

Innovative Travel Models: *Proof of Concept*

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Overview

- “ Ideas are easy to conceive and hard to nurture to maturity. ” - Daniel McFadden (2001)
- Proliferation of great ideas
 - Advanced discrete choice models
 - Land use modeling
 - **Activity-based modeling**
 - Dynamic Traffic Assignment
 - Microsimulation
- Dialog between researchers, consultants, transportation planning agencies.
 - What has been accomplished?
 - What are the promising directions?
 - What are the issues in wide scale implementation?
- Slides will be on ADB40 committee website.

Status and Needs

- Some level of maturity in that growing number of advanced operational models. (3th and 4th generation)
- In many cases, technical barriers less severe than institutional/pragmatic/data barriers.
- Future
 - Integration! Demand, Supply, Land Use
 - Need extensive validation and testing
 - What are marginal impacts over traditional methods?
 - Under what conditions are such accuracies necessary?
 - What is the Cost? Development time? Run time? Policy relevance?

Moving from Nibbling to Using

- Developers need to make a compelling case.
- Lots of reasons why validation and testing are not rigorously performed. Determine what these are and address.
- Move incrementally, but towards long run.
- Efficiency/speed of innovative models an issue.
- Requires funding sources.
- **Requires personnel and expertise.**
- Developers convincing, explaining, understanding practitioners needs, answering necessary questions.
- Practitioners taking risk and finding the time
- Need large-scale implementations of various approaches, compared against traditional approaches in policy settings.
- Collaborative efforts across and within MPOs, consultants, researchers and federal government.
→ Pooled funding and efforts.