New Jersey: Touchdown for TSM&O

A Case Study

Super Bowl XLVIII

New Jersey Department of Transportation
“I am not surprised that we delivered a successful Super Bowl for the NFL based on the excellent game plan put together by a dedicated DOT staff and individuals from our equally qualified partner transportation agencies and law enforcement partners.”

Dhanesh (Dennis) Motiani
Assistant Commissioner, Transportation Systems Management
New Jersey Department of Transportation

“While all the Hudson River crossings were part of the base transportation plan, the Lincoln Tunnel and Port Authority Bus Terminal played a central role in serving Media Day, Super Bowl Boulevard, and Super Bowl Sunday. We developed many contingencies, deployed new assets, and mobilized extra resources for escorts, rapid incident response, snow removal, security, reliability, and customer service.”

Mark Muriello
Assistant Director of Tunnels, Bridges and Terminals Department
The Port Authority of New York and New Jersey
Introduction

The New Jersey Department of Transportation (NJDOT) and its partners routinely plan and staff transportation management activities for planned special events (PSE). This past winter they were charged with traffic management responsibility for Super Bowl XLVIII, an undertaking that required more planning and greater focus than does the typical PSE. The Super Bowl is much more than just a football game on a Sunday; it is an entire week of events and transportation challenges that agencies must plan for in order to operate an efficient transportation system.

Elements that made this planned special event unique were as follows: having the game in a winter venue and a non-dome stadium, a first; complexities of a high-population, bistate major metropolitan region; a complex transportation network with chokepoints (bridges/tunnels); heavy emphasis on fans using mass transit and bus transport to the venue; and a surrounding transportation network that mandated vehicle or mass transit arrivals at the sports complex (no pedestrian access).

This case study documents the transportation management activities undertaken by the NJDOT and its partners, which were characterized by operational strategies and the application of advanced technologies. The purpose of this high-level document is to provide an overview of the partners that collaborated for this event; the anticipated transportation challenges; the planning process; the technologies used; the collaboration efforts; and lessons learned in the implementation of game day operations that allowed for a successful event for the State of New Jersey. A complete document with all details regarding the event planning is also available.

The guiding vision for transportation management for the event was to build on successful regional transportation agency coordination and operations to deliver a safe and efficient Super Bowl XLVIII week experience for both residents and visitors using the transportation network.

“The Turnpike Authority was able to be successful thanks to the great ground troops working from a coordinated multiagency playbook throughout Super Bowl week. Our Turnpike Authority team for both planning and implementation integrated Operations, State Police, Tolls, Engineering, and Administration.”

Henry (Chip) Eibel, Jr., Acting Director of Operations, New Jersey Turnpike Authority
**Challenges**

The NJDOT has a long history of traffic management for very large events at the MetLife Sports Complex featuring attendance numbers equaling that of the Super Bowl event, but many things made this event unique, including the following:

- This event was designated as a Special Event Assessment Rating 1 (SEAR 1) by the Department of Homeland Security (DHS) for security, which is the highest rating other than that of a National Special Security Event (NSSE).
- Planners needed to remain cognizant of the importance of the “Fan Experience” in everything that was done.
- The fact that this one-day event should be treated like a week-long event, due to supplementary events and the teams’ repeated travels to and from the hotel and the practice facility.
- The challenges of operating in winter weather.
- As the first “Mass Transit Super Bowl,” the event offered very few parking spots to ticket holders and no tailgating or drop-offs were allowed.
- This event was very high profile compared with any other game that has been played at this stadium, drawing enhanced media attention due to the potential for a weather event occurring. The majority of the fans would be “out-of-towners” and therefore unfamiliar with the complex roadway and the transit system.
- Given that planners were unsure of which teams would end up playing the game, planning for the possibility that a regional team (Giants, Jets, Eagles, Patriots, Redskins, Ravens, and even the Steelers) would be a contestant was a particular challenge, since fans of those teams might stay in New Jersey or perhaps be dropped off near the stadium.

**Planning for Operations**

With NJDOT and NJSP as co-leaders, a core team of stakeholders and partner agencies began planning over a year in advance. Timely, careful, and detailed planning for Transportation Systems Management and Operations (TSM&O) was required, calling for effective interagency coordination, cooperation, and interoperability. Harnessing existing technologies and resources, together with supplemental elements as needed, allowed the team to efficiently deploy and implement the plan. Subcommittees and outside agencies were involved, even in addition to the routine planning groups responsible for New Jersey traffic management activities. Traffic Incident Management (TIM) and Winter Operations were the main focus for planning, along with providing exceptional traveler information for the ingress and egress of cars and buses.

Table-top exercises were held to model scenarios and document response actions or preparation, as well as design contingencies. All response plans were documented in the Play Book. With each planning exercise the teams assessed the likelihood that an event would occur and its potential severity. In addition, for certain scenarios key players conducted drive through exercises to assess every angle of a potential event. The probability of certain risks were assessed against the severity using a risk assessment matrix. Risks and scenario assessed by the team included the following:

- Scheduled construction or maintenance work;
- Personnel staffing;
- Transportation mode shifts;
- Terrorist/large-scale public safety threats;
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- Telecommunications issues;
- Inclement weather;
- Vehicle influx from neighboring states;
- Emergency roadwork;
- Traffic incidents;
- Transit rail link failure;
- Emergency lockdown; and
- Power failures.

Other operations strategies that were considered during planning include the following:

- Tasking Safety Service Patrols (SSP) and TIM response teams to patrol the highways around the stadium;
- Renting snow melters in case there was a heavy snowfall so that plowing would not be the only solution;
- Adding snow removal contractors to provide additional assistance in case of heavy snowfall;
- Keeping resources (e.g., staff, ITS devices) in reserve to manage unexpected contingencies;
- Planning to retrieve field resources sooner, as in New Jersey, the snow event happened the day after the Super Bowl and many resources were out in the field;
- Restricting lane closures and then banning them well prior to event;
- Planning for the obvious even if it was eliminated as a possibility, in recognition that one cannot plan for the unknown unknowns;
- Documenting all of the details for the planning of transportation management in the Play Book, an indispensable overall go-to guide for the planning and response efforts;
- For parts of Super Bowl week, having all stakeholders sit together in the New Jersey Statewide Traffic Management Center (STMC) with access to ITS tools and resources;
- Specifying staffing levels for all agencies supporting transportation management and limiting time off and vacations during the week; and
- Keeping key vendors, such as radio system specialists, video management staff, DMS software specialists, ITS staff, bridge inspectors, structural engineers, and IT staff on stand-by during the event.
Special technological solutions were incorporated into Super Bowl transportation management, including the following:

- New color portable DMS were very effective in providing traveler information and routing information in full color to complement colored parking areas. There were 5 major approaches to the sports complex and 3 defined zones with 14 parking lots, so clear guidance to these facilities was imperative for a smooth flow into the stadium.

- Lack of visual surveillance on the major East-West roadway required installation of additional permanent CCTVs, while some other stretches of roadway were enhanced with portable CCTV. Bluetooth readers were added to enhance analytics and to provide travel times. An MOU was executed between NJDOT and PANYNJ to share PANYNJ camera images along NJ-495 and near the Lincoln Tunnel.

- Message consistency and coordinated timing of messages were an important part of traveler information services. There were many DMS across many entities (NJDOT, NJTA, PANYNJ, stadium, and NFL consultant rentals), so it was vital to have consistency and coordinated messages.

- The Public Safety Compound (PSC) was an amazing temporary state-of-the-art facility located within the stadium complex. The PSC was led by NJSP, but it was used by all key stakeholders, including public safety organizations, transportation agencies, utility companies, and the NFL. NJDOT/ NJTA patched in ITS resources, including camera feeds, for display on a video wall, and transportation agencies, as well as NJSP, used an incident database located in the PSC.

- All partners used a common radio channel across NJDOT, NJTA, and NJSP that was specifically designated for Super Bowl week activities. Additional agencies also had access to the channel for use as a back-up to other communication types such as cell phones.

- In the months before the Super Bowl, NJDOT identified the key existing ITS field devices and prioritized repairs and preventative maintenance accordingly. During Super Bowl week, those devices were also given higher priority for repair.

“The New Jersey State Police, including the Incident Management Unit which works hand-in-hand with NJDOT everyday, was proud to help deliver a safe Super Bowl week. The STAT Committee meetings and table-top exercises built relationships among transportation and law enforcement staff from across the region so that when incidents happened, we already knew each other and each agencies’ resources.”

Lt. Michael Abline
Incident Management Unit,
New Jersey State Police
The fact that there was an existing network of collaborating agencies facilitated commencement of the collaborative exercises required in the early planning phases for the event. Elements of the collaborative efforts include the following:

- The agencies routinely came together for other routine planning and training exercises. The time invested in planning for this specific transportation management challenge increased the bonds between the various agencies. Each agency had a defined role and cooperated to contribute resources and facilities.

- Given the size of the event, planning began over a year in advance. A kickoff event was held in February of 2012, followed by monthly meetings and then, as the week approached, even more collaborative meetings.

- A Play Book was developed to document all plans, resources, and responsibilities. Various specialized subcommittees were formed to address specific challenges and the team grew together to ensure the overall objectives were met. Throughout the planning and implementation process, each partner agency was responsible for its own facilities; however, ultimately the entire network operated as a whole because of the successful collaboration of the group.

- The collaboration efforts for this Super Bowl will benefit each involved agency long after the event. Many of the working relationships were well established prior to the event, which helped, but the planning provided a greater understanding of what the others did and overall regional resources. It was also helpful to have staff from various levels of each agency interact during the planning and implementation phases.

- Multiple transportation-focused table-top exercises brought everyone together for planning exercises and to document responses plans for various traffic management scenarios. Each scenario worked through a situation: who would do what; who would lead the response; and what possible resources would be needed. Weather preparedness scenarios and quick clearance strategies were very important in planning exercises. The response plans were all documented and added to the Play Book, which was revised up to the very last minute and provided to all involved agencies.

One example of how the planning influenced the operations of the system: an incident occurred on the George Washington Bridge and reduced traffic to one lane each direction. The PANYNJ restored the roadway to full operation in 20 minutes. The team felt that its emphasis on planning allowed for a rapid response in this situation. A second learning experience: an incident occurred early in Super Bowl week, when all systems were “go” resulting in an overreaction, which in turn allowed for tweaking of response plans prior to game day.
Lessons Learned

The core team worked exceptionally well together throughout the planning, operations, and implementation of traffic management for Super Bowl XLVI and strengthened existing relationships. The lessons learned and collaborative networking will benefit the region’s transportation operations for years to come, not only in connection with planned special events but also daily operations, communication with travelers, and incident management. Specific lessons learned by this team include the following:

• The frequent multiagency planning activities in the year before the event led to solid plans and strengthened relationships that formed the basis for successful implementation of transportation management for Super Bowl week.

• Within the transportation management center, good information flows and situational awareness were essential to success. Co-locating decision-makers from multiple agencies allowed real-time informed decisions.

• Having a running “punch list” of things that needed attention, with timelines and assignments of responsibilities, provided transparency regarding open items and team accomplishments.

• Holding multiagency conference calls or briefings to discuss overall status and remaining punch list items beginning a few days prior to Super Bowl Week helped ensure team readiness.

If the chance were there to do it all again NJDOT would:

• Keep pressure on local transportation experts to accommodate forecast and regional travel characteristics.

• Minimize overemphasizing or over resourcing any one technology. Also, do not introduce a new technology (or software) unless there is adequate time to properly train staff on its use.

NJDOT documents the following learning opportunities:

• Partnerships and coordination efforts must continue after the Super Bowl event. The multiagency core group must capitalize on the relationships built during this process to provide advantages to future projects and everyday traffic management.

• Document the lessons learned and have a formal debrief so that lessons can be shared and success acknowledged.

And finally, those items the DOT wished it knew ahead of time and now would like to pass on to the next agency planning this scale of an event would be the following:

• The scale and scope of planning transportation management for the Super Bowl will require multiagency involvement at least one year prior to the event. Cross planning is a necessity and you will need to form multiple subcommittees and ask lots and lots of questions. Relationships established in the planning phase will be important throughout the entire event cycle.

• From the NFL’s perspective, all focus should be on the “Fan Experience.”

• Existing institutional knowledge cannot be replaced by that of outside experts.

• Use the event as an opportunity to expedite ITS infrastructure investments in the region.

• Document everything to memorialize and show transparency, for instance by creating a “Play Book” and having a post-event debrief. Conduct training sessions with front-line staff on the plans contained in the Play Book.

• Use a running “punch list” of open items and things that need done.

Credits

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