

Managed Lanes Joint Subcommittee Meeting

Houston, Texas

April, 2005

Planning for Managed Lanes

1. Simulation – Purpose is to feedback travel time savings (and use of the lanes) in the simulation process
 - a. Role of simulation
 - i. Short trip utilization
 - ii. Feedback of speeds
 - b. Best practices for simulation analysis
 - c. Simulation Tools
 - d. Interrelationship between travel forecasting and simulation
2. How to evaluate managed lanes in NEPA analysis
 - a. Relationship of managed lanes to purpose and need
 - i. Inherent bias based upon revenue generation?
 - b. Managed lanes as an operational strategy or an infrastructure alternative option in alternatives analysis
 - i. Triggers to consider managed lanes: what thresholds for performance should be standardized for consideration
 - c. Role in fiscal constraint analysis
 - d. How are funds used
 - e. Environmental Justice / Burden of Cost / Distribution of benefits
 - i. Geographic equity
3. How to evaluate public / private initiatives in managed lanes
 - a. Role of uncertainty
 - b. Appropriate risk sharing
 - c. Cost recovery
 - d. Public perception
 - i. Public acceptance of a managed lane facility may change with presence of private operator
 - e. Coordination with agencies
 - i. How should various agencies be involved in P/P decision
 - ii. What role of acceptance do partner agencies have in P/P?
4. How to forecast traffic volumes for regional and NEPA analysis – revenue forecasts vs NEPA forecasts
 - a. Models available
 - b. Techniques used
 - c. Relationship to revenue forecasts
 - d. Accuracy of previous forecasts
 - e. Relationship between toll lanes and parallel free lanes
 - f. Trip lengths on toll lanes

- g. Performance measures
 - i. Level of Service
 - ii. Speed
 - iii. Time

- 5. Effect of toll lanes on carpool and transit use
 - a. Implications for TCM compliance / Air Quality conformity
 - i. Non-attainment / maintenance area impacts
 - b. Transit service enhanced from managed lanes
 - c. Mode split process
 - i. Cross-modal elasticity
 - ii. Techniques for estimation
 - iii. Influence of incentives and demand management

- 6. Regional analysis
 - a. System-wide networks in relation to corridor-specific analysis
 - b. Interconnectivity within corridors