



Freight Delay

- Freight delay is the difference in truck threshold travel time vs truck peak hour travel time.
- KYTC will evaluate using interstate speed/travel time data in 60 minute intervals. Five minute interval data is not available in KY. In KY, 15 minute intervals are not statistically significant for large portions of the day. Therefore, KYTC recommends using 30 hours per week rather than 168 for freight delay analysis.
- KYTC will provide interstate congested speed data for the weekday peak hours of 6-9 am and 3-6 pm. All other travel time is assumed not to have delay. Annual congested travel time is based on the average weekday travel time for 6-7, 7-8, and 8-9 am on averaged weekday day for a year. The process will be repeated for the PM peak hours of 3-6pm using NAVTEQ 2011 data.
- For KYTC, the truck threshold travel time is defined as 90% of the posted speed limit for a given segment. The dominate speed limit will be used in TF segments with more than one posted speed limit. Dominate speed limit means the speed of the longest segment in the section.
- Interstate segments will be defined by current traffic count segments (TF). Hourly truck counts/percentages will be based on the most recent segment classification count or the average of adjacent segments.
- Current SCOPM shows growing from hourly to daily to weekly, to annual. KYTC will use average daily multiplied by 365.
- Interstate corridor delay will be based on the truck VMT weighted average of each segment.

Future Analysis may include:

- Assuming the far right lane is the primary truck lane, comparing speed from KYTC class counts, ATA/FHWA truck speed data, and NAVTEQ average speed, we found a 4mph difference. Therefore KYTC could use NAVTEQ average annual travel time minus 4 mph for the truck travel speed. More research is needed to verify for all roadway types and elevation changes. Currently, speed data is not separated by vehicle classification.
- A threshold speed will be based on 90% of the posted speed limit. Future evaluations may take into account rural, suburban and metropolitan specific impacts.
- When the 5 or 15 minute travel time data can be shown to be representative of the actual speed/travel time per segment, it may be used.
- Available speed data is not separated by vehicle classification.