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December 3, 2019

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Tahoe Regional Planning Agency
128 Market Street
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Submitted via email – rhaefer@trpa.org

RE: Travel Demand Model Update and Medium-Term Improvements

Dear Reid,

Thank you for the opportunity to provide comments on the work done to update TRPA's travel demand model (model or transportation model) over this past year. The League to Save Lake Tahoe (League) appreciates the opportunity to guide and implement the most accurate transportation model possible for Tahoe's needs. We look forward to continuing to work with TRPA and the Model Working Group to help determine the best path forward and use of resources for the short-, near- and long-term vehicle miles traveled (VMT) calculation tools needed in Tahoe.

First, we would like to extend our appreciation to TRPA staff for allocating and prioritizing resources to improve the model for the 2018 base year. In particular, we appreciate the purchase of Streetlight data and services, and the time and thought that you, Mr. Haefer, and team put into updating the model structure and collecting more accurate and recent data.

Following on our January 31 and March 18, 2019 comments on the model update, we have a few remaining concerns.

Sub-Models and Data Inputs

Visitor sub-model data. We requested that TRPA conduct more accurate visitor surveys, such as intercept surveys, to inform the model. We appreciate TRPA's effort to update this important demographic information about the visitors that contribute the bulk of Tahoe's daily and annual VMT. However, in order to make the model accurate, TRPA will need more survey data to capture a larger sample size going forward. With millions of visitors per year, we are not confident that the 668 valid surveys (516 overnight and 152 day visitors) collected for the 2018 base year is a statistically representative sample size. In the short-term, we recommend a more robust winter visitor survey for this model run. We believe the larger sample size and the addition of seasonal demographics would outweigh any issues with using 2019 surveys to inform the model for the 2018 base year.

In the mid-term, we would like to see a more robust set of visitor demographic data from surveys or other sources, such as visitor authorities.

External workers sub-model. We recommended that TRPA identify more current data sources, as the numbers used in the most recent model run do not correlate with recent data included in regional housing assessments.[1] We were happy to see the external worker data updated with Streetlight, however, can you provide a comparison of the new external worker data to the South and North Shore Housing assessment numbers? And, what were the different data sources used and how do they compare – percentage and number of workers, and associated VMT?

External worker sub-tours. The model documentation for the 2017 Regional Transportation Plan (RTP) explains that there are no external worker sub-tours or intra-tour stops included in the model, mostly for simplicity and due to lack of data. We recommended considering using the same values/sub-model for external workers as used for the resident worker sub-model. Was this addressed in the current model update?

As external workers and visitors create the majority of the region's VMT, we also want to make sure the model architecture does not result in trip truncation and/or discounting. Truncating trips to and from the Basin undercounts VMT for longer trip lengths, and discounting creates a permissive bias for outlying development (e.g., near-Basin projects). TRPA's effort in the current model update to expand external transportation analysis zones (TAZ) and create more external stations is a very good step in this direction.

Resident sub-model. As with the visitor demographic data, we requested that TRPA conduct more household surveys to get a current and representative sample. While residents are a small source of VMT in the region, it is still very important to have accurate demographic and trip pattern data. If this is done well once, the data would not have to be updated often. For the current model run, can you describe if Streetlight data contributed to a better understanding of our residents, or how this was otherwise addressed?

For the mid-term model updates, TRPA may consider robust resident surveys and requesting more specific census zones as El Dorado County is currently doing for the Meyers area.

Model Structure and Trip Assignments

Stay types. The League requested a more robust discussion and consideration of "seasonal" and "house" stay types. We recognize the difficulty in this and appreciate TRPA's efforts so far. Our only remaining concern for the current model run is with how short term/vacation home rentals (STR) are classified. Based on the last Model Working Group meeting, residential units seem to include STRs. Is TRPA classifying STRs as residential, overnight (tourist accommodation units - TAU), or some combination? We believe that inventoried STRs should be included in the model as TAUs, or at least use TAU input attributes and assign them to all relevant TAZs (in the same manner that TRPA treats verified single room occupancy - SRO - as residential units).

[1] Truckee/North Tahoe Area. The Tahoe Truckee Community Foundation housing report from 2016 reflected 58.6% commute in and 46.6% commute out: http://www.ttcf.net/impact/regional-housing-study/,
and the 2019 Tahoe Prosperity Center South Shore Housing Assessment showed 25-31% commuting in and 58-72 million VMT: https://tahoeprosperity.org/housing-study/.

For mid-term updates, given the uncertainty surrounding STR regulations, and the large amount of undocumented or unverified "house" stay types, TRPA will need to make some important assumptions supported by more current and accurate data.

Traffic assignment. In our January 31 comments, we noted that the "drive-to-transit" trip assignment considers all transit stops as "qualifying" because of the underlying assumption that parking is unnecessary as riders will be dropped off at the bus stops. Has this been addressed?

Transit base map. Is TRPA using the transit base map and, if so, what are the current and assumed routes and ridership trends, and what is the source of that data? If the transit base map is not used for the current model run, we recommend considering it for the mid-term update.

Emerging transportation modes. We would still like to see this addressed in the mid-term updates, along with freight.

The Model Day

We appreciate the robust discussion of the model day. Upon further consideration following the last working group meeting, we recommend choosing either all August days or all summer days for the current model run.

We see downsides to the "Mondays-Thursdays" or "Fridays" recommended by TRPA. Mondays-Thursdays throws out about one-third of the busiest days, and all Fridays results in only five days to actually model. Excluding the weekends also excludes much of the annual and daily VMT and visitor travel patterns.

The advantages to all August days or all summer days outweigh the slightly higher standard deviation and variation. Advantages include:

- August and summer days capture the bulk of the visitor travel, which is the bulk of regional VMT. We need to be able to capture and manage visitor travel, or at least have confidence that we can accurately track visitor travel.
- The model day should reflect the diversity in travel patterns and traveling parties in Tahoe, and August and summer days fittingly include a mix of visitor and resident travel. School is in session for about half of the month of August. School would also be in session for about one-third of all summer days with the remaining two-thirds of the time dominated by visitors.
- Using a monthly or quarterly window of time would allow a greater amount of data inputs. Overall there are more days to look at and some important data is only available on a monthly or quarterly scale.
- Previous model days include August days, the busiest day in August, and a peak Friday. While each model run results in new VMT numbers due to model refinement and additional data collection (especially in back-casting) including previously modeled days in the current model run's model day would remove one apples-to-oranges comparison that happens with each model run. We would still have better data, but the model day would be similar.

TRPA and partners should also revisit the model day through peer review during mid-term updates.

Model Applicability and Consistency

Consistency and compliance. We want to make sure, for accuracy and SB 743 compliance, that the same modeling methods and assumptions are used to set the threshold for both threshold assessment and impact mitigation. According to the Governor's Office of Planning and Research technical advisory,[2] the tools used to evaluate VMT impacts and mitigation must be consistent with the methodology used to determine VMT thresholds.

Scale and scope. Again, to comply with SB 743 the model needs to be able to analyze projects as well as the threshold – both project-generated and project-effect VMT. We have not seen this addressed. Can you explain how the model can be used for individual projects and capture both project-generated and project-effect VMT?

Off-model tools. To maintain the required consistency between methods for thresholds and projects, we do not recommend using the Trip Reduction Impact Analysis (TRIA) sketch planning tool to estimate project-generated VMT, as the thresholds will be based on the transportation model. Sketch tools like TRIA may be useful for evaluating the impacts of potential travel demand management strategies. Off-the-shelf, sketch planning tools for VMT analysis do not contain trip generation rates or trip lengths consistent with TRPA's transportation model. Both trip generation rates and trip lengths need to be consistent with the transportation model for accurate project impact and mitigation analyses.

Overall, TRPA needs to make sure to accurately and concisely capture the applications and limitations of the model (e.g. project-level, types of projects, etc.). Can this model be used by project proponents and local jurisdictions?

Thank you again for the opportunity to participate in the Model Working Group and provide these comments. If you have any questions, please do not hesitate to contact me directly.

Sincerely,

Gavin Feiger
Senior Policy Analyst

[2] Governor's Office of Planning and Research, *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Nov. 2017), Pg. 12-13: http://opr.ca.gov/docs/20171127_Transportation_Analysis_TA_Nov_2017.pdf