

CHAPTER SEVEN

TRAVEL DEMAND MANAGEMENT AND TRAVELER INFORMATION



Figure 7-1

Planned Special Event Express Bus Service from Park and Ride Lot

PURPOSE

This third chapter on event operations planning reviews strategies for: (1) mitigating the travel demand impacts of planned special events and (2) ensuring the transportation system operates as efficiently as possible on the day-of-event. Successful strategies are presented in three sections that influence travel choice utility; *travel demand management*, *transit service*, and *pre-trip traveler information*. These initiatives enhance transportation system operations and improve customer service for all users by utilizing all available system resources and excess capacity. The identification and successful promotion of travel demand man-

agement initiatives can reduce traffic demand and, in turn, improve system efficiency and travel time reliability.

INTRODUCTION

Travel Demand Management (TDM) represents a key component of the overall advance planning process when forecasted traffic demand levels approach or exceed available road capacity. TDM strategies may be warranted for planned special events occurring during peak travel times, continuous events located in downtown areas, street use events of long duration, regional/multi-venue events, and special events in rural areas having limited transportation system capacity. The goal is to optimize event patron

and non-attendee travel through incentives aimed at consolidating person trips and altering user travel patterns and habits, while minimizing any penalties to the user.

Transit service for a particular planned special event includes: (1) public transit service expansion or modification, (2) express buses from area neighborhoods or park and ride lots, and (3) charter bus service from other cities and counties. These services, though configured to net operators a profit, represent a travel demand management initiative. The goal of transit operators involve designing a special event service and related incentives to not only improve the travel choice utility associated with using transit, but also to exceed the utility (e.g., travel time, parking fees, comfort, etc.) associated with traveling via personal automobile. Successful transit services collectively may result in a significant change in event patron modal split without impacting service to non-attendee users.

The availability of pre-trip travel information, consisting of essential event operations and real-time traffic information, proves effective in assisting event patron evaluation of potential travel options, trip departure times, and travel routes to the event venue. Similarly, other road users, seeking to minimize event-related impacts to their trip, value this information.

TDM, transit, and pre-trip traveler information initiatives complement one another and work to reduce traffic on the roadway network in the vicinity of the event. These initiatives are not infrastructure improvements to increase capacity, but rather are methods that decrease vehicular traffic by providing event patrons with various travel choices as well as providing information that may lead to a reduction in traffic volumes. Some of these strategies are implemented by: (1) the public agency involved with the special event, (2) the event planners themselves, and (3) a combination of both groups.

TRAVEL DEMAND MANAGEMENT

Overview

TDM strategies are used to maximize the efficiency of the transportation system, thus reducing the volume of traffic on the roadway and minimizing the peak demand rates that cause congestion. They do not represent infrastructure improvements to increase capacity, but rather are methods that cause traffic demand reduction by encouraging other travel mode choices, particularly for event patrons. As shown in Table 7-1, TDM techniques for planned special events involve two distinct groups.

Table 7-1
Travel Demand Management Goals

USER GROUP	TRIP PURPOSE	TDM GOAL
Event patrons	<ul style="list-style-type: none"> Traveling to the event itself 	<ul style="list-style-type: none"> Encourage the use of travel modes other than personal automobile. Encourage a shift in arrival and departure times to reduce peak traffic volumes. Increase vehicle occupancy.
Non-attendee road users	<ul style="list-style-type: none"> Traveling for reasons other than the event itself 	<ul style="list-style-type: none"> Divert non-attendee travelers around the impacted area. Alter non-attendee time of travel to avoid conflict with event peak ingress and egress times.

Demand Management Strategies

Successful TDM strategies, developed to reduce the amount of event patron traffic, encourage the use of alternate travel modes. Essentially, a successful, integrated plan includes, for example, providing convenient alternates to driving an automobile to the event site and encouraging the use of these alternate travel modes. This includes increases in scheduled public transit service. In addition, express bus service can also be provided from park and ride lots to the event site as well as charter buses traveling to the event site from outlying areas. TDM strategies are also used to influence the travel patterns of non-attendee road users by encouraging a trip time shift or a change in travel mode. The resulting reduction in traffic demand reduces travel times for both event patrons and non-attendee road users. TDM also reduces delay, increases levels of safety, decreases motorist stress levels, reduces fuel consumption, and decreases certain vehicle emissions.

Table 7-2 contains a summary of travel demand management strategies.

High Occupancy Vehicle Incentives

The ultimate goal of any high occupancy vehicle (HOV) strategy is to increase the number of persons traveling in each vehicle. One option to reduce the amount of vehicles on the roadway is to encourage HOV use. In some areas, limited-access highways include HOV lanes to increase the attractiveness and efficiency of carpooling and vanpooling. Many of these HOV lanes are intended to assist commuters on a daily basis and, as such, the hours of the HOV may be limited to weekday commuting hours. In the case of a major planned special event, consideration should be given to continuing the HOV restrictions on these lanes to later

weekday hours, or even into weekend hours, in order to encourage event patrons to carpool.

Incentives can be provided to encourage two or more persons per vehicle. Figure 7-2 illustrates one such example. The Suffolk County Fair and a radio station (WALK) in New York offered a promotion of \$40 per carload on certain days. This price included parking, fair admission, and unlimited rides for everyone in the vehicle. In this manner, it was not economically feasible to travel alone, but rather to travel with as many people as possible in one vehicle.

Another strategy to encourage HOV's involves offering special privileges at the event site. Special parking lots can be restricted to HOV only, and these lots may be located nearer to the venue in order to encourage carpools. Lower parking rates further increase the attractiveness of this initiative. Private parking lot operators can be persuaded to offer special HOV pricing in exchange for promotion in special event advertisements. As demonstrated by Figure 7-3, this information needs to be relayed to the public so that they know the advantages of carpooling to the event site.

One successful implementation of HOV incentives took place at Husky Stadium on the campus of the University of Washington in Seattle for football games.⁽¹⁾ The Transportation Management Plan (TMP) included a parking pricing system to provide financial incentives for carpooling. During the 2000 football season, parking on campus cost \$7 for vehicles with three or more persons and \$10 for vehicles with less than three persons. Operators charged \$17 for parking a recreational vehicle and \$20 for buses, regardless of the number of people in the vehicle. In addition to the cost incentives, a marketing plan was also developed to encourage carpooling. Messages such as "carpools save

Table 7-2
Travel Demand Management Strategies

STRATEGY	DESCRIPTION	TECHNIQUES	USER GROUP
High occupancy vehicle (HOV) incentives	<ul style="list-style-type: none"> Increase the number of persons traveling in each vehicle. 	<ul style="list-style-type: none"> Consider continuing HOV restrictions on HOV lanes to later weekday hours, or even into weekend hours, in order to encourage event patrons to carpool. Reduce parking fees for vehicles with more than two people. Provide free advertising for private lots to balance discounts given for HOV parking. 	<ul style="list-style-type: none"> Event patrons Non-attendee road users
Event patron incentives	<ul style="list-style-type: none"> Encourage event patrons to arrive early or leave late in order to reduce peak traffic demand. 	<ul style="list-style-type: none"> Consider departure strategies that encourage spectators to stay late after an event: <ul style="list-style-type: none"> Post-event fireworks or concert Special programming on stadium video screens “Meet the mascot” promotion for children Special discount with a ticket stub at nearby restaurants and pubs Extended parking, at no additional cost, for event goers to encourage their patronage of downtown restaurants and shops after an event. Consider arrival strategies that encourage spectators to arrive early before an event: <ul style="list-style-type: none"> Registration in free drawings and contests that occur before the event Early opening of venue restaurants and/or offering of special discounts Tailgating encouraged in venue parking areas Encouraging spectators to watch teams warm-up before the game 	<ul style="list-style-type: none"> Event patrons
Bicyclist accommodation	<ul style="list-style-type: none"> Encourage the use of bicycles in traveling to/from the event. 	<ul style="list-style-type: none"> Provide proper bicycle paths (existing and temporary). Maximization of safety for bicyclists Avoidance of roadways with higher traffic volumes due to the event Provide security in bicycle parking areas. <ul style="list-style-type: none"> Staffing to prevent bicycle theft Locate bicycle parking close to venue entrance. Provide bicycle racks on transit buses to allow spectators to access mass transit while carrying a bicycle. 	<ul style="list-style-type: none"> Event patrons
Local travel demand management	<ul style="list-style-type: none"> Increase the use of public transit. Encourage car pools. Shift work hours. Shift commercial truck travel routes and delivery schedules. 	<ul style="list-style-type: none"> Encourage alternate travel choices. <ul style="list-style-type: none"> Avoidance of travel during times of event ingress and egress Avoidance of travel near event venue Encourage businesses to implement TDM strategies. <ul style="list-style-type: none"> Telecommuting Carpooling Flexible hours Modified delivery schedules Early release from work on event dates for infrequent night events Use media to announce alternate routes to and around the event. Contact commercial trucking companies. <ul style="list-style-type: none"> Times to avoid routes serving the event venue Reduction of number of truck trips Shifting of some truck trips to nighttime (non-event) hours. 	<ul style="list-style-type: none"> Non-attendee road users



Figure 7-2
High Occupancy Vehicle Incentive

time and money and are a lot more fun than going alone” were incorporated into the Husky football transportation guide.

In addition to the plan implemented for University of Washington football games, a similar plan was implemented for Seattle Seahawks football games during the 2000-2001 season when stadium construction forced the Seahawks to use Husky Stadium for home games. The public information campaign for Seahawks football included a summary of available parking in the vicinity of the stadium. Since the Seahawks were playing in a temporary stadium, fans had to be oriented to: (1) new traffic flow routes to access the stadium and (2) new event parking locations and costs. A public information campaign outlined Husky Stadium parking limitations, including only 9,000 on-campus spaces being provided as compared to the 11,000 free on-street parking spaces

and 35,000 off-street parking spaces around the Seahawks original stadium. Carpool parking pricing incentives were established similar to those used for University of Washington football games. At the beginning of the season, game day parking was \$15 for carpools with three or more persons per vehicle and \$20 for vehicles with less than three persons. Stakeholders reduced the carpool parking fee in mid-season to \$10 in an effort to increase higher vehicle occupancy.

In addition to venue operators offering HOV privileges at venue parking areas, private parking operators in the site area can also be encouraged to offer special incentives to event patrons. For example, if private lot operators offer a special HOV discount, then the event advertisements can mention that particular private lot by name and location. The “free advertising” may help private operators balance discounts given for HOV parking.

Thus, three high occupancy vehicle incentive techniques include:

- Consider continuing HOV restrictions on HOV lanes to later weekday hours, or even into weekend hours, in order to encourage event patrons to carpool.
- Reduce parking fees for vehicles with more than two people.
- Provide free advertising for private lots to balance discounts given for HOV parking.

Carpool and save even more! Each time you arrive with two or more other passengers you'll receive a coupon for \$3 off next year's Guaranteed Sonics Parking pass. A potential **savings** of almost **\$130!**

Figure 7-3
High Occupancy Vehicle Parking Incentive (*Graphic courtesy of the Seattle Center.*)

Event Patron Incentives

Stakeholders managing discrete/recurring events at a permanent venue that generate high peak arrival and departure rates can encourage event patrons to *arrive early or leave late* in order to reduce the peak traffic demand.

Sporting events and concerts fall into this category given that, when the game or show ends, the majority of event patrons leave the venue at one time. This departure pattern scenario can be offset using several strategies:

- For instance, event organizers or venue operators can offer special incentives for spectators to stay after the event, such as special programming on the stadium video screens or post-event fireworks.
- Restaurants and pubs located in or near the event venue can remain open and may even offer special price savings with a ticket stub.
- Some sporting events and other types of events may feature live music after games in order to encourage spectators to remain at the venue.
- One incentive for parents to remain longer at sporting events with their children is a “meet the mascot” type of promotion.
- Venues in downtown areas can also provide extended parking, at no additional cost, for event patrons who wish to remain in the area and go to downtown restaurants or shops. Instead of parking lots having to be vacated a certain time after the event, extended parking hours allow event patrons to linger in the surrounding downtown area. These incentives help to spread out the flow of departing traffic and lessen the peak traffic demand on the roadway network. This

concept also benefits businesses in the vicinity of the event venue.

Incentives that can be used to attract patrons to events earlier than usual include:

- Registration in free drawings and contests that occur before the event to attract spectators to the event site.
- Venue restaurants can open early and offer special incentives to attract spectators before the event.
- Tailgating may also be encouraged to attract event patrons to venue parking areas hours before the actual start of the event.
- Organizers of sporting events can encourage spectators to arrive early and watch teams warm-up before the game.

Venues that do not have pre- or post-event activities can solicit suggestions from the public through mailings or via the venue website. For example, when season ticket applications or tickets to the event are mailed, an accompanying survey can ask event patrons which type of pre- or post-game activities they would be more likely to take advantage of. Similar types of questions can also be presented on an event or venue website, as illustrated in Figure 7-4. As a result, the pre- or post-game events will cater to the persons who actually attend the event, thus increasing the number of spectators attending staged activities. For recurring events, stakeholders can survey the patrons in the venue or distribute suggestion cards when patrons enter or exit the venue.

One example of implementing successful event patron incentives involves the San Jose, CA “America Festival”. The website for this event alerted spectators that they need to plan ahead for the event’s hallmark 4th of July fireworks display since the park venue reached capacity early the year be-

fore. The website suggested that event patrons arrive early and see one of the many bands that performed at the festival in addition to sampling the food and drinks available. In this manner, the arrival patterns to the event become spread out over a longer time period. Instead of all spectators showing up at one time, the arrival patterns are influenced by the music that the event patron would like to listen to. In addition, the availability of food and drinks at the festival also helps to spread out the arrival patterns. These incentives reduce congestion by reducing the peak arrival rate of event patrons. Collectively, the incentives convert a discrete event (fireworks display) into a continuous event (festival).

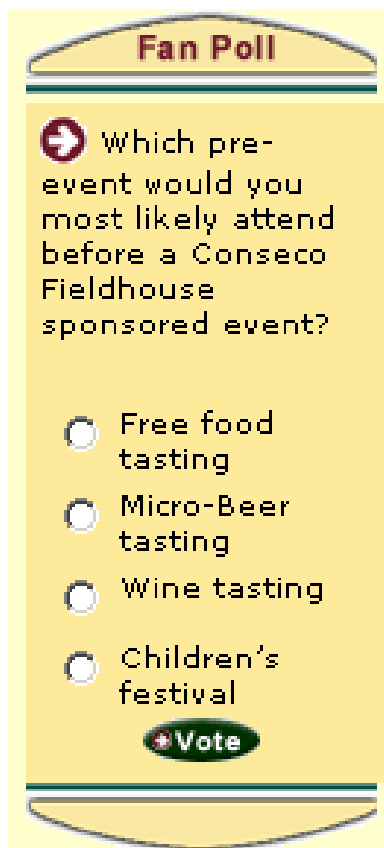


Figure 7-4
Venue Website Survey on Event Patron Incentives (Graphic Courtesy of Conseco Fieldhouse.)

In addition to the recommendations for arriving event patrons, the website also suggested that spectators remain after the fireworks for another concert. Figure 7-5 displays the slogan posted on the event website. In this manner, stakeholders assumed that some event patrons would leave immediately after the fireworks display and some would stay to listen to the music. This reduces the peak departure demand on the transportation system. The post-fireworks concert entertained spectators as they waited for traffic congestion to dissipate. In turn, event patrons did not feel that they were just “sitting around and waiting” for congestion to dissipate.

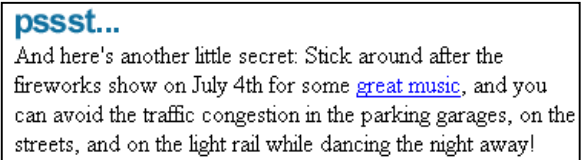


Figure 7-5
Event Patron Incentive (Graphic courtesy of EHC & FILCO.)

Bicyclist Accommodation

Another alternate form of transportation that can be used to access the event is a bicycle, especially in downtown areas. Special accommodations need to be provided for event patrons that wish to arrive by bicycle. Safety is a concern for all bicyclists, and proper bicycle paths need to be provided. These paths can consist of existing bike lanes and trails that are augmented with temporary paths leading to the event site. The provision of bicycle paths maximizes safety for the bicyclists and keeps them off roadways that experience higher traffic volumes due to the event.

Security represents a major concern of bicyclists. Figure 7-6 shows a bicycle parking area for a planned special event. In order to encourage bicycle travel, bicycle parking areas may be staffed (e.g., valet service) to

prevent bicycle theft. In addition, if the bicycle parking area is located close to the entrance of the venue, it may encourage event patrons to use their bicycles in order to access the event easier. Public transit operators may also provide accommodations for bicycles during events, such as bicycle racks on the front of transit buses that allow spectators to access mass transit while carrying a bicycle.



Figure 7-6
Bicycle Parking Area

Local Travel Demand Management

TDM strategies that reduce the amount of background, non-attendee traffic consist of:

- Increasing the use of transit (e.g. transit promotion).
- Encouraging use of carpools.
- Shifting of work hours.
- Shifting of commercial truck travel routes and delivery/travel times.

For non-attendee road users, a successful TDM plan encourages alternate travel choices, such as avoiding travel during times of event ingress/egress or travel near the event venue, that ultimately increase mobility and travel time reliability for these users compared to their default travel choice. This includes personal and business travel in addition to commercial truck travel.

Businesses can help minimize traffic demand during peak commuting hours through implementing TDM strategies such as:

- Telecommuting
- Flexible hours
- Modified delivery schedules

Carpooling should also be encouraged by major employers and through public information campaigns. In order to assist the business community in the implementation of TDM, information detailing recommended strategies and how to implement them should be distributed.

The event planning team should inform the local community as to the magnitude of the planned special event through a series of press releases and public service announcements. Alternate routes to and around the event can also be published in daily newspapers, discussed on local television or radio news, and communicated by public and private traveler information services.

In the special case of events that occur infrequently, businesses located in the immediate vicinity of a venue (e.g., hosting a Monday Night Football game) may allow employees to leave early on event dates. This initiative causes an increase in parking supply for event patrons. A public information campaign can be used to notify businesses of the possible problems that could occur and how these problems can be alleviated by clearing, for example, a downtown area prior to a certain time.

Successful local travel demand management techniques, instituted by local businesses, were utilized during the 2002 Winter Olympics in Salt Lake City, Utah.⁽²⁾ These strategies effected a change in residents' travel patterns during the event. A post-event telephone survey indicated that about one-fifth of residents changed their travel patterns

during the games. The predominant change involved employers revising normal work schedules during the event and allowing earlier work hours or flexible schedules.

In order to reduce commercial truck traffic, stakeholders should contact pertinent trucking companies and advise them of times that truckers should avoid traversing freeway and arterial corridors serving the event venue. Trucking companies should attempt to reduce the number of truck trips made and shift some of their remaining truck trips to nighttime hours. Special mailings can be sent to long haul trucking companies in order to inform them of an upcoming planned special event and affected road corridors. In addition, fliers can be distributed to truck drivers at major points of entry to the region, disseminating information on the days and times of the event, high impact locations, and special traffic patterns. During the event, e-mails containing traffic advisories can be sent to trucking companies so that they can, in turn, get the word out to truckers via citizens-band radio and through their electronic distribution lists. Portable changeable message signs (CMS) and highway advisory radio (HAR) can also be placed at major ports of entry to alert truck drivers.⁽²⁾

Some components of a successful freight management plan include requiring trucks to have permits to enter certain areas between a set time frame. In this way only trucks that need to be in the area will be present during peak traffic times. In addition, delivery hours can be restricted to overnight to completely avoid conflict with event traffic. Long-haul trucking can be discouraged from certain roadways in the event area by providing directions on the roadway that divert trucks around the area surrounding an event venue.

TRANSIT SERVICE

Overview

Modifications to existing transit service for a special event represent TDM strategies. The focus of the public transit agency is to increase ridership during the event by increasing the attractiveness of the service that it provides. In many locations and for many types of special events, additional ridership to and from special event sites can provide substantial additional revenue for the transit system at little additional cost. Also, transit system use may relieve traffic congestion around the venue.

Table 7-3 contains a summary of transit service strategies.

Public Transit Service Expansion

In order to maximize the use of public transit, options need to be convenient (e.g., faster travel time and satisfactory comfort level) for event patrons without impacting non-attendee transit users.

Three possible approaches to using public transit during special events includes:

- Existing service with additional vehicle hours. In general, this represents an extension of the existing service and is in addition to the regularly scheduled transit service. The extension of existing service may include: (1) expanded hours of operation or (2) increased frequency of system service on a particular route in order to serve a planned special event.
- Modifying existing service by creating a route deviation. A deviation involves adding a new transit stop near the event venue to the existing route. In addition, a deviation of the regular route may be required due to road or travel lane closures needed to stage the planned special

event. Because of these deviations, station-to-station travel times may change.

- Implementation of an express service to establish a special purpose route to and from the event. This service, including bus and commuter rail, usually requires riders to pay a fare, although event sponsors may reimburse the service cost or include the cost in the ticket price. The express service will involve an entirely new route and new schedule of service that accommodates the operational characteristics of the event served. Express bus routes may originate, for example, from regional park and ride lots or regional commercial centers with available parking. Express bus operations are discussed in more depth in the “Express Bus Service” section.

The Portland, Oregon area has a special Tri-Met SETS (Special Events Transit Service) Program that handles all requests for modifications to existing transit service due to a planned special event.⁽³⁾ Requests for all

special services are evaluated based on the following criteria as outlined in Tri-Met’s Service Standards:

- *Serving the Public Interest* - Certain community events require the movement of large groups of people during certain hours of the day. These are events that would otherwise seriously restrict traffic movements unless public transit took an expanded role. Historically, these events are annual events, although some one-time events may also be considered. The decision to provide the service is based on an evaluation of available resources and the need for the service.
- *Cost Effectiveness* - The special service requested must be evaluated based on both operations and system cost and on the availability of operators and equipment.

Table 7-3
Transit Service Strategies

STRATEGY	TECHNIQUES
Public transit service expansion	<ul style="list-style-type: none"> • Maximize use of public transit. <ul style="list-style-type: none"> ○ Existing service with additional vehicle hours ○ Modifying existing service by creating a route deviation with a stop near the event venue ○ Implementation of an express service to establish a special purpose route to and from the event site
Express bus service	<ul style="list-style-type: none"> • Discourage event patrons from driving their vehicles to the event site due to expected site parking deficiencies and anticipated roadway congestion. <ul style="list-style-type: none"> ○ Using express bus service between a park and ride facility or remote parking lot and event venue ○ Using park and ride lots that best intercept spectator traffic as it approaches the event site.
Charter service	<ul style="list-style-type: none"> • Use a contract service to provide transportation directly to the event site from outlying areas (e.g., other neighborhoods and cities). • Consider both charter bus operations as well as charter rail service.
Transit Service marketing	<ul style="list-style-type: none"> • Establish a comprehensive transit marketing program. <ul style="list-style-type: none"> ○ Informing the public of the availability of public transit service to/from the event venue ○ Convincing the public to use the service

- *Patronage Potential* - The special service must be evaluated on its potential ridership.
- *Service That Could Be Provided By Others* - Consideration is given as to whether or not the service can be provided by others, which includes charter bus operations, taxis, carpools, vanpools, and other dial-up services. Included in these considerations are the possibility that larger buses may be needed based on cost, geographic limitations, and potential market penetration.
- *Partnership Building* - Tri-Met's goals include partnership building in the community. This helps to enhance Tri-Met's role as a community partner and as a facilitator of mobility.

In areas where service overlaps involve two or more agencies, inter-agency coordination is very critical especially on issues of fares, transfers, and scheduled service hours. One pitfall to avoid, especially for non-regular riders, is forcing riders to use several different fare instruments. In other words, transfers may not be allowed unless the rider pays a new fare. This obstacle should be eliminated through inter-agency coordination.

Express Bus Service

Stakeholders managing travel for a particular event may discourage event patrons from driving their private vehicles to the event site due to expected site parking deficiencies and anticipated roadway congestion. These spectators would likely utilize an express bus service, originating from a permanent park and ride facility or other vacant parking area (e.g., regional mall overflow parking area), if the service provides a higher level of service to event patrons compared to the drive-alone option. An express bus would furnish direct service to the event venue. In

order for an express bus service to operate successfully, the express bus stations (e.g., park and ride areas) must be strategically located to intercept spectator traffic as it approaches the event. In determining appropriate express bus station locations, the event planning team should review the results of a feasibility study market area analysis.

Six successful examples of express bus service include:

- A successful public transit and express bus campaign was utilized during the 2002 Winter Olympics in Salt Lake City, Utah.⁽²⁾ During the event, over 2.5 million passenger trips were recorded on the Salt Lake City public transit system for an average of about 150,000 per day. TRAX (Salt Lake City's light rail system) carried two-thirds of the passengers and park and ride express buses carried the remaining third.
- Another successful implementation of express bus service involves football games at Husky Stadium on the campus of the University of Washington in Seattle.⁽¹⁾ Football game attendees were encouraged to take public transportation to the stadium. All football ticket holders were able to ride King County Metro buses for free to the stadium via special service routes from park and ride lots in the region. Event parking revenues subsidized the cost of the express bus service.
- In addition to the plan implemented for University of Washington football games, a similar plan was implemented for Seattle Seahawks football games during the 2000-2001 season, when the Seahawks were forced to use Husky Stadium for home games. The Seahawks

developed a comprehensive public information and promotion campaign. The campaign, entitled “Tackle Traffic,” included a full range of television, radio, and print media promotions. Fans were advised of the free fare transit service through the campaign. The campaign also informed event patrons that the transit service provided faster travel times than driving to the game due to the priority routes and loading locations assigned to buses before and after the game.

- The Regional Transportation District of Denver, Colorado provides an express bus service for Denver Broncos football games known as BroncosRide. This service provides transportation from 30 free park and ride lots in the surrounding area. A fee of \$6 roundtrip is charged to each event patron for the bus service or spectators can also purchase a season pass. In addition, after the game, the express bus stations exist directly outside of the stadium.
- Milwaukee, Wisconsin hosts the annual, multi-day Summerfest music festival where special express bus service, provided by the Milwaukee County Transit System and other private companies, operates throughout the event. The express service utilizes existing park and ride facilities in the area. Certain buses are provided free of charge, while service on other express routes cost \$5 for a roundtrip ticket with tickets available only at the point of origin.
- The Downtown Shuttle Service also operates in the Milwaukee downtown area. A list of parking lots and structures located near the shuttle route is disseminated on the event website. These parking facilities offer a special parking rate of \$5 or less when event patrons enter

after 5 P.M. on weekdays and all weekend. The Downtown Shuttle Service provides 5 to 10 minute headways during the event and stops at designated stations along the route serving the event. The cost of this service is \$2 roundtrip.

Charter Service

Charter service represents a contract service that provides transportation directly to the event venue from outlying areas (e.g., other neighborhoods and cities). Users often can purchase tickets in advance and generally in conjunction with the event ticket. This service can include both charter bus operations as well as charter rail operations. The charter service configuration usually involves providing direct service to the event venue. However, service may also connect to an existing transit station or park and ride lot (e.g., express bus transfer).

Advantages of charter operations include:

- Provides the opportunity for residents of outlying areas to use mass transportation. This represents the main focus of charter service.
- Allows people who would not normally have access to public transportation for a particular event to use the service.
- Results in a reduction in traffic in the vicinity of an event site as well as on major corridor flow routes serving the site.
- May include free parking in the outlying area to help promote the service.
- Allows operators to offer special season passes at a discount rate to attract riders for recurring events (e.g., football games).

One key aspect of charter bus service concerns the need to provide emergency transportation for riders should the need arise. For example, charter service travel times

may exceed an hour. Patrons who use the charter service must remain in the area of the event until the completion since, typically, only one bus or train is utilized for the event. Therefore, if a patron needs to return home as a result of an emergency, a “guaranteed ride home” service needs to be provided as part of the charter service. This represents one of the factors against charter service and, therefore, the availability of an emergency ride home policy will likely attract more users.

One example of a successful charter service involves the Rochester-Genesee (NY) Regional Transportation Authority (RTS). The RTS runs a charter bus operation from the Rochester area to Buffalo Bills’ games. The first pick-up is at the RTS headquarters and occurs 4 ½ hours before the kick off. Three more stops exist, 4 hours, 3 ½ hours, and 2 hours and 45 minutes before the game. After the last stop, a direct trip is taken to the stadium facility with the bus arriving one hour before kickoff. The charter bus departs for the Rochester area 45 minutes after the completion of the game. RTS operates a similar charter bus operation for Syracuse Orangemen football and basketball games, including the first stop a full 4 hours before the event start.

Public transit agencies may provide charter service, but only under special circumstances. In cases where the Federal Transit Administration (FTA) subsidizes a particular transit agency and that agency wants to provide any charter service using FTA funded equipment or facilities, then the transit agency must first determine if any local private bus companies can and will elect to provide the desired charter service. If a private operator exists, FTA regulations prohibit transit agencies from establishing a charter service with FTA funded equipment or facilities. Public transit agencies must submit a charter service request to the FTA at least 90 days prior to the first day on

which the transit agency wants to provide charter service. Specifics of this FTA regulation are contained in 49 CFR Part 604, “Charter Service” which went in effect on May 13, 1987.

Transit Service Marketing

In order for public transit to be effective, the general public must be made aware of the benefits of using the transit system. This can be accomplished through a comprehensive transit marketing program. This program serves to: (1) inform the public of the availability of public transit service to/from a special event venue (2) convince the public to use the service. Stakeholders can develop various marketing techniques to accomplish one or both of these tasks.

San Francisco Giants Program

One successful implementation of a transit marketing program involved the San Francisco Giants baseball team in coordination with the regional Metropolitan Transportation Commission (MTC), Bay Area transit operators, and the San Francisco Department of Parking and Traffic. These stakeholders collectively developed and implemented a comprehensive transit marketing campaign prior to the opening of the new Pac Bell Park in San Francisco.

The goal of the program involved attracting patrons to transit in large numbers. The name of the campaign was “Your Ticket Home,” and it was funded by the Giants, the MTC, and a number of corporate sponsors. Each corporate sponsor’s logo was printed on materials associated with the campaign. The transit marketing program targeted first-time transit riders. Since the Bay Area has an extensive public transportation system, the main focus of the campaign was to educate the traveling public. Key elements of the transit marketing campaign included:

- *Transit Information Guide* – A pocket-sized foldout information guide was developed and widely distributed to Giants fans, including all season ticket holders.
- *Transit Information Hotline* – A toll-free number was developed to provide live transit planning assistance for patrons.
- *Transit Tickets by Mail* – Giants season ticket holders were provided the opportunity to purchase transit tickets in advance through the mail.
- *Transit Incentive Program* – Giants fans that purchased transit tickets in advance were rewarded with points toward the Giant’s fan appreciation program.
- *Transit Advertising* – An advertising campaign was developed using the “Your Ticket Home” logo and was featured on Bay Area trains and buses and in the ballpark. The use of public transportation was also heavily promoted on Giant’s radio and television broadcasts as well as on the scoreboard inside the park.
- *Transit Ambassador Program* – The Giants and the various transit agencies worked together to provide “transit ambassadors.” These ambassadors helped to answer questions and guide new riders through transfers and fare collection procedures at various stations. These ambassadors wore brightly colored uniforms that were easy to recognize.

The Giants, the MTC and the San Francisco Department of Parking and Traffic also worked together to effectively publicize available transit services through local media including newspapers, television, and radio. In addition, press releases were issued and interviews were scheduled on television and radio to further promote the transit program.

PRE-TRIP TRAVELER INFORMATION

Information Needs

Various traveler information techniques are used to disseminate information to the public, including both event patrons and non-attendee road users, so they can be better informed when planning their trip to a planned special event, or around an event. Table 7-4 lists techniques used to provide pre-trip information to the traveling public.

Table 7-4
Pre-Trip Traveler Information Dissemination Techniques

TECHNIQUE
• Internet
• Telephone information systems
• Public information campaign
• Event and venue transportation guide
• Kiosks
• Television
• Newspapers
• Changeable message signs
• Highway advisory radio

The primary function of pre-trip information involves assisting drivers with decisions regarding route planning, travel mode, and the time of day to travel. Accurate pre-trip travel information will provide benefits to all transportation system users in the form of time and cost savings.

Pertinent information that event patrons may want before beginning their trip include:

- Best driving route to the venue from specific origins (e.g., cities or freeways)
- Best public transit route
- Parking area locations and parking fees, access to disabled parking spaces, and times that the parking areas open before the event

- Recommended event ingress and egress routes, particularly if different for arrivals and departures
- Up-to-the-minute roadway information (e.g., current traffic conditions and weather conditions)
- Estimated travel time by different travel modes
- Event information such as times and schedules
- Recommended speed/safety advisories
- Scheduled roadway construction and maintenance lane closures
- On-street parking restrictions during the event
- Heavy vehicle restrictions
- Expected delays leaving the event

This information may help event patrons better gauge the utility associated with available travel choices and, in turn, assess what transportation mode and route they will be taking to the event. Pre-trip traveler information also helps event patrons budget sufficient time in accessing the event venue.

Non-transportation information that may be pertinent to an event patron’s travel plan includes security procedures. This encompasses items allowed to be brought into the parking area or the venue itself, including pets. This information is important since it may impact the amount of time it takes spectators to get into a parking area or venue. Other information includes what vendors are available on-site, since event patrons may have the option of eating before or after the special event. This will impact the time the event patron designates for venue arrival. In addition, a seating chart and gate locations may assist the spectator in selecting which parking area to use.

Non-attendee road users also desire information on event specifics, but this information is directed more to possible road/lane closures or changes in normal traffic patterns.

The main issues for the non-attendee road user becomes, “How will the event generated traffic impact my daily driving routine?” The most relevant information is up-to-the-minute traffic reports in the area of the venue, used by non-attendee road users to determine if their travel route needs adjusting. Information on travel lane closures is also important to determine if extra time needs to be budgeted or an alternate route taken.

All of this pre-trip information helps transportation system users plan their best route to and from the event or around the event. The event patrons will have the information they need to arrive on time for the event; moreover, the information will prepare them for what may lie ahead in their trip. The non-attendee road users are also made aware of what to expect as a result of a planned special event. If residents and businesses in the area surrounding a venue incur significant impacts, then it may be more difficult, in the future, to obtain special event permits in the area.

In order to improve public understanding, cooperation, and acceptance of the planned special event, stakeholders should consider the following actions:

- Develop public information programs to encourage early travel to the event and/or spectator use of alternative routes or transit.
- Develop public information programs to encourage non-attendee road users to consider transit, ridesharing, and alternative work hours.
- Develop agreements with trucking agencies to avoid peak period travel and deliveries.

Internet

Internet websites have several key points of interest when they are used to disseminate traveler information:

- Provide global information distribution since geography is not a limiting factor.
- Facilitate interactivity by allowing users to control information display. Users can find information about what they are interested in and may also find information they did not know was available.
- Can target a specific subject area and concentrate on this area with links to other related sites.
- Provide detailed information that is not easily conveyed by telephone.
- Provide flexibility since revisions and updates can be made in a fraction of the time and cost of re-printing material (e.g., brochures).
- Identify conditions affecting service, thus answering the question: “Why are there delays on this section of roadway at this time?”
- Use graphics capabilities. Users understand complicated subject matter better when presented with graphics. This concept holds true with driving directions and transit maps, for example. It is easier to digest the information via a map rather than read a table of times and destinations. In addition, the graphics can be printed and used at a later date if needed.
- Promote existence and use of telephone information systems (e.g., 511 service).

Public Agency Websites

As illustrated in Figure 7-7, a typical public agency website includes up-to-the-minute information for the traveling public both before the event and on the day-of-event. Information provided on these websites includes traffic conditions, such as road seg-

ment speeds or traffic incident locations. In addition, websites can include in-depth details regarding traffic incident characteristics by allowing the user to click on icons for a more detailed explanation. As an example, if a certain icon shows a traffic incident, the user can click on that icon and see a more detailed explanation of the traffic incident itself.

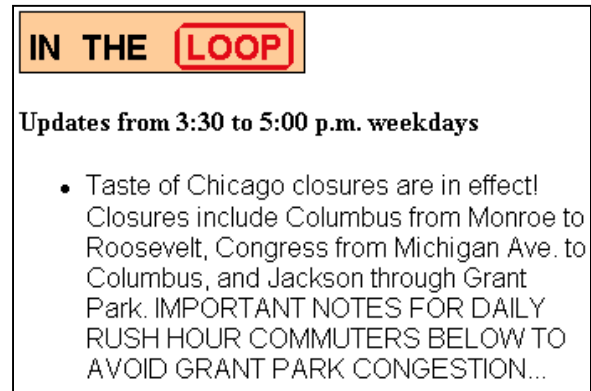


Figure 7-7
Traffic Information Dissemination Via a
Public Agency Website (*Graphic courtesy
of the Chicago DOT.*)

Public agency websites also provide information on roadway closures, locations of roadway construction sites, and details of planned special events impacting transportation system operations. Again, the user can obtain more detailed information for each location by clicking on a certain area within the website. A typical public agency website may provide weather information along with information on pavement conditions.

Public agency websites may disseminate closed-circuit television (CCTV) camera images. By clicking on CCTV location icons, a snapshot picture of the latest CCTV image is shown on the website. In addition, locations of CMS and their current message can also be shown. Public agency websites, or private traffic advisory services, may also allow users to subscribe to an alert system that allows them to receive e-mails if a traffic incident, roadway construction, or

planned special event impacts operations on a user-defined route.

One successful implementation of a website for disseminating pre-trip traveler information was the Utah DOT's CommuterLink Website (CLW) used during the 2002 Winter Olympics in Salt Lake City, Utah.⁽²⁾ The CLW represented the most highly accessed traveler information element during the Olympics. It included typical public agency information on traffic conditions including speeds and incidents. It also disseminated information on roadway closures, current roadway construction, weather conditions, and pavement conditions. In addition to the typical public agency information, the CLW provided Olympics travel information.

In order to assess the usefulness of the CLW during the Olympics, a survey was conducted of both residents and visitors to the Salt Lake City area. The results of the visitor survey showed that 41 percent of visitors heard of the CLW and 34 percent of visitors stated they used the CLW. The results of the resident survey indicated that 70 percent of residents heard of the CLW while 21 percent used it. Both visitors and residents indicated that they used the CLW to obtain:

- Traffic information
- Road conditions
- Olympics information (e.g., travel options and event operations information)
- Weather information

Event or Venue Website

A typical planned special event or venue website includes event start times and directions to the event. The website can also provide information on parking area locations, fees, alternate routes, or incentives to use different modes of transportation. A venue website represents one of the best techniques to reach the people attending the

event. Successful websites also provide information on the availability of public transportation and route maps for all public transportation alternatives. Venue ingress and egress routes can be specified on a website to provide valuable advance information to the traveling public. Appendix L contains examples of public agency and event-specific websites.

Telephone Information Systems

Another method to disseminate pre-trip traveler information to the public is by the use of telephone information systems (e.g., 511 service). This system consists of an automated voice recognition system and/or a menu that can be accessed by using a touch-tone phone, and the system provides up-to-the-minute traveler information. The system includes information on traffic conditions, public transit information, and road conditions. The system can also provide event-related information such as times, location, and event descriptions. Parking information can also be provided, such as parking locations and parking lot status information. The system can furnish updated information on event travel alternatives throughout the event. Stakeholders should coordinate with telephone information system operators (e.g., state DOT) to ensure that information pertaining to a specific planned event is included in the system and updated regularly.

Marketing a 511 service for a planned special event includes the following considerations:

- Deployment of roadside signs on travel routes to the event venue and placed in advance of the event dates.
- Promotion through the media.
- Establishment of partnerships between 511 service operators and all venue operators in a region.

- Use of television commercials and radio advertisements.
- Use of an event transportation guide for information on the service.

In addition to disseminating information via the Internet during the 2002 Winter Olympics, the Utah DOT also operated a 511 telephone information system. Figure 7-8 shows the 511 service structure established by the Utah DOT. On a typical day during the Olympics, the 511 service received 1,923 calls.⁽²⁾ Callers to the 511 service accessed the following main menu within the system:

- Traffic menu
- Transit menu
- Olympics menu
- Road conditions menu

Both residents and visitors were surveyed in regard to an evaluation of the telephone information system. The results of the survey showed that 25 percent of visitors heard of

the 511 service and 17 percent used it. The survey results reported 44 percent of residents heard of the 511 service; however, only 4 percent of residents used it.

The 511 service is normally run by a regional or statewide public agency, and the service is not intended solely for planned special events. A telephone information system is also used on a daily basis by commuters and other travelers in the area to obtain information on daily traffic conditions. However, one way that planned special event stakeholders can promote use of the existing service is to advertise it on the event website. This was done on the Bristol (TN) Motor Speedway's website. On the first page of directions to the venue, an advertisement, shown in Figure 7-9, was placed for the area's 511 service. As a result, the event website alerted event patrons of a means to obtain accurate, up-to-date traveler information before commencing their trip to the event venue or while en-route.

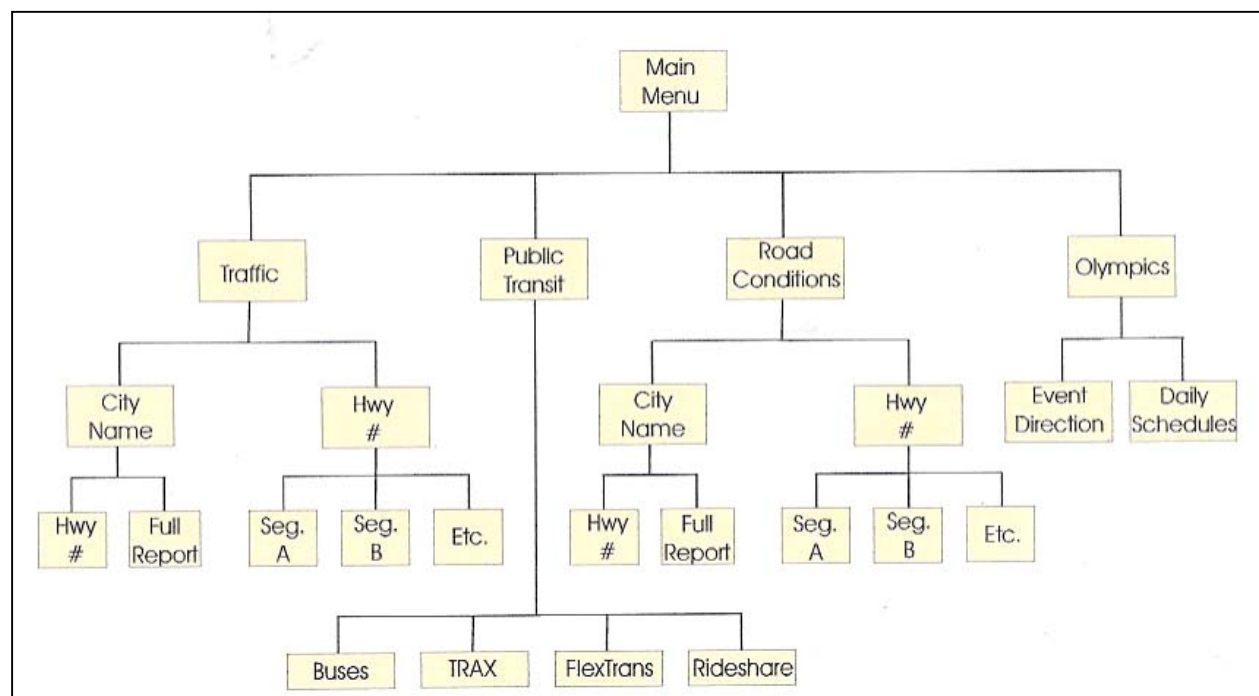


Figure 7-8
Telephone Information System Menu Structure⁽²⁾

How To Get To The Speedway (and how to get home!)

When there is NOT a major event at Bristol Motor Speedway or Bristol Dragway, the most direct route to the Speedway and Dragway from Interstate 81 north is on Hwy. 11E. Take Virginia Exit 3 and Hwy. 11E will take you directly to the Speedway. From Interstate 81 south, take Tennessee Exit 69 and turn east on Hwy. 394. Hwy 394 will take you to the Bristol Dragway Entrance. Turn on Hwy. 11E North to access the North Entrance and South Entrance to Bristol Motor Speedway.

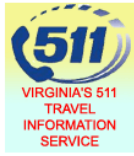


Figure 7-9

Promotion of 511 Service on Event Website
(Graphic courtesy of Bristol Motor Speedway.)

Public Information Campaign

A public information campaign is simply an outreach initiative designed to disseminate a message(s) to a general audience and to garner public response to the message subject.

Key considerations include:

- In order for a public information campaign to be successful, stakeholders must initiate the campaign well in advance of a special event.
- Information disseminated through the campaign needs to reach both event patrons and non-attendee road users.
- Maps showing event site and location of parking areas, as well as any associated roadway closures and/or special traffic patterns, can be placed in local newspapers. In addition, this information can be broadcast on local radio and television newscasts throughout the day.
- Special media briefings can be held in advance of the event so that the media has ample time to inform the public of the upcoming activities. Stakeholders can provide the media with maps and written information.

As shown in Figure 7-10, television advertisements can broadcast telephone numbers to call for additional information about a

planned special event and related travel options.



Figure 7-10

Public Information Campaign Promotion

The Wisconsin DOT and its stakeholder partners provide several information packages for events held throughout the state. One such event was the 2002 Major League Baseball All-Star game held at Miller Park in Milwaukee. The DOT provided a detailed brochure for event patrons going to the baseball game, informing them of road construction and potential difficulties (e.g., delays) in accessing the ballpark. The brochure then specified, in detail, alternate routes that motorists could take to avoid the most congested areas. The brochure also directed event patrons to the DOT website for further information concerning any topic covered.

The Wisconsin DOT also produced a brochure entitled "Get Down Downtown" for the Milwaukee area. This brochure included maps of the area that specified all on-going roadway construction projects. It also provided information on available public transit system service and parking area locations. Suggestions, such as "carpool with friends and coworkers," were made to reduce traffic demand in the downtown area, particularly when planned special events occur. The

brochure listed summer travel tips in addition to guidance (e.g., websites) on where to get more information about any particular topic. In this manner, the brochure provided an abundance of information while not overburdening the reader. Instead of the reader having to look through an entire guide, subject areas were listed coupled with statements on how to obtain additional information. Figure 7-11 presents the summer travel tips communicated by the brochure.

Event and Venue Transportation Guide

Another strategy that can be used to distribute pre-trip traveler information is through an event-specific or venue transportation guide. These guides are normally distributed to event patrons when they receive their tickets for an event, or the guides can be downloaded from an event or venue website. Local hotels can also maintain copies of the transportation guide.

Typical items that may be included in a transportation guide that comprise useful pre-trip traveler information include:

- Schedule of events
- Driving directions
- Area map
- Inbound and outbound traffic flow routes
- Parking areas
- Area transportation options

Transportation guides can illustrate the benefits of carpooling. Parking facilities within a downtown area can be shown, and the guide can emphasize those parking facilities that offer HOV pricing. Local access streets can be identified with a request not to use those streets while driving to and from the event unless the driver intends to patronize local businesses either before or after the event.

Get Down DOWNTOWN

- Be aware of street closures before traveling downtown.** Visit www.dot.state.wi.us to view traffic cameras and travel times.
- Plan an alternate route.** Be aware of other ways to get to your destination.
- Visit ParkMilwaukee.com to find parking information before visiting downtown.** This site includes information on more than 14,000 parking spaces near 35 downtown destinations.
- Carpool with friends and co-workers.** Carpooling reduces the number of automobiles on the highways.
- Use Park & Ride lots and shuttles.** Shuttles offer an easy way to get in and out of downtown without driving and parking.
- Research transportation options.** Visit www.rideMCTS.com for a number of options which include mass transit, shuttles and frequent flyers.
- Leave early for your destination.** Planning ahead will make your trip easy.
- Use turn signals.** They let other drivers know where you are going.
- Be prepared to stop.**
- Be patient.** Your fellow drivers will do the same for you.
- Always Buckle Up for Safety.**

Logos on the right side of the brochure include: GET-IPI! MILWAUKEE DOWNTOWN GET-DOWN!, CITY OF MILWAUKEE DEPT. OF PUBLIC WORKS, P (parking), SmartWays Wisconsin's Intelligent Transportation System, WISCONSIN ROUTE 940 DEPARTMENT OF TRANSPORTATION, east town, OnMilwaukee.COM, WESTTOWN DOWNTOWN-MILWAUKEE, MIDWEST MILWAUKEE AMERICAN, and MILWAUKEE POLYVALENT.

Figure 7-11
Public Information Campaign Brochure

Appendix M contains an example of a venue transportation guide prepared for Ford Field in Detroit, Michigan.

The Nazareth Speedway in Nazareth, Pennsylvania produces an informative venue guide each year that provides in-depth information about the raceway itself as well as travel options to the venue site. Appendix M contains the transportation section of the guide prepared for this venue. This guide can be downloaded from the venue's website. The opening sections of the guide provide a venue overview and list important travel tips, including the use of recommended routes and the possibility of incurring delay due to both traffic congestion and security issues. Since ingress and egress traffic patterns differ, both sets of directions are communicated in the venue guide. A facility map shows available amenities as well as parking area locations (including disabled parking). In addition, the guide includes a grandstand map and states parking area opening times in addition to parking rules and regulations.

Other Technology Applications

Other technology applications include:

- Kiosks
- Television
- Roadside traveler information devices

Kiosks

Kiosks are used extensively to provide multi-modal transportation information to the traveling public, such as:

- Area maps
- Route guidance information
- Real-time travel condition information (e.g., speeds, traffic incidents, etc.)
- Planned special event information

- Road construction and road closure information
- Public transit information
- Weather information.

Successful kiosk implementations include information that can be displayed on a color-coded map and/or printed. This information can include such items as turn-by-turn route planning. The ideal location for a kiosk is in high pedestrian traffic areas, such as hotels, tourist attractions, businesses, schools and universities, military bases, shopping malls, rest areas, hospitals, and amusement parks.

The kiosk concept is used extensively in the San Antonio, Texas area which operates 4 outdoor and 36 indoor interactive traveler information kiosks.⁽⁴⁾ Before deployment of the kiosks in San Antonio, a focus group was established that randomly selected people in the area to try the kiosk software. This allowed designers to evaluate different types of presentation layouts and information and to base designs on user feedback. The design process proved successful in creating demand for the kiosks in the San Antonio area.

Television

A successful pre-trip information strategy includes the use of local media outlets to disseminate information to the traveling public. During planned special events, television stations may show actual footage obtained from CCTV cameras along roadways in order to communicate real-time traffic information. These CCTV camera links originate from a transportation management center (TMC), and the TMC can prevent media access to certain cameras for security or privacy reasons. In addition, a successful information campaign includes the release of regular e-mail or voice recording updates to various media outlets by TMC operators. The local media outlets, especially radio and

television, use this information to alert motorists of traffic incidents, alternate routes, and general traffic information.

Television can be used to disseminate pre-trip traveler information by way of regular broadcast updates or a dedicated cable television channel. A dedicated channel allows travelers to turn on the television and view a traffic report with little delay. As shown in Figure 7-12, maps can be provided that show icons with traffic incident locations and color coded road segments that indicate current travel speeds. Television traffic reports can broadcast planned special event travel information as well as road closures, construction, detours, weather conditions, transit, and current traffic conditions.



Figure 7-12
Television Travel Report

Roadside Traveler Information Devices

Roadside traveler information devices, such as CMS and HAR, can be used in the days and weeks prior to an event to alert commuters and local residents of possible special traffic patterns and closures due to a future planned special event. Device messages can be specific in terms of the exact days and times of the anticipated travel impacts and roadway modifications. Message broadcast should commence at least one week prior to the planned special event.

HAR can disseminate more detailed information about transportation alternates and parking access for the event. The service can promote alternate modes of travel such as light rail, bus, or bicycle. In addition, information on shuttle buses for the event can be included in HAR message sets.

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