

# CHAPTER FOUR REGIONAL AND LOCAL COORDINATION



Figure 4-1  
Closed-Circuit Television Camera on a Stadium Access Road

## PURPOSE

This chapter covers the first of five phases of managing travel for planned special events. Program planning for planned special events involves activities unrelated to a specific event. This level of advance planning involves the participation and coordination of stakeholders having an oversight role in addition to agencies directly responsible for event operations planning. Products of program planning include establishing new institutional frameworks, policies, and legislation to monitor, regulate, and evaluate future planned special events. Stakeholders utilize program planning initiatives to more

efficiently and effectively complete event operations planning, implementation activities, day-of-event activities, and post-event activities for individual, future planned special events. In turn, post-event activities (e.g., participant evaluation, stakeholder debriefing meeting, evaluation report) performed for specific special events provide valuable input for on-going program planning activities in a region or jurisdiction.

This chapter presents key elements of program planning on a *regional level* and *local level* that facilitate improved planning and management of travel for future planned special events affecting multiple jurisdic-

tions or a single municipality, respectively. It also describes strategic *infrastructure support* considerations for improved traffic management and dissemination of traveler information. The occurrence of major or recurring planned special events often serve as a platform for stakeholders to assess new services and infrastructure proposed for a single or series of special events in the context of supporting: (1) all special planned special events in a region and (2) day-to-day transportation system operations.

## INTRODUCTION

This chapter presents program planning activities conducted for future planned special events. These activities include the development, by oversight team stakeholders, of policies, programs, and regulations that collectively comprise a special event program for managing all planned special events in a region. Program planning for regional planned special events requires an institutional framework for generating and managing successful programs and initiatives. Some key topics and initiatives addressed in this section include:

- Role of oversight stakeholders, including (1) how their involvement is coordinated, (2) what are the programs and initiatives that facilitate the planning and operation of planned special events, and (3) how special events planning is integrated with other ongoing transportation programs.
- Support necessary from a policy perspective. On a policy level, interagency agreements permit those involved to work together. At times, legislation may be needed to allow agencies to go beyond their current activities into areas not currently permitted legally.
- Regional planned special events programs. In many instances, the impact of

planned special events will extend beyond the jurisdiction of a single agency. In this section, the key elements of regional planned special events programs will be identified, the scope and benefits of such programs will be noted, and stakeholder organization will be explained. Also covered in this section is how such programs are developed, and just as important, sustained. Services and initiatives that go into regional planned special events management will be explained and the institutional issues, likely to be encountered, will be noted.

- Government agency permitting and regulation framework. The permitting process can identify many of the basic elements of the special event such as its timing, location and expected number of event patrons. Through a carefully constructed permitting process, transportation and public safety agencies can achieve a better sense of what resources these stakeholders need to handle the event. This section will provide an overview of the permit process, what the process includes, the components of a detailed application, and the associated requirements including recovery of public stakeholder expenses.
- Infrastructure support. Technology can be used for a variety of purposes, including communication among stakeholders and to the public in addition to transportation system management and monitoring during events. Paying for these activities is covered in the subsection on funding sources.

## REGIONAL LEVEL

### Institutional Framework

#### Stakeholder Roles and Coordination

Program planning for regional planned special events concerns proactively improving travel management for all planned special events in a region. This necessitates the involvement and coordination of stakeholders representing multiple jurisdictions. At the program planning level, the stakeholders include:

- Those agencies directly involved in planning and day-of-event travel management for special events. These include law enforcement agencies, transportation departments, transit providers, and regional organizations.
- Others who typically are not involved in transportation management, such as the event organizers and elected officials serving an oversight role.
- Typically, mid-to-upper level agency administrators that collectively form the planned special events oversight team.

The FHWA publication, *Regional Transportation Operations Collaboration and Coordination*, addresses how regional coordination can take place during incidents and emergencies.<sup>(1)</sup> While unplanned events are not specifically targeted in the publication, the same basic elements can be applied to planned special events. Figure 4-2 indicates five major elements of a framework for regional collaboration and coordination. The balance of this section notes how each of the elements fits into regional coordination for planned special events. The five-step process described below is not instituted when an incident or emergency takes place, but is a way of doing business that facilitates regional coordination when an event occurs.

*Step One: Identify the Stakeholders.* Which agencies and organizations will have a role in managing events? Which agencies have an oversight role? Depending on the location, there may be multiple states or several

metropolitan planning organizations (MPOs) that have an oversight role.

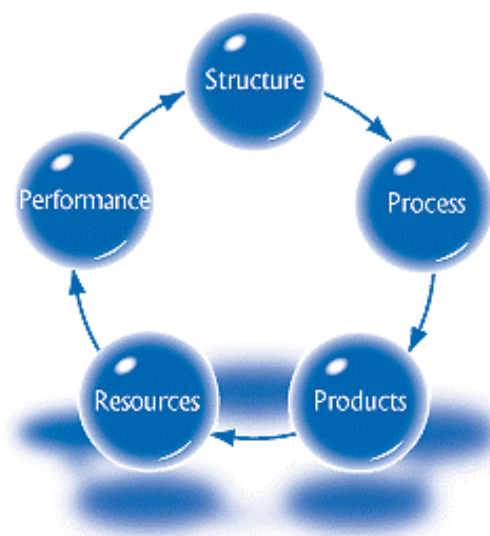


Figure 4-2  
Major Elements of a Framework for Regional Collaboration and Coordination<sup>(1)</sup>

As these questions are answered, a widening circle of stakeholders will be identified. As they are listed, their roles and responsibilities will be noted. Since not all stakeholders will have the same level of participation, their involvement in the planning process can also be assessed.

*Step Two: Identify a Lead Agency.* While a collaborative process is ideal in dealing with a planned special event, there is still a need to identify a lead agency that will have overall responsibility for the group’s work. In many instances, no one agency will have a clear leadership role for program planning. A possible way to pick a leader without offending other lead agencies is to use co-chairs representing different disciplines or geographic areas. Leadership can also rotate to assure that all key players have an opportunity for a leadership role.

While the lead agency oversees the entire process, it can delegate elements of the plan

to others with expertise in particular areas. For example, public safety issues might be assigned to a law enforcement agency or a sub-committee of public safety agencies. These stakeholders would help make up the *structure* in which regional coordination takes place.

*Step Three: Maintain Communication.* Throughout the planning process, communication among stakeholders is critical. Meetings of the stakeholders represent a venue where stakeholders can share what they see as their role in the planning process. As they meet, roles and responsibilities are adjusted as agencies understand what other agencies will be doing and how they can assist each other.

*Step Four: Form Subcommittees.* Depending upon the complexity of the event, subcommittees may be formed to focus on specific planning elements. For example, security may only directly involve law enforcement agencies at the local, state and federal levels. These agencies can meet separately to plan their segment of the overall plan. Representatives of these subcommittees can share their progress, along with their needs, with other stakeholders at higher level planning meetings.

*Step Five: Continue Communication.* Throughout the planning process, the lead agency takes a *big picture* view and serves as a coordinator. Its responsibility is to see that communication and coordination are taking place among the stakeholders and, if necessary, to facilitate that coordination where it is not taking place.

### Programs and Initiatives

While planned special events may be temporary, and the planning for those events may bring together a group of stakeholders only

for that event, ongoing programs and initiatives can be used to address general special event needs on a continual basis. This portion can be described as the *processes* of coordination. Processes are what the stakeholders have agreed to that will provide the basis for how they will work together. An institutional framework can be created either before an event takes place or based on the planning for a specific special event. This framework can be used on a continuing basis to allow easier coordination among agencies for future events and eliminates the need to re-establish working relationships, which have already been created.

A state transportation agency or an MPO can develop a program that identifies what is needed for the effective management of special events. These overarching needs may include funding mechanisms, means of early identification of special events needing regional planning, and a template to bring stakeholders together to begin the planning process.

Funding is an important consideration since it is needed to pay for the time of staff assigned to planning and coordination efforts. Without an identified source of funding, the participation of agencies is subject to the availability of financing from the home agencies of those asked to take a role. At times of budgetary restrictions, agencies may not choose to make staff members available for planning and coordination, or they may limit the time or number of staff members who are needed to formulate a plan. This could be especially true for agencies that are outside of the jurisdiction where the event is being held. However, funding could be included within the budget of an MPO or a state DOT.

While all stakeholders may be aware of recurring special events, such as sporting

events and annual fairs, or major events such as the Olympic Games or the Super Bowl, less prominent events may not gain notice until just before the event. Having a program in place to identify special events requiring planning well in advance is beneficial. This initiative could take several forms. One example is regularly scheduled meetings where upcoming events are noted and discussed among regional agencies. Identification of potential problems would alert all involved to the event and allow agencies to decide if multi-agency planning needs to take place. Such meetings could be held specifically for this purpose, or they could be incorporated as part of gatherings held for other purposes.

The process of regional coordination and collaboration leads to the *products* of coordination. These products include a regional concept of operations, baseline performance data, current performance information, and operating plans and procedures that inform regional entities (public and private sector) about how the regional transportation system must operate over time (including planned improvements).

### Integration with Other Transportation Programs

Planned special events are just one example of transportation activities requiring multi-agency coordination. Special events planning could be held in conjunction with other multi-agency efforts such as construction coordination, incident management planning, and wireless communications coordination. These activities bring together most, if not all, of the key regional transportation and public safety agencies and, in turn, allow them to discuss special events while they are already together. By expanding the agenda of such meetings to include initial special events planning, agencies are given

one more reason to attend. Also, meeting fatigue is limited by not having stakeholders attend separate meetings focused only on special events.

For some smaller special events, these regularly scheduled meetings may be sufficient to alert affected stakeholders and to do a minimal amount of planning. For larger special events, requiring more detailed preparation and coordination, separate meetings should be considered. This will allow specialists to participate where necessary and will allow the original meeting to not lose its focus on a wider agenda. The regularly scheduled meetings can also be a place where updates of the more detailed plan are presented.

## **Policy Support**

### Interagency Agreements

In most instances, transportation and law enforcement agencies have no prohibitions from coordinating efforts with other agencies, especially for events expected to have an impact on that agency. However, there are instances where interagency agreements are helpful, or even necessary, for multi-agency cooperation.

While interagency agreements will vary based on state law and the culture of the agencies, there are some common issues they can address.

One issue would be *areas of responsibility*. State police, state DOT and toll agencies could each be given broad areas of responsibility through an interagency agreement. By spelling out these responsibilities ahead of time, *turf issues* can be minimized and the same ground does not have to be covered each time the agencies gather to plan a special event.

Funding issues can also be addressed in interagency agreements. If it is known ahead of time who will be paying for various aspects of the effort, confusion will be reduced and participation encouraged. In some instances, the agreements could specify that a non-public agency, such as the event organizer, is responsible for paying for certain parts of the planning and coordination effort.

### Legislation

Legislation provides the legal authority for a government agency to take certain actions. In many instances, activities involved in special events planning have already been addressed by legislation. Examples include law enforcement responsibilities for the state patrol on an interstate highway leading to the event venue or the state department of transportation being responsible for operation of a transportation management center (TMC) in the area of the event. However, there may be special circumstances not addressed in current legislation.

Examples where special legislation may be needed could include permitting agencies to operate outside their current jurisdiction or taking on activities they have not been given specific authority to undertake.

Some important considerations in establishing legislation during the program planning phase include:

- Since creating and passing legislation is normally a lengthy process, it is important that these needs are identified early so the process can be completed before the new law is needed.
- In many instances, a request for legislation has to go through many steps within an agency before it is even presented to lawmakers. At a minimum, agency

counsel and executive management needs to be involved. Since these individuals typically would not be involved in special events planning where these needs are first identified, it is also important that procedures be in place to begin the legislative process.

- Most agencies already have procedures in place to bring legislative needs to the attention of lawmakers, but it is important that those who first identify these needs know what those procedures are and how to get the process started.

## **Regional Planned Special Events Program**

### Key Elements

A regional planned special events program is an ongoing process designed to address a region's needs for managing special events. It is not a program put in place to address a specific special event, although a specific event may trigger the formation of such a program.

The program involves those agencies that have a role in managing planned special events as well as those agencies that may be in an oversight or funding role.

The program will put in place the framework for handling regional planned special events including:

- A template for groups created to deal with specific special events.
- Identification of funding to support such planning.
- Identification of infrastructure improvement needs in the region to better manage special events.

All of these elements used to implement a regional special events program can be con-

sidered the *resources*. These resources will vary depending on what is available in the region and to the participants.

### Scope and Benefits

The scope of such a program should focus on planned special events of regional significance. If an event can be wholly managed within and by a single agency or jurisdiction (e.g., through a planned special event permit program), then there is no need for the regional plan to come into effect.

However, those events that reach beyond a single agency or jurisdiction would be addressed by this program. Regional events may vary in size. For example, a parade through two towns would have limited regional impact and might require only minimal coordination, but a mega-event, such as the Olympics, would involve multiple regions and a large number of agencies.

Key benefits of a regional planned special event program include:

- The primary benefit to the creation and maintenance of such a program is that it establishes a mechanism for agencies to work together before they are *forced* to work together as the result of an impending event.
- By early identification of funding opportunities, agencies can address monetary needs prior to the event. Therefore, when an event is proposed, stakeholders can focus on planning and not be concerned with funding the planning.
- Another benefit is that by early identification of infrastructure improvements, there is a higher likelihood that the improvements can be put in place before they are needed. Noting what improvements are needed just before the event may mean they will not be available

given the lead time needed to make the improvements.

- Legislative and policy needs will also be identified through this program. As with infrastructure improvements, this will allow these needs to be addressed prior to their being required.
- An intangible benefit accruing from a regional planned special events program is the development of relationships that will extend to other operational areas.
- Better communication and cooperation is likely and will help in areas such as incident management and construction coordination.

It is important that performance measures be planned: (1) to note the *performance* benefits of the regional planned special events program and (2) to demonstrate the differences it has made to mobility and coordination within the region. Since the goals and objectives of the program are part of a collaborative process, what is measured should also be agreed to by the participants.

### Stakeholder Organization

The stakeholders in a regional program such as this will vary from region to region. Table 4-1 lists organizations that should be considered part of the program. Leadership of the program will vary by region, but the agencies most likely to take the lead include state DOTs, state law enforcement agencies, and MPOs.

### Program Development and Sustainment

Perhaps the hardest step in the development of the program is the first step, *creation of the program*. A champion of the idea, who is willing to go through the difficulties in establishing the program, is very helpful. This person can reach out to those people in leadership positions who will support the



program and assign people within their organization to work on its creation. The champion will also shepherd the program through the red tape, agency mazes, and obstacles any significant new idea is sure to face.

Table 4-1  
Regional Program Stakeholder  
Organizations

<b>STAKEHOLDER ORGANIZATIONS</b>
<ul style="list-style-type: none"> <li>• State Department of Transportation</li> <li>• Metropolitan Planning Organization</li> <li>• State police/patrol</li> <li>• Toll agencies</li> <li>• Mass transit agencies</li> <li>• Municipal governments and police departments</li> <li>• County governments and police departments</li> <li>• Owners of large venues (e.g., arenas, stadiums, universities)</li> </ul>

Ideally, agencies should assign people within their organization who support the concept and who can speak on behalf of their agency when decisions need to be made. These people should have a strong commitment to the program and be willing to attend meetings and take follow-up actions identified at these meetings.

Potential funding agencies should be a part of the program from the start. They can provide guidance on where funding is available and the steps that need to be taken to obtain it. By being involved at the beginning, the representative from the funding agency can guide the group in what they must do and help avoid situations where early decisions have to be adjusted to meet needs that are later identified.

The sustainment of the program will be due, in part, to the support of those who participate. Open lines of communication should keep all stakeholders and interested observ-

ers informed of what is being done as well as problems that may be encountered. What is needed is not someone who only sees the good, but someone who can make a realistic assessment of where the challenges lie and how to overcome them.

While what is described in this section involves varying levels of involvement, a region just starting to initiate program planning for regional planned special events should not be intimidated by what may be required before they take their first steps. As a starting point, even before high-level support is obtained or funding is identified, first steps can be taken on an informal basis among operations level staff to share information and to use resources which are already available, such as highway advisory radio (HAR), changeable message signs (CMSs), and interagency communications channels. Often it is these first, informal steps that demonstrate the value of regional coordination and lead to more formal support.

#### Services and Initiatives

The customers for this group are the event planning team and traffic management team charged with making planned special events run smoothly from a transportation perspective. The services they provide should be designed to make special event operations run well. While the regional planned special events program stakeholder group will identify early action steps and other needs, it is important that they seek the input of operations personnel as they define the services they will provide.

The very creation of the group provides an important service: (1) a forum for information to be shared and (2) needs to be identified. Other services the program will provide are those noted earlier:



- Identification of funding sources.
- Funding of the program itself.
- Identification of needed infrastructure improvements.

By handling these issues, the program will allow operations staff to focus on specific plans and leave some of these other concerns to the group.

### Institutional Issues

A regional planned special events program will face some of the same institutional issues faced by other multi-agency programs. To assure the success of the program, the following two institutional issues should be handled at the start of the process:

- Control and leadership issues.
- Need for buy-in from participating agencies.

The program needs to be flexible enough to deal with changing conditions. The structure established may not always be the ideal one for every event. Agencies should be comfortable dealing with the ambiguity that comes with new situations and be able to adjust to the situation presented.

The flexibility also affects budgeting. While expenditures need to be allocated, a reallocation will likely be needed at times to address new concerns and needs.

While a core group will participate in running the program, it may be necessary from time to time to bring in new organizations. The program should anticipate expansion so that it does not become an issue and can easily be integrated. While institutional issues among participating agencies may be a problem at the start, there exists danger of the program itself becoming an institution and presenting its own set of issues.

Many institutional issues can best be handled by those who participate in the regional planned special events program. The relationships established by committee members can be extremely helpful in overcoming encountered problems. As personal relationships develop among the members, institutional barriers become less significant and easier to deal with.

A regional committee on planned special events should not see their task as a one-time effort. Even without a specific event on the horizon, the group should work to maintain the relationships developed and adjust the planning process so that it remains fresh. This could be encouraged through regular meetings in which the group looks at upcoming special events that might require regional coordination or by expanding the role of the group so they can address other transportation management issues in-between special events. This could include areas such as roadway construction coordination and incident management planning. Some regions have even used groups such as this to provide better regional coordination for non-events such as road weather management or recreational traffic management (e.g., reach the beach, etc.).

While many of the issues addressed in this section look at planning for special events on both a short-term and medium-term basis, agencies also should consider long-term planning (10-20 years) on how they wish to handle special events. This long-term planning can address areas such as: (1) major infrastructure improvements, (2) creation of new organizations that may be needed, or (3) long-term financial and legislative needs to address these improvements. While operations level people can help identify these needs, the development of long-term plans also will require the involvement of planners and executive staff, along with legislators

and their staffs. An MPO can also be expected to play a major role in meeting these long-term needs since they will approve Federal funding and will be able to view these needs in the context of all transportation needs for the region.

## **Relationship to FHWA Traffic Incident Management Self-Assessment Guide**

The FHWA maintains a Traffic Incident Management (TIM) Self-Assessment Guide intended for use by state and regional TIM program managers to assess their achievement of a successful multi-agency program to manage traffic incidents effectively and safely.<sup>(2)</sup> Managers may also utilize the tool to evaluate gaps and needs in existing multi-agency regional and statewide efforts to mitigate congestion and safety impacts caused by traffic incidents. The TIM Self-Assessment tool consists of a series of questions designed to allow those with traffic incident management responsibilities to rate their performance, by assigning a score ranging from 0 (no progress) to 4 (outstanding efforts), in specific organizational and procedural categories.

Planned special events often represent a major element of a traffic incident management or freeway management and operations program. Such programs may spawn a committee on planned special events for the purpose of managing all planned special events in the program's region. The TIM Self-Assessment tool contains a TIM administrative team assessment question on planned special events. Question 4.1.2.5 states: Does the assessed TIM program conduct planning for "special events" including sporting events/concerts/conventions, etc.? This tool also includes several assessment questions

applicable to measuring a program's progress regarding the advance planning and management of travel for planned special events.

Table 4-2 lists pertinent assessment questions categorized by the five defined phases of managing travel for planned special events. This technical reference provides guidance on the topics identified in the assessment questions from the perspective of planned special event planning, operations, and evaluation.

## **LOCAL LEVEL**

### **Overview of Planned Special Event Permitting**

The development of a formal planned special event permit program marks a key program planning initiative to facilitate stakeholder coordination, compliance with community needs and requirements, and efficient event operations planning. Backed by guidelines and regulations specified in municipal ordinances, the program outlines a defined planning framework and schedule for event organizers and participating review agencies to follow. It represents an *agreement* between participating public agencies (e.g., transportation, law enforcement, public safety, etc.) to ensure, through planning activities or review, that all planned special events meet a set of mutually agreed upon requirements for day-of-event travel management. A municipal permit represents approval, or agreement between a jurisdiction and event organizer, to operate a planned special event, and it includes provisions outside of travel management. Larimer County, WY defines the purpose of a planned special event permit as follows:

Table 4-2  
Traffic Incident Management Program Assessment Questions Relative to  
Managing Planned Special Events

PHASE	ASSESSMENT QUESTION
Program Planning	<p>Does your program:</p> <ul style="list-style-type: none"> <li>• Have formal interagency agreements on operational and administrative procedures and policies?</li> <li>• Have multi-agency, multi-year strategic plans detailing specific programmatic activities to be accomplished with appropriate budget and personnel needs identified?</li> <li>• Have field-level input into the strategic plans ensuring that the plans will be workable by those responsible for their implementation?</li> <li>• Have formalized multi-agency teams to meet and discuss administrative policy issues?</li> <li>• Hold regular meetings of the administrative team?</li> <li>• Have multi-agency agreements on what measures will be tracked and used to measure program performance?</li> <li>• Have established criteria for what is a “major event” – event levels or codes?</li> </ul>
Event Operations Planning	<p>Does your program:</p> <ul style="list-style-type: none"> <li>• Have agreed upon methods to collect and analyze/track performance measures?</li> <li>• Have established targets for performance?</li> <li>• Have a pre-identified (approved) contact list of resources?</li> <li>• Have response equipment pre-staged for timely response?</li> <li>• Utilize traffic control procedures in compliance with the MUTCD?</li> <li>• Have mutually understood equipment staging procedures?</li> <li>• Have quick clearance policies?</li> <li>• Have a pre-qualified list of available and contracted towing and recovery operators?</li> <li>• Use motorist assistance patrols?</li> <li>• Have specific policies and procedures for traffic management during the event?</li> </ul>
Implementation Activities	<p>Does your program:</p> <ul style="list-style-type: none"> <li>• Conduct training through simulation or “in-field” exercises?</li> <li>• Train all responders in traffic control procedures?</li> </ul>
Day-of-Event Activities	<p>Does your program:</p> <ul style="list-style-type: none"> <li>• Utilize traffic control procedures for the end of the traffic queue?</li> <li>• Utilize the Incident Command System?</li> <li>• Have a two-way interagency voice communications system allowing for direct communications between responders?</li> <li>• Use Traffic Management Center(s)?</li> <li>• Have the ability to merge/integrate and interpret information from multiple sources?</li> <li>• Have a real-time motorist information system providing event-specific information?</li> </ul>
Post-Event Activities	<p>Does your program:</p> <ul style="list-style-type: none"> <li>• Conduct post-incident debriefings?</li> <li>• Conduct periodic review of whether or not progress is being made to achieve performance targets?</li> </ul>

*The purpose of the special event permit is to insure that any changes, restrictions, or adaptations, resulting from such an event are managed in a safe, prudent, and legal manner in order to protect the health, safety,*

*welfare, and convenience of the traveling public and citizens of Larimer County.*

Special event permits apply to a single jurisdiction, and numerous cities and counties, encompassing metropolitan, urban, and/or

rural areas, across the Nation maintain a special event permit program. In contrast, a state DOT permit targets the satisfactory maintenance and protection of traffic on state highways necessitating partial or full closure due to a proposed street use event. In most cases, state DOTs encourage event organizers to use county roads or local streets whenever possible.

Some important considerations and applications of planned special event permitting include:

- Permitting proves particularly effective for less frequent continuous events, street use events, and rural events occurring at a temporary venue not having a known spectator capacity. These events place an emphasis on advance planning and public outreach to mitigate traffic operations deficiencies and community impacts.
- Jurisdictions may not require a permit for special events held at permanent venues, such as stadiums, arenas, and amphitheaters.
- Permitting allows jurisdictions the opportunity to engage the event organizer at the beginning of the event operations phase.
- Public stakeholders can size-up the event operations characteristics of a proposed event in order to schedule adequate personnel and equipment resources to accommodate the event. Resources may include traffic control, security, and maintenance.
- From the event organizer's perspective, a special event permit application and associated regulations outlines a general approach toward successfully managing travel for the event, facilitates coordination with appropriate stakeholders, and gauges resource requirements on the day-of-event.

The balance of this section on permitting will describe special event application components, review processes, guidelines, and regulations specific to managing travel for a planned special event. The section will include numerous references to special event permitting in city and county jurisdictions.

## **Permit Process**

Initiation of the permit process for a specific planned special event begins with the submission of a completed special event permit application by the event organizer. The permit application represents a formal proposal by the organizer to stage a planned special event. In some cases, particularly those where the event organizer requests assistance from the jurisdiction in locating a suitable venue location or street use event route, the event organizer and pertinent public stakeholders may interact prior to application submission to review the proposed event and permit process.

Table 4-3 lists public stakeholders that may administer special event permit applications and issue permits. In small and medium-sized locales, law enforcement, transportation department, or city/town manager's office commonly processes a special event application for review internally and by other agencies in the jurisdiction. Some metropolitan jurisdictions have an office of special events that serves in a similar capacity. A local district partnership may assume a lead role in the permit process for events proposed in commercial areas. Jurisdictions issue an event permit based either on:

- A single official, such as a police chief, fire chief, director of public works, or elected official, rendering a final decision based on reviewer(s) input.
- A multi-agency application approval where each agency signs off on the

permit when the event organizer meets specific agency prerequisites.

Table 4-3  
Stakeholders Governing Permit Applications

APPLICATION ADMINISTRATION
<ul style="list-style-type: none"> <li>• Local law enforcement</li> <li>• Local transportation department</li> <li>• Fire department</li> <li>• City/town manager’s office</li> <li>• City/town clerk</li> <li>• Community development department</li> <li>• Office of special events</li> <li>• Local district partnership</li> <li>• Public works department</li> <li>• Parks and recreation department</li> <li>• Bureau of licenses</li> <li>• Office of finance</li> <li>• Risk management office</li> </ul>
PERMIT APPROVAL
<ul style="list-style-type: none"> <li>• Police chief</li> <li>• Fire chief</li> <li>• Transportation department director</li> <li>• Director of public works</li> <li>• Multi-agency approval (e.g., public works, law enforcement, and city manager).</li> <li>• City manager</li> <li>• Community development director</li> <li>• Street and sidewalk use coordinator of the bureau of licenses</li> <li>• Local district partnership</li> <li>• City/town council</li> <li>• County board of commissioners</li> <li>• Local planning commission</li> </ul>

Figure 4-3 presents a flowchart summarizing key event organizer and public agency actions throughout the special event permit process, from submitting a permit application to conducting the proposed event. Agencies administering a permit application may assign a staff person, representing the jurisdiction’s event coordinator, who will assist the event organizer throughout the permit process. Table 4-4 indicates permit application submission deadlines for several cities and counties. Application deadlines significantly influence the scope of activities performed during the permit process. To

effect a comprehensive permit application review, including stakeholder meetings and public outreach, jurisdictions should mandate permit application deadlines at least 60 days prior to a large-scale planned special event. A shorter deadline is warranted when jurisdictions, for example Wichita, KS (30 day deadline), require event organizers to arrange all details with individual involved agencies prior to submitting a permit application for approval.

The special event permit process serves to scope, schedule, and direct event operations planning activities for proposed events. This reduces unnecessary delay in facilitating stakeholder coordination, developing planning deliverables (e.g., traffic management plan, etc.), reviewing mitigation strategies, and mobilizing personnel and equipment resources required to stage a particular planned special event. Practitioners may expand and contract the process in order to best fit: (1) the area type and involved stakeholders, (2) the special guidelines and regulations unique to a particular jurisdiction, (3) the operations characteristics of a particular event, and (4) the purpose of a particular event, such as community events versus commercial, for-profit events involving event organizers from the private sector. Chapter 2 of this handbook, under a section on “Impact Level,” summarizes example decision criteria and thresholds used to determine the need to initiate a special event permit process in addition to event permit requirements.

As indicated in Figure 4-3, jurisdictions should conduct a preliminary review of the proposed special event date and time in addition to, if a street use event, the proposed parade or race route. Table 4-5 shows select jurisdiction regulations prohibiting the issuance of a permit for a special event occurring at a certain time and/or location. Aside

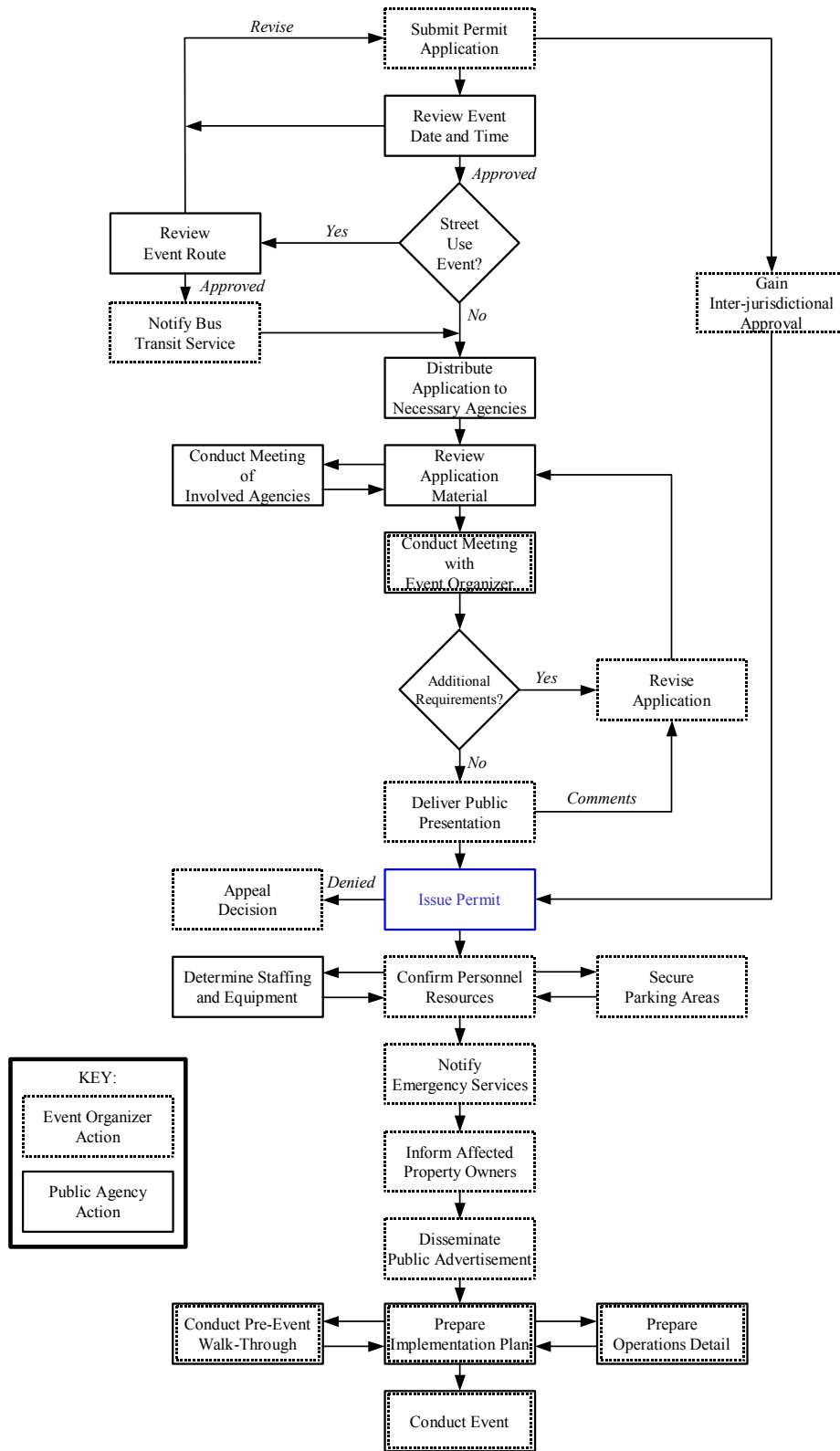


Figure 4-3  
Planned Special Event Permit Process

**Table 4-4**  
**Planned Special Event Permit Application**  
**Submission Deadline**

<b>LOCATION</b>	<b>SUBMISSION DEADLINE PRIOR TO EVENT</b>
Minneapolis, MN	5 days for parade; 60 days for race
Las Vegas, NV	14 days
Stamford, CT	14 days
Fort Collins, CO	20 days minimum; 1 year maximum
Jackson, CA	20 days
Clarksville, TN	30 days
Coos Bay, OR	30 days
Hot Springs, AR	30 days
Lancaster, PA	30 days
West Des Moines, IA	30 days
Wichita, KS	30 days
City and County of Honolulu, HI	40 days minimum; 9 months maximum
Bowling Green, KY	45 days
Reno, NV	45 days minimum; 1 year maximum
Larimer County, WY	40 days; 50 days for road closure
Louisville, KY	60 days
City and County of Denver, CO	60 days
Kane County, IL	60 days
Menlo Park, CA	60 days
Miami Beach, FL	60 days
Milwaukee, WI	60 days
Ypsilanti, MI	60 days
Montgomery County, MD	2 months
Virginia Beach, VA	60-90 days
Redmond, WA	90 days
Evanston, IL	90 days
Aurora, IL	120 days

from regulations designed to avoid conflicts with commuter traffic, the possibility of staging multiple events concurrently may cause significant travel impacts and logistics problems. Law enforcement, traffic engineering, and fire department agencies may conduct a preliminary review of a proposed event route and grant approval contingent on required traffic control measures. This step

should occur prior to distributing a street use event application to all necessary agencies with preliminary approval rendered at least 30 days prior to the event. To expedite this step, San Luis Obispo, CA, for example, maintains two standard parade routes.

The special event permit application review phase involves all agencies within a jurisdiction having authority on an entity impacted by the proposed event, and certain agencies may require event organizers to meet prerequisites and/or obtain supplemental permits. Transportation approvals include street occupancy permits, parking variances, and requests for traffic control services.

Some key stakeholder considerations during the permit application review phase include:

- Involved agencies may conduct a meeting to coordinate their review and event planning considerations.
- For large-scale events, jurisdictions and associated review agencies may meet with the event organizer to discuss additional requirements and contingencies.
- Agencies should complete review of a special event permit application within about two weeks of receipt to allow the event organizer sufficient time to revise the application (e.g., site plan, parking plan, traffic control plan, etc.).
- To ensure full mitigation of potential local traffic and community impacts, jurisdictions, such as Miami Beach, FL and San Diego, CA (see Appendix A) for example, may require event organizers to present the proposed special event management plan to neighborhood and business associations and the general public for review and recommendation.
- The event organizer should deliver the public presentation early in the permit process, at least 30 days prior to the



Table 4-5  
Planned Special Event Permit Restrictions

LOCATION	EVENT CATEGORY	RESTRICTION
City and County of Honolulu, HI	Street use event	<ul style="list-style-type: none"> <li>• No parade or activity permitted between the hours of 5:30 a.m. to 8:30 a.m. and 3:30 p.m. and 6:00 p.m., Monday through Friday, except holidays.</li> <li>• In the Central Business District, a parade or activity permitted only on weekends and holidays or after 6:00 p.m. on weekdays.</li> <li>• No parade or activity permitted to use or travel the entire distance on Hotel Street, from Richards Street to North King Street.</li> <li>• Only one parade or activity permitted on any given day on any street.</li> </ul>
Louisville, KY	All events	<ul style="list-style-type: none"> <li>• Permit holders shall open the event venue to patrons at least one hour prior to the event.</li> </ul>
Miami Beach, FL	All events	<ul style="list-style-type: none"> <li>• No special event permitted if it interferes with a previously scheduled activity or repair work scheduled for a site.</li> <li>• No event permitted if it interferes with any other scheduled event. The City Manager may take into account simultaneously occurring events in the region or other factors that would impact the city’s capability to host an event before approving an event.</li> <li>• No permit issued for more than four consecutive days or five non-consecutive days during the course of a calendar year.</li> </ul>
Minneapolis, MN	Street use event	<ul style="list-style-type: none"> <li>• No permit granted for a parade/race to be conducted within the downtown area between the hours of 7:00 a.m. and 9:00 a.m. or 4:00 p.m. and 6:00 p.m. on any day which is not Saturday, Sunday, or a legal holiday.</li> <li>• No permit granted for bicycle racing, foot racing, race walking, wheelchair racing, rollerblading, marathons, and jogging events unless the activity is to take place between the hours of 6:00 a.m. and 3:00 p.m. on Saturday, Sunday, or legal holiday.</li> </ul>

event, so public comments can be incorporated into application revisions.

Jurisdictions typically issue a special event permit approximately 7 to 15 days prior to the event. The lead time allows the event organizer and other stakeholders to carry out necessary tasks under the implementation activities phase. These tasks include determining resource requirements and preparing an operations plan. Certain jurisdictions may handle, by regulation, day-of-event traffic control, while other jurisdictions designate partial or all responsibility to the event organizer. Stakeholders representing the event traffic management team should consider conducting a pre-event walk-through, done a few days before the event to permit modifications, to review the final site plan and traffic management plan.

Table 4-6 provides a snapshot of select jurisdictions and criteria referenced by officials when rendering a final decision on a special event permit application. Due to the changing dynamics of planned special event operations, jurisdictions, particularly in metropolitan areas, may issue a special event permit only days in advance of the event date.

Table 4-7 presents a list of common event organizer tasks performed during the special event permit process coupled with example deadlines. A common prerequisite to obtaining a local jurisdiction event permit involves the event organizer securing permits from all jurisdictions controlling roadways slated for temporary full/partial closure. This represents a program planning initiative for managing all planned special events in a

Table 4-6  
Planned Special Event Permit Application Decision Criteria

LOCATION	EVENT CATEGORY	APPROVAL CRITERIA
Anaheim, CA	Street use event	<ul style="list-style-type: none"> <li>• Time of the proposed parade.</li> <li>• Place of the proposed parade.</li> <li>• Manner in which the proposed parade is to be held.</li> <li>• Other proper uses of the streets such as construction/maintenance or pedestrian traffic; construction/maintenance on the streets involved in the proposed parade route.</li> </ul>
Menlo Park, CA	All special events	<ul style="list-style-type: none"> <li>• Day(s) of the week; time of day; number of days.</li> <li>• Venue distance from nearest legal residential use.</li> <li>• Number of people involved.</li> <li>• History of complaints.</li> </ul>
Minneapolis, MN	Street use event	<ul style="list-style-type: none"> <li>• Conduct of the parade/race does not substantially interrupt the safe and orderly movement of other traffic contiguous to its route or will interfere with street maintenance or other legally permitted events.</li> <li>• Concentration of persons, animals, and vehicles at assembly points of the parade/race will not unduly interfere with proper fire and police protection of, or ambulance service to, areas contiguous to such assembly areas.</li> <li>• Conduct of such parade/race will not interfere with the movement of firefighting equipment en-route to a fire.</li> <li>• Parade/race is scheduled to move from its point of origin and to its point of termination expeditiously and without unreasonable delays en-route.</li> </ul>
Redmond, WA	All special events	<ul style="list-style-type: none"> <li>• Event does not disrupt traffic beyond a practical solution.</li> <li>• Event does not interfere with access to fire stations and fire hydrants.</li> <li>• Event does not cause undue hardship to surrounding businesses and residents.</li> <li>• Event does not require the diversion of so many public employees that service is denied to other local residents.</li> </ul>
Reno, NV	All special events	<ul style="list-style-type: none"> <li>• Event will not conflict with established on-going events.</li> <li>• Event will not create a substantial interruption of public transportation or other traffic; conflict with development in the right-of-way; close major streets during peak commuter hours.</li> <li>• Event will not cause a diversion of such a great number of police employees that police protection of the remainder of the city is in jeopardy.</li> <li>• Event will not create undue interference with emergency vehicles.</li> <li>• Availability of sufficient traffic controllers, crowd monitors, safety equipment, or insurance coverage.</li> </ul>
West Des Moines, IA	All special events	<ul style="list-style-type: none"> <li>• Route of the event.</li> <li>• Date and time of event.</li> <li>• Maximum length of the event</li> <li>• Impact on residential and commercial neighbors.</li> <li>• Limitations on public use of area requested for event.</li> <li>• Number of events previously scheduled in the city on the same date.</li> <li>• Amount of city personnel necessary to regulate and monitor the event.</li> <li>• Interference with peak transportation periods, movement of the transit vehicles, movement of authorized emergency vehicles, and schedules of various construction projects.</li> <li>• Participant provisions including parking and dispersal routes.</li> </ul>

Table 4-7  
Event Organizer Special Requirements

TASK	DEADLINE	SPECIFICATIONS
Gain inter-jurisdictional approval	<ul style="list-style-type: none"> <li>30 days before event.<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>Secure appropriate approval if temporarily closing roadways under the control of another jurisdiction.</li> </ul>
Notify transit service	<ul style="list-style-type: none"> <li>1 month before event.<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>Communicate street closure specifics for bus re-routing.</li> </ul>
Deliver public presentation	<ul style="list-style-type: none"> <li>30 days before event.<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>Present special event management plan to appropriate neighborhood associations or local planning board for review and recommendation.</li> </ul>
Confirm personnel resources	<ul style="list-style-type: none"> <li>21 days before event.<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>Obtain written confirmation from stakeholders that sufficient traffic management team personnel resources will be available on the day-of-event.</li> <li>Use private staff to patrol private parking lots (not responsibility of on-duty law enforcement officers).</li> <li>Off-duty law enforcement officers must be hired to provide VIP/dignitary escorts and to staff traffic control posts.</li> </ul>
Secure parking areas	--	<ul style="list-style-type: none"> <li>Obtain written confirmation to use private parking lots (schools, churches, businesses).</li> </ul>
Notify emergency services	<ul style="list-style-type: none"> <li>14 days before event.<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>Inform fire departments and emergency medical service of the exact location, date, and time of planned road closures.</li> </ul>
Inform affected property owners	<ul style="list-style-type: none"> <li>30 days before event.<sup>4</sup></li> <li>14 days before event.<sup>5</sup></li> <li>10 days before event (14 days for review).<sup>3</sup></li> <li>Minimum 2 days before event and 7 days maximum.<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>Distribute an approved road closure notice to all property owners adjacent to a planned road closure.</li> <li>Notify property owners, residents, and businesses within 300 feet of the event venue.</li> <li>Distribute parking passes and/or escort passes issued by governing jurisdiction.</li> </ul>
Disseminate public advertisement	<ul style="list-style-type: none"> <li>15 days before event.<sup>2</sup></li> <li>7 days before event.<sup>3</sup></li> <li>2 days before event.<sup>7</sup></li> </ul>	<ul style="list-style-type: none"> <li>Publicize the special event through the media, including newspapers, radio and/or television stations.</li> <li>Identify the event date and time, contact information, any traffic and parking restrictions, and a map of the street use event route.</li> <li>Require review of announcement by public stakeholders.</li> </ul>
Prepare implementation plan	<ul style="list-style-type: none"> <li>7 days before event.<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>Summarize traffic management plan specifics.</li> <li>Require plan for review by public stakeholders.</li> </ul>
Prepare operations detail	<ul style="list-style-type: none"> <li>Complete before event.</li> </ul>	<ul style="list-style-type: none"> <li>Indicate traffic management team personnel assignments and day-of-event operations activities.</li> <li>Specify radio or cellular interface between agencies comprising the traffic management team.</li> </ul>
Hire on-site coordinator	--	<ul style="list-style-type: none"> <li>Hire a public employee as an overall on-site coordinator, having decision-making authority, whose responsibility will be to ensure that all services are provided, the event runs smoothly, and all governing regulations and ordinances are complied with.</li> </ul>
Day-of-event activities	--	<ul style="list-style-type: none"> <li>Install temporary signs and traffic control devices.</li> <li>Maintain an approved copy of the permit application during the entire special event.</li> </ul>
Post-event activities	<ul style="list-style-type: none"> <li>2 hours after event close.<sup>8</sup></li> <li>30 days after event for report.<sup>9</sup></li> </ul>	<ul style="list-style-type: none"> <li>Remove temporary signs and traffic control devices.</li> <li>File post-event report.</li> <li>Participate in post-event debriefing with public agencies, affected citizens, and other involved stakeholders to address issues that arose during the event.</li> </ul>

Notes: <sup>1</sup> Miami Beach, FL mandate. <sup>2</sup> Louisville, KY mandate.  
<sup>3</sup> Larimer County, WY mandate. <sup>4</sup> San Luis Obispo, CA mandate  
<sup>5</sup> Reno, NV and San Diego, CA mandate. <sup>6</sup> Minneapolis, MN mandate.  
<sup>7</sup> Pitken County, CO mandate. <sup>8</sup> Larimer County, WY and Kane County, IL mandate.  
<sup>9</sup> U.S. Bureau of Land Management mandate.

region. Appendix A contains Washington State DOT guidelines for street use events conducted on state highways.<sup>(3)</sup> Key event organizer actions typically performed upon receipt of an approved special event permit include:

- Notifying emergency service agencies of temporary road closures and access restrictions.
- Informing property owners and residents, located in the immediate vicinity of the event venue, of traffic and parking restrictions.
- Disseminating travel and parking information to community residents, representing potential event patrons, via media advertisements.

### Application Components

Table 4-8 summarizes the various items that appear, in a questionnaire format, on a special event permit application. The application serves to communicate event operations characteristics to a jurisdiction, thus permitting it to impose appropriate impact mitigation requirements and/or advise the event organizer to change event operation parameters. Key items include the event purpose that may signal the need to develop contingency plans in response to possible security threats or demonstrations. Information regarding event history and expected attendance assists in achieving a more predictable event travel forecast. The application should prompt the event organizer to indicate travel demand management initiatives, including use of carpools and other modes of travel. Appendix A contains a sample special event permit application from Virginia Beach, VA.

Table 4-8  
Planned Special Event Permit Application Components

APPLICATION COMPONENT	SPECIFICATIONS
Event sponsor/organizer	<ul style="list-style-type: none"> <li>• Organization, corporation, community group, etc. sponsoring event in addition to professional firm/agency contracted to produce the event.</li> </ul>
Primary contact and coordinator	<ul style="list-style-type: none"> <li>• Decision-making authority and continuously available through the day-of-event activities phase.</li> <li>• Mailing address, e-mail address, phone (day/night/cell/radio frequency), and fax.</li> <li>• Location on day-of-event.</li> </ul>
Event name/type of event	<ul style="list-style-type: none"> <li>• Name used to advertise event.</li> </ul>
Event date and time	<ul style="list-style-type: none"> <li>• Event date(s).</li> <li>• Hours of operation on each event day.</li> <li>• Duration of event (if street use event).</li> <li>• Proposed timeline of activities through the event day(s).</li> <li>• Rain date.</li> </ul>
Event location	<ul style="list-style-type: none"> <li>• Location (e.g., street address).</li> <li>• Venue attendance capacity.</li> <li>• Temporary venue, permanent venue, on-street.</li> <li>• Zoning classification of property and/or present use of venue site.</li> <li>• Alternate location.</li> </ul>
Event purpose	<ul style="list-style-type: none"> <li>• Description of event.</li> <li>• Indication whether event differs from previous years.</li> <li>• Indication if event is political in nature.</li> </ul>

Table 4-8 (cont'd.)  
Planned Special Event Permit Application Components

APPLICATION COMPONENT	SPECIFICATIONS
Event history	<ul style="list-style-type: none"> <li>• Number of times event has been held.</li> <li>• Event produced in other cities.</li> <li>• Receipt of a special event permit in the past by the event organizer.</li> <li>• Event organizer's experience in handling special events.</li> </ul>
Expected attendance	<ul style="list-style-type: none"> <li>• Attendance per day.</li> <li>• Peak attendance at any given time.</li> <li>• Number of participants and spectators.</li> <li>• Basis for projection.</li> <li>• Attendance at past event occurrences.</li> <li>• Target age group (e.g., percent attendance by age group).</li> <li>• Estimated number of vehicles generated (cars and busses).</li> </ul>
Event preparation	<ul style="list-style-type: none"> <li>• Set up and tear down (date and time)</li> <li>• Description of required activities.</li> </ul>
Audience accommodation	<ul style="list-style-type: none"> <li>• Admission charge.</li> <li>• Parking charge.</li> </ul>
Street use event route	<ul style="list-style-type: none"> <li>• Route to be traveled or occupied.</li> <li>• Assembly location and time.</li> <li>• Completion point.</li> <li>• Rest stop areas.</li> <li>• Estimated length of parade (front to rear).</li> <li>• Maximum interval of space to be maintained between parade units.</li> <li>• Minimum and maximum speed of the parade.</li> <li>• Number and type of parade floats/vehicles.</li> <li>• Number of pedestrians and number/type of animals in parade.</li> </ul>
Street closures	<ul style="list-style-type: none"> <li>• Reason for using a non-local roadway.</li> <li>• Street segments (indicate by cross streets) and direction of travel.</li> <li>• Use of entire street width for event.</li> <li>• Occurrence of event in intersections.</li> <li>• Bridge closure.</li> <li>• Closing date and time and opening date and time.</li> <li>• Affected bus transit routes.</li> </ul>
Traffic control	<ul style="list-style-type: none"> <li>• Name of private company providing traffic control equipment.</li> <li>• Date and time of temporary traffic control equipment setup and removal.</li> <li>• Overview of directional signing, number and type of sign.</li> </ul>
Access and parking	<ul style="list-style-type: none"> <li>• Available emergency vehicle access.</li> <li>• Sidewalk and parking lot closures.</li> <li>• Use of public parking lots intended.</li> <li>• Establishment of reserved/VIP parking areas.</li> <li>• Use of off-site parking areas.</li> <li>• Covering of parking meters.</li> </ul>
Transportation	<ul style="list-style-type: none"> <li>• Narrative on anticipated congestion impacts and proposed mitigation.</li> <li>• Special arrangements for dignitaries.</li> <li>• Use of a charter or express service intended.</li> <li>• Use of public transportation intended.</li> <li>• Development of initiatives to encourage transit use.</li> </ul>

Table 4-8 (cont'd.)  
Planned Special Event Permit Application Components

APPLICATION COMPONENT	SPECIFICATIONS
Personnel	<ul style="list-style-type: none"> <li>• Number of volunteers and staff working the event.</li> <li>• Intended volunteer work assignments.</li> <li>• Number of staff working in a supervisory capacity.</li> <li>• On-site communications, cellular or radio.</li> </ul>
Event notification and advertisement	<ul style="list-style-type: none"> <li>• Notification of other involved jurisdictions and whether a permit has been obtained.</li> <li>• Use of media to advertise event (radio, television, print, Internet).</li> <li>• Use of a process to notify affected property owners and residents.</li> </ul>
Dismantling and clean-up	<ul style="list-style-type: none"> <li>• Restoration of roadway right-of-way and other public property.</li> <li>• Clean-up start and end times.</li> </ul>

Table 4-9 lists supplemental requirements to a special event permit application, required of the event organizer either at the time of initial application submission or after jurisdiction review of the application questionnaire. Traffic flow plans that specify a street use event route should identify any: (1) hindering of access by authorized emergency vehicles, (2) conflict with bus transit routes, and (3) interference with non-event attendee access to hospitals, airports, transit stations, businesses, churches, and other public buildings. Traffic control plans should address in detail the service and protection of event patron traffic, the accommodation of emergency vehicles and background traffic, and the necessary traffic control equipment and personnel resources. The event site plan and parking plan must provide accessible parking and routes to the event venue. As an example, Table 4-10 shows Miami Beach, FL special event parking and site plan guidelines for compliance with the Americans with Disabilities Act.

Jurisdictions require event organizers to sign a *hold harmless* agreement and post a certificate of insurance, typically \$1 million, before issuing a special event permit. Appendix A contains a sample hold harmless agreement from Evanston, IL.

## Permitting Requirements

Jurisdictions maintain the following general requirements for planned special events: (1) event restrictions, (2) impact mitigation and traffic control, (3) legal, and (4) funding. As indicated in Table 4-11, the municipal codes of jurisdictions across the Nation specify a wide range of requirements for managing travel for planned special events, all of which become incorporated in the special event permit process. The previous sections highlighted several requirements and associated examples under the first three cited categories. With regard to traffic control, Appendix A contains a Hot Springs, AR checklist of traffic control requirements for street use events using a particular city street. This checklist serves as a traffic management and operations plan for *recurring* street use events on the cited street, thus permitting traffic management team members to become proficient at efficiently managing traffic for events on the designated route. Appendix A also contains a detailed traffic control resource checklist, complete with equipment specifications, used in Montgomery County, MD and special event directional sign regulations maintained in Marco Island, FL.

Table 4-9  
Planned Special Event Permit Application Supplemental Requirements

APPLICATION COMPONENT	SPECIFICATIONS
Event site plan	<ul style="list-style-type: none"> <li>• Identify access points/gates, traffic circulation, lighting, and sign locations.</li> <li>• Show location of fencing, barriers, and/or barricades including temporary fencing that can be removed for emergency vehicle access.</li> <li>• Show adjacent external roads.</li> <li>• Show emergency and handicap accessible routes.</li> <li>• Identify location for a command/communication center.</li> <li>• Provide computer-assisted drawing.</li> </ul>
Traffic flow plan	<ul style="list-style-type: none"> <li>• Provide map of street use event route.</li> <li>• Show street use event staging and disbanding area.</li> <li>• Indicate required sidewalk, street, and parking lot closures.</li> <li>• Indicate affected transit routes and proposed mitigation.</li> <li>• State locations and/or parking meter numbers that require covering.</li> <li>• Indicate traffic flow routes and capacity (e.g., number of travel lanes, etc.)</li> </ul>
Traffic control plan	<ul style="list-style-type: none"> <li>• Specify temporary directional sign, advance warning sign, barricade, and traffic cone locations.</li> <li>• Conform to Manual on Uniform Traffic Control Devices specifications.</li> <li>• Allow for a continuous, through traffic lane, typically 20 feet wide, on closed roads for use by public safety personnel in an emergency.</li> <li>• Show proposed alternate routes.</li> <li>• Indicate how normal traffic pattern will be accommodated.</li> <li>• Describe how local resident and commercial traffic has access during the event.</li> <li>• State what stakeholder furnishes, installs, and removes traffic control equipment.</li> <li>• Specify temporary, removable pavement markings only.</li> <li>• Provide traffic control agent or law enforcement officer (signalized intersections especially) at all intersections requiring traffic control.</li> <li>• Provide volunteers to monitor barricades at all intersections not requiring traffic control personnel.</li> <li>• Indicate pedestrian access routes and major pedestrian crossings.</li> </ul>
Parking plan	<ul style="list-style-type: none"> <li>• Show parking sites (e.g., paved and unpaved) and access points.</li> <li>• State the number and size of vehicles planned to stage for the event in addition to the staging location.</li> <li>• Accommodation of media vehicles.</li> <li>• Indicate number of spaces available.</li> <li>• Include valet parking and route.</li> <li>• State the number of parking staff required.</li> <li>• Indicate parking lot assignments (e.g., permit, public, fee), costs, and vehicle processing procedures.</li> </ul>
Emergency evacuation plan	<ul style="list-style-type: none"> <li>• Evacuation routes.</li> </ul>
Notice of event for affected property owners and residents	<ul style="list-style-type: none"> <li>• Present event concept.</li> <li>• Indicate travel impacts in addition to planned parking and traffic restrictions.</li> <li>• Distribute to residents, businesses, schools, places of worship, and other affected entities.</li> </ul>
Event advertising brochure	<ul style="list-style-type: none"> <li>• Provide event operations information (e.g., times, dates, ticket information).</li> <li>• Indicate travel information (e.g., directions, parking, travel incentives).</li> </ul>



Table 4-9 (cont'd.)  
Planned Special Event Permit Application Supplemental Requirements

APPLICATION COMPONENT	SPECIFICATIONS
Hold harmless agreement	<ul style="list-style-type: none"> <li>Specify that event organizer agrees to defend, indemnify, and hold a municipality, including its officers and employees, harmless from any liability or claim caused by the event organizer failing to fulfill all obligations.</li> </ul>
Certificate of Insurance	<ul style="list-style-type: none"> <li>Require event organizer to obtain and name the governing municipality and its employees as insured.</li> <li>Name transportation agencies as insured.</li> <li>Ranges from \$500,000 to \$1,000,000.</li> </ul>

Table 4-10  
Guidelines for Compliance with the Americans with Disabilities Act<sup>(4)</sup>

REQUIREMENT
<ul style="list-style-type: none"> <li>All on-site accessible pedestrian routes from accessible parking to the event must be equipped with curb cuts or temporary ramps. All ramps must meet applicable codes.</li> <li>Additional disabled parking must be provided and staffed. A disabled parking area must be designated and located near to the main entrance and accessible to pedestrian routes. Necessary signs must be provided to indicate this parking area. An accessible shuttle may be used for remote parking areas.</li> <li>All Americans with Disabilities Act considerations must be identified on the site plan.</li> </ul>

Section 12200 of the California Vehicle Code defines a *special event monitor* as a person who has completed a traffic control program approved by the California Highway Patrol. Use of special event monitors reduces demand on law enforcement staff needed for security detail and highway patrol. Jurisdictions in California require these trained monitors, when the day-of-event

training program is available, during permitted special events. For instance, the County of San Diego, CA specifies the following traffic control requirements during planned special events:

Table 4-11  
Municipal Code Provisions on Planned Special Events

PROVISION
<ul style="list-style-type: none"> <li>Special event definition</li> <li>Conditions for permit requirement</li> <li>Permit restrictions</li> <li>Content of permit application</li> <li>Permit application submission and review deadline</li> <li>Notification of city/town officials</li> <li>Notification of abutting property owners and residents</li> <li>Permit approval criteria</li> <li>Event organizer duties</li> <li>City/town authority to restrict parking and close local roads</li> <li>Hold harmless clause</li> <li>Insurance requirements</li> <li>Recovery of expenses</li> <li>Procedure for appealing a denied permit</li> </ul>

- *Traffic control is to be provided at various locations, such as, narrow road segments, intersections, and starting or ending points.*
- *Only properly trained or certificated personnel (by a training program approved by the Commissioner of the California Highway Patrol) are to handle the traffic control responsibilities.*
- *Traffic controllers shall wear orange vests and utilize a "Stop/Slow" paddle.*
- *Advance warning signs shall be placed, well in advance of any personnel and the event, to alert oncoming vehicles of the supplemental traffic control and the event.*
- *Traffic controllers will avoid delays or back up of traffic onto primary County roadways such that "grid-lock" does not happen; waits of more than two minutes are excessive and will not be allowed.*
- *Adjacent driveways to neighboring businesses and residences will not be blocked.*

### Funding

Public agencies recover costs incurred in providing services during the event operations planning phase and resources on the day-of-event through event organizer fees and other funding mechanisms. Table 4-12 lists special event permit application fees for a select number of jurisdictions across the country. Table 4-13 describes five different approaches used by jurisdictions to obtain cost reimbursement for staff and equipment rental.

After an August 2002 Grateful Dead concert attracted 35,000 spectators at an amphitheater in rural Walworth County, WI, and event stakeholders prepared to turn away thousands of expected ticketless spectators, county officials passed an innovative ordinance, *Recovery of Expenses Incurred for*

*Providing Extraordinary Governmental Services*. Appendix A contains a copy of the cited ordinance, Section 10-28 of the Walworth County Code.

The social and economic benefits yielded by planned special events, in addition to the purpose of select events, result in jurisdictions periodically waiving cost reimbursement requirements even for privately sponsored special events. Table 4-14 lists criteria that planned special events in Louisville, KY must meet for City provision of free services for event operation and management.

## INFRASTRUCTURE SUPPORT

### Technology Applications

While the most critical aspect of managing travel for planned special events is the coordination of the many stakeholders involved, technology lends an assisting hand to the effort. Technology is fast becoming a mainstay in every aspect of transportation, from road maintenance and snow removal to incident management and emergency evacuation. Special event management is no different in this regard. The variety of technologies and their application serve to assist managers in both informing travelers of an upcoming event as well as monitoring and managing the event in real-time.

Most technology applications, as they relate to travel management, fall under the category of Intelligent Transportation Systems (ITS). ITS is comprised of a number of technologies, including information processing, communications, control, and electronics. These technologies are comprised of tools that can be deployed permanently for uses other than planned special events or

Table 4-12  
Planned Special Event Permit Application Fees

LOCATION	PERMIT FEE	LOCATION	PERMIT FEE
Anaheim, CA	\$25	Palm Beach Gardens, FL	\$50 per event day
Fort Collins, CO	\$25	Ypsilanti, MI	\$50-\$100
Lancaster, PA	\$25	Charlotte County, FL	\$87
Larimer County, WY	\$25	Virginia Beach, VA	\$75-\$150
Louisville, KY	\$25	Branson, MO	\$100
Marysville, WA	\$25	Clarksville, TN	\$100
Stamford, CT	\$25	West Des Moines, IA	\$100
West Palm Beach, FL	\$25	West Sacramento, CA	\$125
Minneapolis, MN	\$25 parade; \$100 + \$0.50/participant for race	Miami Beach, FL	\$250 application fee; \$250 permit fee
Lincoln, NE	\$45	Mount Pleasant, TX	\$250
Kane County, IL	\$50	Pitken County, CO	\$275
Marco Island, FL	\$50		

Table 4-13  
Planned Special Event Funding Mechanisms

FUNDING MECHANISM	COMMENTS/EXAMPLES
Event organizer pays a deposit with permit application submission.	<ul style="list-style-type: none"> <li>Applies to events necessitating road closure. Deposit is reimbursed if all road closure requirements are fully complied with (\$500 – Larimer County, WY)</li> <li>Requires \$2,500 refundable security deposit no later than 30 days in advance (Miami Beach, FL).</li> <li>Requires a \$1,000 security deposit, returned if the transportation department determines the roadways are in good or better condition than before the event took place (Kane County, IL).</li> <li>Requires a \$25 deposit on each city owned traffic control device used during an event (Golden, CO).</li> </ul>
Public agency sends post-event invoice to the event organizer for resources used.	<ul style="list-style-type: none"> <li>Allows event organizer to be charged for law enforcement, traffic engineering, and public works services.</li> <li>Requires four-hour minimum charge for each public employee engaged by the event organizer (Miami Beach, FL).</li> </ul>
Event organizer pays for estimated, required public agency resources before event.	<ul style="list-style-type: none"> <li>Requires event organizer pre-payment or bond posting before issuing an event permit (Anaheim, CA).</li> <li>Requires event organizer to submit payment for services and equipment two weeks before the event (Miami Beach, FL).</li> <li>Requires event organizer to pay for parking meter rentals (\$10 per meter/day for Miami Beach, FL; 50% of the standard fees in Denver, CO) and rental of public parking lots (Ypsilanti, MI requires 20% gross revenue sharing) as applicable.</li> </ul>
A charge on each ticket sold is set to recover expenses incurred for providing extraordinary governmental services.	<ul style="list-style-type: none"> <li>Establishes Ordinance No. 232-11/02 (Walworth County, WI).</li> </ul>
Event organizer posts a performance bond.	<ul style="list-style-type: none"> <li>Covers post-event street cleaning and/or damages to roadway infrastructure.</li> </ul>

Table 4-14  
 Louisville, KY Criteria for Providing Free  
 Services for a Special Event<sup>(28)</sup>

CRITERIA
<ul style="list-style-type: none"> <li>• Ability of the City to provide all or part of requested support services.</li> <li>• Extent to which the event is economically, socially, and culturally beneficial to the community.</li> <li>• Intended use by the sponsoring organization of any revenue over and above expenditures.</li> <li>• Impact of the event (positive or negative) on normal commercial activities.</li> <li>• Extent to which the event contributes toward the promotion of tourism.</li> </ul>

deployed temporarily during the special event only. Table 4-15 discusses these technologies and implementation alternatives in more detail. Joining these technologies to our transportation system will save lives, save time, and save money.<sup>(6)</sup> In its infancy, ITS addressed incident management, but over time, it has become an application of management strategies to improve mobility in everyday responsibilities of transportation managers of various modes. Mobility may be defined as ability and knowledge to travel from one location to another using a multi-modal approach. ITS not only benefits the transportation managers, but other service providers such as emergency service providers (e.g., police, fire, ambulance) and support providers such as towing services. In short, ITS has become a significant enabler for operating and managing the transportation network. ITS is a tool for transportation managers, and as such, it augments the many non-technical activities to plan and manage an event.

At one time, ITS was characterized as technology looking for a problem. Over the years, transportation managers realized the need to first identify needs and problems, and then associated solutions, usually technological, to those needs. As such, ITS applications are grouped into services they can

provide, or more simply as functions. In the realm of managing planned special events, there are a number of functional areas that technology can support. The following sections describe these functional areas in greater detail.

### Traffic Management

Traffic management is the most common function associated with special event planning and management. It includes the real-time detection, surveillance, and management of traffic conditions. In a typical event management scenario, managers and operators would monitor traffic, pedestrian, and parking conditions in real-time using various technologies, and modify control strategies such as modifying traffic signal and ramp meter timing, transit priority, opening gates for high occupancy vehicle (HOV) lane access, to name just a few. This function also forms the basis for collecting much of the information communicated to travelers. There are a number of specific management strategies that encompass traffic management:

- **Arterial traffic management** differs considerably from that of the freeway. While the basics are similar – detect or survey, verify, respond and inform – the strategies and tools are not. As a rule, streets do not have any available capacity compared to the using of a freeway shoulder, for instance. Parking can be removed, but there is an economic and social price to pay to remove parking. Two-way streets can be made to operate in one direction, but this, too, can come at significant cost.

Successful arterial traffic management results from utilizing every bit of roadway capacity and adapting to changing traffic conditions. Typically, streets are

Table 4-15

Planned Special Event Technology Applications

ITEM	FUNCTIONS	DEPLOYMENT	APPLICATION	BENEFIT
Detectors	Traffic Management	Permanent – in field.  Portable – on trailers for temporary deployment.	<ul style="list-style-type: none"> <li>• Provides the managers at the Transportation Management Center (TMC) with reliable, real-time information on conditions in the field.</li> <li>• Collects various data, but the most common are vehicular or travel speed, volume and occupancy.</li> <li>• Includes inductance loop detectors and infrared or ultrasonic detectors placed in, over, or beside the highway.</li> <li>• Uses portable detection systems installed on trailers that allow for locating the technology anywhere in the event area that managers want to survey.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides a status of real-time traffic conditions on the highway to managers so they may adapt their plans as conditions warrant.</li> </ul>
Closed-Circuit Television (CCTV)	Traffic Management	Permanent – in field.  Portable – on trailers or permanent structures for temporary deployment.	<ul style="list-style-type: none"> <li>• Consists of one of the oldest and most reliable methods of surveying the network in real-time.</li> <li>• Uses cameras installed in the field to monitor conditions in real time.</li> <li>• Allows systems to be located temporarily for the event using trailer-mounted rigs.</li> <li>• Whether permanent or portable, provides managers at the TMC with real-time video of conditions on the highway, allowing them to adapt their plans accordingly.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides managers instant information on the status of the highway, transit station, or pedestrian mall to managers to allow them to react quickly to issues, thereby minimizing impacts to users.</li> </ul>
Transportation Management Center (TMC)	Traffic and Transportation Management	Permanent.  Portable – in mobile trailer or van.  Virtual – a single person connected to the central systems from any remote location.	<ul style="list-style-type: none"> <li>• Serves as the nerve center where the event managers from various disciplines, transportation and other, work together to ensure close coordination.</li> <li>• Often includes a “situation room” where the event managers work, all the time being in contact with the control room.</li> <li>• Utilizes many technological tools at the TMC including: (1) map displays showing real-time traffic and transit conditions, (2) video display walls, (3) changeable message sign, (4) closed-circuit television control systems, (5) telephone and radio communications to communi-</li> </ul>	<ul style="list-style-type: none"> <li>• Provides a single location where all the managers of the agencies involved with the special event can work face-to-face and be able to communicate with their respective operators and field personnel.</li> </ul>

ITEM	FUNCTIONS	DEPLOYMENT	APPLICATION	BENEFIT
			<p>cate with their field liaisons, and (6) incident management and traffic signal control systems.</p> <ul style="list-style-type: none"> <li>In most cases, consists of a government agency facility, but in some specialized cases, such as at stadium venues, the venue itself may house this coordination center.</li> </ul>	
Mobile Telephone	Traffic Management  Traveler Information	Portable.	<ul style="list-style-type: none"> <li>Provides common form of communication between event managers and field personnel.</li> <li>Provides real-time traffic conditions to managers (i.e., manual detection) and permits receipt of real-time traffic conditions information through a paging service or by dialing into a telephone information system (see below).</li> </ul>	<ul style="list-style-type: none"> <li>Allows managers to stay in communication with their field personnel at all times via cell phone.</li> <li>As a traveler information device, transmits information on real-time conditions to digital telephones equipped to receive text messages.</li> <li>There is a large potential market for this form of traveler information.</li> <li>Requires timeliness since 3<sup>rd</sup> party Information Service Providers (ISPs) are used.</li> </ul>
Personal Digital Assistants	Traveler Information  Traffic Management	Portable.	<ul style="list-style-type: none"> <li>Sends real-time traffic conditions to pagers registered to receive the traveler information.</li> <li>Allows two-way pagers (e.g., Blackberry™) to be used by field personnel to report problems or by travelers to do the same.</li> </ul>	<ul style="list-style-type: none"> <li>Has a large potential market for this technology for traveler information.</li> <li>Requires timeliness since 3<sup>rd</sup> party ISPs are used.</li> </ul>
Internet	Traveler Information  Advertising	Permanent.  Accessible from any location with connectivity.	<ul style="list-style-type: none"> <li>Permits dissemination of information regarding new traffic patterns, restrictions, etc. (along with other information regarding the event) well in advance of the date(s) of the event.</li> <li>Provides real-time information regarding the travel conditions along the affected routes, incidents that are impacting traffic flow, and available parking.</li> <li>Aims to reach travelers <i>before they commence their trip.</i></li> </ul>	<ul style="list-style-type: none"> <li>Reaches large audience of pre-trip travelers.</li> <li>Offers subscription e-mail service to notify traveler of an alert on their preferred routes.</li> <li>As a rule, provides free service with the subscription to an ISP.</li> </ul>
Changeable Message Sign	Traveler Information	Permanent – in field.	<ul style="list-style-type: none"> <li>Informs travelers (en-route) prior to the upcoming event of</li> </ul>	<ul style="list-style-type: none"> <li>Reduces congestion by informing motor-</li> </ul>

ITEM	FUNCTIONS	DEPLOYMENT	APPLICATION	BENEFIT
	Advertising	Portable – on trailers for temporary deployment.	<p>its expected impact, infrastructure changes (e.g. road or lanes closures, parking restrictions).</p> <ul style="list-style-type: none"> <li>Provides real-time traveler information during the event (e.g., roadway conditions, incidents, parking availability).</li> </ul>	<p>ists in advance of the event so they may alter their routes or mode choices.</p> <ul style="list-style-type: none"> <li>Informs en-route travelers of potential problems such as full parking areas.</li> </ul>
Highway Advisory Radio	Traveler Information	<p>Permanent – in field.</p> <p>Portable – on trailers for temporary deployment.</p>	<ul style="list-style-type: none"> <li>Similar to CMS, informs en-route motorists of an impending problem ahead.</li> <li>Typically uses warning signs to inform motorists that an important message is being broadcast.</li> <li>Allows messages to be controlled from a remote location, such as a TMC.</li> <li>Technologically, consists of a low-power (e.g., 10-watt) transmitter located near the roadside.</li> </ul>	<ul style="list-style-type: none"> <li>When applied correctly, provides significant benefit to en-route motorists who must be advised of a traffic incident or congestion ahead.</li> </ul>
Telephone Information System	<p>Traveler Information</p> <p>Traffic Management</p>	Permanent – call center remains at a fixed location.	<ul style="list-style-type: none"> <li>Provides a phone-in service to provide real-time traffic condition information to en-route and pre-trip travelers.</li> <li>Stores real-time conditions in a database. Callers, with the help of computerized telephony, are routed to a recording of, or a live operator stating real-time conditions on the segment of highway requested by the caller.</li> <li>As a national 511 initiative, serves as both a traveler information and traffic management tool, in that it provides current traffic conditions to callers as well as allows callers to report incidents on the network.</li> </ul>	<ul style="list-style-type: none"> <li>Serves as a very useful tool in providing current traffic conditions to travelers.</li> <li>Often can be an expensive undertaking.</li> <li>Has generated a number of success stories during the 511 program's short life.</li> </ul>
Traffic Signal System	Traffic Management	<p>Permanent – Closed Loop Signal Systems.</p> <p>Permanent – Centrally controlled traffic signal systems.</p> <p>Permanent – Centrally controlled adaptive signal systems.</p>	<ul style="list-style-type: none"> <li>Signal systems are commonly installed along arterial streets to optimize traffic flow and minimize delay.</li> <li>Closed Loop Signal Systems and Centrally controlled signal systems allow system operators to download and implement special signal timing plans for special event management. These plans will optimize traffic operations during event ingress and egress.</li> <li>Adaptive traffic signal systems, due to a high level of detectorization and sophisticated system</li> </ul>	<ul style="list-style-type: none"> <li>Increases the efficiency of the street network and reduces the delay on the network.</li> </ul>



ITEM	FUNCTIONS	DEPLOYMENT	APPLICATION	BENEFIT
			programming, will adjust to event-generated traffic flows and optimize traffic operations during event ingress and egress. With adaptive signal systems, the engineering of event timing plans is largely accommodated by the system. However, adaptive systems are considerably more expensive to install than either Closed Loop or centrally controlled systems.	
Parking Information Systems	Traffic Management	Permanent.	<ul style="list-style-type: none"> <li>• Outfits parking lots and garages with detection and surveillance technology to determine the available number of spaces.</li> <li>• Collects information via detection and surveillance technology that is then processed by algorithms in computer systems, and can determine what space is available, using actual counts and predictive algorithms. The parking status is then conveyed to signs at the entrance or to an advanced traffic management system to be placed on CMSs or broadcast on HAR or commercial radio.</li> <li>• At arenas or stadiums, alerts motorists not to exit from a freeway to a parking lot if it is full, and directs them to available parking locations.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces the circling pattern of vehicles in a downtown area by informing motorists of the unavailability of parking spaces.</li> </ul>
Commercial Radio or Television Stations	Traveler Information	Permanent.  Accessible from any location with connectivity.	<ul style="list-style-type: none"> <li>• Broadcasts traffic reports on a regular basis, typically during peak traffic periods or periods of special events. The information is received from aerial spotters or advanced traffic management systems.</li> </ul>	<ul style="list-style-type: none"> <li>• If broadcasted in a timely manner, reaches the most travelers and provides them with information to change their route or mode to ensure the most efficient network for prevailing conditions.</li> </ul>

managed by traffic signal systems, and one of the most beneficial signal strategies for planned special events is the use of modified timing plans to optimize traffic operations during event ingress

and egress. Several strategies, having various levels of complexity, exist for managing traffic signal systems on arterial highways. The best strategies available for special event management in-

clude: (1) remote modification of the system, (2) individual signal timing in response to changing conditions, and (3) highly sophisticated adaptive control systems, which, due to a higher level of data acquisition and system programming, automatically adapt to changing traffic flows. Closed Loop Signal Systems, which are relatively inexpensive and are becoming widely used, offer a means of implementing planned system timing plans designed for a particular special event. Individual signals and system timing can be monitored and modified remotely from a transportation management center or any other location equipped with a personal computer and modem.

The more sophisticated centrally controlled traffic signals have a fixed communication system between the traffic signals and a control center. The traffic signals and signal systems under control are constantly monitored. These systems generally have a higher level of programming sophistication than the Closed Loop Systems. Planned special event management is accommodated in much the same way as with Closed Loop Systems, with special timing plans being downloaded into the system in response to event conditions. The timing plans are configured in advance, but as with Closed Loop Signal Systems, can be modified from a transportation management center in response to changes in the field.

Adaptive control systems represent the most sophisticated traffic signal systems. These systems require considerably more detector input and communication ability. Adaptive control systems rely on intricate software packages to produce an ever-evolving signal timing

plan. These systems have the capability to continuously adapt to changing traffic patterns, thus optimizing traffic flow. With adaptive traffic signal systems it would not be necessary to download special signal timing plans in order to manage a special event. The adaptive traffic signal systems would automatically adapt to changes in traffic caused by additional event-generated traffic.

- **Ramp management** represents a freeway strategy that controls the amount of traffic entering and exiting a freeway in order to maintain or increase its efficiency. It is typically provided by means of metering or closing ramps. The theory behind metering is that the rate at which vehicles enter a freeway is controlled, reducing turbulence at ramp junctions where most congestion occurs. This, in effect, improves the efficiency of the mainline freeway, thus reducing a vehicle's overall trip time. Ramp closure is rarely used as a long-term solution, but can be implemented when the capacity of an entrance or exit ramp is exceeded and the resulting queues jeopardize safety.
- **Lane use management** is a process used to maximize benefits and use of existing pavement, and improve the safety and efficiency of freeway operations. Lane use management is typically exercised through use of signs (static and dynamic), temporary traffic control devices, economic incentives and disincentives, and law enforcement. Lane use management includes designating certain lanes for the use by a particular class of vehicles (e.g., buses, carpools), the use of shoulders as a traveled lane during peak periods, contra-flow lanes, reversible lane control, and lane use control. Lane use control uses dynamic

signing to indicate whether a lane is open (green arrow pointing down over a lane), closed (red “X” over a lane), or is closed ahead (a diagonally cocked color arrow over the lane).<sup>(7)</sup>

- **Incident management** represents an operational approach used on both free-ways and arterials that employs all of the available resources, including human and technological, to identify, manage, and clear incidents from a freeway in a quick and effective manner. In the transportation management center, operators utilize networks of closed-circuit television cameras, vehicle detection sensors, incoming 911 or 511 reports, incoming media reports, and mobile reports (from service patrols, police, maintenance personnel, and motorists) to monitor, verify, and determine the scope of incidents to quickly dispatch the appropriate emergency response personnel and equipment. This saves valuable time when treating the injured and minimizes the effects incidents have on traffic conditions. After field personnel arrive at the incident scene, TMC operators continue to monitor the incident and conditions surrounding the incident to inform travelers of traffic conditions.<sup>(7)</sup>
- **Parking management** facilitates improved and sustained mobility - moving traffic through a location quickly, with little delay, and only once. Parking management supports effective mobility by managing parking facilities. In this discipline, systems monitor and survey the available capacity of parking facilities, both surface lots and garages, and communicate the availability or non-availability of spaces to motorists. In doing so, motorists do not congest the highway network by traveling from

parking location to parking location in hopes of finding an available space.

### Traveler Information

To ensure the successful management of a special event, it is vital to communicate with travelers to inform them of anticipated (future) and current conditions on the network:

- One goal is to provide the conditions information to en-route travelers so they may alter their route or mode, and to pre-trip travelers so they may alter their trip planning. Information that can be provided includes current traffic conditions, congestion, lane or turn restrictions, HOV restrictions, alternate routes, parking availability, and road closures and the relevant time periods.
- A second goal is to inform the public of the event well enough in advance to allow intended travelers, whether event attendees or not, to change their travel *habits* prior to the event.

Various means and technologies are used to disseminate information to the public. Information is provided to:

- Pre-trip travelers via websites, media broadcasts, and mobile communication devices (e.g., personal digital assistants, pagers, and cell phones).
- En-route travelers via roadside devices such as changeable message signs and highway advisory radio, and in-vehicle via commercial radio.
- Both pre-trip travelers and en-route travelers through mobile phones, web-enabled wireless phones, pagers and personal digital assistants (PDA).

In support of these functions, there are many technologies in the realm of ITS that have been incorporated for special event man-

agement. Not all of these are a single technological device, nor are all of the parts provided by the managing agency alone.

## Funding Sources

Current funding practice typically favors building new or rehabilitating existing transportation facilities over operational improvements, such as freeway management systems. A key reason is that agencies do not consider operations as a distinct line item in their budget. Freeway management systems require both capital and maintenance funding. This topic has been under discussion for several years, and few agencies have been willing to attempt new approaches.<sup>(7)</sup>

Involvement by the freeway practitioner in funding processes and decisions cannot be over-emphasized. As noted in the Millennium Paper prepared by the Transportation Research Board Freeway Operations Committee, "If funding for deployment of freeway management systems and programs, and their ongoing operations and expansion, is not budgeted and the necessary resources allocated, the freeway investments will deteriorate and eventually become useless."<sup>(8)</sup>

Funding for ITS initiatives always has been a challenge and is tied in closely with how well we sell the concept of freeway operations and management. Because of tighter controls on money and a never-ending list of ways to spend it, there will continue to be challenges in the search for new sources of funding to continue expanding the existing infrastructure. Such new concepts as partnerships between the private and public sectors, outsourced design/build/operate contracts for transportation infrastructure projects, and user-pay scenarios will bring about new opportunities for funding. Expanding advertising, sponsorship, and

"adopt-a-highway" plans to include traffic management will present options for funding operations. Partnerships to sell or share data and video signals will continue to provide new opportunities.<sup>(8)</sup>

The authority for transportation decision-making is dispersed among several levels, or "tiers", of government, and often between several agencies with each governmental level. The concept of special event management needs to be considered and supported at each of the different tiers noted below:<sup>(9)</sup>

- The **national** tier involves the authorizing legislation that establishes and provides direction, priorities, and resources for the federal regulations, policies, programs, and research that is initiated or implemented.
- The **regional/statewide tier** involves the appropriate strategic transportation planning, programming, and coordination efforts that include a longer-range time horizon (10 –20 years). Statewide and regional transportation planning is the structured process followed by states, metropolitan planning organizations, municipalities, and operating agencies to design both short and long-term transportation plans. Products are project-oriented, typically providing the Statewide and Regional (Constrained) Long Range Plan (LRP), Statewide Transportation Improvement Program (STIP), regional Transportation Improvement Program (TIP), and Unified Planning Work Program (UPWP). While the process has historically focused on capital projects, it is now recognized that the statewide/regional transportation planning process must take management and operations of the transportation network, and the ITS – based systems that support

operations, into consideration. This is particularly true given that ITS appears to be losing its special funding status that it enjoyed in ISTEA and TEA-21. The current trend to “mainstream” ITS (and operations) into the traditional decision-making process of transportation planning means that operations and ITS deployments will be increasingly funded through regular sources and compared with traditional transportation components, such as road widening and new construction. There is consequently a need to strengthen the ties between management and operations, ITS, and the transportation planning process.

- The **agency tier** is where the infrastructure comprising the surface transportation network (e.g., freeways, bridges, tunnels, streets, rail lines, rolling stock, traffic control/management devices) is typically owned. This level develops a multi-year program and budget that defines resources and commitments for a three to 10 year time frame, with updates every year or two. It is at this tier where priorities, budgets, and allocation of resources are established. From the perspective of freeway management and operations, it is at the agency level where the planning, design and implementation activities for the freeway management program (i.e. special event) take place. It is important that the process to develop the ITS – based strategic plan (or any such focused plan or project) support the overall transportation planning process; not compete with it. Moreover, the end products of these “focused” processes can and should be used to feed information back into the overall transportation planning process.

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