



FEMA

LESSON LEARNED

Public Works: Training Additional Crew Members to Reduce Snow Plow Shift Lengths

SUMMARY

Departments of public works and transportation should consider training additional crew members in snow plow operations for prolonged snowfall events that require 24-hour plowing. This can reduce shift times and minimize worker fatigue while allowing snow plow crews to maintain continuous operations.

DESCRIPTION

From December 13 to 27, 2008, the Puget Sound region of western Washington experienced an extended period of winter weather. Seattle received 11.3 inches of snow during the period, 9.1 inches higher than the city's regular December snowfall amounts. Continuous accumulation of snow, coupled with freezing temperatures, turned compacted snow into ice. This resulted in road closures, treacherous driving conditions, limited Metro bus service, and school and business closures throughout the city. The Seattle Department of Transportation (DOT) coordinated response and recovery efforts with the Seattle emergency operations center as well as with police, utilities, and public health agencies. Overall, the storm cost Seattle an estimated \$3.4 million in damages and response and recovery efforts, including snow removal, power restoration, and the delivery of critical medications and healthcare services to stranded individuals.



Seattle Skyline during the 2008 Storms

Seattle DOT plowed and sanded over 1,530 road miles multiple times over the 2-week period. Seattle DOT crews worked 12-hour shifts to maintain 24-hour plowing operations. After 4 days of continuous plowing, several crew members struggled to maintain the 12-hour shift schedule. As a result, many crew members experienced significant fatigue. The *City of Seattle December 2008 Winter Storm After-Action Report and Corrective Action Plan* suggests that the Seattle DOT train more crew members in snow plow operations. This could enable officials to reduce the length of snow plow shifts, thereby minimizing worker fatigue while still maintaining 24-hour operations.

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plowing. This can reduce shift times and minimize worker fatigue while allowing snow plow crews to maintain continuous operations.

CITATION

Seattle Office of Emergency Management. *City of Seattle December 2008 Winter Storm After Action Report and Corrective Action Plan*. Feb 2009.

<https://www.llis.dhs.gov/docdetails/details.do?contentID=35495>

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