ASSESSMENT OF TRANSIT INFORMATION MATERIALS AND DEVELOPMENT OF CRITERIA FOR PROTOTYPE TRANSIT MATERIALS

PROBLEM STATEMENT

For those who use transit on a daily basis, interpreting a transit route map or transit schedule may seem simple. However, occasional users or non-users may not find transit trip planning such an easy task. Besides the immediate issue of gaining access to transit information materials, the non-user or casual user may encounter significant difficulties in interpreting the transit route maps and transit schedules. While this is an issue for transit agencies throughout the country, Florida transit agencies are especially concerned about the effectiveness of transit information materials on the non-user's ability to plan a trip, as Florida is a major tourist destination.

OBJECTIVES

This project originated as a result of the findings of the National Center for Transit Research Project, *Assessment of Operational Barriers and Impediments to Transit Use*, wherein the lack of effective and user-friendly bus schedules and route maps in Florida was identified as a significant barrier to transit use among non-users. This project will serve as the foundation for a second phase project entitled *Design Elements of Effective Transit Materials*, wherein prototype transit information materials will be developed and field tested to evaluate the effectiveness of specific design materials. Specific objectives include the following:

- collecting bus schedules and route maps from national markets to identify the "best practices" in transit information materials
- classifying these materials based on the design elements included
- developing a process to guide the objective selection of design elements to be included in prototype materials that will be developed in the next phase
- applying the process in the selection of the design elements to be included in prototype materials

The results of the proposed research will generate the research plan/scope for the second phase of study, *Design Elements of Effective Transit Materials*.

FINDINGS AND CONCLUSIONS

The exercise of collecting examples of national transit information materials revealed the various similarities and differences in approach. Researchers collected schedules and maps from 23 systems in Florida and over 15 systems in other states. Findings included the following:

- The material format varied among system-wide guides and individual route brochures.
- The layout of the information on the pages varied from map and schedule on same side of page to map and schedule on opposite sides of page.

- Some systems present transit stops on the written schedules horizontally; while others presented the stops vertically.
- The transit information materials sometimes included legends to assist clients with identifying map features.
- In many cases, color was used on maps and schedules for aesthetic reasons. Sometimes colors were used to identify routes (functional reasons).

When identifying those design elements that would be tested in the secondary project, researchers considered four factors: (1) the feasibility of testing each design elements, (2) the cost of performing the test, (3) whether participants in the original field test noted difficulty with the particular design element, and (4) the degree to which the design element is *perceived* to be important to a non-user's transit trip planning ability. Researchers found the following:

- Front/back layout, stop alignment, scheduling, aesthetic use of color, use of legend, time point identification, identification of transfer points, and use of directional symbols were more feasible to test.
- Stop alignment, scheduling, and use of legend and directional symbols were the least expensive design elements to test.
- Material format, front/back layout, and time scheduling presented the most difficulty to participants in the original field test.
- Material format, front/back layout, map details, time point identification, functional use of color, and time scheduling were strongly perceived to be important to persons using transit information materials.

After considering the four factors used to evaluate the design elements, researchers developed a process to determine which design elements should be tested in the next phase of the project. They were primarily concerned with those factors that represented the concerns and perspective of the transit customer. The two factors most important to customers were (1) how strongly the design element is perceived to be important and (2) which design elements posed the most significant difficulty in the original project, *Assessment of Operational Barriers and Impediments to Transit Use*. The design elements that met **either** of those criteria (and that are considered consumer-relevant) will be evaluated in the field tests of the next project. Given the financial parameters of the next project, design elements that would *probably be evaluated* include those that met **both** of the criteria but were not considered consumer-related (Most Feasible to Test and Inexpensive to Test).

Finally, this project outlined a process for developing prototype written transit information materials and testing those materials among transit non-users. This is to be accomplished through the follow-up project entitled, *Design Elements of Effective Transit Information Materials.*

BENEFITS

The benefits of this study are twofold. First, the collection of transit information materials resulted in the development of a matrix of information materials characteristics for all transit agencies in Florida. This information is useful to FDOT, as it provides a snapshot of the design

elements that are currently being used across the state. A transit agency in Florida contemplating a modification in the design of its transit schedules could be provided the list of transit agencies that employ the design element variation being considered. This type of information exchange promotes cooperation between Florida transit agencies, and it also provides FDOT with another technical assistance tool.

This study serves as the groundwork for the next phase of study, *Design Elements of Effective Transit Informational Materials.* In this next phase, mock materials will be developed and tested, which will result in prototypes of effective schedules and maps. These prototypes will provide significant value to Florida transit agencies, which acknowledge the difficulties with current transit information materials and want to address the inadequacies.

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