

### **MPO staff comments on use of VMT in addition to or instead of mode split for NE Neighborhood Goal**

VMT best measures the impact on the environment, but there are problems with it. It is more difficult to measure and requires baseline data to compare to. Also, the chances of meeting the neighborhood goal of a significant reduction from the baseline are much less since VMT depends in large part on the spatial location of the neighborhood in relation to jobs, shopping, etc. and the level of transit service. Given the peripheral location of the neighborhood on the far side of both Interstate highways and the small % of regional jobs, shopping etc. in close proximity, the probability for failure is high. There is more potential for neighborhood design to have a positive impact on the share of walking and bicycling trips, which would typically be internal to the neighborhood.

#### Baseline issue for VMT

There is 2001 National Household Transportation Survey (NHTS) data for VMT similar to the mode split data. The data is for the City of Madison and Dane County (with and without the City). However, there is little difference in the VMT per person data<sup>1</sup> for the city and county (30.6 daily miles per person for city, 31.2 for county (including city) and 31.9 for county (without city)). This raises questions regarding the data. The survey respondents "guesstimated" the length of their trips (e.g., ½ mile, 1 mile, etc.), so the trip lengths are not that accurate. There may have also been an issue with the geographic distribution of the survey respondents.

It may be possible to extract out the data for the Isthmus area to get data for the rest of the city and some adjacent communities (e.g., Middleton). However, as noted above the difference for the city and county is small.

#### Problem with using NHTS data for baseline

The county add-on sample for the 2001 NHTS survey was perhaps a one-time thing. The earliest it would be done again would be in 6-7 years. The 2008/9 NHTS survey is going on now, but WisDOT did not purchase any add-on samples for this survey.

Even if it is done again, it is very unlikely that the number of samples from the NHTS survey would be sufficient to measure the data for the Northeast Neighborhood. Therefore, future data for the neighborhood will need to be collected through a survey or other means (e.g., odometer readings of a sample of volunteer residents). If that method is used to collect data for the neighborhood, it should probably be used for the baseline. Otherwise, one wouldn't know if the differences are the result of the differences in data collection method, sample size, etc.

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<sup>1</sup> January 1, 2001 population estimate by WisDOA was used to divide into the weighted VMT number from the NHTS survey.

### Area to survey for baseline data

If it were decided to survey or collect data from residents for a baseline, this raises the question of the area/neighborhood to sample. Do you try to find a similar neighborhood to the planned one in terms of general location (eastside) within the urban area, socioeconomic characteristics of the population, housing density, etc.? Or would you just sample several peripheral neighborhoods, knowing that every neighborhood is unique in terms of these factors? We leave that for the city land use planners to decide.

### Use of the Travel Model

MPO staff looked at the Portland, OR example. This isn't enough information on the website to know exactly how they calculated VMT per area. Even if we could do that calculation with our model, use of the model isn't recommended because:

1. The model can only calculate the numbers for a base year and future plan year. It cannot be updated on a regular basis.
2. The model is not sensitive to the kinds of things that will be implemented in the neighborhood to reduce VMT (street design, development site design, TDM, etc.).