Statewide Model Application Using the Texas SAM

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Texas Statewide Analysis Model Application

Study Objective
– Identify Improvements for I-35
– Identify Opportunities for PPP’s

Presentation Outline
– Brief Model Description
– Study Objective
– Project Description
– Model Application

Project Description
• Deliver EIS with Reasonable Corridor Alternative
• Evaluate Private Sector Concept

Model Description
– TransCAD Software
– Completed in 2003 by TxDOT
– 1998 Base Year/2025 Forecast Year
– Freight Demand based on 1998 Reebie Transearch Data (Global Insights)
– Passenger Demand (by trip purpose) utilizes an in-house trip generation program based on HH stratification curves adopted from Texas MPO models.
– Trip distribution based on in-house model (similar to gravity model) using trip length frequency curves from urban models and national HH surveys.
– Mode Choice (passenger and freight)
– Traffic Assignment is a User Equilibrium MMMC

Model Application
• Identify Study Area
• Identify and Evaluate Preliminary Corridor Alternatives (~10 miles wide)
• Identify Reasonable Corridor Alternative for NEPA
• Evaluate Private Sector Concept
• Develop Corridor Demand Tool for evaluation of modal and route alignment alternatives to support NEPA.
Texas Statewide Analysis Model Application

**The Study Area**

**Preliminary & Reasonable Corridor Alternatives**

**TTC-35 SWM Applications**
- IH-35 Corridor Model
  - IH-35 Origin-Destination Survey
- IH-35 Freight Corridor Study
  - IH-35 Freight Transport Survey

**Evaluation of Private Sector Concept**
- Developed Sketch Level Toll Diversion Component
  - Used to evaluate traffic and revenue potential, and
  - Identify cross finance opportunities.

**Origin-Destination Survey**
- Specific to I-35 Corridor Travel
- Included Car and Truck Surveys
- Types of Surveys:
  - Roadside Interviews
  - Mailout/Mailback Survey
  - License Plate Matching
- Completed in July 2008

**Origin-Destination Surveys**
Origin-Destination Survey

- Survey data will support a variety of needs for TxDOT:
  - Tier II Need and Purpose
  - Updates to Private Sector Concept
  - Corridor Model Development
  - Freight Corridor Study
- MPOs gain better understanding of the characteristics of through traffic.

IH-35 Corridor Model

- Focus Along the IH-35 Corridor
- Model System Overview
  - Incorporates existing MPO models in urban areas
  - Supplemented with SAM model in rural areas
  - Interaction between urban and rural areas calibrated / validated with OD Survey

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• Focus Along the IH-35 Corridor

Survey Overview
– Understand how shippers make transport decisions
– Develop Revealed and Stated Preference Questionnaires
– Conduct Focus Groups and Interviews
– Report Findings

• Anticipated Completion in February 2009

IH-35 Freight Users Survey
**IH-35 Freight Corridor Study**

- Analysis of Freight Modal Options
- Identification and Evaluation of:
  - Preliminary Corridors
  - Preliminary Modal Options
  - Cost/Benefit of Modal Options
  - Preferred Corridor and Modal Options will be identified
- Anticipated Completion Date of May 2009

**TTC-35 Planning Initiatives Summary**

**Discussion**

- Question and Answer Session
- Need More Information?
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