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Public Agency Guidance On Employer-Based TDM Programs

This TCRP digest summarizes the results of TCRP Project B-4, "Cost-Effectiveness of Transportation Demand Management Strategies," conducted by COMSIS Corporation.

INTRODUCTION

This digest describes information collected and guidance developed for use by public agencies and employers interested in implementing employer-based transportation demand management (TDM) strategies to reduce employee reliance on single-occupant vehicles.

TDM strategies to encourage increased use of transit, ridesharing, and other alternatives to the single-occupant automobile increasingly are being considered as an effective tool for congestion relief. However, to stimulate implementation of TDM strategies, appropriate analysis methodologies for assessing the costs and benefits of TDM strategies to employers and to state and local policy makers are needed.

Although studies have been conducted to develop methodologies for evaluating the economic, productivity, and other benefits of transportation improvements, none have focused specifically on TDM programs. Studies have been conducted, however, to measure the transportation effects (e.g., trip reduction and mode choice) of various TDM strategies. Most of the latter studies have found that employer-based TDM strategies produce the most beneficial transportation effects.

Employers, developers, and property owners need practical, easy-to-use methodologies for assessing their business decisions concerning employer-based TDM strategies. State and local agencies and employers, both public and private, who are considering imple-

mentation of a TDM program, need information concerning the costs and benefits of various TDM alternatives. The public sector needs information on successful TDM experience that will aid in understanding the overall costs, benefits, and other effects at a systemwide level of providing various public services and facilities designed to support and stimulate the implementation of TDM strategies.

Research was conducted under TCRP Project B-4, "Cost-Effectiveness of TDM Strategies," by COMSIS Corporation, in an attempt to address these needs. This research, completed in 1996, initially was aimed at developing a methodology and an accompanying handbook that would address the needs of those considering employer-based TDM strategies. Because of the greater complexity of the public sector decision-making process, a secondary aim of this research was a more limited effort to develop general guidance, based on existing examples and experience, about the overall costs, benefits, and other effects of successful TDM programs.

More specifically, the initial objectives of the research were (1) to develop a procedure that employers, developers, and property owners (in the public and private sectors) can use to better evaluate the benefits, costs, and other effects of transportation-effective, employer-based TDM strategies and (2)

to provide guidance to public agencies on the systemwide costs, benefits, and other effects of providing public services necessary to stimulate

and support further implementation of TDM strategies.

The cost and effectiveness data obtained during an employer survey performed early in the project were insufficient to address the initial project objectives; therefore, a revised work plan for the remaining tasks was approved by the project panel. Revised products included an enhanced public agency guidance document for public agencies implementing TDM strategies and an employer technical memorandum documenting the employer survey results and lessons learned.

Two final reports have been produced as a result of the research:

- *Public Agency Guidance on Employer-Based TDM Programs and*
- *Employer Technical Memorandum: Characteristics of Effective TDM Programs.*

A brief summary of each report follows.

FINAL REPORT SUMMARIES

Public Agency Guidance on Employer-Based TDM Programs

This document outlines and describes a prototypical planning process-for developing, implementing, and evaluating public agency TDM programs-that can be readily adapted and modified to fit the varied needs and circumstances of specific states or metropolitan regions. This process recognizes that-given varying characteristics in urban, suburban, and rural settings-TDM programs are necessarily developed and implemented at widely ranging levels of rigor, with different substantive methods and resources being applied.

This report describes an approach that can be incorporated into statewide and metropolitan transportation planning processes, the development of congestion management systems, the implementation of major transportation investment studies, and state and local ordinances. This public agency

TDM development process may also be useful in the implementation of the Clean Air Act Amendments (CAAA) of 1990, particularly in demonstrating transportation conformity. This process is designed to serve as a "best practice" tool. The guidance focuses on public agency development and implementation of TDM strategies that can be implemented with and/or through employers.

The report starts with a discussion of the reasons for public agency interest in TDM and the need for public agency guidance. The report then provides the results of employer focus group sessions related to employers' actual and desired interaction with public agencies over the course of their TDM programs. Ideas are presented, from focus group participants, on actions public agencies could take to encourage successful and widespread employer-based TDM programs.

The report then describes a simple four-step process to examine the feasibility of TDM program strategies that a public agency might implement. Supporting this process are specific examples from public agencies, around the United States, that are exhibiting the kind of analytical rigor necessary to develop an effective TDM program.

Finally, the report identifies key areas for new methodology and technique development, as well as the areas in which data collection is needed.

Employer Technical Memorandum: Characteristics of Effective TDM Programs

This technical memorandum provides the results of an in-depth employer and public agency survey and focus group effort performed as part of the research project to explore factors leading to successful, cost-effective employer-based TDM programs. The effort examined the influence of worksite and employer characteristics of employer-based programs, the TDM measures implemented, and the process used to select TDM measures.

Forty-nine employers across the country were chosen for a detailed

survey of their program experience. The sample, chosen to represent various employer and program characteristics, was not random. It included programs with various levels of effectiveness, measured in terms of trip reduction, but was chosen to oversample "effective" programs.

The survey collected information on the employer's location and industry type, other employer and worksite characteristics, program costs, the measures implemented, the reasons for beginning a TDM program, the tools and process used to make TDM-related decisions, and the timing of measure implementation. The survey results were analyzed to identify factors associated with successful programs and to determine relative effectiveness and cost-effectiveness of programs with different characteristics.

The results were described in a working paper disseminated to public agencies in the areas surveyed and to employers who agreed to participate in one of three focus groups held following the survey. The researchers presented the findings to the focus groups and solicited comments from the participants on the research methods and results. The focus group discussions also served to supplement the survey data on employers' TDM decision processes and program costs and explored employers' information and guidance needs.

The technical memorandum summarizes the survey process and the results. It outlines the methodology used to select employers for the survey sample, summarizes the characteristics of employers in the sample, describes the survey and focus group questions, and explains the data complexities and difficulties that affected the research. The memorandum describes the survey analysis undertaken and the findings on effectiveness and cost-effectiveness factors, such as program measures implemented, reasons for engaging in TDM, measure selection process, principal selection criteria, public agency involvement, and employer-defined TDM benefits.

The technical memorandum then discusses issues raised by focus group participants about factors that influenced the successful development of TDM programs. These issues include regulatory-related issues, public agency institutional issues, program implementation issues, and issues related to the role of public agencies. Ideas are then offered from the surveys and focus groups for more productive interaction of public agencies and employers in successful TDM programs. Four questions are considered: (1) What public agency support do employers need? (2) How can public agencies be catalysts for successful programs? (3) What is the appropriate mix of

regulation and guidance? and (4) What future areas exist for employer-public agency cooperation?

Finally, recommendations on how public agencies can foster more effective employer-based TDM programs are presented. Also discussed are recommendations to encourage the collection of more and better information on program effectiveness and cost-effectiveness so that future research on these topics will be more conclusive.

HOW TO OBTAIN COPIES

Copies of each of these reports can be obtained by contacting the

Transportation Research Board at the following address:

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Please include your name and mailing address with the request.

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