

PSAEI HDV/LDV Workgroup meeting May 19th, 1-2pm

Attendees: Brandon Whitaker, Sarah Flagg, Joe Ray, Kell McAboy, Kelly McGourty, Sally Otterson, Sean Ardussi, Timothy Sexton, Cindy Lin, Ron Stuart

Meeting agenda

- Review 2005 methodology for data collection and emission estimates
- Plan for the flow of information (data or emission factors) for 2011 modelers
- Define the use of Mobile 6 and Moves
- Define roles and responsibilities for modeling
- Define a timeline for data collection and information distribution

Topics Discussed

2005 Review

Starcrest began with a review of 2005 data collection and emissions estimates. Data request forms were distributed to terminal operators. The forms requested information including: How many trucks daily, turn times, waiting or idling times, average distance traveled within the terminal, average speed in the terminal.

Emission Factors were produced for “On” and “Off” terminal activity. Mobile 6 was run to produce low speed emission factors for on-terminal activity and terminal activity data was applied to produce emissions. Regional emissions were produced by using the “Port Traffic” portion of a regional traffic flow model. The traffic model determines miles traveled by vehicle type. Mobile 6 was used to produce off-terminal emission factors and applied to Port regional traffic data to produce regional emissions.

Mobile 6 is a model specifically developed to estimate on-road vehicle emissions. Starcrest used Mobile 6 to determine “On Terminal” gram per mile emission factors by vehicle type, model year and speed. Then they created a composite emission factor representing the year of truck.

Important to know the number of model year in fleet. Although the Mobile 6 can provide the model year information, it is better to get Port specific information. Puget Sound Clean Air Agency provided age distribution data in 2005. This can be done better for the 2011 update because both ports have truck programs with truck data. Port of Tacoma has OCR systems collecting activity data and plate data converted to model year by DOL.

POT/POS both have truck registries. One issue is that they have more trucks registered than visit. One solution is to count only Washington State registered vehicles as more likely to be frequently visiting Port terminals. Discussed was the level of effort to collect detailed truck data considering truck emissions relative to other sectors.

Port of Everett was asked if they are collecting gate data. They do not have a truck registry but track the number of trucks entering the gates, what type of truck.

Group discussion of Mobile 6 vs Moves.

Mobile 6 is the old model used in 2005 while the State is transiting to the newly adopted Moves model. To be comparable with 2005 inventory, the Mobile 6 model should be run. It may be beneficial to run

both Mobile 6 and Moves noting details of the differences. Moves can be used for both emission rates and mass emissions. Moves is currently being developed for regional emissions. Moves is being developed for pm2.5 non-attainment area. We need to know direction (Moves vs Mobile 6) by end of the year so emissions factors are available in early 2012. It is likely that Moves will be available by 2012.

Differences between Moves and Mobile 6 input data were discussed. There are differences in how vehicle classes are entered into the model. Starcrest should be able to provide vehicle class distribution information.

Discussed was additional information not available in traditional analysis like emission retrofits. Some data is available and will be provided. From the Ports experience, the number of retrofits are small and likely insignificant to the inventory.

Discussed was Moves input for hourly activity of trucks. This level of detail was not asked of terminal operators. The sense is that idling is minimized by high fuel prices. This type of information could be collected by interview, experience, or general knowledge.

If we use both models, we should run both inventory years 2005 and 2011 in both models. We will need to describe the differences between the two models. There is information available about the differences (talking points). Moves website may also have general information including training material. The report should also describe why we are using Moves – moves will be the relevant model used in future inventory. Further information about Moves and Mobile 6 will be distributed to the group.

Rolls and responsibilities for modeling

PSRC does not use the model annually but has it available for use. PSRC is prepared to do the same type analysis for the 2011 inventory as was done in 2005 for on-road port related trucks trips. PSRC will distribute the methodology to the group.

Regional analysis is done for specific years – baseline 2006 and 2015 are available. Model runs will be interpolated for calendar year 2011. PSRC will check with staff regarding the amount of time needed to produce the interpolation. Discussed was an estimate of two weeks. Specific terminal data is not needed for this. PSRC will review methodology and report back to Ron and he will forward to the group.

Flow of information and Timeline for data collection and information distribution

PSRC should be able to provide regional data by Jan 2012. Truck age distribution will be available soon after the beginning of the year. Truck registries will not change drastically month to month and will be available from Port of Tacoma and Seattle for review prior to 2012. Port of Olympia and Everett gate Data will be available by year end.

In 2005 RSRC ran mobile 6 and applied emission factors to on-road traffic. In 2005 Starcrest ran mobile 6 for low speed terminal emission factors. Starcrest suggest one model run for regional and on-terminal emission factors.

Next meeting early October