

**The Expression of Travel Model Information:
Gauging Presentations and Exhibits to Audiences**

(Synopsis)

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Introduction

Travel models provide stakeholders with technical information for transportation planning purposes. It is critical that the key messages produced by a travel model be communicated effectively to a wide variety of audiences. The presentation of travel model information necessitates a high level of attention, commensurate with the development and application of the model. Innovative presentation graphics and other materials need to be developed that convey the appropriate information to each specific audience. This often requires an investment of time, staffing, and resources beyond the normal application of travel demand model software.

This paper is a synopsis of a full document that discusses the need for quality presentations, as well as offers outlooks on how to convey travel model information to the public, technical advisory committees, policy advisory committees, citizen advisory groups, project teams, and other audiences. Topics of discussion include:

- Need for Quality Presentations
- Presentation Production Needs
- General Presentation Concepts
- Specific Topics
- Innovative Graphics with Explanatory Presentation Notes

The innovative example graphics are provided (in the full document) complete with descriptions of the “theory” behind the graphic: why the particular styles and graphical features were selected for specific presentation needs.

This paper concentrates on the meeting presentation of results of the application of a multi-modal model in a planning study, but the same concepts can be applied to presentations on travel model development, travel surveys, and other technical transportation planning topics.

Need for Quality Presentations

Travel data is part of the fabric of information stakeholders need to make good planning decisions. Information from a travel model needs to be meaningful and clear so that it provides answers and is easily understood by decisionmakers. In contrast, a planning process is hindered by travel information that is confusing or overwhelming.

Travel models are planning tools that require a significant amount of planning resources. Expenditures for travel models include travel surveys, land use planning and forecasting, model development, and model operation and analysis. It is the thesis of this paper that the presentation of model information also warrants a significant investment of time and resources. Presentation of model information needs to be commensurate with the visual graphical environment of the professional planning culture today. This typically requires

a step beyond traffic analysis zone plots, network stick diagrams, or other such model graphics that are customary among modelers, but not suitable for wide audiences.

Quality presentations of travel modeling are important in order to sustain knowledge and support in the local planning community. In fact, after years of model development, stakeholders may need to be reassured that the model adds value to the planning process. Proper presentations can help add confidence of stakeholders in a travel model.

Presentation Production Needs

Presentations of model information affect project or agency staffing, budgets, and schedules. Additional staffing beyond transportation modeling personnel may include GIS technicians, cartographers, and graphic designers. Project or agency budgets need to be planned accordingly to support the proper workforce. It is important that project schedules accommodate the preparation of presentations. This is often challenging, because the data intensive requirements of travel models often precipitate delays. However, effective presentations require time to plan, develop, and examine for value before release to the intended audience.

General Presentation Concepts

- Define the needs of the presentation. Some presentations may need to focus on travel patterns (for example origins and destinations), while others may need to convey specific numbers (such as specific traffic volumes or ridership estimates).
- Know the audience. Audiences vary according to several measures, including:
 - Generally technically capable
 - Political or elected persons
 - Knowledgeable about travel models
 - Knowledgeable about the specific projectThe presentation must be tailored according to the general characteristics of the audience.
- Know areas of concern and interest of the audience. A presentation must address topics of interest, no matter the level of controversy.
- Use graphics and charts as much as possible. Tables are also useful. Brief explanatory text can also be helpful. Too much text is not helpful.
- Use appropriate headers, titles, logos, and legends. For maps, include north arrows and scales. Use a background that is clean and not too cluttered. Use appropriate road labels, etc. Footnote date and sources.
- Convey information in an easy and simple manner. Often the key is to simply convey a general concept, but demonstrate that there is a depth of information and analysis behind the basic result.
- Relay the messages from the model. The presentation should reflect the interpretation and analysis of the model results - the comparative story that the model analyst obtains from the technical results.

- Realize that most people do not focus nor need the details of a specific presentation topic, but should easily “walk away with” the general concept. For example, the specific amount of future growth in traffic volumes may be available from the model, but many audience members may simply need to know whether traffic volumes will grow moderately or dramatically. However, it is important to have back-up details available.
- Choosing Media. The formality and size of the meeting will typically determine the presentation media. Typical options include easel boards, PowerPoint, or handouts. Boards are best for public meetings. Boards should quickly convey a basic message, but can also contain detail for those who are interested. PowerPoint is best for formal and/or large meetings, but can be the least effective visually. Usually, for committee or group meetings individual handouts are imperative in conjunction with PowerPoint or boards.

Specific Topics

- How a Model Works. This topic is typically presented to satisfy the general curiosity of stakeholders, and to instill confidence in the model results. Presentations should be kept as simple as possible, and will vary depending on technical knowledge of audience.
 - Examples of different levels of in-depth explanations of the four-step process [provided in full paper].
- Demonstrating Model Validity. Some audiences may never ask about the validation of a model, but to others it may be a critical concern.
 - Comparisons of observed traffic and/ridership compared to base year model results, often with tables or bar graphs.
 - The amount of statistics presented varies based on the audience.
- Controlling Expectations of Model Capabilities. It is always critical to explain the role and design function of models, so that audience expectations of the level of detail available from a model are realistic.
 - As an analogy, a graphic example of an image at a distance vs. zoomed in. At the close scale, the resolution becomes pixilated and nonsensical. This is related to the regional nature of a travel model, and optionally an example can be given of the traffic loading characteristics of centroid connectors.

Example Innovative Graphics

The full paper includes observations on the content and features of these graphics – the presentation theory behind the graphic.

- 3-d Traffic Volumes– Shows relative growth of traffic among alternatives. (North I-25 EIS)
- Tetris graphic of vehicle trip purposes (North I-25 EIS)

- Transit Ridership – Clean, concise, detailed. (I-70 East EIS)
- Travel time. Travel times are important but difficult to convey, particularly for multi-modal comparisons. A detailed graphic provides a summary as well. (North I-25 EIS)
- Comparison in Access Delay – Addressed a specific public concern; detailed information that is easy to understand. (US-285 Corridor EA)
- Origins and Destinations – Travel patterns with explanatory text (I-15 Corridor Study)
- Travel Patterns – Interchange use of entering freeway traffic (North I-25 EIS)
- Land Use – 3-d of regional population (I-15 Corridor Study)
- Interchange Activity – Comparative levels of ramp activity (I-15 Corridor Management Plan)
- Transit Ridership – Schematic of station-to-station activity. (IRCAA)
- Arterial Congestion – Current and future (I-70 East EIS)
- Average Delay – Map of delay by segment (GAA EIS)

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