Innovative Applications of the National Incident Management System (NIMS)

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Case Study Submission

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City of Olathe, Kansas

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The City of Olathe is now ready for anything Mother Nature dishes out—thanks to its utilization of the National Incident Management System (NIMS). Local governments across the nation are required to adopt NIMS, which is a comprehensive approach to incident management. For many jurisdictions, that is where NIMS ends—a book on a shelf.

The City of Olathe decided to take that book off the shelf by utilizing NIMS in its daily operations. The City has realized efficiencies through better coordination, as a result of implementing NIMS in its non-emergency operations. By using NIMS on a consistent, non-emergency basis, the City is well-practiced and better prepared to use the model in a disaster situation, should such a situation arise.

One innovative area in which Olathe utilizes NIMS is through snow-removal—a common Midwestern challenge; the City has found that having a system in place to handle snow, means it is also prepared for the rest, and more. The level of preparedness achieved by the City of Olathe came, in part, from embracing this NIMS system—a system that other local governments can embrace for their own local needs, whether or not they have to worry about snow-removal.

NIMS, with its military-like incident command structure, systems and nomenclature puts all of the likely participants in a natural disaster—police, fire and public works—on the same page, time and place. But as with any good system, the use of NIMS gets better and more efficient only with regular practice.

During the past several years, Olathe's embrace of NIMS has spanned more than just the removal of snow—it has been employed in advance of a number of large community events, such as the nationally recognized Oz Marathon, a regional balloon festival, the Fourth of July fireworks display, and an annual countywide "Old Settlers" gathering. During several of these events, the use of NIMS protocols has allowed the City to coordinate across multiple jurisdictional boundaries, preparing it for future emergency events where multi-agency communications are essential.

But it is in the snow-removal process where the NIMS blade meets the road, so to speak, and has produced greatly improved efforts and results.

Two years ago, Olathe had what City leaders acknowledged as "spotty" efforts in removing snow. The lack of a coordinated effort had plow drivers who had finished their arterial routes being allowed to leave before residential drivers had finished their routes. This lack of a coordinated effort resulted in large numbers of complaints from residents about subdivision streets not being plowed in a timely fashion.

Prior to the most recent snow season, however, Olathe started getting prepared for the worst before the first flakes even began to fall. "This year, we put together a unified NIMS command structure involving police, fire and streets," said Susan Sherman, Assistant City Manager for the City of Olathe. "We managed the snow emergency as we would have a major natural disaster."

NIMS was part of an overhaul of the City's snow-removal procedure that followed a review designed to make sure best management practices were being utilized. Major program changes, in addition to NIMS, included the issuance of standard callout procedures, definitive declarations of city-wide snow emergencies and the use of GPS technologies to provide fast and responsive customer service.

The result has been a better-coordinated effort that has placed more vehicles on the road during daylight hours to take advantage of sunshine melting and a reduction in the use of road materials. Additionally, each of the City's snow-removal vehicles now features GPS tracking, which is linked to a website, enabling residents to see where vehicles are and where they have been, greatly increasing the level of customer service.

Utilization of NIMS in the City's snow-removal efforts has truly given the City a vital opportunity to practice the model, so that if a disaster strikes, staff will already be familiar with it. GPS capabilities have allowed residents to track the streets that have been plowed and pinpoint the location of City plows relative to their streets, homes and businesses. This ability to practice in advance of a disaster "has changed the way we think about snow removal," Sherman said.

Innovation Study Components

1. Innovation/Creativity

How did the idea/ program/ project/ service improve the organization?

The City realized that if a tornado struck down, or if some other uncontrolled event, such as a plane landing on a City street, were to occur, there would be an organization-wide effect. Olathe now has one system in place that can be utilized in a number of situations, including snow removal, tornados, ice storms and any type of incident at a large public gathering, such as the Fourth of July fireworks display.

The use of NIMs provides a clear and consistent protocol for internal informational purposes, while better tracking systems and more equipment on the street makes snow-removal more efficient and results in a better experience for Olathe residents. The NIMS system for snow-removal has been in place for one year in the City's Public Works Department; NIMS has been in use for other City efforts for several years.

The use of the ICS forms and the creation of an Incident Action Plan provided a framework for the incident from an emergency response standpoint; this allowed for a common system to be in place for several types of emergency operations. It has also created an opportunity for City staff members to familiarize themselves with ICS forms prior to required use on a large incident. It also enables the City to disperse information quickly through the City's various social media accounts, including Facebook, Twitter and YouTube.

Were new technologies used?

Incident Action Plan (IAP) forms are used for reports and information updates during snow events, and GPS units have been installed in all snow-removal units for tracking. Streets that have been completed can now be viewed online, enabling the City to monitor those that have been missed. Tracking information was added to the City's website, which also allows citizens to view unit locations.

While it took some time and training to become accustomed to the new system, paperwork, and terminology, the utilization of NIMS has allowed the City to overcome obstacles associated with coordination of certain events and operations.

Was a consultant used?

No

2. Outcomes Achieved

What customer/community needs and expectations were identified and fulfilled? Has service delivery been enhanced?

The use of these forms and the creation of an IAP provides a framework for the incident from an emergency response standpoint. As it relates to snow-removal, having the additional 17 snow-removal units available for use on the day shift was another benefit of using this model, by placing more units on the road for a faster response to neighborhood snow concerns. And, because more units are working while the sun is shining, the full benefit of natural melting is realized, while also using less road material. Enabling citizens to view the real-time location of individual units through the City's website has also contributed to increased customer service.

Aside from staff time, which would have been dedicated to NIMS training regardless of whether the City implemented this model for its snow removal, there were no costs associated with the NIMS implementation. The initial cost to add the GPS tracking system to snow-removal vehicles was $29,127. Collecting and having more data available resulted in savings for the City by more efficiently using snow-removal vehicles, road materials and manpower.

Did the initiative improve access to your government?

Yes, the City was able to convey its daily operations message to management, communications staff and snow staff in one consistent format.

Has the health of the community improved as a result?

Driver safety has been enhanced. Also, in the event of a medical emergency or a need for technical rescue at an event, the use of NIMS provides a structure of operations, insuring event information is documented and known to responders and supervisors.

3. Applicable Results and Real World Practicality

What practical applications will be shared?

The utilization of NIMS insures that throughout any emergency operation, all information will be in the same format. The City will share the actual forms used and mock scenarios of

emergencies within an event. Analytics from online usage of tracking data will also be shared, as citizen interaction increased after implementing the new snow-removal system. Prior to a snowstorm in January 2011, the City's Facebook page was averaging 685 daily post views. At the height of the three-day storm, that average increased to 18,005. Facebook "likes" increased 150 percent during the storm while Twitter followers increased 50 percent. The City maintained those followers after the storm, which was significant in terms of reaching a broader audience with our messages.

How applicable is the idea/program/project/service to other local governments?

This is highly applicable and transferable, considering local governments adopt NIMS structures for emergency situations. This presentation will show the local governments how NIMS can be successfully implemented in everyday situations (like snow-removal), so that when a large natural disaster may strike, the NIMS model will already be familiar throughout the organization.

What results/outcomes will you share?

The presentation will share how the process works in the organization and how the City has benefitted from its use. Applicable performance standards set by the City include: 100 percent of all bare pavement routes to be cleared within 24 hours of the end of a 2 inch to 4 inch snowstorm; 100 percent of all bare pavement routes to be cleared within 48 hours of the end of a 5 inch to 6 inch snowstorm.

4. Innovation Study Presentation

Describe your innovation study presentation.

The presentation will include a PowerPoint, handouts, and staff presentation.