

PSRC SoundCast Technical Working Group (TWG)

Fourth Meeting Summary – Held 11/16/2016, 1:00 – 3:00 pm at PSRC

Attendees:

- TWG members: Joseph Bervell (Snohomish County), Gary Hendricks (Pierce County), Natarajan Janarthanan (WSDOT), Hu Dong (City of Bellevue), Brant Lyerla (Sound Transit)
- PSRC Data Team: Suzanne Childress, Craig Helmann, Stefan Coe, Mark Simonson, Brice Nichols, Angela Yang

Agenda

1. Announcements
2. Progress since last meeting
3. SoundCast model results (near end of model re-estimation & subsequent beginning of calibration work)
4. Next steps

Detailed Notes

Announcements: (Craig Helmann, PSRC)

Craig informed attendees that Billy Charlton has stepped down as Director of Data – he will remain a part-time PSRC employee into the 1st quarter of next year, and after completing a few technical tasks will be leaving PSRC. Craig is stepping into a shared department management role with Mark and Carol Naito.

Progress Since Last Meeting: (Stefan Coe, PSRC)

Model estimation is basically complete, and model validation / calibration is beginning. PSRC went beyond original scope in re-estimating, deciding it was worth doing a 2014 data refresh on most of the major SoundCast models.

Parallel model improvements are also being made, including:

- Run time has been significantly reduced – based on work completed by PNNL & implemented by RSG, PSRC's DaySim code now only takes around 16 hours for a full model run (including both the DaySim & the EMME2 portions of the simulation), down from 36 hours originally.
- LEHD Flow Data and Port of Seattle Survey data are being used to update External and SeaTac special generator trips respectively.

SoundCast Model Results: (Stefan, Brice Nichols PSRC)

Stefan and Brice walked attendees through Year 2014 model results comparisons involving both SoundCast and the PSRC 4K model, compared to each other and to ground counts and survey results. PSRC provided in advance 3 different products:

- a GIS shapefile network plot containing link-level model outputs and counts,
- a spreadsheet summarizing the same data to different facilities & geographies, and
- a new [Tableau-based Dashboard](#) for viewing SoundCast results to survey-derived calibration targets.

PSRC staff plan to frequently update the Dashboard with current model outputs so TWG members can easily access and review results going forward.

Attendees expressed support for the Tableau Dashboard approach and content, while offering some suggestions:

While an initial comparison of how SoundCast outputs compare to 4K outputs has been useful, going forward 4K model outputs can be dropped from the comparisons. The key comparisons will be how SoundCast looks relative to survey targets, actual counts, and expectations regarding forecasts.

PSRC has a license for the INRO visualization software, [CityPhi](#). Staff will do some research into whether it can be a complement to the Dashboard.

Add “mini-screenlines” to Dashboard

While reviewing the results so far attendees noted several issues to focus on as staff move from re-estimation to calibration and testing:

Transit boardings per trip – we’re at 1.3, actuals from ST higher 1.4 to 1.5

Trips per person low even using the GPS survey records

Student average trip distance much higher in models. (shadow pricing challenges?)

Peaks are lower than observed peaks.

VMT per person: Might be high due to how light trucks are classified

Other comments:

Next Steps

From here PSRC will be investing time in:

- Something

Next Meeting

PSRC staff will follow up with specifics for the next meeting, anticipated for some time in January 2017.