Moving Travel Models to the Next Level

Synthesis of Advanced Practices in Travel Forecasting

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Moving Travel Models to the Next Level

- Approach & Definition
- Benefits
- Obstacles
- Lessons Learned
- Case Studies

Focus on implementation and management, not on technical details
Advanced Practice

I will practice my modeling technique 2 hours every day
Advanced Practice

- Tour & Activity-Based Models
- Land Use Models
- Freight and Commercial Movement Models
- Statewide Models
- Dynamic Network Models

Anything beyond a 4-step model
Benefits

Benefits depend on the questions

Matching traffic counts not generally cited as a major benefit
Obstacles to Implementation

They’re not that bad!
Obstacles to Implementation

- Perceived as too complex
- Not sure they validate well
- Limited commercial software
- Hardware & runtime requirements
- Data requirements
- Development time & cost
- Staff capability & retention
Lessons Learned

I will backup my laptop every day.
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Lessons Learned

• Have a champion
• Write a model development plan
• In-house vs. consultant
• Use agile development (a.k.a. don’t bite off more than you can chew)

Align model with the policy questions
San Francisco Case Study

- Focus on policy questions
  - Time-of-day for Doyle Drive
- Use agile development
  - Start with county model
- Have a champion
  - Joe Castiglione & Billy Charlton
- Benefits
  - “Results don’t look weird”
- Other Lessons
  - Readily extensible for future applications
Sacramento Case Study

- Focus on policy questions
  - Started with Blueprint planning
- Use agile development
  - Use existing tools, then ABM
- Have a champion
  - Gordon Garry & Bruce Griesenbeck
- Benefits
  - Placer Vineyard application, SB 375
- Other Lessons
  - Trade-off between in-house vs. consultant development
NCHRP Synthesis 406, Advanced Practices in Travel Forecasting

Published in June, 2010

Available at:
http://www.trb.org/Publications/Public/PubsNCHRPSynthesisReports.aspx
Acknowledgements

Interviewees

Bill Upton,  Billy Charlton,  Brian Dunn,
Brian Gardner,  Brian Gregor,
Bruce Griesenbeck,  Chuck Purvis,
Danny Lamb,  Dennis Farmer,  Dick Walker,
Donna Wittl,  Elizabeth Sall,  Eric Sabina,
Fred Ducca,  Gordon Garry,  Greg Giaimo,
Hani Mahmassani,  Hsi-Hwa Hu,
Jennifer Malm,  Jim Ryan,  Karen Faussett,
Keith Lawton,  Kelly McGourty,
Ken Cervenka,  Kenneth Groves,
Kermit Wies,  Kuo-Ann Chiao,
Maren Outwater,  Mark Simonson,
Mary Ann Waldinger,  Michael Clay,
Rebekah Anderson,  Ron Milone,  Ronald Kirby,
Suzanne Childress,  Wu Sun,  Zhuojun Jiang

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Brian Gregor,  Daniel Lamb,
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