I-95 Corridor Coalition

Best Practices for Border Bridge Incident Management

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Prepared for:

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1 INTRODUCTION

Incident management is defined in the Federal Highway Administration's (FHWA) Incident Management Handbook as "the systematic, planned, and coordinated use of human, institutional, mechanical, and technical resources to reduce the duration and impact of incidents, and improve the safety of motorists, crash victims, and incident responders. These resources also help to increase the operating efficiency, safety, and mobility of the highway by systematically reducing the time to detect and verify an incident occurrence; implementing the appropriate response; and safely clearing the incident, while managing the affected flow until full capacity is restored."

Successful incident management entails a series of activities carried out by personnel from a variety of transportation and emergency management agencies. These agencies typically include police, fire, 911 dispatch, towing and recovery, emergency medical service (EMS), transportation agencies, and the regional media. Cooperation, coordination, and communication between these agencies are vital to the success of the incident management program.

In cases where incident management must transverse state boundaries the number of agencies involved in the program increases significantly. Transportation and emergency management agencies from all states near the border must be involved in responding to incidents. This is especially the case at border bridges, such as the Woodrow Wilson Bridge, which connects the State of Maryland, the Commonwealth of Virginia, and the District of Columbia along the Capital Beltway.

Agencies responsible for incident management on the Woodrow Wilson Bridge have received many accolades for their incident management program. This report documents the best practices of the Woodrow Wilson Bridge incident management program in an effort to provide guidance to other I-95 Corridor Coalition states in dealing with border bridge issues.

1.1 Project Purpose

The purpose of this report is to document the process, methodology, lessons learned and results of the inter-jurisdictional work that has been done between Virginia, Maryland, and Washington D.C. regarding incident management on the Woodrow Wilson Bridge. In doing so, special attention will be placed on protocols for incident response, incident location identification and verification, cross-border Dynamic Message Sign (DMS) coordination, bridge jumper protocol, quick clearance strategies, responder safety, towing guidelines, and coordination of weather-related or emergency maintenance services.

1.2 Study Area

This study focused on the incident management efforts on the Woodrow Wilson Bridge, which is one of seven crossings over the Potomac River within the Washington, D.C. Metropolitan Area. The drawbridge is located on I-495/I-95 and connects Northern Virginia (City of Alexandria) with Maryland (Prince George's County). Travel across the bridge has grown to 200,000 vehicles per day and is fast approaching three times its original design capacity of 75,000 vehicles per day. The bridge opened in 1961 with the design capacity anticipated for a 20-year timeframe.

Congestion is a problem on the bridge and an effective incident management program is necessary for the Woodrow Wilson Bridge for the following reasons:

- Over 60% of the region's freeway congestion is attributed to incidents.
- An I-95 Corridor Coalition study found that disabled vehicles and minor collisions result in an average incident duration of 45 – 60 minutes. Furthermore, 40% of accidents block one or two lanes of traffic with an incident duration of 45-90 minutes.
- For freeways operating at capacity, a 20-minute blockage can result in a 2 ½ mile back up and the resulting congestion will likely last the duration of the peak period. The WWB currently operates at capacity during peak travel periods.

- The Woodrow Wilson Bridge has been classified as one of the top 10 high accident locations on the Capital Beltway.
- National statistics indicate that 20-30% of freeway pedestrian fatalities are the result of disabled vehicles, and secondary accidents that result from a previous accident total 13% of all peak period accidents.
- Over 5,000 incidents occur annually along the Woodrow Wilson Bridge corridor.

A new bridge structure is currently being built to replace the original Woodrow Wilson Bridge, which will be 20 feet higher than the old bridge. This increased clearance will allow for 70 percent fewer bridge openings and traffic interruptions. Currently, there are 260 openings per year, which will be reduced to approximately 65 times per year. The new bridge will be twelve lanes:

- Eight general purpose lanes, matching the number of lanes on the Capital Beltway, which will unclog the existing bottleneck
- Two merge / diverge lanes to allow safe acceleration and deceleration of vehicles between the adjacent Maryland and Virginia interchanges
- An express / local configuration to balance through and local traffic
- HOV / express bus / rail transit lanes that will be open for normal use until systems are in place on both sides of the Potomac River

Once completed, the new 12-lane facility will accommodate 300,000 vehicles per day on two parallel structures containing local, express, and HOV / transit lanes in both the northbound and southbound directions. As shown in the figure below, interchanges between the Capital Beltway and MD-210, US Route 1, and VA 641 will be reconstructed to provide access to all local lanes and for select express and HOV / transit lanes.

Figure 1. The Woodrow Wilson Bridge

1.3 Description of Tasks

The objective of this project was to identify best practices for inter-jurisdictional operational procedures for bridges that cross borders between states and regional / local jurisdictions. This report consists of a write up of the Woodrow Wilson Bridge incident management process from start to finish including the methodology used to develop the program. An overview of the project tasks are provided below:

Task 1 – Identify and Collect Information / Documentation from Agencies and Staff involved in the Woodrow Wilson Bridge Incident Management Process – Coalition Member Agencies and consultant staffs associated with the Incident Management Program at the Woodrow Wilson Bridge were interviewed to collect information and documentation for this project. Over a two-month period, eight interviews were

conducted. Interviewees included transportation and emergency management staff. A list of personnel interviewed is provided below:

- Marcelino Romero, *Woodrow Wilson Bridge Incident Management Coordinator* – May 25th, 2006
- Jim Austrich, *District Department of Transportation* – May 30th, 2006
- Pete Todd, *Virginia Department of Transportation* – June 8th, 2006
- Lt. Bonnie Morris, *Maryland State Police* – June 12th, 2006
- Tom George, *Niagara International Transportation Technology Coalition* – June 14th, 2006
- Alvin Marquess, *Maryland State Highway Administration* – June 28th, 2006
- Lt. Harry Newlin, *Virginia State Police* – June 30th, 2006
- Gene Donaldson, *Delaware Department of Transportation* – July 13th, 2006

In addition to conducted interviews, an extensive review of documentation related to the Woodrow Wilson Incident Management Program was also conducted. Documents reviewed include:

- FHWA's Traffic Incident Management Handbook
- The Woodrow Wilson Bridge Incident Management Plan
- Incident Management Advances for the Woodrow Wilson Bridge Project
- Maryland, Virginia, and District of Columbia Operational Agreements

Task 2 – Develop Sample "Boiler Plate" Documents for use by Coalition Partner Agencies – Documents discovered in Task 1 were reviewed and used to develop sample documents that could be provided to member agencies as a sample agreement. These sample operational agreements are provided in Appendix A of this document.

Task 3 – Produce Final Report – The final task of the project consisted of producing this final report, which includes a descriptive problem statement and best practices write up of the Woodrow Wilson Bridge incident management process from start to finish.

2 INCIDENT MANAGEMENT ROLES AND RESPONSIBILITIES

Incident management activities on the Woodrow Wilson Bridge require the skills and expertise of a diverse group of agencies. This includes (1) law enforcement, (2) fire and rescue, (3) emergency medical services, (4) transportation agencies, (5) towing and recovery service providers, (6) media, and (7) information service providers from Maryland, Virginia, and the District of Columbia at both the statewide and local level. Discussion of the roles and responsibilities of these agencies, which are based on the FHWA Incident Management Handbook, are provided below.

2.1 Law Enforcement

Law enforcement agencies from the state and county levels are responsible for incident management on the Woodrow Wilson Bridge. These agencies include: (1) Maryland State Police, (2) Virginia State Police, (3) Washington, D.C. Metropolitan Police, (4) Prince George's County Police, (5) Fairfax County Police, and (6) City of Alexandria Police. In general, participation from these agencies is dictated by the jurisdiction in which the incident occurs. State Police agencies are responsible for incident management on interstate highways while county / local police agencies are responsible for arterials. Overall, incident management roles and responsibilities assumed by law enforcement agencies include:

- Assist in incident detection
- Secure the incident scene
- Assist disabled motorists
- Provide emergency medical aid until help arrives
- Direct traffic
- Conduct accident investigations
- Supervise scene clearance

The Maryland State Police and the Virginia State Police work together to patrol both the inner and outer loops of the Capital Beltway and respond to incidents on the Woodrow Wilson Bridge itself. Emergency command in the event of a bridge jumper shall rest with the first arriving police officer until relieved by a higher ranking officer according to procedures in force with each jurisdiction. If the first arriving officer finds that the incident is not within his jurisdiction, he/she will be prepared to turn command over to the first arriving officer of the affected jurisdiction. Usually the first agency to be notified of an incident will respond to the scene. Incidents in Prince George's County and in the City of Alexandria are the responsibilities of the respective county and city police agencies. The Metropolitan Police are responsible for incidents on I-295.

2.2 Fire and Rescue

Fire and rescue services are provided by local fire departments. The following fire and rescue agencies are responsible for the Woodrow Wilson Bridge: (1) Prince George's County Fire Department, (2) Fairfax County Fire Department, and (3) The City of Alexandria Fire Department. Incident management roles and responsibilities assumed by the fire departments include:

- Provide traffic control until police or DOT arrival
- Provide emergency medical care
- Provide initial HAZMAT response and containment
- Fire suppression
- Rescue crash victims from wrecked vehicles

- Rescue crash victims from contaminated environments
- Arrange transportation for the injured
- Assist in incident clearance

Fire Departments respond to incidents in both directions on the Woodrow Wilson Bridge. The department responding to the scene usually is dispatched from the 911 call center receiving the call. Additionally mutual aid agreements are in place that allow the Prince George's, Fairfax County, and Alexandria Fire Departments to respond to incidents on the Woodrow Wilson Bridge.

2.3 Emergency Medical Services (EMS)

The primary responsibilities of EMS are the triage, treatment, and transport of crash victims. On the Woodrow Wilson Bridge, these services are provided by the following county agencies: (1) Prince George's County Emergency Medical Services, (2) Fairfax County Fire Emergency Medical Services, and (3) The City of Alexandria Emergency Medical Services. Typical incident management roles and responsibilities assumed by EMS include:

- Provide advanced emergency medical care
- Determine destination and transportation requirements for the injured
- Coordinate evacuation with fire, police, and ambulance or airlift
- Determine approximate cause of injuries for the trauma center
- Remove medical waste from the incident scene

Emergency Medical Service agencies respond to incidents in a similar manner as fire and rescue agencies described above.

2.4 Transportation Agencies

Transportation agencies are responsible for the overall planning and implementation of incident management programs. These agencies are also involved with the development, implementation, and operation of the Traffic Management Center (TMC), as well as the management of freeway service patrols. The following agencies provide transportation management duties on the Woodrow Wilson Bridge: (1) MDSHA, (2) VDOT, and (3) DDOT. Typical operational responsibilities assumed by these transportation agencies and their service patrol vehicles include:

- Remove disabled / accident vehicles
- Assist in incident detection and verification
- Initiate traffic management strategies on incident impacted facilities
- Initiate emergency medical assistance until help arrives
- Provide traffic control
- Assist motorists with disabled vehicles
- Provide traveler information
- Determine and implement incident clearance and roadway repair needs
- Establish and operate alternate routes
- Coordinate clearance and repair resources
- Repair transportation infrastructure

MDSHA is responsible for incident management on interstate highways in the State of Maryland. The Traffic Operations Center (TOC) 3, located in College Park, MD assumes responsibilities for the Woodrow Wilson Bridge. The center is responsible for control of ITS devices including CCTV, DMS, and HAR leading up to the bridge. This center is co-located with the Maryland State Police Barracks, and acts as the localized operational point, providing peak hour coverage (5 AM to 9 PM) on weekdays. Freeway service patrol units (referred to as Emergency Response Units or ERU's) are also responsible for patrolling the interstate and bridge. These vehicles are designed to improve the efficiency of the highway system through the quick resolution of minor incidents, including disabled vehicles, vehicles out of gas, and other minor incidents that impede traffic flow. When TOC 3 is not operating, the Statewide Operations Center (SOC), located in Hanover, MD is responsible for operations leading up to and on the Woodrow Wilson Bridge. All ITS devices are operated by CHART operating software.

The Virginia Department of Transportation responds to incidents affecting interstate highways in the Commonwealth of Virginia. The Northern Virginia (NOVA) Smart Traffic Center (STC), located in Arlington, VA is responsible for operations of the Woodrow Wilson Bridge. Similar to the MDSHA traffic management centers, the VDOT STC operates ITS devices including CCTV, DMS, and HAR. Additionally the STC also operated ramp meters, reversible lane control gates, and HOV lane restrictions. The NOVA STC is also responsible for dispatching freeway service patrol vehicles. These vehicles serve the same function as MDSHA vehicles although they monitor Virginia freeways 24/ hours, 7 days a week.

District Department of Transportation operational responsibilities for the Woodrow Wilson Bridge is limited to I-295 and diversion routes around the Woodrow Wilson Bridge. Although DDOT incident management duties do not include the Woodrow Wilson Bridge itself, DDOT will respond to incidents on the bridge if requested by MDSHA and / or VDOT. Additionally, DDOT will also coordinate with VDOT and MDSHA when incidents on the bridge may impact traffic in the District of Columbia.

2.5 Towing and Recovery Service Providers

Towing and recovery service providers are responsible for the safe and efficient removal of wrecked or disabled vehicles, and debris from the incident scene. Towing and recovery companies are important to incident response, even with programs that include service patrols. Their typical responsibilities include:

- Remove vehicles from the incident scene
- Remove debris from the roadway
- Provide transportation for uninjured vehicle occupants

The State Police agency at the scene of the incident is responsible for dispatching towing and recovery service providers. Towing and recovery service providers are selected based on a rotating list. Each state police agency, the Maryland State Police and Virginia State Police, have their own list of towing agencies that they utilize. These lists enable regional towing agencies equal competition in the area as long as they meet towing standards set forth by the State Police agencies.

2.6 Media

The typical roles and responsibilities of the media as they relate to incident management activities include:

- Report traffic incidents
- Broadcast information on delays
- Provide alternate route information
- Update incident status frequently
- Provide video or photography services

The area covered by the regional media encompasses the entire Metropolitan Washington, D.C. Area including the Woodrow Wilson Bridge. These media outlets provide news, traffic, and weather

information on a regular basis. All transportation and emergency management agencies in the area have a close working relationship with personnel at these media outlets.

2.7 Information Service Providers

Information service providers are commercial entities that provide traffic information updates to both motorists and the media. Information is disseminated by ISP's via:

- Radio (including satellite radio)
- Television
- Email Services
- Pager Services
- Internet websites

Several information service providers play a vital role in incident management on the Woodrow Wilson Bridge. MDSHA and VDOT are in the process of engaging in a public-private partnership with Mobility Technologies, also known as Traffic.com. This partnership will allow Mobility technologies to deploy Remote Traffic Microwave Sensor (RTMS) sensors along MDSHA and VDOT right-of-way at no cost. In return, MDSHA and VDOT will receive detector information for operations purposes while Mobility Technologies uses it to provide traveler information on its website, through satellite radio, and other means. This partnership has been beneficial to both agencies involved. Mobility Technologies is planning on deploying detectors near the Woodrow Wilson Bridge in the near future.

TrafficLand is a leading provider of real-time, video-based electronic information services. TrafficLand is in cooperation with MDSHA, VDOT, and DDOT to share CCTV camera images over the web. Developed as a public/private partnership, TrafficLand offers DOTs the ability to unlock the full potential of their video assets by:

- Helping the general public to avoid traffic congestion with free and subscription-based online services providing anywhere, anytime access to live traffic views from desktop computers and web-enabled cell phones.
- Improving incident assessment and response for first responders by providing a private network, live video multi-screen displays, integrating multi-jurisdictional camera resources to provide "big picture" understanding of roadway incidents.
- Providing DOTs with a cost effective, integration and distribution of traffic video for better operational control, and a streamlined approach to sharing video externally with multiple user groups

2.8 Relationships and Training

To foster improved incident management the DOTs have forged active partnerships with traditional response agencies, such as police and fire. Incident management on the Woodrow Wilson Bridge has been successful because of the relationships that agency staffs have fostered. These relationships are not only professional, but also personal. As part of the Woodrow Wilson Bridge Construction Project, agency staffs from Maryland, Virginia, and the District of Columbia have been meeting on a monthly basis to discuss incident management on the Woodrow Wilson Bridge and are expected to continue taking place, although less frequently, following the completion of the construction project.

Additionally, Maryland and Virginia Freeway Service Patrols have daily interactions – both professional and personal – with the state police. It is not uncommon to see Safety Service Patrol members taking coffee breaks together during off-hours. These relationships are important because they provide personnel responding to incidents the opportunity to have a sense of trust and understanding with their counterparts. Simply put, these relationships allow the various agencies to confide and support one another.

Other initiatives in the Washington, D.C. Metropolitan Area also help to bring transportation and emergency management agencies together to discuss incident management. These initiatives include:

- The Metropolitan Washington Council of Government's (MWCOG) Management, Operations and Intelligent Transportation Systems Task Force (MOITS). The MOITS Task Forces advise the National Capital Region Transportation Planning Board on matters of transportation operations and management, including considerations of ITS technologies in improving those operations. The Task Forces also provide regional forums for coordination among Transportation Planning Board member agencies and other stakeholders on these topics.
- The RESF-1 Transportation Committee, which meets to discuss transportation's role in the National Capital Region (NCR) Homeland Security Program. The leadership of the District of Columbia, the State of Maryland, the Commonwealth of Virginia, area local governments, and the Department of Homeland Security's Office for National Capital Region Coordination (ONCRC) are working in partnership with non-profit organizations and private sector interests to reduce the vulnerability of the National Capital Region (NCR) from terrorist attacks. The regional working group and regional emergency support function (R-ESF) committees work together to advance preparedness in the region. As the State Administrative Agent for the metro area, the District of Columbia provides management of many of the grant funds allocated to the area. The Metropolitan Washington Council of Governments (COG) is the coordination point for many of these activities.

Training is another vital component of a successful incident management program. Maryland, Virginia, and the District of Columbia transportation and emergency management agencies conduct numerous training activities to help facilitate incident management not only on the Woodrow Wilson Bridge, but in the entire Washington, D.C. Metropolitan Area. These activities include:

- The National Highway Institute (NHI) Unified Incident Command Course, which addresses institutional and technical aspects of safe and efficient resolution of traffic incidents and other roadway emergencies. Training focuses on practices to obtain good inter-agency and inter-disciplinary understanding and cooperation.
- The American Traffic Safety Services Association (ATSSA) Course for Emergency Traffic Control for emergency responders, which is aimed at police and fire rescue personnel who get involved with traffic control, either responding to an incident or enforcing traffic control in work zones. It discusses major, intermediate, and minor principles of incident management and considerations for traffic control enforcement in work zones.
- An Annual Incident Management Conference that brings regional transportation and emergency management agencies together. The conference includes vendors, equipment, and speakers from the Metropolitan Washington, D.C area, as well as from across the nation and the United Kingdom in 2006.
- MDSHA, VDOT, and DDOT staffs have also participated in cross-training efforts. These cross-training exercises send agency operators to each other's Traffic Management Center for an entire day so that they can fully understand how other agencies in the region operate.

3 BORDER BRIDGE INCIDENT MANAGEMENT ACTIVITIES

Border bridge incident management activities are similar to incident management activities on interstate highways, only they require additional cooperation and coordination because more transportation and emergency management agencies are involved in the process. Incident management includes a series of activities, which are carried out by personnel from a variety of response agencies and organizations. In the case of the Woodrow Wilson Bridge, this includes personnel from Maryland, Virginia, and the District of Columbia. A description of the Woodrow Wilson Bridge incident management process is described in detail below. This process includes the following activities: (1) detection, (2) verification, (3) traveler information, (4) response, (5) site management, (6) traffic management, and (7) clearance. Additionally, processes for winter / maintenance management and bridge jumpers are also discussed in this chapter.

These activities are consistent with the FHWA Incident Management Handbook. It is important to note that these activities are not necessarily performed sequentially. For example, traveler information is continuously updated through the duration of an incident while other activities, such as clearance, are taking place.

3.1 Detection

Detection is the process by which an incident is brought to the attention of the agency or agencies responsible for maintaining traffic flow and safe operations on the Woodrow Wilson Bridge. Incident detection on the Woodrow Wilson Bridge is performed using several different techniques including:

- Calls from motorist cell phones
- VDOT and MDSHA Freeway Service Patrols
- Virginia and Maryland State Police Patrols
- Future RTMS detectors that will be deployed at ½ mile increments on the bridge

Motorists equipped with cell phones have become one of the most efficient means for detecting incidents on the Woodrow Wilson Bridge. These motorists report incidents by calling #77, 911, local radio stations, and transportation agencies. Motorists generally report the number of vehicles involved, location, and severity. While motorists can provide valuable information regarding an incident, their calls are often inaccurate and / or inconsistent. Incident management personnel are careful in using motorist phone calls to detect incidents. Details from multiple phone calls are usually combined to increase the accuracy of the information received by motorists. The Woodrow Wilson Project is helping to improve the accuracy of these phone calls. The project is considering posting mile markers leading up to and on the bridge to assist motorists in identifying incident locations.

Freeway Service Patrols are another vital form of detection on the Woodrow Wilson Bridge. MDSHA and VDOT service vehicles patrol both the inner and outer loops of the Woodrow Wilson Bridge. Memorandums of Understanding (MOU's) between the Virginia Department of Transportation and Maryland State Highway Administration help foster the detection process. These MOU's allow Virginia freeway service patrol vehicles to travel into Maryland and MDSHA freeway service patrol vehicles to travel into Virginia. By allowing this to happen, MDSHA and VDOT can patrol the entire bridge, detecting incidents on the way. The Woodrow Wilson Bridge Project has also helped foster the freeway service patrols by purchasing additional vehicles for MDSHA and providing funding for the VDOT patrols.

Police Patrols also patrol the Woodrow Wilson Bridge. Incident management personnel for the Woodrow Wilson Bridge Project understand the importance of having police vehicles patrol the bridge during construction. In fact, the Woodrow Wilson Bridge Project currently funds patrols from Maryland State Police and Virginia State Police. This funding will continue until the completion of the bridge, although once completed there is no longer any dedicated funding for the police patrols. Currently MSP and VSP have two vehicles each that patrol the bridge from 7:00 am to 3:00 pm, two vehicles each patrolling from 3:00 pm to 11:00 pm, and one vehicle each patrolling from 11:00 pm to 7:00 am.

Public-private partnerships have also helped to advance detection on the Woodrow Wilson Bridge. Mobility Technologies (Traffic.com) has developed partnerships with both the State of Maryland and the Commonwealth of Virginia. This partnership allows Mobility technologies to deploy RTMS detectors on MDSHA and VDOT right-of-way. Information from these detectors is then used by Mobility Technologies as traveler information and can also be used by MDSHA and VDOT for operations purposes. Mobility Technologies is currently in the process of deploying these detectors throughout both states and will begin their efforts at the Woodrow Wilson Bridge.

Regardless of how an incident is detected, the various transportation and emergency management agencies will share the information they receive with one another. This coordination is usually done using telephone, fax, or email communication. Further discussion on communications is provided in Chapter 4 of this document.

3.2 Verification

Verification includes confirming that an incident has occurred, determining its exact location, and obtaining as many relevant details about the incident as possible. Verification includes gathering enough information to dispatch the proper initial response. Verification on the Woodrow Wilson Bridge is conducted using the following activities:

- CCTV cameras viewed by operators at the MDSHA Traffic Operation Center/Statewide Operations Center (TOC / SOC) and VDOT Smart Traffic Center (STC). Once complete, operators at the Woodrow Wilson Bridge Control Tower will also be able to view CCTV images
- Dispatch field units (e.g., police and freeway service patrol vehicles) at the incident site
- Images from the Virginia State Police helicopter equipped with a downlink

Once the new Woodrow Wilson Bridge is complete, it will have full camera coverage. These cameras will be controlled by the WWB Control Tower using MDSHA's CHART software. Additionally, a fiber link will be installed between Maryland and Virginia allowing for video sharing between transportation agencies.

Some video sharing is currently taking place on the Woodrow Wilson Bridge. The Maryland State Police and VDOT NOVA STC currently have CHART workstations that allow them to view MDSHA cameras. Additionally, TrafficLand, a private agency, also allows agencies in the region to view MDSHA and VDOT video images over the internet. This website is the primary source of video images used by the Virginia State Police.

The Metropolitan Washington, D.C. area is also in the process of developing a Regional Integrated Transportation Information System (RITIS) that allows all transportation agencies in the region to share transportation and emergency management information, including video images. This system is currently being developed by the University of Maryland.

In addition to using CCTV cameras, verification by freeway service patrols and police vehicles is another critical means for verifying incidents. As discussed earlier, field units patrol the Woodrow Wilson Bridge on a regular basis and are used to verify incidents on the bridge. Communication back to transportation and emergency management centers are conducted using Nextel phones and/or 800 MHZ and low band radios. These devices are also used to assist the field units in communicating to one another. Communications are discussed in more detail later in this memorandum.

Finally, in the event of a major incident on the bridge, the Virginia State Police will utilize their helicopter to fly over the incident scene. This helicopter is equipped with video downlink that sends images taken from cameras on the helicopter to the Virginia State Police operations center in Fairfax, Virginia.

3.3 Traveler Information

Traveler information consists of activating various means of disseminating incident-related information to affected motorists on or around the Woodrow Wilson Bridge. Traveler information is disseminated using the following devices:

- Dynamic Message Signs (DMS) located prior to the Woodrow Wilson Bridge on I-495/I-95
- Highway Advisory Radio (HAR)
- Commercial radio broadcasts
- Commercial and public television reports
- Internet / online services

MDSHA and VDOT utilize DMS and HAR messages to provide traveler information to motorists. The MDSHA TOC and VDOT STC coordinate these messages during incident by communications over the telephone. Standard operating protocols ensure that MDSHA and VDOT staffs coordinate the messages if an incident will impact the neighboring state.

Maryland and Virginia also rely on the regional media and the private sector to disseminate traveler information. Both MDSHA and VDOT have a close relationship with regional media outlets. In fact, these agencies have the phone numbers of media incident management staff in their cell phones. Additionally, TMC operators are advised to contact media outlets during major incidents on the Woodrow Wilson Bridge. Both MDSHA and VDOT understand that providing traveler information to regional media outlets is one of the best ways of getting information out to the public.

Several private sector websites also provide traveler information for the Metropolitan Washington, D.C. area and the Woodrow Wilson Bridge. These websites include:

- Traffic.com – provides traveler information collected from Mobility Technology detectors
- TrafficLand – provides MDSHA and VDOT video images on the internet

3.4 Response

Response includes dispatching the appropriate personnel and equipment, and activating the appropriate communication links and motorist information media as soon as there is reasonable certainty that an incident is present. Incident response depends on the agency that is notified of the incident. Virginia agencies will generally coordinate with agencies from Virginia while Maryland agencies generally coordinate with transportation and emergency management agencies from Maryland. The exception is that VDOT service patrol vehicles have MDSHA radios installed in them which allow MDSHA staff to dispatch VDOT vehicles.

If an incident occurs prior to the Woodrow Wilson Bridge in Maryland or Virginia, the corresponding state will respond to the incident. Virginia agencies are responsible for incidents in Virginia while Maryland agencies are responsible for incidents in Maryland. This is fairly straightforward.

When incidents occur on the Woodrow Wilson Bridge itself, there is not always a straightforward answer as to who should respond to the incident scene. In a perfect world, Virginia agencies will respond to incidents on the outer loop of the Capital Beltway (traffic leaving Virginia and entering Maryland) while Maryland agencies respond to incidents on the inner loop (traffic leaving Maryland and entering Virginia).

But the scenario described above is an ideal case and is not always an accurate description of what happens or needs to happen in the real world in order to provide the quickest response to an incident. Maryland and Virginia have operational agreements in place that allow agencies from either state to respond to incidents on the bridge. Additionally, both MDSHA and VDOT freeway service patrol units make periodic round trips across the bridge. As is the case, responders from Maryland will often end up working with responders from Virginia.

Because agencies from different states end up working together at the incident scene, the cross-training described earlier in this report is important. Virginia and Maryland responders have a good, close working relationship with one another. When they respond to an incident, they have often been trained or have worked with responders from the neighboring state.

3.5 Site Management

Site management is the process of effectively coordinating and managing on-scene resources. The foremost objective is ensuring the safety of response personnel, incident victims, and other motorists. Command at the site follows the hierarchy shown here: (1) Fire / EMS, (2) State Police, and (3) the Department of Transportation. This level of hierarchy is followed by all agencies in the region, regardless of what state they are from. It is not unlikely to have Maryland responders working under Virginia staff, and vise versa. If, for some reason, corresponding agencies from Maryland and Virginia (i.e., MSP and VSP, MDSHA and VDOT, etc.) both arrive at the scene, the agency that is first to arrive at the scene has responsibility over the incident.

The primary objective at the incident scene is ensuring safety for responders and motorists. Regardless of whether Maryland or Virginia responders are at the scene, several measures are taken to ensure safety. Responders take measures to protect themselves, their counterparts, incident victims, and other motorists. These measures are listed below:

- Responders implement Quick Clearance Strategies to move vehicles out of the traveling lanes and onto the shoulders. MDSHA has a statewide clearance program and VDOT have a statewide program called Move-It that is currently being promoted to educate the general public.
- Freeway safety patrols park their vehicles directly behind the incident to provide a buffer between the incident and approaching traffic. Freeway safety patrol vehicles are equipped with lights, DMSs (with arrows or message signs), and cones.
- Freeway service patrol personnel will work with the other emergency responders to minimize the number of lanes closed.

3.6 Traffic Management

Traffic management is the application of traffic control measures in areas affected by the incident. Traffic management occurs both at the incident site and at the TMC. Responders are responsible for the incident scene while the various TMCs look at the regional view. The MDSHA and VDOT TMCs are responsible for determining the impact that the incident has on the region and react accordingly. The TMCs may elect to activate Freeway Incident Traffic Management (FITM) plans, use DMS and HAR to divert traffic around incidents, operate overhead lane control signs on Route 1 in Virginia, and change timing plans on approaching arterials in Alexandria, etc.

Whatever actions are taken, operators from the MDSHA TOC and VDOT STC coordinate their responses with one another. Constant communication occurs between agencies over the telephone throughout the duration of the incident. In the future, RITIS (as previously described) will allow the TMCs to share this information over their traffic management systems. MDSHA and VDOT staff did express some concerns about how traffic management information is currently being shared. Both agencies believe that there are times when small incidents eventually lead to much larger/regional incidents. MDSHA and VDOT personnel believe that they need to do a better job of identifying these cases and coordinating in a consistent manner with their counterparts. They both believe that consistent procedures for notification need to be developed to ensure that responses are consistent for similar type incidents.

3.7 Clearance

Clearance is the process of removing wreckage, debris, or any other element that disrupts the normal flow of traffic and restoring the roadway capacity to its pre-incident condition. Private towing companies are responsible for clearing incidents. The State Police Officer and DOT personnel at the scene are

responsible for providing oversight, assisting where necessary, and making sure that the towing company clears all travel lanes of wreckage.

The State Police Officer at the scene (and their corresponding dispatch center) is responsible for dispatching a private towing agency to the scene. Both Maryland and Virginia use a list of pre-qualified towing companies. Towing agencies are dispatched sequentially as they appear on the list. Both Maryland and Virginia have different lists for different types of incidents (i.e., tractor trailer incidents). These lists are composed to ensure that the appropriate type of tow truck and equipment arrive at the scene.

When towing vehicles, the Maryland and Virginia State Police have a Special Order in place for the Woodrow Wilson Bridge that says that no trooper has the authority to direct or authorize the towing or removal of any vehicle to a destination outside of its own, unless the consent of the law officer of the jurisdiction destination has been first obtained. For example, the Maryland State Police cannot have a vehicle towed from Maryland to Virginia without consent from Virginia. If the vehicle is on the bridge, the responding law enforcement agency can have it towed to their jurisdiction, but must have consent to tow it to another jurisdiction.

During clean-up activities, MDSHA and VDOT personnel at the scene work with the other responders to open the roadway once lanes become clear. Clearance is usually performed from left-to-right or right-to-left to help open up lanes as efficiently as possible.

3.8 Weather / Maintenance

Coordination of winter maintenance operations on the Woodrow Wilson Bridge started during a major winter snowstorm on Veteran's Day in 1987. On November 11, 1987, a snowstorm produced 11 ½ inches near the Woodrow Wilson Bridge during the late morning and afternoon. The storm had a tremendous snowfall gradient associated with the storm – Washington's western suburbs received 3 to 5 inches of snow, while eastern suburbs of Washington had up to 17 inches of snow.

Needless to say, the storm completely disabled the entire Washington Metropolitan Area and left many motorists stranded on interstate highways, including the Woodrow Wilson Bridge. That night VDOT did the unspeakable, they sent their snow plow and spreader vehicles into the State of Maryland to help their counterparts with snow removal operations. This had never been done before. That night VDOT maintenance units helped to clear the Woodrow Wilson Bridge not only on the Virginia side but also on the Maryland side. Following the storm, Pete Todd of VDOT was invited to Maryland's snow response meeting and recognized for the work his staff had done that night. When the next winter storm hit the area, Maryland snow plows and spreaders entered the Commonwealth of Virginia to help their counterparts. Since that day in 1987, MDSHA and VDOT continue to help each other with snow operations. Both agencies continue to send their vehicles across the bridge to assist their neighbors, although a formal agreement is not in place.

3.9 511 Coordination

In July 2000, the Federal Communications Commission (FCC) designated 511 as the national telephone phone number to be used to disseminate travel information. This easy to remember number was established to provide travelers the ability to access an assortment of real-time traveler information, 24 hours a day, seven days a week from almost any location. In its designation of the 511 number, the FCC has left nearly all 511 implementation issues to transportation agencies and telecommunications carriers within the state that the 511 system will be implemented. As such, states have the flexibility to design and implement their 511 system independently of other states, based on the needs of local agencies and travelers. As a result, as more and more states bring their 511 systems online, and travelers become more familiar with and dependant on 511 information, 511 system users will want to access information from one state while in another, especially near state borders.

Take for example a motorist traveling between states "A" and "B", both of which have 511 systems designed and deployed independently of each other. If the motorist is in State A, he/she will only be able to access 511 information for state A, even though he/she may have a need for information in State B.

This limits a travelers' ability to effectively plan their trip and to take appropriate action, when incidents (e.g., construction, severe weather, and major accidents) occur.

Complicating the need to access travel information for one state while in a bordering state, telephone systems locate their switching equipment based on their business needs and economies rather than on state borders. This means that callers near the border of the state they're in may actually access switching equipment in another. The telephone switch may serve callers from both states but the telecommunication provider will be able to switch calls to only one 511 system. Therefore, callers that want to access travel information for the state they're in may be connected to the 511 system in the bordering state. Although this situation may occur for landline telephone systems, it is much more prevalent for mobile phones because mobile phone system switches generally cover a larger geographic area than landline switches do.

In the WWB Corridor, Virginia currently has a statewide 511 system and Maryland is in the early stages of designing its own. If Maryland or the District of Columbia elects to deploy their own 511 system in the future, interoperability will need to be discussed for the Metropolitan Washington D.C. Area so that travelers can obtain information from the systems in a seamless manner. There are two alternatives to ensure interoperability between 511 systems. These alternatives are briefly described below:

- Call Transfer – A call transfer consists of implementing a series of call transfers to link callers to information from an outside system. For example, if a traveler in Virginia requested information about Maryland, they would first call into Virginia's 511 system. Then their call would be transferred over to Maryland's 511 system where they would be able to obtain the Maryland traveler information that they were trying to obtain.
- Data Transfer – Data transfer consists of sharing data between two 511 systems so that information can be accessed by travelers without having to be transferred to another 511 system. In this case, a traveler in Virginia would be able to access Maryland 511 information through the Virginia 511 system because the underlying information is being shared between the two 511 systems.

Further information regarding 511 interoperability can be obtained from the USDOT's Deployment Assistance Report #4: 511 Regional Interoperability Issues at http://www.its.dot.gov/511/511inter.htm.

3.10 Bridge Jumpers

Bridge jumpers on the Woodrow Wilson Bridge can cause massive traffic tie-ups throughout the Washington Metropolitan Area. For example, on November 4, 1998 an Alexandria man stood on the Woodrow Wilson Bridge for more than five hours before jumping off the structure. The bridge was closed for the duration of the incident, bringing much of the Capital Beltway to a standstill by evening rush hour. The closing of the Woodrow Wilson Bridge caused backups as long as 20 miles on the Beltway and infuriated commuters who found themselves stuck in traffic for several hours.

Bridge jumpers are a unique type of incident with many variables. State Police response to a bridge jumper may vary depending on the situation. For example, police response will differ depending on whether the jumper has a gun or not. Regardless of the situation, incident responders agree that the safety of incident responders and the traveling public is the number one priority when dealing with bridge jumpers. The secondary goal is to limit the impact on traffic. Bridge jumpers can cause major delays resulting in secondary accidents and stranded motorists.

In the case of a bridge jumper, the Maryland and Virginia State Police assume control of the scene. Their response may vary depending on the situation. Typical responses by the State Police and DOTs are provided below:

Bridge Jumper Does Not Pose an Immediate Threat to Responders and / or the Traveling Public

State Police – If the individual attempting to jump off of the bridge is unarmed, police will distract and then tackle the bridge jumper. Negotiations with the bridge jumper will not take place if there is no firearm present. Police will attempt to keep the bridge open during this type of scenario. State Police should minimize the closure of travel lanes on the bridge.

State DOTs – If the bridge jumper does not pose an immediate threat to responders and / or the traveling public, or State DOTs staff, the bridge will not be closed to traffic. Traffic management duties should occur as normal.

Bridge Jumper Poses an Immediate Threat to Responders and /or the Traveling Public (i.e., Possesses a Firearm or has taken a Hostage)

State Police – Depending on the event, State Police may elect to do the following:

- Bring in a negotiator to talk the jumper off the bridge,
- Bring in a marine vessel equipped with safety nets that can be positioned to catch the jumper and/or hostage if they fall off the bridge, and/or
- Firing upon by the State Police if the individual poses an immediate threat to responders or the traveling public.

State DOTs – In the event that a bridge jumper poses an immediate threat on the bridge, DOTs will close the bridge to all traveling public. FITM routes will be implemented by the DOTs affected by the incident.

As every incident is unique, especially in the case of potential bridge jumpers, these actions are the recommended, but not only response options. Other types of responses may be necessary, depending on the unique occurrences within each incident. As such, responders may need to respond accordingly.

Emergency command in the event of a bridge jumper rests with the first arriving police officer until relieved by a higher ranking officer according to procedures in force with each jurisdiction. If the first arriving officer finds that the incident is not within his jurisdiction, he/she will be prepared to turn command over to the first arriving officer of the affected jurisdiction.

4 COMMUNICATIONS

Communication is the most vital aspect of border bridge incident management. While the overall incident management process remains the same, the level of coordination increases for border bridge scenarios. Several more agencies are involved in the border bridge incident management process and these agencies need to communicate.

4.1 Center-to-Center Communications

The primary source for Center-to-Center communication for the Woodrow Wilson Bridge is via telephone and email. While this form of communication has been sufficient in the past, the various agencies in the region understand the benefits of automated communications using systems. Additionally, some agencies have begun sharing information from their operating systems with others in the region. MDSHA has provided the VDOT STC and DDOT TMC, along with others, their CHART operating system. This allows other agencies to access the CHART software and view incident management information. While this allows agencies to view CHART information, it does not allow them to control CHART devices.

The Metropolitan Washington, D.C. region is taking a proactive role in improving information sharing amongst stakeholder agencies. The University of Maryland's Center for Advanced Transportation Technology (CATT) Laboratory has taken the lead in developing RITIS. This system will help to improve the transportation efficiency, safety, and security through the integration of existing transportation management systems.

RITIS will collect data of regional interest and fuse the data into regional information that can be used to enhance regional traveler information and transportation management functions performed by member agencies. RITIS will leverage information from various transportation and emergency management agencies in the Metropolitan Washington, D.C. area. These agencies are depicted in the figure below.

Figure 2 – The Regional Integrated Transportation Information System (RITIS)

Once complete, RITIS will be a valuable tool for agencies involved with the Woodrow Wilson Bridge. RITIS will benefit regional transportation management by accelerating and broadening the exchange of information between participating agencies in the corridor. Operationally, RITIS will provide the potential to enhance the coordination of actions and resources when responding to regional incidents, special events, and unusually high congestion. It will also allow the transportation network to be managed on a more proactive basis.

4.2 Field Communications

Field communications allow personnel in the field to communicate with one another and to their appropriate Traffic Management Center / Emergency Operations Center (TMC/ EOC). Field personnel responding to incidents on the Woodrow Wilson Bridge generally use Nextel phones and / or radios for communication. Nextel phones have become the standard communication devices for MDSHA, VDOT, and DDOT personnel. These phones allow freeway service patrol units to communicate with one another using two-way radio communications. MDSHA, VDOT, and DDOT personnel have all exchanged phone numbers with one another to help facilitate inter-agency communication. This has enabled personnel from the various agencies to easily communicate with one another while in the field. The positives of cell phone usage were highlighted in a 1988 incident with a potential bridge jumper. A VDOT-issued cell phone was available and provided the communications link that led to a successful outcome. The success of this incident contributed to the expanded use of the technology by the regional responders.

Maryland and Virginia State Police agencies utilize radio communications, such as 800 MHz radios, for communications between field units and their dispatch centers. The Virginia State Police have undertaken a major effort to increase communications with their transportation counterpart by providing VDOT with their radios. This allows VDOT field personnel to listen to Virginia State Police dispatches and operational information.

While incident management activities on the Woodrow Wilson Bridge have benefited from Nextel phones and radio communications, an effort for regional wireless communication is also taking place. The Capital Wireless Integrated Network (CapWIN) is a partnership between the states of Maryland, Virginia, and the District of Columbia to develop an interoperable first responder data communication and information sharing network. It is a unique program, which created the first multi-state and multi-discipline, interoperable public safety and transportation wireless data system in the United States. CapWIN's vision is to enable data interoperability for first responders wherever they are. To achieve this vision, the CapWIN program had developed a unique data sharing system and application suite through the participation of multiple state, local, and federal partners.

The CapWIN system is currently available free of charge to first responders across Maryland, Virginia, the District of Columbia, as well as federal agencies. Several State Police and DOT vehicles are equipped with mobile data terminals that allow field units to use CapWIN. Additionally, operations centers are also equipped with CapWIN capabilities. The system allows responders to view incident information from their operations centers as well as from mobile data terminals in their emergency response vehicles. Current system capabilities include:

- Incident Coordination Across Jurisdictions and Disciplines:
    - Group messaging through the discussion 'Main Room'
    - Creation of multiple structured 'Sub Rooms'
    - Identification of participants by agency and public safety/transportation discipline
    - Full text of incident rooms instantly available through the 'show archive' function
- Access to three (3) law enforcement databases from Virginia, Maryland, and Washington, D.C.
- One-to-one private instant messaging
- Group messaging through public chat rooms accessible to all online users
- Secure group communication through private chat rooms accessible only to invited participants
- Comprehensive directory of individual users, their skills, and agency information

CapWIN has been a valuable tool for incident management on the Woodrow Wilson Bridge and will continue to be as the system expands in the future by allowing the following agencies to share and view real-time incident information:

- Maryland State Police (MSP)

- Maryland State Highway Administration (MDSHA)
- Maryland Transportation Authority (MdTA)
- Prince George's Police Department
- Prince George's County Fire and EMS
- Virginia State Police (VSP)
- Alexandria Police Department
- Fairfax County Fire and Rescue
- Virginia Department of Transportation (VDOT)
- Metropolitan Police Department
- District Department of Transportation (DDOT)

5 INCIDENT MANAGEMENT FOR THE WOODROW WILSON BRIDGE PROJECT

The various agencies involved with incident management on the Woodrow Wilson Bridge have taken a proactive role toward incident management during the long-term construction project. Prior to the beginning of the project, an Incident Management subcommittee comprised of public safety agencies with incident management responsibilities along the bridge was organized for the purpose of identifying strategies to enhance incident management during and after construction of the Woodrow Wilson Bridge project. A charter, suggested work program, schedule, and approval process were set forth to provide a framework that allowed for meaningful and timely input by all personnel. These items are discussed in more detail below:

- Charter – set out strategies to enhance incident management before and after the construction. The charter provided the subcommittee with a focus to complete its efforts in the timeframe required.
- Work Program – assessed existing detection, verification, response, communications, and management practices to determine if possible improvements could be made to reduce delay and improve safety within the proximity of the construction zone. The subcommittee identified, studied, and recommended potential strategies and practices.
- Schedule – subcommittee activities were undertaken and completed by the development of 30% design plans for input into an updated project cost estimate.
- Approval – all recommendations were submitted to and reviewed by a Steering Committee comprised of FHWA, VDOT, and MDSHA management personnel. The Steering Committee coordinated and guided the efforts of the subcommittee to ensure that recommended strategies provided for safe, orderly, and efficient movement of traffic through the Woodrow Wilson Bridge corridor. All recommendations were screened closely for applicability to the project and cost-effectiveness, and were then ultimately prioritized into Tier 1, 2, and 3 levels.

This was the first time that a project in the Washington, D.C. Metropolitan area had brought all of the NCR players together at the onset of a project to discuss incident management.

5.1 Incident Management Strategies During Construction

During the construction of the new Woodrow Wilson Bridge, MDSHA and VDOT committed to maintaining the existing number of travel lanes open to travel during peak commuting periods. The goals and objectives of the incident management program for the Woodrow Wilson Bridge construction were as follows:

Table 1. Woodrow Wilson Bridge Incident Management Goals and Objectives During Construction

Goals	Objectives
Keep traffic moving	• Ensure incident detection, verification, response, and clearance times do not increase during the construction period
Maintain public safety	• Reduce the potential for secondary accidents • Reduce the potential for injury to motorists stranded in disabled vehicles • Provide effective incident scene management

Several strategies were implemented to help meet these goals and objectives. Initiatives that help to facilitate maintaining pre-construction incident detection and verification times include:

- Providing extensive signing to advise motorists to call #77 and report incidents.

- Providing special milepost markers to improve location information via cellular phone callers.

Initiatives to maintain pre-construction incident response and clearance times and facilitate scene management included:

- Dedicating MDSHA, VDOT, Maryland State Police, and Virginia State Police vehicles and staff to patrol the Woodrow Wilson Bridge corridor construction zone – 24 hours a day, 7-days a week.
- Providing compatible cellular telephone communications (NEXTEL phones) between Maryland and Virginia incident management providers at the state and local levels. These phones, with their two-way capability provides a common communications channel along the corridor where six different radio systems / frequencies are utilized by transportation and emergency management agencies.
- Providing the use of photogrammetry, which facilitates the accident investigation phase by allowing police officers to take digital photographs of the accident scene and input the information directly into a personnel computer.

Other initiatives that were implemented to facilitate incident management during construction include:

- A full-time person to coordinate incident management and construction management activities. The responsibilities of this staff member include providing daily, constant communications to local and regional incident / emergency management providers; monitoring construction activities that impact incident response procedures; developing and organizing Table Top training exercises; facilitating quarterly and major incident critiques; and coordinating with MDSHA, VDOT, and I-95 Corridor Coalition diversion plan updates and practices.
- Maintaining a full shoulder along the Capital Beltway during construction for as long as possible. As incident management and emergency service providers routinely utilize a full shoulder to quickly respond to an incident, a high priority was placed on developing construction staging plans to provide a full shoulder. Temporary emergency pull-off areas, nominally 10-feet by 200-feet in size, were also located for every ¼ mile of continuous beltway shoulder closure.
- Contract specifications that support and facilitate incident management practices. Major initiatives include (1) maintaining existing fire suppression systems, (2) specifying contractors to move, relocate, or use their equipment or stop construction to facilitate incident response or clearance initiatives, (3) having contractors monitor and view CCTV camera images for use in supporting traffic control and lane closure / opening responsibilities, and (4) mandating that contractors obtain cellular telephone communications that are compatible with incident / emergency management providers.

Through their existing ITS programs, both MDSHA and VDOT also pursued initiatives to share CCTV camera images and current traffic information with State Police, local police, and fire / EMS agencies who have incident management responsibilities along the Woodrow Wilson Bridge corridor.

6 OTHER REGIONS THAT MAY BENEFIT

Several regions in the I-95 Corridor Coalition can benefit from the research conducted for and provided in the *Best Practices for Border Bridge Incident Management Final Report*. Any multi-state or multi-jurisdictional borders which span geography such as rivers or canyons and involve physical structures such as bridges and tunnels will find this report applicable. In particular, there are a number of regions in the corridor with numerous border bridge crossings. These regions include:

- The Maine / New Hampshire border, separated by the Piscataqua River
- The New Jersey / New York border, separated by the Hudson River
- The New York / Canadian border, separated by the Niagara River
- The Pennsylvania / New Jersey border, separated by the Delaware River
- The Virginia / Washington, D.C. border, separated by the Potomac River
- The South Carolina / Georgia Border, separated by the Savannah Rivers
- The Georgia / Florida border, separated by the St. Mary's River

Several key interstate highways transverse numerous states throughout the Coalition states. Coordinated incident management programs and processes near these borders can also provide significant benefits. The following table provides a listing of major interstates crossing state borders and border bridges within the I-95 Corridor Coalition that may benefit from this report.

Table 2. Interstates Crossing State Lines and Border Bridges in the I-95 Corridor

State	Bordering States/Countries	Interstates Crossing State Lines	Border Bridges
Maine	New Hampshire Canada	I-95 (Canada) I-95 (New Hampshire)	Piscataqua River Bridge (New Hampshire) Route 4 Bridge (New Hampshire) Route 9 Bridge (New Hampshire) Route 11 Bridge (New Hampshire) Route 101 Bridge (New Hampshire)
New Hampshire	Canada Maine Massachusetts Vermont	I-89 (Vermont) I-95 (Maine) I-95 (Massachusetts) I-93 (Massachusetts) I-93 (Vermont) I-293 (Massachusetts)	Piscataqua River Bridge (Maine) Route 4 Bridge (Maine) Route 9 Bridge (Maine) Route 11 Bridge (Maine) Route 101 Bridge (Maine)
Vermont	Canada Massachusetts New Hampshire New York	I-89 (New Hampshire) I-89 (Canada) I-91 (Massachusetts) I-91 (Canada) I-93 (New Hampshire)	Route 2 Bridge (New York) Route 17 / 903 Bridge (New York)

State	Bordering States/Countries	Interstates Crossing State Lines	Border Bridges
Massachusetts	Connecticut New Hampshire New York Rhode Island Vermont	I-84 (Connecticut) I-90 (New York) I-91 (New Hampshire) I-91 (Connecticut) I-93 (New Hampshire) I-95 (Rhode Island) I-95 (New Hampshire) I-195 (Rhode Island) I-295 (Rhode Island) I-395 (Connecticut)	None
Rhode Island	Connecticut Massachusetts	I-95 (Connecticut) I-95 (Massachusetts) I-195 (Massachusetts) I-295 (Massachusetts)	Boom Bridge (Connecticut) Route 1 Bridge (Connecticut) Route 78 Bridge (Connecticut)
Connecticut	Massachusetts New York Rhode Island	I-84 (Massachusetts) I-84 (New York) I-91 (Massachusetts) I-95 (New York) I-95 (Rhode Island) I-395 (Massachusetts)	Boom Bridge (Rhode Island) Route 1 Bridge (Rhode Island) Route 78 Bridge (Rhode Island)

State	Bordering States/Countries	Interstates Crossing State Lines	Border Bridges
New York	Canada Connecticut Massachusetts New Jersey Pennsylvania Vermont	I-78 (New Jersey) I-81 (Pennsylvania) I-84 (Connecticut) I-84 (New Jersey) I-86 (Pennsylvania) I-87 (Canada) I-87/I-287 (New Jersey) I-90 (Pennsylvania) I-90 (Massachusetts) I-95 (New Jersey) I-190 (Canada) I-287 (New Jersey) I-495 (New Jersey)	Lewistown-Queenstown Bridge (Canada) Peace Bridge (Canada) Rainbow Bridge (Canada) South Channel Bridge (Canada) Whirlpool Bridge (Canada) Bayone Bridge (New Jersey) George Washington Bridge (New Jersey) Goethals Bridge (New Jersey) Holland Tunnel (New Jersey) Lincoln Tunnel (New Jersey) Outerbridge Crossing (New Jersey) Interstate 84 Bridge (Pennsylvania) Route 2 Bridge (Vermont) Route 17/903 Bridge (Vermont)

State	Bordering States/Countries	Interstates Crossing State Lines	Border Bridges
New Jersey	Delaware New York Pennsylvania	I-76 (Pennsylvania) I-78 (Pennsylvania) I-78 (New York) I-80 (Pennsylvania) I-84 (New York) I-87/I-287 (New York) I-95 (New York) I-95 (Pennsylvania) I-276 (Pennsylvania) I-287 (New York) I-495 (New York) I-676 (Pennsylvania)	Delaware Memorial Bridge (Delaware) Bayone Bridge (New York) George Washington Bridge (New York) Goethals Bridge (New York) Holland Tunnel (New York) Lincoln Tunnel (New York) Outerbridge Crossing (New York) Benjamin Franklin Bridge (Pennsylvania) Betsy Ross Bridge (Pennsylvania) Commodore Barry Bridge (Pennsylvania) Delaware Water Gap Toll Bridge (Pennsylvania) Interstate 78 Toll Bridge (Pennsylvania) Interstate 95 Bridge (Pennsylvania) Pennsylvania/New Jersey Turnpike Bridge (Pennsylvania) Walt Whitman Bridge (Pennsylvania)

State	Bordering States/Countries	Interstates Crossing State Lines	Border Bridges
Pennsylvania	Delaware Maryland New Jersey New York Ohio West Virginia	I-70 (Maryland) I-70 (West Virginia) I-76 (New Jersey) I-78 (New Jersey) I-79 (West Virginia) I-80 (New Jersey) I-80 (Ohio) I-81 (New York) I-81 (Maryland) I-83 (Maryland) I-86 (New York) I-90 (New York) I-90 (Ohio) I-95 (New Jersey) I-95 (Delaware) I-276 (New Jersey) I-676 (Pennsylvania)	Benjamin Franklin Bridge (New Jersey) Betsy Ross Bridge (New Jersey) Commodore Barry Bridge (New Jersey) Interstate 78 Toll Bridge (New Jersey) Pennsylvania/New Jersey Turnpike Bridge (New Jersey) Walt Whitman Bridge (New Jersey) Interstate 84 Bridge (New York)
Delaware	Maryland New Jersey Pennsylvania	I-95 (Pennsylvania) I-95 (Maryland)	Delaware Memorial Bridge (New Jersey)

State	Bordering States/Countries	Interstates Crossing State Lines	Border Bridges
Maryland	Delaware District of Columbia Pennsylvania Virginia West Virginia	I-68 (West Virginia) I-70 (Pennsylvania) I-81 (Pennsylvania) I-81 (Virginia) I-83 (Pennsylvania) I-95 (Delaware) I-95 (Virginia) I-495 (Virginia)	American Legion Bridge (Virginia) Cabin John Bridge (Virginia) Harry W. Nice Bridge (Virginia) Woodrow Wilson Memorial Bridge (Virginia)
District of Columbia	Maryland Virginia	I-66 (Virginia) I-395 (Virginia)	Theodore Roosevelt Memorial Bridge (Virginia) 14th Street Bridge (Virginia)
Virginia	District of Columbia Maryland North Carolina Tennessee West Virginia	I-64 (West Virginia) I-66 (DC) I-77 (West Virginia) I-77 (North Carolina) I-81 (Maryland) I-81 (Tennessee) I-85 (North Carolina) I-95 (North Carolina) I-395 (DC) I-495 (Maryland)	American Legion Bridge (Maryland) Harry W. Nice Bridge (Maryland) Woodrow Wilson Memorial Bridge (Maryland) Theodore Roosevelt Memorial Bridge (DC) 14th Street Bridge (DC)

State	Bordering States/Countries	Interstates Crossing State Lines	Border Bridges
North Carolina	South Carolina Tennessee Virginia	I-26 (South Carolina) I-40 (Tennessee) I-77 (Virginia) I-77 (South Carolina) I-85 (Virginia) I-85 (South Carolina) I-95 (Virginia) I-95 (South Carolina)	Buster Boyd Bridge (South Carolina) Route 49 Bridge (South Carolina)
South Carolina	North Carolina Georgia	I-20 (Georgia) I-26 (North Carolina) I-77 (North Carolina) I-85 (North Carolina) I-85 (Georgia) I-95 (North Carolina) I-95 (Georgia)	Buster Boyd Bridge (North Carolina) Route 49 Bridge (North Carolina) Ernest VanDiver Bridge (Georgia) Eugene Talmadge Memorial Bridge (Georgia) Georgia-Carolina Memorial Bridge (Georgia) Hartwell Lake Bridge (Georgia) Interstate 20 Bridge (Georgia) Interstate 520 Bridge (Georgia) Route 17 Bridge (Georgia) Route 28 Bridge (Georgia) Route 221 Bridge (Georgia)

State	Bordering States/Countries	Interstates Crossing State Lines	Border Bridges
Georgia	Alabama Florida South Carolina Tennessee	I-20 (South Carolina) I-20 (Alabama) I-75 (Tennessee) I-75 (Florida) I-85 (South Carolina) I-85 (Alabama) I-95 (Carolina) I-95 (Florida)	Ernest VanDiver Bridge (South Carolina) Eugene Talmadge Memorial Bridge (South Carolina) Georgia-Carolina Memorial (South Carolina) Hartwell Lake Bridge (South Carolina) Interstate 20 Bridge (South Carolina) Interstate 520 Bridge (South Carolina) Route 17 Bridge (South Carolina) Route 28 Bridge (South Carolina) Route 221 Bridge (South Carolina) Interstate 95 Bridge (Florida)
Florida	Alabama Georgia	I-10 (Alabama) I-75 (Georgia) I-95 (Georgia)	Lillian Bridge (Alabama) Interstate 95 Bridge (Georgia)

7 CONCLUSION

For the most part, incident management operations for border bridges are similar to those on non-border bridges, although they usually include require additional cooperation and coordination because the process requires agencies from adjacent states to work together. This report documents the best practices from the Woodrow Wilson Bridge incident management program in order to help other states in the I-95 corridor deal with border bridge issues.

A successful border bridge incident management program requires a champion(s) to lead the program. The Woodrow Wilson Bridge incident management program was led by three agencies working together to develop the program. These champions included Alvin Marques (MDSHA), Pete Todd (VDOT), and Jim Austrich (DDOT). These champions have taken a proactive role in establishing the incident management program for the Woodrow Wilson Bridge and have engaged other transportation and emergency management agencies into the program. The success of the program can be attributed to the efforts placed by these and several other individuals.

A mix of high-tech and low-tech solutions is also important for the success of the program. Major deployments such as transportation management centers, dynamic message signs, highway advisory radios, interoperable information sharing systems, and freeway service patrol units can provide several benefits for an incident management program, albeit at a high cost. At the same time, low-tech solutions such as developing operational agreements, providing training sessions, and exchanging telephone numbers can be equally as important to the program.

Regardless of the activities taken, breaking barriers between agencies and building relationships between transportation and emergency management counterparts are the most vital aspects of developing a border bridge incident management program. Coalition staff interviewed for this project all agreed that cooperation, coordination, and communication are the building blocks for the program. They emphasized that a successful incident management program relies on trust and understanding of all agencies and personnel involved.

APPENDIX A: SAMPLE OPERATIONAL AGREEMENTS

Several Operational Agreements are in place that helps facilitate the incident management process on the Woodrow Wilson Bridge. Sample Operational Agreements, based on those from the Woodrow Wilson Bridge, are provided in this Appendix. These forms are not meant to be final documentation for interagency agreements, but a sample to help agencies get the incident management process started. These agreements include:

- City & State DOT for Incident Management Agreement
- County Government Incident Management
- County & State DOT for Incident Management Agreement
- Regional Aid Agreement
- State Police Border Towing
- State Police ITS Program
- State Police & State DOT Incident Management Agreement #1
- State Police & State DOT Incident Management Agreement #2
- State DOT & County Incident Management Agreement #1
- State DOT & County Incident Management Agreement #2
- State DOT Hazard Removal Policy
- State DOT Safety Service Patrol Incident Management Agreement
- State DOT & State Police Extraordinary Services Agreement
- State DOT & State Police Lane Closure for Truck Accidents Agreement
- State DOT & State Police Law Enforcement Services Agreement
- State DOT & State Police Vehicle Removal Agreement #1
- State DOT & State Police Vehicle Removal Agreement #2
- State TMC & State DOT Incident Management Agreement
- State Traffic Operations Order
- Memorandum of Understanding for Bridge Jumpers

OPERATIONAL AGREEMENT

BETWEEN

CITY

AND

STATE DEPARTMENT OF TRANSPORTATION

FOR

IMPLEMENTATION OF THE WOODROW WILSON BRIDGE PROJECT INCIDENT MANAGEMENT PLAN

THIS AGREEMENT made this _____ day of _____, *Year*, by and between the *State* (hereinafter referred to as the STATE) acting by and through the *State Department of Transportation* (hereafter referred to as DOT) and the *City*, a political subdivision of the State (hereinafter referred to as the CITY).

WHEREAS, DOT in cooperation with the *State 2 DOT*, the *State 3 DOT,* and the Federal Highway Administration (FHWA) is undertaking a major project to re-construct the *Road 1* and the *Road 2*, *Road 3*, *Road 4* and *Road 5* Interchanges with the *Road 6*, known as the *Project*; and

WHEREAS, the Period of Reconstruction impacting traffic in the *State* will begin on or around *Date* and be completed by or about *Date*; and

WHEREAS, the *Project* construction zone in *State* will be determined by construction staging and maintenance of traffic procedures throughout the Period of Reconstruction in or around the *Road 6* from the *State 2* line to west of *Road 2*, the *Road 3* approaches to the *Road 6*, and the *Road 3* Interchange with the *Road 6*; and

WHEREAS, the area of reconstruction experiences a high volume of interstate traffic and historically high occurrences of incidents; and

WHEREAS, an Incident Management Plan was developed by the *Project* Incident Management Sub-Committee to enhance the ability to facilitate incident management, keep traffic moving, and maintain public safety during the Period of Reconstruction, and subsequently approved and adopted by the *Project* ITS/CMS Steering Committee on *Date*; and

WHEREAS, additional resources to support communications and accident investigation site practices to hasten the clearance of incident sites will be required to implement the Incident Management Plan; and

WHEREAS, the CITY'S Police and Fire Departments are actively involved in responding to incidents that affect the *Project* construction zone and adjacent areas, and their participation in implementing the *Project* Incident Management Plan is critical to maintaining the flow of traffic in these areas during the Period of Reconstruction; and

WHEREAS, DOT and the CITY wish to mutually support the implementation of the *Project* Incident Management Plan by entering into this Operational Agreement (OA) with the knowledge that both parties, in entering this OA, accept the items comprising this understanding as set forth herein.

NOW, THEREFORE, in consideration for the mutual benefits to be derived from the commitments made and the obligations accepted as set forth in the mutual covenants herein, the CITY and DOT agree as follows:

TERMS AND CONDITIONS

1. DOT shall provide the CITY Police Department with six cellular phones for use by CITY Police Officers normally assigned to patrolling areas within the construction zone. In providing said cellular phones to the CITY Police Department, DOT agrees to cover the expense of said phones for the Period of Reconstruction. Expenses for said cellular phones will be capped at *$X* for the Period of Reconstruction.

2. DOT shall provide photogrammetry and supporting software, software upgrades, and training for supervisors, field training for investigators, technical support and consultant / vendor costs to administer the training to the CITY Police Department. In providing photogrammetry and supporting services, the CITY Police Department agrees to use the photogrammetry to expedite the clearance of incidents within the construction zone for the Period of Reconstruction. Expenses for said photogrammetry and supporting services will be capped at *$X*.

3. DOT shall provide the CITY Fire Department with one cellular phone for use by CITY Fire Department Personnel when responding to calls for incidents within the construction zone. In providing said cellular phone to the CITY Fire Department, DOT agrees to cover the expense of said phone for the Period of Reconstruction. Expenses for said cellular phone will be capped at *$X* for the Period of Reconstruction.

4. The CITY and DOT expressly acknowledge that entering into this OA is not a commitment, either stated or implied, to a continuation of the OA beyond the Period of Reconstruction.

5. Either the CITY or DOT may TERMINATE this OA at any time by providing in writing Notification to the other of the intention to TERMINATE. Sixty days after receipt of NOTIFICATION of INTENTION to TERMINATE, both the CITY and DOT are freed from all further duties and obligations as might appear in this OA.

OA EXECUTION

IN WITNESS WHEREOF, DOT, acting by and for the COMMONWEALTH and the CITY have caused this OPERATIONAL AGREEMENT to be executed by their respective officials, thereunto duly authorized.

STATE DEPARTMENT OF TRANSPORTATION	*CITY*
By: _____	By: _____
Name,	*Name*,
Commissioner	City Manager

County Government

TRANSPORTATION OPERATIONS AND

INCIDENT MANAGEMENT COMMITTEE

MEMORANDUM OF UNDERSTANDING

AGREEMENT

This Agreement, made this _____ day of _____, *Year* by and between *County Department of Transportation* (hereinafter referred to as *DOT*), *Department of Police* (hereinafter referred to as *PD*), *Department of Fire and Rescue Services* (hereinafter referred to as *DFRS*), *Fire and Rescue Commission* (hereinafter referred to as *FRC*), and *Department of Environmental Protection* (hereinafter referred to as *DEP*), provides as follows:

Explanatory Statement

In *Month, Year*, *County* experienced a hazardous materials transportation incident that shut down *Highway* for *X* hours, causing extensive transportation delays and immeasurable loss to the community. While the individual operating departments responding to the incident performed admirably within the limits of their authorities and duties, this incident pointed out a concerted lack of coordination among the involved departments. Such lack of coordination was a key factor in preventing the successful resolution of the overall incident.

In response to the problems uncovered in the *Month, Year Highway* incident, the *DOT, PD, DFRS,* and *FRC* initiated a *Transportation Incident Management Task Force*. This *Task Force* was charged with improving the coordination and cooperation among all agencies responding to transportation related incidents. Since its inception, the *Task Force* has developed a draft Transportation Incident Management program manual; piloted transportation management training classes for command level and field supervisors; defined the roles and responsibilities for respective department response to transportation incidents; and identified more efficient and effective methods for the operating departments to manage the transportation system.

Studies have indicated that transportation delays in U.S. metropolitan regions cause thirty-four billion dollars loss, each year, through wasted fuel, lost wages and added vehicle maintenance. In particular, loss estimates for *County* exceed *X* million dollars and *X* work years, each year. Further, such studies have indicated that traffic delays add significantly to the poor air quality in the *metropolitan region*. Poor air quality also has attendant costs in health care and lost productivity for the citizens of *County*. Finally, federal law has mandated management of the transportation system to improve efficiency and as a mechanism to improve regional air quality.

In September, 1993, at the initiative of the Federal Highway Administration, a Capital Area Roadway Safety (CARS) Committee was formed to address regional concerns for highway safety. Members of *County's* Transportation Incident Management Task Force served on the CARS Committee, assisting in formulating that Committee's recommendations. In October, 1993, the CARS Committee released its final report wherein 33 individual recommendations for improving the safety of the region's highways were made. These recommendations, in addition to the previous work by the *County Task Force*, lay the groundwork for continued effort by the *DOT, PD, DFRS, FRC,* and *DEP* to improve the management and safety of the County's transportation system.

Accordingly, it is the desire of the undersigned *Departments* and *Commission* to formally establish and set out the organization and responsibilities of an interdepartmental *Transportation Operations and Incident Management Committee*. Said committee is charged with attaining the highest possible degree of cooperation and coordination among participating departments for the purpose of securing the safest, effective and efficient transportation system practicable for the benefit of all system patrons.

TERMS OF THE AGREEMENT

Now, therefore, for the reasons cited above, and in consideration of the mutual promises and agreements herein after set forth, the parties agree as follows:

1. The interdepartmental committee will be known as the *Transportation Operations and Incident Management Committee*, herein after referred to as the *Committee*, and is to be comprised of two standing subcommittees: a policy group, providing policy direction, and a work group, providing policy development and implementation.

2. Each participating department and the *FRC* will make every effort in good faith to abide by the policies and procedures established by the *Committee*, and adjust their operating procedures accordingly, for the mutual benefit of all participating departments and transportation system patrons.

3. The participating departments agree to pool their resources to the extent possible within budgetary, personnel, and other constraints, for the purpose of supporting the *Committee* and its efforts.

4. In providing direction, the policy group is responsible for, but not limited to, the following:

(a) Setting policy concerning the operations of the various participating departments where such policies concern transportation management, are within the legally defined authority of the concerned department and do not conflict with any local, state or federal law;

(b) Setting priorities among competing demands, with consideration that the highest priority must be the maintenance of the safety and welfare of service providers, the traveling public, and citizens at large;

(c) Acting on the recommendations of the work group; and

(d) Directing and reviewing the efforts of the work group.

5. The policy group will consist of one or more senior staff representatives from each of the participating departments and *FRC*, one of whom will be designated the primary member of the subcommittee. In addition to these members, a Chairperson of the *Committee*, in entirety, will serve on the policy group. The Chairperson will be appointed by the Director, *Department of Transportation*, from *DOT*. Membership on the policy group is not limited to the parties to this agreement. Representatives from other County departments or agencies or outside organizations may be solicited for membership on the majority vote of the voting members.

6. In providing policy development and implementation, the work group is responsible for, but not limited to, the following:

(a) Identifying mechanisms by which policies can best be implemented;

(b) Developing the specifics of such mechanisms for the most effective and efficient implementation of policies;

(c) Researching and recommending to the policy group new policy initiatives and direction; and

(d) Reviewing implemented policies for effectiveness and making recommendations to the policy group on possible changes.

7. The work group will consist of one or more representatives from each of the departments' party to this agreement, one of whom will be designated the primary member of the work group. In addition to these members, the Chairperson of the *Committee* will serve on the work group. Membership on the work group is limited to the department's party to this agreement. Advice and comments from other County departments or agencies, or outside organizations may be solicited at the discretion of the Chairperson or direction of the policy group.

8. Each County Government department or agency participating on the *Committee* is entitled to one vote. The Chairperson of the Committee holds the power of vote only where necessary to create a majority. Voting privileges may be extended to invited organizations at the discretion of the voting members of the policy group.

9. Neither the Committee, in entirety, nor its subcommittees are authorized to encumber departmental funds or authorize spending, except through normal departmental procedures.

10. This agreement may only be amended upon the written consent of all the Parties.

11. This agreement will continue in force until terminated by thirty days written notice from any Party or Parties to each of the remaining Parties.

The signatories below certify that they have read and understand the contents of this agreement.

Director
Department of Transportation

Director,
Department of Police

Director,
Department of Fire and Rescue Services

Chairman,
Fire and Rescue Commission

Director,
Department of Environmental Protection

Chief Administrative Officer

OPERATIONAL AGREEMENT

BETWEEN

COUNTY

AND

STATE DOT

FOR

IMPLEMENTATION OF THE *PROJECT* INCIDENT MANAGEMENT PLAN

THIS AGREEMENT made this _____ day of _____, *YEAR*, by and between the *State* (hereinafter referred to as the STATE) acting by and through the *State DOT* and *County*, a political subdivision of the STATE (hereinafter referred to as the COUNTY).

WHEREAS, *State DOT* in cooperation with the *State 2 DOT*, the *State 3 DOT,* and the Federal Highway Administration (FHWA) is undertaking a major project to re-construct the *Road 1* and the *Road 2*, *Road 3*, *Road 4,* and *Road 5* Interchanges with the *Road 6*, known as the *Project*; and

WHEREAS, the Period of Reconstruction impacting traffic in the *State* will begin on or around *Date* and be completed by or about *Date*; and

WHEREAS, the *Project* construction zone in the *State* will be determined by construction staging and maintenance of traffic procedures throughout the Period of Reconstruction in or around the *Road 6* between the *State 2* line and east of *Road 2*, the *Road 3* and *Road 4* approaches to *Road 5*, and the *Road 3* and *Road 4* Interchanges with the *Road 5*; and

WHEREAS, the area of reconstruction experiences a high volume of interstate traffic and historically high occurrences of incidents; and

WHEREAS, an Incident Management Plan was developed by the *Project* Sub-Committee to enhance the ability to facilitate incident management, keep traffic moving, and maintain public safety during the Period of Reconstruction, and subsequently approved and adopted by the *Project* ITS/CMS Steering Committee on *Date*; and

WHEREAS, additional resources to support communications to hasten the clearance of incident sites will be required to implement the Incident Management Plan; and

WHEREAS, the COUNTY'S Fire Department is actively involved in responding to incidents that affect the *Project* construction zone and adjacent areas and its participation in implementing the *Project* Incident Management Plan is critical to maintaining the flow of traffic in these areas during the Period of Reconstruction; and

WHEREAS, STATE and the COUNTY wish to mutually support the implementation of the *Project* Incident Management Plan by entering into this Operational Agreement (OA) with the knowledge that both parties, in entering this OA, accept the items comprising this understanding as set forth herein.

NOW, THEREFORE, in consideration for the mutual benefits to be derived from the commitments made and the obligations accepted as set forth in the mutual covenants herein, the COUNTY and *State DOT* agree as follows:

TERMS AND CONDITIONS

1. *State DOT* shall provide the COUNTY Fire Department with one cellular phone for use by COUNTY Fire Department Personnel when responding to calls for incidents within the construction zone. In providing said cellular phone to the COUNTY Fire Department, *State DOT* agrees to cover the expense of said phone for the Period of Reconstruction, as defined above. Expenses for said cellular phone will be capped at *$X* for the Period of Reconstruction.

2. The COUNTY Fire Department shall provide any available data requested by *State DOT*, or their *Consultant*, that will allow for evaluation of the provided equipment and staff for Incident Management strategies within the construction zone.

3. The COUNTY and *State DOT* shall attain an agreement for transferring of funds and invoicing / progress report procedures. The agreement is to be made before the transferals occur.

4. The COUNTY and *State DOT* expressly acknowledge that entering into this OA is not a commitment, either stated or implied, to a continuation of the OA beyond the Period of Reconstruction.

5. Either the COUNTY or *State DOT* may TERMINATE this OA at any time by providing in writing Notification of the Intention to TERMINATE. Sixty days after receipt of NOTIFICATION of INTENTION to TERMINATE, both the COUNTY and *State DOT* are freed from all further duties and obligations as might be required by this OA.

OA EXECUTION

IN WITNESS WHEREOF, *State DOT*, acting by and for the STATE, and the COUNTY have caused this OPERATIONAL AGREEMENT to be executed by their respective officials, thereunto duly authorized.

State Department of Transportation

By: _____
Name,
Project Project Manager

County

By: _____
Name
Fire Department Chief

ADDENDUM TO

REGIONAL COUNCIL OF GOVERNMENTS MUTUAL AID AGREEMENT

PROJECT OPERATIONAL PLAN

PURPOSE;

To provide for coordinated emergency response to the *Project Area* so that greatest life safety conditions exist.

SCOPE;

The *Project Area* is a Federally owned structure that crosses three (3) jurisdictions: *State 1*, *State 2,* and *State 3*. Legal considerations arising out of an emergency response dictates that all of the jurisdictions participate in dealing with incidents at the *Project*. This document deals with the general topics of unified response, communications, and chain-of-command procedures that are to be observed on the scene of incidents on the bridge.

RESPONSE;

Representatives of the Fire Departments shall periodically convene to review the procedures which govern the amount and type of apparatus which is to respond to the *Project*. These meetings shall be held at least once a year. Response procedures agreed to at said meetings shall remain in effect until altered by the next meeting. Response to the *Project* shall generally be governed by the type of incident at its location. Coordination of radio dispatch shall be reviewed periodically to minimize differences in procedures which might arise.

CHAIN-OF-COMMAND;

Final command authority at an emergency incident at the *Project* shall rest with, the jurisdiction in which the incident has occurred. Joint command shall be implemented whenever an emergency scene is so spread out that it is located in more than one (1) jurisdiction. There will be instances in which emergency response personnel from one (1) jurisdiction will arrive before the personnel from the affected jurisdiction. In such instances the first arriving jurisdiction shall have its senior officer assume command until relieved by the officer of the affected jurisdiction. The exact procedures of command and transfer of command shall also be reviewed at least annually to allow for possible changes in the emergency environment which affect these procedures. Items such as traffic impediments or changes in operating radio frequencies are but two (2) possible examples of such "changes".

REGIONAL PLANNING CHANGES;

Within the scope of authority allowed by a jurisdiction, the fire departments which respond to incidents at the Woodrow Wilson Bridge will continue to press for needed fire safety improvements so as to improve the ability of the fire service to handle emergency incidents in an expeditious manner.

RESPONSE;

All incidents which are received by any jurisdiction concerning the *Project* shall be communicated to the other two (2) jurisdictions by radio or telephone. The individual jurisdiction's response will be governed by the type of incident and as modified by this addendum and as further modified by any future addenda. From the date of this agreement until formally altered, the response assignments shall be as follows:

ACCIDENT WITH INJURY;

State 3 (*City*) - 1 Extrication Wagon, 1 Medic Unit

State 2 (*County*) - 1 Engine Company, 1 Ambulance, 1 Heavy Duty Squad Truck

VEHICLE FIRE (Non-hazardous material)

State 2 (*County*) - 1 Engine Company

State 3 (*City*) - 1 Engine Company

VEHICLE FIRE OR OTHER EMERGENCY INVOLVING HAZARDOUS MATERIAL

State 1 - Fire Boat, 1 Engine Company or Battalion Officer

State 2 (*County*) - 2 Engine Companies, 1 Heavy Duty Squad Truck, 1 Tanker Truck, 1 Foam Unit, 1 Ambulance, 1 Medic Unit, 2 Command Officers

State 3 (*City*) - 3 Engine*, 1 Ladder Truck*, 1 Medic Unit, 1 Battalion Officer

Virginia (Fairfax County) - 1 Heavy Duty Squad Truck *1 - Engine Company and the ladder truck will be deleted from the assignment if the incident is not on the Virginia side of the bridge tower since these units would be expected to provide water from the river at Jones Point. Any incident between the tower and the Maryland shore would be handled with the fire boat or other methods.

RADIO DISPATCH PROCEDURES;

When any one of the affected jurisdictions receives a report of a fire or injury related incident on the Woodrow Wilson Bridge, it shall immediately notify the other jurisdictions which are due to respond as noted earlier in this addendum. The jurisdiction in which the emergency is believed to be located will announce the assignment agreed upon and shall request those units specified from the other jurisdictions. Since the bridge is subject to extreme traffic problems, ordinary dispatch procedures may take too much time. Therefore, a jurisdiction which first receives a

call for assistance may send its units into either of the other jurisdictions while simultaneously notifying the appropriate Fire Communications Center. This procedure will allow for the quickest response possible for some fire service apparatus and thus is very much in the interest of the life safety of bridge users.

COMMAND PROCEDURES;

Emergency incident command shall rest with the first arriving fire service officer in all fire/injury related incidents; command will rest with this officer until relieved by a higher ranking officer according to the procedures in force with each jurisdiction. If the first arriving officer finds that the incident is not within his jurisdiction, he/she will be prepared to turn command over to the first arriving officer of the affected jurisdiction. Whenever command is transferred, it will be done face to face with the two (2) officers involved, if possible. In any case, the transfer of command will be made over the radio frequency being utilized for incident command.

STATE
STATE POLICE

SPECIAL ORDER NO, *X*

No Trooper shall have the authority to direct or authorize the towing or removal of any vehicle or other item to a destination outside its own jurisdiction, unless the consent of a law enforcement officer of the destination jurisdiction has been first obtained. An example being *State 1 Police* having a vehicle towed from *State 1* to *State 2*.

Specifically, the following shall be adhered to when dealing with vehicles on the *adjoining roadways.*

1) All disabled, abandoned, or wrecked vehicles shall be handled as promptly as possible so as to alleviate or limit the disruption to traffic flow caused by its presence.
2) A vehicle located on the described *roadways* will in all cases be removed as soon as possible consistent with safety and good judgment.
3) If possible, the owner/operator should be approached and consulted regarding *a* tow service,
4) If the owner/operator is unable to or refuses to make a decision, then the vehicle will be removed by an authorized tow service appearing on the *State Police Barrack's* tow list.
5) Upon removal, the vehicle will be returned to *State 1* for storage and/or safekeeping.
6) Notification of the owner and safekeeping of the vehicle's contents will be handled in the same manner as established to deal with all other towed vehicles.

All personnel are reminded that this compact also provides state and local police from *State 3* and *State 3* with similar authority to act on both bridges under the same regulations. Should an inquiry be received about a vehicle removed without the owner's consent, it will be important to keep in mind that it may be necessary to refer the caller to another Agency or Department.

SPECIAL ORDER NO. *X*

TO: ALL *Area* Troop Personnel

SUBJECT: *Local River* Bridge Towing Compact

During the *Year* legislative session, an agreement was entered into by the jurisdictions controlling bridges over the *Local River* to deal with disabled, wrecked, or abandoned vehicles on these bridges. In the *Area* Troop there are two bridges which fall under this agreement, the *Bridge 1* in *Barracks 1 Area* and the *Bridge 2* in *Barracks 2 Area*. The following order is intended to delineate *State Police* actions on these bridges regarding disabled, wrecked, or abandoned vehicles.

The Transportation Article, Section *X*, Subtitle *X*, authorizes the *State Police* to tow vehicles from any part of the aforementioned bridges even though the vehicle may not be located within our jurisdiction. If the vehicle is towed without the owner's consent, it must be returned to our jurisdiction and the *State Police* will be responsible for notifying the owner and completing the appropriate paper work. This subtitle authorizes a *State* tow company to remove the vehicle at our request from any portion of either bridge and if necessary pass through another jurisdiction before returning to *State* for storage or safekeeping.

State Police
Office of Liaison
Statewide Operations Center

TO: *Name*, Chairman *ITS Program* Board of Directors

FROM: *Name*, *SP Liaison Officer*, *Statewide Operations Center*

SUBJECT: *State Police* responsibilities in the *ITS Program*

Introduction

The *State Police (SP)* have been directly involved in the creation of the *ITS Program* since its beginning in *Date*. Prior to that time *SP* was also involved with the *State Highways Division*, the *State Transportation Authority* and others to bring about a program to address the congestion problem associated with seasonal traffic traveling to and returning from the *state resort area*.

"*Program*", as the program came to be known, began in *Date* and continued for several years during which time our incident management practices were improved upon. This, coupled with an accelerated highway construction program by the *State Highways* led to a much improved weekend traffic congestion situation near the *state resort area*.

In *Date*, when *ITS Program* was in its infancy, *State Highways* and *SP* officials realized that to create such a program statewide would require dedicated staff to monitor each phase of the programs' implementation. In *Month* of that year the *SP Liaison Officer* was assigned full time to the *Office of Traffic & Safety*, while his duties were varied, much of his time was spent on *ITS Program*. Since that time the *Liaison Officer* has been involved in all aspects of putting together *ITS Program* Freeway Incident Management practices.

As of the date of this report the *Liaison Officer* between the *Highways Division and SP* continues to be involved in not only current *ITS Program* activities but in mapping the future of the program. He is currently housed in the new *Statewide Operations Center (SOC)* and as you know is a member of the *ITS Program* Board. With the *SOC* coming on line in the near future the *State Police* is now looking at keeping its commitment of staffing the *SOC* with Troopers to assist *Highway Division* operators in coordinating major incidents.

The *SP* has been looking at which approach to staffing the *SOC* they should take. Originally the *SP* looked at manning the *SOC* on a twenty-four hour basis seven days a week. Through conversations with members of the *ITS Program* Team and the Administrator of the *Highway Division* it now appears that *SP* may not need to man the *SOC* twenty-four hours a day as originally thought. *SP* is now looking at staffing the *SOC* with one trooper during the morning rush hour period and one during the evening rush. While the exact time frames have not been finalized it is the thoughts of many that the

troopers should be in the center for _Four_ hour periods, (ex. 0500-0900 hrs, and 1500-1900 hrs daily, Monday through Friday).

Federal funding applied for during this past year has been approved and will be available to the *SP* for *X* staffing positions as of *Date*. There is continuing discussion on whether to (1) assign *X* troopers to the *SOC* on a full time basis, (2) assign those positions to the *Local Barrack* and have that installation responsible for assigning personnel to work within the *SOC* each day or (3) Assign troopers to work in the *SOC* on a volunteer, overtime basis so that as many troopers as would like would have an opportunity to rotate through the *SOC* thereby bringing to a higher level those individuals within the *SP* who would have a good working knowledge of the *SOC* and a much more in depth understanding of the wide spectrum incident management process. It appears that the agency may go with the third option of rotating troopers within the *SOC*. At a meeting with the new *SP Superintendent*, *Name* and *Highway Division Administrator, Name* on *Date* it was apparent that *SP Superintendent* is fully supportive of the *ITS Program* and *SP's* involvement in its operational concepts.

The *SP Liaison Officer* and the *Deputy Superintendent*, *Name* are working out the actual operational assignment of troopers to the new *SOC*. Troopers in the field continue to work toward a common goal with their counterparts from emergency services and transportation officials in fine tuning viable incident management practices that we have enjoyed throughout the past five to six years here in *State*. *State* is now looked upon nationwide as one of the leaders in implementing a sound incident management program with as little interagency red tape as possible.

***SOC /*Operational Responsibilities**

Members of the *State Police* who will be assigned to work within the new *SOC* will be monitoring and coordinating certain activities of the *State Police* during freeway incidents. The *State Police* has divided *State* into *X* regions and has *X* separate installations for its operational responsibilities. Each installation continually monitors what is happening within its jurisdictional area of responsibility. *Duty Officers (Shift Commanders)* at each installation oversee the entire operations of that facility during his eight-hour tour of duty. He is responsible to see that all calls for service are handled in a timely fashion and has the authority to call for additional assistance when needed. In looking at freeway incidents I like to draw the following:

The duty officer at the local barrack may be monitoring one or even two accidents/incidents at one time and will be coordinating such things as emergency response requests, notification procedures to *SOC* should a road be closed, soliciting, upon request the proper towing service/s, and at the same time monitoring other non-traffic issues which may be going on within his area of responsibility. This, coupled with being inundated with calls from the public wanting to report the accident, etc., leave the duty officer and the *PCO* extremely busy thereby leaving open the possibility of error, (ex. forgetting to notify in a timely fashion the *SOC* of a road closure). I think of this individual as the Micro manager, one who is looking only at what is happening within his barrack area.

In looking at the trooper working within the *SOC* we must think of him as being involved in what is happening that is incident related on a Statewide basis. Where the aforementioned duty officer is responsible for what is occurring in his barrack area the *SOC trooper* is responsible to monitor what is happening in all *X* regions of the state and at each installation. He will be constantly in radio/telephone contact with various installations making sure that certain requirements regarding notifications, requests for assistance, and other items have taken place. This operator may be monitoring as many as *X* to *X* incidents at one time statewide. He will, however, be concentrating on *ITS Program*-related issues and not be distracted by other calls for service as will the local duty officer. This should keep the *SOC* in the loop regarding incident-related activities being conducted by the *SP*. He/she will work with the *communications equipment* within the *SOC* and also provide assistance to *Traffic* operators when requested. He will be responsible to keep the *Liaison Officer* fully informed of what is happening on the system and of any deficiencies found so that the *Liaison Officer* can address the matter with the appropriate commander.

It is not certain at this time whether or not they will be crossed trained in programming of *Field Device* messages, etc. While this will not be a requirement at the beginning, it is felt that through the fostering of a relationship between the troopers and the *Traffic* operators and upon gaining experience they too may become proficient in conducting many of the *ITS Program*-related operations within the *SOC*. I think you will agree with me that these troopers will be looking at freeway incident management on the MACRO level, (The big picture!), assuring that operational matters on behalf of the *SP* are taking place in a timely fashion.

Closing

The progress of the *ITS Program* and its interagency cooperative processes has proven to be superior when compared to neighboring jurisdictions. Teaming up *SP*, *Highway Division,* and possibly other operators within one central location to monitor and coordinate our efforts will do much to improve upon the already excellent working relationship we now enjoy far into the future. Like any other program, we will need to constantly monitor each operational phase of the program and its usefulness thereby directing the future path of *ITS Program* by using what we learn on a day to day basis. It is only through this systematic approach that we can hope to correctly identify what will enhance our efforts or what needs to be corrected or even eliminated.

cc: *ITS Program Board*

ITS Program Operations Team

OPERATIONAL AGREEMENT

BETWEEN

STATE POLICE (SP)

AND

STATE DEPARTMENT OF TRANSPORTATION (DOT)

PROJECT
Project Name

BACKGROUND
The *DOT*, in cooperation with the *State 2 Department of Transportation*, the *State 3 Department of Transportation* and the FHWA is undertaking a major project to re-construct the *Project Area* and the *Road 1*, *Road 2*, *Road 3,* and *Road 4* Interchanges with the *Road 5*, known as the *Project Area*.

It is anticipated that the Period of Reconstruction impacting traffic in *State* will begin on or around *Date* and be completed by or about *Date*. It is anticipated that due to the high volume of interstate traffic, the historically high number of incidents occurring in this area, and extensive roadway and bridge construction, that additional resources will be required to facilitate incident management during the Period of Reconstruction as set forth in the *Date Project Area* Incident Management Plan. The *Project* Incident Management Plan was subsequently adopted and approved by the *Project* ITS / CMS Steering Committee on *Date*.

PURPOSE
This Operational Agreement (OA) is to establish an agreement between the *SP* and *DOT* concerning the level of support and funding for resources to facilitate incident management activities and abate traffic impacts on the *Project* during the Period of Reconstruction.

According to the terms set forth in this OA, *DOT* will provide funding to the *SP* for staffing, photogrammetry and cellular telephones to augment *SP* incident management capabilities within the Coverage Area, as defined in this OA, and in accordance with the Terms and Conditions set forth in this OA.

TERMS and CONDITIONS
During the Period of Reconstruction and within the Coverage Area:

1. *DOT* shall supplement existing *SP* Barracks *Road 5* coverage by providing *SP* with overtime monies for two (2) troopers per 8-hour shift, 24 hours a day, 7-days a week dedicated to patrolling the *Road 5* between the *State 2* Line and *Road 6*, with special

emphasis on patrolling the Coverage Area. Deployment of the troopers can vary as determined by the *SP*.

2. The Coverage Area is defined as the *Road 5* between the *State 2* Line and the *Road 7* interchange, the *Road 3* and *Road 4* Interchanges, and the *Road 3* and *Road 4* approaches to *Road 5*.

3. Funding for payment of overtime expenses shall be made available for the Period of Reconstruction only and are capped at *$X*. *SP* will have the discretion to distribute such monies during the Period of Reconstruction as the project progresses.

4. *DOT* shall provide *SP* with *X* cellular phones for use by *SP* troopers in the Coverage Area. In providing said cellular phones to the *SP*, *DOT* agrees to cover the expense of said phones for the Period of Reconstruction. Expenses for said cellular phones will be capped at *$X* for the Period of Reconstruction.

5. *SP* and *DOT* shall attain an agreement for transferring of funds and invoicing / progress report procedures. The agreement is to be made before the transferals occur.

6. *SP* and *State* expressly acknowledge that entering into this OA is not a commitment, either stated or implied, to a continuation of the terms and conditions of this OA beyond the Period of Reconstruction.

7. Either *SP* or *DOT* may TERMINATE this OA at any time by providing in writing Notification to the other of the intention to TERMINATE. Sixty days after receipt of NOTIFICATION of INTENTION to TERMINATE, both *SP* and *DOT* are freed from all further duties and obligations as might appear in this OA.

OA EXECUTION

IN WITNESS WHEREOF, the *State Department of Transportation* and the *State Police* have caused this Operational Agreement to be executed by their respective officials, thereunto duly authorized.

State DOT	*State Police*
By:_____	By:
Name,	_____
Project Project Manager	*Name*,
	SP Superintendent

OPERATIONAL AGREEMENT

BETWEEN

STATE POLICE (*SP*)

AND

STATE DEPARTMENT OF TRANSPORTATION (DOT)

PROJECT
Project

BACKGROUND
DOT, in cooperation with the *State 2 DOT*, the *State 3 DOT* and the FHWA is undertaking a major project to re-construct the *Road 1* and the *Road 2*, *Road 3*, *Road 4,* and *Road 5* Interchanges with the *Road 6*, known as the *Project*.

It is anticipated that the Period of Reconstruction impacting traffic in *State* will begin on or around *Date* and be completed by or about *Date*. It is anticipated that due to the high volume of interstate traffic, the historically high number of incidents occurring in this area, and extensive roadway and bridge construction, that additional resources will be required to facilitate incident management during the Period of Reconstruction as set forth in the *Date Project* Incident Management Plan. The *Project* Incident Management Plan was subsequently adopted and approved by the *Project* ITS / CMS Steering Committee on *Date*.

PURPOSE
This Operational Agreement (OA) is to establish an agreement between *SP* and *DOT* concerning the level of support and funding for resources to facilitate incident management activities and abate traffic impacts on the *Project* during the Period of Reconstruction.

According to the terms set forth in this OA, *DOT* will provide funding to the *SP* for staffing, photogrammetry and cellular telephones to augment *SP* incident management capabilities within the Coverage Area, as defined in this OA, and in accordance with the Terms and Conditions set forth in this OA.

TERMS and CONDITIONS
During the Period of Reconstruction and within the Coverage Area:

1. *DOT* shall supplement existing *SP* coverage of the *Road 6* by funding one (1) trooper per 8-hour shift, 24 hours a day, 7-days a week with vehicles dedicated to patrolling the *Road 6* between the *Interchange 1* and the *Road 1*, with a special emphasis on patrolling the Coverage Area.

2. The Coverage Area is defined as the *Road 6* between the *Road 1* and *Road 2*, the *Road 3* Interchange, and the *Road 3* approaches to the *Road 6*.

3. The vehicles will be replaced after three years of use.

4. Funding for *SP* vehicles and supplemented patrol coverage for the Period of Reconstruction is capped at *$X*.

5. *DOT* shall provide *SP* with eight cellular phones for use by *SP* personnel in the Coverage Area. In providing said cellular phones to the *SP*, *DOT* agrees to cover the expense of said phones for the Period of Reconstruction. Expenses for said cellular phones will be capped at *$X* for the Period of Reconstruction.

6. *DOT* shall provide photogrammetry and supporting software, software upgrades, training for supervisors, field training for investigators, technical support and consultant / vendor costs to administer the training to the *SP* personnel. In providing photogrammetry and supporting services, the *SP* agrees to use the photogrammetry to expedite the clearance of incidents within the Coverage Area for the Period of Reconstruction. Expenses for said photogrammetry and supporting services will be capped at *$X*.

7. *SP* shall provide any available data requested by *DOT*, or their General Engineering Consultant, that will allow for evaluation of the Incident Management strategies within the construction zone.

8. *SP* shall submit a quarterly progress report / invoice for costs incurred by the abovementioned resources to the *Project* project manager, in order to request payment by *DOT*.

9. *SP* and *DOT* expressly acknowledge that entering into this OA is not a commitment, either stated or implied, to a continuation of the terms and conditions of this OA beyond the Period of Reconstruction.

10. Either *SP* or *DOT* may TERMINATE this OA at any time by providing in writing Notification to the other of the intention to TERMINATE. Sixty days after receipt of NOTIFICATION of INTENTION to TERMINATE, both *SP* and *DOT* are freed from all further duties and obligations as might appear in this OA.

OA EXECUTION

IN WITNESS WHEREOF, the *State Department of Transportation* and the Virginia Department of State Police have caused this Operational Agreement to be executed by their respective officials, thereunto duly authorized.

STATE Department of Transportation *STATE* Department of State Police

By:_____ By:_____

Project Manager State Police Superintendent

OPERATIONAL AGREEMENT

BETWEEN

COUNTY AGENCY

AND

STATE DEPARTMENT OF TRANSPORTATION

FOR

IMPLEMENTATION OF *PROJECT* INCIDENT MANAGEMENT PLAN

THIS AGREEMENT made this _____ day of _____, 2001, by and between the *State* (hereinafter referred to as the STATE) acting by and through the *State Department of Transportation* (hereafter referred to as DOT) and *County Agency*, a political subdivision of the STATE (hereinafter referred to as the COUNTY).

WHEREAS, DOT in cooperation with the *State 2 Department of Transportation*, the *State3 Department of Transportation* and the Federal Highway Administration (FHWA) is undertaking a major project to re-construct the *Project* Area (PA) and the *Road 1*, *Road 2*, *Road 3,* and *Road 4* Interchanges with the *Road 5*, known as the *Project*; and

WHEREAS, the Period of Reconstruction impacting traffic in the *State* will begin on or around *Date* and be completed by or about *Date*; and

WHEREAS, the *Project* construction zone in the *State* will be determined by construction staging and maintenance of traffic procedures throughout the Period of Reconstruction in or around the *Road 5* from the *State 2* state line to west of *Road 1*, the *Road 1* approaches to the *Road 5*, and the *Road 1* Interchange with *Road 5*; and

WHEREAS, the area of reconstruction experiences a high volume of traffic and historically high occurrences of incidents; and

WHEREAS, an Incident Management Plan was developed by the *Project* Incident Management Sub-Committee to enhance the ability to facilitate incident management, keep traffic moving, and maintain public safety during the Period of Reconstruction, and subsequently approved and adopted by the *Project* ITS/CMS Steering Committee on *Date*; and

WHEREAS, additional resources to support communications and accident investigation site practices to hasten the clearance of incident sites will be required to implement the Incident Management Plan; and

WHEREAS, the COUNTY'S Police and Fire Departments are actively involved in responding to incidents that affect the *Project* construction zone and adjacent areas and their participation in implementing the *Project* Incident Management Plan is critical to maintaining the flow of traffic in these areas during the Period of Reconstruction; and

WHEREAS, DOT and the COUNTY wish to mutually support the implementation of the *Project* Incident Management Plan by entering into this Operational Agreement (OA) with the knowledge that both parties, in entering this OA, accept the items comprising this understanding as set forth herein.

NOW, THEREFORE, in consideration for the mutual benefits to be derived from the commitments made and the obligations accepted as set forth in the mutual covenants herein, the COUNTY and DOT agree as follows:

TERMS AND CONDITIONS

1. DOT shall provide the COUNTY Police Department with three cellular phones for use by COUNTY Police Officers normally assigned to patrolling areas within the construction zone. In providing said cellular phones to the COUNTY Police Department, DOT agrees to cover the expense of said phones for the Period of Reconstruction. Expenses for said cellular phones will be capped at *$X* for the Period of Reconstruction.

2. DOT shall provide photogrammetry and supporting software, software upgrades, training for supervisors, field training for investigators, technical support, and consultant / vendor costs to administer the training to the COUNTY Police Department. In providing photogrammetry and supporting services, the COUNTY Police Department agrees to use the photogrammetry to expedite the clearance of incidents within the construction zone for the Period of Reconstruction. Expenses for said photogrammetry and supporting services will be capped at *$X*.

3. DOT shall provide the COUNTY Fire Department with one cellular phone for use by COUNTY Fire Department Personnel when responding to calls for incidents within the construction zone. In providing said cellular phone to the COUNTY Fire Department, DOT agrees to cover the expense of said phone for the Period of Reconstruction. Expenses for said cellular phone will be capped at *$X* for the Period of Reconstruction.

4. The COUNTY shall submit a monthly progress report / invoice for costs incurred by the abovementioned resources to the *Project* project manager *Name*, in order to request payment by DOT.

5. The COUNTY and DOT expressly acknowledge that entering into this OA is not a commitment, either stated or implied, to a continuation of the OA beyond the Period of Reconstruction.

6. Either the COUNTY or DOT may TERMINATE this OA at any time by providing in writing Notification to the other of the intention to TERMINATE. Sixty days after receipt of

NOTIFICATION of INTENTION to TERMINATE, both the COUNTY and DOT are freed from all further duties and obligations as might appear in this OA.

OA EXECUTION

IN WITNESS WHEREOF, DOT, acting by and for the STATE, and the COUNTY have caused this OPERATIONAL AGREEMENT to be executed by their respective officials, thereunto duly authorized.

STATE
DEPARTMENT OF TRANSPORTATION

By: _____
Name,
Project Project Manager

COUNTY

By: _____
Name
Fire Department Chief

By: _____
Name
Police Department Chief

OPERATIONAL AGREEMENT

BETWEEN *COUNTY*

AND

STATE DEPARTMENT OF TRANSPORTATION

FOR

IMPLEMENTATION OF THE *PROJECT*
INCIDENT MANAGEMENT PLAN

THIS AGREEMENT made this *X* day of *Month*, *Year*, by and between the *State* (hereinafter referred to as the *STATE*) acting by and through the *State Department of Transportation* (hereafter referred to as *DOT*) and *County*, a political subdivision of the *STATE* (hereinafter referred to as the *COUNTY*).

WHEREAS, DOT in cooperation with the *State 2 Department of Transportation*, the *State3 Department of Transportation* and the Federal Highway Administration (FHWA) is undertaking a major project to re-construct the *Project* Area (PA) and the *Road 1*, *Road 2*, *Road 3,* and *Road 4* Interchanges with the *Road 5*, known as the *Project*; and

WHEREAS, the Period of Reconstruction impacting traffic in *State* will begin on or around *Date* and be completed by or about *Date*; and

WHEREAS, the *Project* construction zone in the *State* will be determined by construction staging and maintenance of traffic procedures throughout the Period of Reconstruction in or around the *Road 5* from the *State 2* state line to west of *Road 1*, the *Road 1* approaches to the *Road 5*, and the *Road 1* Interchange with *Road 5*; and

WHEREAS, the area of reconstruction experiences a high volume of interstate traffic and historically high occurrences of incidents; and

WHEREAS, an Incident Management Plan was developed by the *Project* Incident Management Sub-Committee to enhance the ability to facilitate incident management, keep traffic moving, and maintain public safety during the Period of Reconstruction, and subsequently approved and adopted by the *Project* ITS/CMS Steering Committee on *Date*; and

WHEREAS, additional resources to support communications to hasten the clearance of incident sites will be required to implement the Incident Management Plan; and

WHEREAS, the *COUNTY'S* Fire Department is actively involved in responding to incidents that affect the *Project* construction zone and adjacent areas and its participation in implementing the *Project* Incident Management Plan is critical to maintaining the flow of traffic in these areas during the Period of Reconstruction; and

WHEREAS, *DOT* and the *COUNTY* wish to mutually support the implementation of the *Project* Incident Management Plan by entering into this Operational Agreement (OA) with the knowledge that both parties, in entering this OA, accept the items comprising this understanding as set forth herein.

NOW, THEREFORE, in consideration for the mutual benefits to be derived from the commitments made and the obligations accepted as set forth in the mutual covenants herein, the *COUNTY* and *DOT* agree as follows:

TERMS AND CONDITIONS

1. *DOT* shall provide the *COUNTY* Fire Department with *X* cellular phones for use by *COUNTY* Fire Department Personnel when responding to calls for incidents within the construction zone. In providing said cellular phones to the *COUNTY* Fire Department, *DOT* agrees to cover the expense of said phones for the Period of Reconstruction, as defined above. Expenses for said cellular phones will be capped at *$X* for the Period of Reconstruction.

2. The *COUNTY* Fire Department shall provide any available data requested by *DOT*, or their *Engineering Consultant*, that will allow for evaluation of the provided equipment and staff for Incident Management strategies within the construction zone.

3. The *COUNTY* and *DOT* shall attain an agreement for transferring of funds and invoicing/ progress report procedures. The agreement is to be made before the transferals occur.

4. The *COUNTY* and *DOT* expressly acknowledge that entering into this OA is not a commitment, either stated or implied, to a continuation of the OA beyond the Period of Reconstruction.

5. Either the *COUNTY* or *DOT* may TERMINATE this OA at any time by providing in writing Notification of the Intention to TERMINATE. Sixty days after receipt of NOTIFICATION of INTENTION to TERMINATE, both the *COUNTY* and *DOT* are freed from all further duties and obligations as might be required by this OA.

OA EXECUTION

IN WITNESS WHEREOF, *DOT*, acting by and for the *STATE* and the *COUNTY* have caused this OPERATIONAL AGREEMENT to be executed by their respective officials, thereunto duly authorized.

STATE HIGHWAY DIVISION

Date

MAINTENANCE POLICY *X*

SUBJECT: PROMPTLY REOPENING ROADWAY TO TRAFFIC
Road/Lane Blocked/Closed by Accident of Loads Falling from Trucks

PURPOSE: Whenever a roadway or travel lane is closed or partially blocked by An accident and traffic delays or safety problems may occur, the *Highway Engineer* or his representative in cooperation with the police officer in charge should reopen the roadway as soon as possible ON AN URGENT BASIS. This policy recognizes that public safety is the highest priority and must be secured, especially if injuries or hazardous materials are involved. It is understood that damage to vehicles or cargo may occur as a result of clearing the roadway on an urgent basis. While reasonable attempts to avoid such damage should be taken, the highest priority is public safety.

PROCEDURE: Type of Occurrence

GENERAL

The *Highway Engineer* or his representative is to assign the necessary equipment and manpower to reopen the roadway or lane as soon as possible.

If the incident involves any truck (other than a pick-up), or the exact nature of the incident is unknown, or involves removal of debris (safe spilled cargo), a rubber-tired Front End Loader will be dispatched to the scene as soon as possible in the event it could be needed to assist a tow truck in righting/relocating the vehicle(s) involved, or assisting in debris removal/relocation.

If commercial help does not arrive within a reasonable period of time, *State Highway Division* forces should begin the removal of vehicle(s) spilled safe cargo.

If the commercial help is unable to correct the situation, the *State Highway Division* will assist by using the Front End Loader as needed.

If materials being transported are spilled, the *State Highway Division* will make every effort to relocate the materials in the shortest possible time, using whatever equipment is necessary. All such materials will be relocated as short a distance as possible, but not be placed so as to present a traffic hazard.

The RME or his representative is to prepare a list of the personnel and equipment used and the work hours involved so that the owner of the vehicle and/or cargo can be billed for the cleanup. The *State Highway Division*'s towing response form will also be completed for every incident involving the *State Highway Division*.

Appropriate warning devices (signs, barricades, arrow-boards, etc) are to be placed at the scene should either the damaged vehicle(s) or cargo remain adjacent to a shoulder.

HAZARDOUS/FLAMMABLE/EXPLODING MATERIAL

No attempt is to be made by *State Highway Division* personnel/equipment to move any hazardous or flammable explosive material for any reason. If the *State Highway Division* is first on the scene and the cargo content is not readily identifiable, the *Highway Engineer* or his representative will contact the proper authorities to ascertain if special measures should be taken.

As soon as the public safety has been secured, then reopening of the roadway is to proceed as described under "GENERAL" in this memorandum.

_____
Name
Maintenance Engineer

OPERATIONAL AGREEMENT

BETWEEN

STATE DEPARTMENT OF TRANSPORTATION SAFETY SERVICE PATROL (DOT SSP)

AND

STATE DEPARTMENT OF TRANSPORTATION (DOT)

PROJECT

Project

BACKGROUND

The *State 2 DOT*, in cooperation with the *DOT*, the *State 3 DOT* and the FHWA is undertaking a major project to re-construct the *Project Area* and the *Road 1*, *Road 2*, *Road 3,* and *Road 4* Interchanges with the *Road 5*, known as the *Project Area*.

It is anticipated that the Period of Reconstruction impacting traffic in *State* will begin on or around *Date* and be completed by or about *Date*. It is anticipated that due to the high volume of interstate traffic, the historically high number of incidents occurring in this area, and extensive roadway and bridge construction, that additional resources will be required to facilitate incident management during the Period of Reconstruction as set forth in the *Date Project* Incident Management Plan. The *Project* Incident Management Plan was subsequently adopted and approved by the *Project* ITS / CMS Steering Committee on *Date*.

PURPOSE

This Operational Agreement (OA) is to establish an agreement between the *DOT SSP* and *DOT* concerning the level of support and funding for resources to facilitate incident management activities and abate traffic impacts on the *Project* during the Period of Reconstruction.

According to the terms set forth in this OA, *DOT* will provide funding to the *DOT SSP* for vehicles, staffing, operations, and cellular telephones to augment *DOT SSP* incident management responsibilities within the Coverage Area, as defined in this OA, and in accordance with the Terms and Conditions set forth in this OA.

TERMS and CONDITIONS

During the Period of Reconstruction and within the Coverage Area:

1. *DOT* shall supplement the existing *DOT SSP* vehicle, which is dedicated to the *Project* 16-hours a day, M-F, to provide 24-hour coverage, 7-days a week.

2. *DOT* shall provide funding for one (1) dedicated *DOT SSP* vehicle, 24-hours a day, and 7-days a week to patrol the Coverage Area.

3. The Coverage Area is defined as the *Road 1* between *Road 2* and the *Road 3* Interchange, the *Road 4* Interchange, and the *Road 4* approach to *Road 5*.

4. *DOT SSP* vehicles can assist in incident management activities when accessing the *Road 5* while in *State 2*.

5. *DOT SSP* shall provide staff, vehicle maintenance, materials and resources (e.g. fuel, cones, etc.) to properly operate and deploy the *SSP* vehicles.

6. The *DOT SSP* vehicles will be leased. No new vehicles will be purchased.

7. Funding for leased *DOT SSP* vehicles and supplemented patrol staffing for the Period of Reconstruction is capped at *$X*.

8. *DOT* shall provide *DOT SSP* with funding for five cellular phones for use by *DOT SSP* personnel patrolling the Coverage Area. In providing said cellular phones to the *DOT SSP*, *DOT* agrees to cover the expense of said phones for the Period of Reconstruction. Expenses for said cellular phones will be capped at *$X* for the Period of Reconstruction.

9. *DOT SSP* shall provide any available data requested by *DOT*, or their *Consultant*, that will allow for evaluation of the Incident Management strategies within the construction zone.

10. *DOT SSP* shall submit a quarterly progress report / invoice for costs incurred by the abovementioned resources to the *Project Manager, Name*, in order to request payment by *DOT*.

11. *DOT SSP* and *DOT* expressly acknowledge that entering into this OA is not a commitment, either stated or implied, to a continuation of the terms and conditions of this OA beyond the Period of Reconstruction.

12. Either *DOT SSP* or *DOT* may TERMINATE this OA at any time by providing in writing Notification to the other of the intention to TERMINATE. Sixty days after receipt of NOTIFICATION of INTENTION to TERMINATE, both *DOT SSP* and *DOT* are freed from all further duties and obligations as might appear in this OA.

State Department of Transportation	*State Department of Transportation* *Safety Service Patrol*
By:_____ *Name*, *Project* Project Manager	By: _____ *Name, Position*

STATE POLICE CONTRACT FOR EXTRAORDINARY LAW ENFORCEMENT SERVICES

Parties 1 *State Highway Division* ("*Requesting Party*")

2 *State Police* ("*Department*")

The parties agree that the *Requesting Party* shall pay the *Department* to provide extraordinary law enforcement services pursuant to the terms of this contract as set forth below.

1. Description of Service: Law Enforcement/Incident Response

2. Date(s) of Service: Beginning: *Date* and Ending: *Date*
   on each day at times from: 24/7 to:

   The location(s) the services are to be performed: *Highway between Road 1 and Road 2*

3. The anticipated cost of the extraordinary law enforcement service are (check all that applies):

   Overtime Cost not to exceed: *$X* per hour

   Indirect Cost Recovery Rate: *X%* of Overtime costs

   Use of Agency Vehicle: *$X* per hour

4. The Department shall submit its bill to:

   Name: *Name*
   Position: *Position*
   Telephone: *Telephone Number*
   Address: *Address*

5. Upon billing by the *Department*, the *Requesting Party* shall promptly pay the cost of the services described herein. “Promptly pay” as used herein shall mean thirty (30) days from the date of billing.

6. For purposes of this Contract and the execution of its terms, the parties agree that the employees of each, for purposes of liability, shall remain the employee of the respective party. It is not the intention of either party to either limit or expand any of the immunities and defenses currently applicable to law enforcement officers or employees of their respective employers.

7. Either party may terminate this Contract for any reason by giving the other party prompt notice of the intention to do so. This notification provision shall not prohibit the *Department* from immediately terminating this Contract or reassigning law enforcement personnel assigned to this contract to other duties as emergencies may require.

8. This Contract shall be construed, governed, and enforced in accordance with the laws of the *State*.

9. This Contract has no exhibits, contains all the agreements, conditions and understandings made between the parties, and supersedes all prior written and oral agreement between them with respect to the matter discussed herein.

10. Each individual executing this Contract on behalf of a party represents and warrants that such individual is duly authorized to execute and deliver this Contract on behalf of the party the individual purports to represent and that this Contract is enforceable against either entity in accordance with its terms.

For the Requesting Party

By:_____

Printed Name:_____

Position:_____

Witness:

_____

Printed Name:

For the Department of *State Police*

By:_____

Printed Name: _____

Position:_____

Witness:

_____

Printed Name:

This is to certify that this Contract was prepared by or under the supervision of the undersigned *State* attorney. *Name*, Assistant Attorney General

Approved as to form and legal sufficiency: *Name*

Assistant Attorney General, *State*,
Department of State Police

Date

MEMORANDUM

TO: All District Engineers
All Assistant District Engineers - Maintenance
All Assistant District Engineers - Traffic
All Resident Maintenance Engineers
Name – SP Highway Division Liaison Officer
Name – ITS Program Manager

FROM: *Name*
Deputy Chief Engineer - Maintenance

SUBJECT: Emergency Lane Closures Due to Truck Accident

This is to remind you that a policy statement was issued in *Month* of this year in order to provide direction for resolving slow or inadequate responses from private towing contractors when needed for removing trucks involved in accidents and causing lane closures on our primary highways.

In his *Month* memorandum, *Name (Administrator)* has directed that "in each and every instance where a lane closure occurs as the result of an overturned tractor trailer or a spilled load along state highways which will result in major traffic delays, a front-end loader and a dump truck with sand (along with an *Highway Division* tow vehicle in *Districts a, b, c)* under the direct control of *Highway Division* will be dispatched to the scene."

A copy of the policy is attached for your convenience, for your review, and so you can bring this matter to the attention of your respective staff.

Please contact me if you have any questions regarding this policy.

Deputy Chief Engineer

Attachment
cc:

STATE POLICE
CONTRACT FOR EXTRAORDINARY LAW ENFORCEMENT SERVICES

Parties 1 *State Department of Transportation* ("Requesting Party")
2 *State Police* ("Department")

The parties agree that the Requesting Party shall pay the Department to provide extraordinary law enforcement services pursuant to the terms of this contract as set forth below.

1. Description of Service: Law Enforcement/Incident Response

2. Date(s) of Service: Beginning: *Date* and Ending: *Date*
on each day at times from: 24/7 to:

3. The location(s) the services are to be performed: *Road 1* between *Road 2* & *Bridge*

4. The anticipated cost of the extraordinary law enforcement service are (check all that applies):
   _____ Overtime Cost not to exceed: ***$X*** Per hour
   _____ Indirect Cost Recovery Rate: ***X%*** of Overtime costs
   _____ Use of Agency Vehicle: ***$X*** per hour

5. The Department shall submit its bill to: Name: *Name*
Position: *Position* Telephone: *Phone*
Address: *Address*

6. Upon billing by the Department, the Requesting Party shall promptly pay the cost of the services described herein. "Promptly pay" as used herein shall mean thirty (30) days from the date of billing.

7. For purposes of this Contract and the execution of its terms, the parties agree that the employees of each, for purposes of liability, shall remain the employee of the respective party. It is not the intention of either party to either limit or expand any of the immunities and defenses currently applicable to law enforcement officers or employees of their respective employers.

8. Either party may terminate this Contract for any reason by giving the other party prompt notice of the intention to do so. This notification provision shall not prohibit the Department from immediately terminating this Contract or reassigning law enforcement personnel assigned to this contract to other duties as emergencies may require.

9. This Contract shall be construed, governed and enforced in accordance with the laws of the *State*.

10. This Contract has no exhibits, contains all the agreements, conditions and understandings made between the parties and supersedes all prior written and oral agreement between them with respect to the matter discussed herein.

11. Each individual executing this Contract on behalf of a party represents and warrants that such individual is duly authorized to execute and deliver this Contract on behalf of the party the individual purports to represent and that this Contract is enforceable against either entity in accordance with its terms.

For the Requesting Party

By: _____
Printed Name: _____
Position: _____

Witness: _____
Printed Name: _____

For the Department of State Police

By: _____
Printed Name: _____
Position: _____

Witness: _____
Printed Name:

This is to certify that this Contract was prepared by or under the supervision of the undersigned Maryland attorney.

Signature *Name*, *Position*

Approved as to form and legal sufficiency: *Signature*
Name,
Position, *State Police*

State DOT & State Police Vehicle Removal Agreement #1

INTERAGENCY AGREEMENT
Department of Transportation & State Police
REMOVAL OF VEHICLES FROM ROADWAY

This agreement made this _____day of _____, ____, by and between the *State Department of Transportation* (*DOT*) and the *State Police* (*SP*) is to provide guidance for *State Police*, and *State Highway* personnel in removing vehicles from roadways in certain situations to maintain a safe and orderly flow of traffic.

WITNESSETH: Whereas, the *DOT* is proposing to remove certain vehicles from the roadway on an urgent basis following collisions or where vehicles are abandoned and are causing a hazardous situation to exits.

I. General:

Whenever a road or lane is closed or partially blocked by an accident and traffic delays or safety problems may occur the *Resident Maintenance Engineer or his Representative* in cooperation with the *SP Officers* in charge should reopen the roadway as soon as possible ON AN URGENT BASIS. This recognizes that the public safety is the highest priority and must be secured, especially if injuries or hazardous materials are involved. It is understood that damage to vehicles or cargo may occur as a result of clearing the road on an urgent basis. While reasonable attempts to avoid such damage should be taken, the highest priority is public safety.

II. Procedure/Requirements - *DOT*

A. General

The *Resident Maintenance Engineer or his Representative* is to assign the necessary equipment and manpower to reopen the road or lane as soon as possible.

If materials being transported are involved, the *DOT* will make every effort to relocate the materials in the shortest possible time, using whatever equipment is necessary. All such materials will be relocated as short a distance as possible, but not be placed so as to present a traffic hazard.

The *Resident Maintenance Engineer or his Representative* is to prepare a list of the personnel and equipment used and the work hours involved so that the owner of the vehicle and/or cargo can be billed for the work. Appropriate warning devices (barricades, signs, arrow-boards, etc.) are to be placed on the scene should either damaged vehicles(s) or cargo remains adjacent to a lane or the shoulder.

B. Hazardous/Flammable/Exploding, Material

No attempt is to be made by the *DOT Personnel* to move any hazardous or flammable or explosive material for any reason. If *DOT* is first on the scene and cargo content is not readily identifiable, the *Resident Maintenance Engineer or his Representative* will contact the proper authorities to ascertain if special measures should be taken.

As soon as the public safety has been secured, then reopening of the roadway is to proceed as described under "GENERAL" in this agreement.

III. *SP* Duties and Responsibilities

Members of the *State Police* who are the on-scene motor vehicle collision investigators will work in cooperation with other Emergency Service Personnel and members of the *State DOT* who are at the scene.

Members of the *State Police* will conduct their required investigation as expeditiously as possible, considering the severity of the collision and the quality of their investigation. Lengthy investigations will require investigators to work diligently in an attempt to minimize traffic delays. This may mean that certain "non-critical" portions of an investigation be conducted at a later time when traffic congestion is non-existent (i.e., non-peak periods).

It should be understood that as fire and rescue services personnel complete their required tasks of extrication, administration of medical assistance, and removal of the injured, the State Police Office in Charge may choose to release them unless a HAZMAT situation exists.

This will also hold true for allied police personnel, additional troopers, and members of the *State DOT* as each complete their required functions and it is determined that their services are no longer needed. It should be understood that as fire and rescue services personnel complete their required tasks of extrication, administration of medical assistance, and removal of the injured, they be released from the scene unless a hazmat situation exists. This will be true also of *state or county police personnel* and members of the *State DOT* as each complete their required functions to return the roadway to normal as soon as possible.

Members of the *State Police* shall not unnecessarily cause a delay in the reopening of a roadway in allowing a company to dispatch (an) additional truck(s) for immediate off-loading where this action will result in additional back ups or hazardous circumstance during peak traffic periods.

IV, Liability Issues

State DOT's policy for the immediate removal of certain vehicles from roadways on and URGENT BASIS, utilizing available resources, recognizes that public safety is of the highest priority. Furthermore SHA realizes that damage to vehicles or cargo contained therein may occur as the result of their clearing the roadway, and *DOT* assumes liability under these circumstances for said damaged, should that become an issue. *DOT's* liability under these circumstances would be no greater than they might expect from negligence etc. on the part of snow equipment operations. As

outlined in the “Limits of Liability” portion of the *State Tort Claims Act*, *DOT* is only responsible for the first *$X* in damages resulting from clearing the roadway unless there was clear evidence on the *DOT’s* part, that negligence was used in said operation.

In Witness Whereof, each party hereto has caused this agreement to Be executed in its name and on its behalf by its duly authorized officer or agent as of this day and year first above written.

Original signed by

_____

Name
Secretary
Public Safety and Correctional Services

Original signed by

_____

Name
Secretary
State Department of Transportation

Original signed by

_____

Name
Superintendent
State Police

Original signed by

_____

Name
Administrator
State Department of Transportation

INTERAGENCY MEMORANDUM OF UNDERSTANDING

STATE DEPARTMENT OF TRANSPORTATION

STATE POLICE

REMOVAL OF VEHICLES AND CARGO FROM ROADWAYS

This memorandum of understanding made this _____ day of _____, *Year* by and between the *State Department of Transportation (DOT)* and the *State Police (SP*) is to provide guidance for *SP* and *DOT* personnel in removing vehicles from roadways in certain high traffic volume and/or delay situations to maintain a safe and orderly flow of traffic.

PURPOSE; The *DOT* and *SP* find it necessary to remove certain vehicles from the roadway on an urgent basis following collisions or spilled loads or where vehicles have been abandoned and are causing a hazardous situation or extraordinary traffic delay to exist.

I. General:

Whenever a road or lane is closed or partially blocked by an accident and/or spilled load and traffic delays or safety problems may occur, the *DOT*, in cooperation with the *SP* shall reopen the roadway as soon as possible ON AN URGENT BASIS. This recognizes that public safety is the highest priority and must be secured, especially if life threatening injuries or hazardous materials are involved. It is understood that damage to vehicles and/or cargo may occur as a result of clearing the road on an urgent basis. While reasonable attempts to avoid such damage will be taken, the highest priority is public safety.

II. Procedure/Requirements – *DOT*

A. The *DOT* will have a supervisor on the scene prior to any actions being taken by *DOT* personnel. The *DOT* supervisor will assign the necessary materials, traffic control devices, equipment and personnel to reopen the road, or lane, as soon as possible.

If vehicle loads are involved, the *DOT* will make every effort to relocate these loads in the shortest possible time, using whatever equipment is necessary. All such materials will be relocated as close as possible, without being placed so as to create a traffic hazard.

The *DOT* supervisor shall prepare a list of the personnel, materials, traffic control devices, and equipment used and the work hours involved so that the responsible party, or the owner of the vehicle or load may be charged for the work. Appropriate warning devices (barricades, signs, arrow-boards, etc.) are to be placed on the scene in the event that damaged vehicles and/or cargo remain in a lane or adjacent to a lane or shoulder.

B. Hazardous/Flammable/Exploding Materials

No attempt is to be made by the *DOT* to move any hazardous, flammable, or explosive materials for any reason.

C. No vehicles or cargo will be moved by *DOT* personnel or equipment until so directed by the *SP*, or other law enforcement agency on the scene and responsible for the investigation of the incident.

D. As soon as public safety has been secured, the reopening of the roadway is to proceed as described under "GENERAL" in this agreement.

III. Duties and Responsibilities - *SP*

Members of the *SP* who are the on-scene accident/incident investigators will "work in cooperation with other emergency and public safety and *DOT* personnel who are on the scene.

Members of the *SP* will conduct their required investigation in as expeditious a manner as possible, considering the severity of the collision and injuries, as well as the need to maintain a high quality investigation. Lengthy investigations will require Troopers to work diligently in an attempt to minimize traffic delays. This may require that certain "non-critical portions of the investigation be conducted at a later time, when traffic volume has diminished.

As fire and rescue personnel complete their tasks of extrication, administering to the injured and hazardous material recovery/suppression, the *SP* Trooper in-charge may choose to release them from the scene. This will also apply to allied police personnel, additional troopers and *DOT* personnel as their tasks are completed and their presence is no longer required. Returning the roadway to normal volume, safely, is the top priority, after the injured have been cared for and no hazardous material or threat or fire exists that would pose a hazard to traffic.

IV. Public Safety Priority

The *DOT* and the *SP* determine and agree that public safety is the highest priority when preparing to reopen traffic lanes blocked by motor vehicle accidents. Further, the policy of utilizing available resources for the removal of vehicles involved in accidents that interfere with the flow of traffic and create a safety hazard, should be immediately placed in effect and the vehicles removed from the roadways on an URGENT BASJS.

(Signature area below here)

OPERATIONAL AGREEMENT

BETWEEN

STATE DOT TMC

AND

STATE DOT

PROJECT
Project Name

BACKGROUND
The *State DOT*, in cooperation with the *State 2 DOT*, the *State 3 DOT* and the FHWA is undertaking a major project to re-construct the *Road 1* and the *Road 2*, *Road 3*, *Road 4* and *Road 5* Interchanges with the *Road 6*, known as the *Project*.

It is anticipated that the Period of Reconstruction impacting traffic in *State* will begin on or around *Date* and be completed by or about *Date*. It is anticipated that due to the high volume of interstate traffic, the historically high number of incidents occurring in this area, and extensive roadway and bridge construction, that additional resources will be required to facilitate incident management during the Period of Reconstruction as set forth in the *Date Project* Incident Management Plan. The *Project* Incident Management Plan was subsequently adopted and approved by the *Project* ITS / CMS Steering Committee on *Date*.

PURPOSE
This Operational Agreement (OA) is to establish an agreement between the *State DOT TMC* and *State DOT* concerning the level of support and funding for resources to facilitate incident management activities and abate traffic impacts on the *Project* during the Period of Reconstruction.

According to the terms set forth in this OA, *State DOT* will provide funding to the *State DOT TMC* for vehicles, staffing, operations, and cellular telephones to augment *State DOT TMC* incident management responsibilities within the Coverage Area, as defined in this OA, and in accordance with the Terms and Conditions set forth in this OA.

TERMS and CONDITIONS
During the Period of Reconstruction within the Coverage Area:

1. *State DOT* shall provide *State DOT TMC* with funding for two *State DOT* Emergency Traffic Patrol (ETP) units to be dedicated to the Coverage Area for 16-hours a day, 7-days a week, and one unit 8-hours a day, 7-days a week during the overnight period.

2. The Coverage Area is defined as *Road 6* between the *State 2* line and the *Road 7* interchange, *Road 3* to the first exit, the *Road 3* and *Road 4* interchanges, and the *Road 4* approach to *Road 6*.

3. *State DOT TMC* vehicles can assist in incident management activities when accessing *Road 6* while in *State 2*.

4. *State DOT TMC* will provide and/or coordinate staff, vehicle maintenance, materials and resources (e.g. fuel, cones, etc.) to properly operate and deploy the ETP vehicles.

5. *State DOT* shall purchase two new *State DOT* ETP vehicles via *Project State DOT Contract #s*. The vehicles will be replaced with new vehicles after *X* years of use under a contract to be agreed upon.

6. Funding for new ETP vehicles, replacement of the vehicles, and staffing is capped at *$X* for the Period of Reconstruction.

7. *State DOT* shall provide *State DOT TMC* with funding for *X* cellular phones for use by *State DOT* ETP personnel patrolling the Coverage Area. In providing said cellular phones to the *State DOT TMC*, *State DOT* agrees to cover the expense of said phones for the Period of Reconstruction. Expenses for said cellular phones will be capped at *$X* for the Period of Reconstruction.

8. *State DOT TMC* shall provide any available data requested by *State DOT*, or their *Consultant*, that will allow for evaluation of Incident Management strategies within the construction zone.

9. *State DOT TMC* and *State DOT* shall attain an agreement for transferring of funds and invoicing / progress report procedures. The agreement is to be made before the transferals occur.

10. *State DOT TMC* and *State DOT* expressly acknowledge that entering into this OA is not a commitment, either stated or implied, to a continuation of the terms and conditions of this OA beyond the Period of Reconstruction.

11. Either *State DOT TMC* or *State DOT* may TERMINATE this OA at any time by providing in writing Notification to the other of the intention to TERMINATE. Sixty days after receipt of NOTIFICATION of INTENTION to TERMINATE, both *State DOT TMC* and *State DOT* are freed from all further duties and obligations as might appear in this OA.

OA EXECUTION

IN WITNESS WHEREOF, the *State Department of Transportation* and the *State Department of Transportation* have caused this Operational Agreement to be executed by their respective officials, thereunto duly authorized.

State Department of Transportation

By:_____
Name,
Project Project Manager

State Department of Transportation TMC

By:_____
Name,
TMC Manager

STATE

DEPARTMENT OF
PUBLIC SAFETY AND CORRECTIONAL SERVICES

STATE POLICY DEPARTMENT
ADDRESS
PHONE

Date

SPECIAL ORDER NO. *Number*

TO: Office of the Superintendent, Superintendent's Staff Units, Bureau Chiefs, Troop, Division, Installation and Unit Commanders and Unit Commanders and Directors.

SUBJECT: *State Police* Participation in Emergency Event Management

The purpose of this order is to delineate agency responsibility and operational procedures during the management of major emergency situations such as severe weather events, natural disasters, major freeway incidents and other occurrences that require the extraordinary utilization or state resources and interagency cooperation.

EMERGENCY OPERATIONS CENTER

During a major emergency event, a member of the *Operations Division Staff* will be detailed to the *Emergency Operations Center* of the *State Emergency Management Agency* in *City*. It is his/her responsibility to provide liaison between *SP* and other participating agencies, and to participate in the decision-making process in an effort to relieve the effects of the emergency condition.

During the winter months, the *Operations Division* will maintain a roster of staff personnel to be assigned to the *Emergency Operations Center* (*EOC*) and will provide a copy to the *Telecommunications Division*. At other times, the bureau chief will assign staff personnel to the *EOC* as required.

As applicable to the circumstances of an emergency event, it is important that all installations affected by the emergency provide hourly reports or updates, via *Program* messages, to the *Telecommunications Division* and *EOC*.

The *Operations Division* staff representative will provide information that emanated from other state agencies during the course of the emergency to the *SP* duty officer, the *Telecommunications Division*, and other appropriate agency personnel.

SPECIAL ORDER NO. *Number*

At the conclusion of the *EOC* activity, the *Operations Division* staff member last assigned to the center will collate all logs, reports, messages, and other operations records and will forward them for filing and retention to *Operations Division*.

UTILIZATION OF SUPPORT PERSONNEL

When it becomes necessary to augment the field patrol force in support of emergency operations, personnel from other divisions and units may be called upon for assistance. Generally, entities such as the *Commercial Vehicle Enforcement Division* and the *Automotive Safety Enforcement Division* will suspend normal operations and provide personnel for deployment, as directed by the chief of the *Operations Division*. Troop commanders will provide information on manpower requirements directly to the Chief of *the Operations Division*. Approval for the utilization of personnel from bureaus other than *Operations Division* will be sought from the respective division chief. Unless absolutely necessary, support personnel will not be assigned to conduct investigations that would extend beyond the conclusion of the emergency deployment.

The *State Department of Natural Resources (DNR) Police Department* will provide police officers equipped with four wheel drive vehicles (and *SP Radios*) at the request of local commanders. *DNR* personnel should be utilized only when four wheel drive vehicles are required as the only means of mobility, and when existing agency resources have been exhausted. They will not be used to augment manpower except in cases of extreme emergency. Commanders requiring *DNR* assistance may contact the *DNR Central Communications Center* at *Phone*.

EMERGENCY REMOVAL OF VEHICLES DURING WINTER STORMS

To assist in the removal of abandoned and disabled vehicles from the roadway during major winter storms, the *State Department of Transportation (DOT)* has contracted with towing agents throughout the state. During periods of severe weather, these towing services have been directed to report directly to local *DOT* offices, from which they will be dispatched to remove vehicles from the traveled portion of the highways to the shoulders or medians.

DOT-sanctioned removal of vehicles will take place only after local or state police have been unable to cause timely removal, and only after authorization has been provided by the law enforcement agency involved. After these conditions have been met, the contracted tow services will remove vehicles from the roadway only when an on-scene *DOT* representative authorizes the removal. The on-scene *DOT* representative will document the following information:

-Date, time, location and lane blocked
-Vehicle make and registration plate
-Visible damage before and after removal
-Approximate distance moved.

Department of Transportation personnel will utilize a yellow/green tag (similar to this agency's disabled vehicle tag) to be affixed to any vehicle moved by *DOT*. Towing services utilized under these circumstances will be paid for by *DOT*, and not the motorist. After the vehicle is moved from the roadway, it will be subject to impoundment and removal in accordance with existing procedures. Installation commanders shall contact the appropriate *DOT* District Engineer to use this removal service.

STATE TRAFFIC MANAGEMENT CENTER (TMC)

The *State* has undertaken a long-term Traffic Systems Management Initiative, which will employ the use of current *SP/DOT* manpower resources and technology. *DOT* will employ *Safety Service Patrols* during morning and evening peak traffic hours to assist disabled motorists and report incidents.

Additionally, *DOT/SP* will man *TMCs* throughout the state, which will assist in the management of resources and will regulate the use of *devices*. These devices supply motorists with "real time" traffic information.

This project will look into the future use of more technically advanced methods of detecting freeway incidents through the use of video cameras and loop detectors, which will give constant updates on traffic volumes along a particular corridor.

An important aspect of the *TMC* program from this department's standpoint is the detection of, and response to, incidents which cause lengthy delays on the Interstate system. A major consideration of this response area involves *Traffic Management Plans (TM)*.

TRAFFIC MANAGEMENT (TM)

The *State's* urban interstate highways often experience traffic gridlock conditions due to the increasing number of motorists utilizing these systems, and unpredictable road-closing events. Such events cause major traffic problems, which results in roadway closures for extended periods of time, stranding motorists who are unable to reach exit ramps.

Through guidelines established with the creation of the *TMC* program, *DOT* will respond to major road closures and will assist the responsible police agency with traffic direction and route diversion. *DOT* employees are an invaluable asset and can provide arrow boards, signs, traffic cones, and sufficient manpower to help manage freeway incidents.

The *Department of Transportation* has implemented a policy to assist with the clearance of disabled or damaged vehicles. In the interest of public safety, if there is an urgent need to remove a vehicle from the roadway that has been involved in a collision or other incident, *DOT* will respond with adequate equipment to accomplish the removal. The removal must be authorized by the police officer in charge of the incident scene and must be beyond the immediate resources of local towing services.

It is fully recognized by the *Department of Transportation* that damage may occur to the vehicles being removed by *DOT* equipment. While reasonable attempts to avoid such damage will be made, the highest priority is the resumption of traffic flow to reduce threats to public safety. *DOT* has accepted responsibility for liability should damage to the vehicle or cargo occur during removal. An interagency agreement regarding *SP* and *DOT* responsibilities for removal of vehicles from the roadway is currently on file with this agency (see attachment). The aforementioned removal policies are effective immediately and apply to all Interstate routes, U.S. routes, and major state routes.

The *DOT Removal Policy* has the concurrence of the *Secretaries of Public Safety* and the *Department of Transportation*; the S*uperintendent of the State Police*; and the *Administrator*

of the State Highway Division. Members of the agency will cooperate to the fullest extent with representatives of *DOT* in this joint effort.

There are two types of traffic congestion that cause delays to motorists:

Recurring and Nonrecurring.

Recurring traffic congestion is what motorists experience each day as they travel to and from work. This accounts for approximately 36% of traffic delays. The most significant type of traffic congestion is known as nonrecurring traffic congestion, caused by unusual traffic incidents, collisions, etc. Since nonrecurring congestion accounts from 64% of all traffic delays, it is imperative that the *State Police*, the *State Department of Transportation* and other allied agencies concentrate *Traffic Management* efforts.

Nonrecurring incidents occur randomly and are usually caused by accidents, spilled loads, disabled vehicles, hazardous material discharges, and other unpredictable events. Superintendent's Memorandum #*Number* established formalized coordination procedures for the *State Police*, the *State Department of Transportation* and other government agencies to manage traffic during such incidents. The overall objective is to minimize traffic delays and their associated adverse effects on highway safety.

The *State Department of Transportation*, in association with the *State Police*, has developed *Traffic Management* (*TM*) plans to address traffic congestion caused by non recurring incidents. *TM* Plans are comprehensive and include provisions for detours, special signing, emergency telephone numbers, and overall procedures for the management of traffic incidents.

Under current *TM* guidelines, in the event of a major traffic incident resulting in closure of any interstate highway, the installation commander or acting commander will immediately respond to a designated command center to assume management of the incident. The installation commander has the authority to request additional manpower and equipment from any source within the agency to assist with traffic problems. The installation commander or his designee may request such assistance by directly contacting the required agency during normal business hours or by contacting the *Telecommunications Division* duty officer after hours, as appropriate.

In the event of a major road closure, the installation with responsibility for managing the incident will immediately notify the *Department of Transportation Communications Section* at *Phone* or will route such notification through the appropriate *DOT Traffic Management Center* (*TMC*) for the area involved.

COORDINATION WITH *TRAFFIC MANAGEMENT CENTERS* (*TMC*)

State Police duty officers and police communications officers who work in those barracks containing a *Traffic Management Center* will interact in a positive manner with employees of the *Department of Transportation*.

During daily *TMC* training exercises and actual traffic incidents, it is imperative that duty officers make direct personal contact with the *TMC* operator to assure that certain required tasks have been undertaken. One of the most critical tasks is to provide motorists with "real time" traffic information through the use of *field devices*.

Following confirmation that proper messages have been initiated, the barrack duty officer will record that fact on the daily barrack log.

For those installations that do not contain, but are served by a *Traffic Management Center*, it will be the duty officer's responsibility to coordinate requests for *DOT* services by telephone. *DOT* will then dispatch a *SSP Vehicles* to the scene of the incident.

The duty officer will record the notification to the *TMC* on the barrack log, as well as the details of any requested assistance. Duty officers will be held strictly accountable for the proper notification of all interaction with the appropriate *Traffic Management Center*.

This order supersedes Special Order *Number* (Amended) and any other orders in conflict therewith.

Name
DOT Superintendent

INTERAGENCY MEMORANDUM OF UNDERSTANDING

STATE POLICE 1

STATE POLICE 2

STATE POLICE 3

STATE DOT 1

STATE DOT 2

STATE DOT 3

RESPONSE TO A POSSIBLE BRIDGE JUMPER

This memorandum of understanding made this _____ day of _____, *Year* by and between the *State Police 1, State Police 2*, *State Police 3*, *State DOT 1, State DOT 2 and State DOT 3* is to provide guidance for personnel responding to individuals causing a dangerous situation for him/herself and/or potentially the nearby motoring public by attempting to jump off a bridge.

PURPOSE;

To provide for coordinated transportation and emergency response during a bridge jumper incident on the *Bridge Name*.

SCOPE;

The *Bridge Name* is a Federally owned structure which crosses three (3) jurisdictions; *State 1*, *State 2*, and *State 3*. Legal considerations arising out of an emergency response dictates that all of the jurisdictions participate in dealing with incidents on the *Bridge Name*. This includes response to individuals causing a dangerous situation for him/herself and/or potentially the nearby motoring public by attempting to jump off of the bridge. This document provides guidance for State Police and State DOT agencies when dealing with a bridge jumper.

CHAIN-OF-COMMAND;

Final command authority at an emergency incident on the Bridge Name shall rest with, the jurisdiction in which the incident has occurred. Joint command shall be implemented whenever an emergency scene is so spread out that it is located in more than one (1) jurisdiction. There will be instances in which emergency response personnel from one (1) jurisdiction will arrive before the personnel from the affected

jurisdiction. In such instances the first arriving jurisdiction shall have its senior officer assume command until relieved by the officer of the affected jurisdiction. The exact procedures of command and transfer of command shall be reviewed at least annually to allow for possible changes in the emergency environment which affects the procedures.

RESPONSE;

In the event of a bridge jumper on the Bridge Name, any jurisdiction responding to the incident shall communicate to the other two (2) jurisdictions by radio or telephone. The individual jurisdiction's response will be governed by the type of threat the bridge jumper poses on the *Bridge Name*. From the date of this agreement until formally altered, the response assignments shall be as follows:

Bridge Jumper Does Not Pose an Immediate Threat to Responders and / or the Traveling Public

A. State Police – If the individual attempting to jump off of the bridge is unarmed, police will distract and then tackle the bridge jumper. Negotiations with the bridge jumper will not take place if there is no firearm present. Police will attempt to keep the bridge open during this type of scenario. State Police should minimize the closure of travel lanes on the bridge.

B. State DOT's – If the bridge jumper does not pose an immediate threat to responders and / or the traveling public, State DOT's the bridge will not be closed to traffic. Traffic management duties should occur as normal.

Bridge Jumper Poses an Immediate Threat to Responders and /or the Traveling Public (i.e., Possesses a Firearm or has taken a Hostage)

A. State Police – Depending on the event, State Police may elect to do the following:

- Bring in a negotiator to talk the jumper off the bridge,
- Bring in a marine vessel equipped with safety nets that can be positioned to catch the jumper and/or hostage if they fall off the bridge, and/or
- Fire upon the jumper by the State Police if the individual poses an immediate threat to responders or the traveling public.

B. State DOT's – In the event that a bridge jumper poses an immediate threat on the bridge, DOT's will close the bridge to all traveling public. FITM routes will be implemented by the DOT's affected by the incident.

As every incident is unique, especially in the case of potential bridge jumpers, these actions are the recommended, but not only response options. Other types of responses may be necessary, depending on the unique occurrences within each incident. As such responders may need to respond accordingly.

COMMAND PROCEDURES;

Emergency command in the event of a bridge jumper shall rest with the first arriving police officer until relieved by a higher ranking officer according to procedures in force with each jurisdiction. If the first arriving officer finds that the incident is not within his jurisdiction, he/she will be prepared to turn command over to the first arriving officer of the affected jurisdiction.

STATE 1 DEPARTMENT OF TRANSPORTATION

By: _____

Name,

Commissioner

STATE 1 POLICE AGENCY

By: _____

Name,

Commissioner

STATE 2 DEPARTMENT OF TRANSPORTATION

By: _____

Name,

Commissioner

STATE 2 POLICE AGENCY

By: _____

Name,

Commissioner

STATE 3 DEPARTMENT OF TRANSPORTATION

By: _____

Name,

Commissioner

STATE 3 POLICE AGENCY

By: _____

Name,

Commissioner