

FEBRUARY 2011 BLIZZARD

AFTER ACTION REPORT / IMPROVEMENT RECOMMENDATIONS

June 20, 2011
FINAL



Recommendation document for snow emergency planning purposes.

FOUO – Not for public dissemination without the sender's knowledge. This document contains sensitive communications and cannot be shared without written authorization of the Office of Emergency Management and Communications.

AFTER ACTION REPORT / IMPROVEMENT RECOMMENDATIONS

ADMINISTRATIVE HANDLING

1. The title of this document is the February 2011 Blizzard After Action Report (AAR) / Improvement Recommendations.
2. The purpose of this report is to assist in future planning. The report is designed to assist in the decision-making process. This document is intended to be a frank, open discussion of the February 2011 Blizzard response activities to assist in decision making on future snow incidents.
3. The information gathered in this AAR is classified as For Official Use Only (FOUO) and should be handled as sensitive information not to be disclosed. This document should be safeguarded, handled, transmitted, and stored in accordance with appropriate security directives. Reproduction of this document, in whole or in part, without prior approval from the Chicago Office of Emergency Management and Communications is prohibited.
4. Point of Contact:

Name: José A. Santiago
Title: Executive Director
Agency: Chicago Office of Emergency Management and Communications (OEMC)

AFTER ACTION REPORT / IMPROVEMENT RECOMMENDATIONS

EXECUTIVE SUMMARY

On 01FEB11, the City of Chicago was hit by the third largest blizzard in Chicago history; a total accumulation of 20.2 inches of snow fell on the City within hours. Whiteout conditions, wind gusts of up to 70 miles per hour, and snow drifts caused power outages; school, business, and airport closures; public transportation shut downs; shelter and warming center openings; and significant impacts to commuters on Lake Shore Drive (LSD). From 01–06FEB11, the City took on the task of restoring critical infrastructure, utilities, and transportation systems damaged from the blizzard. Restoration activities included LSD vehicle relocation, tracking, and return activities; LSD and arterial street plowing; gas, electric, and phone restoration; and public transportation rescheduling. Following the restoration activities, the City was hit by an extreme cold weather event lasting from 07-09FEB11.

Despite experiencing a storm of epic proportions and its overwhelming impacts on City resources, the City ensured all response efforts were conducted quickly and as safely as possible.

INTENT. The intent is to facilitate effective planning to ensure that a quick and effective response by the City of Chicago occurs before, during, and after the blizzard.

DECISIVE. Decisive to the incident is the City's ability to identify resources, coordinate interaction between the private and public sectors, maintain situational awareness, and efficiently and cost effectively utilize limited resources.

END STATE. End State will occur when all departments receive effective feedback (through Hotwashes and AARs) to improve current operational plans so that future responses will result in minimal risk to life, health, and property.

As with all incidents, the following Incident Priorities were identified:

- Life safety;
- Incident stabilization;
- Property preservation; and
- Environmental considerations.

During the Blizzard, the following Incident Objectives were identified:

- Maintain health and safety of responders and the public during the severe-weather incident;
- Ensure responders are properly prepared, equipped, and attired for inclement weather;
- Maintain situational awareness and prepare to respond to unexpected incidents;
- Provide a Liaison Officer among primary and supporting agencies and entities; and
- Anticipate and maintain citywide emergency-response capabilities during the severe-weather incident.

The goal of this AAR is to summarize the response activities that occurred from 28JAN11–09FEB11 in order to evaluate and recommend a course of future action for snow emergencies. The information presented in this report is gathered from incident documentation, two After Action Conferences (AACs), and direct submission of blizzard related materials from representatives of various City Departments, not-for-profit organizations, and private-sector partners that collaboratively responded to this incident. This AAR also provides a review of the City's major strengths and areas for improvement associated with the response to the February 2011 Blizzard.

EVENT OVERVIEW

Event Name

February 2011 Blizzard

Type of Event

Extreme Weather

Event Start/End Date

Phase 1: Pre-Event Actions (28-31JAN11)

Phase 2: Snow Operations during the Blizzard (01FEB11)

Phase 3: Lake Shore Drive (LSD) – Personnel and Vehicle Relocation (01-03FEB11)

Phase 4: Snow Removal– Restoration of Critical Infrastructure, Utilities, and Transportation (01-06FEB11)

Phase 5: Cold Weather Operations (07-09FEB11)

Mission

Response and Recovery

Participating Organizations

Chicago Office of Emergency Management and Communications (OEMC)

Chicago Police Department (CPD)

Chicago Fire Department (CFD)

Chicago Department of Aviation (CDA)

Chicago Department of Buildings (Buildings)

Chicago Department of Public Health (CDPH)

Chicago Department of Streets and Sanitation (S&S)

Chicago Department of Transportation (CDOT)

Chicago Department of Fleet Management (Fleet)

Chicago Department of Water Management (DWM)

Chicago Office of the Mayor (MO)

Chicago Park District (Parks)

Chicago Transit Authority (CTA)

Chicago Housing Authority (CHA)

Chicago Department of Family and Support Services (DFSS)

Chicago Public Schools (CPS)

Chicago City Colleges (CCC)

METRA

Illinois Department of Transportation (IDOT)

Illinois Emergency Management Agency (IEMA)

American Red Cross (ARC)

Salvation Army (Sal Army)

Commonwealth Edison (ComEd)

People's Gas (People's)

AT&T

ChicagoFIRST

Building Owners and Managers Association of Chicago (BOMA/Chicago)

AFTER ACTION REPORT / IMPROVEMENT RECOMMENDATIONS

SUMMARY AND TIMELINE

SUMMARY

From 01-09FEB11, the City of Chicago experienced extreme weather conditions that impacted the City and surrounding jurisdictions causing power outages; school, business, and airport closures; public transportation shut downs; shelter and warming center openings; and significant impacts to commuters on LSD. While the extreme weather conditions did strain City resources, close coordination and communication between departments, the county, the state and partner organizations proved successful overall.

Some notable statistics over the timeframe include:

- Approximately 20.2 inches of snow fell on the City of Chicago within hours
- Chicago departments remained open and operated throughout the duration of the incident
- LSD was cleared of snow and reopened within 33 hours
- OEMC hosted 13 press conferences and submitted 20 press releases
- OEMC posted 20 Facebook updates and 15 NotifyChicago updates
- 496 cars were relocated and returned to the owners within 48 hours
- City schools were reopened after two days of closure
- The OEMC 911 Center received a total of 24,584 total calls between 01FEB11 and 02FEB11. Of those calls, 350 calls were from LSD. (There were a total of 750 calls from LSD; however, 400 of those calls were duplicate calls)
- On 01FEB11 the 311 City Services received approximately 13, 424 calls. Of that total, 78 calls were for “no heat”, 49 calls were for “senior well-being checks” and 61 were for “shelter requests.”
- From 01FEB11 to 02FEB11, approximately 84,000 City of Chicago customers were without power for up to 8.5 hours; restoration efforts delayed because of snow

TIMELINE

The below timeline summarizes the major actions, issues, and requests identified from the incident documentation, two AACs, and direct submission of blizzard related materials from representatives of various City Departments, not-for-profit organizations, and private-sector partners that collaboratively responded to this incident.

The events of the February 2011 Blizzard occurred in a series of phases. Specifically,

- Phase 1: Pre-Event Activities (28-31JAN11)
- Phase 2: Snow Operations during the Blizzard (01FEB11)
- Phase 3: LSD – Personnel and Vehicle Relocation (01-03FEB11)
- Phase 4: Snow Removal – Restoration of Critical Infrastructure, Utilities, and Transportation (01-06FEB11)
- Phase 5: Cold Weather Operations (07-09FEB11).

Concurrent phases include Policy Decisions (01-09FEB11) and Emergency Operations Center (EOC) Activities (01-09FEB11).

AFTER ACTION REPORT / IMPROVEMENT RECOMMENDATIONS

Phase 1: Pre-Event Activities (28-31JAN11)

28JAN11:

- OEMC hosts conference call with City Departments to discuss advancing weather conditions
- OEMC hosts press conference to provide a weather update to the public
- OEMC continues to monitor weather conditions

30JAN11:

- Blizzard Watch message sent via NotifyChicago
- OEMC continues to monitor weather conditions
- Various departments begin implementing Cold Weather and Snow Operations Plans

31JAN11:

- OEMC continues to monitor weather conditions
- Four NotifyChicago and two Facebook messages posted
- OEMC hosts one press conference to discuss advancing weather conditions
- OEMC submits an updated weather condition press release for publication
- The State Emergency Operations Center (SEOC) is activated and a State of Illinois Disaster Proclamation is signed by the Governor
- FEMA activates its Regional Response Coordination Center (RRCC)

Phase 2: Snow Operations During the Blizzard (01FEB11)

01FEB11:

- Chicago Disaster Proclamation signed by the Mayor
- OEMC continues to monitor weather conditions
- OEMC increases staffing levels to 125 percent
- S&S response elevated to 100%
- EOC activates to a Level II (Partial Activation)
- Hourly Situation Reports begin
- Heavy pedestrian traffic reported at public transportation stations
- CFD implements additional staffing procedures, including 15 BLS ambulances upgraded to ALS; 10 additional special event ambulances put in service; and 50 snow mobiles distributed to various firehouses
- Increase in snow related accidents reported throughout the City
- Three NotifyChicago updates and four Facebook updates posted
- OEMC hosts two press conferences and issues three press releases
- Traffic flow and weather conditions on LSD are continuously monitored:
 - o 1415 - 1515 hours:
 - 4,425 cars on northbound LSD
 - Snowfall continues
 - S&S deploy 17 city plow trucks to clear snow and spread salt on LSD
 - S&S deploy 11 city tow trucks to LSD
 - o 1500 – 1600 hours:
 - 2,400 cars on northbound LSD
 - Snowfall continues
 - S&S continues to plow snow and spread salt on LSD
 - S&S increases to 17 in service tow trucks

AFTER ACTION REPORT / IMPROVEMENT RECOMMENDATIONS

- 1600 – 1700 hours:
 - 1,840 cars on northbound LSD
 - Snowfall continues
 - S&S increases number of city plow trucks to 22 to clear snow and spread salt
 - 17 city tow trucks continue to relocate cars off LSD and on/off ramps
- 1700 – 1800 hours:
 - 1,010 cars on northbound LSD
 - Snowfall increases and visibility decreases
 - S&S deploy four high-lifts to LSD to assist with vehicle relocation
- 1800 – 1900 hours:
 - 530 cars on northbound LSD
 - Car accidents at Belmont block several northbound lanes; however, traffic continues to move
 - Traffic begins to back up between Belmont and Fullerton
 - S&S deploys heavy duty wrecker to relocate jackknifed CTA bus at 4700 LSD
 - Weather conditions worsen and visibility continues to decrease
- 1900 – 2000 hours:
 - 270 cars on northbound LSD
 - Traffic continues slowly along northbound LSD
 - Whiteout conditions on LSD significantly impact visibility
 - Accidents cause backups on northbound LSD from North to Fullerton; backups prevent traffic from exiting at Fullerton
 - S&S send four tow trucks to relocate vehicles from northbound lanes
 - S&S redirects traffic flow from northbound LSD to the southbound lanes
 - Executive Director orders closure of LSD at 1958 hours
- 2000 – 2100 hours:
 - 137 cars on northbound LSD
 - Backups at Belmont, Fullerton, and North/LaSalle due to accidents, jackknifed busses, stalled vehicles, construction, and whiteout conditions
 - S&S deploy tow trucks to North/LaSalle to relocate cars blocking exit
 - S&S deploy a total of 4 flat-bed tow trucks, 55 private tow trucks, and 29 tow trucks to relocate cars to off-site lakefront relocation parking lots
- 2100 – 2200 hours:
 - S&S deploy 10 quick-hitch garbage trucks to LSD to supplement snow plow fleet
- 2200 – 2400 hours:
 - DWM deploy 7 high-lifts to LSD

Phase 3: Lake Shore Drive – Personnel and Vehicle Relocation (01-03FEB11)

02FEB11:

- Supervisors participate in policy group meeting in OEMC strategy room
- OEMC in coordination with S&S sets up car relocation, tracking, and pick-up operations
 - 60 private high-lifts and 120 private semi-trucks remove snow and relocate vehicles
 - S&S deploy forklifts to LSD from auto pounds to lift cars stuck in snow drifts
 - Working in coordination with the Parks, additional relocation lots are cleared including lots at Belmont, Foster, Chicago, and Soldier Field
- FCAD calls continue to increase
- CPS closed due to weather conditions

AFTER ACTION REPORT / IMPROVEMENT RECOMMENDATIONS

- OEMC hosts two press conferences and submits nine press releases
- Four Facebook updates and two NotifyChicago updates posted

03FEB11:

- LSD open to traffic in both directions at 0510 hours
- Relocation and pick-up of LSD vehicles continues
- CPS closed due to weather conditions
- Four Facebook updates and one NotifyChicago update posted
- OEMC hosts two press conferences and issues three press releases

Phase 4: Snow Removal – Restoration of Critical Infrastructure, Utilities, and Transportation (01-06FEB11)

04-06FEB11:

- CPS schools reopen on 04FEB11
- Snow plow activities continue at CPS parking lots
- Restoration of critical infrastructure, utilities, and transportation systems continues
- EOC decreases activation from a Level II (Escalated) to a Level III (Minimal)
- Five Facebook updates and two NotifyChicago updates posted
- OEMC hosts three press conferences and issues three press releases

Phase 5: Cold Weather Operations (07-09FEB11)

07-09FEB11:

- Warming centers and shelters continue operations
- EOC decreases activation to a Level IV (Duty Officer)
- One Facebook and two NotifyChicago updates posted
- OEMC hosts two press conferences and issues one press release

ANALYSIS OF ACTIONS

OEMC hosted an AAC on Wednesday, 15FEB11 and Friday, 18FEB11 with representatives from various City Departments, not-for-profit organizations, and the private sector. The following strengths and areas for improvement for each Phase were identified during the AACs.

PHASE 1: PRE-EVENT ACTIVITIES (28-31JAN11)

Strengths:

- OEMC continuously monitored weather conditions via National Weather Service and hosted several daily conference calls with Department heads to discuss preparation strategies, as outlined in the Emergency Weather Operations Plan (EWOP).
- OEMC posted frequent Facebook and NotifyChicago messages to update the public on weather conditions, shelters, and precautionary and protective measures.
- The OEMC 911 Center and 311 City Services anticipated the need for additional staffing to handle increased emergency calls and increased staffing to 125 percent.
- The EOC was activated in anticipation of the advancing storm.
- Fleet provided cots and sleep space for mechanics working long shifts.
- S&S proactively implemented their department-specific Snow Operations Plan and began staffing laborers starting on Sunday anticipating increased operations on Monday.
- The City hosted several press conferences and issued several press releases to update the public of severe weather conditions.
- ARC prepped shelter operations in advance by scheduling adequate staff, contacting volunteer staff, and stocking shelters with adequate supplies.
- ARC identified Malcolm X College as a location for staging and prepping of vehicles.
- CPS secured construction sites and contacted schools to ensure proper supplies and adequate food services were available.
- CTA proactively implemented their department-specific Winter Operations Plan the weekend prior to the storm.
- CTA began prepping fleet of vehicles in anticipation of extreme weather.
- Memorandums of Understanding (MOUs) and emergency contracts were established and in place prior to the emergency event.

Areas for Improvement:

- Use the Joint Information Center (JIC) at the OEMC to develop strategic media plans.
- Establish a City of Chicago Blizzard Webpage earlier in the process.
- Keep a list of truck contractors available with National Incident Management System (NIMS) classified equipment and resources.
- Identify alternate shelters (north, south, central and west) close to CTA train stations.
- Enhance inclusion of the private sector early in the planning process.
- Explore issuing interoperable radios to responding personnel to ensure redundant communication, if needed.

AFTER ACTION REPORT / IMPROVEMENT RECOMMENDATIONS

PHASE 2: SNOW OPERATIONS DURING THE BLIZZARD (01FEB11)

Strengths:

- Operational Plans and briefs outlining department roles and responsibilities were developed by OEMC and distributed to all departments.
- OEMC continued to host conference calls to update department heads of current situation.
- OEMC continued to host press conferences to update public on current weather conditions.
- CFD procured snowmobiles to assist with the transport of patients from areas inaccessible by emergency vehicles and equipment.
- ARC fully staffed Malcolm X (shelter), continuously maintained inter and intradepartmental communications, maintained good situational awareness, and ensured that facilities were plowed and accessible.
- ARC implemented a quick and efficient registration process at Malcolm X.
- ComEd prioritized and quickly restored outages throughout the City and focused on specific requests (CPS locations).
- Informational updates were continuously posted to Notify Chicago, Nixel, Alert Chicago, Facebook and the City of Chicago Blizzard Webpage.
- Press conferences were conducted on a daily basis throughout the storm.
- Sal Army increased staffing to provide services at multiple locations. Crews were dispatched to the Quinn Fire Academy, Engine 88's quarters, and OEMC.

Areas for Improvement:

- Update distribution lists to ensure all departments received a copy of the Operational Plan.
- Continue to conduct daily Operational Period Briefs.
- Explore activating the City's Incident Management Teams.
- Ensure Departments provide accurate situational awareness reports to Command staff.
- Enhance information provided to ComEd so that they can more quickly prioritize restoration to "critical" facilities.
- Establish means of access to critical infrastructure during non-working hours.
- Enhance utilization of radio stations to provide information to the public located in their vehicles.
- Proactively provide situational awareness to hospitals.
- Include CERT and faith-based volunteers in the planning and response process.

AFTER ACTION REPORT / IMPROVEMENT RECOMMENDATIONS

PHASE 3: LAKE SHORE DRIVE – PERSONNEL AND VEHICLE RELOCATION (01-03FEB11)

Strengths:

- Safety concerns on LSD were communicated to the public via press releases and updates on Facebook and Notify Chicago.
- LSD was not closed as a method of traffic management due to potential traffic impacts on the existing traffic congestion in the CBD.
- Expectations about opening LSD only when it was determined to be safe were clearly communicated to the public via press conferences.
- CFD performed extremely well during search and rescue operations on LSD.

Areas for Improvement:

- Consider the installation of additional median cuts or vehicle outlets as access/egress points to/from LSD to divert the flow of traffic.
- Enhance utilization of radio stations to communicate updates and safety information for passengers stranded in their vehicles.
- Improve communications between field and EOC personnel so that updates are accurate.
- Explore initiating CTA reroutes based on conditions observed on LSD.
- Improve communications and reporting between bus drivers and the CTA Control Center.
- Explore enhancing availability of specialized towing equipment for CTA
- Stage towing equipment along LSD if an extreme weather event is anticipated.
- Implement a centralized reporting process for Public Works personnel.
- Develop a parking plan for towed vehicles and reiterate this plan to private tow contractors.
- Stage CTA buses to be used as warming buses for pedestrians if an extreme weather event is anticipated.
- Develop a coordinated LSD Operational Plan that includes clearly identified triggers for a systematic shut down.

PHASE 4: SNOW REMOVAL – RESTORATION OF CRITICAL INFRASTRUCTURE, UTILITIES, AND TRANSPORTATION (01-06FEB11)

Strengths:

- CPS was reopened quickly.
- S&S operations were critical and greatly assisted with the removal of snow at entrances of hospital emergency rooms and entrances at schools with handicap access.
- Good coordination between S&S, CPS, and OEMC for snow removal activities at schools.
- Utilized additional city personnel resources, including CTA, MO, CDOT, and volunteer city workers to ensure bus stops and shelters were cleared.

Areas for Improvement:

- Continue to utilize the Parks Department as Parks can assist with identifying appropriate locations for the stockpiling of plowed snow.
- Improve communication between the EOC and City Departments and Sister Agencies.

AFTER ACTION REPORT / IMPROVEMENT RECOMMENDATIONS

PHASE 5: COLD WEATHER OPERATIONS (07-09FEB11)

Strengths:

- DWM began hourly internal reporting to better manage operations.
- CPD and CDPH conducted well-being checks and continually reported to OEMC.
- 311 coordinated with DWM, S&S and CFD to ensure fire hydrants were cleared.

Areas for Improvement:

- Consider reducing 24-hour EOC operations earlier in the process, if appropriate.

POLICY DECISIONS (1-09FEB11)

Strengths:

- State of Illinois Disaster Declaration on 31JAN11 and activation of the State EOC.
- City Proclamation initiated on 01FEB11.
- Governor Pat Quinn sent a formal request to President Barack Obama asking that 60 counties (including Cook County) be declared federal disaster areas on 28FEB11.
- S&S implemented garbage pick-up suspensions.
- Main arterial streets are closed to parking when snow accumulation is over two inches.
- Decision to communicate severity of storm before it hit via multiple media pathways.

Areas for Improvement:

- Conduct further discussions about the safety of CTA buses and personal vehicles on LSD during extreme weather conditions.

AFTER ACTION REPORT / IMPROVEMENT RECOMMENDATIONS

EMERGENCY OPERATIONS CENTERS (1-09FEB11)

Strengths:

- Situation Report information was useful to recipients.
- Technical support and Sal Army were extremely helpful in meeting requests and deadlines.

Areas for Improvement:

- Provide a briefing at the beginning of each operational shift in the EOC to set expectations for agency representatives, including an overview of:
 - o Operations Plan, Operational Brief
 - o Roles and responsibilities while in EOC
 - o Reporting deadlines (for Situation Reports)
 - o Requests using ICS 213s (General Messages)
 - o Completion of ICS 214s (Unit Logs)
 - o In-briefing to replacement at shift change (come in early for briefing)
 - o Information from EOC must be passed back to departments
 - o Review security protocols for personal laptops and jump-drives
- Require agency representatives to have NIMS training to have a seat in the EOC.
- Expand Situation Report distribution list to include EOC agency representatives.
- Show a copy of the current Situation Report on the video board.
- OEMC should clarify EOC Activation Levels and recommend actions to all departments.
- Encourage interaction, updates, and requests between agencies in the EOC.
- Analyze data in Situation Reports to determine trends.
- Enhance technology in the JIC by installing additional phone lines and television screens to monitor news reports.
- Enhance communication between the Strategy Room and EOC.
- Ensure all EOC representatives understand OEMC's security procedures and protocols.
- Provide EOC and NIMS training to secondary departments.