

Toll Traffic and Revenue Forecasts

Turnpike 101
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11/21/06

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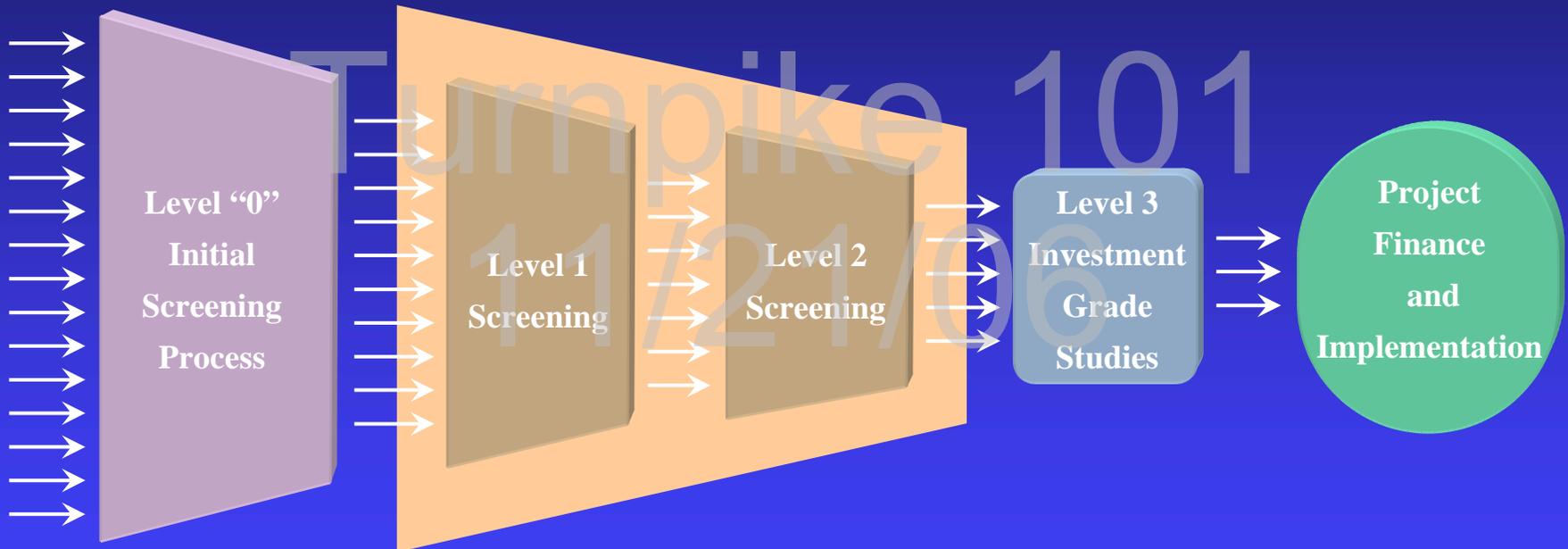
Today's Presentation

- What is a toll road financial feasibility study?
- Why is it necessary?
- What is the forecasting process?
- What are the next steps?

Levels of Toll Studies

- Level 1 – Sketch level
 - Project screening
- Level 2 – Preliminary Study
 - Indicative toll traffic, revenue, and feasibility
- Level 3 – Investment Grade
 - “Certified” revenue, used by bond rating agencies and investors to evaluate financial return on the project

Toll Candidate Screening and Study Process



Level 1 – Sketch Level Traffic & Revenue Study

- 1 – 2 months
- Existing Data Sources – traffic counts, socioeconomic parameters
- Limited Travel Demand Modeling using Existing Models
- Used for Screening

Level 2 Preliminary Traffic & Revenue Study

- 3 – 6 months
- Existing Travel Demand Models – limited refinements
- New Traffic Counts
- Speed & Delay Studies
- Model Calibration in the Corridor
- Socioeconomic Review with Limited Adjustments
- Value of Time from Census Statistics
- Toll Sensitivity
- Total Corridor Demand
- Diversion to Toll Facility – Toll Revenue
- Input to Preliminary Financial Analysis

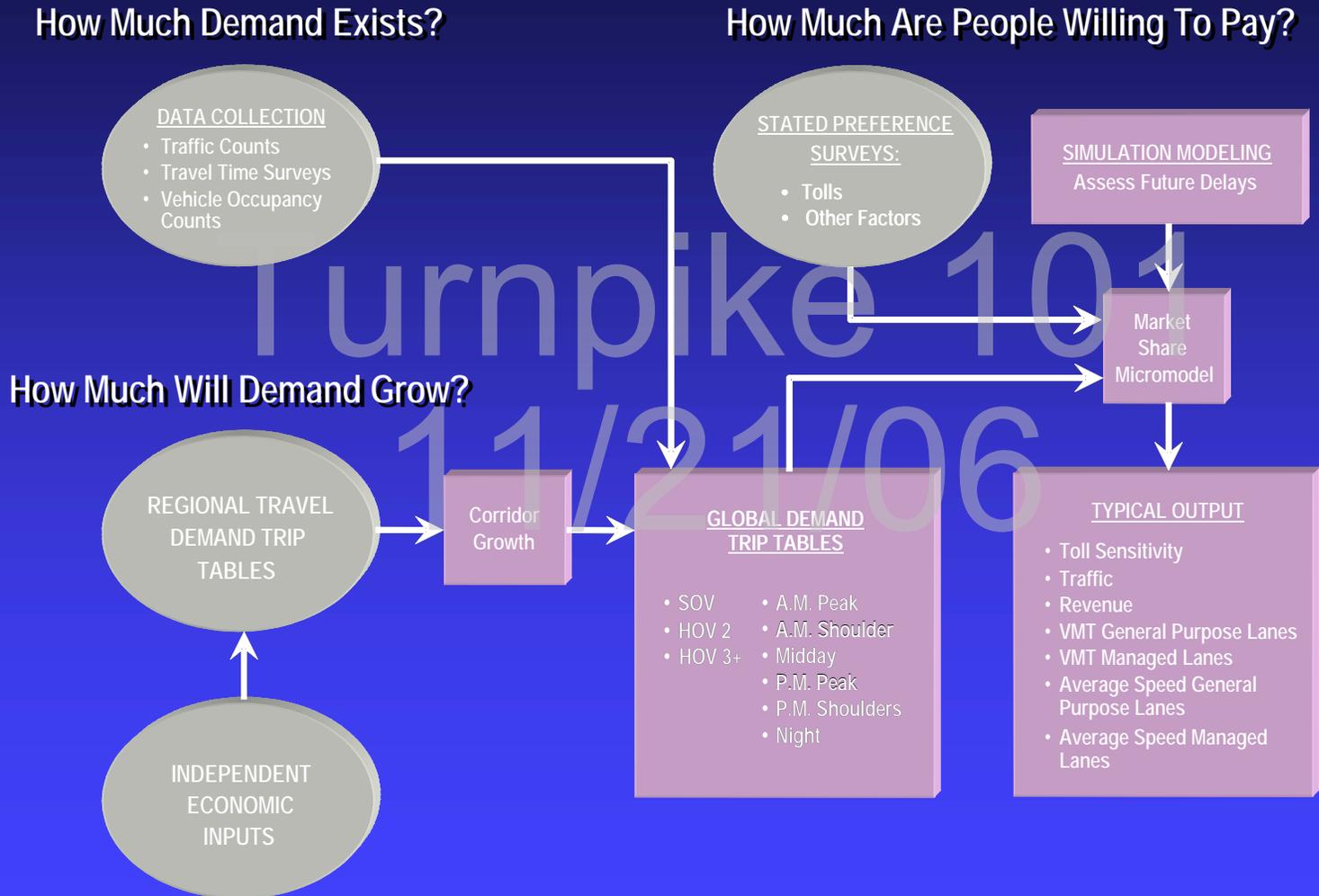
Level 3 – Investment Grade Traffic & Revenue Study

- 8 – 12 months
- Study cost around \$1 million
- Existing Travel Demand Models with Adjustments
- New Counts and Speed/Delay Studies
- Origin-Destination Surveys
- Stated Preference Surveys
- Independent Economic Review and Adjustments
- Operational Analysis and Toll Technology
- New Travel Demand Forecasts Including Transit
- Toll Sensitivity
- External Sensitivity Tests
- “Certified” Revenue Forecasts to Bond Rating Agencies and Investors

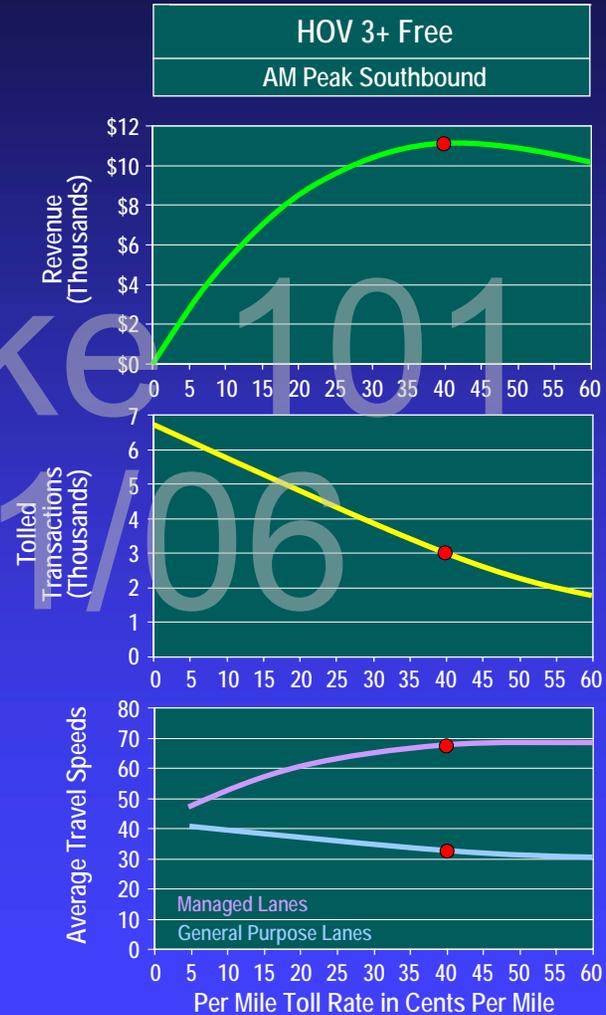
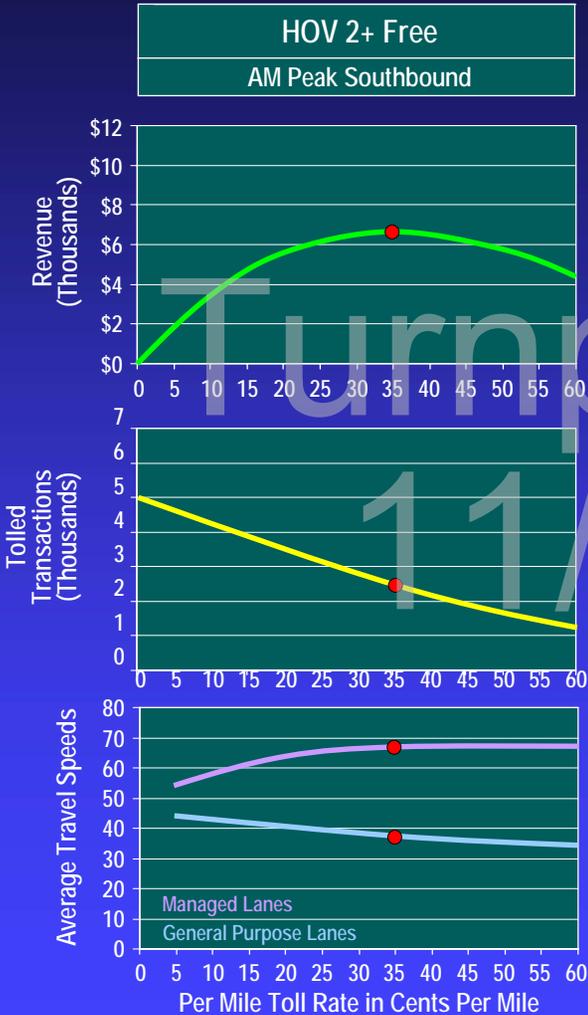
Toll Facility Traffic & Revenue Modeling

- How much travel demand is in the corridor?
 - **Passenger vehicles**
 - Cars, HOV, Transit
 - **Commercial vehicles**
 - Light, medium, heavy
- How much are people willing to pay to use the toll facility?
- How much will total demand grow?

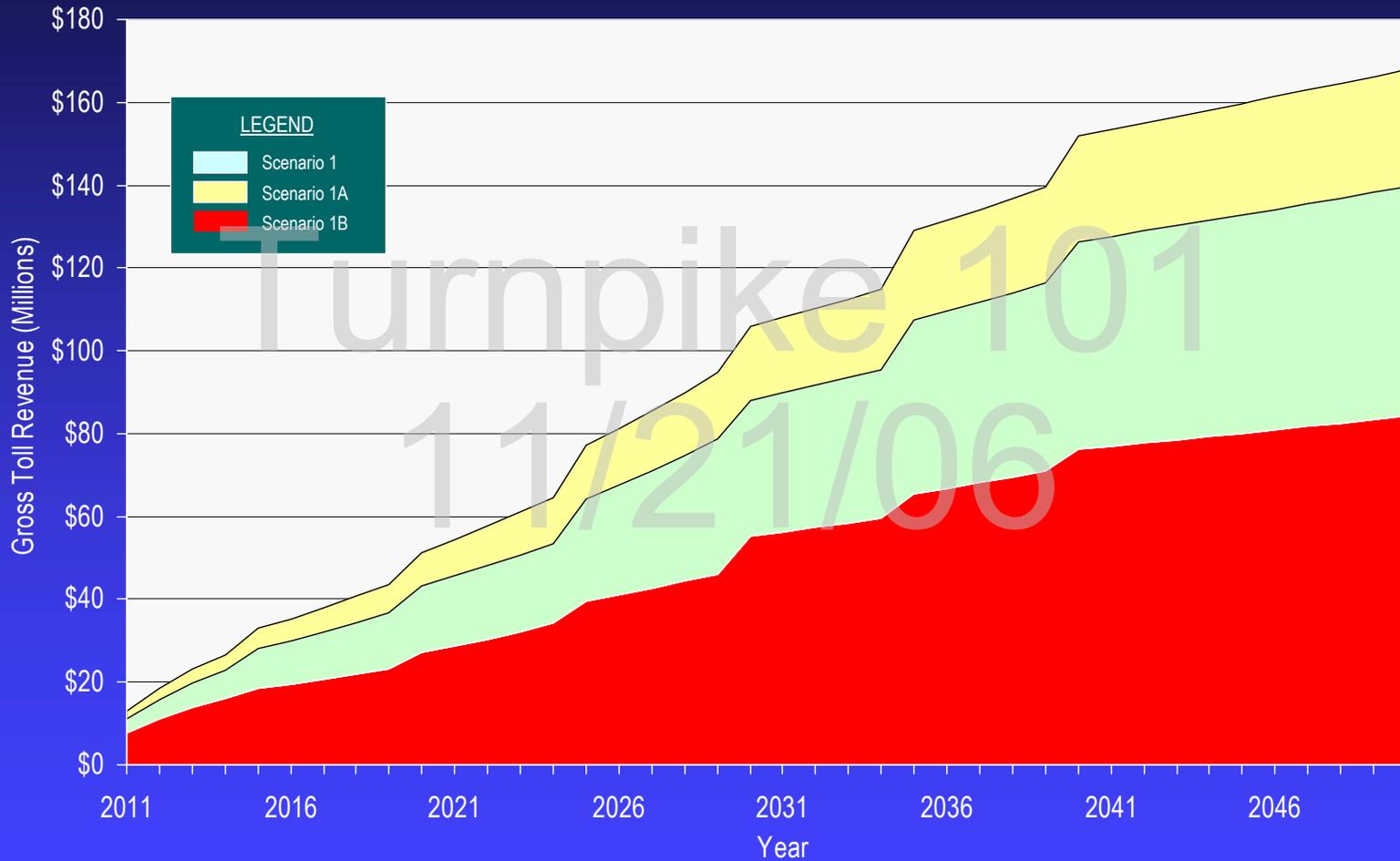
Toll Modeling Overview



Example Toll Sensitivity



Example Toll Revenue Forecast



Triangle Turnpike

- First Project to Move to Investment Grade Study
- Important New Access to RTP and Other Employment Sites
- Preliminary Studies Show Strong Revenue Potential
 - But additional funding beyond tolls will be needed

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