

# **Public Agency Guidance on Employer-Based TDM Programs**

**and**

# **Employer Technical Memorandum Characteristics of Effective TDM Programs**

**Prepared for:**

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# PUBLIC AGENCY GUIDANCE

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## **I. Executive Summary**

### **A. Purpose of Guidebook**

This guidance document has been provided to assist public agencies in developing more cost-effective transportation demand management (TDM) programs. A complementary guidance document, the *Employer Technical Memorandum*, has been provided to assist employers in the development of their TDM programs. Both products result from research undertaken to explore the key factors leading to successful and cost-effective employer-based TDM programs. This research effort, the Transit Cooperative Research Project B-4, *Cost Effectiveness of Transportation Demand Management Strategies*, consisted of three parts: in-depth employer surveys, public agency staff interviews, and focus groups with representatives from both employers and public agencies. Through this process the research team was able to access the collective experience of TDM professionals in both the private and public sectors. Their insights based on real-world experience in the development and implementation of employer-based TDM programs provides the foundation for both guidance documents.

The purpose of this guidance document, *Public Agency Guidance on Employer-based TDM Programs*, is to outline and describe 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 particular states or metropolitan regions. This approach 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 guidebook is not intended to set forth federal guidance. It does, however, describe 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. The guidance outlined here does not refer to any specific federal requirements. It is designed instead to serve as a best practice tool.

### **B. Public Agency and Employer TDM Programs**

This guidance document focuses on public agency development and implementation of TDM strategies which can be implemented with and/or through employers. Such employer-based TDM programs have long been the focus of many public agency TDM efforts. This stems, in part, from the recognition that employer policies and procedures, such as free parking, overtime, etc., can be a significant factor in influencing how employees choose to get to and from work.

Moreover, since employers have immediate and direct access to their employees, they provide a means by which public agencies can leverage relatively limited public resources for encouraging alternatives to solo driving. For instance, employers offer a readily available and cost-effective communication channel, at least compared to expensive mass media outlets, through which public agencies can reach and educate the commuting public with information about TDM alternatives. In addition, changing the behavior of individual drive alone commuters frequently requires the intervention and/or assistance of third-party change agents, known as an employee transportation coordinator (ETC). With the exception of their own employees, the capacity of public agencies to interact with the commuting public in this manner is severely limited.

The functional relationship which has developed between public agency TDM efforts and employer-based TDM programs involves two components. The first, and more widely recognized, aspect of this public/private relationship involves public agency TDM efforts designed to encourage the development and implementation of employer-based TDM programs. This has taken the form of either encouraging voluntary employer TDM programs or mandating employer trip reduction programs at the local, state or federal levels. In regions where the regulatory approach has been relied upon the most "successful" employer TDM programs have come about where the achievement of public goals is complemented by private benefits, such as improved employee productivity.

The second component of this functional relationship involves public agency activities that might enhance the TDM efforts of employers by creating conditions which make adoption of commute alternatives by individual commuters more likely. Both components of public agency TDM efforts are needed--encouraging the creation of employer-based TDM programs and creating conditions that can optimize employer TDM efforts--because the ultimate aim of public agency TDM strategies should not be merely the creation of more employer TDM programs. Such programs are only the means to the end of changing individual commuter behavior. The latter is accomplished by affecting the travel demand factors (such as cost, time, convenience, availability, accessibility, reliability and safety) that determine individual commuting behavior. Although employer policies and practices affect these travel demand factors, other forces--land use patterns, tax laws, and public transportation subsidies--have an impact as well.

In some respects, employers have inadvertently been placed in the position of trying to sell the unwanted (commute alternatives) to the unwilling (the commuting public). This is due in part because many public agency efforts have overemphasized the need to create employer-based TDM programs while at the same time not devoting sufficient resources to the other primary component of the public/private relationship, i.e. creating conditions which will optimize the TDM efforts of employers. For this, and other related reasons, the regulatory approach is becoming increasingly resisted by the private sector.

By themselves, employer-based TDM programs can only achieve so much as long as the demand

for commute alternatives within the commuting public remains relatively limited. Public agency efforts to implement TDM strategies through employers must be complemented by other TDM strategies creating conditions in the overall transportation environment that can enable TDM activities to better flourish. Other public agency sponsored TDM strategies that can help stimulate demand for commute alternatives include the following:

- **Regionwide TDM services and infrastructure:** ridematching, HOV lanes, park and ride lots, transit improvements, and telecenters.
- **Land use demand:** encouraging the development of denser urban forms more supportive of pedestrian and transit activity.
- **Tax code changes:** although generally beyond the control of local and state agencies, the federal tax code strongly influences employers to provide free parking to employees to the exclusion of other transportation benefits. TDM research has shown a strong correlation between the level of parking charges and the likelihood of driving alone to work.
- **Market-based strategies:** although currently not politically feasible, by directly impacting individuals, such strategies as toll roads, congestion pricing, gas tax increases, etc. are likely to be potent factors for increasing the demand for commute alternatives.

These non-employer based TDM strategies, if carried out, would help to create conditions in which mandated employer trip reduction programs would be less needed. The bottom-up demand from employees for commuter assistance would by itself stimulate the development and implementation of voluntary employer TDM programs.

### **C. TDM and Transportation Planning Process**

The opportunity to create conditions which increase the likelihood of individual commuters choosing ridesharing modes and other commute alternatives, while at the same time demanding commuter assistance from their employers, is best established in the early phases of the transportation planning process. This lays the foundation for all subsequent TDM efforts, including those of employers, but in practice all too often TDM is incorporated into the planning process as an after thought, if at all.

Since TDM is still considered a relatively new tool in the overall arsenal of techniques and strategies available to the transportation planner, this tendency to not give TDM equal weight early on in the planning process is in part understandable. Moreover, lacking the national standards and models available to TSM and capacity improving strategies, efforts by public

agencies to quantify TDM-transportation benefits, when made, tend to vary substantially in their projected impacts. As a consequence, there is a perceived risk in relying on TDM strategies where the extent to which such strategies can contribute to needed solutions is uncertain.

As a result, when employers are asked to do their part in bringing about improvements in traffic congestion and air quality by developing TDM programs, it is often unclear both to the employers and to the public agencies to which they are responding whether or not the goals established for them are realistic or achievable in the mandated timeline. Where expectations are not sufficiently grounded in a rational assessment of predicted outcomes, those responsible for TDM program implementation, including employers, are likely to become either discouraged or resistant to further requests for their participation in solving problems perceived as the prime responsibility of the public sector.

Such developments emphasize the necessity that the funding of all TDM programs include resources for the evaluation and monitoring of those programs. Evaluation will provide the data on actual outcomes that is needed by transportation planners who wish to incorporate TDM into the transportation planning process. While more such information on TDM outcomes has been acquired, many other opportunities to develop a more indepth understanding of TDM effectiveness have been lost because funding for evaluation was not considered a priority. For this reason, this guidance document incorporates evaluation into the TDM planning process as an essential component of all public agency TDM programs. As more evaluations provide a better understanding of how to effectively influence individual commuter mode choice decisions, this information will reduce the intangible nature of current TDM practices and give both public agency transportation planners and employer TDM implementors greater confidence in the expected outcomes of their work.

This section on the need to incorporate TDM into the transportation planning process, and the preceding section on the nature of the relationship between public agency TDM programs and employer TDM programs have been provided as an introductory context for the findings reported below.

#### **D. Key Findings and Observations**

Although this guidance document refrains from making definitive assertions on the relative value of one TDM measure or strategy over another, it does rest on the weight of the research conducted throughout this project. In general, there are three areas in which observations and findings can be reported:

##### **The Current Picture**

- *Public agencies are generally not making TDM part of their overall transportation*

*planning and funding process.* Instead of identifying potential actions that have a high probability of successful implementation and problem solution and then finding ways in which to fund them, public agencies are allowing the availability of designated funding to be the primary criterion for program advancement.

- *Implementation at the employer level as carried through by public agencies focuses almost entirely on public agency-derived goals.* Too often, public agencies involved in TDM have not adequately understood that the best results for employer-based TDM programs have come by linking TDM to internal needs and benefits important to employers.
- *With the exception of those places where there is a legal requirement to do so, little or no monitoring and evaluation is going on at the employer level.* Public agencies who participated in this project were almost unanimous in their lack of information on true program effectiveness. In most cases, only a small effort, and few resources, were devoted to examining the impacts of specific TDM actions or programs and feeding those results back through the process. When information was available, it was still difficult to compare to other areas and programs because of variations in data availability and performance measures used.

#### ***Improvements from this Guidance***

- *The guidance offers a general, process-oriented framework within which public agencies can develop effective TDM programs.* It does this by making all of the necessary choices and tradeoffs explicit, and by placing TDM on an equal footing with other transportation strategies.
- *The guidance emphasizes a shift away from command-and-control toward partnership with the private sector and with other public agencies.* As partners in the TDM implementation process, rather than subjects of public policy imperatives, employers can provide valuable information on how to best encourage changes in the commuter behavior of their employees.

#### ***Data and Methodology Needs for the Future***

- *The continued integration of TDM-related planning with the rest of the transportation planning process is not only a short-term improvement advocated by this guidance document but is also essential for the long-term development of a balanced transportation system.* Until TDM has equal standing, the process remains compromised by its lack of balance, and will consistently be biased by its stress on traditional supply-side solutions at the expense of the innovation

represented by TDM.

- *TDM impacts need to be assessed more fully in the land development approval process.* By promoting sparse, low-density development, best served by the automobile, the land use planning process remains as biased as the overall transportation planning process.
- *TDM research needs to focus on the individual transportation system user, whether strictly a commuter or anyone making a trip in the impact area.* The ultimate aim of all TDM policies and strategies remains the individual, whether viewed as an employee or simply a trip-maker. TDM research needs to refocus its efforts and place more emphasis on assessing what affects the individual's transportation mode choice. Effectiveness should be measured in the impact on the individual user's mode choice, not on the willingness of a given employer to be involved in the TDM process.

#### **E. Structure of the Guidance Document**

The goal of this guidance document is to provide a framework within which TDM can be analyzed and evaluated alongside other transportation strategies. To accomplish this end, the remainder of this document is divided into four sections.

The first two sections sets the stage for this TDM guidance framework:

- Section II discusses the reasons for public agency interest in TDM and the need for public agency guidance.
- Section III summarizes employer group findings related to public agency issues.

The framework itself is presented in the final two sections which can be used as a self-contained guidebook.

- Section IV describes public agency TDM program development as a four-phase process.
- Section V provides examples of public agency TDM programs, and discusses future needs and areas for study.

What follows in the remainder of this executive summary are brief synopses of sections II through V.

*Section II. Purpose and Overview of the Guidance*

For many public agencies, TDM is a new endeavor. This is especially true for those organizations whose mission is not focused on transportation management and operation, the traditional arenas for TDM, and agencies in areas where traffic congestion and/or air quality problems are not widely acknowledged. Even for public agencies with experience in dealing with TDM, tighter budgets, greater pressure for results and a new emphasis on coordinating air quality and transportation planning activities have heightened the need to invest wisely and justify their investments.

The guidance is not meant to imply that current public agency actions with regard to TDM are lacking, but the interviews with public agency representatives did suggest that many do not know if their programs are or will be effective or cost-effective, either in absolute terms or when compared to other options to meet the same goals. The research indicated that many public agencies selected TDM strategies haphazardly and conducted little, if any, analysis either before or after a given strategy or program was implemented.

**The premise of the guidance document is that by following a logical, comprehensive process for selecting, implementing and evaluating TDM strategies and programs, public agencies can improve their TDM decision-making.**

*Section III. Summary of Employer Focus Groups Findings Related to Public Agency Issues*

Much of the discussion in the employer focus group sessions related to employers' actual and desired interaction with public agencies over the course of their TDM programs. This section summarizes ideas from focus group participants on potential actions public agencies could take to encourage successful and widespread employer-based TDM programs.

Employers were generally in agreement that support from public agencies was needed in the following four areas:

- Information, training and guidance--especially training for employee transportation coordinators and in regulated areas clearer definitions of targets and methods for achieving them.
- Provision of basic support functions as a necessary adjunct for employers' in-house efforts. These include regional ridematching, TMA assistance, and guaranteed ride home programs.
- Infrastructure improvements such as expanded transit service and HOV lanes

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- Financial inducements such as tax credits for employers implementing TDM programs, transit discount programs, and other cost-sharing mechanisms.

Employers felt that public agencies could be more effective catalysts for TDM program development by trying to create a "regional climate" more supportive of TDM. Outreach efforts to employers to increase the number of voluntary employer TDM programs, public education campaigns to create a more aware and interested employee population, and public agency efforts to become "employer role models" by enhancing their own internal TDM programs were cited as ways of creating this supportive TDM climate.

Employers felt that public agencies could do more to make TDM an attractive choice for employers. There was an expressed need for greater emphasis on TDM benefits and less reliance on regulatory requirements. For this reason, employers desire changes in the tax code that will reduce the cost of implementing financial incentive-based TDM measures and programs.

**Among the most compelling conclusions drawn from the employer focus groups is that to encourage successful and widespread employer-based TDM programs, public agencies need to fundamentally change the way they view, promote and support such programs.**

### *Section IV. TDM Program Development Guidance*

This and the following section are written as a self-contained guide book that can be separated from the rest of this report and read independently by users. As shown in Figure I-1, the heart of the guidance is a simple four-phase process:

#### **Module I: Identify Problems/Evaluate Potential Solutions**

*What is the range of problems and solutions and how does TDM fit in?*

The first part of assessing feasibility is clearly defining those issues or problems TDM will be expected to address and determining if TDM is applicable to the situation. TDM may be a powerful tool for some transportation-related problems, but its success is highly situational. TDM approaches should be compared to non-TDM options, such as TSM, new construction, technological solutions, and land-use planning techniques, to provide a complete picture of potential tools. To improve the overall potential for solving transportation-related problems, TDM approaches may be considered for use in combination with traditional transportation solutions.

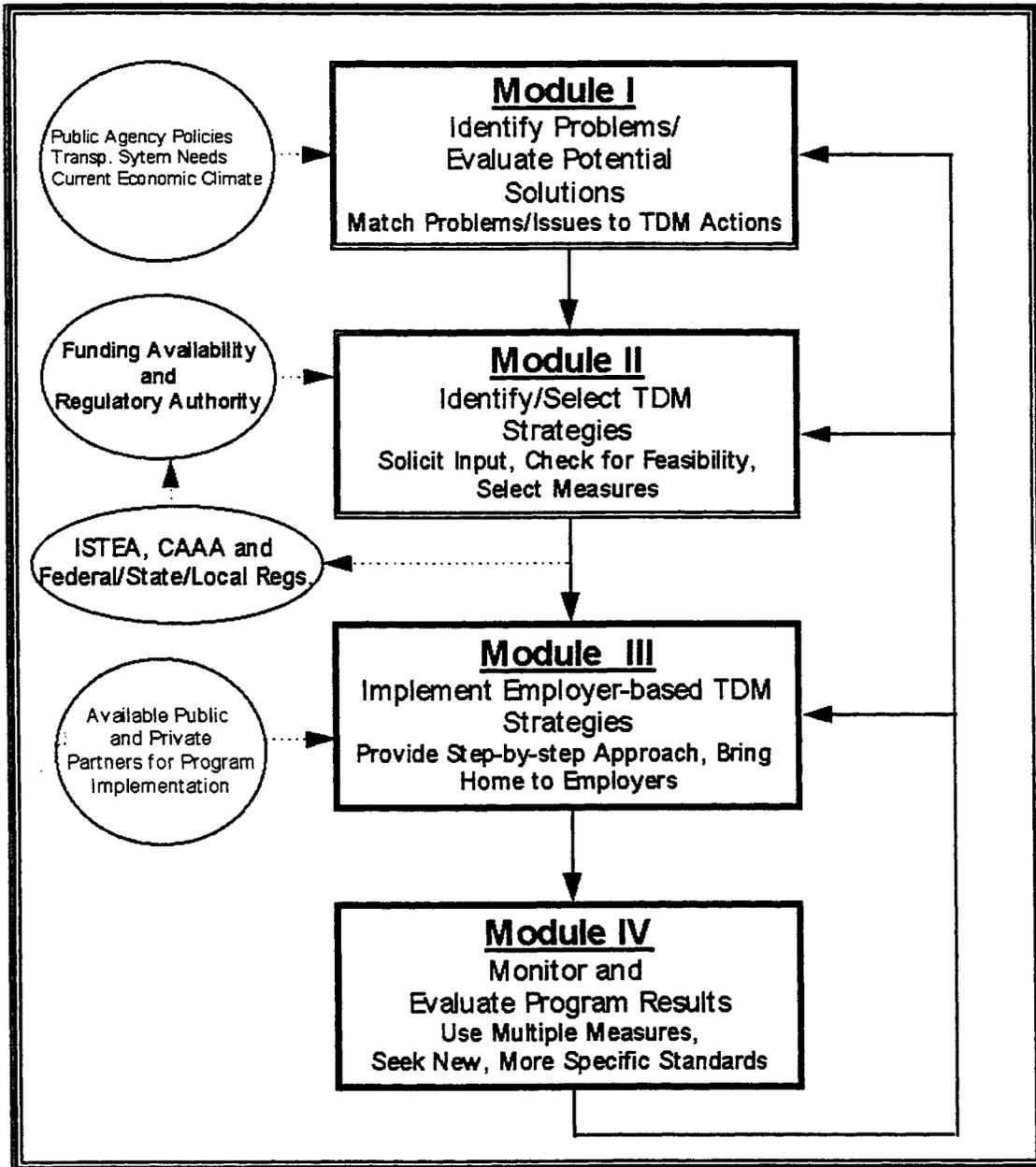


Figure I-1: Ongoing Process for Public Agency TDM Programs

**Module II: Identify/Select Appropriate TDM Strategies**

*Which TDM measures should be employed?*

After one decides that TDM, in a general sense, may have potential for addressing a problem, the wide range of potential individual strategies must be thoroughly examined. This step requires the agency to explore its needs further and look honestly at the type and level of benefits, such as trip reduction, emissions reductions, and others, that TDM strategies will offer.

**Module III: Implement TDM Strategies With and Through Employers**

*How and in what context should the selected measures be implemented?*

The analyst must develop a clear set of implementation steps and schedule, identifying each implementation partner and the roles it has agreed to play. The schedule should include progress milestones and serve as a frequently-consulted guide to implementation. Keep in mind that this discusses implementation of TDM programs at the level of the public agency, and is not intended to describe the activities carried out by employers in their program implementation. For that information refer to the *Employer Technical Memorandum*.

**Module IV: Monitor and Evaluate Results**

*Do the measured results meet the intended goals and objectives?*

This will require further development of evaluation techniques that can adequately account for the intended goals and objectives. This module can also include, if necessary, surveys and data collection. The entire monitoring and evaluation effort must be geared toward feeding the results back through the entire process, applying the lessons learned to each relevant stage of program development. Keep in mind that measurement criteria and data collection methodology should be in place and underway prior to program implementation.

**Section V. Summary and Conclusion**

This concluding section is the second part of the actual guidebook. It begins with a series of examples from public agencies around the United States that are exhibiting the kinds of analytical rigor and effort that has been recommended throughout this document. By focusing on these exemplary actions, the guidance provides concrete examples to the reader when considering the particular course to take in developing an effective TDM program that includes employer-based actions and measures.

Finally, the section closes with a reexamination of the guidance's key elements and their

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implications for future TDM program development. An essential component of this reexamination consists of the identification of key areas for new methodology and technique development, as well as the areas in which new information and methods of data collection are needed.

## **II. Purpose and Overview of Guidance**

### **A. Public Agencies' Interest in TDM**

The purpose of this document is to assist public agencies such as state and local transportation and air quality organizations to implement effective and cost-effective employer-based *travel demand management* (TDM) programs. As defined here, the term "TDM" includes a wide range of activities, such as rideshare matching, guaranteed ride home programs, and parking management, which are designed to reduce the demand for transportation infrastructure by encouraging travelers to use transit, carpools, and other alternatives to driving alone.

Although TDM is not new, recent upward trends in vehicle miles traveled (VMT) and solo driving have sparked wide interest in TDM. Data from the most recent National Personal Transportation Survey (NPTS) show that American commuters collectively traveled 432.2 million vehicle miles to work on an average day in 1990. This represents a startling 46 percent increase from 1983, the prior survey year. During the same seven year period, the percentage of commuters using autos for commuting increased by 7 percent and the occupancy of private autos used for commuting declined by 5 percent. Many areas are wrestling with traffic congestion, air pollution, "sensible" and sustainable land use planning, community access and economic vitality, energy resource management, and other issues related to our growing reliance on and use of motor vehicles. Many public agencies are now exploring TDM as one tool, among others, for planning and management of transportation and air quality.

Public agencies' interest in TDM has been reinforced by the passage of two federal laws: the 1990 Clean Air Act Amendments (CAAA) and the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA). These two laws, which acknowledge the strong links between transportation and air pollution, include consideration of TDM as an integral part of regional and state level future transportation and air quality planning. Under the CAAA, eleven states are required to institute Employee Commute Option (ECO) programs, in which large employers develop worksite-based TDM programs. It should be noted that the trend over the last two years has gradually shifted away from a literal enforcement of the ECO requirement (now technically designated Employer Trip Reduction, or ETR, programs) toward, at a minimum, a more flexible implementation approach.

Other states also are considering TDM activities as additional "transportation control measures" (TCMs) to reduce vehicle emissions for transportation conformity analysis and for inclusion in the State Implementation Plan (SIP) for air quality improvement. ISTEA's provisions for congestion management systems and major investment studies (MIS) are prompting many state and local governments to also consider the role of TDM in reducing peak commute period vehicle trips.

## **B. The Need for Public Agency Guidance**

For many public agencies, TDM is a new endeavor. This is especially true for those organizations whose mission is not focused on transportation management and operation, traditional arenas for TDM, and agencies in areas where traffic congestion and/or air quality problems are not universally acknowledged. But even for public agencies with a history of TDM programs, tighter budgets, greater pressure for results, and a new emphasis on coordinating air quality and transportation activities have heightened the need for public agencies to invest wisely and justify their investments.

This document does not imply that public agencies' current TDM programs are lacking, but discussions with public agencies suggest many do not know if their programs are or will be effective or cost-effective, either in absolute terms or when compared to other options to meet the same goals. The public agency interviews and focus groups conducted for this research indicated that many public agencies selected TDM strategies haphazardly and conducted little, if any, analysis either before or after the strategy was implemented.

**The premise of this document is that by following a logical, comprehensive process for selecting, implementing, and evaluating TDM strategies and programs, public agencies can improve their TDM decision-making.**

*TDM Program Development.* First, it is important for public agencies to conduct thorough feasibility analyses of TDM projects, comparing costs and benefits of TDM options against each other and against transportation systems management (TSM) options, other non-TDM solutions, and other non-transportation options. For this, agencies need to be able to identify TDM strategies that have potential to solve the problems they are facing and eliminate those that do not. They also need tools and assessment methodologies to estimate benefits and costs of various strategies and to compare TDM strategies against other possible solutions. Agencies also must assess the political and traveler acceptance of potential strategies

*TDM Program Implementation.* Second, public agencies must be able to implement TDM projects cost-effectively. For this, they need to define logical, efficient implementation steps and schedules and resolve implementation issues. Additionally, public agencies need to determine implementation roles for which they will take responsibility and those that are better suited to other agencies, regional rideshare groups, transportation management associations (TMAs), employers, transportation service providers, and consultants. If others should be included in TDM implementation, public agencies need to form partnerships and/or coordinate TDM efforts with those groups. Research conducted for this project indicated that employers felt that coordination among public agencies was

lacking.

Partnerships with employers are especially important. Some TDM strategies, such as congestion pricing, are best applied regionally, but many have been shown to be most effectively implemented at employment sites by employers. This suggests that to reap the greatest TDM benefits, public agencies should encourage and support employer-based TDM programs.

Employer-based TDM programs can be, and indeed have been, mandated through local, state, or federal laws, but acceptance of such programs has gradually waned over the past three years. Mandated programs are widely viewed as expensive, inflexible, and unresponsive to employers' needs and constraints. Some employers have implemented TDM programs voluntarily, not to meet a public agency requirement, but for internal reasons, such as to solve a parking constraint. Research has shown that some of these employers also realized other company benefits such as enhanced productivity, operating cost savings, and lower employee turnover. This suggests that public agencies might be most successful in encouraging employer-based TDM if they encourage voluntary programs that emphasize positive employer and traveler motivations rather than command and control requirements that focus on public agency goals.

*TDM Program Evaluation* -- Finally, careful monitoring and evaluation of TDM programs is needed to document results of past projects and guide future TDM investments. For this, public agencies must know how to set realistic TDM goals and measure their success against those goals, using sound evaluation techniques that are consistent across projects and across areas. Public agencies should also revise TDM programs that are underperforming, and reexamine them to identify problems and potential corrective actions.

### **C. Overview of the Guidance**

This document presents a four-step process public agencies and others implementing TDM programs can follow to develop, implement, and evaluate TDM programs.

**Much of the guidance can be applied to any TDM strategy, but its focus is on strategies implemented with and/or through employers, that is, it concentrates on guiding public agencies in encouraging and supporting employer-based TDM.**

This emphasis on employer-based programs has been selected for several reasons. First, as noted earlier, TDM programs implemented by employers are among the most successful and offer the greatest potential for significant results in certain areas. Second, at a time of

decreasing public resources, many public agencies are cutting back regional TDM programs and relying more heavily on employers' participation in TDM. And third, research conducted for this project found that employers who had implemented successful TDM programs believed public agency support had been instrumental to their success, but felt that such support needed to be strengthened and expanded.

The guidance following this introduction is presented in three sections.

*Section III. Summary of Employer Survey Findings Related to Public Agency Issues* summarizes findings of an earlier research phase of this project. These findings, which were more fully presented in the previously-released *Employer Technical Memorandum*, highlight the role of public agency support in encouraging successful and widespread employer-based TDM programs. They are included here because they form the basis for many of the recommendations in the guidance.

*Section IV. TDM Program Development Guidance* is organized into four modules or steps which make up the heart of the guidance framework:

**Module I. Identify Problems/Evaluate Potential Solutions**

This opening module offers guidance on the screening of existing and potential transportation and air quality issues and problems which may be amenable to a solution which includes TDM measures. TDM must be viewed as one of several potential responses, along with such elements as TSM, new capacity construction, and land use changes. Although the remainder of the guidance is predicated on the selection of TDM as at least a partial response to a given transportation/air quality issue, it is important to formally introduce a process by which various competing or complementary strategies can be evaluated.

**Module II. Identify/Select Appropriate TDM Strategies**

This module offers guidance on the development of employer-based TDM programs and the selection of TDM strategies. Having described those transportation and air quality issues for which public agencies might consider implementing or supporting a TDM program in the previous module, the guidance briefly presents common TDM strategies, their application, and a framework for estimating their potential benefits and costs. Finally, this section presents a process for conducting a feasibility analysis to choose appropriate and cost-effective strategies and recommends tools and techniques useful for the analysis.

**Module III. Implement Employer-based TDM Strategies**

This module opens with a discussion of potential TDM program partners, such as other public agencies and TMAs, and suggests roles for each in a proposed

program. It provides guidance on effective methods of implementing TDM, within the structure of employer-based programs. Assuming that the public agency has identified TDM strategies to be implemented, this module further discusses five key areas in which implementation issues might need to be addressed: regional and local policies, public agency coordination, employer education and outreach, public education and outreach, and development of supporting programs. For each of these five areas, the section presents recommendations and techniques and provides guidance on establishing discrete steps to follow during implementation.

**Module IV. Monitor and Evaluate Results**

This module focuses on the need for thorough, consistent evaluation of TDM programs. It begins by discussing TDM evaluation issues and concerns raised in this and other TDM research. It then presents applications of monitoring and evaluation and offers recommendations for evaluation techniques for various applications, such as voluntary versus regulated programs, and employer-based versus regional programs. Finally, it provides direction on where the results of any monitoring/evaluation exercise can be fed back into the overall public agency process.

*Section V. Conclusion and Areas for Future Study* concludes the guidance with a series of real-world examples of public agency success in implementing the guidance, and a discussion of the implications of the research presented and the need for further investigation of TDM at the public agency/employer point of contact.

### **III. Summary of Employer Focus Group Findings Related to Public Agency Issues**

Many of the recommendations included in Section IV of this document are drawn from research conducted in this project and by other researchers in both the transportation field and other disciplines. Research in this project included surveys and focus groups of employers that had implemented successful TDM programs. Much of the discussion in the focus groups related to the employers' actual and desired interaction with public agencies in the employers' TDM programs. This section summarizes ideas from the focus group on potential actions public agencies could take to encourage successful and widespread employer-based TDM programs. Readers who are interested in a more complete explanation of the findings are directed to the *Employer Technical Memorandum*, previously produced for this project.

The focus group findings are grouped into four categories:

- How public agencies can support employers most effectively
- How public agencies can be catalysts for program development
- The appropriate mix of regulations and guidance
- Future areas for employer-public agency cooperation

The final part of this section examines the implications of these findings for public agencies and sets the stage for the public agency guidance in Section IV.

**One general conclusion drawn from these findings is that to encourage successful and widespread employer-based TDM programs, public agencies need to change the way they view, promote, and support such programs.**

#### **A. Where Public Agencies Can Support Employers Most Effectively**

Employers who participated in the focus group meetings were generally in agreement that support was most needed in four basic areas:

*Information/Training and Guidance:* Above all, employers cited TDM information and training programs as needed public support functions. This category would include employee transportation coordinator (ETC) training, general information and promotions for TDM programs, and program formation and evaluation guidance research and materials. Nearly two-thirds of the representatives cited information and guidance from public agencies as key elements used in their TDM decision-making process. Employers in regulated areas especially mentioned needing clearer definition of the objectives and performance targets of the regulation, direction on how to meet regulation

requirements, and guidance on program start-up, especially during the early stages of the program. Most employers in the focus groups preferred locally-produced guidance targeted to their areas rather than general guidance. They also cited use of "case studies" and local program examples as useful information.

*Basic support functions:* Employers indicated that a basic level of public support was an essential adjunct to employers' in-house efforts. Services mentioned here included regional rideshare matching, TMA formation assistance, guaranteed ride home programs, and partial funding in key regional activity center programs. These functions not only support a consistent regional base for TDM, but help stretch employers' resources, resulting in less costly employer programs.

*Infrastructure improvements:* A secondary public agency support need identified by focus group employers was for physical improvements that enhanced employees' ability to commute by non-single occupant vehicle (SOV) modes. Infrastructure is used broadly here as any physical transportation-related support measure, such as improved and expanded transit service, high occupancy vehicle (HOV) lane construction, or the implementation of a bike/pedestrian path network. Employers ranked this as less critical for their needs, but recognized it as an indication of an overall interest of the public sector to devote resources to TDM.

*Financial inducements:* Employers also noted tax credits for employers that implement TDM programs, transit discount programs, and other cost-sharing mechanisms as ways in which public agencies could assist employers' TDM programs. Cost sharing stretches employers' resources, and as with infrastructure improvements, is a highly visible demonstration of public support for employers' activities.

These four areas of support are presented here in order of their relative importance to focus group participants. The most critical needs were better information from public agencies and a basic level of regional support. Many of the employers cited lack of information from public agencies as a significant obstacle to their program implementation. Employers in areas where such information was provided highly valued this assistance.

Employers also felt that regional services, such as rideshare matching, were valuable, both for their obvious program support role and as a foundation for cooperation and coordination in TDM efforts. These first two support elements were considered particularly necessary during program start-up.

Employers also mentioned the last two items, infrastructure improvements and financial inducements, but with less urgency and, likely, less expectation that they would be provided.

In light of the "second tier" nature of these measures, public agencies may want to consider whether they are feasible, given fiscal constraints. It is certain, however, that the inclusion of measures from the last two categories would firmly establish what employers referred to as a supportive "regional climate" for TDM. By embarking on a strong support program that includes measures from all four categories, public agencies create a high profile and awareness of TDM throughout a region, extending to all segments of the population.

Both employers and public agency representatives cited another area in which public agencies must play a leading role: clarification of public responsibilities for TDM and coordination of TDM policies and transportation planning-related activities with land use and development regulations. Employers expressed a desire for clearer definition of responsibilities for the various agencies that engaged in TDM activities. Their preference was for a single agency that administered all TDM activities within a geographic area, or for effective internal coordination by various agencies to offer seamless support to employers.

Survey respondents and focus group participants also identified a need for public agencies to develop a comprehensive view of TDM and its role in future policies on land use, parking, taxes, and other government functions. This presents a difficult challenge, given the many factors that influence the development of such policies and the variety of groups involved in policy decisions in a region. It should also be noted that regional equity is a key issue in this context, and that if policies are enacted or encouraged in one jurisdiction, efforts should be made to make those policies uniform across the region.

## **B. How Public Agencies Can Be Catalysts for Program Development**

The research also explored ways in which public agencies could spark employers' interest and action in TDM programs. The survey identified seven reasons why employers implemented TDM programs:

- comply with a legal requirement
- for employee assistance
- resolve traffic-related concerns
- to be a good neighbor
- ease significant worksite relocation and consolidation
- manage workforce growth
- satisfy economic considerations

Of these categories, many public agencies would already be directly involved in those involving a legal requirement and relocation/consolidation. Legal requirements can come in many forms, from a municipally-mandated trip reduction ordinance to a statewide employee commute option (ECO) requirement. Relocations and worksite consolidations can involve public agency

interaction, especially if the site is new or expanding, through developer trip reduction requirements. Such interaction can result in negotiated agreements between the local jurisdiction, the developer and the employer to mitigate vehicle trips associated with the expansion or consolidation.

The other categories cited do not, by definition, require public agency interaction. It is possible, however, that the number of voluntary programs could be increased if the "regional climate" strongly supports TDM. Indeed, several of the employer survey respondents indicated that they had initiated their TDM programs as a result of a tangential connection to a regional ridesharing organization or some other transportation-related public agency. That is to say, employers learned about TDM through a public support program and were not previously aware of it as a general policy initiative or as a set of programs directed primarily at them.

This reinforces the need for and the potential benefits of information, training, and guidance. By expanding outreach efforts to employers, public agencies might greatly increase the number of voluntary employer programs. In addition, a wider public education and information campaign can result in a more aware employee population. Such a situation is already substantially in place in the Seattle area, where the regional education level has been very high and employees often suggest to employers the kinds of measures they want to see implemented as part of TDM programs.

A final issue related to public agencies being catalysts for employer program development is that public agencies and governments can be role models for other employers. By undertaking significant internal TDM efforts for their own employees, public agencies can both help to create the supportive "regional culture" mentioned above, and serve as an example to private employers.

### **C. The Appropriate Mix of Regulation and Guidance**

The employer surveys and the focus groups explored employers' feelings on the relative mix of regulation and guidance needed to foster effective TDM program development. Although the level of guidance was generally higher in areas where regulations require employers' participation in TDM, employers felt it still was insufficient. They also felt that public agencies could do more to make TDM an attractive choice for employers. These comments and concerns seem to indicate that a key to successful programs is a greater emphasis on TDM benefits and a lower level of regulatory requirement, that is more "pull" and less "push". Recent US EPA policies, which give states implementing CAAA mandated ECO programs more flexibility in what is or is not required of employers, echo this thought.

Employer and public agency experience with Regulation XV in southern California has made it clear that the way in which TDM is implemented on a regional level is extremely important.

Despite many employer-recommended changes to Regulation XV, the climate for TDM has remained mostly adversarial. Employers in the region still regard TDM as a burden. Many have been particularly rankled by the use of average vehicle ridership (AVR) as the sole target measure, and the occasional stipulation of which strategies must be used.

The desire among employers seems now to be for greater program flexibility, primarily in the form of greater leeway in deciding which strategies to use, how to package them, and especially how to evaluate their success. This may equate to a lesser reliance on strict benchmarks such as average vehicle ridership (AVR) and a greater emphasis on more subjective evaluation techniques. States that are considering and/or beginning the implementation of ECO statutes in the wake of the Clean Air Act are encountering similar difficulties in establishing performance criteria and satisfactory measures of program success.

It should be noted, however, that in a more flexible regulatory environment, employers will need a greater level of guidance to arrive at the combination of strategies that can provide cost-effective demand management in their particular situation. Public agencies will need to provide a continuing stream of current information and guidance. In addition, although flexibility suggests a lessening of public agencies' influence in the design of employer programs, training of staff and information campaigns may offer the public sector opportunities to disseminate consistent guidance. Training for ETCs and TMA staff may prove an effective forum for suggesting appropriate measures and setting a general tone of cooperation between employers and public agencies.

#### **D. Future Areas for Employer/Public Agency Cooperation**

One area of future employer-public agency cooperation may be on tax credits and cost sharing programs that will encourage employers to implement more incentive-based measures and programs, which are generally regarded as the most effective TDM measures. Employers clearly have an interest in changes to the tax code that will reduce the cost of implementing effective measures. Several states, such as California, New Jersey, and Connecticut have enacted or are in the process of enacting tax credits for employer-based TDM programs. Evaluation of the impacts of these programs may offer greater understanding of the impacts of such assistance and provide a basis for further cooperation between employers and public agencies.

If experience in California with Regulation XV is indicative, the use of tax credits or other financial instruments to encourage the formation and more effective implementation of TDM programs may provide a way to avoid the difficulty in implementing effective TDM programs. Those most involved with Regulation XV programs noted that it often took several rounds of implementation and regulatory evaluation (with missed or impending targets) to prod employers to undertake more substantial, incentive-based strategies (which most used only as a last resort).

Targeted tax credits can help to eliminate contentious, time-consuming wrangling and make incentive-based measures more desirable, leading to faster and more widespread implementation.

A second important area for cooperation was briefly mentioned earlier: training of ETCs and TMA staff. Employer input could be valuable in the creation of classes and training materials tailored to specific worksite situations. Public agencies also can use such sessions to provide targeted guidance to commute management professionals. The give and take which accompanies the creation of ETC and TMA staff training courses could contribute to greater cooperation between public agencies and employers and help in the creation of a truly supportive "regional climate" for TDM.

Finally, the issue of flexibility is sure to be an active area of employer-public agency cooperation. The current trend with TDM is away from performance-based programs based solely on AVR and toward greater flexibility and negotiation.

#### **E. Implications of the Findings and How They Influence the Guidance Offered**

Taken together, these findings imply that public agencies might need to change how they approach employer-based TDM. First, employers seem to be indicating that they resent command-and-control regulatory imperatives that dictate strategies and measure their "success" solely against regional trip reduction goals for air quality improvement or congestion mitigation. Many of the focus group employers with "successful" TDM programs noted other reasons for engaging in TDM: provision of an employee benefit, resolution of site constraints (i.e. parking or other space limitations), and/or easing of local area congestion. Although employers often teamed "internal" motivation with "external" motivation, such as regional planning or environmental protection, the prevalence of internal motivation indicates that employers have not, by and large, been convinced that they should participate in TDM to advance community goals. Most are not and might never be very interested in them.

This does not mean public agencies should abandon classic trip reduction goals for TDM. Public agencies are not in the TDM business to provide employee benefits. They should encourage and support employer-based TDM only if such programs further public goals. But public agencies that understand this dichotomy will quickly realize that the best results for employer-based TDM will come by promoting TDM in terms that are relevant and persuasive to employers, such as enhanced employee recruitment, enhanced site access, "good corporate citizen" public image, and regulations (if applied at all) that offer flexibility in strategies and evaluation measures to suit individual employer situations.

Second, employers have indicated that they do not want to bear the entire responsibility for public-sponsored TDM. Employers expressed a need and desire for strong, tangible public

agency support to employer-based programs, in the form of information, regional services, infrastructure, and cost sharing. Employers are most willing to participate in TDM when public agencies act as true partners, rather than regulators. This suggests that public agency support not only eases the TDM burden for employers that currently engage in TDM, but also encourages others to join the effort.

Finally, employers indicated confusion about which public agency or group of agencies is leading the TDM effort and what role each agency plays. Employers cited overlapping roles, gaps in services, and conflicting public policies as problems in public-sponsored TDM activities. They seem more willing to participate in TDM when public agency roles are well defined and distinct and when they can receive answers and assistance with the fewest number of calls or contacts.

The three major issues noted above form the basic premises for the public agency guidance that follows:

- Public goals must drive agencies' consideration of TDM, but TDM efforts will be most successful if agencies motivate employers to participate for internal reasons, rather than to solve external, public goals.
- Public agencies that desire employer-based TDM results must visibly and tangibly support employer-based programs.
- Successful public support requires extensive coordination, communication, and cooperation of public agencies and private groups and clear definition of roles and responsibilities of each.

The guidance that follows this summary will provide public agencies with a framework, based on these premises, with which to determine if TDM makes sense in a particular region or jurisdiction, to choose strategies that offer the greatest potential for success, to implement strategies effectively and efficiently, and to evaluate and modify TDM programs to maximize local and regional benefits.