Traffic Forecasting Process
For Mn/DOT Projects

Begin

Receive Request for Traffic Forecast

Review PPMS and STIP

Determine Traffic Forecasting for
• Scoping
• Designing
• Planning

Notify TDA of Forecast and Determine Level of Future Involvement

Determine the Data Needed

E-NOTE (TDA Enters Information in Database)

Is project location covered by Travel Demand Model (TDM)?

NO

Select Forecasting Methods

YES

Contact and Involve the MPO Staff

Use one or more Tools
• Trend Analysis for Linear Growth Areas
• ITE Trip Generation for New Development Areas
• Other Methods

Is TDM Needed?

NO

Trend Analysis

Go to Trend Analysis Page (page 2)

YES

Use or Enhance MPO Model as the Forecasting Tools

Run TDM

Develop New TDM

Analysis

Document the Results

Submit to TDA for Approve

Finish

Contact TDA to evaluate the need for coordination with other jurisdictions (MPO's, ATP's or Traffic Demand Modelers)

Follow Model and parameters Adjustment Guidelines
• Run Model for Base and Design Year
• Use standard NCHRP 365 adjustments
• Develop Scenarios

Follow Model Output Reasonableness Checks and Adjustment Guidelines NCHRP 268
• ADT, DH, K and D factors
• Growth Rate
• Turning movement
Trend Analysis

Begin
- Establish a Base Year and a Forecast Year
- Previous Forecast?
  - NO
  - Collect 10-20 Years of Historical AADT
  - Create Schematic Diagram for Project Area
  - Use Historical Data and Update the Forecast
  - ESAL Analysis Required?
    - NO
      - Use Least Square Equation or Software to Determine Results
      - Results:
        - Forecast Volume
        - Design Hour Volume
        - Turning Movement
    - YES
      - Go to MnESAL Analysis Procedure (page 3)
      - Understand and Improve the Socioeconomic Trends in the Forecast Area
      - Attain Acceptable R² and Growth Rates
      - Throw Out Outliers if Necessary
      - Complete Adjacent Segments if Necessary
      - Compare Forecast and Growth Rates on All Segments
  - Document the Results
  - Submit to TDA for Approval
  - Finish

Office of Transportation System Management - Traffic Forecasting Unit
John Hackett john.hackett@state.mn.us 651-366-3851
Libby Keene elizabeth.keene@state.mn.us 651-366-3847