

# **Employer Technical Memorandum**

## **Table of Contents**

<b>Section</b>	<b>Page</b>
<b>I. Introduction</b>	
A. Research Undertaken . . . . .	I-1
B. Research Results . . . . .	I-2
<b>II. Summary of Research Efforts</b>	
A. Recap of Employers . . . . .	II-1
B. Research Methods . . . . .	II-3
C. Data Complexities, Completeness and Difficulties . . . . .	II-5
<b>III. Survey Results</b>	
A. Initial Analysis and Findings . . . . .	III-1
B. Analysis Conducted Following Focus Groups . . . . .	III-4
<b>IV. Issues and Needs Raised by Employer Focus Groups</b>	
A. Regulatory-related Issues . . . . .	IV-1
B. Institutional Relationship Issues . . . . .	IV-2
C. Issues Related to Measuring Costs and Benefits . . . . .	IV-3
D. Implementation-related Issues . . . . .	IV-9
E. Issues Related to the Role of Government Agencies . . . . .	IV-9
<b>V. Public Agency Support and Its Relationship to Employer Issues</b>	
A. Where Public Agencies Can Support Employers Most Effectively . . . . .	V-I
B. How Public Agencies Can Be Catalysts for Program Development . . . . .	V-2
C. The Appropriate Mix of Regulation and Guidance . . . . .	V-3
D. Future Areas for Employer/Public Agency Cooperation . . . . .	V-4

***TCRP B-4: Employer Technical Memorandum***

**VI. Conclusion and Areas for Further Study**

A.	Research Goals . . . . .	VI-1
B.	Public Agency Support Roles . . . . .	VI-2
C.	Measurement of Program Impacts . . . . .	VI-4

**Appendix: Employer Summaries**

	List of Surveyed Employers . . . . .	A-i
	Employer Summaries . . . . .	A-1
	Glossary of TDM Terms . . . . .	B-1

**List of Tables**

Table II-1	Employer Characteristics, with distribution and percent . . . . .	II-1
Table IV-1	Potential Alternative Goals and Performance Indicators . . . . .	IV-4
Table IV-2	Cost Considerations for Employer-based TDM Programs . . . . .	IV-8
Table VI-1:	Potential Alternative Indicators and Data Needs . . . . .	VI-6

## **I. Introduction**

### **A. Research Undertaken**

This document is one of several prepared as part of an in-depth employer and public agency survey and focus group research effort to explore factors leading to successful and cost-effective employer-based TDM programs, and to develop guidance documents that would assist employers and public agencies to develop more cost-effective programs. The research examined the influence of worksite and employer characteristics of employer-based programs, the TDM measures implemented, and the process used to select TDM measures.

First, 49 employers across the country were chosen for a detailed survey of their program experience. The sample was chosen to represent a variety of employer and program characteristics, but the sample was not random. It included programs with various levels of effectiveness, measured in terms of trip reduction, but it was chosen to over sample "effective" programs. The survey was conducted in person by a professional interviewer, at the worksite for each of the 49 employers.

The survey collected information on the employer's location and industry type, other employer and worksite characteristics, program costs, the measures they implemented, their reasons for beginning a TDM program, the tools and process they used to make TDM-related decisions, and their timing of measure implementation. The survey results were transferred to an electronic database and 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 the research review panel, 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 results and implications of the public agency survey will be explored further in the public agency guidance, to be provided as the culmination of the next task of this project.

## **B. Research Results**

It was not possible to establish conclusive relationships between program characteristics and TDM cost-effectiveness due to difficulties in measuring both program effectiveness and costs from the data available. Previous national employer-based TDM program studies have experienced similar difficulties. The significance of the research is that the survey results did, however, suggest that certain program characteristics were associated with successful programs. Additionally, the focus groups identified other results of interest about the roles employers would like public agencies to play in fostering effective employer-based TDM programs. Two findings were particularly significant:

1. *Employers appear to view the benefits and goals of their programs differently than public agencies.* Most employers cited employee benefits as vital to their programs, while public agencies were more focused on trip reduction and hard targets as program objectives.
2. *Public agency involvement appears to be an important factor in successful TDM programs.* Over half of the employers surveyed enjoyed a medium-to-high level of public agency interaction, indicating that expanded public agency roles can yield significant positive results.

This paper presents these and other key results and offers recommendations for future research on the topic of program cost-effectiveness. The balance of this paper is divided into five sections:

- *Section II: Summary of Research Efforts*  
This section 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 impacted the research.
- *Section III: Survey Results*  
Section III describes the survey analysis undertaken in the research 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.
- *Section IV: Issues and Needs Raised by Employer Focus Groups*  
This section discusses those issues raised by focus group participants about influences on their development of successful TDM programs. These issues

include regulatory-related issues, public agency institutional issues, costs and benefit measurement, program implementation issues, and issues related to the role of public agencies.

- *Section V: Public Agency Support and Its Relationship to Employer Issues*  
Section V presents ideas gleaned from the surveys and focus groups for more productive interaction of public agencies and employers in successful TDM programs. Four questions are considered: what public agency support do employers need?, how can public agencies be catalysts for successful programs?, what is the appropriate mix of regulation and guidance?, and what future areas exist for employer-public agency cooperation?
  
- *Section VI: Conclusions and Recommendations*  
This section presents recommendations drawn from the research regarding public agency support roles to foster more effective employer-based TDM programs. The section also discusses recommendations to encourage the collection of more and better information on program effectiveness and cost-effectiveness to allow conclusive future research on these topics.

## **II. Summary of Research Efforts**

This section summarizes the research procedures, including the methods used to select employers to be surveyed, the survey tool, and the format of focus groups. It closes with a discussion of the most important problems and limitations encountered over the course of the research effort.

### **A. Recap of Employers**

The employer-based research effort was centered on two activities: a nationwide interview of 49 employers engaged in TDM efforts and a series of focus group meetings in three of the regions where employers were surveyed. Because the goal of the research was to explore factors leading to cost-effective programs, the process used to arrive at the members of the sample was selective rather than random.

First, industry experts were asked to nominate employers whose programs were judged to be effective. Then, from these candidates, employers were chosen to fill a series of cross-characteristic "cells" to represent a broad range of employer types, sizes and locations. Significant effort was made to identify a sufficient number of employers in each cross-category to insure a minimum level of representation. Table II-1 shows the distribution of employers in each of six characteristic categories.

**Table II-1: Employer Characteristics, with distribution and (percent).**

<b>A. Employer Type (type, number, percent)</b>		
Education/Research	5	10%
Government/Agency	9	18%
Hospital/Health Care	6	12%
Manufacturing	10	21%
Professional Service	10	21%
Retail/Commercial	5	10%
Utility	4	8%

**TCRP B-4: Employer Technical Memorandum**

**B. Employer Size (size, number, percent)**

≤ 500	15	31%
500 to 999	3	7%
1,000 to 1,999	11	22%
2,000 to 4,999	9	18%
5,000 to 7,499	5	10%
7,500 +	6	12%

**C. Setting/Land Use (category, number, percent)**

CBD Core	6	12%
CBD Fringe	5	10%
Suburban CBD	9	18%
Business Park/Campus	17	35%
Suburban Strip	3	7%
Isolated Suburban/Exurban/Rural	9	18%

**D. Parking Availability (category, number, percent)**

Scarce	15	30%
Limited	18	37%
Ample	16	33%

**E. Legal Requirement (status, number, percent)**

Yes	33	67%
No	16	33%

**TCRP B-4: Employer Technical Memorandum**

F. Number of Years in TDM (category, number, percent)		
≤ 1	3	7%
2	7	14%
3 to 5	18	37%
≥ 5	21	42%

The final list of 49 employers interviewed was the result of the attempt to meet stratification criteria for a pool of "successful" TDM programs, including criteria such as program quality, geographic location, previous trip reduction impact, and availability of data. The sample was designed to over sample successful programs, in order to deepen the base of understanding of how successful programs achieved their effectiveness. This narrow focus and sample set allowed only a limited ability to compare successful programs with "unsuccessful" programs. A full list of employers, with brief case studies attached, can be found in the appendix to this technical memorandum.

## **B. Research Methods**

This research was designed to collect employer data on costs, benefits and travel impacts of TDM programs. With that data in hand, it was envisioned that employers would then be compared against each other in terms of their cost-effectiveness. Finally, the research was intended to provide guidance to both employers and public agencies on the kinds of measures and programs that could lead to a high level of cost-effectiveness.

Two basic tools were used to analyze employer-based TDM programs and their cost effectiveness: surveys and focus groups.

### **Employer Survey**

A sample of 49 employers in several regions of the country was chosen for an in-depth survey. Along with the companion survey of public agency officials, this formed the central effort of this study. Due to the complexity of the information to be gathered and the need for employer confidentiality, the research team decided to use the Gallup Organization, a nationally-respected survey firm, as the sole interviewing arm of the project. Over a period of two months in the spring of 1994, representatives of the selected employers were interviewed at their worksites. Data from the completed surveys were transferred to an electronic database and analyzed.



The survey took about ninety minutes to administer, and incorporated seven different parts:

**Employer Background and Demographics**

1. *Employer Characteristics:* Type of employer, location (whether CBD, suburban business park, exurban/rural, etc.), and the level of transit and pedestrian accessibility and nearby services.
2. *Employment Information:* Number of employees, breakdown among various employment categories (managerial, professional, sales, etc.), and total number of employees on site.
3. *Locational/Site Characteristics:* Ownership arrangement of site, length of time at site, relative employee capacity, and parking availability.

**Program Background**

4. *Program History & Evolution:* How and why the program was begun, and which measures were used over time and when. A total of 37 measures were listed on the survey. An attempt was also made, where appropriate, to identify distinct phases in programs in order to track their evolution in terms of measures and emphasis over time.
5. *TDM Program Planning Process:* How measures were selected, who was involved, and how employers developed and weighted selection criteria.

**Program Results**

6. *Travel Impacts and Costs:* Pre- and post-program and -phase travel data for employees and what the program as a whole cost during each phase in relation to the resulting vehicle trip rate.
7. *Program Costs and Benefits:* More detailed look at costs, both direct and indirect (or avoided), and benefits, whether quantifiable or non-quantifiable.

As noted, under parts six and four of the survey, particular attention was given to examining the cost-effectiveness of the programs and to the phasing of measures, including how and why employers chose various measures in their programs and how programs evolved over time. The survey provided a valuable source of updated information on employer-based programs. The complexities of the employer-based data are discussed later in this section.

**Focus Groups**

Focus group meetings were the second tool used in the research. Subsequent to the initial analysis, focus group meetings were held in Seattle, Washington, DC, and Miami. Each

focus group meeting consisted of separate 3-hour sessions with employer and public agency representatives. Focus group participants were briefed on the purpose and scope of the study, the research approach, and the key findings. Each was then led through a facilitated discussion designed to elicit feedback on the procedures and findings and to solicit suggestions for converting the results into final products.

The focus groups discussed a wide range of topics, including:

- The grouping of measures
- Interaction of variables
- Trip reduction performance
- Validity of the source data
- Corroboration of findings with experience
- Trip reduction as the sole performance measure

Several of these areas of discussion are examined in more depth in the following part of this section.

### **C. Data Complexities, Completeness and Difficulties**

Focus group participants and reviewers cited three main areas of difficulty with the analysis procedures and the results:

**Interaction of Variables:** Since each variable was analyzed separately during the initial analysis, a number of the focus group reviewers were concerned that the interaction of variables was not accounted for. Particular criticism was directed at the lack of information on the relative importance of variables in explaining program success.

**Analysis of Trip Reduction Performance:** The use of 1990 Census of Transportation Journey to Work (CTPP) data was particularly questioned. Some reviewers objected to its use because it represents a composite of industries, employer sizes, and locations. They felt it was not sufficiently detailed to allow for a reasonable comparison of vehicle trip rates in specific situations.

**Trip Reduction as the Sole Performance Measure:** Some employers participating in the focus group sessions noted that trip reduction was often a fairly low priority in the initiation of their programs. Other objectives included adhering to a corporate ethic or dealing with a particular work force or site-related constraint. Public agency representatives, on the other hand, were generally comfortable with the use of trip

reduction as the benchmark.

A fourth issue raised, although less frequently than the three noted above, was that the research described results with a level of exactness not generally supported by the data. Employers do not exist in vacuums and cannot be easily analyzed using standard scientific methods with control groups.

To establish "true" vehicle trip reduction values, accurate before or baseline conditions must be accounted for. Within the context of behavioral research, control groups can be established, or the actual before condition can be documented to define the true before or "null" condition. Unfortunately, the majority of employers involved in TDM have not documented the base or before condition, which has made it extraordinarily difficult to calculate a change in mode use to an employers work site. Establishing control groups within the context of this type of research seems to be impractical.

The research design and data collection/complexity issues noted above made it exceedingly difficult to estimate, with worksite-specific accuracy, the actual vehicle trip reduction achieved by individual employers surveyed in this research.

### **III. Survey Results**

The initial analysis of employer survey results, following directly from the original design of the research, attempted to draw definitive relationship and conclusions as to influential factors in trip reduction and cost-effectiveness of the employer-based TDM programs contained within the survey sample. This section of the memorandum revisits the key findings that emerged from that initial analysis of the survey data.

#### **A. Initial Analysis and Findings**

The employer survey results were initially analyzed with the following objectives:

- Exploration of the types of TDM measures incorporated by employers in their programs, and then the classification of these employer programs into four program types, as determined by the mix of TDM measures emphasized by employers. (Refer to pages III-2 and III-3 for a full description of this employer TDM program classification).
- Assessment of the transportation effectiveness of the surveyed employer programs as measured through net vehicle trip reduction (VTR), and relationship of trip reduction to the type of program and characteristics of the employer and its geographic and motivational setting.
- Computation of the costs and cost savings associated with the employer programs, and the relationship of those costs with type of program and its transportation performance.
- Exploration of the decision-making processes used by the employers in designing and modifying their programs, and association with the resultant trip reduction and economic performance.

Findings for each of these analyses are summarized below.

#### **Measures Selected by All Employers**

A first step in the analysis was to determine which TDM measures and kinds of measures were implemented by the surveyed employers. The incidence of individual measures grouped under the following headings was examined:

*Support Measures:* These were services and activities that created a favorable environment for alternative mode use through the provision of information,

promotion, or other general assistance. Measures most frequently implemented under this category included: rideshare matching (implemented by 59% of employers), employee transportation coordinators, or ETCs (47%), and marketing events/promotions (41%). Other, less frequently used measures included flexible schedules (6%) and dependent care (6%).

*Alternative Work Schedules:* Strategies that change the time of day during which the trip to the worksite is taken or eliminate the trip entirely were grouped under the alternative work schedule category. This category included flexible work hours (implemented by 45% of employers) compressed work weeks (41%), telecommuting (27%), and staggered work hours/shifts (10%).

*Transportation Services:* Transportation services included tangible activities and measures such as guaranteed ride home, or GRH (offered by 57% of employers), preferred parking (51%), and bike racks and lockers (47%). Less frequently employed measures in this category included contract transit services (8%) and site improvements for transit (6%).

*Economic Incentives:* Incentive strategies offered tangible monetary encouragement to employees to use alternative modes. Incentives generally came in two forms -- subsidies for alternative modes and fees for SOV use, most frequently including transit subsidies (offered by 73% of employers), parking fees (33%), and vanpool subsidies (29%). Less frequently used incentives included parking cashout (4%) and transportation allowances (4%).

In addition to identifying frequently offered individual measures, the research examined the overall emphasis of the surveyed employers' programs. This analysis step classified the employers into four categories, as follows:

*Support and Work Hours:* Programs here emphasized support services and work hours strategies only, and did not include financial measures or transportation services. Although nearly all employers included support measures in their programs, only 12% of the employers offered them exclusively or with only work hours as an additional measure.

*Transportation Services:* Programs in this category were typified by their inclusion of at least one major transportation service (most often in addition to support and work hours measures), such as a vanpool or subsidized transit service program. Eleven percent of programs were primarily transportation service-oriented programs.

*Incentives:* Employers in this category had programs that may have included support

and work hours-related measures, but also at least one major pricing incentive (subsidy) or disincentive, such as a parking fee. The majority of programs, 55%, were categorized as incentive-based programs.

*Services and Incentives:* This final classification contained comprehensive programs that provided a wide range of support services, transportation services, and major incentives. Twenty-two percent of the programs fell into this combination category.

Due to the difficulty in identifying a universally accepted benchmark against which to compare program performance, it is impossible to present absolute trip reduction results from the analysis. Programs did vary, however, in their relative effectiveness. Programs that relied primarily on transportation services showed modest trip reduction, while the incentive-focused programs and service and incentive-focused programs averaged much higher effectiveness. The lowest trip reduction was associated with support and work hours only programs.

Results presented below fall under the same caveat as mentioned directly above. Although the dispute over an appropriate benchmark was not truly resolved, a level of consensus did emerge about the general ordinal nature of the results, if not the point comparison of programs. Focus group participants generally corroborated the findings, and it is the task of the remainder of this section to outline the basic results of the employer survey and begin the process of moving the analysis a step further.

### **Reasons for Engaging in TDM**

The survey also asked the 49 employers to indicate the reasons they first implemented their TDM programs. Employers cited seven reasons for initially engaging in TDM. Some employers noted two or more reasons:

- a legal requirement (cited by 67% of employers)
- a desire for employee assistance (35%)
- traffic-related concerns (31%)
- desire to be a good neighbor (20%)
- significant relocation (12%)
- manage workforce growth (10%)
- economic considerations (6%)

The three reasons associated with the highest trip reduction were economic considerations, employee assistance and legal requirement. Those associated with the lowest trip reduction were response to traffic concerns, desire to be a good neighbor, and to assist in managing growth at the worksite.

### **Measure Selection Process**

Employers cited many tools and factors used in the process to select measures during the lifetimes of their programs, including:

- employee input (cited by 47% of employers)
- public agency guidelines/reports (47%)
- corporate policy/management decision (39%)
- internal study (35%)
- professional judgment (27%)
- consultant recommendation (25%)
- training/reports/conferences (14%)
- external studies (10%)
- union agreement (4%)

High trip reduction programs were associated with employers who used agency guidelines, internal study, and professional judgment. Programs that used corporate policy and external studies to guide their selection processes experienced the lowest levels of trip reduction.

### **Principal Selection Criteria**

The criteria that surveyed employers used for the selection of measures throughout the lifetime of employers' TDM programs also were examined. There were six in all:

- employee acceptance (cited by 47% of employers)
- benefit/cost (43%)
- legal requirement (43%)
- judgment (37%)
- other economic considerations (27%)
- minimal level of effort (8%)

Although employee acceptance was the most frequently cited criterion by all employers, the influence of a legal requirement (just 4% less at 43%) in specifying particular measures was associated with the highest trip reduction. The least "successful" criterion was the use of "other economic considerations."

### **B. Analysis Conducted Following Focus Groups**

Both the employer and public agency focus group discussions raised issues related to public agencies' roles in employer-based TDM programs. Survey data analysis subsequent and

partially in response to the focus group discussions was undertaken to examine the level of public agency interaction in the employer's program and the benefits employers associated with their programs.

### **Public Agency Interaction**

The survey did not include a question that directly asked employers how involved public agencies were in their programs. It did, however, include other indications of such involvement, such as the use of public agency-provided guidelines in formulating TDM plans, public agency-sponsored training programs for ETCs, cooperation and funding agreements with local transit operators and governments, and direct provision of TDM support services such as GRH or ridematching.

Based on this information, the surveyed employers' programs were assigned a level of interaction of:

- *none* (8% of employers)
- *low* (19%), examples of low involvement were those employers that had some agency guidelines, contact with transit providers (perhaps with transit info days, etc.), and/or inclusion in a regional rideshare matching program
- *medium* (26%), in addition to the more basic support provided low involvement employers, employers in this category received public agency guidance and training for staff.
- *high* (47%), employers who were highly involved with public agencies, either in funding transit subsidy programs or in providing or funding employer- or area-specific transportation services like shuttles or vanpool programs

As shown, the level of public agency interaction was primarily in the medium to high range overall. This might suggest a connection between program success and public agency interaction or could simply reflect a generally high level of public involvement in the areas where employers were surveyed. The generally high level of public agency interaction also could be indicative of the regulatory nature of the TDM programs in the sample; thirty-three of the 49 employers cited a legal requirement as one reason they engaged in TDM.

### **Employer-defined TDM Benefits**

Subsequent analysis also explored employers' perceptions of the benefits they received from their programs. Surveyed employers tended to identify six kinds of benefits of their TDM programs:

- meet a legal requirement and/or provide an employee benefit (cited by 37% of



employers)

- provide employee benefit and/or raise awareness (16%)
- improve access and/or respond to a site-specific constraint (16%)
- meet a legal requirement (13%)
- reduce Vehicle Trips (10%)
- improve corporate image and/or set an example (8%)

These results show that most of the surveyed employers with successful programs view the benefits of TDM differently than do public agencies. While public agencies frequently mention trip reduction as the goal, only 10% of the employers consider this the primary benefit, while only 13% consider meeting a legal requirement as the only benefit.

The employers included in the survey are much more likely to cite an internal benefit. Over half (53%) of the employers in the sample recognized the TDM program as an employee benefit (either solely, or in conjunction with other benefits). This suggests that public TDM promotional efforts will be most effective if they allow for the consideration of a broad range of benefits, rather than focusing exclusively on the narrow benefit of trip reduction.

#### **IV. Issues and Needs Raised by Employer Focus Groups**

This section of the memorandum discusses issues raised by focus group participants, related to employers' development of successful and cost-effective TDM programs.

##### **A. Regulatory-related Issues**

Employers participating in the focus groups encountered regulatory requirements in two basic ways:

- (1) As a citywide or regional trip reduction ordinance (TRO) or employee commute option (ECO) requirement, in which all employers of a certain size (usually firms with 100 or more employees) were required to implement trip reduction plans and to attain a specific trip reduction target (usually expressed in terms of average vehicle ridership or another measure of vehicle utilization).
- (2) As a development impact mitigation requirement, in which developers (and/or employers) were required to implement a trip reduction strategy to avoid negative impacts from new office or commercial development.

Although the survey results, presented in Section III, suggested that the level of public agency interaction was generally medium to high among the 49 employers surveyed, they did not indicate the quality of that interaction. In focus group discussions, a primary concern raised by many employers was their lack of knowledge of how TDM goals were set and how employers could attain those targets within the time allowed. In short, most employers cited a lack of information and public agency support.

This last concern is important. TDM requirements and employers' TDM targets often are legislatively set. Employers need assistance to understand why the regulation is necessary, how the target was set, what results are possible in various employment settings, and what kinds of strategies will enable them to achieve these results most cost-effectively. Without such guidance, employers might be unable or unwilling to implement an effective TDM program.

For employers who embark on TDM voluntarily, the story is somewhat different, although the need for public agency guidance and assistance remains. Focus group discussions indicated that employers who are predisposed to engage in TDM need to be encouraged by public agencies to keep and effectively channel their enthusiasm. If employers are not encouraged to continue and expand their efforts, their original willingness to implement TDM can be lost.

## **B. Institutional Relationship Issues**

Another significant outcome of the focus groups was an indication of confusion over which public agencies were actually in charge of, or responsible for, implementing TDM. The focus groups specifically identified two areas of confusion:

- Public agency efforts to support TDM are generally not coordinated in cohesive programs and funding packages. Directives for employers to achieve trip reduction goals are not accompanied by consistent policies regarding transit services and appropriate support services.
- Support services, such as rideshare matching, promotions and employee transportation coordinators (ETCs), are often engaged in by multiple agencies and are not commonly coordinated or targeted to specific areas and groups of employers.

These concerns point to a need for clearer delineation of public agency support roles for TDM. This clarification will be a central part of the anticipated public agency guidance, but it may be necessary to go beyond simply clarifying roles to initiating a discussion on what those roles should be for various agencies. This debate is currently on-going in several states, as local and state agencies wrestle with the desire to encourage TDM in a cost-effective manner without functional and programmatic overlap.

In focus group discussions, participating employers cited a desire to see all support services centralized in a single agency, what might be referred to as a "one-stop" provider of a range of related TDM services. Whether such an agency would be an entirely new organization, an existing agency that pulled all of the TDM-related services under one roof, or an agency that provided an invisible coordination function is a matter that must be resolved in each individual regional or local area context.

However, response to the request by employers that TDM roles and responsibilities be rationalized, and to some extent harmonized, may be hampered by the process that led to the implementation of a regulatory framework in the first place. Conflict over who is responsible for what in the TDM arena may be influenced by several factors, including insufficient communication between agencies about on-going projects, an unwillingness to relinquish control for current TDM activities, and a potential lack of consensus over the aims of TDM itself. The forthcoming public agency guidance will start with this process in mind, concentrating on the sources of TDM regulation and efforts in general, and working forward to a comprehensive institutional approach to providing the support services and guidance necessary to make such programs and efforts successful.

A final issue related to institutional relationships result from the dynamic involved when transportation services or subsidies become employee benefits. In a unionized environment, this can result in a significant lessening of the employer's ability to engage in labor negotiations with maximum flexibility. Although the percentage of the national work force that is unionized has fallen and will continue to fall over time, this can still be a significant issue when large professional unions are involved at worksites that are implementing TDM. A good example might be a municipal or white collar union at the city or state level. It is unclear at the close of this research effort whether the question of TDM becoming an entrenched benefit is significantly hindering the wider application of employer-based TDM programs.

### **C. Issues Related to Measuring Costs and Benefits**

Data from both the 49 employer surveys and the subsequent focus groups identified a general failure to define costs and benefits of TDM programs. A major concern was the question of which benefit and cost indicator(s) should be used. Taking issues raised about benefits first, one question employers asked several times was:

- Should there be a single barometer of program success, such as an increase in the average vehicle ridership (AVR) or a decrease in the vehicle trip rate (VTR)?

Implied in the question is the assumption that a single indicator such as AVR is too limited a measuring stick for the true range of benefits employer-based TDM might produce. Although most employers attending the focus groups were comfortable with the concept of trip reduction as a major goal of TDM, many were unconvinced that it should be the only, or even most important, way of measuring program effectiveness. Many had become involved in TDM for reasons other than vehicle trip reduction and voiced the opinion that more subjective considerations such as improved employee productivity or morale or enhanced local community-oriented benefits also should be considered in evaluating the program's worth. These other benefits are more difficult to quantify, but are still important and may even be decisive for many employers. Table IV-1 lays out a partial listing of potential alternative indicators of program success:

**Table IV-1: Potential Alternative Goals and Performance Indicators**

Indicator	Description and Potential Measurement
<p>Improve Corporate Image</p>	<p>Several of the surveyed employers had recognized that their corporate image was less positive than they preferred and felt that implementing a TDM program was one potential way of turning that around. Employers in this category may use favorable press articles or better relations with local government officials to indicate the relative success of their programs.</p>
<p>Employee Benefit</p>	<p>Employers may view TDM primarily as an employee benefit, like health care, disability insurance or the provision of free parking. In this case, the measurement of success is self-defining: Is the employer providing a real benefit to its employees?</p>
<p>Parking/Space Management</p>	<p>Employers may want to implement TDM as a way of controlling growth at a workplace that threatens to outstrip space that is currently available. Telecommuting programs can limit the office space required by a given number of employees by encouraging sharing of available offices. All TDM measures should also contribute to lowering the demand for on-site parking. Success would be defined here as the value of space (either parking or office) not required due to the TDM program.</p>
<p>Respond to Local Congestion/Construction Projects</p>	<p>Measurement of this objective may be closely related to a traditional AVR or VTR, but the target is set internally and the program is entered into voluntarily, and may be measured much differently; for instance, through the maintenance of an on-time arrival rate throughout the period of construction, or the reduction in late arrivals due to reduced local congestion.</p>

**TCRP B-4: Employer Technical Memorandum**

<p>Good Neighbor</p>	<p>To some extent, employers in this category are a step beyond those who are trying to improve their corporate image. Good neighbor motivations appeal to employers who have a sense of public responsibility, and may wish to view their TDM efforts in the light of emissions reduction or the promotion of healthier commuting habits.</p>
----------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

The primary cost-related issue aired by employers was the lack of an appropriate methodology for assessing costs. Employers mentioned that, although benefits such as improved employee morale and productivity were important, they were difficult to measure and generally did not enter into the cost/benefit equation. In addition, some employers disagreed with the comparison of program cost-effectiveness for employers that received revenue (such as from an employee parking fee) and those that did not. Some felt that revenue should be included in the cost calculation, while others were opposed to using it and felt that it should be treated differently because not all employers were able to use such a measure.

Above all, what employers wanted to see in terms of guidance was a methodology to estimate their program costs realistically. The methodology itself might be a computer spreadsheet or a series of paper worksheets, but the aim should be to establish a consistent, uniform, and concise framework that could be used by employers of different sizes, in different industries, and settings. This need for cost methodology guidance significantly outweighed the call for further guidance on the potential travel impacts of various TDM measures and programs.

**Description of the Employer Cost Calculation Spreadsheet**

Although the survey instrument itself attempted to elicit estimates of program costs from the sampled 49 employers by stratifying them into various categories (e.g., administrative, marketing/support), the results of the survey were generally disappointing in this respect. Few employers had a firm grasp of their overall costs or cost structure, and the reporting of costs was greatly hampered by a lack of uniformity across estimates. That is to say, employers clearly calculated their costs differently from one another to the degree that nearly all of the cost data became questionable as a tool for comparison. To some extent, this was to be expected. Employers participating in the survey had not been previously exposed to the survey's scheme for grouping of costs, and were therefore unprepared to provide accurate cost data in a form that was useful for the purposes of the project. The spreadsheet printout, included as Table IV-2 at the end of this section, attempts to lay out what might be considered the most essential cost items for employers themselves to consider when

compiling an estimate of annual cost for their TDM programs.

*Administrative Costs:* The spreadsheet breaks out administrative costs into eight categories:

- **Staffing** -- Number of hours or percentage of full-time salaried staff used to provide direction and facilitate the program, multiplied by the hourly rate or annual salary rate of the staff employed.
- **Space/Office** -- Square footage of office space either saved (primarily in the case of telecommuting programs) or required (if office space is already extremely tight) as a result of the TDM program. This cost category would apply only to those employers who rent the space either saved or required.
- **Space/Parking** -- Reduction in demand for a given number of parking spaces multiplied by the cost of providing that space. This cost category would apply only to those employers who rent or lease parking.
- **Equipment** -- Number and types of office machines purchased multiplied by the cost of those pieces of equipment. This cost category relates primarily to telecommuting programs which would have to purchase new equipment to allow employees to work out of their homes. It could also apply to computers purchased to facilitate a ridematching program. Finally, the few cases in which facilities are built to improve the connections between alternative mode and the workplace, or to improve the attractiveness of a particular mode (showers and bike racks, or pedestrian paths), would be accounted for here.
- **Consultants** -- Specific fee for service contracts may be entered into with consultants in either the formulation or implementation of employer-based programs.
- **Training** -- Staff may want or be required to attend training courses offered by the regional implementing agency or a private group on the planning and administration of employer-based TDM.
- **Membership Fees** -- Should the employer be a member of a transportation management association or a similar organization, those fees would be accounted for under this cost category.
- **Tax Liability Incurred** -- The offer of an alternative mode subsidy (see below under "Financial Incentives") incurs not only a cost for the incentive but also a tax liability which must be assumed by the employer, depending on the purpose of the subsidy. The additional tax burden would be accounted for under this cost category.

*Marketing/Support:* Two cost categories are provided under the marketing/support heading. The first, materials, applies to printed brochures, schedules and fliers, designed to help raise the awareness of employees about and provide information on TDM measures offered by the employer. The second category, promotions/gifts,

includes the value of services or cash offered to employees on a one-time only basis to encourage their participation in their employer's program.

*Transportation Services:* Three cost categories are listed under transportation services -- service provider contracts, vanpool program support and other vehicles for employee use. All three could be expanded further, and each employer may find different ways to break out the cost incurred through contracting for transportation services. Ultimately, however, all categories under this heading should be easily calculated as long as the employer is not directly operating any of the services itself, i.e. the employer has a fixed price contract, or simply pays the insurance and maintenance on a regular basis to an outside provider or repair shop.

*Financial Incentives:* The first four categories under this heading -- transit, vanpool and carpool subsidies, and transportation allowances -- are roughly analogous and are calculated in the same manner: level of the subsidy or allowance multiplied by the number of employees participating in the incentive. Parking fees are somewhat more complicated, since they can be based on vehicle occupancy such that a drive-alone commuter would be the highest fee, and those with higher occupancy could be given a discount. Calculating parking fee revenue will therefore require some additional stratification, depending on the particular employer's situation. SOV fees would operate in the same manner, although the fee would, by definition, be uniform and applied to all commuters who drive alone, without regard for where exactly they park their vehicles (on company property or elsewhere).

*Employee Relations:* The two categories listed under the employee relations heading - - recruiting/retainage and productivity -- are representative of the kinds of non-transportation benefits to which the surveyed employers referred during the survey and focus group process. In terms of recruiting and retainage, there will be a cost incurred in some cases: management will have to work harder and expend a greater amount of resources and staff time on recruiting and retaining employees as a result of the implementation of a TDM program. In other cases, however, the existence of a TDM program may make it easier for management to recruit and keep certain kinds of prospective employees. The same holds true for productivity costs, which may be a savings if employees are able to access the workplace more efficiently and save time, or a cost if they are forced into commuting arrangements that actually cost them time and money.



<b>Table IV-2 Cost Considerations for Employer-based TDM Programs</b>			
<b>Cost Category</b>	<b>Description</b>	<b>Items</b>	<b>Totals</b>
<i>I. Administrative</i>	<i>Ia. Staff Hours/Salary</i>	<i>Ia1. # of Persons or Hours</i>	
		<i>Ia2. Hourly Rate or Annual Salary</i>	
		<b><i>Ia3. Subtotal: Ia1 * Ia2</i></b>	
	<i>Ib. Space – Office</i>	<i>Ib1. SqFt of Office Space Saved/Req'd</i>	
		<i>Ib2. Cost per SqFt</i>	
		<b><i>Ib3. Subtotal: Ib1 * Ib2</i></b>	
	<i>Ic. Space – Parking</i>	<i>Ic1. # of Spaces Reduced</i>	
		<i>Ic2. Cost per Space (rental)</i>	
		<b><i>Ic3. Subtotal: Ic1 * Ic2</i></b>	
	<i>Id. Equipment</i>	<i>Id1. Pieces of Equipment or Hardware Purchased</i>	
		<i>Id2. Cost per Piece</i>	
		<b><i>Id3. Subtotal: Id1 * Id2</i></b>	
	<i>Ie. Consultants</i>	<b>Value of Contract on Yearly Basis</b>	
	<i>If. Training</i>	<b>Cost of Training Program(s)</b>	
<i>Ig. Membership Fees</i>	<b>Annual Fee/Rate</b>		
<i>Ih. Tax Liability Incurred</i>	<i>Ih1. Federal</i>		
	<i>Ih2. State</i>		
	<i>Ih3. Local</i>		
	<b><i>Ih4. Subtotal: Ih1 + Ih2 + Ih3</i></b>		
<i>II. Marketing/Support</i>	<i>IIa. Materials</i>	<b>Cost of Printing/Distribution</b>	
	<i>IIb. Promotions/Gifts</i>	<b>Cost of Purchase/Distribution</b>	
<i>III. Transportation Services</i>	<i>IIIa. Service Provider Contracts</i>	<b>Value of Contract</b>	
	<i>IIIb. Vanpool Program Support</i>	<b>Cost of Maintenance/Insurance</b>	
	<i>IIIc. Other Vehicles for Employee Use</i>	<b>Cost of Maintenance/Insurance</b>	
<i>IV. Financial Incentives</i>	<i>IVa. Transit Subsidies</i>	<i>IVa1. Subsidy Level in \$</i>	
		<i>IVa2. # of Employees Enrolled</i>	
		<b><i>IVa3. Subtotal: IVa1 * IVa2</i></b>	
	<i>IVb. Vanpool Subsidies</i>	<i>IVb1. Subsidy Level in \$</i>	
		<i>IVb2. # of Employees Enrolled</i>	
		<b><i>IVb3. Subtotal: IVb1 * IVb2</i></b>	
	<i>IVc. Carpool Subsidies</i>	<i>IVc1. Subsidy Level in \$</i>	
		<i>IVc2. # of Employees Enrolled</i>	
		<b><i>IVc3. Subtotal: IVc1 * IVc2</i></b>	
	<i>IVd. Transportation Allowances</i>	<i>IVd1. Allowance Level</i>	
		<i>IVd2. # of Employee Enrolled</i>	
		<b><i>IVd3. Subtotal: IVd1 * IVd2</i></b>	
	<i>IVe. Parking Fees</i>	<i>IVe1. # of Spaces Utilized</i>	
		<i>IVe2. Fee per Space (can vary)</i>	
		<b><i>IVe3. Subtotal: IVe1 * IVe2</i></b>	
	<i>IVf. SOV Fees</i>	<i>IVf1. Level of Fee in \$</i>	
<i>IVf2. # of SOV Commuters</i>			
<b><i>IVf3. Subtotal: IVf1 * IVf2</i></b>			
<i>V. Employee Relations</i>	<i>Va. Recruiting/Retainage</i>	<i>Va1. Reduction in Staff Time Spent Recruiting</i>	
		<i>Va2. Hourly Rate or Salary</i>	
		<b><i>Va3. Subtotal: Va1 * Va2</i></b>	
	<i>Vb. Productivity</i>	<i>Vb1. Time Savings in Hours</i>	
		<i>Vb2. Hourly Rate or Salary</i>	
		<b><i>Vb3. Subtotal: Vb1 * Vb2</i></b>	
<b><i>Total Program Cost</i></b>			

#### **D. Implementation-related Issues**

The single most important issue related to implementation of successful programs was the need for employee input to and acceptance of various TDM measures. The focus groups in particular pointed to a supportive "corporate culture" as a key component in a successful program. Much of the influence of employee input into the TDM process can be traced to the underlying employer/employee relationship. In most cases, those employers surveyed were quick to cite "employee reaction" or "employee input" as a deciding factor in incorporating or removing measures from a program. The conclusion to be drawn is that, in order to be successful, employer-based programs must respond to the needs of employees and create an environment in which they are encouraged to provide input.

Another relevant aspect of judging a program's success is the manner in which employee support or acceptance is gauged, because the method of evaluating employees' reaction can influence the result. Different methods, such as formal surveys, "word of mouth" assessment, or assessment from employee representatives, and others can produce varying, even conflicting, results of a program's level of acceptance among employees. This can be most evident when a professional organization or union is involved in the process. TDM support measures are often considered to be distinct employee benefits that must be balanced against other contractual benefits. This can frequently make the implementation of employee programs more difficult, or at least more involved than otherwise might be the case.

A final issue raised by some employers concerned the involvement of middle-level managers. One employer in particular found that, despite the heavy involvement of those at the top of the organizational chart, many middle managers were unable or unwilling to effectively implement the program at the employee level. Often this was a strictly organizational problem: middle managers were not brought into the process and properly informed of their roles and responsibilities and so were unable to contribute. In other cases, however, the problem went beyond being uninformed to being unconvinced, and resulted in a dismissal of the effort on the grounds that it was too great an added responsibility (especially in relation to the potential benefits) or simply unnecessary and futile as an endeavor. Some organizations handled this issue by mandating a certain level of manager-participation (whether it be by personally commuting by a certain mode a given number of days per month, or some other requirement), while others avoided such demands and tried other means of persuasion or attempted to implement the selected TDM measures through other means.

#### **E. Issues Related to the Role of Government Agencies**

Several of the issues raised by employers related to their expectations for public agency support. Employer focus group participants cited the following needs/desires for public

agency involvement in TDM:

- To support tax code changes -- credits and/or other instruments such as the ability to write off TDM-related expenses (transit subsidies, for examples) as business expenses -- to minimize the financial burden of employer-provided incentive programs, and to increase the potential for implementing more effective, incentive-based measures.
- To establish a supportive "regional culture" to promote TDM concepts, through education, demonstration projects, and other regional programs. This issue also has what might be termed a "level playing field" aspect in that all local jurisdictions (whether counties or cities) within a region should sign off on the level and emphasis of TDM activities in order to ensure that there are no cross-jurisdictional inequities associated those efforts.
- To promote local land use and development policies that are consistent with TDM, i.e. to manage growth and the accompanying traffic congestion efficiently. It may be necessary to initiate a reordering of regional and local priorities to make this happen in a way that does not disadvantage certain jurisdictions within regions.
- To enhance the level of transit service, especially for suburb-to-suburb commuting trips, and to expand the scope of local operators' activities to include regional mobility/access questions in their strategic planning.

While these issues highlight employers' perceived needs for public agency support, many of the other issues raised by the survey and focus group results also suggest that by supporting employer-sponsored TDM efforts and providing a high quality level of interaction, public agencies can foster an environment that encourages more employers to implement TDM programs and to heighten the level of their programs.

The following section suggests possible public agency support roles for employer-based TDM programs. Whether there is a specific regulatory requirement or not, public agencies should be aware that employers who are engaged in TDM need guidance and support. This is not to say that public agencies have to hand-hold employers through the TDM selection and evaluation process or adopt a command-and-control approach, but it does imply that public agencies can respond to these twin needs by coordinating public efforts and making them more understandable to employers.

## **V. Public Agency Support and Its Relationship to Employer Issues**

This section presents four general recommendations gleaned from the surveys and focus groups for more productive interaction of public agencies and employers in successful TDM programs. They are:

- what public agency support is most needed by employers?
- how can public agencies be catalysts for program development?
- what is the appropriate mix of regulation and guidance?
- what future areas exist for employer/public agency cooperation?

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

Employers and public agency representatives who participated in the focus groups were generally in agreement on four basic areas of support that were most needed:

*Information/Training and Guidance:* This category would include ETC training, general information and promotions for TDM programs, and program formation and evaluation guidance research and materials. It should be remembered that 61 % cited this kind of information and guidance from public agencies as a key elements in their decision-making process with regard to TDM.

*Basic Support Functions:* "Basic" support would include regional ridesharing networks and TMA formation and partial funding in key regional activity centers.

*Infrastructure Improvements Targeted at TDM:* Infrastructure is used broadly here as any physical transportation-related support measure, such as improved and expanded transit service, HOV lane construction, or the implementation of a bike/pedestrian path network.

*Financial Inducements:* Tax credits and other cost sharing programs to encourage employers to implement effective strategies would fall into this category.

These four areas of support are presented here in order of their relative importance as indicated by focus group participants' comments. The most essential needs were for better information from public agencies and a basic level of regional support. As noted earlier in this paper, many of the employers cited a 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 services, such as rideshare matching, were necessary, both as program support and as a foundation for cooperation and coordination in TDM efforts. Whatever the regulatory environment, public agencies need to provide a minimum level of information and guidance, particularly for program start-up.

The last two items, infrastructure improvements and financial inducements, also were listed by employers, 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 - the coordination of TDM policies and transportation planning-related activities with land use and development regulations. All survey respondents and focus group participants recognized this function as an essential element for the effective provision of all of the support categories outlined above. It also presents a difficult challenge, given the wide range of factors that influence the timing and scale of development, and the variety of groups involved in land use decisions within a single region. It should also be noted that regional equity is a key issue in this context, and that if land use policies are enacted or encourage 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**

As noted above, the survey identified seven reasons why employers implemented TDM programs:

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

Of these categories, public agencies would certainly 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 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 incidence of programs having these voluntary origins 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 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 and awareness level has been relatively high and employees often make suggestions to employers about 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 have a role to play as employers. By undertaking significant TDM efforts, large public agencies can both have a significant impact on creating the kind of "regional culture" mentioned above, as well as providing an example to private employers, giving them a role model upon which to base their own programs.

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

The employer surveys and the focus groups both explored employers' feelings on the relative mix of regulation and guidance needed to foster TDM program development. Although the level of guidance was generally higher in areas where regulation plays a part in the TDM context, the quality of guidance was often insufficient and employers felt that public agencies could do more to make TDM an attractive choice for employers. These comments and concerns would seem to indicate that a key to successful programs is a greater level of

guidance on TDM benefits and a lower level of regulatory burden.

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 measures must be used. The desire among employers seems now to be for greater program flexibility, defined as greater leeway in deciding which measures to use, how to package them, and especially how to evaluate their success. This may mean a lesser reliance on strict benchmarks such as AVR and a greater emphasis on more subjective evaluation techniques. Early indications are that the experience of 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 measures that can provide the best 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 employee transportation coordinators (ETCs) and transportation management association (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**

A fertile area of future employer/public agency cooperation may be negotiating and reaching consensus on tax credits and cost saving options that will encourage employers to implement 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 often rocky road to more effective measures and programs that state has faced. 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 measures (which most used only as a last resort). Targeted tax credits can help to circumvent such contentious, time-consuming wrangling and make incentive-based measures much more desirable and possible to implement faster.

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 hard AVR targets and dates for compliance and toward a greater degree of flexibility and negotiation. While public agencies may embrace flexibility as a way to avoid TDM regulatory controversy, they must recognize that their responsibility to guide employers to successful and cost-effective programs becomes both more delicate and more important.