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July 30, 2002

Mr. Jon Williams Manager, Synthesis Studies Transportation Research Board 2001 Wisconsin Ave., N.W. Washington D.C. 20418

Subject: Final Synthesis Draft NCHRP Project 20-5/Topic 32-09: Transportation Planning and Management for Special Events

Mr. Williams,

In accordance with the Contract for the above referenced project, please find enclosed the following deliverable:

- Stage IV Deliverable: Final Draft of Synthesis
  - Two Manuscript Copies
  - Three 3.5 Diskettes with all required files
  - Pamphlet of Phoenix International Raceway as for use as Figures 9 & 10

Many excellent suggestions were made by the 20-5 Synthesis Oversight Committee members and were directly incorporated into the Synthesis Report. Below is the point-by-point response to each of the comments made of the committee.

- **5 (a) Reviewer #1:** With respect to special event security, we conducted an extensive search for information related to security at special events through the internet and recent transportation conference compendiums, resource personnel at ITE and TRB, and through professionals such as Timothy Harpst, the Salt Lake City Transportation Director. Due to the recent nature of the heightened security concerns, very little formal documentation exists related to special event procedures. However, we did incorporate as much information as possible into the *Synthesis* regarding this issue. In Chapter 3, starting on page 32, you will find a summary of the information we found.
- 5 (b) Reviewer #5: Information regarding handicapped access to park-n-ride lots was obtained through direct contact of park-n-ride lot managers. It was found that in most instances, handicapped-accessible shuttle buses are used, and in the case of Phoenix International Raceway, preferential parking for handicap patrons is also provided (see page 51 in Chapter 4).

**Reviewer #6:** Adding more details from the body of the report to the individual sections expanded on Chapter 9, starting on page 86, so it was more specific for the readers.

5 (c) Reviewer #1: See 5 (a) where security was addressed.

6. Reviewer #1: In the section on security in Chapter 3, additional comments were added regarding aviation as it relates to security. Logistical information such as the need for additional ramp space for parking was also included. With regard to increased military roles in security, see Chapter 3, page 29. Information related to emergency evacuations and medical readiness was briefly included in Chapter 3, page 21. No formal documentation was found regarding this issue, but it seems appropriate that it could be handled well by an emergency operations center, which is already trained in this area.

Thank you for the opportunity to perform this study. If you have any questions or need additional information please feel free to call or email me at (406) 994-7998 or <u>JodiC@ce.montana.edu</u> or Ryan Bylsma at (406) 994-7378 or <u>RBylsma@coe.montana.edu</u>.

Sincerely,

Jodi L. Carson, Ph.D. Assistant Professor

Cc: Ryan Bylsma Graduate Research Assistant

## TRANSPORTATION PLANNING AND MANAGEMENT FOR SPECIAL EVENTS

## SUMMARY

The intent of this overall investigation was to identify and document transportation-related activities related to the planning and management of special events. The National Highway Institute (1988) defines a special event as an occurrence that "abnormally increases traffic demand" (unlike an incident or construction/maintenance activities that typically restrict the roadway capacity). Under this definition, special events may include such things as sporting events, parades, fairs and other planned events.

Data to support this investigation came from four primary sources: (1) published literature, (2) surveys of stakeholders, (3) select, in-depth case studies and (4) various informal interviews with special event coordinators, Topic Panel members, etc. Because of the dearth of special-event related literature, the primary source of information to support this investigation came from a survey of stakeholder practices related to special event planning and management. The *Survey Questionnaire* provided background information describing this investigation, gave a general definition of a "special event" and solicited information regarding special event types, stakeholder involvement, tools and techniques, supporting guidance documentation, effectiveness of current efforts and funding sources.

In addition to the general *Survey Questionnaire*, a select number of case studies were pursued as part of this investigation. The intent was to identify case studies representative of each of the two special event types – frequent and infrequent.

A fundamental challenge to this investigation stemmed from the basic definition of a special event – occurrences that "abnormally increase traffic demand." This broad definition encompassed frequent events such as sporting events, musical concerts, summer-long event series and seasonal tourist venues as well as infrequent events such as national conventions, international summits, parades, fairs and others.

Event examples cited by survey respondents ranged in size from 1,000 to 1.7 million, in duration from a few hours to several months and in scope of impact from local to multi-state. This breadth in event size, duration and impact combined with the dynamic nature of special events challenges the ability to concisely categorize special events into groups that share common characteristics and present similar challenges in planning and management and subsequently challenges the ability to develop uniform procedures for special event planning and management.

Primary stakeholders in the special event planning and management process included law enforcement, fire departments, transportation departments, the media, event organizers, planning and political bodies and the military. In all, 29 different stakeholders were identified as having a potential role in the special event planning and management process. Agency and jurisdictional involvement varied by event size, type and location. Despite the significant number of stakeholders that could be involved in the special event planning and management process, relatively consistent interaction among the key stakeholders was reported. A "champion" was nearly always responsible for ensuring this interaction though the affiliation of the champion varied across responses. The affiliation of the champion also varied depending on the size, type and location of the special event. The most common forum for interaction was reported as interagency/inter-jurisdictional pre- and post-event meetings.

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An extensive array of special event planning and management tools and techniques are reportedly in use or planned for use. In nearly all cases, a combination of tools and techniques are employed that address: (1) motorist information, (2) traffic management and (3) travel demand management needs. Common motorist information tools and techniques include variable message signs, highway advisory radio and pre-event informational campaigns. Predominant traffic management tools and techniques include the use of traffic cones, temporary lane closures, portable static signs, traffic management teams and traffic management centers. Travel demand management tools and techniques most commonly employed include park-n-ride lots, alternative routes and parking management. A high consistency in the use of these tools and techniques for both frequent and infrequent events was noted.

Limited formal guidance documentation to support special event planning and management was uncovered; only seven states responded affirmatively that they have such formalized guidance. Of those that did respond affirmatively and provide examples, differences were noted in the content and focus of the guidance documents depending on the lead development agency. Law enforcement-initiated documents focused more general public safety and enforcement duties and less on traffic control activities during special event times.

Efforts to quantitatively evaluate the effectiveness of special event planning and management activities have been limited; only one survey respondent out of 36 indicated that formal performance measures were pre-defined to evaluate efforts. Only eight survey respondents reported collecting data in support of planning and management efforts. Qualitative assessments of special event planning and management efforts were easier to obtain. When considering their own agency's performance, the majority of respondents indicated being satisfied with their

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agency's level of effort towards special event planning and management. Externally, the common challenge expressed related to communication and cooperation with other stakeholders.

Common sources of funding for special event planning and management at the federal level include the Congestion Mitigation and Air Quality Improvement Program (CMAQ), the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA). At the state level, the most common funding source cited by survey respondents for special event planning and management was from state departments of transportation. Transportation department operating budgets have been used to support personnel, traditional traffic control devices and equipment such as variable message signs (VMS). Private partners and event organizers also provide funding for planning and managing special events, though at varying levels.