



METROPOLITAN
TRANSPORTATION
COMMISSION

Joseph P. Bort MetroCenter
101 Eighth Street
Oakland, CA 94607-4700
TEL 510.817.5700
TDD/TTY 510.817.5769
FAX 510.817.5848
E-MAIL info@mtc.ca.gov
WEB www.mtc.ca.gov

Memorandum

TO: MTC Planning Committee, ABAG Administration
Committee and Joint Policy Committee

DATE: January 7, 2011

FR: Executive Director

W.I.

RE: SCS/RTP Performance Targets, MTC Resolution No. 3987

Staff has revised the Sustainable Communities Strategy/Regional Transportation Plan (SCS/RTP) performance targets based on discussion at your December 10, 2010 meeting. MTC staff requests the Planning Committee recommend approval of the targets by MTC on January 26. The ABAG Executive Board will consider the performance targets for approval on January 20.

Why Have SCS/RTP Performance Targets?

Rooted in the Three E's of Economy, Environment and Equity, the vision for the SCS/RTP is to reduce greenhouse gas emissions from passenger vehicles while supporting a prosperous and globally competitive economy, providing for a healthy and safe environment, and producing equitable opportunities for all Bay Area residents to share in the benefits of a well-maintained, efficient regional transportation system. The recommended targets and goals give more specific, measurable expression to our commitment to the Three E principles. They will be used as follows:

- Performance targets are quantifiable measures of policies against which land use and transportation scenarios will be evaluated at the regional level. These targets reflect a wide range of benefits, and the Three E principles of economy, environment, and equity leading to a preferred SCS/RTP. Information from additional analyses, such as the RTP Equity Analysis, SCS/RTP EIR and other data summaries, will supplement the performance targets where it is important to have a more focused understanding of the potential impacts of analyzed scenarios. See [Attachment C](#) for a description of these efforts and list of measures that, while not recommended as targets, remain under consideration for these efforts.
- The performance targets are ultimately tools for elected officials, stakeholders and the public to assess scenarios and investment options in the course of developing a preferred SCS/RTP. With the exception of the greenhouse gas and housing targets required under SB 375, the targets are voluntary statements that MTC and ABAG can modify to better align with new agency policy direction or respond to new circumstances. The targets are not standards and do not represent goals or restrictions on development for local jurisdictions, nor do they represent limits on any actions or authority by local jurisdictions.
- The performance targets also provide a framework to assess potential transportation projects for the RTP. The project performance assessment will help us compare projects on a consistent qualitative and quantitative basis to the extent possible and practical. As past experience has shown, projects and programs in the RTP do not meet each and every

performance target. The intent is to identify and advance those high-performing, cost-effective projects that also support a preferred land use approach. MTC will use its policy discretion along with the performance results to determine which projects/programs will ultimately be included in the RTP.

- MTC and ABAG may periodically measure progress made toward the performance targets as a way of assessing whether regional and local policies and investments are having the intended effect. The agencies may wish to modify or adjust programs, policies or the performance targets themselves based on actual results.

What Has Been Our Past Practice?

MTC and ABAG each have a long established practice of applying performance-based planning for our long-range planning and forecasting activities. The performance objectives in MTC's Transportation 2035 Plan and ABAG's Projections 2009 provide the most recent model for the recommended SCS/RTP performance target development process. In both cases, the performance objectives proved to be useful tools for policy analysis; and, in the case of Transportation 2035 Plan, the performance objectives guided evaluation of transportation projects and programs included in the plan.

Revisions to Performance Targets

The recommended performance targets are listed in [Attachment A](#). Staff has summarized in [Attachment B](#) the comments on each target from the December 2010 ABAG Regional Planning Committee and joint MTC Planning Committee/ABAG Administration Committee/Joint Policy Committee. Attachment B also describes revisions to the recommended targets as well as ways in which other components of the SCS/RTP address the concerns raised. As noted in December, the target analysis represents just one of the elements of the scenario assessment staff will undertake in 2011. Attachment C lists the measures under consideration for supplemental analyses of the scenarios. [Attachment D](#) summarizes comments from members of the public at the December and January meetings of the Regional Advisory Working Group, and its adhoc committee, and the Joint MTC/ABAG/JPC committee.

Recommendation

Staff recommends that the MTC Planning Committee forward MTC Resolution No. 3987 to the Commission to adopt the performance targets. The ABAG Executive Board will consider adopting the performance targets on January 20, 2011.

Steve Heminger

Attachment A
Recommended Targets

GOAL/OUTCOME	#	RECOMMENDED TARGET <i>Unless noted, all targets are for year 2035 compared to a year 2005 base</i>	GOAL/OUTCOME IN T-2035 OR PROJECTIONS 2009
CLIMATE PROTECTION	1	Reduce per-capita CO ₂ emissions from cars and light-duty trucks by 15% <i>Statutory - Source: California Air Resources Board, as required by SB 375</i>	✓
ADEQUATE HOUSING	2	House 100% of the region's projected 25-year growth by income level (very-low, low, moderate, above-moderate) without displacing current low-income residents <i>Statutory - Source: ABAG adopted methodology, as required by SB 375</i>	
HEALTHY & SAFE COMMUNITIES	3	Reduce premature deaths from exposure to particulate emissions: <ul style="list-style-type: none"> • Reduce premature deaths from exposure to fine particulates (PM_{2.5}) by 10% • Reduce coarse particulate emissions (PM₁₀) by 30% <i>Source: Adapted from federal and state air quality standards by BAAQMD</i>	✓
	4	Reduce by 50% the number of injuries and fatalities from all collisions (including bike and pedestrian) <i>Source: Adapted from California State Highway Strategic Safety Plan</i>	✓
	5	Increase the average daily time walking or biking per person for transportation by 60% (for an average of 15 minutes per person per day) <i>Source: Adapted from U.S. Surgeon General's guidelines</i>	
OPEN SPACE AND AGRICULTURAL PRESERVATION	6	Direct all non-agricultural development within the current urban footprint (existing urban development and urban growth boundaries) <i>Source: Adapted from SB 375</i>	
EQUITABLE ACCESS	7	Decrease by 10% the share of low-income and lower-middle income residents' household income consumed by transportation and housing <i>Source: Adapted from Center for Housing Policy</i>	✓
ECONOMIC VITALITY	8	Increase gross regional product (GRP) by 90% – an average annual growth rate of approximately 2% (in current dollars) <i>Source: Bay Area Business Community</i>	
TRANSPORTATION SYSTEM EFFECTIVENESS	9	Decrease average per-trip travel time by 10% <i>Source: Adapted from Caltrans Smart Mobility 2010</i>	
	10	Maintain the transportation system in a state of good repair: <ul style="list-style-type: none"> • Increase local road pavement condition index (PCI) to 75 or better • Decrease distressed lane-miles of state highways to less than 10% of total lane-miles • Reduce average transit asset age to 50% of useful life <i>Source: Regional and state plans</i>	✓

Goal: Adequate Housing

Ensure housing affordability and supply for individuals of all income levels, while at the same time reducing concentration of poverty, minimizing displacement of low-income residents and maximizing livability.

Target #2

House 100% of the region’s projected 25-year population growth by income level (very low, low, moderate, above moderate) without displacing current low-income residents.

STAFF RECOMMENDATION:
No change to the target as presented in December.

WHY IS THIS TARGET IMPORTANT?
SB 375 requires regions to plan for housing all projected population growth, by income level, to prevent growth in in-commuting. In November 2010, ABAG adopted a methodology to define this target as required under SB 375. This target also seeks to avoid displacement of low-income residents, defined as the outward movement of current low-income residents from locations in the urban core to locations with low accessibility and limited services as a result of new development pressures. This proposed target will complement the Regional Housing Needs Assessment (RHNA)

COMMENT	STAFF RESPONSE
The displacement element of this target is questionable – some low-income housing is substandard or located in unhealthy or unsafe environments.	Staff defines displacement as indicated above; this definition that does not preclude improvement of substandard housing or better site location. ABAG’s new, market-based model will test whether new infill development results in a large outward movement of low-income residents, which could also impact residents’ health and access to services. This target complements the RHNA process by measuring unintended loss of affordable units due to changes in the real estate market.
Including displacement in the housing target is a significant improvement.	Staff agrees it is worthwhile to address displacement in the target.
We need to focus our displacement concerns on low-income housing in healthy and safe neighborhoods.	Neighborhood-scale health and safety goals are addressed by other targets; they should also be included as indicators as well as in the Equity Analysis.
Why are we concerned about housing availability for the above-moderate income level?	RHNA requires above moderate income units to be allocated as well as other brackets.

Goal: Healthy & Safe Communities

Promote a better quality of life in communities throughout the region, which includes air quality improvement, collision reduction, and health benefits from increased walking and biking for all residents across all income levels.

Target #3

Reduce premature deaths from exposure to particular emissions:

- Reduce premature deaths from exposure to fine particulates (PM_{2.5}) by 10%
- Reduce coarse particulate emissions (PM₁₀) by 30%

STAFF RECOMMENDATION:

Add target to reduce coarse particulate (PM₁₀) emissions based on a request by the Air District. Although the decrease in premature mortality associated with reducing PM₁₀ cannot be estimated with precision, it is expected that reducing PM₁₀ by 30% will provide additional reductions in premature mortality, over and above the decrease in premature mortality related to a 10% reduction in PM_{2.5}.

WHY IS THIS TARGET IMPORTANT?

The Bay Area currently does not meet the federal standard for fine particulate matter, which is extremely hazardous to health. The 10% reduction goal for PM_{2.5} roughly reflects the expected benefit from meeting the federal standard, assuming each emission sector (both mobile and non-mobile sources) takes on similar emission reduction shares, as calculated by the Air District. The region currently does not attain the state standard for PM₁₀, which also has health-impacts. The 30% reduction goal for PM₁₀ is consistent with the reduction needed to meet the state standard. This target represents an important shift from measuring vehicle emissions, as in the current Transportation 2035 Plan, to a health outcome-based approach.

COMMENT

STAFF RESPONSE

The numeric target is too low (not aggressive enough).

The recommendation reflects achievement of current, health-based federal air quality standards. US EPA is considering adopting a stricter federal standard; should this occur prior to adoption of the SCS/RTP, staff would recommend adjusting the target accordingly.

The target should be expanded to reflect PM_{2.5} health impacts by geography, particularly for low-income and minority communities.

Staff agrees this is an important concern. Unfortunately, we are unable to recommend a target measuring health-impacts or PM_{2.5} concentration at the community level. This type of community level assessment requires considerable detail; the Air District presently does not have the analysis tools required to conduct this type of assessment for the scenarios. MTC staff can and will analyze the geographic distribution of particulate emissions from motor vehicles for each scenario as part of the parallel Equity Analysis process. These results will be reported along with the target analysis results.

Goal: Healthy & Safe Communities, cont.

<p>Target #4</p>	<p>Reduce by 50% the number of injuries and fatalities from all collisions (including bikes and pedestrians).</p> <p>STAFF RECOMMENDATION: <i>No change to the target as presented in December.</i></p> <p>WHY IS THIS TARGET IMPORTANT? <i>The target reflects a core goal of the RTP and an important co-benefit of the SCS to the extent it reduces driving. The target is adapted from the State's Strategic Highway Safety Plan (2006) and has been updated to reflect recent data showing a 26% decrease in injuries and fatalities between 2000 and 2008.</i></p>	
	COMMENT	STAFF RESPONSE
	<p>The target should be disaggregated by mode.</p>	<p>Staff does not recommend disaggregating the performance target by mode. Our current forecasting tools, which are based on data from CHP, are not valid at that level of detail. Staff does, however, hope to make headway in this area and therefore intends to test newly developed methodologies to estimate future pedestrian and bicycle collisions as part of the data summary. For example, one limitation of the model is its challenges in estimating the benefits of safety initiatives and enhancements, enforcement, and education strategies. Some well-documented safety initiatives, such as Safe Routes to Schools, may be able to be considered in the scenario assessment but further research is needed. Finally, staff will report indicators (based on actual data) separately by mode as available from the California Highway Patrol.</p>
	<p>Consider revising this target to a per-mile basis since we are trying to increase the amount of walking and biking.</p>	<p>Staff does not recommend a per-mile target since the region's goal is to minimize total injury and loss of life due to transportation. Ideally, the region will implement the SCS/RTP in a manner that makes walking and biking, as well as driving, safer.</p>
<p>This target is not essential; replace it with a green building/open space target instead.</p>	<p>Staff recommends including target for a collision reduction, which is an important element of healthy and safe communities and reflects the overall safety of the transportation system.</p>	

Goal: Healthy & Safe Communities, cont.

<p>Target #5</p>	<p>Increase the average daily time walking or biking for transportation per person by <u>60%</u> (equivalent to an average of <u>15 minutes per person</u>).</p>	
	<p>STAFF RECOMMENDATION: <i>Include a target based on minutes of biking and walking, as presented in December and increase the numeric target to increase by 60%, which is equivalent to 15 minutes per day in 2035. Staff recommends this modification in response to comments that the previous recommendation (equivalent to an average of 10 minute per person per day) was not ambitious enough. It also reflects updated analysis with the regional travel model.</i></p>	
	<p>WHY IS THIS TARGET IMPORTANT? <i>This target relates directly to U.S. Surgeon General’s guideline that people get 30 minutes per day of physical activity to lower risk of chronic disease and increase life expectancy. There is no accepted guideline for the amount of activity people should get through day-to-day transportation compared to other activities. The average time Bay Area residents spent walking and biking for transportation was about 9 minutes per person in 2005. A 60% increase equates to approximately 15 minutes per person, half of the daily recommendation. While this may sound like a modest target, it reflects the fact that transportation is just one means of daily physical activity. This target includes walking or biking to transit.</i></p>	
	<p>COMMENT</p>	<p>STAFF RESPONSE</p>
	<p>The numeric target should be more aggressive, given the fact that this is a long-range 30-year plan.</p>	<p>Staff agrees and is recommending a more ambitious target as described above under “Staff Recommendation”.</p>
	<p>Consider a mode share target.</p>	<p>Staff believes a target based on minutes of walking and biking better reflects desired health outcomes, is more closely linked to public health guidelines, and is strongly supported by the public health community as a reflection of health impacts. Mode share is important to understand how the scenarios work but is not an outcome-oriented measure for public health; staff will report mode share for the scenarios in the data summary and analysis.</p>

Goal: Open Space and Agricultural Preservation

Minimize sprawl and preserve vital habitat and agricultural lands through directing growth within the urban footprint, while supporting agricultural activities in rural communities.

Target #6

Direct all non-agricultural development (100%) within the current urban footprint (existing urban development and urban growth boundaries).

STAFF RECOMMENDATION:

Update target area for development reference the "urban footprint" as defined above rather than using "urbanized area", which has multiple meanings. Figure 1 includes a map of the urban footprint as of 2005. This map will be updated this spring to show the urban footprint as of 2010. The updated map will be used to assess the detailed scenarios.

WHY IS THIS TARGET IMPORTANT?

SB 375 requires consideration of open space and natural resource protection, which supports accommodating new housing and commercial development within existing areas for urban growth. The intent of this target is to support infill development while protecting the Bay Area's agriculture and open space lands. By focusing on areas with existing urban development, as well as areas specifically selected for future growth by local governments, the target seeks to avoid both excess sprawl and elimination of key resource lands.

COMMENT

STAFF RESPONSE

How will "urbanized areas" be defined?

The target's definition has been updated to reference the "urban footprint" as defined above. (See Figure 1.)

This target should reflect voter-approved urban growth boundaries.

Staff agrees the target should reflect growth management policies on a more localized level and has revised to the target to include voter-approved urban growth boundaries in its definition of the urban footprint.

Reference to urbanized areas as of 2010 is of concern; regional agencies should not restrict cities' ability to grow or force development into areas that reject it.

Staff has revised the target to recognize urban growth boundaries and thus better reflect local desires for growth. Staff has removed the reference to 2010 to reflect the fact cities may modify areas for planned growth over time. However, in calculating the target for the SCS/RTP scenarios, staff will need a defined point of reference and will use the urban footprint as of 2010. Finally, this is a voluntary target for the purposes of scenario analysis only; development decision remains within the purview of local jurisdictions.

This target should not preclude improvement such as habitat/wetlands restoration or agricultural improvements that may be defined as "development" in law.

Staff does not intend to preclude these types of improvements. The performance targets are to be used only for scenario analysis in the SCS, and the scenarios will not be defined to that level of detail. The targets do not represent enforceable policies or restrictions on eventual development, which is the purview of local jurisdictions. As such, the recommended target will not have the feared unintended consequences.

This target should consider the need for open space within urbanized areas for recreational and environmental purposes.

Staff acknowledges the importance of providing open space areas within the urbanized areas but does not recommend including this in the target. This will be addressed through other measures, such as access to parks, which is included in the PDA Assessment and may also become a performance indicator.

Figure 1: Urban Footprint in 2005*



*Update for 2010 in progress

Goal: Equitable Access

Ensure residents of all income groups can access essential destinations from locations of high-quality housing, while at the same time equitably distributing transportation and housing benefits and burdens across the region.

Target #7

Decrease by 10% the share of low-income and lower-middle income residents' household income consumed by housing and transportation.

STAFF RECOMMENDATION:

No change to the target as presented in December.

WHY IS THIS TARGET IMPORTANT?

This target used in Transportation 2035 remains very relevant in the context of the SCS/RTP. According to a study by the Center for Housing Policy, low-income and working class families in the Bay Area spend 67 percent of household income on housing and transportation compared to 57 percent for families in other major U.S. cities. The target aims to bring the Bay Area in line with the national average. This measure will capture expenditures for both work and non-work travel.

COMMENT

STAFF RESPONSE

There is insufficient information to accurately measure the success of this target over time.

The Center for Neighborhood Technology, which contributed to the study cited above as well as a more detailed analysis of the Bay Area, has developed a methodology to measure housing and transportation costs based on data from the US Census Bureau, land use and transportation system characteristics and auto ownership cost estimates from AAA. For more information on the Housing and Transportation Affordability Index, see <http://www.cnt.org/tcd/ht>.

Clarify whether this target calls for a reduction of 10 percentage points or a total 10 percent change.

The target is to reduce expenditures by 10 percentage points to bring Bay Area families in line with the national average, as described above.

Goal: Economic Vitality

Preserve quality of life and ensure continued prosperity through transportation and housing policies and investments that contribute toward regional competitiveness and economic and job growth for all residents across all income levels.

Target #8

Increase gross regional product (GRP) by 90% – an average annual growth rate of approximately 2% (in current dollars).

STAFF RECOMMENDATION:

Include a target to increase GRP, as proposed in December and set the numeric at a cumulative target 90% from 2005 to 2035, which is based on a rate slightly higher than the historic average annual growth rate over of 2% the past 40 years. This is a provisional recommendation based on further discussion with representatives of the business community.

WHY IS THIS TARGET IMPORTANT?

The business community views this target as a key indication of the region’s commitment to advance the SCS/RTP in a manner that supports economic growth and competitiveness. Growth patterns and transportation investments in the SCS/RTP scenarios will affect travel time, cost and reliability. Staff will use an economic impact model to estimate the resulting impacts on the cost of on-the-clock travel and access to labor, suppliers and markets. Any resulting increases in productivity makes the region more competitive for attracting new businesses and jobs; this will increase employment and wages, which are also reflected in the GRP target.

COMMENT

STAFF RESPONSE

This target fails to consider the issue of jobs-housing fit; this is more of a direct concern of the SCS/RTP.

Staff agrees that jobs-housing fit is an important component of the SCS/RTP but does not recommend replacing the GRP target. GRP is a reflection of overall regional competitiveness, which is a critical issue for the business community. Jobs-housing fit is a critical element and is complex enough to merit a full analysis as part of the detailed SCS scenario assessment process. Additionally, the Equitable Access target implicitly reflects jobs-housing fit within the targets framework due to the tendency for low-income families to accept longer, more costly commutes for more affordable housing.

Employment should be considered either as an additional economic target or as an indicator of the plan’s success.

Staff believes a GRP target is a more comprehensive reflection of regional competitiveness and economic growth. Employment levels are closely tied to GRP and will be calculated and reported as part of economic analysis data summary.

The target does not capture the benefits of locating growth in transportation-efficient areas where per-capita greenhouse gas emissions are lower.

While this is an important means of reducing greenhouse gas emissions in an economically sustainable way, the benefits of locating growth in transportation-efficient areas are measured through several targets including the Climate Protection and Transportation System Efficiency targets.

Does the target reflect local consumption, imports and exports or the notion of “the 100-mile radius economy” which reduces GHG-producing transportation?

The GRP analysis will consider whether goods produced within the region are consumed locally or exported. However, it will not be detailed enough to address the 100-mile radius concept.

Goal: Transportation System Effectiveness

Target transportation investments to maximize effectiveness in achieving mobility and accessibility for all residents across all income levels, as well as to ensure that the system is in a state of good repair.

Target #9

Decrease average per-trip travel time by 10%.

STAFF RECOMMENDATION:

Modify the target presented in December to all modes in a single numeric target. (The December recommendation called for a 10% decrease in auto and transit only.)

WHY IS THIS TARGET IMPORTANT?

This target is intended to measure the effectiveness of the transportation system in providing easier, faster access to individuals' travel destinations. Bus and auto travel times will include both recurring delay, due to congestion, and non-recurring delay, due to incidents and accidents. The target will be influenced by supportive land use patterns, improved transit speeds and frequency and improved efficiency of the existing roadway system through signal timing, ramp metering, incident clearance and better trip planning.

COMMENT

STAFF RESPONSE

Consider a combined travel time target for all modes, including bicycle and pedestrian.

Staff agrees with this suggestion and has modified the target accordingly. In addition, the data summary will include travel times by mode for scenario comparison.

The target does not reflect the goal to make transit travel more competitive with auto travel. We should aim to improve transit travel times more so than auto travel times.

A more distinct target is needed to measure transit effectiveness.

The measure reflects efficiency of the entire transportation system and land use decisions in getting people where they want to go more quickly. It will reflect improvements to transit including: transit service frequency, through reduced time waiting at transit stops; transit accessibility, through less time getting to the transit stop; and speed improvements through more direct service or service enhancements such as BRT. Additional measures, such as an analysis of overcrowding, will be included in the data summary and through the indicators process.

Travel time reductions for auto and transit are not necessarily in conflict.

Staff agrees with this comment – there are a number of projects and programs to be studied that would benefit more than one mode – for example, construction of HOV/HOT lanes will benefit autos taking advantage of the new lanes and express buses gaining reliability and travel time reduction.

This target could be achieved by building more freeways; focus instead on encouraging utilization of public transit.

The proposed target will reflect benefits from land use decisions that may result in shorter distances between origins and destinations as well as improvements to all different types of facilities – from freeway operational improvements to new and enhanced transit service and better access to jobs and housing due to more focused growth assumptions

Goal: Transportation System Effectiveness, cont.

<p>Target #10</p>	<p>Maintain the transportation system in a state of good repair.</p> <ul style="list-style-type: none"> • State highway system: Decrease the number of distressed pavement lane miles to less than 10% of the state highway system • Local roadways: Increase the average pavement condition rating to 75 or better • Transit: Reduce the average asset age to 50% of useful life <p>STAFF RECOMMENDATION: <i>No change to the target as presented in December.</i></p> <p>WHY IS THIS TARGET IMPORTANT? <i>The region needs to maintain the existing transportation infrastructure in order to support the SCS. Failure to do so would result in increased future maintenance costs, unreliable service and increased costs to travelers. "Fix it first" has long been a core RTP goal, and these targets are included in Transportation 2035.</i></p>	
COMMENT		STAFF RESPONSE
	<p>What is the expected cost to achieve an average local roadway PCI of 75?</p>	<p>MTC staff estimates the cost to achieve an average PCI of 75 is 83% of the cost shown in Transportation 2035, which is based on reaching an average PCI of 85. The cost to achieve a PCI of 75 is approximately \$28.6 billion. The Transportation 2035 Plan allocates \$23.3 billion to local streets and roads maintenance; An additional \$5.3 billion would be needed to achieve an average PCI of 75. These estimates will be updated for the SCS/RTP. It is important to note that the average annual cost to maintain the pavement at a lower PCI is higher than if the region is able to make the up-front investment to bring the PCI to an optimal level of 85.</p>
	<p>The proposed PCI target is unattainable for many jurisdictions – consider a 10% increase from existing conditions in each jurisdiction</p>	<p>While they might be challenging to achieve, less aggressive numeric targets would lack justification, especially since they would lead to a moderate or mediocre state of repair and would increase long-term maintenance costs. Staff would like to emphasize that the targets will not be applied on a local jurisdictional level. Note that these targets have been carried over from Transportation 2035.</p>
	<p>Define "distressed" pavement</p>	<p>Caltrans defines distressed pavement as pavement with poor ride quality, which can be treated with overlays, or with significant cracks that require rehabilitation or reconstruction. Caltrans monitors the state highway system each year to measure the extent of distressed pavement. This target comes from the State's 10-year State Highway Operation and Protection Program Plan (SHOPP).</p>

General Comments	
COMMENT	STAFF RESPONSE
The targets have the potential for unintended consequences in the future.	As described in the attached memo, the primary purpose for targets is to inform the evaluation and comparison of SCS/RTP scenarios, and this will be stated clearly in the resolutions adopting the targets. MTC and ABAG have the ability to modify the targets at any time and staff expects to recommend updates in the future based on tracking our actual progress over time.
The proposed targets aren't visionary enough.	<p>Staff agrees that some targets in the December draft recommendation could be more ambitious, and is recommending revisions in those cases.</p> <p>Based on evidence from past transportation plans, the revised set of targets is, in fact, quite ambitious. Past plans have generally predicted outcomes in the opposite direction of the recommended targets. For example, Transportation 2035 predicted an increase in particulate emissions, collisions, and travel time compared to today.</p>
Relying on the requirement that a target must be able to be forecasted well eliminates a number of desirable measures from consideration.	<p>Staff agrees the targets, which must be forecast, do not capture some nuances. At the same time, they reflect many important goals. Staff will develop indicators to capture other measures that cannot necessarily be forecast. (See Attachment C.)</p> <p>MTC and ABAG are happy to share all modeling assumptions and methodologies.</p>
A lack of economic growth will hinder the prospect of SCS-supportive development projects – the very same projects that will provide us with an opportunity to achieve many of these targets.	Staff agrees that economic health is essential to the success of the SCS/RTP, and has specifically addressed that issue in GRP target. Because the SCS/RTP is a long-range plan, we believe that the lack of demand for significant development in the short term will not adversely impact the long term success of the SCS/RTP.
Staff needs to provide additional information on what strategies will be used to achieve the targets.	Strategies to achieve each target were included as part of the PowerPoint presentation to the joint meeting of the MTC Planning Committee, ABAG Administration Committee and Joint Policy Council on December 10, 2010.
It is unclear how we will appropriately weight the target results for overall scenario evaluation.	Staff does not agree it is necessary to weight up front the individual targets for the scenario assessment. Instead, staff will present policymakers with the target results and additional information from the Equity Analysis. This information will allow an informed discussion of trade-offs, which may elicit preferences regarding the relative weight of each target.

Attachment C

Additional Scenario Assessment Efforts

In developing the recommended targets, staff reviewed over 90 measures. As detailed on the next two pages, many of the measures reviewed remain under consideration for inclusion in one of the following four efforts to provide additional data and analysis in conjunction with the targets analysis of the scenarios in 2011.

- Equity Analysis will explore how low-income and minority communities fare compared to the rest of the Bay Area and whether benefits and burdens are distributed equitably in the scenarios. We will start it in early 2011 with the Initial Vision Scenario and continue through the Detailed Scenario and Draft SCS/RTP. The initial analysis could include a drill-down of the targets by income in addition to measures from the Transportation 2035 Equity Analysis. Other measures that facilitate a more detailed review of the impacts on low-income and minority communities remain under consideration for this effort, as noted below.
- SCS/RTP EIR is a legally required document that compares and contrasts several alternatives over a 25-year period. It is designed to inform decision-makers and others of the range or potential environmental impacts that could result from the preferred SCS/RTP alternative (“Project”). It also analyzes a range of alternatives to the proposed project. As joint lead agencies, MTC and ABAG will use the draft EIR in its review of the draft SCS/RTP prior to formally adopting a final SCS/RTP.
- Land Use and Travel Forecast Data Summaries/Analysis will include detailed data and analysis that can help explain the target results. The land use summary will describe the general projected land use pattern for the region and summarize the major changes in employment and housing locations. The transportation summary will describe travel patterns by mode and trip purpose, traffic forecasts and transit ridership, and vehicle emissions.
- Indicators will track actual progress towards the targets and measure other aspects of community quality. These measures cannot be forecast but are related to transportation and land use, such as concentration of poverty, displacement, school quality, and local government implementation. Indicators are an important means to inform policy discussions that are also part of the SCS. For example, current data on access to quality schools can define the transportation policies and jobs/housing growth allocations in the scenarios. Staff will recommend a set of indicators for adoption in April, based on feedback from the Ad Hoc Committee on Performance Measures over the next several months.

GOAL: CLIMATE PROTECTION

CONSIDER FOR SUPPLEMENTARY ANALYSIS

Data Summary and Analysis

- Vehicle miles traveled (VMT) per capita
- Mode share for public transit and non-motorized modes

Equity Analysis

- Impact of greenhouse gas emissions on communities of concern

Indicators

- % of Bay Area transportation powered by carbon-free, regional renewable energy sources

NOT RECOMMENDED AT THIS TIME

Doesn't Reflect Goal

- Energy intensity per person mile traveled

Outside of Primary SCS/RTP Scope

- Acres of land underwater due to sea level rise caused by global warming

GOAL: ADEQUATE HOUSING

CONSIDER FOR SUPPLEMENTARY ANALYSIS

Data Summary and Analysis

- Distribution of low-income housing
- Share of new development in infill and priority development areas

Equity Analysis

- Concentration of poverty
- Affordable housing in neighborhoods of opportunity
- Number of affordable homes
- Displacement
- Number of low-income households in transit-rich environments

Indicators

- New deed-restricted affordable housing units

NOT RECOMMENDED AT THIS TIME

Address through RHNA Process

- Distribute new housing growth equally across neighborhoods of all income levels
- Increase RHNA allocation for very low and low income housing that is accommodated in areas zoned for 2-5 stories

GOAL: HEALTHY & SAFE COMMUNITIES

CONSIDER FOR SUPPLEMENTARY ANALYSIS

Data Summary and Analysis

- Vehicle miles traveled (VMT) per capita
- Mode share for all modes

Equity Analysis

- PM2.5 emissions in communities of concern adjacent to transportation hot spots
- Accessibility to essential destinations (by mode)

Indicators

- Densities of station areas compared to areas outside of them
- Quality of bike facilities and destinations accessible by bike
- Percentage of jurisdictions that rezone after SCS

NOT RECOMMENDED AT THIS TIME

Technical Limitations (Data or Forecasting)

- Quality of the public realm

GOAL: OPEN SPACE PRESERVATION/EFFICIENT USE OF LAND

CONSIDER FOR SUPPLEMENTARY ANALYSIS

Indicators

- Resource lands preserved or protected
- Urban development on the region's most essential resource lands
- Acres of prime agricultural lands
- New housing units within designated station areas/TOD/PDAs

NOT RECOMMENDED AT THIS TIME

Technical Limitations (Data or Forecasting)

- Quantity of water runoff caused by human development

Outside of Primary SCS/RTP Scope

- Land for food production/% of food consumption from sustainable sources

GOAL: EQUITABLE ACCESS

CONSIDER FOR SUPPLEMENTARY ANALYSIS

Equity Analysis

- All targets by income and by mode
- Low-income households within a 30-minute and \$2.50 transit trip to jobs and essential destinations
- Distribution of benefits and burdens from RTP/SCS for low-income communities & residents compared to general population
- Average travel time to jobs and services (by income and/or by mode)
- Non-automobile dependent access to jobs and services
- Ratio of transit to auto commute travel time

Data Summary and Analysis

- Jobs-housing fit analysis
- Availability of industrial land
- Analysis regarding mobility/accessibility of elderly residents

Indicators

- Walkability index
- Population concentration by race
- Accessibility options for elderly and disabled residents

NOT RECOMMENDED AT THIS TIME

Technical Limitations (Data or Forecasting)

- Number of essential destinations within [TBD] minutes for disabled population
- Concentration of communities of concern in urban areas
- Impact of rising fuel prices on communities of concern
- % of high priority community-based transportation plan projects/programs funded/completed in communities of concern

Input Assumptions

- Lifeline gaps
- Correlation between wages & housing cost

Doesn't Reflect Goal

- Average trip distance by income

GOAL: ECONOMIC VITALITY

CONSIDER FOR SUPPLEMENTARY ANALYSIS

Data Summary and Analysis

- Availability of industrial land
- Delay
- Travel time by mode
- Transit loading
- Access to Labor
- Employment/unemployment/job creation
- Personal income
- Job-housing fit analysis

Indicators

- Total regional property tax generation
- Densities of station areas vs. areas outside of them
- Percentage of the sales price of new homes that fees & extractions represent
- Percentage of jurisdictions that rezone after SCS adoption

NOT RECOMMENDED AT THIS TIME

Doesn't Reflect Goal

- Total cost per capita
- Peak to off-peak travel time ratio
- Transportation systems operations and maintenance cost per capita

Outside of Primary SCS/RTP Scope

- Revenue vehicle-miles by operator by mode

Too Complex

- User benefits

GOAL: TRANSPORTATION SYSTEM EFFECTIVENESS

CONSIDER FOR SUPPLEMENTARY ANALYSIS

Data Summary and Analysis

- System utilization & transit loading
- Person-throughput
- Delay

Indicators

- Average distance between transit service calls
- Travel time reliability

NOT RECOMMENDED AT THIS TIME

Technical Limitations (Data or Forecasting)

- Cost to serve new development per capita
- Service level as percent of service that could be provided if moving stock operated at full capacity
- Operating shortfall covered based on highest level of transit service in the past 30 years

Goal: Healthy & Safe Communities, cont.		
Target #4	Reduce by 50% the number of injuries and fatalities from all collisions (including bikes and pedestrians).	
	COMMENT	STAFF RESPONSE
	Forecasting methods need to be advanced to make this target more informative – for example, severity of collisions should also be considered as part of this target.	We will continue to explore new ways to improve the collisions methodology. Unfortunately, the current collision methodology cannot forecast the severity of collisions with much accuracy. Due to the limited level of data provided by CHP, we believe that our current approach – relying on an aggregate target but providing mode-disaggregated results in the data summary – is the best approach moving forward.
	The target should be disaggregated by mode.	See Attachment B.

Goal: Healthy & Safe Communities, cont.		
Target #5	Increase the average daily time walking or biking for transportation per person by <u>60%</u> (equivalent to an average of <u>15 minutes per person</u>).	
	COMMENT	STAFF RESPONSE
	Replace this target with a bike/pedestrian mode shift target – it would be just as effective and it would not be positively influenced by transit service cuts.	See Attachment B.
	The numeric target should be increased to a goal of 15 minutes of active transportation per day.	See Attachment B – target recommendation updated accordingly.

Goal: Open Space and Agricultural Preservation		
Target #6	Direct all non-agricultural development (100%) within the current urban footprint (existing urban development and urban growth boundaries).	
	COMMENT	
	STAFF RESPONSE	
	It is necessary to view this target as a positive overall goal to protect resource lands, while encouraging focused growth.	Staff agrees with this comment; this reflects the primary goal of including this target in the SCS/RTP.
	A better target would look at the density increases or additional dwelling units in PDAs.	Staff has proposed to consider these measures as indicators. Neither of these suggested targets ensures protection of open space and key resource lands.
	A map should be provided with the locations of urban development areas and natural resource areas.	A map has been attached to this document in response to this comment – see Figure 1.
Due to the broad legal definition of “development”, this target should be reviewed to ensure it does not exclude things such as habitat restoration or infrastructure development.	See Attachment B.	
This target is too restrictive and does not justify its selection of the year 2010 as a “freeze in time” for development outside of urban areas.	See Attachment B – year 2010 removed from target accordingly.	

Goal: Equitable Access	
Target #7	Decrease by 10% the share of low-income and lower-middle income residents’ household income consumed by housing and transportation.
	COMMENT
	STAFF RESPONSE
Consider adding an additional equity target to increase the share of residents within a given time/cost of their jobs and essential services.	Affordability is a key goal in terms of ensuring equitable access for all segments of the Bay Area population. Access to jobs and services is also important – this issue will likely be addressed as part of the Equity Analysis.

Goal: Economic Vitality							
Target #8	Increase gross regional product (GRP) by <u>90%</u> – <u>an average annual growth rate of approximately 2%</u> (in current dollars).						
	<table border="1"> <thead> <tr> <th>COMMENT</th> <th>STAFF RESPONSE</th> </tr> </thead> <tbody> <tr> <td>Inclusion of this target in the SCS/RTP is essential to acknowledge economic vitality as a major regional issue.</td> <td>Staff agrees that looking at the region’s overall economic vitality is essential for the SCS/RTP scenario comparison process. This will allow policy-makers to compare the economic impacts of different transportation and land use choices.</td> </tr> <tr> <td>This target should consider the share of jobs and housing in high quality transit-served areas, potentially disaggregated by salary and income level.</td> <td>While jobs and housing availability within transit-served areas is important to meet sustainability goals, it does not reflect the overall economic vitality of the region. Transit service levels for communities of concern and the rest of the region were mapped in the Snapshot analysis and can be considered as an indicator.</td> </tr> </tbody> </table>	COMMENT	STAFF RESPONSE	Inclusion of this target in the SCS/RTP is essential to acknowledge economic vitality as a major regional issue.	Staff agrees that looking at the region’s overall economic vitality is essential for the SCS/RTP scenario comparison process. This will allow policy-makers to compare the economic impacts of different transportation and land use choices.	This target should consider the share of jobs and housing in high quality transit-served areas, potentially disaggregated by salary and income level.	While jobs and housing availability within transit-served areas is important to meet sustainability goals, it does not reflect the overall economic vitality of the region. Transit service levels for communities of concern and the rest of the region were mapped in the Snapshot analysis and can be considered as an indicator.
COMMENT	STAFF RESPONSE						
Inclusion of this target in the SCS/RTP is essential to acknowledge economic vitality as a major regional issue.	Staff agrees that looking at the region’s overall economic vitality is essential for the SCS/RTP scenario comparison process. This will allow policy-makers to compare the economic impacts of different transportation and land use choices.						
This target should consider the share of jobs and housing in high quality transit-served areas, potentially disaggregated by salary and income level.	While jobs and housing availability within transit-served areas is important to meet sustainability goals, it does not reflect the overall economic vitality of the region. Transit service levels for communities of concern and the rest of the region were mapped in the Snapshot analysis and can be considered as an indicator.						

Goal: Transportation System Effectiveness																			
Target #9	Decrease average per-trip travel time by <u>10%</u>.																		
	<table border="1"> <thead> <tr> <th>COMMENT</th> <th>STAFF RESPONSE</th> </tr> </thead> <tbody> <tr> <td>This target is essential for traditional RTP goals. It is important to reduce travel time for auto trips as well as transit.</td> <td>Staff agrees with this comment; these targets are intended to capture central transportation goals of the RTP.</td> </tr> <tr> <td>Travel time reduction for auto and transit are in direct conflict. Target supports highway expansion.</td> <td>See Attachment B.</td> </tr> <tr> <td>This will be difficult to measure. People will make longer trips if speeds improve.</td> <td>A number of factors may be at work and the data summary and analysis will help us tease them out: Some people may use travel time savings from transportation improvements or more efficient land use patterns for other activities; some people may make longer trips if travel speeds improve.</td> </tr> <tr> <td>Alternatives suggested:</td> <td></td> </tr> <tr> <td>Mode split, transit mode share or transit utilization.</td> <td>Travel time reduction is a better measure of the effectiveness of the transportation system. Reducing the amount of time to get to one’s destination is a key transportation goal.</td> </tr> <tr> <td>A more transit-oriented target, such as job growth near high-frequency transit service, transit service level improvements, or transit gap reduction.</td> <td>This target is designed to look at the overall efficiency of the transportation system; while transit is an important component of the transportation network, targets that focus on a single mode do not measure the overall system’s performance. These transit measures are important though, and they should be considered as potential SCS/RTP indicators.</td> </tr> <tr> <td>Targets focusing on increasing travel choices and ensuring sufficient transit capacity.</td> <td>These issues should be considered as part of the indicators process; however, neither represents a measure of the transportation system’s overall efficiency. Sufficiency of transit capacity will be addressed in the data summary.</td> </tr> <tr> <td>Reduce average travel distance</td> <td>This would reflect land use changes only and not transportation system improvements.</td> </tr> </tbody> </table>	COMMENT	STAFF RESPONSE	This target is essential for traditional RTP goals. It is important to reduce travel time for auto trips as well as transit.	Staff agrees with this comment; these targets are intended to capture central transportation goals of the RTP.	Travel time reduction for auto and transit are in direct conflict. Target supports highway expansion.	See Attachment B.	This will be difficult to measure. People will make longer trips if speeds improve.	A number of factors may be at work and the data summary and analysis will help us tease them out: Some people may use travel time savings from transportation improvements or more efficient land use patterns for other activities; some people may make longer trips if travel speeds improve.	Alternatives suggested:		Mode split, transit mode share or transit utilization.	Travel time reduction is a better measure of the effectiveness of the transportation system. Reducing the amount of time to get to one’s destination is a key transportation goal.	A more transit-oriented target, such as job growth near high-frequency transit service, transit service level improvements, or transit gap reduction.	This target is designed to look at the overall efficiency of the transportation system; while transit is an important component of the transportation network, targets that focus on a single mode do not measure the overall system’s performance. These transit measures are important though, and they should be considered as potential SCS/RTP indicators.	Targets focusing on increasing travel choices and ensuring sufficient transit capacity.	These issues should be considered as part of the indicators process; however, neither represents a measure of the transportation system’s overall efficiency. Sufficiency of transit capacity will be addressed in the data summary.	Reduce average travel distance	This would reflect land use changes only and not transportation system improvements.
COMMENT	STAFF RESPONSE																		
This target is essential for traditional RTP goals. It is important to reduce travel time for auto trips as well as transit.	Staff agrees with this comment; these targets are intended to capture central transportation goals of the RTP.																		
Travel time reduction for auto and transit are in direct conflict. Target supports highway expansion.	See Attachment B.																		
This will be difficult to measure. People will make longer trips if speeds improve.	A number of factors may be at work and the data summary and analysis will help us tease them out: Some people may use travel time savings from transportation improvements or more efficient land use patterns for other activities; some people may make longer trips if travel speeds improve.																		
Alternatives suggested:																			
Mode split, transit mode share or transit utilization.	Travel time reduction is a better measure of the effectiveness of the transportation system. Reducing the amount of time to get to one’s destination is a key transportation goal.																		
A more transit-oriented target, such as job growth near high-frequency transit service, transit service level improvements, or transit gap reduction.	This target is designed to look at the overall efficiency of the transportation system; while transit is an important component of the transportation network, targets that focus on a single mode do not measure the overall system’s performance. These transit measures are important though, and they should be considered as potential SCS/RTP indicators.																		
Targets focusing on increasing travel choices and ensuring sufficient transit capacity.	These issues should be considered as part of the indicators process; however, neither represents a measure of the transportation system’s overall efficiency. Sufficiency of transit capacity will be addressed in the data summary.																		
Reduce average travel distance	This would reflect land use changes only and not transportation system improvements.																		

Goal: Transportation System Effectiveness, cont.									
Target #10	<p>Maintain the transportation system in a state of good repair.</p> <ul style="list-style-type: none"> • State highway system: Decrease the number of distressed pavement lane miles to less than 10% of the state highway system • Local roadways: Increase the average pavement condition rating to 75 or better • Transit: Reduce the average asset age to 50% of useful life 								
	<table border="1"> <thead> <tr> <th>COMMENT</th> <th>STAFF RESPONSE</th> </tr> </thead> <tbody> <tr> <td>It is essential to include this target to take into consideration traditional RTP goals.</td> <td>Staff agrees with this comment; these targets are intended to capture central transportation goals of the RTP.</td> </tr> <tr> <td>Weight this target by facility demand.</td> <td>How to prioritize maintenance needs is a broader policy discussion that will take place over the course of the SCS/RTP.</td> </tr> <tr> <td>Make explicit the weighting by transit asset cost.</td> <td>This weighting methodology will be included in the methodology document that accompanies the targets; however, this issue was not considered significant enough to include the target language.</td> </tr> </tbody> </table>	COMMENT	STAFF RESPONSE	It is essential to include this target to take into consideration traditional RTP goals.	Staff agrees with this comment; these targets are intended to capture central transportation goals of the RTP.	Weight this target by facility demand.	How to prioritize maintenance needs is a broader policy discussion that will take place over the course of the SCS/RTP.	Make explicit the weighting by transit asset cost.	This weighting methodology will be included in the methodology document that accompanies the targets; however, this issue was not considered significant enough to include the target language.
	COMMENT	STAFF RESPONSE							
	It is essential to include this target to take into consideration traditional RTP goals.	Staff agrees with this comment; these targets are intended to capture central transportation goals of the RTP.							
Weight this target by facility demand.	How to prioritize maintenance needs is a broader policy discussion that will take place over the course of the SCS/RTP.								
Make explicit the weighting by transit asset cost.	This weighting methodology will be included in the methodology document that accompanies the targets; however, this issue was not considered significant enough to include the target language.								

General Comments	
COMMENT	STAFF RESPONSE
It is essential to include language in the target resolution acknowledging what the targets are and what they are not.	Staff agrees with this comment; the targets resolution will include a very clear description of the purpose for the SCS/RTP targets – targets are intended for utilization in comparison of scenarios.
Defined goals need narratives that link to targets.	Staff agrees with this comment; as shown in Attachment B, brief goal statements have been proposed and included under each goal. Expanded goal statements will also be drafted and included in the SCS/RTP.
The proposed targets are not capable of distinguishing between a scenario with economic and environmental benefits that are equitably distributed and a scenario that fails to achieve those objectives.	Staff disagrees with this assessment of the targets. We believe the proposed targets consider a wide variety of critical issues for the Bay Area, while at the same time recognizing the targets only a part of the overall SCS/RTP process.
Modeling tools are either incapable or limited in their abilities to make accurate and detailed forecasts; models and technical assumptions need to be able to be externally validated.	While the modeling tools used in the SCS/RTP have inherent limitations, they allow us to accurately compare the different impacts from various scenarios. While no model is perfect, the MTC and ABAG models are the best tools available for quantitatively comparing the various scenarios.
Targets need to be disaggregated by income level.	Staff agrees with this comment and proposes to disaggregate the targets by income, as possible, in the Equity Analysis.
Transit needs a more prominent role in the overall targets list.	While transit is only explicitly called out in the state of good repair target, transit service and infrastructure improvements represent a primary strategy that will allow us to achieve many of the targets. For example, travel time reduction and CO ₂ /PM _{2.5} emissions reduction can be achieved by building new BRT or rail expansions, or by improving the competitiveness of transit by increasing service frequency.
The Equity Analysis should be used to compensate for shortcomings in the targets.	The Equity Analysis should be used to provide additional in-depth analysis of various equity issues. Staff has proposed to start the Equity Analysis in early 2011 in order to understand the equity impacts of various proposed scenarios.