

Question: What tasks must be accomplished to show that a Navigation System Model adequately captured the 'real world' for use in decision making?

Group B Breakout 1

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- Standard transportation system choice model is needed. This is the expected practice by transportation economists. This should be a disaggregated model of route choice and commodity, with the emphasis on decision-making by shippers. This is the kind of model economists expect to see.
- Specifics:
 - a. Survey of shippers' choices
 - b. Better data on O-D flows for all modes
 - c. Estimate choice models
 - d. Calibrate models against choice flows

Note: This is the standard methodology for the transportation analysis and can be regional or national in scale.

- A toolbox should be developed to help the field people know which model is appropriate and what decisions may need to be considered throughout the analysis. When the tool is developed, it should be done in a way where it asks the user questions- is it a local problem? Does the problem have Intermodal issues? Through this series of questions it will help the analyst determine which models are appropriate. This will help field people to know which models apply to their problem.
- Congestion: A problem with congestion exists but little analysis is being done of actual congestion response.
 - a. Survey shippers that face congestion issues, especially those who have diverted cargo to alternate locations or modes. Examine how episodic and chronic congestion differ.
 - b. Conduct econometric analysis on traffic flows vs. congestions
- There needs to be a group of people to look at how the without project has been handled and the different criticisms. They need to identify the relevant criticisms and determine how they can be handled better. Another issue is to look at how to forecast inputs of the model forward in time. Much effort is required in improving calibration of the without project conditions.
- Dealing with externalities:
 - a. Issues should be grouped to identify the different externalities that can be considered- those externalities that are used to make decisions should be considered.
 - b. External and internal agreement needs to be reached on which externalities should or should not be evaluated.

- c. A process should be developed to show how to identify the different externalities. This process must be approved. Then another process must be developed on how to incorporate these externalities into the models. Consideration should be given to identifying which externalities are modelable and which are not. As the process moves forward, those externalities that can be modeled need to be incorporated into models.