



METROPOLITAN
TRANSPORTATION
COMMISSION

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Memorandum

TO: Partnership Board

DATE: February 29, 2008

FR: Lisa Klein, Ashley Nguyen & Carolyn Clevenger

W. I.

RE: Transportation 2035: Project Performance & Policy Assessments

Approach

MTC is using a performance-based planning approach to develop the Transportation 2035 Plan. As demonstrated by the vision scenario analysis conducted last fall, we find that a performance-based approach to developing the long-range plan makes good analytic and policy sense because it helps to frame a more informed Commission discussion when making decisions for programs/projects that ultimately get included in the financially constrained RTP element.

The performance objectives provisionally approved by the Commission in January 2008, along with the Draft Vision Policies, provide the framework for the project-level performance evaluation. More specifically, the performance evaluation consists of two elements: (1) a quantitative performance evaluation based on the performance objectives and (2) a qualitative policy assessment drawn from the Vision Policy Strategies. Staff will present an overview of the following three performance evaluation elements at the February 29 Partnership Board meeting:

1. **Quantitative Project Performance Evaluation:** Staff will select a set of projects/programs for the performance evaluation, and will compare project costs and benefits in order to identify the most cost-effective projects with respect to the performance objectives that were provisionally approved by the Commission. In February, the Planning Committee approved the approach and criteria for the quantitative project evaluation. See **Attachment A** for more details.
2. **Vision Policy Strategies:** The Vision Policy Strategies includes (1) a statement articulating the vision for the Transportation 2035 Plan, and (2) policy briefs on the topics of investment, pricing, focused growth, technology and individual actions. Each policy brief explains where we are today, describes the challenges to overcome, and identifies policy strategies that will take us on a shared journey to get to where we want be. See **Attachment B** for the draft Vision Policy Statement, which is scheduled for provisional Planning Committee approval in early March.
3. **Qualitative Policy Assessment:** Staff will conduct a qualitative policy assessment of as many projects/programs proposed for the financially constrained plan as possible. The Vision Policy Strategies defines the policies used for this qualitative assessment. Our intent is to provide qualitative policy evaluation results to the Commission, along with quantitative performance measure results as available; this quantitative/qualitative analysis is meant to inform, not supplant, the Commission's policy review during its deliberation and decision-making. The Partnership Technical Advisory Committee's Ad

Hoc Committee on the Project Performance Evaluation is advising MTC staff on this assessment. See **Attachment C** for more details.

Process & Schedule

Staff sees the planning process unfolding through the following key steps, listed below and illustrated in Figure 1:

1. Identify the most cost-effective projects/programs with respect to the performance objectives (i.e., quantitative project evaluation approach – see Attachment A);
2. Consider the extent to how projects/programs advance the Commission’s vision policy strategies as outlined in Attachments B and C (i.e., qualitative policy evaluation);
3. Debate the trade-offs among various investment strategies that consider both performance objectives and vision policy strategies as part of the deliberations, as well as other considerations the Commissioners may bring to the table;
4. Determine which projects/programs we can afford within the revenues projected to be reasonably available to the region over the next 25 years (i.e., dollars and cents approach); and
5. Develop an investment plan of projects/programs for the financially constrained plan.

We will provide our partner agencies, the public and the Commission with a wealth of quantitative (performance analysis) and qualitative (policy assessment) evaluation results in late April/May 2008. The evaluation results are intended to inform the investment trade-off discussions that will take place between May and June 2008.

As part of its deliberations, the Commission will take into account the (1) Three Es, goals and performance objectives set for the plan; (2) results from the project performance and policy assessments; (3) financial constraints, and (4) and input received from partners, stakeholders and the public. Ultimately, the Commission will exercise its policy discretion and decide on the program of projects/programs for the financially constrained plan in July 2008.

Below are the upcoming key Transportation 2035 milestones:

March 5	Project submittals are due to MTC
March 14	Planning Committee approves <u>Proposed Final</u> Vision Policy Strategies
Late April	MTC staff releases project performance & policy assessment results
May - June	Partners, stakeholders, the public and Commission to review evaluation results and begin investment trade-off discussions
June 13	Planning Committee reviews Draft T2035 Investment Plan
July 11	Planning Committee approves Final Draft T2035 Investment Plan
July 23	Commission approves Final Draft T2035 Investment Plan
December 12	Planning Committee releases Draft T2035 Plan for public review
February 2009	Commission approves Final T2035 Plan

Staff will present the approach and process for the quantitative performance evaluation, Vision Policy Strategies, and qualitative policy assessment at your February 29 meeting.

TRANSPORTATION 2035 VISION

- Three E's and Goals (June 07)
- Policy Performance Objectives (Jan. 08)
- Performance Evaluation Process (Feb. 08)
- Vision Policy Strategies (March 08)

Project/Program Assessment

Attachments B & C

Attachment A

Policy Assessment

Vision Policy Strategies

- Investments, Land Use, Pricing, Technology, Travel Behavior

Quantitative Evaluation

Performance Objectives

- Delay, Emissions, Safety, VMT, Affordability, Maintenance

Financially Constrained Investment (adopt July 08)
Tradeoff Discussions



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Memorandum

TO: Planning Committee

DATE: February 1, 2008

FR: Deputy Executive Director, Policy

W. I.

RE: Transportation 2035: Project Assessment – Quantitative Performance Evaluation

The Commission has expressed interest in carrying forward a performance-based approach to the Transportation 2035 Plan. In January, the Commission provisionally approved a set of performance objectives that provides a framework for the quantitative evaluation of projects proposed for inclusion in the Plan. The Commission would use the information from this evaluation, along with key policy considerations, in trade-off discussions leading to selection of projects for inclusion in the Plan. Staff has refined the approach and criteria for the quantitative project evaluation, presented to you in January, based on discussions with the partnership and MTC's advisors. Staff now seeks the Committee's approval of the quantitative project performance evaluation approach and criteria in order to proceed with the analysis. Staff is also developing a parallel policy assessment that will highlight key policy considerations at the project-level. This information will complement the quantitative evaluation to more fully inform the trade-off discussions.

Approach to Quantitative Project Evaluation

The proposed approach is to compare project costs and benefits in order to identify the most cost-effective projects with respect to the Transportation 2035 Performance Objectives. In sum, key aspects of the proposed approach include:

- Quantitative comparison of project costs and benefits: Wherever possible, benefits are to be valued monetarily, based on established economic research.
- Benefits related directly to the Transportation 2035 Performance Objectives: See Attachment A for complete listing (these objectives do not diminish the significance of other policy considerations in the trade-offs discussion).
- Projects compared directly and quantitatively: The evaluation will capture a wide range of project types. Data will be generated through the regional travel demand model, as possible. In some cases, alternative sources may be used. In particular, MTC staff may need to pioneer evaluation methodologies to quantify the benefits of regional funding programs (such as Transportation for Livable Communities, Lifeline and transit and roadway maintenance shortfall programs) in terms of the adopted performance objectives.
- Most cost-effective projects identified: The strength of this analysis lies in identifying the outliers (i.e. the highest and lowest project performers). It is not likely to be precise enough to distinguish among investments with very close benefit-to-cost ratios.
- Focus performance evaluation on major investment decisions: While practical limitations preclude evaluation of each of the 400 to 600 discretionary investments expected in the Plan, major investment decisions can be informed through evaluation of a subset of projects defined by the guidelines in Attachment B. These guidelines account for approximately 80%

of discretionary investment costs in the current Transportation 2030 plan. Some smaller projects will not be quantitatively evaluated, but be subject to a policy assessment in conjunction with trade-off discussions.

Criteria for Quantitative Project Evaluation

Staff proposes four evaluation criteria (also see Attachment C):

1. Combined benefit-cost measure capturing reductions of delay, greenhouse gas emissions, particulate matter emissions, and fatal and injury collisions. The benefits are expressed in monetary terms. For example, the monetary value of delay is tied to the average regional wage rate; that of particulate matter reflects the costs associated with its health impacts. While the combined measure reflects the cumulative benefits associated with several performance objectives, information also will be provided on the individual components.
2. Cost per reduction in vehicle miles traveled (VMT). VMT has no inherent economic value aside from that associated with emissions and collisions, which are captured in the benefit-cost measure described above.
3. Cost per low-income household served (transit projects only). Staff seeks the Committee's approval to proceed with this criterion on a trial basis as a measure of affordability at the project-level. You may recall from your January meeting, staff's initial assessment was that affordability could be more meaningfully addressed at the policy level than through the project assessment. We still believe the policy component is key: pricing policies will significantly affect the ability of low-income households to benefit from existing and new infrastructure and services. However, at the urging of MTC's advisors, staff believes it worthwhile to try to capture transit affordability in the project evaluation as well.

Staff proposes this test measure following consultation with partners and members of MTC's Minority Citizens Advisory Committee (MCAC). The rationale for the measure is that transit alternatives serving low-income households can reduce the need to own additional automobiles, a significant transportation cost for low-income households. Staff proposes proceeding with this measure on a trial basis to allow us to try to address a variety of technical concerns raised by MTC's advisors and partners. If, after further review and discussion with MCAC members and partners, the technical issues cannot be satisfactorily resolved, the affordability objective would be addressed only through the policy assessment instead of adding the quantitative project evaluation.

4. Alternative benefit-cost measure for maintenance. This measure reflects public and private cost savings from performing maintenance on-time as opposed to deferring it. While this is not a complete measure, it illustrates a large component of benefits from the roadway and transit capital shortfall programs.

Policy Assessment

The quantitative project evaluation represents just one set of considerations important for the trade-offs discussion. With the Planning Committee's direction, MTC staff will conduct a second parallel assessment to highlight key policy considerations for the projects proposed for inclusion in the Plan; the assessment would capture as many projects as possible, including many beyond those subject to the quantitative evaluation. The Vision Policy Strategies introduced in agenda item 2c will provide the framework for a more qualitative policy assessment. These strategies address five policy areas critical for achieving the Vision, based on the fall 2007 scenarios analysis; some policy strategies (e.g., goods movement) may be added. As described in item 2c, MTC staff will return to the Committee in March for approval of the policy strategies.

Recommendation and Next Steps

Staff seeks the Committee's approval of the quantitative project performance evaluation approach and criteria described above. Staff anticipates continued consultation over the next few weeks with Partnership members on technical matters in gearing up for the quantitative project evaluation and policy assessment.

We expect the evaluation to take approximately six weeks, between early March and mid-April, and plan to present results to the Planning Committee, Partnership Board and Joint Policy Committee in May; we also intend to conduct extensive outreach, including county workshops, focus groups and polls, to seek public input on evaluation results and investment trade-offs. The Commission would use this input to inform its own trade-off discussions to determine investments that will be included in the financially constrained plan.

Therese W. McMillan

SH:LK

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Attachment A
Project Evaluation Criteria Derived Directly From Performance Objectives

“E” Principles	Goals	Recommended Performance Objectives = Benefits Captured	Proposed Project Performance Measures
Economy	1. Maintenance & Safety	• Reduce fatal and injury collisions	• Combined benefit-cost – fatality and injury component [1]
		• Improve maintenance	• Alternative benefit-cost – cost savings from performing maintenance on time
	2. Reliability 3. Freight	• Reduce per capita delay	• Combined benefit-cost – delay component [1]
	4. Security	None recommended	None recommended
Environment	5. Clean Air 6. Climate Protection	• Reduce per capita vehicle miles traveled	• Cost per VMT reduced
		• Reduce PM _{2.5} and PM ₁₀ emissions • Reduce CO ₂ emissions	• Combined benefit-cost – emissions component [1]
Equity	7. Access 8. Livable Communities	• Reduce share of income spent by low-income household expenditures on transportation and housing combined (improve affordability)	• Cost per low-income household served (trial measure – transit projects only)

Notes:

[1] A single combined benefit-cost measure would incorporate benefits from reductions in fatal and injury collisions, delay, and particulate matter and carbon dioxide emissions.

Attachment B

Projects Subject to Quantitative Evaluation

MTC staff will select projects for evaluation from among those submitted to MTC by March 5. Staff propose to focus our efforts on the most costly and biggest-impact projects and programs under consideration for discretionary funding, as outlined by the guidelines below:

1. Committed projects and programs as defined by the Planning Committee on January 11, 2008 are not subject to evaluation.
2. Projects considered in the regional Freeway Performance Initiative (FPI) will be evaluated. Prior analyses conducted for the FPI will be used and supplemented, as needed.
3. MTC staff will select up to 100 other projects using cost and functional criteria:

(a) Projects with total cost of \$50 million or greater and with area-wide impacts would generally be subject to evaluation. Examples of projects with area-wide impacts include:

- New/enhanced transit service, including transit priority measures
- Freeway-to-freeway interchanges
- Freeway widenings, including HOV lanes & HOT lanes
- State highway widenings in areas with limited freeways

Examples of projects considered to have local impacts (and therefore not subject to evaluation) include:

- Arterial or intersection improvements, except reliever routes as noted above
- Local interchanges
- Individual, new transit stations/stops for existing services
- Transit center improvements & parking expansion
- Grade separations

(b) Regional funding programs (e.g., TLC/HIP, Regional Bike and Pedestrian Program, Lifeline, Climate Change, Clean Air) would be evaluated. Per Commission policy, MTC's ongoing Regional Operations Programs, Resolution 3434 projects and current TIP projects are deemed committed and would not be evaluated. Other programmatic categories generally would not be evaluated. Examples include: countywide bike and pedestrian projects, non-capacity enhancing arterial improvements, non-specific transit priority measures.

(c) MTC staff would consider narrowing the criteria if, after a review of the projects by March 5, the criteria net more than 100 projects.

**Attachment C
 Quantitative Project Evaluation Criteria**

Proposed Project Performance Measures	Examples of Projects*
<p>Combined benefit-cost Benefit equals value in dollars of reductions in:</p> <ul style="list-style-type: none"> • Delay • Particulate matter emissions • Carbon dioxide emissions • Fatalities and injuries 	<p>Transit expansion and efficiency, e.g., Bus rapid transit/bus priority New ferry routes Rail extensions</p> <p>Freeway expansion and operations, e.g., New carpool lanes/HOT lanes, freeway to freeway interchanges, projects from Freeway Performance Initiative</p> <p>Regional programs, e.g. TLC/HIP, Lifeline, Regional Bike/Pedestrian Program,</p>
<p>Cost per vehicle mile traveled (VMT) reduced</p>	
<p>Cost per low-income household served (trial measure)</p>	<p>Transit expansion and efficiency per above</p>
<p>Alternative benefit-cost for maintenance Benefit equals direct public and private cost savings from performing maintenance on-time</p>	<p>Transit capital shortfall program and local streets and roads shortfall program</p>

* Applies only to projects that are not committed and meet other functional and cost criteria described in Attachment B.



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Memorandum

TO: Planning Committee

DATE: February 1, 2008

FR: Deputy Executive Director, Policy

W. I.

RE: Transportation 2035: Proposed Vision Policy Strategies

Background

MTC launched the Transportation 2035 planning effort in early 2007, focusing on defining our vision first, and then, in broad strokes, identifying those policies and investment strategies to carry out that vision. To date, this Committee has taken action on two core elements of the vision: **(1)** based on the three E principles of economy, environment, equity, gave provisional approval of eight plan goals of safety and maintenance, reliability, security, freight, clean air, climate protection, access, livable communities; and **(2)** gave provisional approval of a set of performance objectives that serve as: **a)** quantifiable policy measures against which future progress toward meeting objectives will be evaluated in subsequent RTPs and annual State of the System reports; and **b)** the basis for developing performance measures that will be used to inform Transportation 2035 investment decisions.

The Vision Policy Strategies, which are the subject of this memo, are the third and final core element that will define the plan's vision. Staff will present them for initial discussion by this Committee on February 8, and following review by our partner agencies, advisory committees, stakeholders and the public, we will seek your approval of the vision policy strategies at your March 2008 meeting.

Vision Policy Strategies

From the scenario analysis that was presented at the October 26 Bay Area on the Move Summit, we learned that:

1. Infrastructure projects alone do not achieve our performance objectives.
2. Pricing has a much bigger effect in the shorter term.
3. Focused growth helps make progress in the longer term.
4. Technology advances further closes the gaps.
5. Travel behavior changes are essential to achieving better system performance.

Staff has identified five policy areas that were drawn from these lessons learned. We view the five policy areas identified below as the key components of the Transportation 2035 vision; however, we note that there are likely other important policy areas that are not captured here that will round out the vision (such as affordability, goods movement, etc.); staff will seek partner and stakeholder help to identify these policy areas.

1. Investments
2. Pricing
3. Focused Growth
4. Technology
5. Individual Actions

The attached package of Vision Policy Strategies includes **(1)** a statement articulating the vision for the Transportation 2035 Plan, and **(2)** briefs for each of the five policy areas. Each policy brief explains where we are today, describes the challenges to overcome, and identifies policy strategies that will take us on a *shared journey* to get to where we want be. For illustrative purposes, we sketch out what this “journey” might look like; we show a continuum of efforts and innovations that will help us move from today towards attainment of our vision in 2035. The continuum categorizes short, medium and long-term improvement strategies based available resources, the state of various technologies and/or the time needed to realize the full impact of improvements (mainly in the land use arena). **Attachment A** describes the vision policies.

Process

The Vision Policy Strategies serve to inform the RTP project evaluation process, influence the ensuing investment trade-off discussions, and help with benchmarking achievement of performance objectives over time. Staff sees this process unfolding through the following key steps:

1. Identify the most cost-effective projects/programs with respect to the performance objectives (i.e., quantitative project evaluation approach – see agenda item #2b);
2. Consider the extent to how projects/programs advance the Commission’s vision policy strategies as outlined in Attachment A (i.e., qualitative policy review by Commission);
3. Debate the trade-offs among various investment strategies that consider both performance objectives and vision policy strategies as part of the deliberations;
4. Determine which projects/programs we can afford within the revenues projected to be reasonably available to the region over the next 25 years (i.e., dollars and cents approach); and
5. Develop an investment plan of projects/programs for the financially constrained plan.

Ultimately, the Commission will deliberate and make informed decisions on the set of transportation investments for the financially constrained Transportation 2035 Plan, taking into account the Three Es, goals and performance objectives set for the plan; the project performance evaluation results; vision policy strategies; financial constraints; and input received from partners, stakeholders and the public.

Schedule

The vision policy strategies outlined in the policy briefs are intended to initiate a robust discussion amongst partner agencies, stakeholders, the public and Commission. Staff expects to refine these vision policy strategies based on input received. The key milestones for review and input on the draft vision policy strategies, investment trade-off discussions, Commission review and action on the draft investment plan, and approval of the T-2035 Plan are as follows:

February 8	Planning Committee reviews <u>Draft</u> Vision Policy Strategies
February 15	Joint Policy Committee reviews Draft Vision Policy Strategies
February/March	Partnership Board reviews Draft Vision Policy Strategies
March 5	RTP project submittals due from CMAs/partner agencies
March 14	Planning Committee approves <u>Proposed Final</u> Vision Policy Strategies
Mid April	MTC staff releases project performance evaluation results

May - June	Investment trade-off discussions occur amongst partner agencies, stakeholders, public and Commission
June 13	Planning Committee reviews Draft RTP Investment Plan
July 11	Planning Committee approves Final Draft RTP Investment Plan
July 23	Commission approves Final Draft RTP Investment Plan
December 12	Planning Committee releases Draft RTP for public review
February '09	Commission approves Final RTP

Therese W. Mc Millan

SH: AN

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Attachment A
TRANSPORTATION 2035: VISION POLICY STRATEGIES

Change in Motion

Transportation 2035 is change in motion — guided by the Three Es of economy, environment, and equity, along with a set of ambitious goals and performance objectives, that will transform not only the way we invest in our transportation but the very way the Bay Area travels. The plan sets forth a bold vision and takes us on a journey to:

Where mobility and accessibility is ensured for all Bay Area residents, regardless of age, income or disability; and

Where our highways, local streets and roads, public transit systems, and bicycle and pedestrian facilities are all safe and well-maintained and take us when and where we need to go; and

Where an integrated market-based pricing system for the region's carpool lanes, bridges, and roadways helps us not only to manage the demand on our mature transportation system but also to pay for its improvements; and

Where our lively and diverse metropolitan region is transformed by a growth pattern that creates complete communities with ready and close access to jobs, shopping, and services and where transit is in place and readily available for both our short and long trips; and

Where technology advances move out of the lab and onto the street, including clean fuels and vehicles, sophisticated traffic operations systems to manage traffic flow on our roadways, advanced traveler information that allows us to make informed travel choices, and transit operational strategies that synchronize fare structures, schedules, and routes to speed travel to our destinations; and

Where we have a viable choice to leave our autos at home and take advantage of a seamless network of accessible pedestrian and bicycle paths that connect to nearby bus, rail and ferry services that can carry us to work, school, shopping, services, or recreation; and

Where we lead and mobilize a partnership of regional and local agencies, businesses, and stakeholders to take effective action to protect our climate and serve as a model for national and international action; and

Where our transportation investments and travel behaviors are driven by the need to reduce our impact on the earth's natural habitats; and

Where all Bay Area residents enjoy a higher quality of life.

POLICY BRIEF #1: TRANSPORTATION INVESTMENTS

Where We Are Today

- Our regional transportation system is an intricate and mature network of highways, local roadways, transit systems, and bicycle and pedestrian facilities.
- As our transportation system ages, the maintenance needs continue to outpace funding available, leading to higher deferred maintenance costs and substantial backlogs.
- Safety remains a critical concern. Over the past nine years, the region has averaged 440 fatal collisions and 37,000 injury collisions per year.
- Our private railroad systems are nearing or at capacity. The competition for scarce capacity between freight and passenger rail services continues to grow, with limited new rights-of-way available.
- Two of the three international airports will reach runway capacity between 2015 and 2020 – congested local freeways constrain airport and seaport landside access.

Challenges to Overcome

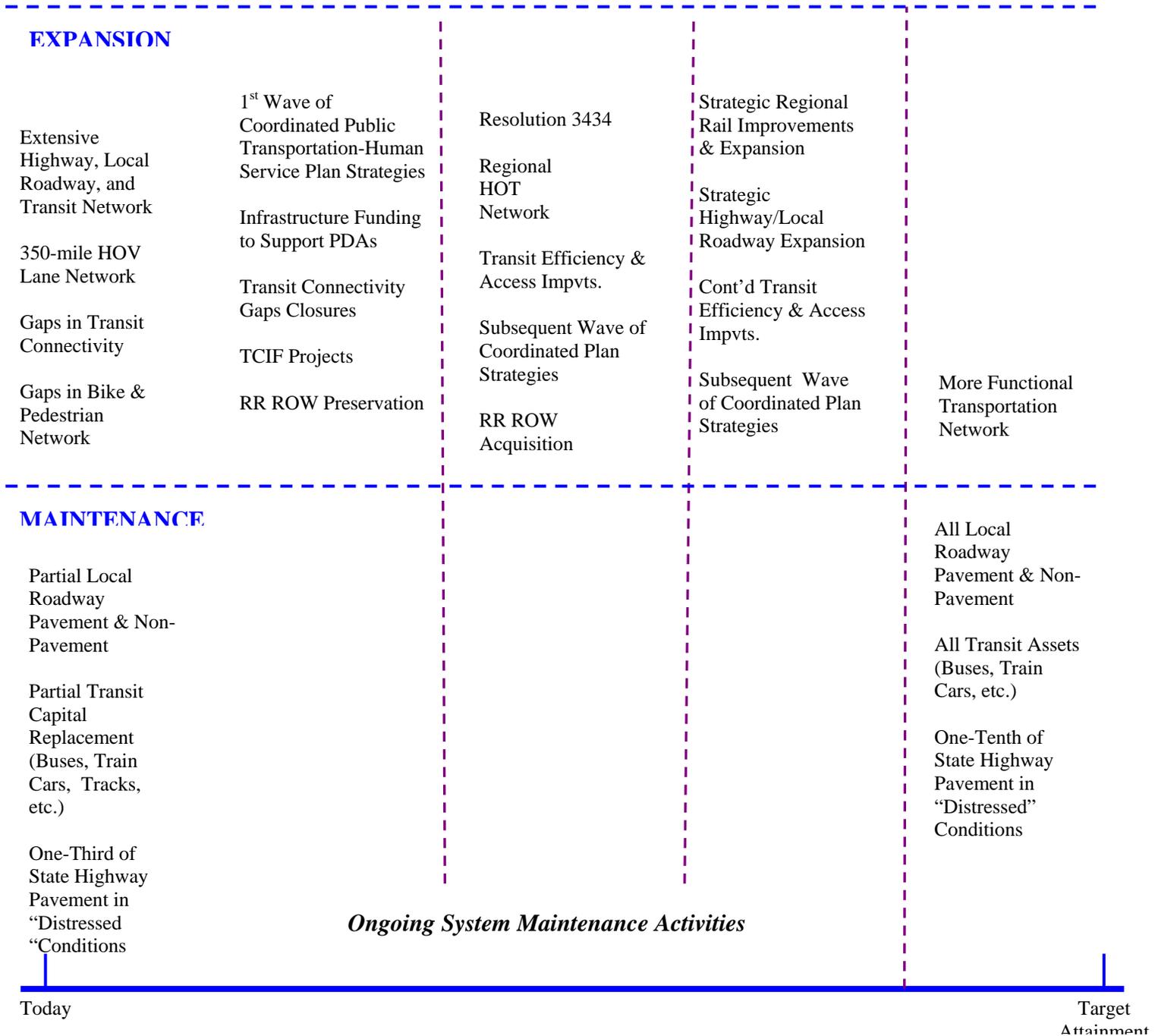
- Adequate funding to keep the regional system in a good state of repair and to minimize backlogs has been difficult due to lack of existing and new revenue sources.
- Bicyclists and pedestrians are disproportionately represented in all traffic collision deaths accounting for about 28 percent of total fatalities, while only a small percentage of all trips.
- Funding for transit services is severely limited; this situation will worsen as new transit expansion projects come online vying over fixed and segregated pots of operating and capital funds.
- By 2035, close to 25 percent of the region's residents will be 65 years or older. Paratransit services may become oversubscribed; but local transit services may not be able to absorb demand due to limited operating and capital resources. Accessible taxis may provide relief, but there are insufficient supplies to meet demand.
- Better institutional and functional coordination of the region's transit operators is needed to gain more efficiency and productivity from the existing system, reduce administrative redundancy and duplicative expenses.

Where Do We Want to Be?

- *Keep the Foundation Strong* - Establish cost-effective maintenance standards, and secure adequate funding for road and transit maintenance to minimize costs and backlogs
- *Maximize System Performance* - Maximize system performance with full deployment of system management strategies and institutional cooperation in the delivery of system services
- *Make Transportation Accessible* - Provide reasonable and affordable transportation alternatives to the automobile and effectively balance mainstream transit services, customized paratransit and human services transportation to meet the needs of low-income, elderly and disabled persons
- *Support System Strategic Expansion* - Fully close gaps in the regional carpool lane network; reduce truck delay in key freight corridors, and convert more truck trips to rail and barge; improve the speed and on-time reliability of bus transit through use of transit-priority measures; close gaps in the regional bicycle network.
- *Promote More Public/Private Partnerships* - Leverage private sector with public sector investments in the freight network to maximize dual benefits to each, and ensure those investments are coordinated with other public investments in the same corridor.

The Journey – A Continuum of Efforts & Innovations

SYSTEM MANAGEMENT – See TECHNOLOGY



POLICY BRIEF #2: PRICING

Where We Are Today

- Though common in many other industries (e.g., airlines, utilities), using price to avoid peak period overload is the exception in regional and state transportation; Europe and other US cities demonstrate that road pricing can reduce congestion and emissions.
- Some work is underway: Alameda and Santa Clara counties are developing HOT lane demonstration corridors (on I-680, I-580, US 101 and SR 85); San Francisco is instituting a congestion-based charge on Doyle Drive and studying the feasibility of a citywide congestion pricing program; MTC has been studying the feasibility of a regional HOT Network
- Working families in the Bay Area spend 10 percent more of their income on transportation and housing combined than families in other major metropolitan areas; this is largely due to high housing costs in our region.
- The region lacks a framework for coordinating transit fares; operators offer discounted fares for youth, elderly and disabled passengers but do not consider income level.
- While parking pricing policies can significantly affect transportation travel behavior and overall parking demand at employment and commercial areas, very few communities take the opportunity to effectively price parking.

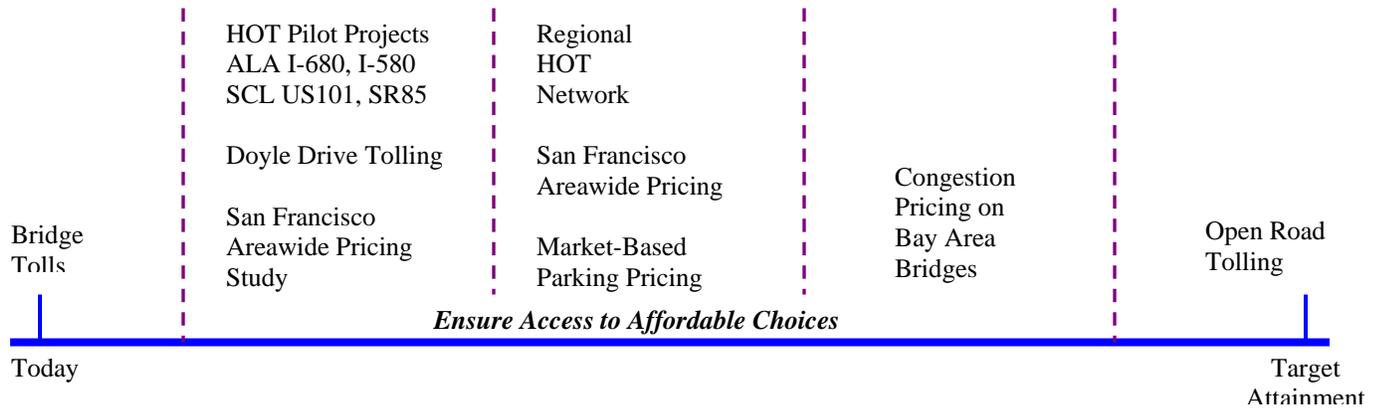
Challenges to Overcome

- In the absence of hands-on experience, the public and many elected officials are skeptical that pricing can succeed technically and politically.
- Congestion pricing programs can be and must be designed so that basic mobility is affordable for low-income households.
- The region lacks a framework for coordinating parking pricing policies; local jurisdictions and businesses are concerned that new or higher parking fees may put them at a competitive disadvantage
- HOT lane design principles and project delivery approaches need to be developed in conjunction with Caltrans, which has not yet established standards for HOT lanes; enforcement strategies will need to be developed in conjunction with CHP
- MTC would need legislative authority to develop and administer a regional HOT network; further, regional stakeholders must develop agreements on revenue allocation that support development of a regional system

Where Do We Want to Be?

- *Implement Full Road Pricing* - Advance congestion pricing as a congestion management tool, starting with HOT Lanes and moving eventually toward full road pricing along with area-wide pricing
- *Promote Area Pricing* - Implement a congestion toll on Doyle Drive by 2009 and follow a natural progression over time to European-style cordon or area-pricing of San Francisco
- *Support Local Parking Policies* - Advance parking policies at the local level that provide market-based pricing signals to users reflecting both direct and indirect costs of parking and support TOD
- *Provide affordable choices* - Give full consideration to providing access for persons of all income levels to the benefits associated with pricing programs. Seek to provide affordable choices, including high quality transit, in advance of implementing congestion pricing programs.

The Journey – A Continuum of Efforts & Innovations



POLICY BRIEF #3: FOCUSED GROWTH

Where We Are Today

- The regional housing market has not kept up with demand resulting in the Bay Area having the highest median housing costs in the nation.
- The region's fastest growing areas are in the outer ring – in-commuting from outside the region has and will likely continue to increase – and the “drive till you qualify” phenomenon will likely continue unless more housing choices are provided in the urban core and near key transit stations and corridors.
- High-growth areas in the outer ring are putting pressure on transportation facilities that were not originally designed to carry current or future traffic volumes and facilitate long-distance driving; vehicle miles traveled and carbon emissions are increasing as a result.
- The region has undertaken several initiatives (TLC/HIP, TOD Policy, T-PLUS) over the past several years to work with local agencies to invest in more focused growth, particularly near existing transit nodes and corridors
- Priority Development Areas (PDAs) have been nominated by local jurisdictions as part of the FOCUS effort. Together they could accommodate as much as 56 percent of the Bay Area's growth by 2035. MTC has committed nearly \$20 million to support planning efforts in PDAs.

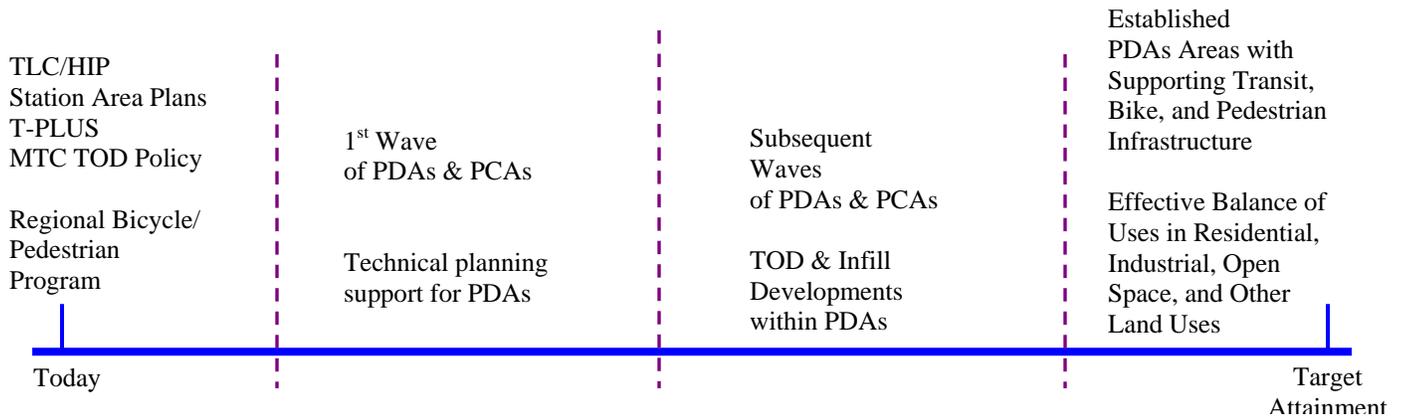
Challenges to Overcome

- PDAs require substantial investments for their host local governments; capital budgets submitted with the first round of PDA applications total tens of billions of dollars so cities and counties will require direct financial assistance to make focused growth real
- The redistribution of growth is a long-term solution to the region's transportation and climate issues; unless we coalesce local and regional priorities now, interest will wane and growth will find its own path of least resistance
- Increased new housing supply can reduce prices but can also gentrify neighborhoods.
- Some industrial land uses are disappearing due to local pressures to convert to higher value land uses.
- Many PDAs overlap with critical goods movement corridors in the region, and finding a balance between competing uses in the urban core is critical to ensuring a diverse job base and efficient goods movement system.

Where Do We Want to Be?

- *Focus Future Growth* - Recognize that PDAs encompass potential areas for focusing growth around transit hubs and transit arterial corridors and they serve as opportunity areas for targeted regional investments
- *Adequate Funding to Make Focused Growth Work* - Provide adequate infrastructure funding for PDAs and give them consideration in the allocation of all new increments of existing unconditional funding and in the use of new revenue sources
- *Consider Freight Needs* - Support industrial land-use preservation where needed and support local jurisdictions in finding ways for goods movement activities, housing and commercial areas to co-exist as good neighbors

The Journey – A Continuum of Efforts & Innovations



POLICY BRIEF #4: TECHNOLOGY

Where We Are Today

System Management

- Traffic congestion caused by incidents is a major problem. The amount of delay experienced by motorists due to non-recurrent congestion is equal in magnitude to the delay experienced due to recurrent day-to-day bottlenecks.
- Although some technology is already in place to address non-recurrent congestion, less than one-third of the freeway system is currently equipped with the needed system management equipment.
- Integration of the freeway system, local arterials, and the transit network is limited. Each system largely operates independently of the other, providing little opportunity to manage the overall system in a coordinated manner.
- Although ramp metering is a proven strategy to reduce freeway traffic congestion, it has been implemented on only 25% of the Bay Area freeway system. Because of this, the ability to maintain optimal performance in response to growing traffic demands is severely limited.
- Communications between transportation providers is primitive. The ongoing Center-to-Center effort to exchange data between several traffic management centers is the first step in improving this situation. Interoperability and communications between Transit agencies is also in its infancy. TransLink[®] is the region's most significant investment for interoperability (fare payment.)

Air Quality/Greenhouse Gas Emissions

- Nearly half of the greenhouse gas emissions (GHG) emissions in the Bay Area come from the transportation sector.
- AB 32 (2006 California Global Warming Solutions Act) requires CARB to develop regulations and market mechanisms that will ultimately reduce California's GHG emissions to 1990 levels by 2020 (a 25 percent decrease), and to 80 percent below 1990 levels by 2050.
- Federal CAFE standard just recently approved to increase fleetwide average of light duty vehicles sold in 2020 and beyond to 35 miles per gallon (mpg); US EPA will require heavy duty trucks to reduce particulate matter (PM) emissions by 85 percent by 2020
- State legislation (Pavley) requires all light duty vehicles sold in California to reduce GHG emissions by 30 percent by 2016; by 2020 California is committed to implement more stringent GHG emission standards (Pavley Phase 2 rules) that will further double GHG emissions and will likely yield better California fleet fuel efficiency to an estimated 44 mpg.
- California Air Resources Board (CARB) will implement air quality regulations for goods movement, including trucks, shore power, railroads, and ships.

Challenges to Overcome

- California must convince the federal appeals court to allow AB 32 implementation.
- Adequate funding is needed to further develop emerging technologies such as VII.
- Implementation of initial Integrated Corridor Mobility projects on I-880 and I-80 in Alameda/Contra Costa counties will require substantial negotiation between Caltrans, affected counties and cities, and transit agencies to develop operational agreements.
- Sustaining the performance benefits of a system management program requires a dependable operations and maintenance budget. Otherwise, any investments in new infrastructure will inevitably be wasted.
- TransLink[®] program needs to complete installation on all operators and achieve a steady state operations.

Where Do We Want to Be?

Deploy System Management Strategies

- Communication infrastructure sufficient to take advantage of in-vehicle technologies as they are developed by the private sector
- Fully instrumented freeway system in which operation can be accurately monitored and managed and from which traveler information can be generated on a real-time basis
- Ramp metering through the entire Bay Area freeway system, with integrated operation of arterials
- Operate TransLink® on all transit agencies
- Deploy transit priority measures and real-time arrival information

Reduce Emissions

- Fully implement AB 32 (Phases 1 and 2)
- Accelerate plug-in hybrid development
- Improve electric vehicle/hydrogen cell technology
- Ultimately increase fuel efficiency to 54 mpg and increase share of zero-emission vehicles to 55 percent of statewide fleet in order to help achieve state GHG and PM emission goals.

The Journey – A Continuum of Efforts & Innovations

SYSTEM MANAGEMENT

<p>16% of Freeway System has ramp metering</p> <p>23% of freeway has necessary TOS equipment to manage non-recurrent congestion</p> <p>Traveler Information through the 511 and Use of Freeway CMSs</p> <p>Vehicle Infrastructure Integration Testbed Under Development</p> <p>10% of Transit System includes TransLink® in Full Operations</p>	<p>Educational Workshops on Ramp Metering</p> <p>Increase in Fleet of VII-Equipped Vehicles</p> <p>40% of Transit System includes TransLink® in Full Operations</p>	<p>Reduction of Impact of Non-Recurrent Congestion.</p> <p>Improved Incident Clearance Times.</p> <p>County and Public Support for Ramp Metering; Deploy in Remaining Major Freeway Corridors</p> <p>Increase in Dynamic Mode Shifts in Response to Real-Time Situation</p> <p>70% of Transit System includes TransLink® in Full Operations</p>	<p>Negotiations with Caltrans and Other Operators on Joint Operating and Management Policies</p> <p>100% of Transit System includes TransLink® in Full Operations</p>	<p>Fully Managed and Controlled System, with Integrated Operation between the Freeway, Arterials, and Transit</p> <p>Sustainable O&M Budget for Technology</p> <p>Efficient and Safe System Through Automated VII Technologies</p> <p>Ability to Leverage New & Emerging Technology</p> <p>Mature System Interoperable between Parking & Fastrak</p>
<p>AIR QUALITY/GHG EMISSIONS</p>				
<p>Current CAFÉ Standards</p> <p>Global Warming Solutions Act</p> <p>Hybrid, alternative fuel vehicles</p>	<p>Implement Global Warming Solutions Act</p>	<p>More Stringent CAFÉ Standards</p> <p>Phase 2 Pavley Rules (fleetwide average of 44 mpg)</p> <p>Technological Changes that Change Business Practices & Related Home-to-Work Travel</p>	<p>Cleaner Fuels & Improved Vehicle Technology</p> <p>Increase in Hybrid Auto Ownership</p> <p>Another Wave of Hybrid-Type Vehicle Technology</p>	<p>Fleetwide Average of 54 mpg</p> <p>55% Zero-Emission Vehicles Fleet</p>
<hr/>				
<p>Today</p>				<p>Target Attainment</p>

POLICY BRIEF #5: INDIVIDUAL ACTIONS

Where We Are Today

- The automobile is still the primary transportation mode, wherein currently 84 percent of trips are by auto, 10 percent are by biking/walking, and 6 percent by transit.
- While simply driving less is likely to have the biggest impact relative to the Transportation 2035 Plan's performance objectives.
- Over 90 percent of traffic collisions are attributable to a human factors rather than infrastructure issues and could be addressed through education and enforcement. Pedestrian safety, aggressive driving, motorcyclist safety and driving decisions about rights of way and turning are bigger problems in the Bay Area than they are statewide.
- Substantial transit infrastructure investments have had little impact on mode split over time.
- Transit is a popular option in some Bay Area corridors where it is time and cost competitive (no toll plazas, avoidance of high San Francisco parking charges).

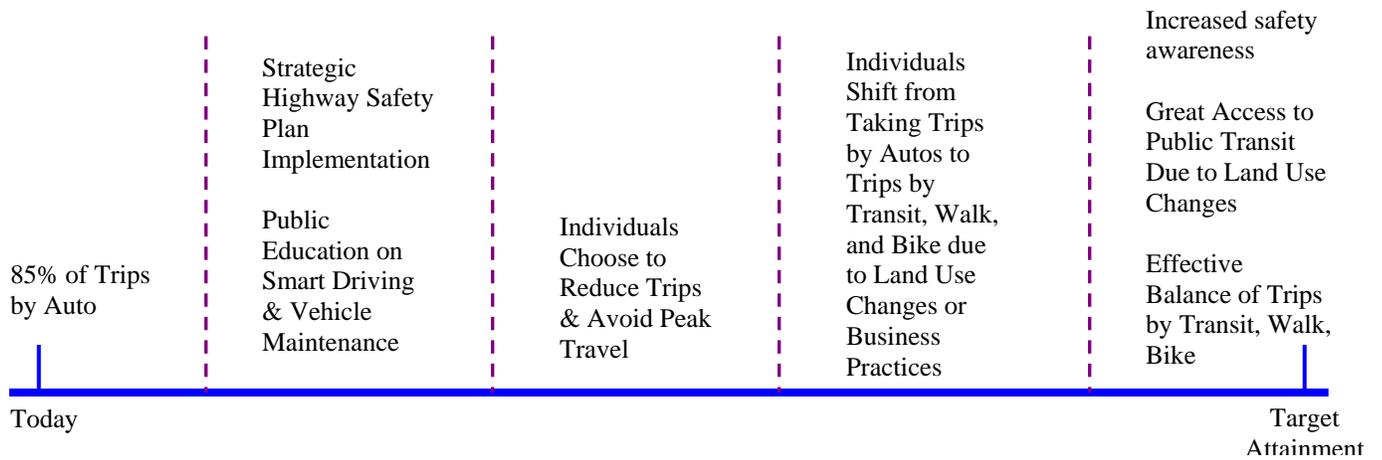
Challenges to Overcome

- Large mode shifts in the nearer term are not likely; our surveys have indicated that most people who drive do so because they believe it is not convenient or practical to use other modes.
- Attitude and preference change will only work if people have an environment in which they can effectuate their new attitudes and choices through new behaviors (e.g. waste-recycling, climate change awareness).
- While more compact land use can lead to less driving overall, such impacts would be considered to be more long-term.
- Many disparate activities are underway at the local level. A coordinated approach is needed among regional agencies to support robust public awareness programs.
- Education and enforcement activities are not generally eligible for the traditional funding sources with which MTC works. A comprehensive approach to regional safety will require partnerships with health departments and law enforcement.

Where Do We Want to Be?

- *Increase Public Education* - Encourage changes in attitude and behavior through a concerted public education program linking desired environmental, transportation, and safety outcomes with personal behavioral choices.
- *Pursue Enhanced Enforcement to Improve Safety* - Commit to a legislative advocacy platform that secures additional funding and commitment to target known problems like speeding, drunk driving and encroachment on pedestrian rights of way.
- *Build Incentive/Pricing Programs* - Provide a combination of various incentive programs (e.g. vehicle buy-back or "feebates" for high MPG vehicles, expanded bicycle and pedestrian facilities) and pricing strategies (e.g. parking pricing, variable tolls, carbon taxes) to encourage voluntary or induced attitudes and behaviors.
- *Enable Land Use Changes* - Provide incentives for planned communities (priority development areas) that allow non-driving access and travel through appropriate densities, use mixes and place designs.

The Journey – A Continuum of Efforts & Innovations



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Item 6a
Attachment C

Memorandum

TO: Partnership Board

DATE: February 22, 2008

FR: Carolyn Clevenger

W. I.

RE: Qualitative Policy Assessment

As you know, MTC is proceeding with a performance-based planning approach to develop the Transportation 2035 Plan. To provide structure to policy considerations, MTC staff has developed a policy assessment that will highlight key policy considerations at the project-level. This information will complement the quantitative project performance evaluation to more fully inform the trade-off discussions.

During the month of February, have sought input from partners to define the approach and criteria for the policy assessment. The approach described here reflects input received in February from an ad hoc committee of the Partnership. . The committee will continue to provide input up to and through another meeting on February 26 to finalize the approach; MTC staff will report back at the Partnership Board meeting.

Vision Policy Strategies

As discussed in Attachment B, the Vision Policy Strategies address five policy areas critical for achieving the Vision. These strategies provide the framework for the qualitative policy assessment. The five policy areas are: 1) Investments, 2) Pricing, 3) Focused Growth, 4) Technology, and 5) Individual Actions. Additional policy areas may be added pursuant to Planning Committee approval of the Vision Policy Strategies in March.

Policy Assessment

The policy assessment will provide information on how projects address the Vision Policy Strategies. This parallel assessment will complement the quantitative project performance evaluation by capturing a range of key considerations that would not otherwise be addressed. As part of the subsequent “trade-off” discussions, MTC staff or stakeholders will likely recommend including some projects in the Plan that are not highly cost effective but do support key policies. The individual policy strategies will not be weighted.

Ultimately, the Commission’s decisions on the set of transportation investments for the financially constrained Transportation 2035 Plan will take into account the goals and performance objectives set for the plan; the project performance evaluation results; vision policy strategies; financial constraints; and input received from partners, stakeholders and the public. The quantitative evaluation is not assumed to trump policy considerations as outlined in the Policy assessment or other policy considerations that the Commissioners may consider for any particular project.

MTC staff intends that the policy assessment capture all non-committed projects submitted. Some projects may be bundled to expedite the evaluation. As per Commission policy, committed projects will not be evaluated.

***Approach.* MTC staff will note the impact on relevant policy strategies from the five Vision Policy Strategies noted in Attachment B for individual (or bundled) projects, which will be presented along with the results of the quantitative project performance evaluation. This will provide project sponsors and MTC staff with the flexibility to highlight key policy considerations that might be overlooked in other project analysis without requiring an overly cumbersome project assessment.**

Process. MTC staff will conduct the policy assessment, which will then be reviewed by a Policy Assessment Review Committee drawn from the larger Partnership ad hoc committee that has provided input to date on the project evaluation process. The purpose of the committee is to help ensure consistency and transparency more than to review specific projects. Project sponsors and CMAs will have an opportunity to review both the quantitative and policy assessments of their project(s) before the tradeoff discussions take place.

The policy assessment will take place concurrently with the quantitative project performance evaluation, throughout the months of March/April. The specific schedule, including meetings with the Review Committee, is still being developed. Staff will seek to meet with the Review Committee as early in the process as possible.

Criteria. Staff is in the process of developing criteria for each of the five policy areas. The Partnership Ad Hoc Committee is providing feedback and ideas for criteria, with the goal of finalizing criteria at the February 26th Ad Hoc Committee meeting. The general framework for the criteria are:

1. Investments

- Improves safety (includes collisions, seismic and personal security), freight mobility, system connectivity, maintenance or mobility for elderly and disabled persons.

2. Pricing

- Implements or supports future pricing strategies
- Reduces transportation or housing costs for low-income households

3. Focused Growth

- Supports mobility either within or between Priority Development Areas (or other focused growth areas)

4. Individual Actions

- Supports promotional/educational/incentive programs or promotes mode shift

5. Technology

- Implements system management technologies or strategies that directly support reduced greenhouse gas emissions

Schedule

The policy analysis will be conducted in March and April, concurrently with the quantitative project performance evaluation.