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MEMORANDUM

To: **Project Selection Committee**

From: CMAP Staff

Date: August 2014

Re: Remaining issues with the methods used for proposed CMAQ scoring process

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For several months the Project Selection Committee has discussed proposed changes to the *CMAQ Programming and Management Policies* as well as the CMAQ scoring process. Comments related to the *Policies* are being addressed in a fresh draft to be considered at the August PSC meeting. As for the scoring process, staff has directly discussed details with individual stakeholders and made changes where appropriate. This memo tries to address known remaining concerns.

1. **New versus existing transit facilities.** Although there is a perceived risk that new service and facilities will be at a disadvantage in the proposed system, note that new facilities tend to score better on air quality cost-effectiveness than projects that modernize existing facilities. Over the last three CMAQ cycles, new transit facilities had an average cost-effectiveness of $1,858/kg (47 points out of 60 on the proposed scale) while projects modernizing existing facilities had an average cost-effectiveness of $5,365/kg (29 points). Thus, the use of asset condition actually tends to offset somewhat the advantage that new facilities have.

   One commenter suggested that projects that add facilities where they do not exist should be awarded priority equal to projects addressing assets in poor condition. Alternatively, it was suggested that a more nuanced approach could be patterned after the travel time reliability score, which considers both the existing reliability and the ability of the proposed project to improve the reliability. For asset condition the improvement is expected to always be to a new or "excellent" condition, so the analogy with the way reliability was handled may not hold. Staff is still seeking an approach that balances competing needs on the transit system.

2. **Congestion Management Process network.** A comment was received to the effect that average daily traffic (ADT) should be used to prioritize highways for funding in addition to the CMP network. However, one purpose of the National Highway System and the Strategic Regional Arterial system (the components of the CMP) is to identify priority roadways. If the CMP network does not perform as intended, then an update to

the CMP should be considered rather than diluting the priorities it does establish. Lastly, note that the point value (5 points) assigned to the CMP is quite small.

3. **Priority based on high transit accessibility index.** Several comments were received to the effect that transit projects should or should not be given priority based on their location's transit accessibility index. To clarify, the proposed scoring system gives points only to bicycle facilities based on the transit accessibility index where they are located.

4. **On-time performance and speed improvement.** One commenter suggested that, with transit travel time reliability, the proposal should consider not only current on-time performance but the optimal speed if improvements were made. However, a simple way of measuring travel time reliability and reliability improvements is needed that could be used for any transit service project by any service board. To CMAP staff, OTP seems like the best measure, but staff is open to another approach if it is fairly simple and widely applicable. Transit speed improvement might also be an appropriate measure, but it is not clear that proper estimates will be available at the time the application is made.

5. **Use of passenger miles traveled.** Some stakeholders suggested that, from their perspective, ridership is not as good a measure as PMT. For example, route enhancements might decrease ridership (unlinked trips) by eliminating a transfer point while increasing PMT. Comparing the transit projects submitted in the last three CMAQ cycles, the 10th, 20th, 30th… 95th percentile values are closely correlated for both ridership and PMT. Since the ridership points are assigned based on percentiles, it does not appear that using PMT would alter project priorities.

6. **Composite scoring.** One commenter suggested that comparing different project types against one another is not appropriate because different criteria are used to evaluate different projects. While it is true that different transportation impact criteria are considered for different project types, the method is actually comparing how much the different transportation benefits of projects are *worth* to the region, and each project ("other" projects excepted) receives 30% of its overall score from these benefits. Multi-criteria analyses are common and have an extensive literature to support them.

7. **Other factors.** The Land Use and Environment and Natural Resources Committees suggested prioritizing projects that have other environmental benefits, such as projects that include permeable pavement, bioswales, recycled materials, etc. The Environment Committee discussed evaluating carbon reduction benefits, noting that GO TO 2040 includes greenhouse gas (GHG) emission reduction targets. Staff proposes to address such additional benefits as a qualitative factor that could influence project selection. Staff also continues to explore quantifying GHG reduction as a benefit. The Economic Development Committee suggested that the program should consider economic impact and equity. The draft *Policies* indicate that equity may be taken into account in project selection. Staff is investigating the ability to estimate credibly the economic impacts of the fairly small projects included in the CMAQ program.

Action requested: Discussion