mitigation



measure), rather than VMT reduction. Recognizing the potential conflict with state GHG reduction policies, the state recently issued new CEQA guidelines that shift the emphasis away from LOS and congestion standards and allow communities to set alternative goals such as trip and VMT reduction.⁹ It is not yet clear what effects this change will have on sustainability outcomes, including infrastructure supply as well as travel demand.

• Expanding the scope of transportation planning activities beyond traditional infrastructure investment. Creative response to climate change and fiscal challenges may require re-definition of the scope of transportation planning. Many innovative and promising strategies to reduce greenhouse gas impacts may require thinking beyond concrete and paint to include planning for new technologies and programs such as electric vehicles, dynamic ridesharing, and smart parking management.

STRATEGIC INVESTMENT OPPORTUNITIES

This section discusses how the CWTP can encourage implementation of a more sustainable transportation system. The Alameda CTC, in cooperation with regional and local partners, is already engaged in a number of actions directed at increasing transportation sustainability. The Alameda Countywide Transportation Plan Draft Briefing Book (December 2010) identifies a number of projects and programs that support a sustainable transportation system. Some are led by the CTC, while others are led by other partners in cooperating with the CTC. Figure 7 shows some examples of these programs and identifies which sustainability principles (as indicated by an X) each appears to most directly support.

	Out	come Princi	ples	Process and Program Principles				
Program	Environment	Economy	Equity & Quality of Life	Fiscal Constraint	Maximize Existing Efficiency	Integrated Planning	Track Performance	
Regional Sustainable Communities Strategy	Х		Х			Х	Х	
MTC Transit Sustainability Project				Х				
New Rail Transit Projects	Х	Х	Х					
New BRT/Bus Enhancements	Х	Х	Х		Х			
Paratransit Services			Х					
Countywide Bicycle Plan	Х		Х					
Trade Corridors Improvement Fund		Х						
ICM & SMART Corridors Projects	Х	Х			Х			

Figure 7 Existing Alameda County and Major Regional Transportation Programs and Sustainability Objectives

⁹ http://ceres.ca.gov/ceqa/docs/

Adopted_and_Transmitted_Text_of_SB97_CEQA_Guidelines_Amendments.pdf

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	Out	come Princi	ples	Process and Program Principles				
Program	Environment	Economy	Equity & Quality of Life	Fiscal Constraint	Maximize Existing Efficiency	Integrated Planning	Track Performance	
LOS Monitoring Reports & CMA Performance Reports		Х					Х	
Local TDM Programs such as in Berkeley and Pleasanton	Х		Х		Х			

To support sustainability in the future, the CTC can consider expanding programs similar to those listed in Table 2, particularly those which address both the environmental and financial components of sustainability. Some examples of cost-effective investment types include local TDM programs to reduce vehicle trips, local parking pricing programs, and Intelligent Transportation Systems improvements to reduce highway congestion. However, the cost-effectiveness of individual investments depends greatly on the context. The CTC can work to ensure that investments are appropriate for the context. The CTC can also help municipalities achieve economies of scale by sharing resources, e.g., by developing a TDM resource center and outreach program serving multiple communities, or developing model zoning ordinances and design guidelines for bicycle facilities and transit accessibility.

Some more specific ideas include the following:

- The CTC could consider creation of a new pilot program category to fund innovations in transportation sustainability. MTC's Climate Initiatives Program funds demonstration projects to test the most innovative strategies to promote changes in driving and travel behaviors. Potential projects may seek to increase the use of low-GHG alternative fuels, expand car-sharing programs, or implement low-GHG tire incentive programs or pricing demonstration projects. Alameda CTC could consider creation of a similar program to fund innovative approaches to climate change and sustainability at the county level. This could also be a means to explore possible innovative technological solutions to climate and sustainability challenges.
- The CTC can evaluate sustainability outcomes. For certain CWTP programs, the CTC could require project sponsors to collect data on sustainability outcomes. Before-and-after usage data on new bicycle and transit facilities, for example, could help inform which types of investments are most successful and cost-effective in which locations. The city of San Francisco, for example, evaluated before-and-after results from its pilot program to put colored bicycle lanes and bicycle boxes on Market Street in downtown San Francisco and found increased levels of bicycling after the improvements were installed.¹⁰ The CTC can also use ongoing performance measurement to track progress towards overall sustainability goals, such as the share of trips made by bicycling, walking, transit, or carpool, by jurisdiction.
- The CTC can study innovative solutions to sustainability challenges. To inform future CWTP efforts, the CTC could launch a study to identify innovative sustainability solutions and emerging challenges. For example, it could study the need for future infrastructure (pavement striping, parking facilities, charging stations) to support electric vehicles, and adopt or develop model building codes that require charging stations as part of new development. It could also examine the need for modifying investment priorities to address the likely impact of climate change-related sea-level rise on low-lying transportation infrastructure.

¹⁰ Source: San Francisco Bicycle Coalition. http://www.sfbike.org/?market

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• **The CTC can be a leader in sustainability.** The CTC can ensure that county agencies and departments are meeting internal transportation-related sustainability goals through their operations, e.g., by offering employees transportation incentives, reducing or eliminating hidden parking subsidies, promoting acquisition of energy-efficient fleets, offering employees access to car-sharing vehicles, and other strategies.

ISSUE PAPER: INNOVATIVE FUNDING STRATEGIES

INTRODUCTION

This section describes existing funding sources for transportation in Alameda County and discusses a number of potential new sources. Key conclusions include:

- Given current and projected needs, current funding is inadequate.
- Many funding sources are unreliable, either because of political challenges to renewal or because they are tied to economic cycles.
- Many sources do not allow for flexibility in their allocation to respond to need.
- Public investments generate private value that is not "captured" for the public good.
- Relatively few revenue sources are based on use of transportation facilities and services.
- Funding sources generally do not directly support policy goals, and sometimes contradict them.
- Options for increasing funding are limited, primarily due to political opposition.
- Many potential new revenue sources cannot be implemented directly by Alameda CTC without legislative or regional or district collaboration.
- New revenue sources requiring contributions from private parties or system users may be impractical or controversial.
- In developing a revenue strategy, Alameda CTC must first set priorities; these might include equity, alignment with policy goals, sustainability, alignment with need, and "buy-in" from stakeholders.

Funding Context and Issues

Finding funding for transportation construction, maintenance, operations and programs in Alameda County has become increasingly more difficult as traditional federal, state, and local funding sources have decreased. While the recession has been responsible for part of this decline, there are structural issues that predate this most recent cycle.

Historically, state and federal funding, such as gas tax revenues, accounted for a majority of transportation funding in Alameda County. At this point, however, outside sources account for less than 40 percent of the Bay Area's regional transportation revenues. Alameda County is a "self-help" county under California law, with its own dedicated sales tax for transportation. The current Measure B sales tax revenue is a primary source of funding; however, like all sales taxes, it is dependent on a growing and stable economy. Receipts declined as a result of the recession from approximately \$100 million annually to about \$90 million, and have now rebounded as the economy has improved, illustrating how economic volatility can affect this revenue stream . Originally projected to earn close to \$2.9 billion between 2002 and 2022, the program is now expected to generate only about \$2.1 billion, a nearly 30% decline. (It should be noted that revenues from Measure B are also used as matching funds to leverage other



sources of funding such as federal capital grants, and when these matching sources themselves decline or are eliminated, the problem is exacerbated.) In 2010, Alameda County voters approved another local transportation funding source, Measure F, a \$10 increase in the annual vehicle registration fee. This fee, however, constitutes a comparatively minor source of funding, as it is anticipated to generate approximately \$110 million over 10 years.

Transportation funding structures in Alameda County are relatively complex, as financing is derived from a wide range of sources. However, sources can typically be assigned to a few categories, and there are a few common and key characteristics that should be highlighted:

- While most funding sources are ongoing, in recent years there has been a heavy reliance on one-time infusions. Over the past decade, programs including the state's 2000 Traffic Congestion Relief Program, the Corridor Mobility Improvement Account created as a result of 2006's statewide Proposition 1B, and the more recent federal American Recovery and Reinvestment Act stimulus funds have been used to supplement existing sources of funding. However, such temporary sources, while of course welcome, are by their nature not sustainable.
- Many "regular" sources of funding are not reliable or sustainable. Even some sources of funding that are regularly renewed cannot necessarily be counted upon, for reasons of politics, the economy, or both. The recent debate in the U.S. Congress over reauthorization of the SAFETEA-LU funding act has provided a vivid illustration of such. State Transit Assistance (STA) funding for operations, which amounted to \$4.4 billion as recently as 2001, was zeroed out by the end of the decade in a budget-cutting maneuver. Measure B, meanwhile, will require two-thirds approval from voters if it is to be renewed. Moreover, Measure B is a sales tax, and revenues from sales tax are dependent on consumer spending and fluctuate along with economic cycles. Similarly, property taxes are tied to assessed home values (with the notable exception that in California, under Property 13, rates for many properties cannot be increased to reflect rising values).
- Many primary sources of funding are not flexible. Funding agencies including the Alameda CTC generally have limited discretion to allocate transportation funds according to need, as many major funding sources carry strict restrictions. For example, federal transit funding is generally available only for capital expansions, not operations, while revenue from the state's gasoline excise tax may only be used for road or fixed-guideway transit projects. Relatively few sources of funding are available for transit operations; as a result, transit agencies tend to rely heavily on local sales and property taxes to fund operations.
- **Direct return on investment is limited.** In the early 20th century, transit projects in the United States typically were privately funded: housing developers would build streetcar lines to ensure access to their developments, the so-called "streetcar suburbs." In Japan, a similar model is still in use, as private companies construct rail lines as "loss leaders" improving access to department stores they then build adjacent to stations. (There are examples of this in America today such as the Washington Metropolitan Area Transit Authority which participates in joint development.) Yet in modern America, "value capture" of private profits made possible by public investments is rare. To be fair, indirect value capture in the form of increased sales and property or parcel taxes is a primary source of transportation funding. Yet more direct linkages in the form of tax-increment financing or business improvement districts remain relatively rare.
- **Funding sources are generally not linked to use.** There are three major forms of transportation user fees in Alameda County: gas taxes, tolls for roads and bridges, and fares for transit users. However, these account for a relatively modest share of all funding: the average farebox recovery ratio (or share of transit operating costs covered by fares) at the Bay Area's seven largest transit operators is less than 40 percent; the federal gas tax has not been increased since 1993; and only \$1 of each \$4 to \$6 toll collected on state-owned bridges is available to transportation projects through Regional Measure 2. There have been some moves recently toward a more direct transportation funding model, as exemplified by the new High Occupancy Toll (HOT) lane on Interstate 680 within Alameda County, the first among several such lanes planned by MTC.

However, taxes and tolls, while clearly more equitable than fees levied on non-users, remain highly controversial among the general public and elected officials.

- Funding sources are not always aligned with policy goals. User fees can be an attractive source of transportation funding in part for reasons of equity, and partly because revenue generation can in some cases be linked directly to policy goals. However, in the current system, even where user fees exist they are sometimes not well aligned with such goals. Transit fares, while a major source of funding for operations, actually run counter to goals of reduced vehicle miles traveled (VMT) and carbon emissions, as charging a fare depresses transit usage. Gas taxes are subject to diminishing returns as fuel efficiency is improved, and tolls that are "flat," rather than demand-based, cannot be used to manage congestion.
- While funding is declining, both need and cost are increasing. Recent years have seen two major trends that do not bode well for the future of transportation funding in Alameda County. First, overall travel demand has been increasing. This is especially true for transit demand, a trend that is likely to only accelerate as a larger share of the population reaches retirement and as climate change concerns continue to increase. Second, transit operating costs have for some time been growing faster than inflation, a trend described in detail in the Transit Sustainability and Integration issue paper.
- In general, options for increasing funding are limited. As described above, the current system of transportation funding is constrained in terms of available revenues and restrictions on use of funds. In terms of options for increased funding, politics may prove to be the greatest constraint, both in terms of the legal barriers to raising revenues (including the two-thirds requirement for tax increases in California, a requirement expanded by the recently approved Proposition 26, which redefines as "taxes" many "fees" that have previously required only majority approval at the state level, and no public vote at the local level) as well as a national political environment that is currently focused on deficit reduction in general, and reduced "discretionary" spending. The budget recently approved by the U.S. House of Representatives would significantly reduce funding for the Federal Transit Administration's New Starts program, a key source of funding for transit capital projects. It would also reduce transportation funding in other areas, including funding for non-motorized projects.

That said, opportunities appear to exist for new "creative" sources of funding, as described in the following pages.

GOALS AND AVAILABLE STRATEGIES

One might think of revenue-related goals in the simplest terms: more money is clearly needed.

However, it is not just *increased* revenue that is necessary; it is a funding structure that is:

- More stable, reliable and thus sustainable, that is, less exposed to political and economic cycles;
- More flexible and able to respond to changing needs;
- More equitable, both in terms of the relationship between fees and benefits and impacts, as well as in a social justice context;
- More closely linked to and supportive of policy goals such as reduced VMT and greenhouse gas emissions; and
- More easily scalable to increasing demand.

Among the strategies that might be available to achieve these goals are:

• Increased use of public/private partnerships. Such arrangements have become more common in recent years, partly out of necessity, but also as a means of building support for investments by engaging stakeholders in a collaborative process. Private parties, of course, may be reluctant to



enter into such arrangements; however, due to the benefits that transportation investments can deliver, "win-win" scenarios often exist where both the public good and private interests can be served simultaneously. Some members of the public may be opposed to any mechanism whereby private profits are generated using public funds, even if a clear public benefit is involved. Public/private partnerships may consist of direct funding contributions to capital and operating expenses, or they may be sponsorships.

- Increased use of value capture strategies. In lieu of voluntary public/private partnerships, fees may be levied on private entities that stand to benefit from improved access, either in terms of increased land values or increased business. This form of funding has proven especially popular for planners of streetcar lines, which have been shown to have a significant impact on land values and development opportunities. However, it is rarely used for other types of rail projects, or bus rapid transit projects that might have a similar effect. Moreover, under Proposition 26, a two-thirds vote of the public is now required to enact fees.
- Increased use of impact fees. Another mechanism for ensuring that private parties who benefit from public investments in transportation infrastructure contribute to those investments is developer impact fees. So-called "nexus" fees linked to demands placed upon transportation systems by development have become relatively common in California, and there are existing fee programs in Alameda County, including the Alameda County Cumulative Traffic Impact Mitigation Fee and the Tri-Valley Transportation Development Fee. The latter applies to all new development in the "sub-region," which includes five cities and unincorporated parts of both Alameda and Contra Costa Counties, and currently ranges as high as \$2,170 for a single family home and \$3.89 per square foot for office space (significantly less than the San Francisco fee described under Case Studies). Enacted in 1998, it is dedicated to road projects. A new Strategic Expenditure Plan is currently in development.
- Increased use of innovative funding mechanisms, such as loans backed by tax revenues. A built-in problem of using tax revenues to fund construction is that the necessary revenue may not be available for some time, delaying implementation and delaying project benefits including increased revenues from related development. Some transportation agencies, of course, are able to exercise bonding authority. One alternative approach is to procure a loan or issue bonds for capital projects backed by tax revenues, allowing project timelines and benefits to be accelerated. A proposed example (Los Angeles County's 30/10 Initiative) is described under the Case Studies.
- Increased use of revenue sources that are supportive of policy goals. Some sources of funding can simultaneously serve as means to achieve policy ends. Most obvious are roadway user fees: congestion pricing serving to reduce peak congestion while raising revenue for investments in transportation alternatives; more typical "flat" tolls which can also raise revenues and discourage driving; taxes on vehicle miles traveled, as an alternative to traditional gas taxes; or gas taxes (although these are becoming less effective over time as technological advancements in fuel efficiency reduce the disincentive to drive). Parking fees can have the same effect. All such user fees, however, can be highly contentious and politically challenging to implement.

CASE STUDIES

Private Funding

Private funding for shuttle operations is relatively common; within Alameda County are examples including the Emery Go Round, which is funded by fees assessed through a Transportation Management Association, and Oakland's "B" Line, which is partly funded by contributions from private business organizations. However, other means exist to capture some of the value that public investment creates for private entities –ways to capture a share of the additional profits they would not have been generated otherwise.

Portland/Seattle Streetcars

The Portland Streetcar is a classic example of using nontraditional funding sources for construction of public transit. To date, construction has cost \$103.15 million, of which \$69.5 million, or more than two-thirds of the total funding, had come from three sources:

- \$28.6 million in bonds backed by revenues from a small (20 cents an hour) short-term parking rate increase in city-owned garages;
- \$21.5 million in Tax-Increment Financing (TIF); and
- \$19.4 million from a Local Improvement District (LID) assessment on owners of non-owneroccupied homes near the alignment (a LID is essentially what is known in California as a Business Improvement District)

The Portland Streetcar is operated by a nonprofit organization, Portland Streetcar Inc., which derives about 5 percent of its funding (\$250,000 per year) from vehicle and shop sponsorships. Sponsor packages include signs, names on brochures, and announcements on-board vehicles. Almost all sponsors are locally owned businesses, merchant groups or institutions.

For Seattle's South Lake Union Streetcar, the share of capital costs contributed by adjacent property owners through a LID was even greater: \$25.7 million, or roughly half of construction costs. Reportedly, just 12 of the property owners to be assessed, or 1.5 percent, filed formal protests, well below the 60 percent required to block the assessments. The South Lake Union Streetcar similarly relies in part on sponsorships. It earned \$387,000 in 2009.

Lessons Learned

- Value capture using an improvement district can account for a significant portion of a capital project's budget, and may prove relatively uncontroversial if there is a clear, direct benefit for property owners
- Another innovative means of obtaining financing from private sources is to build on existing advertising models by offering sponsorships of infrastructure

Cleveland HealthLine

While the Portland and South Lake Union Streetcars described above have been able to raise several hundred thousand dollars per year toward operating expenses by using a limited sponsorship strategy, the Greater Cleveland Regional Transit Authority (RTA), has pursued a more aggressive course, one akin to that used by major-league sports owners: it has sold naming rights to a major transit line.

RTA sold naming rights to the bus rapid transit line for a one-time fee of \$12 million. The project, originally called the "Euclid Corridor" was finally named the "HealthLine" by the sponsors, the Cleveland Clinic and University Hospital, two major institutions located along the line. Fortunately, the name is geographically and logically related to the line, thus reducing any potential for confusion. (It is not clear how long the naming-rights agreement will last and such an arrangement raises an obvious question: if the name were to be changed at some point, what might the impact be on ridership?)

The fact that RTA was able to *successfully* sell naming rights for this fairly substantial sum of money may come as something of a surprise; however, it is more understandable in light of the fact that advertising already serves as a major source of revenue for many transit agencies, as transit vehicles are both highly visible and highly mobile.

Lessons Learned

- Sponsorships may even extend to an entire transit service, and depending on the visibility of that service, may prove relatively lucrative
- In selling naming rights to a transit service or infrastructure , the risk of confusion for users, and attendant ridership and fare revenue impacts should be taken into account

Loans and Bonds

America Fast Forward / 30/10 Initiative (Los Angeles)

In 2008, Los Angeles County voters approved Measure R, a 30-year, half-cent sales tax increase to fund a package of transportation improvements, including many major transit projects. Measure R received 67.2 percent of the vote in 2009 (?), surpassing the required two-thirds majority and demonstrating a broad mandate. Sixty-five percent of Measure R revenues are dedicated to transit capital and operations, and the remaining 15 percent are reserved for cities, some of which will go to transit.

Measure R is expected to generate \$40 billion over 30 years. Construction, however, cannot get underway until funding is actually available. So, in order to deliver project benefits sooner, the Los Angeles County Metropolitan Transportation Authority (Metro) and Los Angeles Mayor Antonio Villaraigosa have advanced the 30/10 Initiative and America Fast Forward, companion proposals to frontload construction of a dozen key transit projects by having the federal government provide loans and bonds backed by local sales tax revenues, and to implement such a program nationwide. Completion dates for all 12 Los Angeles-area projects could be moved up from as late as 2039 to no later than 2019.

The economic and environmental logic is compelling: While a substantial initial investment would be required of the federal government, taxpayers (outside of Los Angeles County, at least) would be largely reimbursed. In exchange, Metro estimates that:

- 160,000 jobs would be created in construction, operations and maintenance
- 521,000 fewer pounds of mobile source emissions would be generated annually
- 10.3 million fewer gallons of gasoline would be used annually
- there would be an additional 77 million annual transit boardings
- annual VMT would be reduced by 191 million miles

Additionally, the Los Angeles Economic Development Corporation has estimated that Measure R projects with a total cost of \$34.7 billion would generate significant benefits for the regional economy, including \$68.8 billion in private section revenues and over a half-million jobs. An additional \$9.3 billion in tax revenue would be generated, including \$6.6 billion for the federal government.

According to program descriptions available on Metro's website, the federal government would incur limited costs. The 30/10 Initiative calls for both Transportation Improvement Bonds (TIBs) requiring a federal subsidy to cover the interest, as well as Transportation Infrastructure Finance and Innovation Act (TIFIA) Direct Loans that would require a subsidy of \$200 million on a \$2.3 billion loan. Congressional approval would be required. A fact sheet for the America Fast Forward program further notes that tax code incentives could reduce borrowing costs for bonds. As the fact sheet states:

The federal government has four types of broad policy tools it can use to stimulate infrastructure investment: grants, regulatory streamlining, credit assistance and tax code incentives. Grant funding has been the traditional federal tool (but) the magnitude of the nation's transportation investment needs far exceeds available resources. .. (C)redit assistance and tax code incentives, when used as innovative project finance tools, promote two important federal policy objectives: a) stimulating investment through leveraging pledged state and local revenue streams or user charges; and b) limiting budgetary costs.

The concept underlying the 30/10 Initiative and America Fast Forward is reflected in President Obama's proposal for a National Infrastructure Bank that could provide such assistance to other regions, including the Bay Area. However, given current Congressional priorities, the likelihood of such a program being enacted prior to the 2012 elections would appear to be limited. Nonetheless, the Fast Forward program has reportedly received the support of the U.S. Chamber of Commerce, the AFL-CIO, and more than 60 mayors.

Lessons Learned

- Issuing bonds or obtaining loans backed by approved sales tax revenues can accelerate project benefits at relatively little cost
- Such a program can serve to reward "self-help" communities, and to encourage others to make similar investments
- Significant political barriers exist to implementation of such a program on the federal level

User Fees

Replacement of gas taxes with Vehicle Miles Traveled, or VMT fees is an idea that has been long discussed in transportation circles in California. Following is a description of a pilot program conducted in Oregon. The primary source for this case study is the 2007 project report, "Oregon's Mileage Fee Concept and Road User Fee Pilot Program."

Mileage Fee Concept and Road User Fee Pilot Program (Oregon)

Program Background. In 2001, the State of Oregon passed legislation which created the Road User Fee Task Force. Responding to the challenges presented by the existing transportation funding system – ever-diminishing revenue that can no longer support existing and proposed infrastructure due to stagnant gas tax rates and increasingly fuel-efficient vehicles – the Task Force was asked to develop concepts for a new, long-term, and stable revenue source for Oregon's transportation system.

The Oregon Mileage Fee Concept was designed by the Task Force and a partnership of the Oregon DOT, Oregon State University, and Portland State University. The fee program was ultimately tested on a pilot basis, known as the Road User Fee Pilot Program, which sought to study the feasibility of both a mileage-based fee and congestion pricing. The program was funded by a \$2.1 million grant from FHWA and \$771,000 in matching funds from the state.

Pilot Overview. The pilot program began in March 2006 and ran for one year. In the study, there were 299 motorists (with 285 vehicles) from 221 households within the greater Portland area. Program participants were offered \$300 per vehicle for their participation, with compensation provided after completion of certain project milestones. In each vehicle an "on-vehicle" device was installed, which used GPS technology to count the number of miles driven within a given zone.¹ Study participants were instructed to refuel their vehicles at two gas stations that had been outfitted with wireless readers to download mileage data and calculate the cost of the gasoline, including the mileage fee.

The first five months of the study were the control period, in which participant mileage was recorded, but drivers continued to pay the existing gas tax. In short, the control period was used to establish a baseline of travel behavior for the participants. Beginning in month six, the participants were broken into two groups: a "VMT" group, which ceased to pay the gas tax and instead paid a 1.2 cents per mile fee; and a "rush-hour" group, which also no longer paid the gas tax and instead paid 10 cents per mile from 7-9 AM and 4-6 PM and .43 cents per mile at all other times. It is important to note that the per-mile fees for the pilot program were explicitly set to be *revenue-neutral*. In other words, they were set to generate as much revenue as the existing 24-cent per gallon gas tax.² As described below, the per-mile rate is one of the key policy questions related to mileage-based fees.

Pilot Program Evaluation and Key Findings. A number of key findings emerged from the pilot program related to program design, implementation, effects on participant travel behavior, and participant experience. These are briefly outlined below:

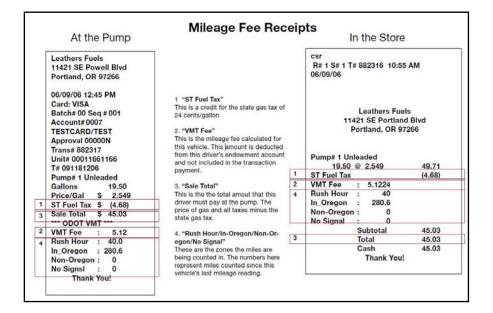
² For example, the 1.2 cents per mile fee was determined by dividing the existing gas tax by the average fuel efficiency (in 2004). 24 cents per gallon / 20 miles per gallon = 1.2 cents per gallon.



¹ Only miles driven within Oregon were recorded.

• **Transparency of fee/ Ease of use:** The program was largely successful in ensuring transparency of the fees and making payment as easy as possible. First, the on-vehicle dash display shows the zone in which a vehicle is traveling and miles traveled. Second, the payment process was designed to be as simple and as familiar as possible for users. The participants would refuel at one of two stations that had been outfitted with wireless readers,³ which would access the on-board equipment and calculate the number of miles driven since the last fueling. At payment the number of miles traveled per zone and the total mileage fee was itemized on the receipt, and shown in comparison to the cost of the gas tax (see Figure 1).

Figure 1 Sample Receipts for Mileage Fee Fuel Purchase⁴



- **High accuracy and easily integrated:** The mileage system accurately calculated the mileage traveled and accurately completed the needed financial transactions. Furthermore, the technology was easily integrated with existing systems, allowing non-test vehicles to also fuel at the pumps.
- **Privacy protection:** One of the highest priorities for the pilot program was to ensure participant privacy, and pilot program showed that this goal is easily achievable. First, the program technology did not allow for the transmission of vehicle location and no location points were stored within the GPS equipment. Second, the transmitters were only short-range and, therefore, did not allow "tracking." Finally, under the proposed, full-scale program, ODOT would not install, maintain, or physically access the equipment within in each vehicle, as this would be done by the vehicle manufacturers themselves. The only data that ODOT would collect at the pump would be a vehicle ID number, miles traveled in each zone, amount of fuel purchased, and location of fuel purchase.
- **Ease of enforcement and minimal fee evasion:** As designed, the program is easy to enforce and hard to evade. First, payment at the pump is an enforcement mechanism in and of itself because a motorist must pay the fee in order to fuel their vehicle. Second, hacking of on-vehicle and pump

³ The wireless readers at the fueling stations were designed to continue to allow non-study participants to continue fueling and pay the existing gas tax.

⁴ Whitty, J. M. (2007). *Oregon's Mileage Fee Concept and Road User Fee Pilot Program.* Salem: Oregon Department of Transportation.

equipment can be mitigated through design and encryption. Third, tampering of equipment of abnormal mileage readings could be detected and flagged for auditing. Furthermore, the mileage fee system offers little incentive to evade the mileage fee because the per-mile fees are comparable to the existing gas tax. Finally, any effort to drive to another state to avoid the tax would likely prove to be not only cost-neutral, but also impractical.

- **Ease of collection and administration:** In Oregon taxes on fuel are paid to the state "up front" by a limited number of distributers before gasoline ever reaches a gas station. Those fees are passed on and recouped by the distributers through the gas retailers, and, ultimately, the motorist. This process would continue under the mileage-based fee system with periodic accounting checks to ensure accurate payments.
- **Program costs:** In 2003, estimated capital costs were \$33 million. It is unclear what setup costs would be at this time, but ongoing improvements in GPS and wireless technology have likely resulted in significant per unit cost reductions. Annual operating costs (in 2003) were \$1.6 million, which represents less than 3 percent of projected mileage fee revenue collected at the pump.
- **Phasing:** As designed, the Oregon mileage-based fee would be phased in over time as only "vehicles equipped with appropriate technology installed prior to first sale...would pay the mileage fee." Retrofitting existing vehicles was determined to be cost-prohibitive. As a result, many motorists would continue to pay the gas tax. It is estimated that it would take approximately 20 years before all Oregon vehicles were equipped with the proper technology and paying a mileage-based fee.
- Adaptability to congestion pricing: The pilot program proved to be highly adaptable to congestion pricing schemes. The technology was able to calculate fees based on specific zones and times of day, yet additional technology and system improvements are likely required before it could be used to implement a comprehensive congestion pricing scheme.
- **Travel behavior:** The mileage and congestion-based fees had some specific impacts on the travel behavior of participants.
 - The "VMT" group showed a 12% reduction in total miles traveled per day, despite the fact that the mileage fee was equivalent to the existing gas tax. The study showed that enhanced information about travel behavior alone led to voluntary changes in travel behavior.
 - Relative to the "VMT" group, the "rush-hour" group had a 22% reduction in peak-period travel.
 - Households within four blocks of transit reduced their rush-hour miles by an additional .742 miles per day.
- **Participant Experience:** In all, program participants reported a positive experience with the mileage-based system. Approximately 91% of program participants indicated that they would have been willing to continue with the mileage-based system. The primary complaints with the system, such as having to purchase fuel at one of two stations, were program-specific and not applicable with a fully scaled and improved program.

By numerous measures, Oregon's experience with a mileage-based fee proved to be a success. The pilot program clearly indicates that a mileage-based fee is a viable alternative to the gas tax. However, the Oregon experience also demonstrates that there a number of remaining issues that must be resolved before the program can be expanded. These lessons are important to highlight as Alameda County and the Bay Area grapple with the region's own transportation funding challenges.

First, the Oregon pilot program was the result of more than a decade of effort to address the gasoline tax. The study of the mileage-based fee and implementation of the pilot program required strong leadership from both the Governor and the State Legislature. State legislation was required to establish the Road User Fee Task Force and move forward with the mileage-based fee. It is clear that any

implementation of a similar program in the Bay Area will require strong leadership from local, regional, and state officials to overcome likely political opposition and resistance to change.

Second, despite evidence to the contrary, privacy concerns continue to be the primary criticism of any mileage-based fee. The increasing ubiquity of smartphones and other GPS-enabled technology would seemingly mitigate any such criticisms, but it is clear that privacy concerns must be addressed if the public is to accept a mileage-based fee. Any effort in the Bay Area to adopt such a funding structure should prioritize effective and clear messaging around this issue. The Oregon experience demonstrates that if the technology and concept is understood, public concerns can be alleviated.

In addition, the Oregon pilot program was explicitly designed to be revenue neutral and the program set per-mile rates equal to that of the existing gas tax. Clearly, the rate structure is one of the most crucial policy questions surrounding mileage-based system. If the Bay Area moves forward with such a funding concept, it will have to evaluate rate structures that respond to the region's numerous transportation goals: revenue generation and fiscal sustainability, congestion reduction, VMT reduction, mitigation of climate change, and equity and fairness.

The Oregon program also demonstrates that a mileage-based fee system is not a "quick fix." The Oregon Task Force determined that the retrofitting of existing vehicles with a mileage-based technology was cost-prohibitive. Instead, any statewide program would be phased in over time, an estimated 20 years, as only new vehicles with pre-installed GPS technology would pay the mileage fee. In short, Alameda County and the Bay Area should not view such a funding scheme as a quick solution to the region's funding challenges as any significant amount of revenue generated from a mileage-based fee is likely many years away.

Lessons Learned

- A mileage-based fee appears to be a viable alternative to existing gas taxes.
- However, there would be significant political obstacles to implementation.
- Public concerns about invasions of privacy, even if unwarranted, would have to be addressed.
- It may prove much easier to adopt such a program if it is revenue-neutral; however, it would then serve only as a means to achieve policy objectives (reduced VMT), and not as a tool for raising revenues.
- In order not to be cost-prohibitive, such a program would have to be phased in over a long period, as new cars are outfitted with the necessary technology.

SFpark (San Francisco) and Old Town Pasadena Parking Benefit District

Like the Oregon Mileage Fee, San Francisco's SFpark Parking Demand Management (PDM) program has been designed to be revenue-neutral. The program will set prices for metered parking spaces based on demand, and with a maximum price of \$6 per hour, it is projected that revenue from meters will increase. However, in addition to reducing vehicle miles traveled, peak period congestion and conflicts with other users of the street (as the need for motorists to "circle" looking for parking would be reduced), one of the program's core objectives is to make it *easier* to find parking and avoid tickets. This would be done in part by increasing availability of legal spaces, but also by providing real-time information on availability, relaxing time limits, and providing more payment options, including credit and debit cards as well as prepaid parking cards. This is expected to reduce revenues from meter, loading zone, double-parking and other violations.

For this reason, market-based pricing of parking may not result in additional revenues. However, marketbased pricing programs in other cities such as Pasadena have been used to generate additional revenues which were then reinvested in the surrounding area. In the Old Pasadena Parking Meter Zone, meter revenues have been used to fund a range of streetscape improvements, enhanced maintenance, security and marketing. The program generates about \$80,000 per block annually, and the area's resurgence since the program's implementation in 1993 has been widely documented: sales tax revenues increased roughly 250 percent within six years, while revenue at a nearby mall with free parking declined. Such a "parking benefit district" or PBD may also be used to fund other types of transportation improvements.

It should be noted that market-based parking pricing programs provide an excellent example of a revenue source that is both equitable and aligned with policy goals. Market-based pricing is not only a user fee; it is a user fee that is set according to demand, and not arbitrarily. Moreover, prices can vary not just by location, but by time of day – meaning that market-based pricing can serve as a form of congestion pricing reducing peak demand on the system. Indeed, SFpark prices will vary by time of day, with a goal of achieving 20 percent availability in all locations at all times during which meters are in operation, thereby reducing the amount of "circling" by motorists attempting to find a space.

Lessons Learned

- Market-based pricing of public parking can serve as a mean to improve convenience for motorists, while reducing VMT, peak congestion and conflicts with other users.
- Market-based pricing can also be used as a means to raise revenues; however, this may be more politically palatable if revenues are reinvested in the immediate area.
- As a demand-based program of user fees, market-based pricing is both an equitable strategy and one that is well aligned with policy objectives.

Impact Fees

San Francisco Municipal Transportation Agency (SFMTA) Revenue Generation Tools

Like transit agencies across the country and in Alameda County, including AC Transit, the SFMTA has struggled to overcome significant budget deficits in recent years. The origins and causes of the financial challenges facing SFMTA are complicated and varied, yet generally involve familiar factors: a combination of declining tax revenues due to the poor economy; increasing labor, operating, and capital costs; and state operating funds being diverted to California's general fund. As a result, the SFMTA has had to close its budget deficits through several fare increases and service reductions. In addition to the immediate impacts of reduced service and higher fares on riders, the ongoing budget deficits have prevented the SFMTA from completing capital projects and implementing the recommendations of its first comprehensive service evaluation in decades, the Transit Effectiveness Project (TEP). While the SFMTA has an approved budget through June of 2012, it still faces systemic budget challenges. In fact, the latest budget outlook estimates that SFMTA faces a \$1.6 billion shortfall over the next 20 years. Moving forward, SFMTA must generate an additional \$50 million in revenue and reduce costs by an additional \$30 million each year to balance its budget.

In response to these long-term budget deficits, the SFMTA has begun to explore and/or refine specific revenue-generation concepts as a means to systemically address its funding shortfalls.⁵ This case study highlights the most applicable of these funding concepts, yet it is important to emphasize that Alameda County will need to thoroughly evaluate these measures in the context of its own transit and regulatory environment. Nevertheless, these concepts offer additional "food for thought" as the Alameda CTC moves forward with developing a transportation plan that seeks to ensure a financially sustainable transit system in Alameda County.

Transportation Impact Mitigation Fee (TIMF). The California Environmental Quality Act (CEQA) requires that public agencies determine if a proposed project will have a "significant" impact on the environment. A project's environmental impact must be evaluated in a number of different areas, including transportation impacts, with "significance" determined by a number of predetermined thresholds. CEQA allows local jurisdictions to establish their own metrics and significance thresholds. However, with regards to transportation, most jurisdictions use well-established Level of Service (LOS)

⁵ In addition, SFMTA is also evaluating a number of cost savings measures, such as bus-stop consolidation and labor savings through ongoing negotiations with unions. For the purposes of this case study, however, the primary focus is on the specific revenue generation concepts.



thresholds. Level of Service is a measure of the amount of delay (calculated in seconds) for a vehicle at an intersection, with a "grade" assigned (A through F) based on the length of delay. For example, an intersection with an A "grade" has less than ten seconds of delay per vehicle, while an intersection with an F "grade" has greater than 80 seconds of delay. Typically, when an intersection reaches a D "grade," measures are employed to "mitigate" that delay, such as roadway widening or adjusting signal timing.

San Francisco has begun to realize the deficiencies of using LOS as the only metric for evaluating a project's transportation and environmental impacts. For example, the application of LOS is imperfect in dense, urban environments given the variety of modes and limited mitigations available (widening roadways in San Francisco has very restricted applicability). In addition, LOS measurements have the potential to prioritize better "performing" projects over others that have additional environmental benefits. For example, a mitigation measure or project that adds a lane of traffic would likely improve an intersection's LOS. However, adding that travel lane could actually induce additional vehicle travel and emissions, while increasing vehicle speeds, which would negatively impact the safety of bicycles and pedestrians.

Furthermore, LOS thresholds are inconsistent with the city's *Transit First Policy* because LOS prioritizes vehicle travel over other modes; and LOS measurements provide a very narrow representation of environmental impacts and ignore the full impacts of additional vehicle trips. As such, the city has begun to explore an alternative way in which to more holistically and equitably assess transportation impacts under CEQA.

What has emerged is a new approach that replaces the LOS threshold with a new impact measure: automobile trips generated (ATG). Under this approach, projects would no longer be evaluated under CEQA for LOS and intersection delay, but rather for how many new vehicle trips will be generated by the project. Using ATG resolves many of the issues created by LOS thresholds because ATG is a more equitable indicator of environmental impact. By calculating ATG, a project's impact on not only congestion, but also air quality, GHG emissions, the overall efficiency of the city's transportation network, traffic safety and collisions, noise, water quality, and the sociological impacts of traffic can be measured. The methodologies to determine ATG are rooted in current transportation planning processes and can be readily adapted to estimate ATG based on certain project characteristics.

Projects that do not generate any automobile trips or even reduce "automobility," and have no potential impacts in other areas, would be eligible for a negative declaration under CEQA. Projects that are shown to have a significant ATG would have to mitigate the impacts from those automobile trips by paying a per-trip impact fee, known as a Transportation Impact Mitigation Fee (TIMF). The per-trip fee would be based on the monetary costs imposed by the new trip onto the transportation network.

Revenue generated by the TIMF would be used to fund a variety of transportation projects and programs to offset the impacts of the new trips, such as site-specific improvements (signal timing, bicycle and pedestrian infrastructure, restriping, parking infrastructure, etc.). In addition, revenue could also be allocated to specifically fund SFMTA transit projects and operations as a means to reduce additional trips.

The ATG approach is currently being evaluated in San Francisco and will require an additional nexus study, environmental review, public hearings, and a citywide ordinance before the new methodology would be phased in.

Transportation Impact Development Fee (TIDF). The TIDF is a reliable, if relatively modest, source of revenue that takes advantage of the nexus between land-use development and demand for transit to justify an equitable "user fee." In short, it recognizes that transit service adds significant value to development projects and recaptures at least part of that value. It also recognizes that automobile traffic generated by new development has a significant negative impact on the speed and productivity of on-street transit services.

TIDF was originally conceived as a means of providing additional peak capacity for commuter-oriented service to the downtown commercial core. It was limited to office projects with a fee of \$5 per square foot. Recognizing that downtown office projects were not the only development projects to require and benefit from additional transit service, San Francisco expanded the program in 2004 to include most non-residential projects citywide and implemented a two-tiered system of fees.

The gap between "justified" and actual fees is a reflection of the program's key limitation: if developers were to pay the full cost of providing additional transit service to their projects, many projects would no longer be economically viable. Unlike most impact fees, administrative costs and outlays have exceeded collections in many years. However, the program maintains a positive balance due to interest earned on the TIDF fund. Finally, as TIDF is limited to non-residential uses, collections decline during development cycles driven by residential projects.

Fees may be used to increase service hours or maintain the ratio between service hours and automobile and transit trips generated by uses subject to the fee, including both operating and capital expenses, as long as there is a reasonable connection to the impacts of development on transit. Expanding the fee beyond downtown office development to non-residential uses citywide allows it to be used for service outside of the peak period. Unlike other types of impact fees, there is no fixed time limit on use of fee receipts; however, the city conducts a five-year review, as required under state law that orders the city to issue "findings" about the program. These findings include certifying that unexpended funds do not exceed the amount needed to make the improvements for which the funds were exacted.

Since its inception in 1981, TIDF has generated about \$120 million (including interest). Originally a \$5 per square foot fee on office developers, TIDF now includes most non-residential projects citywide. Fees have also been raised and indexed to inflation, and are now \$9.07 to \$11.34 per square foot depending on land use type.

Additional Fees and Taxes. The SFMTA is also considering a number of other fees and taxes as a means to generate additional transit revenue that may be of some interest to Alameda County. These concepts have recently been "floated" and will likely be evaluated in much greater detail in coming months. Because these items are taxes or fees, they would likely require two-thirds approval by city residents, per Proposition 26. They include an impact fee, as well as two more conventional assessments:

- Vehicle Mitigation Impact Fee. An impact fee of \$50 to \$150 per registered vehicle, which is estimated to generate \$24 million to \$72 million a year.
- Transportation Utility Fee. Annual utility fee of \$60 to \$180 for each single-family household in San Francisco, which would generate an estimated \$26 million to \$74 million.
- Parcel Tax for Transit Purposes. An increase in the parcel tax of \$100 to \$200 per parcel for commercial, residential and industrial parcels. Estimated revenue would be \$20 million to \$39 million. (AC Transit has won passage of two parcel tax increases in recent years, both of \$48, in 2004 and 2008. The combined \$96 tax will remain in effect through 2019.)

Lessons Learned

- As an alternative to traditional auto LOS evaluation of transportation impacts for mitigation, a standard of auto trips generated might be used; this would serve to reduce traffic (and generate related benefits) rather than increase capacity, as it typical of existing CEQA mitigations.
- As an alternative to mitigations, developments could pay a fee, which could then go into a fund for projects reducing auto trips.
- A nexus study and legislation would be required for implementation.

Emeryville Transportation Impacts Alternative Strategies

As in San Francisco, an alternative approach to traditional auto LOS evaluation of traffic impacts from new development has been proposed for Emeryville. The Vehicle Trip Generation, or VTG, standard would be similar to San Francisco's ATG standard. VTG impacts would be relatively easy to measure using existing tools. Also, because auto trips are among the most significant transportation impacts, VTG could serve as a proxy for evaluating impacts on the larger multimodal system.

As recommended, the threshold for required mitigations would be one net new trip. Developers could pay a Multimodal Transportation Impact Fee, or MTIF. Alternately, they could reduce impacts, for example by implementing transportation demand management (TDM) measures.

As proposed, the MTIF would replace existing transportation impact fees. A nexus study would be necessary to assess appropriate fee levels. Payment of the fee would allow applicants to issue a mitigated negative declaration of impacts under CEQA, or to claim exemption from CEQA review.

Revenue from the MTIF, in turn, could be used to fund projects that do not, as traditional CEQA auto LOS mitigations do, expand roadway capacity. Rather, candidate projects would serve to reduce auto trips. The nexus study would need to establish to what extent projects would have to be in the immediate vicinity of a development, and to what extent they could simply reduce trips over the citywide network.

Lessons Learned

• In addition to the benefits previously enumerated, an auto (or vehicle) trips generated standard would be simpler to administer, reducing the burden on applicants.

Austin Transportation User Fee

The city of Austin, Texas assesses a Transportation User Fee, or TUF, as a means to fund road maintenance. The fee is included in utility bills and is relatively modest: it varies slightly depending on land use (which serves as a proxy for number of auto trips generated; for example, each acre of single-family development is assumed to generate approximately 40 trips per day), but generally amounts to about \$40 per year. Notably, households can claim an exemption from the fee for either of two reasons: residents are elderly, or the household does not own a car. It is this latter exemption that makes the TUF an especially notable revenue strategy, as it is directly linked to policy objectives.

Lessons Learned

• A household- or property-based fee for road maintenance could, by exempting car-free households, reduce the maintenance burden while helping to achieve other objectives.

CHALLENGES

While a number of possible new revenue sources would appear to exist, a number of potential barriers to their implementation might also exist.

• Action would be required at the local, district, regional, State or Federal level. Alameda CTC would be unable to implement many new funding measures on its own. Some, such as market-based pricing of parking, might have to be implemented at the local level, and some, such as sponsorships for transit infrastructure or services, might have to be implemented at the district level. Measures such as a Mileage Fee would require legislation at the State level and would likely have to be implemented statewide (although under current law, the region may implement its own gas tax). An Infrastructure Bank or similar program for providing loans backed by local or regional (county, in this case) taxes would be national in scope. However, the transportation funding challenges faced by Alameda County are not unique; other large counties in California face similar issues, and might act as partners in a coordinated effort to develop new funding sources statewide. Alameda CTC could similarly work with and through MTC. Finally, Alameda

CTC could work with localities within the county to develop new revenue sources for transportation projects at the local level.

- There might be resistance from private parties. Private entities would likely be unwilling to contribute funding in the absence of a clear benefit or mandate. Experience from other areas does suggest, however, that they will do so if value can be demonstrated if businesses or property owners can be convinced that they will see returns on their investments.
- There might be resistance from voters and elected officials. Some proposed revenue sources may prove to be highly controversial, including those with broad impacts (such as taxes on the general public, or user fees for motorists), those that would price a resource that has previously been free (such as new tolls), and those that would affect interest groups able to exert influence on elected officials. Even measures that require direct voter approval or that would be voluntary in nature, such as sponsorships, could prove controversial. Polling could be used to determine risks before committing resources to pursue new revenue sources; however, potential sources of opposition cannot always be anticipated.

STRATEGIC INVESTMENT OPPORTUNITIES

Transit Cooperative Research Program *Report 129: Local and Regional Funding Mechanisms for Public Transportation* identified the following criteria for evaluation of potential new revenue sources:

- Revenue yield, adequacy, and stability
- Cost efficiency, including administrative cost to agencies, compliance costs to taxpayers, and evasion levels
- Equity with regard to cost burden and benefits accrued across income groups, different vehicle classes, and jurisdictions
- Economic efficiency, with particular emphasis on efficiency in pricing
- Political and popular acceptability
- Technical feasibility

However, before potential new sources of revenue can be identified, Alameda CTC should also identify priorities. Selecting potential new sources of revenue to pursue should be not a simple matter of figuring out how much funding might be available and how difficult it might be to procure it. Rather, a strategy for new funding should reflect consensus values.

Following is a list of possible priorities or principles to use in determining which, if any revenue sources should be pursued. In some cases, potential new sources of revenue might reflect some, but not all priorities. However, sources to be pursued should reflect most of the values shared by stakeholders.

- **Sources should be equitable.** Sources should be equitable in two ways: first, they should be equitable from a social justice perspective; and second, they should be equitable in terms of linking assessments to benefits or impacts.
- **Sources should be linked to policy goals.** Ideally, any new revenue source would also serve to further goals such as VMT and emissions reduction, sustainable development, and social justice for disadvantaged communities.
- **Sources should be sustainable.** Sources should be both permanent and reliable, or stable. Sources that fluctuate can make long-term planning difficult and can add to costs if projects must be delayed.
- Sources should address those areas with the most serious needs. Ideally, any new source of funding would be fully flexible in its application, able to be used for any purpose Alameda CTC sees fit. However, if sources are to be linked to specific categories of spending, then those areas with the greatest need, such as transit operations, should be prioritized.



• Sources should be able to win broad support from stakeholders and partners. Finally, only those sources that seem likely to be able to achieve "buy-in" and support from those affected and/or potential allies should be pursued. This will be particularly important if the CTC decides to pursue new sources that would have to be implemented regionally or by the State.

Once these priorities have been clarified, Alameda CTC can develop a strategy for pursuing new sources, including a strategy for collaboration with partner agencies such as MTC.

ISSUE PAPER: TRANSIT SUSTAINABILITY AND INTEGRATION

INTRODUCTION

This section presents principles of transit sustainability and integration and how they may be implemented in Alameda County. Key conclusions include:

- "Sustainability" and "integration" consist of interconnected elements of financial sustainability, high-quality customer service and environmental benefit.
- Opportunities would appear to exist to better coordinate fares, schedules and possibly branding among multiple operators, improving system connectivity and legibility through inter-operator agreements, an "umbrella" oversight body, or agency mergers.
- The county and region could improve the long-term financial standing of the transit system by prioritizing capital improvements that served to improve cost-effectiveness of operations, as well as connectivity.
- It might be possible to improve cost-effectiveness by transferring responsibility for some services to new operators, possible including cities or private entities.
- Opportunities would appear to exist to improve the cost-effectiveness of ADA complementary paratransit services, and possibly to leverage those services to provide service to the general public.
- A comprehensive Long Range Transit Plan for Alameda County might be undertaken to identify additional opportunities for greater integration and sustainability .

Why Transit Matters

The financial challenges faced by Alameda County transit operators have been at the forefront of discussions about the Alameda Countywide Transportation Plan (CWTP). BART, AC Transit and other operators have repeatedly had to cut service and raise fares; AC Transit made headlines by cutting service twice last year. This situation, however, is not new, or temporary, as long-term structural deficits in both operations and capital funding already existed. To solve this problem in a way that ensures that transit can meet rising demand and achieve equity, environmental and other goals will require a hard look at elements of the whole, interconnected system – and not just each operator individually – including service delivery structure, efficiency and cost effectiveness, connectivity and service gaps. These are components of transit sustainability and integration. There are many people who already depend on our transit services, but both demographic trends (including an aging population and a greater preference for urban living among younger generations) and growing social and environmental concerns (about climate change, energy independence and other issues) suggest that both demand and need are only going to grow.

Integration and Sustainability

Transit "integration" and "sustainability" are interrelated concepts. Transit sustainability includes social, financial, and environmental components. The definition of "sustainability" that has been developed by the Metropolitan Transportation Commission (MTC) for its regional Transit Sustainability Project (TSP) includes these three dimensions:

- **Customer:** A system that functions as an accessible, user-friendly and coordinated network for transit riders, regardless of mode, location or jurisdiction
- **Financial:** A system that can cover its operating and capital costs with a growing share of passenger fare revenues as well as reliable streams of public funding
- **Environmental:** A system that can attract and accommodate new riders in an era of emission-reduction goals, and is supported through companion land use and pricing policies

The first element of a "sustainable" transit system as defined by MTC – sustainable for the customer – also serves as a description of an "integrated" transit system, one that functions seamlessly for the customer in terms of fares, routes, transfers and information throughout the region.

Identifying the Sustainability Challenge

As mentioned above, MTC is currently conducting a Transit Sustainability Project (TSP) which is taking a comprehensive look at the short and long term sustainability of our region's transit system. The TSP provides a good launching point for discussion of transit sustainability in Alameda County because MTC is conducting a thorough analysis of the Bay Area's transit providers and its recommendations will apply to Alameda County and the county's transit operators. This MTC study of Bay Area transit services focuses on three elements of the transit system:

- Financial viability
- Service design and delivery
- Institutional (decision-making structures)

The study is also considering the role of external factors that influence the sustainability of a transit system, including land uses and transportation pricing.

The starting point for the TSP was *Transit in Transition*, a report that detailed the greatest challenges facing the Bay Area's transit system. To name a few:

- Between Fiscal Year 1997 and 2008, operating costs at the Bay Area's seven largest operators, including BART and AC Transit, increased 52 percent (in constant, non-inflation-adjusted terms), while hours of service provided increased just 16 percent, and ridership just 7 percent. (AC Transit was representative of this trend costs increased 43 percent, service hours 15 percent and ridership 3 percent while BART was an outlier, with a 34 percent increase in costs, 38 percent in hours and 43 percent in ridership.)
- The study revealed that Bay Area transit operators spend more on administration (approximately 20 percent) than do operators in other regions (a peer group average of approximately 14 percent). As the *Transit in Transition* report noted, there are 28 transit operators in the Bay Area, "each with its own board, staff, and operating team." The financial analysis also found that between 1997 and 2008, costs for employee "fringe" benefits grew faster (69 percent) than overall operating costs. Revenues from sales taxes, meanwhile, fluctuated, but were lower in real terms in 2008 than they had been in 1997.
- On the whole, the study projects operating deficits of \$8 billion, or about 10 percent of operating costs, and capital deficits of \$17.2 billion through 2033 for Bay Area operators.

The TSP has since released an "Initial Cost and Revenue Analysis." Among its findings:

- Service that is contracted out to a private entity, rather than operated under contract, appears to generally be cheaper. In Fiscal Year 2009, operating costs per hour for fixed-route service at the Bay Area's five largest bus operators ranged from \$154 to \$185 for service directly operated. Meanwhile, service provided under contract by LAVTA cost \$92 per hour, and at another operator assessed, Fairfield and Suisun Transit, it cost \$99 per hour. SamTrans, on the Peninsula, pays \$171 per hour for service it directly operates, but just \$111 per hour for service that it contracts out. Notably, all of these services use union operators.
- At the region's seven largest transit operators, wages and fringe benefits accounted 77 percent of all operator costs. Fringe benefits (34 percent) cost nearly as much as wages (17 percent for operators, and 26 percent for others, for a combined 43 percent).
- Among the factors in labor costs are wages and fringe benefits as well as work rules and pension obligations.

This information is not provided to suggest that contracting out always provides cost savings or that all other things are equal in contracted versus non-contracted operations. The information developed by the TSP team simply suggests that transit agencies, especially older agencies with a long history of utilizing public employees as their transit operations forces tend to have higher cost structures with higher legacy costs than many of the newer agencies with contracted work forces. It should also be pointed out that there are many other less tangible differences between these Bay Area examples. The larger and "more expensive" transit operators tend to have the toughest urban duty, operate over longer service days, operate longer weekend hours, and work their employees over split shifts and extended hours in some of the most challenging traffic environments in the Bay Area.

While the data provided above focuses on financial efficiency, a sustainable transit system is also one that has resolved or is able to successfully manage tensions between competing goals. While the TSP definition of transit sustainability includes a "customer" element, in reality, there is no such thing as a single transit "customer." Rather, there are many different customers with diverse needs, and transit services providing the greatest equity benefits are also often among the most expensive to deliver.

Moreover, in the context of the Bay Area and Alameda County, where there are multiple transit operators, developing an integrated transit system means striking a proper balance between competing objectives of local control and regional coordination. A transit system that is seamlessly integrated from a customer's point of view does not necessarily have to be a *single* system. However, as the MTC definition makes clear, it must *function* like one. (A single system or fewer systems might, it should be noted, be more financially sustainable, as "redundant" administrative costs would be reduced.)

Two other relevant studies provide insight into sustainability: San Francisco Muni's Transit Effectiveness Project (TEP) and the Santa Clara VTA's Comprehensive Operations Analysis (COA). Both of these studies sought to redesign services to increase productivity, reducing or eliminating many less-productive services in order to reallocate resources to services that have the most potential to increase transit ridership. Service reductions can improve an agency's cost-effectiveness by focusing resources on corridors that are more productive (i.e. have more riders). This can even result in increased ridership, to the extent that service is actually increased in productive corridors. The environmental component of transit sustainability, of course, stems from increased ridership – the more users, the greater the environmental benefits. However these changes can negatively impact riders on less productive corridors and any definition of transit sustainability must include not just financial and environmental elements, but also equity elements – ensuring high-quality services for all of the divergent markets that a transit provider serves. In Alameda County, AC Transit has sought to make targeted cuts in service in a way that minimizes impacts on riders and on ridership.

ELEMENTS OF A SUSTAINABLE AND INTEGRATED SYSTEM

The TSP's overarching goal of a "more robust, financially viable transit system that is both cost-effective and customer-focused" serves as a good starting point for defining how a sustainable and integrated Alameda County (and Bay Area) transit system could function.

Additional, more specific goals for a sustainable and integrated system in Alameda County could include:

- **Coordination of fares, schedules and branding.** The first two elements, in particular, are fundamental to a transit system that functions seamlessly from a user perspective. The need to pay multiple fares during the course of a single journey is an inconvenience, a possible cause for confusion, and makes transit less competitive cost-wise compared to alternatives. Transfers that are not reliably timed can also have a magnified effect on the decision to take a future trip by transit, as multiple studies have found that time spent waiting for transit *feels* significantly longer than it actually is. Common branding to create the appearance of a single system is less important so long as long as information is clear and readily accessible and rider awareness of where to wait and which vehicles to board is not compromised. MTC and transit operators have taken steps to create a "virtually" integrated system using the Clipper card program (which reduces the inconvenience of paying multiple fares). In addition, a Regional Transit Connectivity Study completed in 2006 recommended improvements to signage and other wayfinding elements at major multimodal hubs, and the use of "real-time" wait time information to reduce the anxiety associated with transit waits.
- **Physical optimization of connections.** In many cases, transfers between transit services are more onerous than need be because of placement and design of stops. It can be prohibitively expensive to retrofit existing infrastructure such as bus transfer areas at rail stations; in some cases, however, distances between stops might be reduced, and paths made more direct and obvious using relatively low-cost means such as relocation of on-street stops (this can also serve to optimize transit operations, for example by moving a stop from the near side to the far side of an intersection). Improvements to the design of stops and stations, including amenities such as shelters and real-time wait time information, can serve to enhance connectivity by reducing the psychological barriers associated with transfers. Some improvements, such as bicycle parking (or auto parking, although this can negatively impact access for other modes) can improve multimodal access, or connectivity between different legs of a trip. Nonmotorized access and connectivity can also be improved by making improvements to the surrounding area, in the form of streetscape-related improvements to the quality of the pedestrian environment or "complete streets" improvements to both the pedestrian environment and the roadway, such as bicycle lanes and improved street crossings (complete streets improvements can also improve operating conditions for transit, if traffic conflicts are reduced).
- Avoidance of delay. Speed is an essential element of sustainable transit service for two reasons. First, reduced travel times benefit riders and are attractive to potential riders. Second (and less well-understood) is the relationship between speed, frequency and operating cost. When travel times are reduced, more service can be provided using the same number of vehicles and operators; or, the same level of service may be provided at reduced cost. Transit vehicles operating in mixed traffic flow are vulnerable to increasing traffic congestion; slow but steady degradations of speed over time can result in a vicious cycle whereby either costs must increase or service must be reduced. Conversely, reducing delay can result in a virtuous cycle of increased ridership providing more revenue. Reducing delay also means an increase in reliability, another essential component of a sustainable system, both from a current customer service and new customer attraction standpoint. Delay can be reduced by making changes to existing routes (such as removal of closely-spaced stops or signal priority for transit) or policies (for example, eliminating fares reduces dwell time, or time spent loading and unloading at stops although it can also contribute to financial unsustainability). Travel times can also be improved by making transit routes more direct (although this must be balanced with access requirements), or by

reducing the need to transfer, which both reduces travel times for users as well as operating costs for providers, as the time it takes to handle transfers is a factor in dwell time.

• Service that responds to context. Different types of riders have different needs; land use (in terms of density, design, and mixture of uses) matters greatly; and there are system design imperatives that should be adhered and responded to in designing a transit service. In practice, this will often mean addressing questions such as: What is the right-size vehicle for this service? Should this service be a community circulator and feeder, or should it provide a "one-seat" ride to a faraway destination? What are the appropriate hours and frequencies for this service? What are the goals (e.g. productivity or equity) this service is designed to achieve?

Possible Strategies

Based on these goals, a number of possible strategies might be available to improve transit sustainability and integration:

- Consider/support measures to better integrate fares and schedules, as well as branding;
- Prioritize capital projects that would improve connectivity and reduce operating costs;
- Consider transferring responsibility for provision of some services; and
- Explore alternative service delivery models for ADA paratransit service.

These strategies are further explored in the concluding section of this document, Strategic Investment Opportunities.

CASE STUDIES

The following case studies illustrate several of the concepts described above, including fare and schedule integration, local/private operation of transit services, and alternative paratransit models.

Fare and Schedule Integration

Verkersverbund (Germany and Switzerland)

A verkehrsverbund, or VV, is a governance model common in Germany and Switzerland. In some ways, VVs are similar to U.S. Metropolitan Planning Organizations (MPOs): they are regional transportation planning bodies that provide capital and some operating funding to local transit operators. However, VVs are stronger in other, key ways: they are able to coordinate and integrate fares and schedules, so that transfers between different operators are as seamless as possible. Transit vehicles operated by local providers may also carry the VV's branding, so that service provided by dozens of different operators appears, from the customer perspective, as though it were provided by a single entity.

In his book *The Transit Metropolis*, UC Berkeley professor Robert Cervero summarized the role of VVs as follows: "These umbrella organizations ensure that problems that commonly plague regional transit services—such as fare penalties for transferring, conflicting timetables, and interagency rivalries—are eliminated."

Munich's *Munchener Verkehrs-und Tarif-Verbund*, or MVV, is governed by an executive board including state and local representatives. The board sets service and fare policies (such as maximum headways), and it approves budgets. Day-to-day administration, however, is left to a management board consisting of staff from individual operators. This board sets actual timetables, fare zone boundaries, work rules and contract terms, and is responsible for marketing. Individual operators effectively function as contract operators, responsible for actual delivery of service.

Zurich's Zürcher Verkehrsverbund, or ZVV, coordinates service provided by more than 40 individual operators, including public agencies and private companies. Its governing Cantonal Transport Board sets minimum service standards, such as connectivity requirements, and it sets maximum budgets. It collects

revenues, then distributes them to operators based on a reimbursement system that takes into account the amount of service provided as well as performance criteria. The ZVV is said to have a "watchdog role" – it manages a competitive bidding process for provision of some services. Within two years of the ZVV's establishment and introduction of a single regional fare structure in 1990, ridership on feeder buses had increased 53 percent.

The potential for application of the VV model to American cities and sub-regions would depend to a great extent on the degree to which localities were willing to surrender control over service planning. While a board including local representatives could set policy, and while managers of local agencies could jointly maintain control over details of the implementation of those policies, ultimately, routes, schedules and fares would be set at the regional level. The VV model can be considered a structure that combines important efficiencies of a single regional transit provider with elements of local control.

Lessons Learned

- Important elements of transit integration coordination of fares, schedules and branding do not necessarily require that a single operator provide all services.
- An "umbrella" transit body could have limited powers, and include subregional representation.
- Such a body could also perform a "watchdog" role.

Local Transit Services Supplementing Regional Services

DASH and Metro (Los Angeles)

DASH is a bus system managed by the City of Los Angeles Department of Transportation (LADOT). DASH's 30-plus routes serve as community circulators, providing service that effectively supplements the more regional trunk services operated by the Los Angeles County Metropolitan Transportation Authority (LACMTA, or "Metro"), the primary provider of transit service in Los Angeles County. Because a dedicated sales tax accounts for a large share of DASH funding, and because the average trip on DASH is relatively short (approximately one mile), fares have historically been kept low: until recently, they were just 25 cents, although they have since been raised to 35 cents, and will soon be increased to 50 cents. Nonetheless, these are low relative to other transit operators. For this reason, strong demand has historically existed among elected representatives of Los Angeles neighborhoods for expanded DASH service.

DASH originally was an acronym for "Downtown Area Short Hop." Introduced in 1971, DASH was originally a downtown-only circulator operated by the Southern California Rapid Transit District, or RTD, the predecessor to LACMTA. In 1985, responsibility for the service shifted to the city, which then contracted out operation to a private company. Within a year, costs had been reduced by 38 percent.

LADOT owns the buses used for DASH service (30-foot models, which are more easily maneuverable and more appropriately scaled to neighborhoods than typical 40-foot buses), but contracts out operation to private companies. As of 2009, operating costs for all LADOT services (including commuter buses and other shuttles) were approximately \$85 per hour or \$2 per trip. By contrast, Metro bus operating costs were approximately \$125 per hour and \$2.40 per trip. These differences are especially notable given that because most of the high-demand transit corridors in Los Angeles are served by Metro, Metro buses are more productive than LADOT's – 51 passengers per hour, vs. 42 – and more productive services are typically more cost-effective.

DASH provides a number of benefits to users and to the City. For users, it provides coverage beyond that provided by Metro, and it adds value to the Metro system by providing "last-mile" connections from Metro rail and bus stops. Indeed, the average trip length on DASH is less than mile.

DASH also provides the City with flexibility in responding to Metro service cuts or perceived deficiencies in Metro service that the agency is unable or unwilling to address. In 2007, for example, a DASH route was lengthened to serve as a replacement for a Metro route that had been eliminated in East Los

Angeles. During the 2008 holiday season, meanwhile, downtown DASH service was extended until 3 a.m. using private funding.

Unfortunately, transfers between Metro and DASH service are no longer as convenient or "seamless" as they once were. In 2008, as part of a transition to use of smart cards in place of paper passes (and in a move that saved the agency \$758,000 per year), Metro ended its longstanding practice of reimbursing LADOT for use of Metro passes on DASH buses. While rides on DASH remain relatively inexpensive, riders transferring from Metro to DASH must pay a cash fare, use a separate DASH pass, or present a regional pass costing \$84 per month.

Lessons Learned

- A municipally administered transit service may be able to supplement regional service by providing supplemental "circulator" service at relatively low cost.
- Such an arrangement also offers the benefit of local control over local services.
- While such an arrangement can contribute to transit sustainability, care must be taken to ensure that it does not negatively impact transit integration.

Community Transit Network (Boulder, Colorado)

Boulder's Community Transit Network, or CTN, consists of seven local bus routes that are operated primarily by the Denver area's primary transit provider, the Regional Transportation District (RTD), but that are subsidized by the City.

RTD provides a baseline level of service to each city and county in its service area based on existing ridership levels; in Boulder it provides both regional and local service. Starting in the early 1990s, however, the City, in collaboration with members of the community, made a decision to fund additional, supplemental local service in order to offer residents a citywide network serving major destinations with headways of 10 minutes or less (or "walk-up" headways, so called because riders are likely to feel comfortable just arriving at the stop and waiting, rather than consulting a schedule first). New routes were also developed with more direct alignments, meaning that the CTN, while a supplemental service, has characteristics of a trunk network.

In addition to improving service for existing riders, it was hoped that the enhanced system would attract more "choice" riders. "The City gives money for a more marketable service model," GO Boulder planner Cris Jones explains. "It's not based on current use, but on our ability to sell to people who aren't using transit."

The strategy appears to have worked. Since the early 1990s, the average number of daily transit boardings in Boulder has increased from less to 20,000 to nearly 35,000 in 2009. Drive-alone mode share has decreased by 15 percent, and the number of vehicle miles traveled (VMT) within Boulder has remained relatively constant.

Boulder provides its share of CTN funding from a local sales tax measure. Several of the CTN routes were launched using federal grants supplemented with local matches. Boulder County and the University of Colorado-Boulder (CU-Boulder), both through its administrative budget and through student fees, also contribute funding.

The City "pays a premium," as Jones put it, for a dedicated fleet of uniquely branded vehicles (the routes feature colorful names such as "HOP" and "SKIP") with amenities including on-board music and automated stop announcements.

Recently, RTD funding and policy issues have threatened CTN service. According to a March 2010 statement on the City's website, "Both current budget problems as well as apparent RTD priorities suggests that RTD has very little commitment to provide service levels above its regional standard. This means that we cannot count on RTD to maintain current service levels and that maintaining or adding to the CTN will require additional local dollars to buy up or support our desired level of service."



Additionally, "(a)s the City of Boulder and RTD have faced budget shortfalls, differences became apparent in how the two organizations approach providing bus-based transit. RTD's apparent priority for bus-based transit service became more focused on providing 'coverage' for 'transit dependent riders,' while the City of Boulder has maintained its focus on providing transit for the 'choice rider' as well as for transit-dependent customers. ... RTD has had significant problems operating high frequency services in a consistent dependable manner and to the standards established for the CTN." The statement goes on to note that the City and its partners "will need to consider ... potentially different operational and governance approaches." This statement would appear to suggest that Boulder may be moving away from its model of a partnership with the regional transit provider to a model closer to that of Los Angeles DASH, which is an entirely separate system both operationally and administratively.

Lessons Learned

- Municipalities might also supplement regionally provided service by paying for higher levels of service on existing routes.
- Such a strategy might give the municipality leverage to work with the operator to redesign local services to achieve local objectives.
- However, in the event of funding shortfalls, and/or if transit agency and municipality objectives diverge, such a partnership may become untenable.

Bay Area Shuttles: Emery Go-Round (Emeryville), "B" Line (Oakland), and Palo Alto Shuttle

The Emery Go-Round is an existing Alameda County example of local shuttle service that effectively augments and supplements regional transit services. The Emery Go-Round fills a "last mile" gap between Emeryville and the MacArthur BART Station (in fact, the distance between the station and Emeryville City Hall is 1.1 miles), and while several AC Transit routes operate within Emeryville, they are primarily regional Transbay routes.

The Emery Go-Round was initially administered by the City and funded using a public/private partnership. However, it is now administered by the Emeryville Transportation Management Association (TMA) and funded using fees paid by all commercial and industrial property owners in Emeryville. In 2010, Emery Go-Round operating expenses were approximately \$2.4 million. The service is free to the public.

In return for their contributions, local businesses receive the benefit of increased access: in 2009, Emery Go Round ridership was approximately 1.3 million. The service is also significantly more cost-effective to operate than AC Transit's services: about \$1.50 per trip, vs. nearly \$5 per trip for AC Transit (in 2009, according to the National Transit Database).

Oakland's new Broadway shuttle, known as the "B" or "Free B", also supplements existing AC Transit services and serves as a "last mile" link from 19th and 12th Street BART to Jack London Square. Since its inception in August of last year, ridership has been trending upwards, from a daily average of around 1,300 to more 1,900 in October. The City is now seeking to expand the weekday-only service to Friday and Saturday evenings.

The City of Oakland administers the service, and AC Transit operates it under contract. It is funded by what project manager Zach Seal calls "a very robust public-private partnership." While its primary funding source is a two-year, \$1 million grant from the Bay Area Air Quality Management District, a number of public and private entities are contributors, including the Oakland Redevelopment Agency, the developers of Jack London Square, the Downtown Oakland Association, the Lake Merritt-Uptown Association, The Uptown Apartments and the Water Emergency Transportation Authority (WETA). Its total annual budget is approximately \$730,000.

While the service remains relatively new, it already appears to be reaping economic benefits for Oakland. According to Seal, at least three new businesses, including the 60-employee solar design firm Sungevity, have relocated to Jack London Square in part due to the shuttle, and business at the restaurant Home of Chicken and Waffles is up 15 percent, an effect the owner has attributed to increased foot traffic brought about by the shuttle.

Finally, in Palo Alto not one but two shuttle systems serve to supplement service provided by the countywide operator, the Santa Clara Valley Transportation Authority (VTA). Stanford's Marguerite system consists of a total of 13 routes serving students, staff and members of the public, including routes connecting Caltrain stations to the Stanford Research Park, a general office park. Additionally, the City of Palo Alto administers two routes serving other areas of the city. A number of partners help to fund the Marguerite, including the City, Stanford Shopping Center, the Palo Alto Medical Foundation, the Bay Area Air Quality Management District and the Peninsula Corridor Joint Powers Board, or JPB, operator of Caltrain. The JPB also provides funding for City shuttle service. Both services are fare-free.

In 2007, VTA completed a Comprehensive Operations Analysis, or COA, resulting in a number of changes to its service in Palo Alto. Unsatisfied with some of the changes, the City partnered with VTA and others on a joint study of VTA Community Bus and Palo Alto Shuttle services. As a result of the study, VTA service was modified to better complement the City shuttle service and satisfy community concerns, including concerns about service to a local high school, and there was only a slight impact on VTA operating costs.

Lessons Learned

- Local economies can benefit from supplemental local service.
- Such services can be funded using a public-private partnership.

Microsoft (Seattle)

In addition to shuttle services administered by cities or civic institutions, private institutions such as hospitals, nonprofit community-based organizations, business groups such as a Business Improvement District or Transportation Management Association, or through a public-private partnership, major employers can supplement transit agency services by providing private shuttles for their own employees. Such services are typically provided as part of a Transportation Demand Management or TDM program, or as an employee benefit/recruiting tool. In Alameda County, Bishop Ranch operates a shuttle system, as do major Bay Area employers such as Google and Genentech. Google's system, a company representative told the *New York Times* in 2007, is so extensive that it is "basically ... a small municipal transit agency."

Because such services tend to be proprietary, only limited information is available to the public. However, some information is available about an extensive private system in the Seattle area, the Connector service provided by Microsoft for its employees. The Connector system consists of 21 routes operating throughout the Puget Sound region and serving more than 3,000 daily riders, of whom 60 percent have been found to have formerly commuted to the Redmond campus by single-occupant vehicle (SOV). Public benefits from the system are extensive, including an annual reduction in greenhouse gas (GHG) emissions of 3,100 tons. This finding reflects local findings from a 2010 study by the San Francisco County Transportation Authority (SFCTA), which concluded that regional private shuttles operating in San Francisco were responsible for annual reductions of 8,000 to 9,000 tons of CO2 and 20 million vehicle miles traveled.

A key issue related to such services that must be resolved is the use of public facilities by private entities. To reduce conflicts at stops between private shuttles and public buses, and to mitigate community concerns including idling and operations on neighborhood streets, private employers and public agencies must closely coordinate their efforts. The 2010 SFCTA study was initiated in response to just such issues, and recommended greater collaboration between public and private stakeholders. In the Seattle area, the Seattle Department of Transportation (SDOT) has worked with Microsoft and affected communities to ensure that Connector buses can use loading zones, including newly designated loading zones, rather than public bus stops (Microsoft pays SDOT annual per-vehicle fees to offset the costs of this program). King County and other public bodies have also worked to ensure access to curb stops. Connector



shuttles have been allocated space at regional transit centers and park-and-rides operated by Sound Transit and King County Metro, including two bays at the Overlake Transit Center adjacent to Microsoft's Redmond campus. Finally, Microsoft and public agency staff coordinate to ensure that Microsoft routes complement rather than compete with public services; there is a benefit for employers in such coordination, as many also pay to subsidize transit passes for their employees.

Lessons Learned

- Private companies may provide transit service for their employees as a condition of project approval or as an employee benefit.
- Such services can offer significant benefits for the public at little or no cost.
- However, such services can place demands on public infrastructure; in these cases, public officials should work collaboratively with employers, recognizing both the potential benefits for the public as well as the impacts

Alternative Demand-Responsive Models

Pittsburgh Route-Deviation Paratransit

Unlike many localities, which reserve paratransit for people with disabilities, Pittsburgh operates a network of fixed-route shuttles that deviate off the route in response to demand. One example is the Airport Corridor Transportation Association (ACTA) Employer Shuttle, which picks up suburban passengers from a designated stop every 20 minutes but strays from the route (within 1.5 miles) to drop people at their destination. These free-fare shuttles are primarily geared toward commuters and students, but serve people with disabilities and, importantly, were designed with the disability community in mind. As employee shuttles, the shuttles are partially funded by employers. The ACTA worked with developers and businesses to optimize routes and stops to efficiently transport employees and customers from bus stops to their locations off the fixed-route paratransit loop. Once on the vehicle, passengers arrange for a pick-up time to return to the bus stop.

Additionally, in neighborhoods without conventional transit, Pittsburgh operates Community Buses and the Elder Express. The two circulate neighborhoods on a fixed route and schedule in small vehicles. The services link passengers to major trip generators and to the fixed-routes of conventional transit for access to services, jobs, and schools. The principal users of the services are low-income people, including students and seniors, and commuters. There is no charge for the service, although riders must apply to obtain a free pass.

These flexible services offer a way to provide coverage in low-demand areas with dispersed origins and destinations at a reasonable cost and can reduce or eliminate the expense of separate, exclusive paratransit service for people with disabilities. In some settings, the cost savings from providing combined service for people with disabilities and the general public can be crucial in making transit service economically viable. Combining service for people with disabilities and other riders theoretically helps consolidate demand density and promotes economies of scale. While paratransit savings have not been realized in Pittsburgh, fixed-route ridership has increased.

Finally, the transportation agency, the Port Authority of Allegheny County, has instituted an educational campaign in Pittsburgh area high schools to overcome some of the reticence to use feeder paratransit and flexible-route paratransit shuttles. Prior to entering the workforce, the agency trains 16-21 year-old high school students with disabilities to access feeder paratransit and other fixed-route transit. This travel instruction serves to increase transportation independence among disabled students.

Lessons Learned

• One alternative to traditional curb-to-curb ADA complementary service is "deviated fixed-route" service that may also be used by the general public.

- Such services should be designed to include quality accommodations for persons with disabilities.
- If such services are also employer shuttles, it may be possible to fund them using a publicprivate partnership.
- Fixed-route circulator services may be able to reduce demand for ADA complementary services, and reduce overall costs.
- Educational efforts can be used to increase use of fixed- or deviated fixed-route services by persons with disabilities.

Vancouver Connector Paratransit

Operating demand-responsive, stand-alone paratransit service is costly: it's not unusual for paratransit trips to cost an agency 10 times more than a fixed-route trip. Feeder paratransit circumvents the provision of costly, comprehensive paratransit service. Instead of providing curb-to-curb service on a single, dedicated paratransit vehicle, feeder paratransit serves the much shorter, curb-to-fixed-route transit stop trip. In Vancouver, British Columbia, feeder service evolved as a way to provide long trips between the suburbs and central Vancouver that otherwise would be too expensive or time consuming due to roadway congestion. Prospective riders phone to request a paratransit ride and are assigned a feeder paratransit trip if:

- The requested destination would require a lengthy paratransit trip; or
- The requested trip occurs during peak hours; or
- The rider asks for a feeder trip

While feeder paratransit was initially unpopular among riders due to the transfer between the paratransit vehicle and conventional transit, focus group participants who use feeder service preferred feeder to direct paratransit service on a number of measures (travel time, schedule convenience, service availability, sense of independence). On the other hand, direct paratransit scored better on personal effort and comfort level.

The upside for Custom Transit, the Vancouver paratransit operator, is that feeder trips cost less than half as much as a similar trip exclusively on paratransit, including account planning, booking, and operating costs. On an average paratransit trip of 12 miles, only 4.9 miles were on feeder paratransit. The average trip time was 41 minutes, not including wait time. Overall cost savings from reduced paratransit mileage was estimated at \$139,000, or roughly 1.3% of the annual paratransit budget at the time.

As the Vancouver case shows, in highly-transit served areas with frequent fixed-route service, connector paratransit can substantially reduce costs without inhibiting the mobility of people with disabilities.

Lessons Learned

- Demand-responsive service for persons with disabilities feeding into regular trunk services can serve as a cost-effective alternative to traditional ADA complementary service.
- However, any such service would have to satisfy ADA requirements including an ADAcompliant path between the fixed-route stop and destination.
- While there would be impacts for users, trunk services provide certain advantages, including speed, frequency, span, and a sense of independence for users.

King County, Washington Community Access Transportation

Formerly known as the Community Partnership Program, King County Metro's CAT program includes two components: a "Vanworks" program under which Metro pays for vanpools provided by community organizations to clients eligible for Metro's ADA program, and who are traveling to work sites; and an "Advantage Vans" program, described below.



ALAMEDA COUNTY TRANSPORTATION COMMISSION

As of 2009 the program included 76 vans loaned to 26 community agencies, all of which have agreed to provide at least 50 one-way trips per month to individuals eligible for Metro's ADA program, Access Transportation. Metro provides maintenance (through a contract with Veolia) and, for agencies that provide at least 100 one-way trips per month to Access-eligible individuals, up to \$10,000 per month in operating expenses. Assuming that all of the trips provided by CAT partners to Access-eligible customers would have been taken on Access, Metro has calculated that the CAT program produced \$2.7 million in avoided operating costs in 2009, after subtracting out the cost of operating the CAT program. Even if only half of the CAT trips by Access-eligible customers would have been taken on Access, the net savings would still have been \$926,000. Staff activities include:

- Monitoring performance of required maintenance to ensure that vehicles are properly maintained, and sometimes troubleshooting issues that arise between the CAT partners and Metro's maintenance provider
- Inspection of driver records to ensure that training has been conducted, drivers have required licenses, and that checks of driving history and background have been conducted and maintained
- Inspecting vehicles to verify their condition
- Reviewing reports to ensure that they are being done properly, so that the reported trip information is reliable and that reimbursed expenses are proper
- Indentifying additional partners and setting up agreements with them

Lessons Learned

- Another alternative to traditional ADA complementary service is to offer subsidies (including vans and maintenance) to community-based organizations to provide ADA trips
- Such programs should include performance standards and regular performance monitoring of participating CBOs

CHALLENGES

While a number of possible opportunities clearly exist to make the transit system in Alameda County more sustainable and integrated, so, too, do a number of challenges. Obstacles include:

- Limited funding. As the recent budget difficulties experienced by AC Transit, BART and other operators have made painfully clear, the existing model for funding transit services within the county is not sustainable. Sales taxes, a primary component of transit operating funds, in particular are highly unreliable, tied directly as they are to economic cycles. Furthermore, the current model does not establish any linkage between revenues and environmental or equity objectives. While San Francisco's model for funding transit service is not a sustainable funding model (Muni, too, has suffered through severe budget crises in recent years), some funding does come directly from parking fee and fine revenues, discouraging overreliance on autos while providing support for transit alternatives.
- Lack of physical integration of services. Existing transit infrastructure in Alameda County is not always amenable to integration. For example, within Downtown Oakland BART stations, the Jack London Amtrak station and the ferry terminal at the opposite end of Jack London Square are several blocks apart. Even where services provided by different operators connect typically, at BART stations those connections are not always optimized or made clear. AC Transit has recently established a hub at the Uptown Transit Center on 20th Street just west of Broadway in Downtown Oakland, near a portal to the 19th Street Oakland BART station; however, the Center is just around the corner from the portal and thus just out of sight, and signage indicating the connection or providing directions remains inadequate. This complex, including both the BART station and Transit Center, should be viewed by both agencies as an integrated hub rather than

adjacent facilities. Elsewhere in the county, significant investments are under way or planned to better integrate services, including the Union City Intermodal and Livermore BART projects.

- **Multiple operators.** Within the Alameda County, there are seven major transit operators, not including shuttle services provided by cities or TMAs. This has the same effect on a county level that MTC has identified at the regional level: separate and arguably "redundant" administrative structures and relatively high administrative costs. Additionally, it presents challenges for integration of services. MTC's Clipper Card program has gone some distance toward "virtual integration" by reducing barriers associated with separate fare structures, and its Regional Connectivity Study has pointed the way toward clearer passenger information related to connecting services at multi-agency hubs such as BART stations. Nonetheless, county operators continue to charge separate fares, and while some effort is made to coordinate schedules (for example, by timing connecting bus services to meet BART trains), there is no body responsible for ensuring schedule coordination. A third issue associated with multiple operators is redundancy; one of the issues the TSP will be examining is to what extent services operated in the same corridor by different providers might serve overlapping markets, and as such, how "redundant" they might be. For example, AC Transit's Transbay bus lines are designed to complement rather than duplicate BART service; however, does it make sense for AC Transit to operate "one-seat" service to San Francisco rather than providing feeder connections to BART stations? Similarly, in Union City AC Transit and Union City Transit service overlaps in the Alvarado/Niles corridor.
- **Diverse needs.** Just as Alameda County is a sprawling, diverse place, encompassing a range of communities from urban to suburban, old to new, and from very poor to very wealthy, its transit providers must serve diverse travel markets. One key tension common to transit agencies everywhere but especially relevant in Alameda County is between "choice riders" (so called because they may choose to drive instead) and "transit-dependents." While there may be more transit-dependent riders in relatively low-income areas of North County, and more choice riders in higher-income areas in the South and East County, a range of riders with distinct needs can be found throughout the county.
- **Disincentives to use transit.** Finally, transit patronage is in large part a factor of the relative ease of driving and parking. This is the case in terms of both supply and costs: When roadways are free and uncongested, and when parking is cheap and available, strong incentives exist to drive. Conversely, congestion, tolls, and higher parking fees can all serve to encourage transit use. In Alameda County a range of conditions exists. Notably, however, in more urban areas, on-street parking is generally priced well below market rates, and roadways within the county are not tolled. Continued investment in expansion of roadway capacity would also serve as a disincentive to transit use.

STRATEGIC INVESTMENT OPPORTUNITIES

Given all of the above, what opportunities for a more sustainable, integrated transit system might exist for implementation through the Alameda Countywide Transportation Plan and Transportation Expenditure Plan? The opportunities identified here should be viewed as concepts and as ideas that might serve as a starting point for further discussion; a determination of their ultimate feasibility would require much more extensive analysis than can be provided here.

• The Alameda CTC could encourage a regional discussion on establishment of an "umbrella" body with limited powers to coordinate fares and schedules. Mergers of major transit agencies in Alameda County and the Bay Area would appear unlikely in the near term for a variety of reasons, including concerns about local control of transit decision-making processes. Even an oversight body such as a European-style *verkehrsverbund* might be difficult to establish. However, the Transit Sustainability Project will be considering institutional structures, and may recommend either consolidations of some agencies or some alternate means of greater



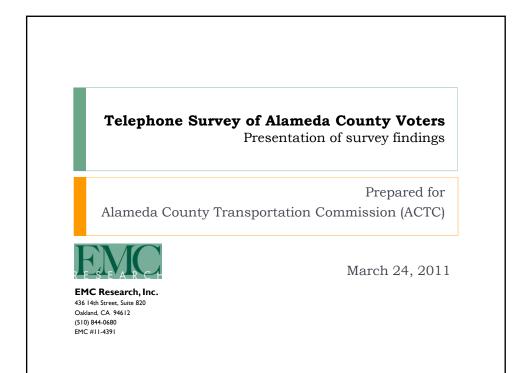
integration. A previous MTC effort, the 2007 Regional Rail Plan, recommended consideration of a regional rail authority empowered to negotiate with freight railroads for use of their rights-ofway for passenger services, and as part of that effort, a number of models for greater structural integration of transit service provision were explored, including "federation" models such as Chicago's Regional Transit Authority or more powerful regional rail authorities. In any case, there would clearly be some benefits to partial, if not full consolidation; there would also be disadvantages in terms of local control. Agreement on a single regional fare structure, for example, could prove to be difficult, even if staff and board members from existing transit agencies jointly set such a policy. Alternately, cost-sharing arrangements such as the existing Fast Pass arrangement between BART and Muni in San Francisco might be used to reduce transfer penalties, or joint tickets or passes could be issued for trips requiring travel on services provided by two separate agencies (for example, a joint BART/AC Transit fare instrument). The Clipper Card and Regional Connectivity programs will provide greater "virtual" integration over time, potentially reducing the need for stronger measures. Nonetheless, these ideas seem worthy of further study, despite the significant political obstacles to implementation. For any such structure to be implemented, there would have to be significant "buy-in" from affected communities and policymakers.

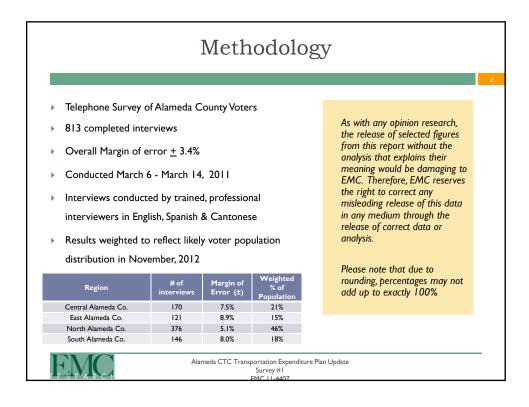
- The Alameda CTC could place an emphasis on prioritizing funding for transit capital projects that would serve to improve connectivity and reduce operating costs, especially in the near term. Emphasis on projects that result not in new services, but in improvements to the speed and reliability of existing services, can serve to save money over time by reducing operating costs. Given the current and long-term challenges to financial sustainability faced by county transit operators, such a policy would appear prudent, especially in the near term until other funding sources could be found. Moreover, a strategy of prioritizing capital investments that could serve to improve existing transit services might offer a greater return on investment for the county than regular operating subsidies. An example is AC Transit's East Bay Bus Rapid Transit project, which the agency has projected would result in a slight increase in costs, but only because significantly more service would be provided; cost-effectiveness as measured in terms of cost per trip would be improved substantially. The project would also result in thousands of new transit trips per day, despite capital costs of approximately \$14 million per mile, low relative to rail projects. Other examples are the packages of relatively modest improvements, such as stop consolidations, recommended by AC Transit staff as part of "mini-comprehensive operations analyses" conducted for the agency's two busiest corridors, the Lines 1 and 1R and Lines 51A and 51B corridors (indeed, the latter was formerly simply the Line 51 corridor; splitting the route to improve reliability was a key recommendation of the study). An additional example can be found in South County, where Union City Transit ridership increased and operating costs decreased following a reorganization of routes to improve speed and reliability. Such projects may not have the political appeal of new service, yet they can prove to be much more cost-effective ways to "buy" increased ridership. Such projects might also include measures to improve connectivity, ease transfers and better integrate services, such as relocations of stops.
- The Alameda CTC might build on the TSP by funding/leading further study of opportunities for municipal/private provision of transit services currently provided by public agencies. Through its examination of service design and delivery and institutional decision-making structures, the TSP will be considering issues such as redundant services and the appropriate roles different services within the larger system. One possible avenue for investigation is whether responsibility for services that can be, and often are, provided by cities or Transportation Management Associations rather than regional operators ought to be transferred from the latter to the former; or, to put it more directly, whether cities and businesses may be better positioned to provide "circulator" or "feeder" services, leaving regional transit providers to focus on longer-distance "trunk" services. Experience has shown that local entities can often provide this service more cost-effectively, and can gain a greater measure of control and security over their continued existence and quality. For example, opportunities would appear to exist to improve local services currently provided by AC Transit simply by transferring responsibility for their

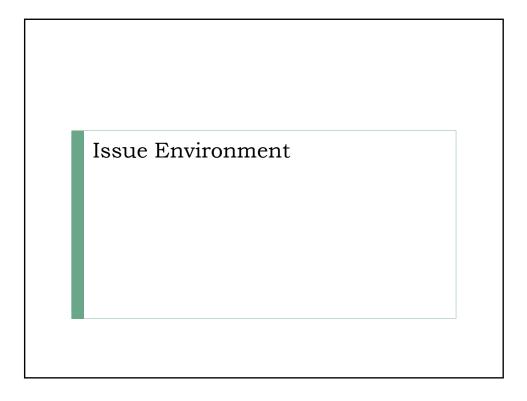
provision. "Simple," of course, is something of a misnomer, as there would be barriers to such a strategy, not least of which would be funding. However, AC Transit service is relatively expensive to provide: approximately \$156 per hour for fixed-route bus services in 2009, according to the National Transit Database. By contrast, the cost per hour to provide Emery Go Round service that same year appears to have been approximately \$66 per hour, based on an operating budget of \$2.1 million and a total of 32,000 hours provided (LAVTA's cost per hour for fixed-route service was approximately \$92 in 2009, and Union City Transit's was \$66). Gaining control over service would also amount to a clear benefit for communities providing service currently provided by AC Transit, a not-insignificant benefit given AC Transit's repeated recent rounds of service reduction. And, AC Transit itself would stand to benefit, as it could focus on its more productive "trunk" services. However, such cost savings are typically achieved by contracting service to a non-union operator, which may prove politically unpalatable, and if cities were to provide service currently provided by AC Transit, an equitable mechanism would need to exist for them to transfer funds currently provided to AC Transit to the local service instead. Alternately, TMAs or private companies might provide service; however, there would either need to be strong TDM mandates to do so, and/or the service would need to be subsidized through a public-private partnership.

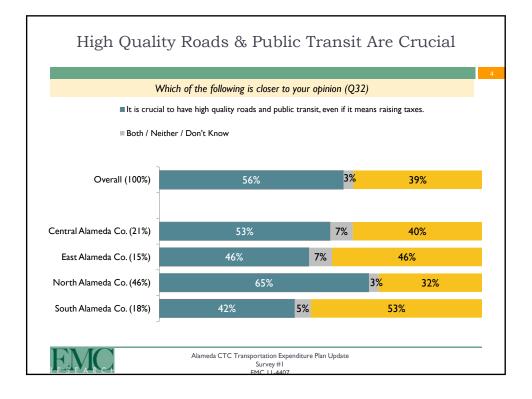
- The Alameda CTC could work with transit providers to identify more cost-effective means of providing ADA paratransit service, based on the outcomes of the TSP. Traditional Americans with Disabilities Act complementary paratransit service is very expensive to provide. Paratransit providers in Alameda County have experimented with some alternate models, such as taxi subsidies. Other models may be available, however, that would allow for more cost-effective delivery of ADA services. Moreover, some might be leveraged to provide demand-responsive service to members of the general public, as described in the case studies.
- The Alameda CTC might take the lead in organizing a Long Range Transit Plan for the county. The MTC TSP will result in recommendations for a more integrated and sustainable transit system within Alameda County. Additionally, there are policy changes that could be made in the near term, without benefit of a comprehensive plan, such as transfer of responsibility for provision of some services and a greater focus on operating cost in prioritization of funding for capital projects. However, the county's transit system is vast, complicated and highly diverse. The scale of the challenges faced by the county in this area, when combined with the scope of funding challenges confronting transit operators (see "Innovative Funding Practices" paper), suggests that a holistic, focused examination of the transit system within the county should be undertaken. Areas of analysis for such a study might include: connectivity between major upcoming projects such as Livermore BART, Altamont Rail, Dumbarton Rail and Santa Clara BART; opportunities for improved regional express bus service (including an examination of alternatives to the existing AC Transit Transbay model); and opportunities for more costeffective delivery of services beyond those identified by the TSP.

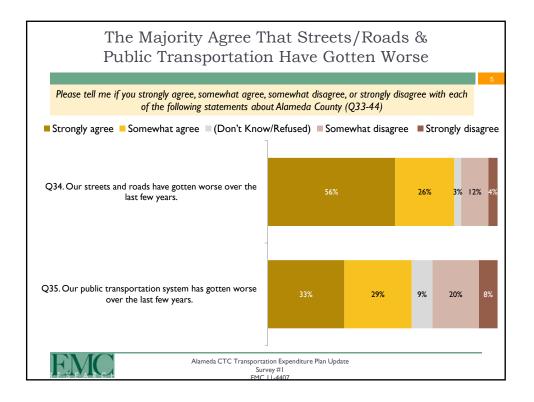
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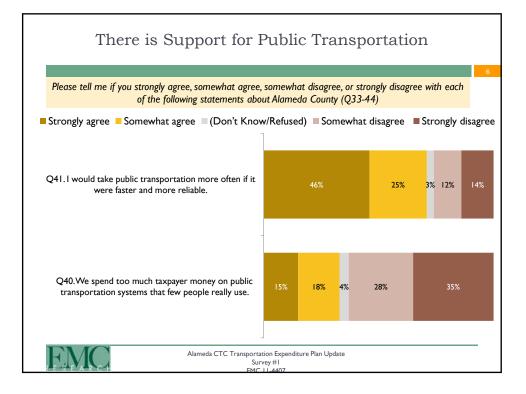


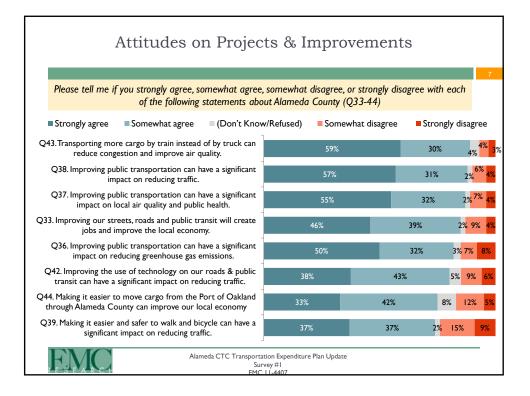




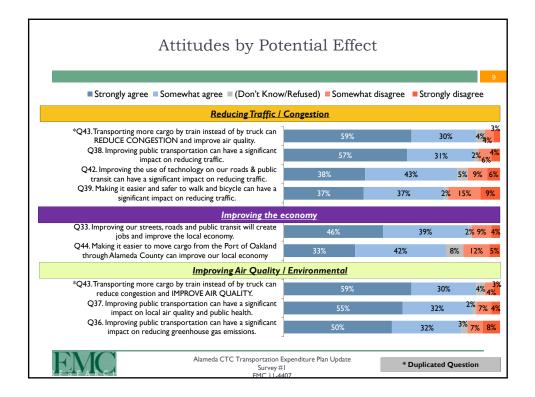


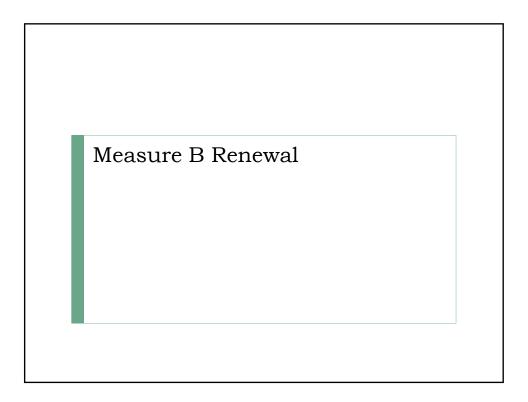


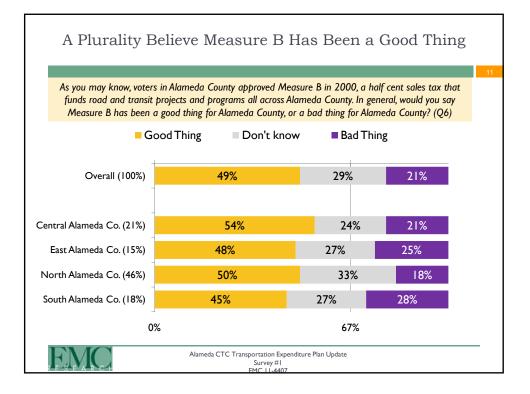


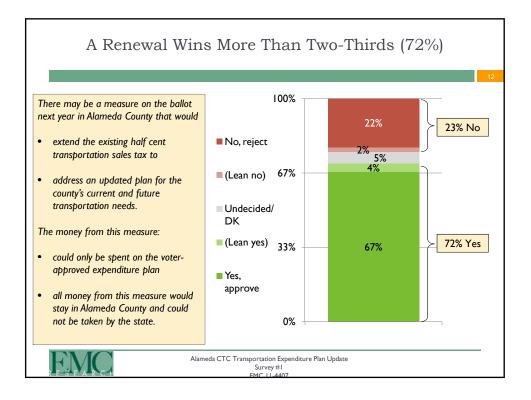


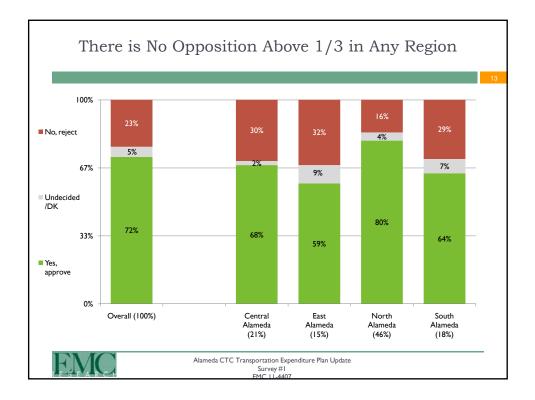
Attitudes by Impr	ovement Typ	pe	8
Strongly agree Somewhat agree (Don't Knov	v/Refused) Somewhat o	disagree 📕 Strong	gly disagree
Public Transportation			
 Q38. Improving public transportation can have a significant impact on reducing traffic. Q37. Improving public transportation can have a significant impact on local air quality and public health. *Q33. Improving our streets, roads and PUBLIC TRANSIT will create jobs and improve the local economy. Q36. Improving public transportation can have a significant impact on reducing greenhouse gas emissions. *Q42. Improving the use of technology on our roads & PUBLIC TRANSIT can have a significant impact on reducing traffic. 	57%	3	1% 2 <mark>% 6% 4%</mark>
	- 55%	325	% 2 <mark>% 7% 4%</mark>
	- 46%	39%	2% 9% 4%
	- 50%	32%	3% 7% 8%
	38%	43%	5% <mark>9%6%</mark>
Streets / Roads & Highways			
*Q33. Improving our STREETS, ROADS and public transit will create jobs and improve the local economy. *Q42. Improving the use of technology on our ROADS & public transit can have a significant impact on reducing traffic.	46%	39%	2 <mark>% 9% 4%</mark>
	38%	43%	5% 9% 6%
Cargo / Freight			
Q43.Transporting more cargo by train instead of by truck can reduce congestion and improve air quality. Q44. Making it easier to move cargo from the Port of Oakland through Alameda County can improve our local economy	59%	3	0% 4% 4% 3%
	33%	42%	8% 12% 5%
Pedestrian Safety			
Q39. Making it easier and safer to walk and bicycle can have a significant impact on reducing traffic.	37%	37%	2% 15% 9%
Survey #	Alameda CTC Transportation Expenditure Plan Update Survey #1 EMC 11.4407 *Duplicated Question		

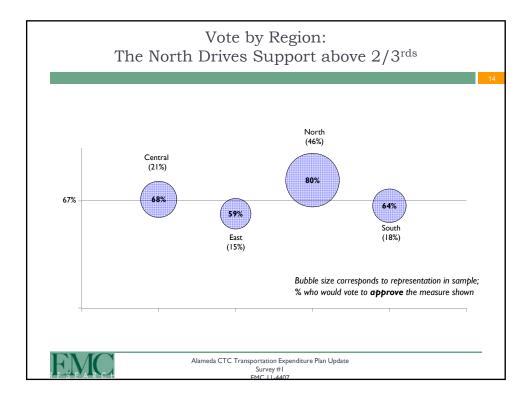


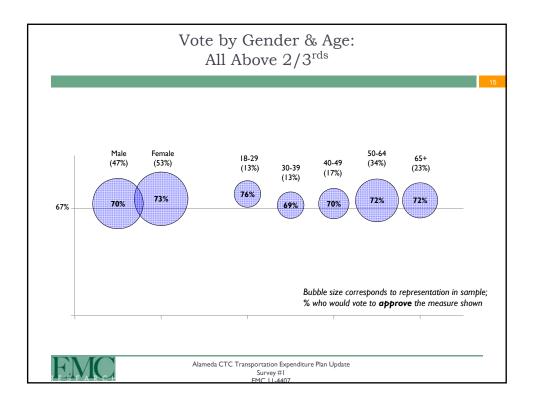


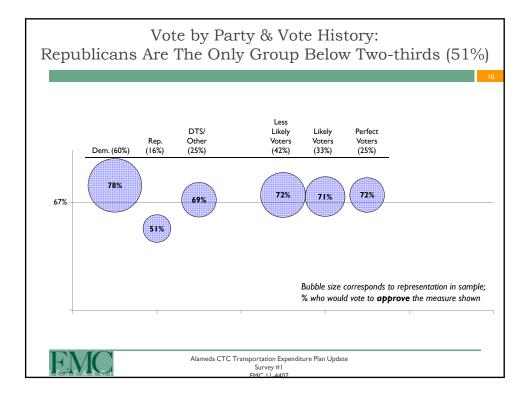


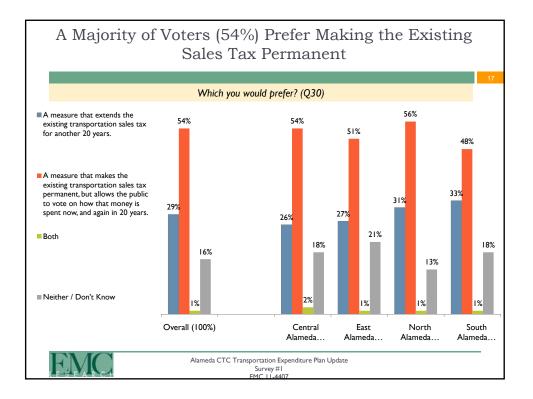


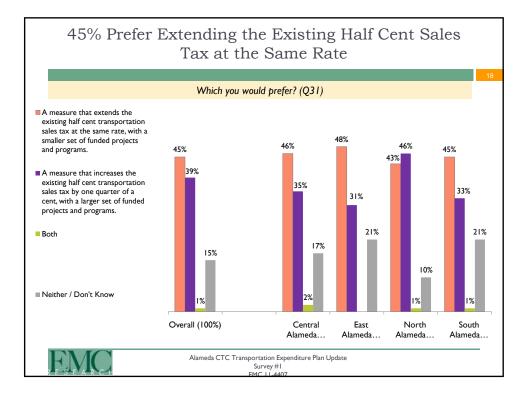


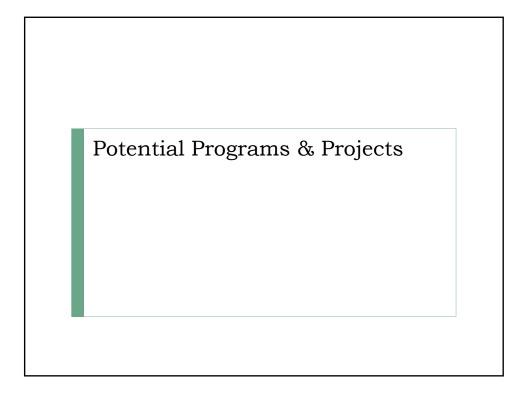


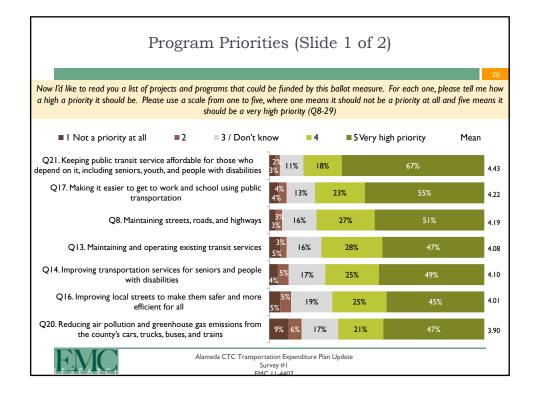


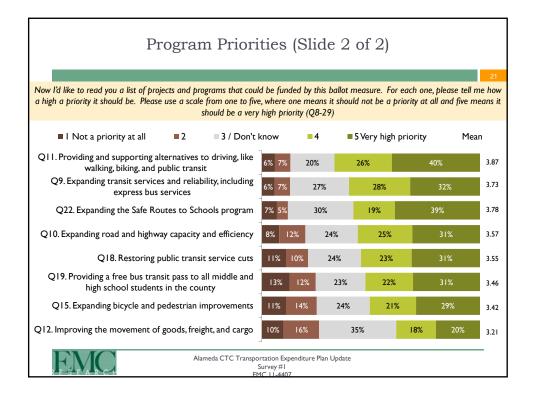




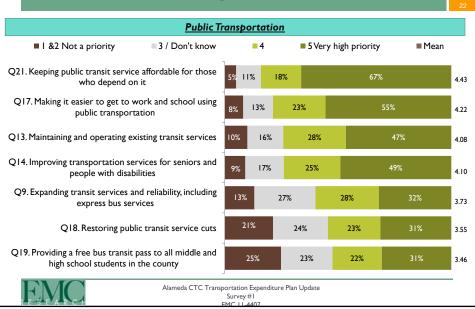


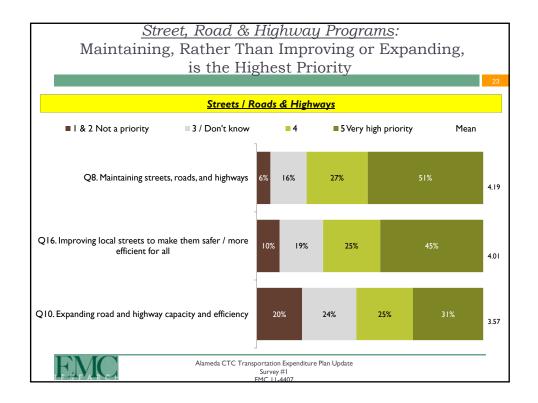


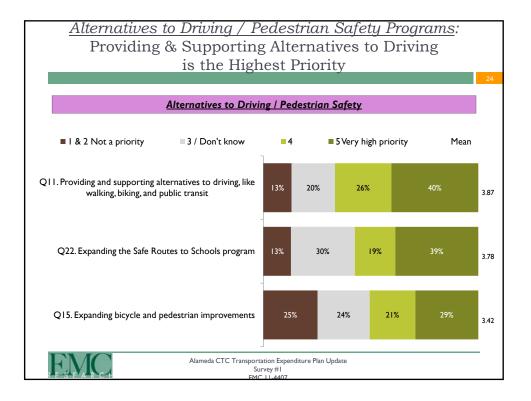


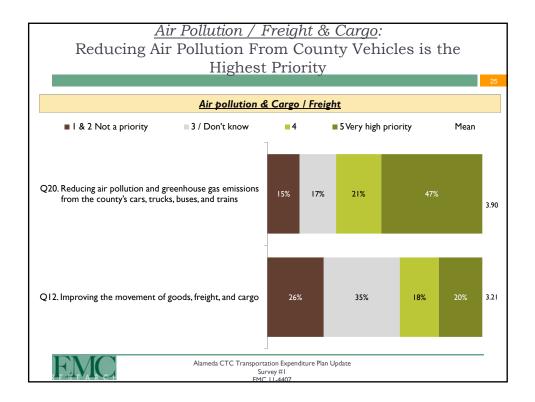


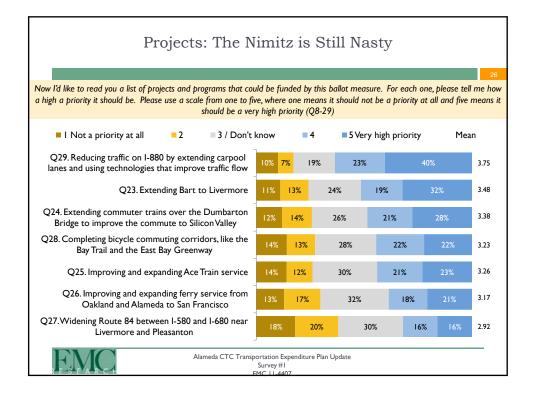
<u>Public Transportation Programs</u>: Keeping Public Transit Affordable & Making it Easier to Take are the Highest Priorities

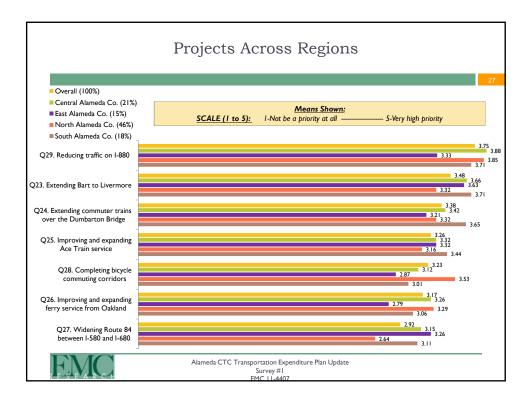






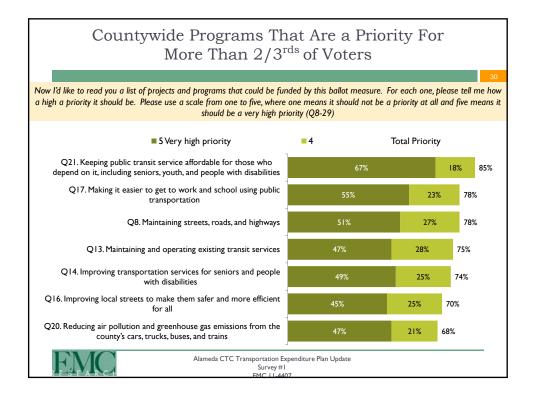


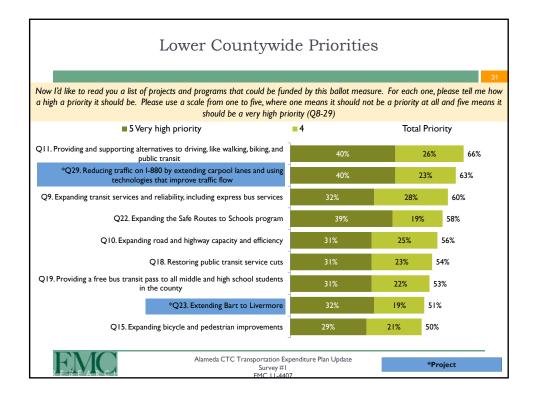


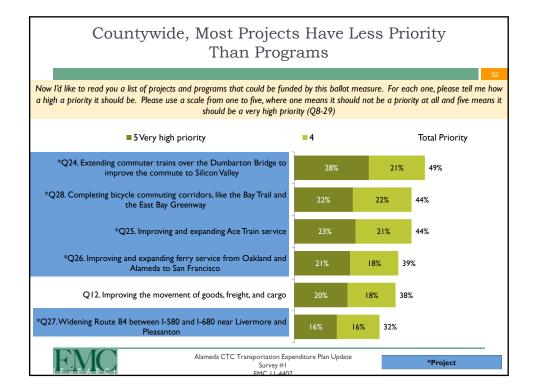


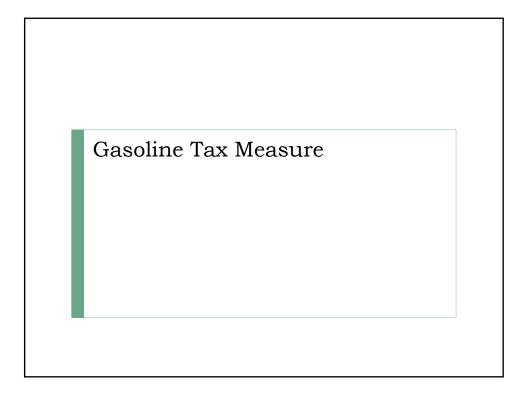
Projects Across Regions (alternate view)											
					28						
<u>Means Shown</u> SCALE (1 to 5): I-Not be a priority at all5-Very high priority											
Program / Project Overall (100%) Central Alameda Co. (21%) East Alameda Co. (15%) North Alameda Co. South Alameda Co.											
Q29. Reducing traffic on I-880 by extending carpool lanes and using technologies that improve traffic flow	3.75 *	3.88 *	3.33 *	3.85 *	3.71 *						
Q23. Extending Bart to Livermore	3.48 *	3.66 *	3.63 *	3.32 *	3.58 *						
Q24. Extending commuter trains over the Dumbarton Bridge to improve the commute to Silicon Valley	3.38 *	3.42 *	3.21	3.32 *	3.65 *						
Q25. Improving and expanding Ace Train service	3.26	3.32	3.32 *	3.16	3.44						
Q28. Completing bicycle commuting corridors, like the Bay Trail and the East Bay Greenway	3.23	3.12	2.87	3.53 *	3.01						
Q26. Improving and expanding ferry service from Oakland and Alameda to San Francisco	3.17	3.26	2.79	3.29	3.06						
Q27. Widening Route 84 between I- 580 and I-680 near Livermore and Pleasanton	2.92	3.15	3.26	2.64	3.11						
EMC	Alameda	CTC Transportation Exper Survey #1 EMC 11-4407	nditure Plan Update	* Indic	ates Top 3						

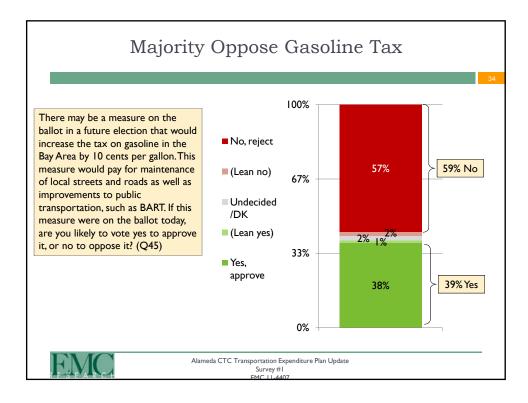


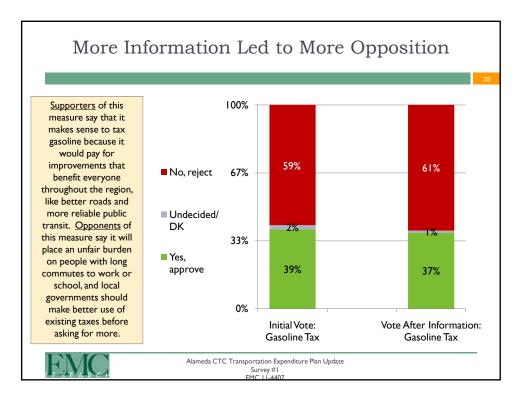














Oakland, CA 94612

PH: (510) 208-7400 www.AlamedaCTC.org

MEMORANDUM

DATE: March 29, 2011
TO: Community Advisory Working Group
FROM: Tess Lengyel, Manager of Programs and Public Affairs Beth Walukas, Manager of Planning
SUBJECT: Update on Outreach Activities

Recommendations

This item is for information only.

Summary

This memo provides an update to outreach activities in relation to the update of the Countywide Transportation Plan (CWTP) and development of the Transportation Expenditure Plan (TEP). This update reflects the changes to the outreach approach as approved by the Steering Committee on January 27, 2011.

The overall approach to the first phase of outreach for the CWTP-TEP development includes identification of project and program needs and education and involvement of the public, elected officials and stakeholders through the following efforts:

- Five evening community workshops throughout the County
- A toolkit for broad engagement of groups that may not be able to attend the workshops
- On-line questionnaire
- Poll
- On-going agency public outreach

Community Workshops

The fifth and final community workshop was held in Dublin on March 24th. Workshops have been conducted throughout the County aimed at educating Alameda County residents, business members and elected officials about the transportation plans development and to receive input on projects and programs that could be included in the plan. These meetings have been advertised in newspapers throughout the County, broadly distributed through email and are on the Alameda CTC website.

A follow-up round of workshops will be held in the fall of 2011 to provide an opportunity for review and comment on the draft plans.

Workshops Outcomes to Date

Supervisorial District 4 workshop (Oakland): Fe	bruary 24 th
attendees (signed in)	53
comment forms received	24
evaluations received	23
Supervisorial District 1 Workshop (Fremont): Fo	ebruary 28th
attendees (signed in)	35
comment forms received	4
evaluations received	13
Supervisorial District 2 Workshop (Hayward): N	/Iarch 9 th
attendees (signed in)	36
comment forms received	11
evaluations received	7
Supervisorial District 3 Workshop (San Leandro): March 16 th
attendees (signed in)	38
comment forms received	9
evaluations received	8
Supervisorial District 5 Workshop (Dublin): Ma	rch 24 th
attendees (signed in)	26
comment forms received	2
evaluations received	5
Total Workshop Attendees:	188

Workshop results, including key themes and evaluation findings will be included in a separate, forthcoming summary.

Outreach Toolkit Trainings Presentations

The Outreach Toolkit allowed broad engagement throughout the county on project and program needs that could be included in the plans, beyond that which can be reached with the public workshops. Members of Alameda CTC's Community Advisory Committees, the Community Advisory Working Group, Technical Advisory Working Group, staff and Commission members used the toolkit to gather input. Outreach Toolkit trainings and general presentations have been made to the following advisory groups:

Date	Advisory Group
January 20th	CAC
January 20th	PAPCO
February 3rd	CAWG
February 8th	TAC
February 10th	TAWG
February 10th	BPAC
February 24th	Steering Committee

95 toolkits were distributed at the CAWG, TAC, TAWG, BPAC and Steering Committee presentation toolkit trainings. Additional toolkits have been downloaded from the website by advisory group members.

Additional training for the use of the toolkit was held on Friday, February 18th, and a short instructional video about the Outreach Toolkit and how to use it was posted to the project website on Friday, February 18th for those members unable to attend previous trainings.

Completed Outreach Activities

To date, MIG, Alameda CTC's Outreach Consultant, has received completed Outreach Toolkit materials including session reporting forms and questionnaires from the following groups.

Group	Participants
Extending Connection (United Methodist Church)	35
Fremont Freewheelers Bicycle Club	11
Union City Planning Commission	8
United Seniors of Oakland (Transportation Committee)	6
Hope Collaborative, Built Environment Group	22
Oakland BPAC	15
West Berkeley Senior Advisory Council	9
City of Newark Senior Advisory Committee	13
Pleasanton Senior Ctr./Paratransit Lead Staff	8
City of Newark Senior Advisory Committee	13
Eden Area Local Organizing Committee	7
Sierra Club - Southern Alameda County Group	9
Union City City Council Audience	10
West Oakland Senior Center	20
Pleasanton Bicycle, Pedestrian and Trails Committee	10
San Leandro Youth Advisory Committee	17
Dumbarton Bus Riders	7
San Leandro Engineering and Transportation Department	16
Friends of Emeryville Senior Center	11
Pleasanton Senior VIP Club	72
AFSCME, Local 3916	50
Friends of Albany Services	11
San Leandro Senior Commission	11
City of San Leandro	6
San Leandro Human Services Commission	9
Ctiy of San leandro	5
Service Review Advisory Committee (East Bay Paratransit)	20
Pleasanton Chamber or Commerce- Vision2015 Forum	10
Saint Mary's Center	26
AC Transit Accessibility Advisory Committee	6
City of Emeryville's Commission on Aging	13
Oakland City Commission on Aging	8
Sierra Club - TriValley Group Exec. Cmte.	5

		March 29, 2011
		Page 4
Oakland Yellowjackets	10	
Wheels Accessible Advisory Committee	8	
Newark Rotary Club	20	
East Bay Bicycle Coalition	25	
Alameda County Public Health Nurses	19	
North Oakland Senior Center	12	
Residents of Allen Temple Arms	35	
Service Learning for Leaders	19	
TOTAL Participants	646	

In addition to these materials, MIG collected completed questionnaires at the CAC and PAPCO meetings. Overall MIG has received **532 completed paper questionnaires.**

Planned Outreach Activities

Advisory group members have identified and committed to make presentations during March at the meetings of the following organizations:

Group

Group
Genesis
Corpus Christi Church
Alameda County on Aging
Oakland Metropolitan Chamber
Albany Strollers and Rollers
Maxwell Park NCPC
City of Berkeley
ACCE (Alliance for Californians and Community Empowerment
APEN (Asian Pacific Environmental Network)
BOSS (Building Opportunities for Self Sufficiency)
EBAYC (East Bay Asian Youth Center)
LIFETIME
Pueblo
City of Alameda Transportation Commission

Online Questionnaires

The online questionnaire is now closed. There were 698 responses.

Poll

Three polls will be conducted from March 2011 through spring 2012. Polling questions were identified through the CAWG, TAWG and Steering Committee. The Steering Committee reviewed, commented on and approved the survey questions for the first survey on February 24, 2011. A presentation of the survey findings was presented to the Steering Committee at its March 24th meeting.

The three surveys that are being conducted for the development of the TEP are described below as well as their implementation timeline.

Survey 1: Baseline Study

The first survey will serve as a baseline study and was completed in early March 2011 and is being presented to committees in March and April. It will be designed to capture information about what transportation projects and programs voters are interested in, as well as measuring potential support for a transportation sales tax measure. This baseline survey will provide a "starting point" that shows where the voting public currently stands on these issues.

Survey 2: Tracking and Measure Refinement Study

The second survey will serve as a tracking study, measuring any changes in attitudes and opinions from the baseline research, as well as capturing additional feedback and opinions on specific projects and programs to further refine the design of the Transportation Expenditure Plan. Building on the information gathered in the baseline study, this tracking study will provide additional input and details as we develop an efficient and effective sales tax measure. This survey will be conducted in fall 2011.

Survey 3: Final Check-In

The third survey will serve as a final check-in with voters prior to placing a measure on the ballot. This survey will be conducted shortly before the deadline for placing the measure on the ballot, with the aim of helping to make a "go, no go" decision on the measure. This survey will be conducted in spring 2012.

On-going Agency Outreach

Alameda CTC conducts regular outreach throughout the County in the form of business, local organizations, agency outreach and coordination, electronic newsletter distributions, executive director reports, web page updates, transportation forums and other public information fairs and events, as well as regular updates at Alameda CTC meetings and in meeting packets. At each of these, information is presented on the updates and development of the plans.

Presentations of Poll and Outreach Findings

Presentations of the poll and preliminary outreach findings are being made at the committee meetings in April and feedback is requested to help support expanded outreach efforts that are scheduled to be implemented in fall 2011 that will seek feedback on the draft plans.

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785 Market Street, Suite 1300 San Francisco, CA 94103 (415) 284-1544 FAX: (415) 284-1554

MEMORANDUM

То:	Community Advisory Working Group, Technical Advisory Working Group, and CWTP-TEP Steering Committee Members
From:	Bonnie Nelson
Date:	March 14, 2011
Subject:	Developing Packages of Projects and Programs for Evaluation in the CWTP

Over the past several months we have been focused on defining the performance measures that will be used to evaluate alternative packages of investments for the Countywide Plan. These performance measures will be applied to alternative packages of projects and programs which each represent a different approach to investment over the next 30 years. A preliminary set of three packages will be developed and evaluated with initial model runs in June and results presented to the Committees in July. A refined package of investments will be developed from what was learned in the preliminary evaluations and will be advanced and refined through further modeling and evaluation through the summer and into early fall as shown on Attachment 07A3. This memorandum outlines the process of developing packages of projects and programs for evaluation, taking into consideration the information we will have available and the constrained timeframe we are working under.

The schedule for screening projects and programs, developing packages and beginning evaluation is highly constrained. The following are key milestones:

- 1. **Project screening of "known projects" will be done in time for the May Committees.** While the deadline for project and program submittal is not until after the CAWG and TAWG meetings take place, we will begin screening the projects we already know will be submitted as early as possible. Based on existing planning efforts, previous CWTP and RTP submittals and the ideas we've already heard through outreach, we have a good head start on identifying the universe of projects. If available, a preliminary screening in April will serve as an example of how screening will be done, as well as showing preliminary results on a group of projects. A final list of screened projects will be provided to the May Committee meetings.
- 2. A key focus of the April Committees will be on the "themes" for the packages. This memo contains a recommendation of three "themes" for building our investment packages. Our committee discussions in April will focus on those themes and how specific project or program examples might be dealt with under the packages proposed.
- 3. Packages will begin to be built after the April TAWG meeting, but can't be fully developed without the approval of themes by the Steering Committee on April 28th. Given our timeframe, we will not be able to submit completed packages to the May CAWG meeting in advance of their May 5th meeting. We anticipate having a presentation at the May 5th CAWG

meeting describing our work in progress and packaging completed in time for the TAWG meeting a week later. TAWG will consider the packages at their May meeting and CAWG members who are interested in a fuller discussion can attend that meeting. The Steering Committee will also be able to weigh in on preliminary packages in May in time to provide any needed course correction before we begin modeling work, which will be conducted in June and August per Attachment 07A3.

Guidelines for Developing Packages

In order to facilitate the development of alternative packages for evaluation, it is important to understand the purpose of packaging and how they will be used. The goals of developing alternative investment packages are:

- Illustrate performance tradeoffs arising from investments emphasizing different policy priorities. The packaging will help inform the selection of key policy priorities that will drive investment levels in programs as well as high priority projects. For example, does concentrating investment in areas with substantial new development make a difference in the overall performance of the transportation system? Do investments in new infrastructure in a particular corridor have an impact that is different from policy and programmatic investments? By developing packages with different emphases we will be able to assess these alternative strategies.
- Capture synergies resulting from investments in combined package of complementary projects. Some projects may work best in combination with other projects or programs with a combined result that is greater than evaluating the two as separate components. Packaging allows us to see the combined benefits of multiple investments pulling in the same direction.
- Quantify overall performance benefits resulting from county-wide plan investments. The adopted CWTP-TEP vision and performance measures (see Attachment 07A2) are focused on the overall performance of the transportation system as well as performance in individual corridors. It is only through the packaging of projects that we can see broader impacts of projects and programs throughout the system.

To assist in the development of coherent packages that are different enough to draw distinctions the following guidelines are recommended:

- 1. A maximum of three preliminary packages will be developed.
- All packages will be designed to meet the CWTP goals and performance measures no
 package will be "set up to fail". The packages will be different enough from one another that it
 will be possible to evaluate different investment philosophies in different settings.
- 3. All packages will be multimodal and will be made up of projects and programs that passed through initial project screening. A key difference between the packages will be the relative emphasis on either capital projects or programs in the package.
- 4. All packages will include both capital investments and programmatic investments including operations and maintenance, although the relative weight of capital versus programmatic spending will vary from package to package.

- 5. Geographic equity will be respected, with the exception that in the land use oriented package, investments will be focused on areas that are transit oriented, included in PDAs or are other areas for potential TOD development as defined by the initial vision scenario.
- 6. The performance of project packages will be tested against a future "business as usual" (e.g. no project) scenario that will include already committed projects. Committed projects will be defined consistent with MTC policy. Because committed projects are part of the "base" network, they are included in all packages. The land use for the "business as usual" scenario will be the "base case" land use.
- 7. Initial packages will represent a range of investment levels based on the balance between projects and programs in each package.
- 8. All packages will be tested using the same land use scenario, developed by the Planning Directors and TAWG and will be informed by the Initial Vision Scenario as modified and tested against a no project condition.
- 9. It is not necessary for a project to be included in the highest performing package to be included as a high priority project in the CWTP. The modeling that will be done on the packages may reveal that one type of strategy works best in one area while another strategy works best in another area. The goal is not to produce a "winning package" but to gain enough information to be able to further optimize the CWTP priorities.
- 10. The final priorities for the CWTP will be "blended" from the three packages to optimize investments in each corridor, in each planning area, and throughout the County.
- 11. A likely outcome from the evaluation of packages is that we will identify key policy priorities (e.g. maintenance, transit operations, integration with land use) that will inform levels of investment in programs and the sequencing of project investments into short, medium, and long-term.

Proposed Package Themes

The package themes suggested below are designed to test alternative investment philosophies. At this stage, the packages will all be designed to meet CWTP goals to the extent possible, and will include a large range of projects and programs.

- 1. Maintenance/Operations and Systems Management Emphasis. This package will have a higher emphasis on programs than on capital projects and will emphasize the "fix it first" philosophy, as well as focusing on the maintenance and operations of all modes. Managing investments through systems approaches will also be emphasized in this package. At least 60% of the total cost of this package will be programmatic spending.
- 2. Capital Projects Emphasis. This package will emphasize meeting CWTP goals through construction of new projects in all modes. While programmatic spending will be included in the package, at least 60% of the total cost of this package will be capital spending.
- 3. Land Use Emphasis. This package will focus investment in transit oriented development area, PDAs and other potential areas from the SCS. Geographic equity will still be factored into this package, but will be less of a rigorous concern than investing in areas that are most likely to address AB 32 and SB 375 goals. The investments in this package will emphasize both projects and programs likely to reduce greenhouse gases or serve larger numbers of people. Capital and programmatic spending in this alternative would be balanced to the extent possible.

The adopted performance measures will be used in evaluating all three of these themes.

Attachments:

07A1: Preliminary Project and Program List (to be distributed at the meeting) 07A2: Adopted Performance Measures

07A3: CWTP-SCS-RTP Process flowchart for Project and Program Evaluation

Alameda County Goal/Outcome	Proposed Measures for Alameda County CWTP Scenario Analysis						
(1) Multimodal	Percent of all trips made by alternative modes (bicycling, walking, or transit)						
(2) Accessible , Affordable and	Accessible:						
Equitable for people of all ages, incomes, abilities and geographies	Share of households (by income group) within 30-minute bus/rail transit ride and 20-min auto ride of at least one major employment center and within walking distance of schools (Source: adapted from Caltrans Smart Mobility Framework)* This measure also serves as a proxy for economic vitality.						
	Share of households (by income group) near frequent bus/rail transit service** (Source: adapted from Alameda CTC CMP process and the Transit Capacity and Quality of Service Manual)						
	Affordable: Covered by breaking out accessibility metrics by income group.						
	Equitable: Equity covered by breaking out metrics by geographic areas of the county. Measures marked with an asterisk will be reported for major jurisdictions as possible given the limitations of analytical tools. Income equity covered by breaking out accessibility measures by income group.						
(3) Integrated with land use	See "Accessible" measure.						
patterns and local decision- making	Transit riders / revenue hours of service (Source: consultant proposal)***						
(4) Connected	See "Reliable and efficient" measures.						
(5) Reliable and efficient	Efficiency: Average per-trip travel time for automobile, truck, and bus/rail transit modes (Source: Modified from RTP process). This measure also serves as a proxy for economic vitality.						
	Reliability: Ratio of peak to off-peak travel time for automobile, truck, and transit modes (Source: consultant proposal)						
(6) Cost-effective	Transit riders / revenue hours of service (Source: consultant proposal)***						
(7) Well-maintained	Pavement Condition Index (PCI) on local roadways. (Source: Alameda County CMP, RTP process)*						
	Transit asset age (Source: RTP process)						
(8) Safe	Injuries and fatalities from all collisions, including pedestrians and bicyclists (Source: Alameda CMP, RTP)*						
(9) Supportive of a clean and	Per-capita CO2 emissions from cars and light-duty trucks (Source: RTP process)*						
healthy environment	Average time traveling by foot and bicycle per day (Source: RTP)*						
	Quantity of fine particulate emissions (Source: modified from RTP)*						

Performance Measures for the Alameda Countywide Transportation Plan

* As possible given constraints of analysis tools, results will be provided by for geographic sub-areas of the county to assess geographic equity issues.

**Defined as being within one half mile of rail and one quarter mile of bus service (acceptable walking distances defined in the Transportation Research Board's 2003 Transit Capacity and Quality of Service Manual Part 3) operating at LOS B or better (headways of <14 minutes) during peak hours.

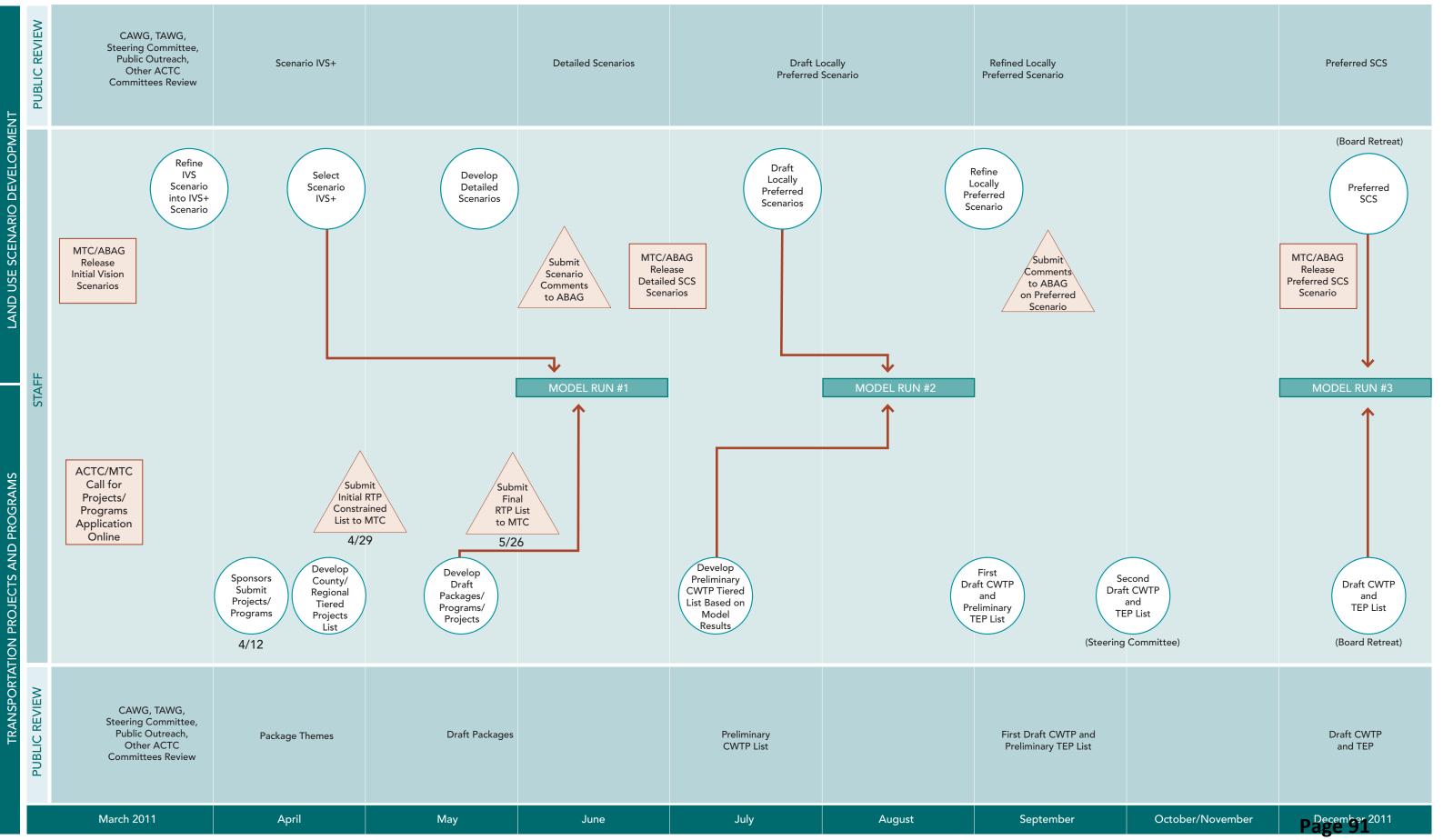
***Measure requires further review to ensure it can be calculated given constraints of Alameda CTC travel demand model.

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ALAMEDA COUNTYWIDE TRANSPORTATION PLAN (CWTP)

Project and Program Evaluation and Land Use Scenario Development (Sustainable Communities Strategy) Process



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1333 Broadway, Suites 220 & 300

Oakland, CA 94612

PH: (510) 208-7400

www.AlamedaCTC.org

MEMORANDUM

SUBJECT:	Review of Sustainable Community Strategy (SCS)/Regional Transportation Plan (PTP) and Countywide Transportation Plan (CWTP)/ Transportation
FROM:	Beth Walukas, Manager of Planning Tess Lengyel, Manager of Programs and Public Affairs
TO:	Community Advisory Working Group
DATE:	March 29, 2011

(RTP) and Countywide Transportation Plan (CWTP)/ Transportation Expenditure Plan Information

Recommendation

This item is for information only. No action is requested. Highlights include an update on the Association of Bay Area Governments (ABAG) process for seeking input on their recently released Initial Vision Scenario and on the implementation of the CWTP and RTP Call for Projects and Programs. Staff is developing a draft master list of projects and programs received to date, which will be distributed at the April meeting for information.

Summary

This item provides information on regional and countywide transportation planning efforts related to the updates of the Countywide Transportation Plan and Sales Tax Transportation Expenditure Plan (CWTP-TEP) as well as the Regional Transportation Plan (RTP) and the development of the Sustainable Community Strategy (SCS).

Discussion

ACTAC; the Planning, Policy and Legislation Committee (PPLC); the Alameda CTC Board; the Citizen's Watchdog Committee; the Paratransit Advisory and Planning Committee; the Citizen's Advisory Committee; and the Bicycle and Pedestrian Advisory Committee receive monthly updates on the CWTP-TEP and RTP/SCS. The purpose of this report is to keep various Committee and Working Groups updated on regional and countywide planning activities, alert Committee members about issues and opportunities requiring input in the near term, and provide an opportunity for Committee feedback in a timely manner. CWTP-TEP Committee agendas and related documents are available on the Alameda CTC website. RTP/SCS related documents are available at www.onebayarea.org.

April 2011 Update:

This report focuses on the month of April 2011. A summary of countywide and regional planning activities for the next three months is found in Attachment A and a three year schedule is found in

Attachment B. Highlights include MTC/Alameda CTC Call for Projects and Programs and the process for moving from the recently released Initial Vision Scenario to the Detailed Scenarios that are scheduled to be released in July.

1) MTC/ Alameda CTC Call for Projects and Programs

The concurrent Call for Projects and Programs was released on February 25, 2011. Project/program applications are due to Alameda CTC by **April 12, 2011**, so they can be screened and a preliminary list of CWTP projects and programs developed. A draft list of projects and programs recommended for inclusion in the RTP is due to MTC by **April 29, 2011**. The Draft list of projects and programs will be presented to Alameda CTC committees in May culminating in a public hearing at the **May 26, 2011** CWTP-TEP Steering Committee meeting with a recommendation for approval by the Commission on the same day. The final list is due to MTC on **May 27, 2011**. Staff has received input on transportation needs from the public in February and March at five public meetings held throughout the County and through the Alameda CTC administrative and advisory committee meetings. Staff is developing a master list of projects and programs received to date, which will be distributed at the April meeting.

2) Release of Initial Vision Scenario and Development of Detailed Scenarios

On March 11, 2011, ABAG released the Initial Vision Scenario representing the starting point for discussion for how to house the region's population and meet sustainability goals (Attachment 09C). The Initial Vision Scenario was presented to Alameda County elected officials at four meetings throughout the County between March 16 and March 24, 2011 and to the Technical Advisory Working Group, including the Alameda County Planning Directors, on March 18, 2011. ABAG and MTC are seeking input on the Initial Vision Scenario between now and June 2011 to use in the development of Detailed Scenarios, which are anticipated to be released in **July 2011**. In addition to providing input on the development of the Detailed Scenarios through the CWTP-TEP Committees, a public workshop, hosted by MTC and ABAG is being scheduled in **May**. Alameda CTC is working with Supervisorial Districts 1 and 2 to host a joint workshop on the SCS. The workshop is scheduled for **May 14, 2011**.

3) RTP/SCS Work Element Proposals and

MTC continues to refine their proposals and guidance for the following work elements of the RTP/SCS:

- 25-year financial forecast assumptions;
- Draft committed funds and projects policy scheduled to be adopted by MTC in April;
- Projects performance assessment approach; and
- Transit capital, local streets and roads maintenance needs, and transit operation needs approach.

Committee	Regular Meeting Date and Time	Next Meeting
CWTP-TEP Steering Committee	4 th Thursday of the month, noon	April 28, 2011
	Location: Alameda CTC	May 26, 2011
CWTP-TEP Technical Advisory	2^{nd} Thursday of the month, 1:30 p.m.	April 14, 2011
Working Group	Location: Alameda CTC	May 12, 2011
CWTP-TEP Community Advisory	1 st Thursday of the month, 3:00 p.m.	April 7, 2011
Working Group	Location: Alameda CTC	May 5, 2011
SCS/RTP Regional Advisory Working	1 st Tuesday of the month, 9:30 a.m.	April 5, 2011
Group	Location: MetroCenter,Oakland	May 3, 2011
SCS/RTP Equity Working Group	Location: MetroCenter, Oakland	April 13, 2011
		May 11, 2011
SCS/RTP Housing Methodology	10 a.m.	April 28, 2011
Committee	Location: BCDC, 50 California St.,	May 26, 2011
	26th Floor, San Francisco	
CWTP-TEP Public Workshops and	Location and times vary	
Initial Vision Scenario Outreach	District 1 and 2 SCS Workshop	May 14, 2011
	Initial Vision Scenario Public	TBD
	Meeting	

4) Upcoming Meetings Related to Countywide and Regional Planning Efforts:

Fiscal Impact

None.

Attachments

Attachment 09A: Summary of Next Quarter Countywide and Regional Planning Activities Attachment 09B: CWTP-TEP-RTP-SCS Development Implementation Schedule Attachment 09C: One Bay Area SCS Planning Process This page intentionally left blank.

Attachment A: Summary of Next Quarter Countywide and Regional Planning Activities (April through June)

Countywide Planning Efforts

The three year CWTP-TEP schedule showing countywide and regional planning milestone schedules is found in Attachment 09B. Major milestone dates are presented at the end of this memo. In the April to June time period, the CWTP-TEP Committees will be focusing on:

- Coordinating with ABAG and local jurisdictions on defining the Detailed Land Use Scenarios for the Sustainable Communities Strategy and establishing how land use and the SCS will be addressed in the CWTP;
- Providing input on issues papers that discuss challenges and opportunities regarding transportation needs in Alameda County, including best practices and strategies for achieving Alameda County's vision beyond this CWTP update;
- Developing and implementing a Call for Projects and Committed Funding and Project Policy that is consistent and concurrent with MTC's call for projects and guidance;
- Developing countywide financial projections and opportunities that are consistent and concurrent with MTC's financial projections;
- Beginning the discussion on Transportation Expenditure Plan strategic parameters and funding scenarios;
- Identifying transportation investment packages for evaluation;
- Reviewing polling results for an initial read on voter perceptions;
- Continuing to conduct public outreach on transportation projects and programs and the Initial Vision Scenario and the Detailed Scenarios.

Regional Planning Efforts

Staff continues to coordinate the CWTP-TEP with planning efforts at the regional level including the Regional Transportation Plan (MTC), the Sustainable Communities Strategy (ABAG), Climate Change Bay Plan and amendments (San Francisco Bay Conservation and Development Commission (BCDC)) and CEQA Guidelines (Bay Area Air Quality Management District (BAAQMD)).

In the three month period for which this report covers, MTC and ABAG are focusing on

- Receiving input on the Initial SCS Vision Scenario released March 11, 2011;
- Developing the Detailed Scenarios based on that input;
- Developing draft financial projections;
- Adopting a committed transportation funding and project policy;
- Implementing a call for projects; and
- Assessing performance of the projects and beginning the performance assessment.

Staff will be coordinating with the regional agencies and providing feedback on these issues, through:

- Participating on the MTC/ABAG Regional Advisory Working Group (RAWG),
- Participating on regional Sub-committees (Equity sub-committee); and
- Assisting in public outreach.

Key Dates and Opportunities for Input

The key dates shown below are indications of where input and comment are desired. The major activities and dates are highlighted below by activity:

Sustainable Communities Strategy:

Presentation of SCS information to local jurisdictions: Completed Initial Vision Scenario Released: March 11, 2011: Completed Detailed SCS Scenarios Released: July 2011 Preferred SCS Scenario Released/Approved: December 2011/January 2012

RHNA

RHNA Process Begins: January 2011 Draft RHNA Methodology Released: September 2011 Draft RHNA Plan released: February 2012 Final RHNA Plan released/Adopted: July 2012/October 2012

RTP

Develop Financial Forecasts and Committed Funding Policy: March/April 2011 Call for RTP Transportation Projects: March 1 through April 29, 2011 Conduct Performance Assessment: March 2011 - September 2011 Transportation Policy Investment Dialogue: October 2011 – February 2012 Prepare SCS/RTP Plan: April 2012 – October 2012 Draft RTP/SCS for Released: November 2012 Prepare EIR: December 2012 – March 2013 Adopt SCS/RTP: April 2013

CWTP-TEP

Develop Land Use Scenarios: May 2011 Call for Projects: Concurrent with MTC Outreach: January 2011 - June 2011 Draft List of CWTP screened Projects and Programs: July 2011 First Draft CWTP: September 2011 TEP Program and Project Packages: September 2011 Draft CWTP and TEP Released: January 2012 Outreach: January 2012 – June 2012 Adopt CWTP and TEP: July 2012 TEP Submitted for Ballot: August 2012

Countywide Transportation Plan and Transportation Expenditure Plan Preliminary Development Implementation Schedule - Updated 12/22/10

							Meeting					
			20	10		1	FY2010-2011			2010	1	1
Task	January	February	March	April	Мау	June	July	August	Sept	Oct	Nov	Dec
Alameda CTC Committee/Public Process												
Steering Committee			Establish Steering Committee	Working meeting to establish roles/ responsibilities, community working group	RFP feedback, tech working group	Update on Transportation/ Finance Issues	Approval of Community working group and steering committee next steps	No Meetings		Feedback from Tech, comm working groups	No Meetings	Expand vision and goals for County ?
Technical Advisory Working Group								No Meetings		Roles, resp, schedule, vision discussion/ feedback	No Meetings	Education: Trans statistics, issues, financials overview
Community Advisory Working Group								No Meetings		Roles, resp, schedule, vision discussion/ feedback	No Meetings	Education: Transportation statistics, issues, financials overview
Public Participation								No Meetings			Stakeholder outreach	
Agency Public Education and Outreach					Informat	ion about upcoming	CWTP Update and rea	uthorization				
Alameda CTC Technical Work												
Technical Studies/RFP/Work timelines: All this work will be done in relation to SCS work at the regional level						Board authorization for release of RFPs	Pre-Bid meetings	Proposals reviewed	ALF/ALC approves shortlist and interview; Board approves top ranked, auth. to negotiate or NTP		Technical Work	
Polling												
Sustainable Communities Strategy/Regional Tran	nsportation Pla	n										
Persional Supportationable Community Strategy Davidson and			Local Land Use Update P2009 begins & PDA Assessment begins						Green House Gas Target approved by CARB.	Start V	ision Scenario Disc	cussions
Regional Sustainable Community Strategy Development - Process - Final RTP in April 2013 -						·			· · · · · · · · · · · · · · · · · · ·		Adopt methodology for Jobs/Housing Forecast (Statutory Target)	Base Case Adopt Voluntary
												Performance Targets

CAWG Meeting 04/07/11 Attachment 09B

Calendar Year 2010

Countywide Transportation Plan and Transportation Expenditure Plan Preliminary Development Implementation Schedule - Updated 12/22/10

	2011						FY2011-2012		2011			
Task	January	February	March	April	Мау	June	July	August	Sept	Oct	Nov	Dec
Alameda CTC Committee/Public Process									1	1		
Steering Committee	Adopt vision and goals; begin discussion on performance measures, key needs	Performance measures, costs guidelines, call for projects and prioritization process, approve polling questions, initial vision scenario discussion	Review workshop outcomes, transportation issue papers, programs, finalize performance measures, land use discussion, call for projects update	Outreach and call for projects update (draft list approval), project and program packaging, county land use, financials, committed projects	Outreach update, project and program screening outcomes, call for projects final list to MTC, TEP strategic parameters, land use rcmmdn	No Meetings.	Project evaluation outcomes; outline of CWTP; TEP Strategies for project and program selection	No Meetings	1st Draft CWTP, TEP potential project and program packages, outreach and polling discussion		Meeting moved to December due to holiday conflict	Review 2nd draft CWTP; 1st draft TEP
Technical Advisory Working Group	Comment on vision and goals; begin discussion on performance measures, key needs	Continue discussion on performance measures, costs guidelines, call for projects, briefing book, outreach	Review workshop outcomes, transportation issue papers, programs, finalize performance measures, land use discussion, call for projects update	project and program	Outreach update, project and program screening outcomes, call for projects update, TEP strategic parameters, land use	No Meetings.	Project evaluation outcomes; outline of CWTP; TEP Strategies for project and program selection	No Meetings	1st Draft CWTP, TEP potential project and program packages, outreach and polling discussion		Review 2nd draft CWTP, 1st draft TEP, poll results update	No Meetings
Community Advisory Working Group	Comment on vision and goals; begin discussion on performance measures, key needs	Continue discussion on performance measures, costs guidelines, call for projects, briefing book, outreach	Review workshop outcomes, transportation issue papers, programs, finalize performance measures, land use discussion, call for projects update	project and program	Outreach update, project and program screening outcomes, call for projects update, TEP strategic parameters, land use	No Meetings.	Project evaluation outcomes; outline of CWTP; TEP Strategies for project and program selection	No Meetings	1st Draft CWTP, TEP potential project and program packages, outreach and polling discussion		Review 2nd draft CWTP, 1st draft TEP, poll results update	No Meetings
Public Participation	Public Workshops in two areas of County: vision and needs; Central County Transportation Forum	Public Workshops in vision and		East County Transportation Forum			South County Transportation Forum	No Meetings		County: feedbac	ublic workshops in ck on CWTP,TEP; insportation Forum	No Meetings
Agency Public Education and Outreach	Forum	Ongoing	Education and Outre	ach through Novemb	per 2012		Ongoing Education and Outreach through November 2012					
Alameda CTC Technical Work												
Technical Studies/RFP/Work timelines: All this work will be done in relation to SCS work at the regional level	Feedback or	n Technical Work, Modi	ified Vision, Prelimina	ry projects lists		Work with feedback on CWTP and financial scenarios	Technical work refinement and development of Expenditure plan, 2nd draft CWTP					
Polling		Conduct baseline poll								Polling on possible Expenditure Plan projects & programs		
Sustainable Communities Strategy/Regional Tra												
			Release Initial Vision Scenario	Detailed	SCS Scenario Develo	oment	Release Detailed SCS Scenarios	Adoption of Regio	of SCS Scenarios; nal Housing Needs Methodology		esults/and funding issions	Release Preferred SCS Scenario
Regional Sustainable Community Strategy Development Process - Final RTP in April 2013		Call for Transportation Projects and Project Performance Assessment				aluation	Draft Regional Housing Needs Allocation Methodoligy					
	Develop Drat	Develop Draft 25-year Transportation Financial Forecasts and Committed Transportation Funding Policy										

CAWG Meeting 04/07/11 Attachment 09B

Calendar Year 2011

Countywide Transportation Plan and Transportation Expenditure Plan Preliminary Development Implementation Schedule - Updated 12/22/10

	2012						FY2011-2012			
Task	January	February	March	April	Мау	June	July	August	Sept	Oct
Alameda CTC Committee/Public Process		l			1					
Steering Committee	Full Draft TEP, Outcomes of outreach meetings	Finalize Plans	Meetings to be determined as needed			Adopt Draft Plans	Adopt Final Plans	Expenditure Plan on Ballot		
Technical Advisory Working Group	Full Draft TEP, Outcomes of outreach meetings	Finalize Plans	Meetings to be determined as needed							
Community Advisory Working Group	Full Draft TEP, Outcomes of outreach meetings	Finalize Plans	Meetings to be determined as needed							
Public Participation			Expenditure Plan City Council/BOS Adoption							
Agency Public Education and Outreach	Ongoing Education and Outreach Through November 2012 on this process and final plans						Ongoing Education and Outreach through November 2012 on this process a			
Alameda CTC Technical Work										Г
Technical Studies/RFP/Work timelines: All this work will be done in relation to SCS work at the regional level										
Polling					Potential Go/No Go Poll for Expenditure Plan					
Sustainable Communities Strategy/Regional Tra										
Regional Sustainable Community Strategy Development Process - Final RTP in April 2013	Approval of Preferred SCS, Release of Regional Housing Needs Allocation Plan		Begin RTP Technical Analysis & Document Preparation	echnical nalysis & ocument			Prepare SCS/RTP Plan			

CAWG Meeting 04/07/11 Attachment 09B



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Page 102



To: MTC Planning Committee, ABAG Administrative Committee

Date: March 4, 2011

- Fr: ABAG and MTC Executive Directors
- Re: Initial Vision Scenario

The Initial Vision Scenario starts the conversation on the Sustainable Communities Strategy among local jurisdictions, regional agencies, and other interested stakeholders. This scenario proposes a future development pattern that depends upon a strong economy, sufficient funding for affordable housing and supportive public infrastructure and transportation investments. The proposed distribution of housing focuses on areas close to transit that have been identified by local jurisdictions. This focused growth pattern preserves open space and agricultural land in the Bay Area.

This important step in the Sustainable Communities Strategy process is designed to solicit comment primarily from local elected officials and their constituents. This input will inform the development of the detailed scenarios to be drafted by the summer of 2011.

Through integrated regional land use, housing, and transportation investments, the Initial Vision Scenario proposes a sustainable pattern of regional growth that maximizes the reduction of greenhouse gas emissions while accommodating the entire region's housing need through 2035. In this scenario, which is unconstrained in terms of financial and other resources to support housing growth, Priority Development Areas (PDAs), Infill Opportunity Areas (areas not designated as PDAs, but that share many of the same attributes), and transit corridors accommodate a major share of housing growth. The development of the transportation network in the region by 2035 is aligned with those areas. As such the transportation network for the Initial Vision Scenario is based on Transportation 2035, but also includes improved transit headways to serve increased growth in PDAs and Infill Opportunity Areas. The attached maps show the Priority Development and Infill Opportunity Areas for the region and for each county.

The Initial Vision Scenario relies on input from local jurisdictions and the characteristics of the places they identified for the distribution of growth. The Initial Vision Scenario differs from previous forecasts (Projections 2007, 2009, 2011) in identifying places to accommodate an additional demand for 267,000 households beyond Projections 2011 so that the current phenomenon of "in-commuting" from adjoining regions does not worsen in the future. These prior forecasts were derived from Census Tracts. This scenario was constructed utilizing a detailed place-based approach, meaning that growth was distributed in specific neighborhoods or geographic locations based on their characteristics. Between November 2010 and January 2011, MTC and ABAG received input from local planners on the capacity for sustainable growth in PDAs and new Infill Opportunity Areas to supplement the information gathered through the PDA Assessment. To the extent possible, MTC and ABAG staff used local estimates of

growth to meet the housing target. However, this scenario includes additional housing units in some PDAs or Infill Opportunity Areas beyond the number submitted by local jurisdictions.

The Initial Vision Scenario assumes a growth of 903,000 households up to 3.6 million, and 1.2 million jobs up to 4.5 million by 2035 compared to today. About 95 percent of new households are accommodated within the urban footprint. PDAs and Infill Opportunity Areas include about two thirds of household growth in the region. At the county level, San Francisco, Santa Clara, Alameda and Contra Costa are projected to absorb a major share of the total increase in the number of households, at nearly 80%. They also absorb the majority of the region's job growth, also nearly 80%. It should be noted that the Initial Vision Scenario does not substantially reallocate jobs to PDAs and assumes continued job growth in employment campuses dispersed throughout the region.

Major cities take the lead in the projected growth of housing in the region. San Jose, San Francisco, and Oakland are projected to produce one third of the housing needed by 2035 by building upon their regional centers and intensifying transit corridor development. At the same time, medium-sized cities that range from city centers to transit towns (Fremont, Santa Rosa, Berkeley, Hayward, Richmond, Concord, and Santa Clara) would accommodate 17 percent of the regional total.

When assessed against the performance targets adopted by the regional agencies, the Initial Vision Scenario reflects significant progress towards the sustainability and equity targets of the region. The Initial Vision Scenario meets the regional housing target and achieves an incremental improvement over our current regional plans with the reduction of greenhouse gas emissions (GHG) per capita by 12 percent in 2035. Thus, it falls short of the 15% GHG per capita reduction target in 2035 established by California Air Resources Board. As expected, we will need to evaluate other infrastructure and transportation demand management strategies in order for the region to achieve the GHG target.

The performance of the Initial Vision Scenario on healthy and safe communities, equitable access, and transportation system effectiveness targets is mixed, indicating some improvements over previous trends and previous forecasts. These results point to the need for additional policies and strategies to meet the regional performance targets. In particular, strategies that will encourage more job growth in PDAs and near transit nodes would substantially improve the performance of the targets, especially the greenhouse gas emissions target. These strategies will be the subject of the upcoming detailed scenarios analysis.

The complete report on the Initial Vision Scenario with detailed analysis, data, and maps will be released for public review and presented at your March 11, 2011 joint meeting.



J:\COMMITTE\Planning Committee\2011\March11\Initial Vision Scenario - Memo Final 2-28-11 dkv1.doc



Current Regional Plans & Initial Vision Scenario

Partnership Technical Advisory Committee March 21, 2011

SB 375 Requirements

- Reduce greenhouse gas emissions from cars and trucks in the Bay Area by 15% per capita by 2035
- Use realistic demographic and revenue assumptions

- House the region's population at all income levels
- Align transportation investments, housing growth, and land use planning
 - Adopt in early 2013 by ABAG and MTC
 ^{BayArea}

Current Regional Plans

- Updates Projections 2009 forecast
- Starting point for analysis; basis for creation of the Initial Vision Scenario
- Reflects current planning and assumptions
- Not designed to meet the targets
- Won't become the Sustainable Communities Strategy



- Starting point to develop the Sustainable Communities Strategy (SCS)
 - Identifies places for sustainable growth
- Accommodates regional housing need
 - Strengthens existing communities
- Utilizes existing transit infrastructure
- Assumes unconstrained resources
 - Affordable housing
- Neighborhood infrastructure
- Transit and other investments



How was it developed? **Initial Vision Scenario:**

Housing Growth Distribution Criteria

- Locally identified growth in Priority Development Areas or new Growth Opportunity Areas
- Additional housing units based upon a jurisdiction's selected Place Type for a PDA or Growth Area
- investments (Existing Transit or Resolution 3434 Transit Greater housing density proximate to significant transit Expansions)
- Major mixed-use corridors with high potential for transit-served, infill development



Regional Growth Overview

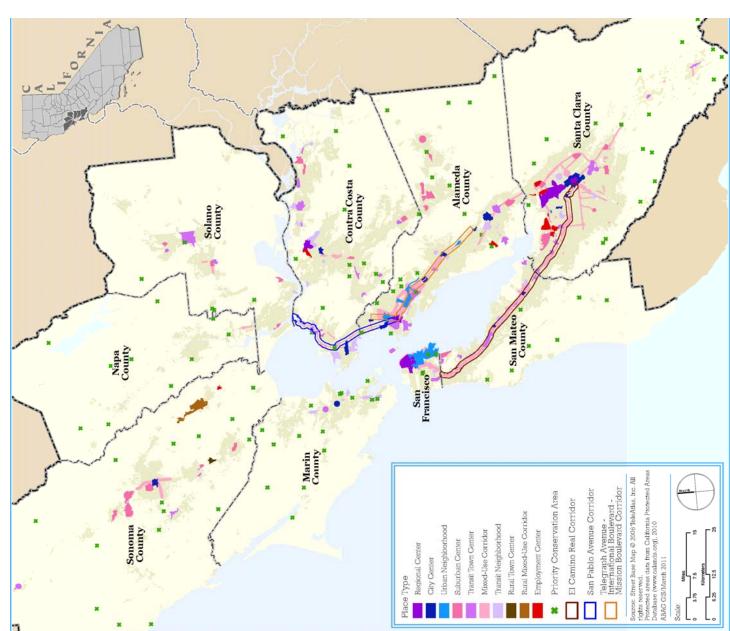
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Scenario	Households	Population	Employed Residents	Jobs
2010	2,669,800	7,348,300	3,152,400	3,271,300
2035 Current Regional Plans	+633,500	+1,717,900	+881,600	+1,129,100
2035 Growth Increment	+269,000	+363,700	+165,000	+92,900
2035 Initial Vision Scenario	+902,500	+2,081,600	+1,046,600	+1,222,000
Total 2035 Initial Vision Scenario	3,572,300	9,429,900	4,199,000	4,493,300
F				

Housing Distribution

70% of growth in Priority Development Areas and Growth Opportunity Areas

97% of growth within the existing urban footprint





Initial Vision Scenario: Housing Distribution

COUNTY	2010 Households	2035 Households	2010-2035 Growth	2010-2035 Growth Rate
Alameda	557,700	770,400	212,700	38%
Contra Costa	392,700	546,700	154,000	39%
Marin	106,400	117,100	10,700	10%
Napa	51,300	56,100	4,800	%6
San Francisco	346,700	436,800	90,100	26%
San Mateo	264,500	358,300	93,800	36%
Santa Clara	613,900	867,800	253,900	41%
Solano	148,200	187,800	39,600	27%
Sonoma	188,400	231,400	42,900	23%
TOTAL	2,669,800	3,572,300	902,600	%76



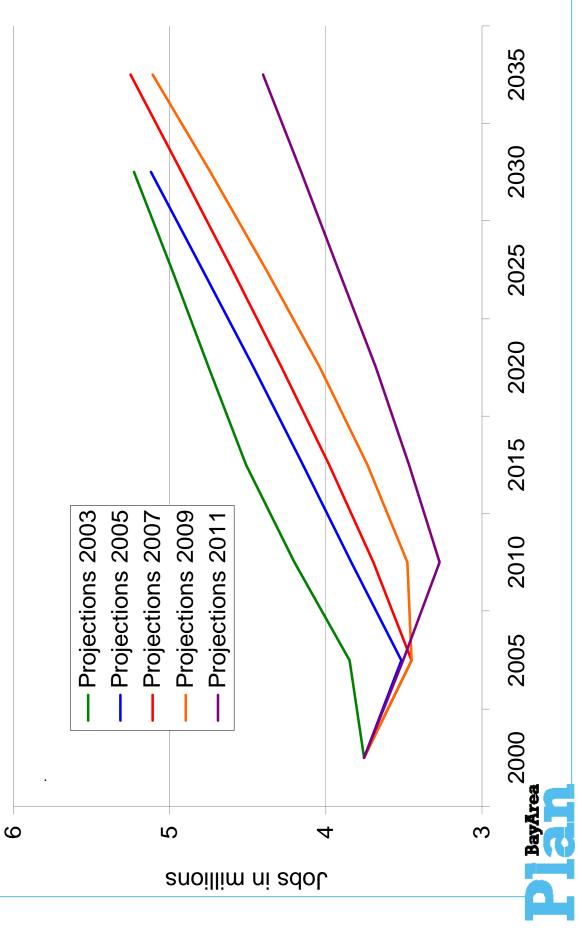
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Initial Vision Scenario: Growth Pattern

- Concentrates 70% of growth in PDAs, Growth Opportunity Areas; about 3% of region's land area
- Limits greenfield development 97% of growth in existing developed areas
- Reduces development pressure on Priority Conservation Areas
- Preserves character of existing residential neighborhoods
- Utilizes existing transit; strengthens planned transit
- Provides for rapid growth in senior population
- Leverages /improves existing water, sewer infrastructure
- Lower per capita water use to growth location, development type



Regional Job Projections Current Regional Plans:



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Employment Distribution

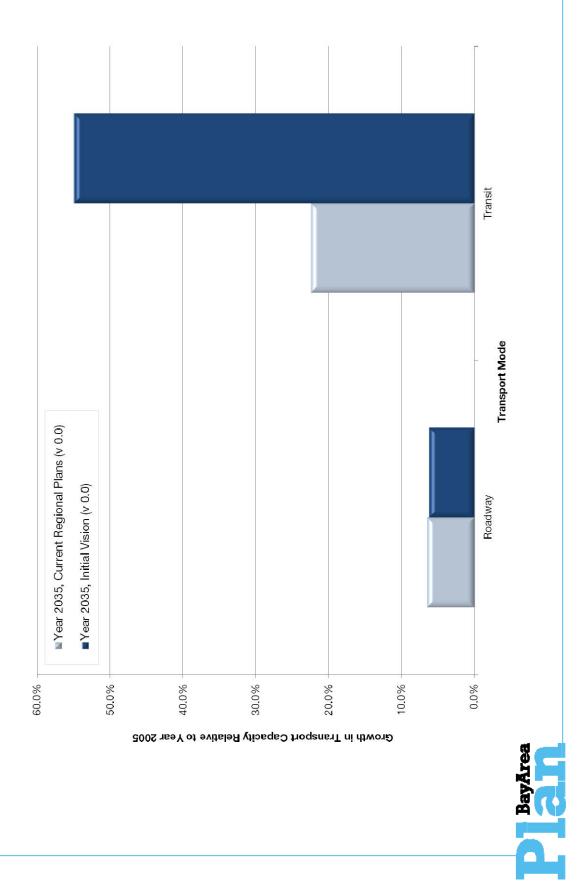
COUNTY	2010 Jobs	2035 Jobs	2010-2035 Growth	2010-2035 Growth Rate
Alameda	675,600	925,400	249,900	37%
Contra Costa	345,900	479,400	133,400	39%
Marin	129,700	151,100	21,400	17%
Napa	70,100	88,800	18,700	27%
San Francisco	544,800	713,700	168,900	31%
San Mateo	330,100	452,200	122,100	37%
Santa Clara	858,400	1,238,400	380,000	44%
Solano	126,300	176,700	50,400	40%
Sonoma	190,400	267,600	77,200	41%
TOTAL	3,271,300	4,493,300	1,222,000	37%

Transportation Network Initial Vision Scenario:

- Transportation 2035 is base network with Express Lane **Backbone system**
- Increased frequencies of existing transit services adjacent to Initial Vision growth areas
- Highlights include ...
- Improved headways on over 70 local bus routes and several express bus routes
- Improved headways on BART, eBART, Caltrain, Muni Metro, VTA Light Rail, and ACE
- 60 miles of dedicated bus lanes in San Francisco and Santa Clara counties
- Increase in passenger seat miles of
- 55 percent relative to 2005
- 25 percent relative to Current Regional Plans in 2035

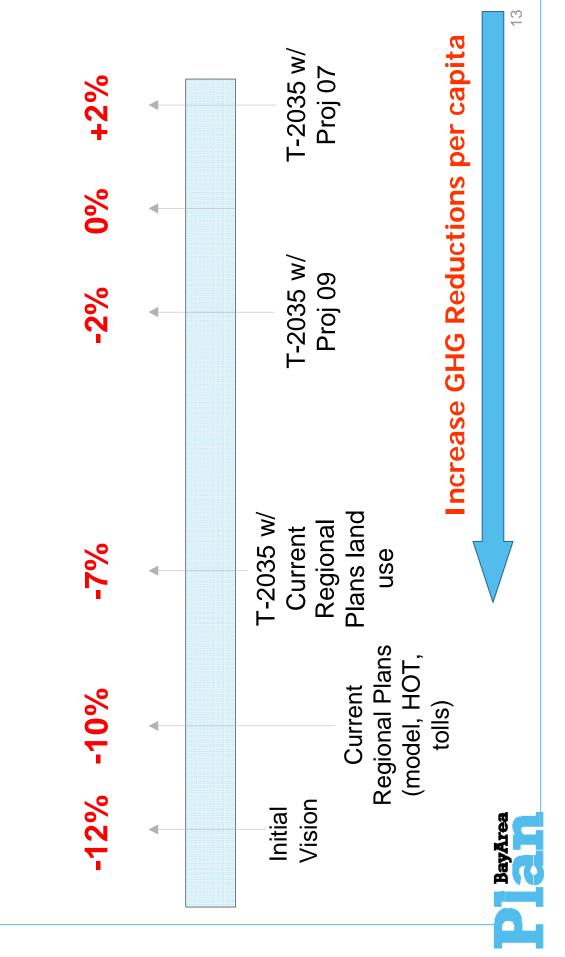


Growth in Transportation Capacity From Year 2005



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GHG Emission Reduction Estimates (% per capita - 2005 vs. 2035)



GHG Targets

(% per capita reduction compared to 2005)

Initial Vision Scenario	-11%	-12%
Current Regional Plans	% 6-	-10%
ARB Target	-7%	-15%
Horizon Year	2020	2035

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Target Results Preview

Initial Vision Scenario does two things:

Creates more housing and more affordable housing

This is all "good" news for the targets:

- Meets the housing target
- Improves jobs-housing-transit alignment
- Reduces housing costs for low-income households

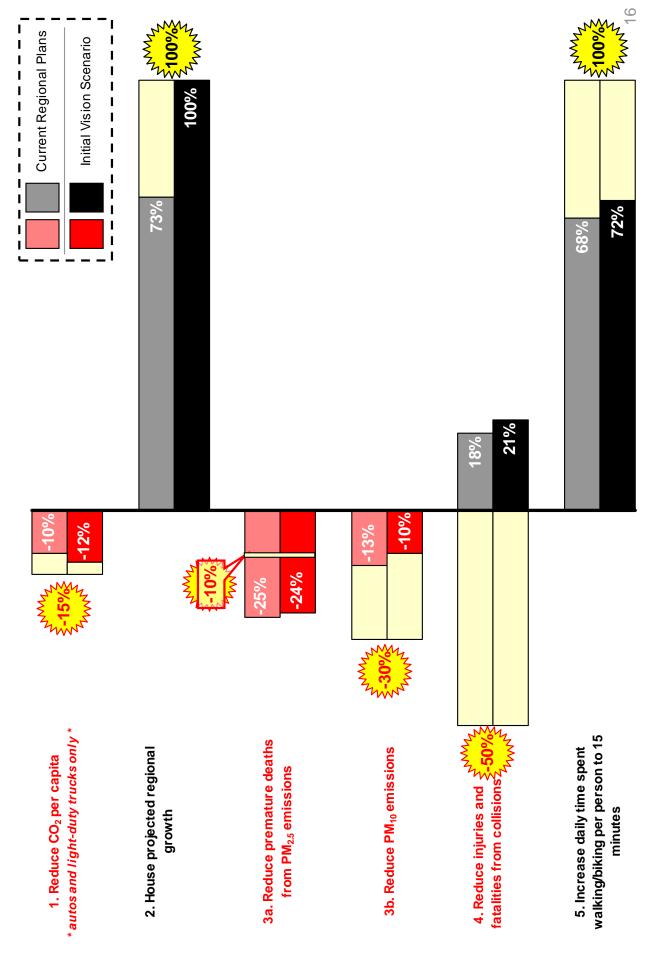
Brings more people into the region 2

This is both "good" and "bad" for the targets:

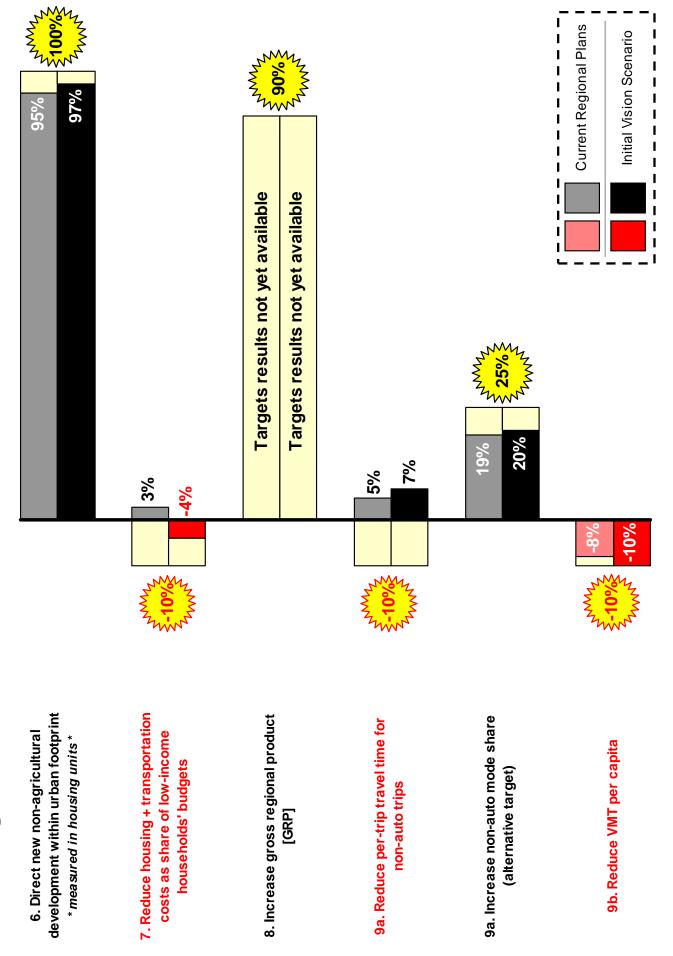
- New residents ride transit, walk and bike more than existing residents and GHG/capita and VMT/capita go down
- But they still drive. As a result, total VMT goes up, which increases collisions and particulate emissions from autos



Target Results (1)



Target Results (2)



Initial Vision Equity Analysis: Approach

Three-phase Equity Analysis approach outlined in Public Participation Plan



- Initial Vision Scenario Approach
- Break out targets by income level as preliminary equity indicators
- Reviewed approach and results with RTP/SCS Equity **Working Group**
- MTC's Policy Advisory Council Equity & Access Subcommittee Interested members of Regional Advisory Working Group and



Do Low-Income Households Have Similar or Households for the Initial Vision Scenario? **Better Results Than Higher-Income**

Current Conditions Scenario	otection Per-capita VMT	Housing Adequate housing O	Ind Safe Active travel	Access Affordability O	Travel time to Vitality •	Travel cost	on System Non-auto travel time	O = Worse results
	Climate Protection	Adequate Housing	Healthy and Safe Communities	Equitable Access	Economic Vitality		Transportation System Effectiveness	

BayArea

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= Result mixed, or by assumption

KEY •

= Similar or better results

Conclusions

- The Initial Vision Scenario reflects additional progress towards the sustainability of the region
- The prolonged Great Recession is having profound impacts on projected job growth
- sustainable locations given adequate resources and transit Bay Area communities can accommodate housing in
- While we meet the 2020 GHG target, we still don't meet the 2035 GHG target and some other targets
- Achieving the targets still requires additional land-use, transportation and non-infrastructure strategies
- Employment location, and its relationship to housing and transit, is a key issue requiring further analysis



Next Steps

Public Involvement (mid-March – July 2011)

- Elected Officials Briefings
- Planner-to-Planner Discussions
- Countywide Workshops
- Community-based Engagement in Communities of Concern
- Telephone Poll & Focus Groups
- Web-based Survey & Interactive Visualization Tools

Detailed SCS Scenarios Definitions (April – December 2011)

- Seek input on a range of detailed alternatives to be tested
- Define draft alternatives that represent varying land-use/transportation strategies that will help us achieve greenhouse gas and other targets
 - Finalize alternative definitions in July 2011
- Evaluate alternatives and produce results by December 2011
- Identify preferred scenario by January 2012



Next Steps (continued)

Additional Analysis (starting in April 2011)

- Employment distribution across region
- Housing distribution by economic segments
- Equity analysis

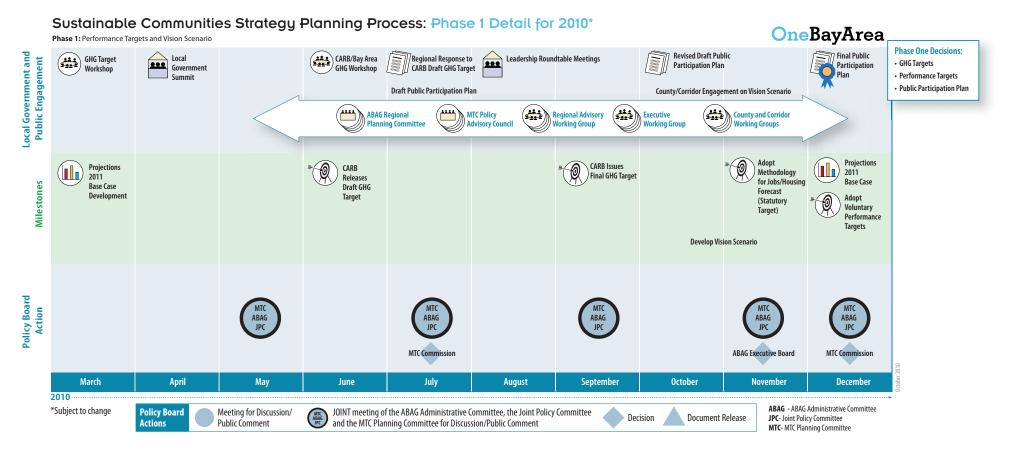
Transportation Investment Strategy (starting in October 2011)

Discuss transportation policies and investment strategies

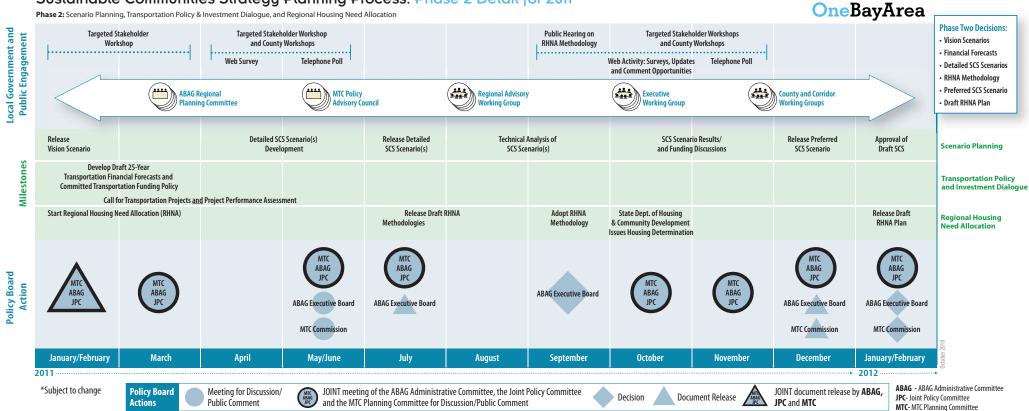
Regional Housing Needs Allocation (RHNA) (underway)

- Release Draft RHNA Methodology in July 2011
- Adopt Final RHNA Methodology in September 2011
- State issues Bay Area housing needs determination in October 2011
- Release Draft RHNA Plan in January 2012
 - Adopt Final RHNA Plan in September 2012

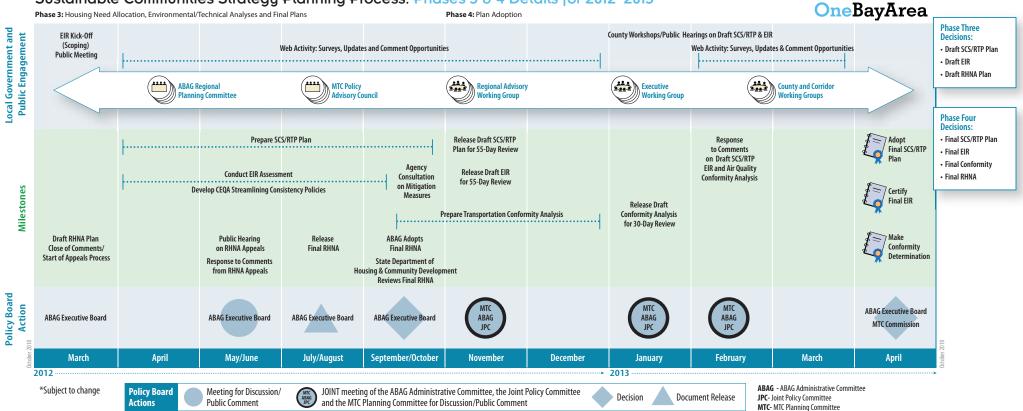




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Sustainable Communities Strategy Planning Process: Phase 2 Detail for 2011*



Sustainable Communities Strategy Planning Process: Phases 3 & 4 Details for 2012–2013*

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Upcoming Advisory and Steering Committee Meetings Schedule

Meeting Date/Function 1 CAWG February 3, 2011 2:30 p.m. – 5 p.m.	Receive an update on Regional and Countywide Transportation	Agenda Items Update on CWTP-TEP Activities Since Last Macting
February 3, 2011	and Countywide Transportation	
TAWG February 10, 2011 1:30 – 4 p.m. Steering Committee February 24, 2011 12 – 2 p.m.	 Plan and Transportation Expenditure Plan (CWTP-TEP) activities and processes Receive overview and schedule of Initial Vision Scenario Review the Metropolitan Transportation Commission (MTC) draft policy on committed funding and projects and call for projects Receive an outreach status update and approve the polling questions Discuss performance measures 	 Last Meeting Update on Countywide and Regional Processes Discuss the initial vision scenario and approach for incorporating SCS in the CWTP Review and comment on MTC's Draft Policy on Committed Funding and Projects, Approve Alameda CTC Call for Projects process and approve prioritization policy Outreach status update and <i>Steering Committee approval of polling questions</i> Continued discussion and refinement of Performance Measures Update: Steering Committee, CAWG, TAWG, and Other Items/Next Steps
 2 CAWG March 3, 2011 2:30 p.m 5 p.m. TAWG March 10, 2011 1:30 - 4 p.m. Special TAWG March 18, 2011 11:30 a.m. to 1:30 p.m. Steering Committee March 24, 2011 11 a.m 1 p.m. 3 CAWG April 7, 2011 2:30 p.m 5 p.m. 	 Receive an update on outreach Adopt Final Performance Measures Initiate discussion of programs Receive update on MTC Call for Projects and Alameda County approach Comment on transportation issue papers subjects Provide input to land use and modeling and Initial Vision Scenario (TAWG) Update on Initial Vision Scenario and Priority Conservation Areas (TAWG) Receive update and finalize Briefing Book Discuss committed funding policy Receive update on outreach activities Provide feedback on policy for projects and programs packaging 	 Update on Outreach: Workshop, Polling Update, Web Survey Approve Final Performance Measures & link to RTP Discussion of Programs Overview of MTC Call for Projects and Alameda County Process Discussion of Transportation Issue Papers & Best Practices Presentation Discussion of Land use scenarios and modeling processes (TAWG) Update on regional processes: Initial Vision Scenario and Priority Conservation Areas (ABAG to present at TAWG) Finalize Briefing Book TAWG/CAWG/SC update Update on Workshop, Poll Results Presentation, Web Survey Discuss Packaging of Projects and Program for CWTP Discussion of Alameda County land use

ALL MEETINGS at Alameda CTC, 1333 Broadway, Suite 300, Oakland, CA

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	Meeting Date/Function	Outcomes	Agenda Items
4 (C 1 2 4 (C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Meeting Date/Function TAWG April 14, 2011 1:30 – 4 p.m. Steering Committee April 28, 2011 12 – 2 p.m. CAWG May 5, 2011 2:30 p.m. – 5 p.m. TAWG May 12, 2011 1:30 – 4 p.m. Steering Committee May 26, 2011 12 – 2 p.m.	 Provide comments on Alameda County land use scenarios Receive update on Call for Projects outcomes Comment on refined Transportation Issue Papers Comment on committed projects and funding policy and Initial Vision Scenario Review outcomes of initial workshops and other outreach Review outcomes of call for projects, initial screening and next steps Discuss TEP Strategic Parameters & alternative funding scenarios Recommend land use scenario for CWTP and provide additional comments on Initial Vision Scenario Receive information on Financial projections and opportunities Introduction to modeling (CAWG) Title VI update 	Agenda ItemsscenariosDiscuss Call for Projects results: Draft project list to be approved by SC to send to MTCTransportation Issue Papers & Best Practices PresentationUpdate on regional process: discussion of policy on committed projects, refinement of Initial Vision ScenarioTAWG/CAWG/SC updateSummary of workshop results and other outcomesDiscussion of Financials for CWTP and TEPOutcomes of project call and project screening- Present screened list of projects and programs. Steering Committee recommends final project and program list to full Alameda CTC commission to approve and submit to MTC.Additional Analysis and Packaging of Projects for CWTP and Scoring and Screening for TEPTEP Strategic Parameters- duration, potential funding amounts, selection processUpdate on regional processes: Focus on Financial Projections, Initial Vision Scenario: Steering Committee recommendation to ABAG on land use (for both a refined IVS and other potential aggressive options)Introduction to modeling (CAWG)Title VI update TAWG/CAWG/SC update
1	No June Meeting		
J 2 1 1 2 1 1 1 1 1 1	CAWG July 7, 2011 2:30 p.m. – 5 p.m. TAWG July 14, 2011 1:30 – 4 p.m. Steering Committee July 28, 2011 12 – 2 p.m.	 Provide comments on outcomes of project evaluation Comment on outline of Countywide Transportation Plan. Adopt TEP parameters and finalize strategy for selecting TEP projects and programs. 	 Results of Project and Program Packaging and Evaluation Review CWTP Outline Discussion of TEP strategic parameters and project/program selection Update on regional processes: Detailed land use scenarios and results of performance assessments (ABAG presents to TAWG) TAWG/CAWG/SC update
S	CAWG September 1, 2011 2:30 p.m. – 5 p.m.	 Comment on first draft of Countywide Transportation Plan Comment on potential packages of projects and programs for 	 Presentation/Discussion of Countywide Plan Draft, including preferred land use and list of projects and programs (modeled results will bepresented 32

	Meeting Date/Function	Outcomes	Agenda Items
	TAWG September 8, 2011 1:30 – 4 p.m. Steering Committee September 22, 2011 12 – 2 p.m.	 TEP Prepare for second round of public meetings and second poll 	 Presentation/Discussion of TEP candidate projects Refine the process for further evaluation of TEP projects Discussion of upcoming outreach and polling questions Update on regional processes: ABAG RHNA methodology and update on preferred SCS (ABAG presents to TAWG) TAWG/CAWG/SC update
7	CAWG November 3, 2011 2:30 p.m. – 5 p.m. TAWG November 10, 2011 1:30 – 4 p.m. Steering Committee December date to be determined	 Comment on second draft of Countywide Transportation Plan Review and provide input on first draft of Transportation Expenditure Plan Projects and Programs Review results of second poll 	 Presentation/Discussion of Countywide Plan second draft Presentation/Discussion of TEP Projects and Programs (first draft of the TEP) Presentation on second poll result Update on regional processes TAWG/CAWG/SC update
8	CAWG January 5, 2012 2:30 p.m. – 5 p.m. TAWG January 12, 2012 1:30 – 4 p.m. Steering Committee January 26, 2012 12 – 2 p.m.	 Review and comment on draft of full TEP Review outcomes of outreach meetings 	 Presentation/Discussion of Draft TEP Presentation of Outreach Findings Update on regional processes: ABAG update on preferred SCS (ABAG to present to TAWG) TAWG/CAWG/SC update

Future Meeting Dates:

Additional meetings are anticipated in March, May and June 2012 to refine both the CWTP and TEP.

CWTP: Countywide Transportation Plan, TEP: Transportation Expenditure Plan

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CAWG Meeting 04/07/11 Attachment 10A

Alameda County Transportation Commission

Community Advisory Working Group

	Date Rec'd	Category	Organization	Planning Area	Title	First Name	Last Name
Ч	29-Jun-10	Health	UC Berkeley Safe Transportation and Education Center	CW	Ms.	Lindsay S.	Arnold
2	22-Jun-10	Business	California Alliance for Jobs.	CW	Mr.	Joseph R.	Cruz
m	30-Jun-10	Business	Economic Development Committee (Oakland)	North	Ms.	Charissa M.	Frank
4	30-Jun-10	CWC Organization	Alameda County Taxpayer's Association	CW	Mr.	Arthur B.	Geen
ப	17-Jun-10	Civil Rights/Env./Social Justice/Faith-based Adv.	Transportation Justice Working Group	CW	Ms.	Chaka-Khan	Gordon
9	30-Jun-10	CWC Organization	League of Women Voters	CW	Mr.	Earl	Hamlin
7	30-Jun-10	Education	Alameda County Office of Education	CW	Ms.	Unique S.	Holland
∞	30-Jun-10	Civil Rights/Env./Social Justice/Faith-based Adv.	Urban Habitat	CW	Ms.	Lindsay S.	Imai Hong
6	7-Jun-10	Alameda CTC Community Advisory Committee	Alameda CTC CAC	CW	Dr.	Roop	Jindal
10	10 29-Jun-10	Education	Oakland Unified School District, Board of Education	North	Mr.	David	Kakishiba
11	. 29-Jun-10	Alameda CTC Community Advisory Committee	Alameda CTC CWC	CW	Ms.	JoAnn	Lew
12	30-Jun-10	Health	Davis Street Family Resource Center	Central	Ms.	Teresa	McGill
13	\$ 29-Jun-10	Civil Rights/Env./Social Justice/Faith-based Adv.	Genesis, and Corpus Christi Catholic Church (Piedmont)	North	Ms.	Gabrielle M.	Miller
14	14 30-Jun-10	CWC Organization	East Bay Bicycle Coalition	CW	Ms.	Elizabeth W.	Morris

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	Date Rec'd	Category	Organization	Planning Area	Title	First Name	Last Name
15	28-Jun-10	Seniors/People with Disabilities	PAPCO	North	Ms.	Betty	Mulholland
16	16 30-Jun-10	Civil Rights/Env./Social Justice/Faith-based Adv.	United Seniors of Oakland and Alameda County (USOAC)	CW	Ms.	Eileen Y.	Ng
17	17 26-Jun-10	CWC Organization	East Bay Economic Development Alliance	CW	Mr.	James W.	Paxson
18	29-Jun-10	CWC Organization	Sierra Club	CW	Ms.	Patrisha	Piras
19	24-Mar-11	Civil Rights/Env./Social Justice/Faith-based Adv.	TransForm (Community Planner)	CW	Mr.	Joel	Ramos
20	20 28-Jun-10	Seniors/People with Disabilities Alameda CTC PAPCO	Alameda CTC PAPCO	East	Ms.	Carmen	Rivera- Hendrickson
21	30-Jun-10	CWC Organization	Alameda County Labor Council	CW	Mr.	Anthony R.	Rodgers
22	30-Jun-10	Business	Board of Director for the City of Fremont Chamber of Commerce	South	Dr.	Raj	Salwan
23	30-Jun-10	Civil Rights/Env./Social Justice/Faith-based Adv.	ElderCare (Fremont, CA) Ponderosa Square Homeowners Association	South	Ms.	Diane	Shaw
24	23-Jun-10	Alameda CTC Community Advisory Committee	Alameda CTC PAPCO	CW	Ms.	Sylvia	Stadmire
25	25 23-Jun-10	Alameda CTC Community Advisory Committee	Alameda CTC BPAC	CW	Ms.	Midori	Tabata
26	26 29-Jun-10	Health	Alameda County Public Health Department	CW	Ms.	Pam L.	Willow
27	27 18-Jun-10	Education	Vacancy	CW			