



**METROPOLITAN  
TRANSPORTATION  
COMMISSION**

Joseph P. Bort MetroCenter  
101 Eighth Street  
Oakland, CA 94607-4700  
TEL 510.817.5700  
TDD/TTY 510.817.5769  
FAX 510.817.7848  
E-MAIL [info@mtc.ca.gov](mailto:info@mtc.ca.gov)  
WEB [www.mtc.ca.gov](http://www.mtc.ca.gov)

*Memorandum*

TO: Planning Committee

DATE: May 2, 2008

FR: Executive Director

W. I.

RE: Transportation 2035: Project Performance Assessment - Preliminary Findings

Last year, the Commission agreed to pursue a performance-based approach to the Transportation 2035 Plan. Earlier this year, the Planning Committee approved a project-level performance assessment of investments under consideration for inclusion in the Plan.

The assessment consists of both a qualitative policy assessment and a quantitative performance evaluation and builds on the policy foundation for the Plan. (See [Attachments A and B](#).) The assessment applied to potential investments, except those considered “committed” by Commission policy. (See Attachment C.)

At your May 9 meeting, MTC staff will present findings from this analysis and will discuss how this information might inform the investment trade-off discussions over the next few months.

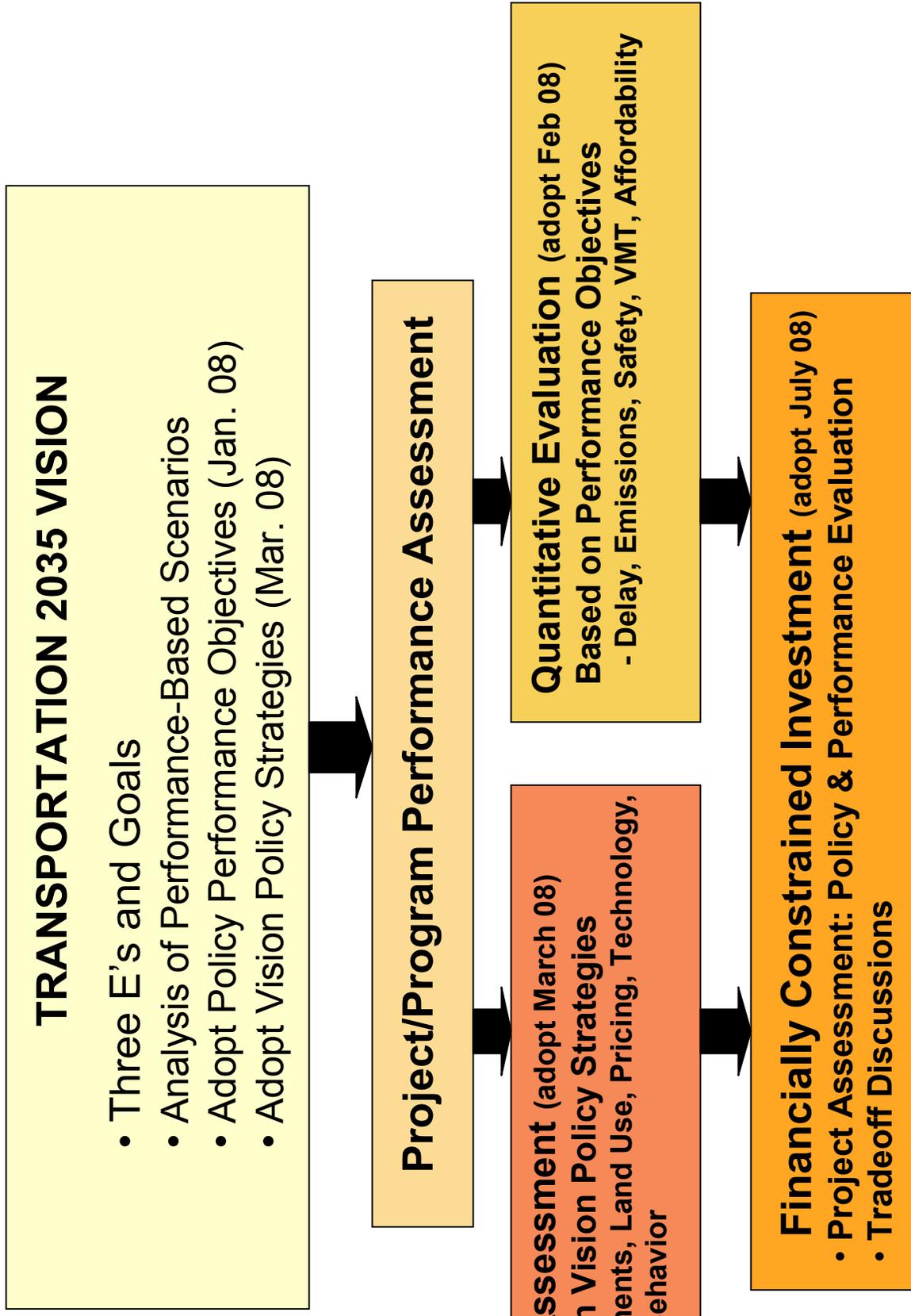
---

Steve Heminger

SH:LK

J:\COMMITTEE\Planning Committee\2008\May08\2c\_Project Performance\_Klein.doc

### Attachment A: Project Assessment Process



### Attachment B: Quantitative Project Evaluation Measures

<b>Transportation 2035 Performance Objectives</b>	<b>Project Performance Measures</b>
Reduce <ul style="list-style-type: none"> <li>• Delay</li> <li>• Emissions</li> <li>• Fatalities and Injuries</li> </ul>	<b>Combined benefit-cost</b> Benefit equals value in dollars of reductions in: <ul style="list-style-type: none"> <li>• Delay</li> <li>• Particulate matter emissions</li> <li>• Carbon dioxide emissions</li> <li>• Fatalities and injuries</li> </ul>
Reduce VMT	<b>Cost per vehicle mile traveled (VMT) reduced</b>
Improve Affordability	<b>Cost per low-income household served (trial measure)</b>
Improve Maintenance	<b>Alternative benefit-cost for maintenance</b> Benefit equals direct public and private cost savings from performing maintenance on-time

## Attachment C: Quantitative Evaluation Approach

The 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. Key aspects of the proposed approach include:

- Quantitative comparison of project costs and benefits: As possible, benefits are valued monetarily based on established economic research. This approach is similar to that used for the Corridor Mobility Improvement Account program in the State Infrastructure Bond.
- Benefits related directly to the Transportation 2035 Performance Objectives: See below.
- Projects compared directly and quantitatively: The evaluation captures a range of project types. Data was generated through the regional travel demand model for most projects. For the regional funding programs (e.g., Transportation for Livable Communities, Lifeline, Transit and Roadway Maintenance Shortfall programs), MTC developed methodologies based on recent research.
- 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 precise enough to distinguish among investments with very similar 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 as described below. Some smaller projects were not quantitatively evaluated, but were reviewed in the policy assessment.

### Projects Subject to Analysis

1. Committed projects, as defined by the Planning Committee in January 2008, were not evaluated quantitatively or qualitatively.
2. Regional funding programs (beyond committed baseline programs) (e.g., TLC, Regional Bike and Pedestrian Program, Lifeline, Climate Change) were evaluated quantitatively.
3. MTC staff selected approximately 60 transit and roadway projects with total cost of \$50 million (2007\$) or greater and/or with area-wide impacts. Examples include:
  - New/enhanced transit service, including transit priority measures (if reasonable expectation of operating funding)
  - Freeway-to-freeway interchanges
  - Freeway widenings, including HOV lanes & slow-vehicle lanes
  - HOT lanes corridors (bundled by county/region and with express bus)
  - State highway widenings and major arterial connectors/reliever route improvements
4. Due to limitations of resources and analysis tools, some transit and roadway improvements costing more than \$50 million were not evaluated quantitatively. Examples include:
  - Arterial or intersection improvements, except as noted above
  - Local interchanges
  - Individual, new transit stations/stops for existing services, transit center improvements & parking expansion
  - Grade separations
  - Programmatic categories (e.g., countywide bike and pedestrian projects, non-capacity enhancing arterial improvements)