

# OneBayArea

To: Equity Working Group  
 From: Jennifer Yeamans, MTC  
 Date: February 6, 2012  
 Subject: Equity Analysis Methodology Refinements for Preferred Scenario

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In presenting the results of the Alternative Scenarios Equity Analysis in December, staff received a range of feedback and suggestions on how the measures might be refined or changed for the coming analysis of the Preferred Scenario. This memorandum provides an initial discussion of proposed refinements to the three travel model-based measures based on this feedback, for your consideration and discussion at your February 8 meeting. Discussion of the methodological approach will continue in March, when staff must finalize the methodology for all measures so that analysis of the Preferred Scenario can commence in a timely fashion.

## Feedback on Alternative Scenarios

Comments and suggestions received from the Equity Working Group and members of the Joint MTC Planning/ABAG Administrative Committee included<sup>1</sup>:

- Incorporate subsidized housing into the H+T Affordability measure
- Add school trips to the analysis of commute travel time
- Consider looking at the number of accessible destinations in lieu of travel time
- Consider analyzing trip distance and/or average speed instead of travel time

## Recommendations for Travel Related Measures

In consideration of the last three points above, staff recommends the following in response:

- Keep analysis of school trips separate from work-related commute trips. The rationale for keeping these separate is because assumptions about the locations of educational destinations do not vary between scenarios as do the location of and mixes of employment forecast. School trips could potentially be examined a separate measure, but the results in terms of overall trends/observations is very likely to be duplicative with the two travel time measures already being analyzed.
- Continue to analyze travel time rather than use accessibility measures, in that the results are more intuitive to interpret (average commute time = X minutes rather than an average of 13,000 jobs accessible from a group of locations). This is a case where MTC's new travel model is a substantial improvement in terms of representing travel characteristics at the individual level rather than the neighborhood or "zone" level as in the past when MTC used accessibility measures for equity analysis.
- Continue using travel time as a measure instead of distance or speed. Attachment A provides a summary comparison of these three possible measures for your consideration. Because all three measures represent similar overall trends across the

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<sup>1</sup> Refer to the December 2011 and January 2012 meeting summaries for further details on comments and input received from Equity Working Group members. For minutes of the December Joint Committee meeting, see here: [http://apps.mtc.ca.gov/meeting\\_packet\\_documents/agenda\\_1799/1\\_Final\\_minutes.pdf](http://apps.mtc.ca.gov/meeting_packet_documents/agenda_1799/1_Final_minutes.pdf)



scenarios, choosing more than one would be duplicative. To make a change to the measures approved by MTC’s Planning Committee in October, staff would need to provide justification that one of the alternatives was substantially superior. Note that issues identified related to assumptions about transit travel times are also present in the travel speed measure, since speed is a function of time.

In addition to the points above, staff is also planning to modify the analytical approach to the VMT Density measure so that an identical roadway network is being analyzed across all scenarios. The previous methodology used in the Alternative Scenarios Analysis selected only “major” roadway links carrying more than 10,000 vehicles per day, but because travel patterns varied across scenarios, some links were captured in some scenarios and not others, making for “apples to oranges” comparison of VMT results across scenarios. Staff therefore proposes analyzing the union of roadway links captured across all scenarios, so that the VMT results present “apples to apples” comparisons across scenarios.

#### **Next Steps**

March	Finalize Methodology for Preferred Scenario Equity Analysis
April	Conduct Analysis
May	Adopt Preferred Scenario

Attachment	“Comparison of Potential Equity Analysis Measures Based on Alternative Scenarios Analysis of Commute Travel Time”
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Comparison of Potential Equity Analysis Measures  
Based on Alternative Scenarios Analysis

Commuter Time (Current Measure) <i>Average time in <u>minutes</u> for commute trips</i>		Base Year	1. Initial Vision	2. Core	3. Focused	4. Constrained	5. Outward
				Concentration	Growth	Core Concentration	Growth
	Communities of Concern	25	28	28	27	27	27
	Remainder of Region	27	29	29	28	28	28
	Regional Average	27	29	28	28	28	28

Commuter Distance (Alternative 1) <i>Average distance traveled for commute trips in <u>miles</u></i>		Base Year	1. Initial Vision	2. Core	3. Focused	4. Constrained	5. Outward
				Concentration	Growth	Core Concentration	Growth
	Communities of Concern	11	11	11	11	11	11
	Remainder of Region	14	13	13	13	13	13
	Regional Average	13	13	13	13	13	13

Commuter Speed (Alternative 2) <i>Average speed for commute trips in <u>miles per hour</u></i>		Base Year	1. Initial Vision	2. Core	3. Focused	4. Constrained	5. Outward
				Concentration	Growth	Core Concentration	Growth
	Communities of Concern	27	24	24	25	25	25
	Remainder of Region	31	28	28	29	29	29
	Regional Average	30	27	27	28	28	28