

- o Second, effective scene management, handled by one designated scene manager, will eliminate confusion and safeguard the public and the responding emergency personnel;
- o Third, a comprehensive plan should also include a traffic coordination element involving the evaluation of road conditions and traffic control measures to be taken;
- o Fourth, multi-agency communication and coordination establishing the responsibilities, authority, and equipment capabilities of each agency will enhance coordination of activities at the scene;
- o Finally, statewide, multi-agency training in emergency incident response will bring all of these elements together to provide smooth scene management.

In a final analysis, not one of these elements can stand alone to ensure effective emergency incident response. However, all of the elements combined can lead to the successful conclusion of emergency incident responses.

STARTING INCIDENT MANAGEMENT ON LONG ISLAND

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How does a transportation agency begin to address the issue of incident management on roads that have many agencies responsible for different aspects of traffic operations on that road? I will describe what we have done on Long Island and share our experience in what has been a successful effort to improve incident management in a multi-jurisdictional area.

On Long Island, one of the most densely populated areas in the country that is highly dependent upon personal vehicles for work and pleasure, public concern and awareness of traffic congestion has grown in the last ten years as Long Island's economy has boomed and expanded. During this same period road capacity improvements have all but ceased due to funding limitations and a serious concern for the fragile environment of Long Island. Presently, 55 percent of Long Island's roads are capacity deficient and any disruption to traffic flow causes widespread congestion.

Incident response and incident management on Long Island, even with these circumstances present, is difficult to organize primarily because of the multi-jurisdictional responsibilities for traffic and roads that is typical of densely populated suburban areas. On our most heavily travelled road, the Long Island Expressway, with an average annual daily traffic approaching 160,000, there are two County Highway Patrols responsible for law enforcement (Nassau and Suffolk Counties), the State Department of Transportation responsible for roadway maintenance and traffic operations, the State Department of Environmental Conservation responsible for the cleanup necessary resulting from accidents involving hazardous or toxic materials including spilled gasoline and diesel fuel, numerous volunteer fire and ambulance companies responsible for responding to accidents, private towing companies that respond on a rotational basis to accidents, as well as State Police and other elements of the County Police Forces that are called upon when necessary.

Each of these organizations has an important role in the response to incidents but none have seen it as "their job" or primary responsibility. Lack of a proprietary interest in managing incidents has led to informal and ad hoc management of and response to incidents. Typically, a highway police unit would come upon an accident and begin to divert traffic as well as call in the necessary assistance from ambulance service or tow trucks. If the accident involved a spill of a hazardous material, or if there were fuel spilled on the roadway in any substantial amount, they would contact the State Department of Environmental Conservation to clear up that spill in an environmentally approved manner. They may also contact State Department of Transportation's maintenance forces if there were materials or debris that had to be removed from the accident scene. During a particularly severe incident there may be need for assistance from a local fire department or another unit of the County Police or State Police. All this takes time and often occurs sequentially as those on the scene realize the resources necessary. The personnel from each of these groups responding to an incident have had extensive training in their specialty and have some familiarity with the other organizations on the scene. However, there has been reluctance for any one organization to assume overall responsibility for directing the cleanup operation or the traffic control. Given the growing public concern with traffic congestion and a rash of unfortunate incidents on the Long Island Expressway during the summer of 1985, the local media began to give a great amount of coverage to the traffic jams that resulted from these incidents.

An incident that took place in August 1985 that brought out the best and the worst of the ad hoc traffic incident management that was in-place on Long Island at that time occurred at approximately 3:25 a.m. when a tractor-trailer truck which was carrying a containerized load of beer went out of control, ran off the left shoulder of the Expressway causing the container to fall off the truck and crash into one of the supports of a sign structure spanning the westbound lanes of the Expressway in Nassau County. The Nassau County Highway Patrol responded immediately and within a matter of minutes was on the scene providing emergency first aid, traffic control and started the process of requesting assistance from other groups to clean up and remove the tractor-trailer and the containerized load of beer. So far, so good. The Police Department notified the State Department of Transportation's twenty-four hour radio dispatcher that a sign structure had been damaged. The radio dispatcher immediately called the appropriate highway maintenance foreman (who was home asleep) and informed him of the incident. The foreman requested the dispatcher to also call the sign crew maintenance supervisor (who was also home asleep) because it was a sign structure that has been damaged and would likely require specialized equipment and knowledge. It was then about 4 a.m.

The sign crew supervisor, following Department of Transportation procedures not to call out a full crew and equipment until he surveyed the situation, arrived at the scene about 4:40 a.m. and immediately realized that because of the size of the sign structure and the severity of the damage to the support, he would require additional resources to perform any repairs. At this time the Highway Patrol had a lane closed on the Expressway but the relatively light early morning traffic was still passing under the damaged sign.

The sign crew supervisor, seeking assistance, in-turn called his supervisor who was also home asleep but who arrived on the scene about 5:15 a.m. It was then determined that the overhead sign structure was damaged beyond repair and would have to be removed. The Department of Transportation personnel and the police on the scene discussed the situation and decided to wait until after the rush hour and then close the roadway and completely remove the sign

structure. Although the roadway was left open through the rush hour, there was significant rubber-necking delays and traffic was backed up for miles. At about 8:30 a.m., approximately four hours after the incident, and the beginning of the normal work day for the Department of Transportation personnel, a call was made to the Department's Engineer responsible for structures suggesting that perhaps he should take a look at the damaged structure and offer technical advice on its removal. He was told that traffic was travelling unimpeded under the sign and that there would be no attempt to remove it until later that morning. The Engineer arrived on the scene and after closely examining the damage to the overhead sign structure was very concerned with its structural stability and recommended total closing of the roadway to prevent a possible collapse of the sign. The Highway Patrol closed the road at the exit before the incident and diverted traffic onto a local road. The structure was totally disassembled and removed at about 5:00 p.m. and two lanes of the Expressway were opened for traffic. One lane was kept closed to allow for the continuing cleanup and removal of the cargo in the tractor-trailer. All lanes were finally opened about 6:30 p.m.

It was a long day for Long Islanders that normally use the Expressway. That particular August afternoon the temperature rose to 97 degrees and temperatures were higher. Beside the inconvenience of being shunted off the Expressway the resulting congestion caused a tremendous number of cars to overheat, exacerbating the delays and the congestion on the alternate routes. The next morning the local media had a field day. They were stating something quite clear and simple. First, these are serious occurrences that cause tremendous cost to the public and must be given high priority. Secondly, that someone must take the first step to assume responsibility for addressing the problem in an organized planned manner.

But who is responsible? Which agency is in charge? Does a highway maintenance supervisor tell a police officer what to do? Is a police officer expected to have the engineering knowledge to help him determine how to correct a damaged sign structure? Is there any way the incident should have been cleaned up sooner? Should there be concurrence from a local town or village before their roads are used as detours to an incident? How much of an inconvenience is it to the public? Are they getting the best service they can expect? The questions are practically endless.

That summer there had already been three or four other major incidents on the Long Island Expressway. The following week there were two more. All were seemingly related with one exception. Each one made the public angrier and the media louder. Something had to be done and soon.

The New York State Department of Transportation contacted the County Executives of both Nassau and Suffolk Counties and suggested that at the highest level of local government that the two counties and the State Department of Transportation sit down and begin to figure out a way to manage these incidents. The list of subjects and questions to be addressed at that first meeting was substantial. So it was simply decided that there were only two issues that need to be addressed immediately. The first was total agreement that this is a serious issue and that resolving the issue would receive priority and support at the highest level of State and local government. This simple statement and understanding gave the departments and bureaus of the Counties and the State the license to devote time and personnel to work on a solution. It served as a way to raise the consciousness of personnel that is absolutely necessary before any progress in these matters can be made.

It should be noted that to get the attention of the elected officials we presented a cost analysis that showed it cost the public two million dollars for the first hour of a Long Island Expressway complete closure and one million dollars for the subsequent hours due to lost time, fuel and automobile operating costs. They were already aware of the public relations and political costs.

The second issue to be addressed was who would be primarily responsible for incident management and in charge during incident response. The decision on this was that all parties are responsible and all parties simply have to work together. The multi-jurisdictional circumstances simply would not allow one agency to take the lead and direct other agencies of various levels of government. It was recognized that each governmental agency possessed expertise and knowledge that was unique. What was missing was the coordination of those resources in an open and mutually supportive manner. It was felt that coordination could be best achieved by heightened awareness of the importance of incident management within each agency, providing further incident management training within each agency, and establishing training to provide mutual understanding of each other's resources and limitations to respond to incidents. Within each agency direction was given to review existing response procedures to shorten time.

The two County Executives and the Department of Transportation formed a task force with representatives from the various police departments, traffic departments, maintenance divisions, emergency service representatives, as well as Environmental Conservation representatives, all with an interest in incident management. The goals of the task force were to develop better coordination among organizations, become familiar with each organization's resources and personnel, and over a period of time develop standard operating procedures that would ensure the groups work together well. In addition, each representative to the task force would bring back to his organization suggestions for additional training within his own organization that would augment and make more efficient their incident management capabilities. The task force is now a committee that meets on a monthly basis to review incidents that have happened and constantly modifies agency coordination.

It was also decided that these efforts would concentrate on the Long Island Expressway initially because of its traffic volumes and to simplify the task of coordination.

Surprisingly, much of what has come out of those meetings since 1985 have been great improvements to incident management on Long Island at little or no cost. For example, in the Department of Transportation we have directed that some maintenance crews start work at 4:30 a.m. and others work until 7:30 p.m. to be immediately available to assist the Highway Patrol in cleaning up after an incident. This has been accomplished primarily through shifting existing personnel and results in a direct savings of approximately one hour in response time because there are people standing by in the area and it is not necessary to call them out from their homes. Also, since the complete crew is available, all the necessary resources arrive at the scene as quickly as possible. These work hours were selected because they cover the beginnings and ends of the Long Island commuter rush hours.

It is interesting to observe that the added attention given to incident management was praised in the press and the media. Those agencies who a few short months ago were lackadaisical and unresponsive were now seen as paragons of public administration. Local elected officials appreciated the attention given to the incident management efforts and jumped on the bandwagon by

providing special budgetary allocations for some aspects of this effort - allowing the efforts to be further enhanced and more effective. The State Department of Transportation has received a budget allocation that will permit dedicated response crews to be formed, both local police agencies have received added funds for the purchase of additional traffic control equipment, and we are in the process of obtaining from the Federal Highway Administration special funds to prepare preplanned detours to be used when an incident occurs. All these budget enhancements come after the agencies that are involved took the initiative and reallocated existing resources first.

In summary, the experience on Long Island has shown that it is very important to establish the policy that incident management is a critical activity, and have that policy announced by the highest level of local and state governments; that in a multi-jurisdictional situation a coordinated incident management effort can work successfully; and that the efforts made to improve incident management are appreciated by the public and their elected representatives who, in turn, will provide additional funds for those efforts.