

MEETING SUMMARY - DRAFT
Washington Climate Advisory Team (CAT)
Transportation Technical Work Group (TWG)
Call #6, September 20, 2007, 10:00am – 12:00pm

Attendance:

1. Technical Working Group members: Genesee Adkins; KC Golden; Lloyd Brewer (for Dennis Hession); Teresa Jones; Jay Larson; Gary Prince; Steve Marshall; Sue Mauermann; Mary McCumber; Michael McGinn; Leslie Stanton (for Dennis McLerran); Dave Moore; Jim Thomas (for Sister Sharon Park); Carol Lee Roalkvam; Megan White; Jemae Hoffman
2. Center for Climate Strategies (CCS) staff: Jeff Ang-Olson; Lisa McNally
3. Washington State Agency (ECY/CTED) Liaison and Attendees: Joyce Philips; Julie Anderson

Background documents:

(All posted at http://www.ecy.wa.gov/climatechange/cat_twg_trans.htm)

1. Powerpoint presentation (including agenda) for meeting
2. Draft Mitigation Options document

Discussion items and key issues:

1. CCS reviewed the meeting Agenda.
2. CCS conducted roll call.
3. CCS asked the TWG if there were any comments on or requests for changes in the draft summary notes from TWG Meeting #5. There were no comments or requests for changes.
4. CCS provided a report on the September 7 CAT meeting. The CAT reviewed the 4 mitigation options (Description and Design) that it had not previously reviewed (T-1, T-3, T-9, T-10). In summary, the CAT affirmed the direction of the TWG on all four options. In option T-3 (pricing), a CAT member noted that the King County mileage based insurance pilot program is just starting, so the goal of expanding this pilot by 2010 might be too ambitious. In option T-10, the CAT noted the need to ensure that plug-in hybrids are charged during off-peak hours on the grid.
5. CCS reviewed the CAT schedule over the next several months and how that fits with the TWG process. The Transportation TWG is expected to complete several mitigation options in draft form (including quantification of costs and benefits) for the October 4 CAT. Quantification of all options should be done in draft form in time for review at the Nov 15-16 CAT.

6. CCS moved into reviewing draft mitigation options and providing updates on changes and additions made by the volunteer groups since the last TWG meeting.
- a. **Option T-0: New Transportation Funding Mechanism.** The volunteer group lead for this option provided an update on the status of the description and design text. The TWG was asked whether this option should exist as a 13th option, or whether it should be treated as an overarching consideration as it affects the implementation of the other 12 options. The group lead underscored the need for new and flexible funding mechanisms to fund measures (i.e., the 12 mitigation options) to meet the Governor's objectives. A TWG member suggested that this option should talk about making better use of existing sources of funding, not just new sources. A TWG member suggested considering a fuel efficiency tax. A TWG member requested that text be added to the policy design for considering an equitable approach to imposing new taxes, balancing user fees, and reducing the application of regressive tax increases. Finally, the question was posed as to whether the group should merely list potential new sources of funding need to be considered and thus provide options for consideration, or should the group recommend that the State pursue a specific set of revenue sources. The latter is the preferred approach, but it will depend on the progress by the TWG volunteer group. The volunteer group for this option will set up a conference call in the next two weeks to further refine the text for this option. *[Jemae Hoffman and Gary Prince requested to be added to the T-0 volunteer group.]*

The TWG then reviewed the remaining options in reverse order.

- b. **Option T-12: Zero Emission Vehicle Standard.** The volunteer group lead provided an update on this option. PSCAA has been discussing with Ecology the possibility of hiring a contractor to analyze this option, since a detailed analysis would need to be done anyway as part of any recommendation to the legislature. If no contractor is used for analysis, CCS will work with PSCAA and Ecology to estimate GHG impacts and costs. CCS also inquired about whether the impacts of vehicle A/C refrigerants are being considered in this option, as some A/C refrigerants have a much higher global warming potential than CO₂ and switching to alternative refrigerants can have a significant impact. The TWG volunteers for this option will look into the refrigerant issue and report back.
- c. **Option T-11: Low Carbon Fuel Standard.** CCS has completed preliminary attempts to quantify the benefits of the LCFS option. CCS raised the question of whether the LCFS should apply to both gasoline and diesel fuel. The initial goal for this option is to reduce the carbon intensity of passenger vehicle fuels by at least 10 percent by 2020. Recent white papers that are helping to shape this option in California suggest that the standard should be applied to both gasoline and diesel fuels. Implementation is still an open issue in California. The TWG agreed that this standard should cover diesel in addition to gasoline, since there are (or will be) viable low carbon alternatives to diesel. In Washington, the impacts of renewable fuel requirements also need to be considered under this option. A TWG member asked that the document clearly identify the impacts of existing biofuels mandates, as distinct from the impact of this proposed standard. A TWG member

suggested that we consider feedstock other than soy for biodiesel. Currently, some biodiesel in WA comes from canola. Palm is also an option in WA.

- d. Option T-10: Actions to Accelerate and Integrate Plug-In Hybrid Electric Vehicle Use.** The volunteer group lead for this option mentioned a King County conference just completed. CCS reviewed the preliminary quantification of life-cycle GHG impacts of PHEVs (done using Argonne National Lab's GREET model and specifically accounting for WA's electric power mix in the analysis). CCS said that in order to complete quantification of GHG impacts, the TWG will need to agree on a market penetration goal for 2020. In California, scenarios developed for the low carbon fuel standard used penetration rates of 5% and 13% for PHEVs. CCS conferred that it is acceptable to provide a range of benefits, but the TWG needs to provide professional judgment to explicitly define a feasible penetration rate in 2020. The TWG noted a desire to consider vehicle market share separate from VMT market share, noting that people are likely to drive PHEVs more than typical vehicles because they are cheap to operate. CCS asked the group for a response to the WA Auto Dealers Assn proposal for sales tax incentives to encourage fleet turnover and purchase of more efficient vehicles. A TWG member voiced opposition to an across-the-board reduction in the B&O tax, since new vehicles are not much more fuel efficient than older vehicles. The TWG member felt that selectively reducing the sales tax to promote purchase of efficient vehicles (best in class) might be a good idea. A TWG member noted that it would probably be impossible to quantify the vehicle-to-grid concept, but the mitigation option should still make mention of this.
- e. Option T-9: Transportation System Management.** The group lead provided an update on changes to the Design section. Overall, the volunteer group added minimal information from what was discussed at the last meeting. A TWG member requested that a small revision be made to the document; this will occur in the next week. CCS requested direction from the TWG to quantify the impacts of some elements in this option, such as the reduction of speed limits on freeways and highways. CCS asked the TWG to decide on an estimate for the number of lane miles of highway on which speed will be reduced, and to clarify assumptions that define the portion of drivers that will comply with the reduction in speed. CCS has obtained data from WSDOT on lane miles and traffic volumes by roadway type and can therefore conduct a simple calculation of statewide fuel savings. A TWG member suggested that data exists on the benefits of "transit-only lanes", so it may be possible to quantify the benefits of this component.
- f. Option T-8: Local Transportation Financing and Bicycle and Pedestrian Infrastructure Improvements.** CCS described the proposed approach to quantifying this option. We will document the existing bike/pedestrian mode share in urban areas and a baseline forecast to 2020. Then we will identify goals for increase in bicycle and pedestrian mode share, reflecting the effect of additional investments. The volunteer group reported that it is still in the process of collecting that baseline information. Once the baseline is determined, the TWG needs to define a target goal for increasing the mode share. CCS will then make some assumptions for increases in bike mode share. The setting of goals will be

informed by research by Larry Frank (studies looking at the relationship between mode shift and land use patterns when considering street and pedestrian networks). A TWG member suggested looking at Portland for ideas for increase in bike mode share (resulting from the Complete Streets policy). A TWG member asked whether this analysis should only apply to metropolitan areas and suggests applying the analysis to all urban growth areas in order to make this approach consistent with Options 4 and 5.

- g. **Option T-7: Diesel Engine Emission Reductions and Fuel Efficiency Improvements.** CCS has requested some specific data from PSCAA in order to quantify this option. PSCAA is currently working on this data compilation.
- h. **Option T-6: Improvements to Freight Railroads and Intercity Passenger Railroads.** The volunteer group has been working with WSDOT to compile data and making progress on further defining the goals.
- i. **Option T-5: Quantifying GHG Emissions from Transportation Emissions.** The volunteer group lead reported that the group is working with Dr. Larry Frank to develop a technical foundation for this policy option and to compile information on the limitations of current modeling approaches. The group lead will synthesize information that Dr. Frank has provided. This will help with developing the implementation mechanisms. The group lead would like to convene a smaller group on this issue to define modeling approaches that would be used to implement this option. A TWG member suggested that in that determination, changes to the existing natural environment also need to be considered – there are interrelationships between transportation projects and ecosystems (loss of trees, water quality impacts, etc.) CCS suggested that the group not get tied up due to the fact that current models cannot fully capture the impacts of transportation projects on travel and emissions, noting that just applying existing tools to quantify GHG impacts would be an improvement over current practice. A TWG member mentioned that King County is developing two tools for quantifying the benefits of improvements to bicycle and pedestrian systems as part of the Health Scape program.
- j. **Option T-4: Promote Compact and Transit-Oriented Development.** The volunteer group lead summarized the updates to the description and design text since the last meeting. Updates include an added note that discusses PSRC’s model and its limitations, in addition to changes that they are eager to make in the future. Also, the option design is now more explicit about compact development fitting within the framework of the Growth Management Act while recognizing the geographic and regional diversity of the state. A TWG member asked that the text define this phrase: “within an easy transit... commute to work.” Another TWG member noted that rule of thumb of ¼ mile to bus transit and ½ to rail transit. A TWG member requested that a qualification be added to the text that states that adequate affordable housing should be integrated into TOD plans and project; it was requested that this text clarify that the affordable housing must be sufficient to meet needs. CCS reminded the TWG that it is challenging to quantify impacts of this option, and that there is no perfect tool to fully measure the VMT impacts of land use policies on a region. CCS will help to provide the group with

a summary of modeling data at the regional level and empirical data at the neighborhood scale to be able to quantify VMT impacts. The TWG volunteer group will set up a meeting in the next several weeks to discuss this further.

- k. **Option T-3: Transportation Pricing.** For transportation pricing, the TWG specifically discussed pay-as-you-drive insurance since the group still needs to develop assumptions for the percent of vehicle owners to be covered by this type of insurance by 2020. CCS noted that some states that are providing this type of insurance project that there could be future market penetration of about 50 percent. The TWG was asked whether they thought this was too aggressive a goal for pay-as-you-drive insurance coverage in Washington. CCS requested the TWG to make a professional judgment on the percent of market penetration in 2020 and the extent to which insurers would be required to offer this as an insurance option. A TWG member suggested that the number of drivers expected to use this type of insurance is dependent on pricing, and it is difficult to estimate what projected consumer prices would be. Another TWG member suggested that the volunteer group look at Sightline Institute's research since they have been putting analytic energy into this subject. The volunteer group will convene in the next two weeks to determine numeric goals. Discussion shifted to another form of transportation pricing, as CCS emphasized the need to quantify the percent increase of a parking surcharge. A TWG member suggested that the implementation of a 5 or 10 percent parking surcharge in the Puget Sound region will not be sufficient to change behavior and affect demand. It was also noted that if the option focuses on a surcharge for paid parking, there are few places outside of Seattle where it would apply. A TWG member suggested this option be recast to include a tax on construction of new parking spaces, as a way to limit supply in lower density areas. The TWG agreed that the parking component of option T-3 needs to be broader than just a parking surcharge. Jemae Hoffman agreed to a revision to the language.
- l. **Option 2: State, Regional, and Local VMT and GHG Reduction Goals and Standards.** CCS reminded the TWG that Option 2 overlaps with many other options, and that achieving per capita VMT reductions will be accomplished by meeting many of the other priority goals being proposed in the CAT process. CCS explained the data tables that were included in the document draft. It was noted that the data tables in the option design assume that GHG reduction is proportional to VMT reduction. A TWG member requested that baseline 1980 VMT data be added to the reduction scenarios table. CCS asked the TWG how the group envisions standards being adopted. There were concerns that a 10 percent reduction in annual per capita VMT is not sufficiently aggressive. A TWG member suggested that reduction goals should be set against 1980 levels as opposed to 1990 levels. CCS reported that VMT estimates are derived from two sources: statewide VMT is derived from the HPMS Program that uses DOT sample traffic counts to infer VMT broadly on a roadway system; and at the regional level, VMT data is derived from travel models, which are calibrated against traffic counts. CTED noted that there is a statewide VMT reduction goal for CTR areas, and we should be able to get data on this from Brian Lagerberg at WSDOT.

- m. **Option T-1: Transit, Ridesharing, and Commuter Choice Programs.** CCS reported that it is still trying to acquire data for baseline VMT and trips by mode share from PSRC and other RTPOs, and will work with the volunteer group to complete the draft design. The next step is for the volunteer group to determine realistic and aggressive goals for increasing mode share through 2020. King County is working to set up a discussion with interested TWG members to decide on those goals as well as costs. All TWG members are invited to join that discussion.

Next steps:

1. The next TWG meeting is scheduled for Wednesday, October 18, 10am -12pm. The next CAT meeting is October 4 when a review will occur of the completed draft options and any quantitative analysis that has been completed.
2. The next TWG meeting will review initial quantification of mitigation options and discuss remaining gaps in the mitigation option text. All mitigation options need to be quantified in draft form by mid-late October.