

**AASHTO Perspectives
and Reactions to
TRB Special Report 288:
Metropolitan Travel
Forecasting**

**TRB Annual Meeting
January 2008**

**Deb Miller, Secretary Kansas DOT
AASHTO Standing Committee on Planning, Chair**



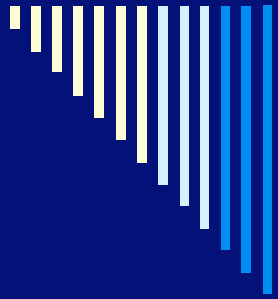
Background

- **Travel demand modeling is a core transportation planning activity for state DOTs**
 - **AASHTO and the Standing Committee on Planning support efforts to strengthen the state of the practice**
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SCOP Response to Special Report 288

- **Generated lively discussion**
 - **SCOP created a Policy and Planning Team**
 - **SCOP also created a Technical Review Team**
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Special Report 288

SCOP Policy and Planning Team

Members

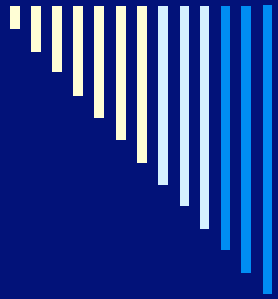
Kent Cooper, Nevada DOT

Mike Crow, Kansas DOT

Raja Veeramachaneni, Maryland DOT

Jonette Kreideweis, Minnesota DOT

Ron McCready, AASHTO



Special Report 288

SCOP Technical Review Team

Members

Greg Miyata, CALTRANS

Huiwei Shen, Florida DOT

Jonette Kreideweis, Minnesota DOT

Mark Byram, Ohio DOT

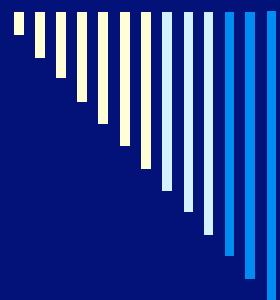
Paul Agnello, Virginia DOT

Phil Mescher, Iowa DOT



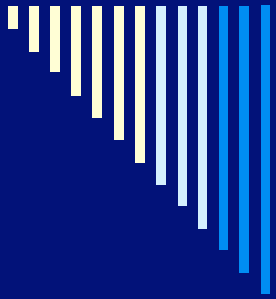
Progress

- **SCOP Policy Planning Team and AMPO Steering Team are in the process of:**
 - **Determining key themes and focus areas**
 - **Identifying other stakeholders**
 - **Planning and outlining next steps**
- **SCOP Technical Review Team has reviewed the report and provided their reactions**

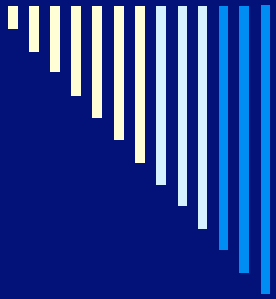


Technical Review Team Reactions

- **Metropolitan travel demand models are a tool**

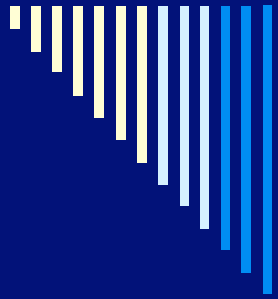


- **The uses for travel demand models has expanded beyond original expectations**
 - **Assessment air quality and environmental impacts**
 - **Evaluation of congestion and operations management strategies**
 - **Analysis of transportation related policies (e.g., smart growth, pricing, transit incentives)**
 - **Emergency and evacuation planning**



■ **One size does not fit all**

- **Very large metropolitan areas with many modal options have more complex travel demand modeling challenges and needs**
- **Traditional 4-step process meets the needs of many small and mid-size metropolitan areas.**

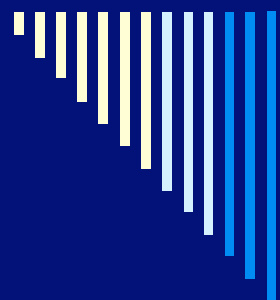


- **Complexity of travel demand modeling must align with staffing capabilities and public understanding**



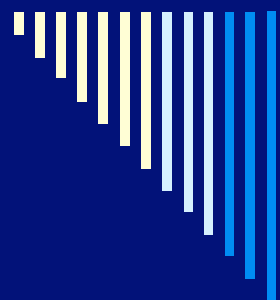
Needed Improvements

- **Opportunities to refine modeling methods**
 - **Incorporate transit, freight + non-motorized travel**
 - **Enhance calibration, validation**
 - **Include local networks and interchanges**
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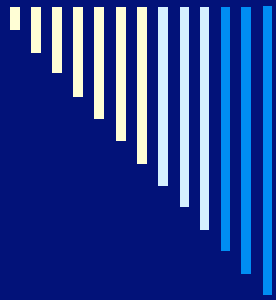
Data Enhancements Needed

- Updated household travel data
- Longer distance trip data
- Trip generation and travel estimation parameters
- Freight origins and destinations
- Arterial traffic volumes + congestion

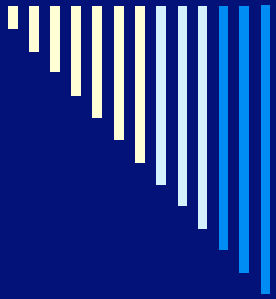


Improve People Skills

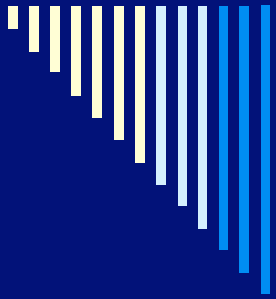
- **Expanded technical training**
- **Capacity building**
- **Research**



- **Advanced modeling will require new resource investments in:**
 - **Data collection**
 - **Staffing and training**
 - **Analysis tools, capabilities**
 - **Network development**
 - **Partner and relationship building**



- **Need ways to understand and share the value and benefit of advanced travel demand modeling methods**



- **Need for stronger federal role in travel demand modeling:**
 - **More robust national data**
 - **Development of tools, methods, practices**
 - **Training and capacity building**
 - **Research + synthesis studies**
 - **Guidance on model calibration + validation**
 - **Demonstration of modeling advances**



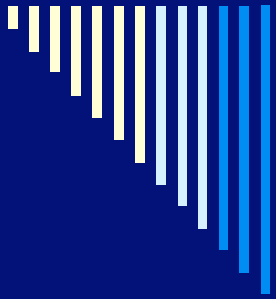
Technical Team Suggestions for Next Steps

- Clarify travel demand modeling purposes, expectations and appropriate uses of results
 - Create a national travel demand modeling steering committee to identify strategies for strengthening practices & coordinating advances
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Suggestions for Next Steps - Continued

- **Promote a tiered approach based on the level of complexity needed to support transportation planning, policy and project decisions**
 - **Support additional federal funding for metropolitan travel demand modeling efforts**
 - **Continue to monitor and share advances**
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Thank you!

**Deb Miller, Chair
AASHTO Standing Committee on Planning
Secretary, Kansas DOT**
