



Calgary Emergency Management Agency

CEMA 2014 Annual Report



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Onward! By 2020, more than 86 per cent of citizens will report that Calgary is a safe city in which to live.



THE CITY OF
CALGARY
EMERGENCY MANAGEMENT
AGENCY



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2014 Annual Report of the Calgary Emergency Management Agency - Attachment
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 CEMA 2014 Annual Report

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Illustrations (front and back cover, page 17) courtesy of
Girl Guides of Calgary – 52 Brownies Thornccliffe)





VISION

Calgary is recognized as the North American leader in emergency management.

MISSION STATEMENT

Enable Calgary to better manage an expanding crisis through risk assessment, prevention, mitigation, preparedness and recovery while facilitating a collaborative multiple agency response to both natural and human-induced disasters.

EMERGENCY MANAGEMENT PRIORITIES

The priorities of the Calgary Emergency Management Agency are:

People – Save lives and reduce suffering while maintaining responder safety.

Property – Protect critical infrastructure and property.

Environment – Uphold/maintain environmental integrity.

Economy – Reduce social and economic losses.

DIRECTOR'S MESSAGE

After being at the epicentre of Canada's most costly disaster ever, the June 2013 floods, Calgary has seen more disasters in 2014. The Calgary Emergency Management Agency (CEMA) has been kept busy with emergency events as well as addressing daily business.

In the summer of 2014, the Conference Board of Canada released their report *Forewarned and Forearmed: The Calgary Emergency Management Agency and the 2013 Flood*. This report, as a third-party and independent report, was widely heralded as the definitive report on the flood response and early recovery efforts. According to Dr. Satyamoorthy Kabilan, Director, National Security and Strategic Foresight with the Conference Board of Canada, "Despite the plaudits that The City of Calgary has received, City officials have asked the question, how can we do better next time?" Recommendations were made in five areas: relationship building; information flow; private sector preparedness; volunteer management; and mental health of responders. CEMA has begun to implement changes through a workplan that has been

developed and shared with members and partners.

September 2014 saw the heaviest early snowfall (prior to the fall equinox) in 130 years. The total amount measured was almost 30cm, with the western side of the city reporting higher amounts. This snowfall was prior to a killing frost, so the leaves had not yet been shed from deciduous trees. Heavy snow accumulation caused many limbs, especially in older, larger trees, to snap off. Tree limbs falling on power lines caused power outages for an estimated 70,000 people. Teams from Canada Task Force 2, City of Calgary Roads, City of Calgary Parks and others assisted with debris cleanup.

Barely a month had passed after the September snow event when several blocks of the western downtown core were affected by an underground fire and power outage. Over 5,000 people were left without power, and 112 buildings were affected. CEMA and its Emergency Social Services team were called upon to support almost 1,000 citizens who needed assistance with accommodation, food, and pet care. The power outage lasted for five days.



Ken Uzeloc



2014 also saw some significant achievements in community outreach, including development of a business continuity plan brochure and online workbook, and a community disaster preparedness program (ReadyCalgary). Ensuring our communities and businesses are prepared for and resilient to any emergency or disaster will greatly assist in response and early recovery efforts. As part of continued efforts to improve communication, the Calgary Chamber of Commerce, in conjunction with CEMA, set up an emergency email notification database. Over 9,500 businesses have signed up to receive information about events that could affect their business.

Effective January 1, 2015, CEMA will become its own City of Calgary business unit. This strategic change recognizes the ever increasing importance of emergency management in municipal government, and dedicates and positions the Agency to expand its role, broaden its partnership base, and improve its capabilities. CEMA is grateful to the Calgary Fire Department for its support for the past five years. The strong foundation built by the Calgary Fire Department has helped shape CEMA into a North American leader in emergency management.

Ken Uzeloc
Acting Director, Calgary Emergency Management Agency

CEMA continues to make a difference in the lives of Calgarians. In 2014 we:

- Assisted almost 1,000 Calgarians with needs like lodging, food and pet care during the downtown power outage in October.
- Distributed over 35,000 *Flood Preparation: Frequently Asked Questions* brochures.
- Attended over a dozen open houses and interacted with hundreds of people about flood preparation.
- Hosted Disaster Alley where 1,800 people learned what first and other responders do in an emergency or disaster, and learned about how they can be better prepared to withstand a disaster.
- Attended and presented to 500 children at Safety Expo about how their families can be better prepared.
- Supported dozens of Calgarians who experienced house fires by ensuring their basic needs were met.
- Promoted seasonal flu and infectious disease awareness to more than 12,000 City employees.
- Provided feedback regarding hazards and emergency management on area structure plans for places where thousands of Calgarians will live in the future.
- Worked with our members and partners to clean up tree debris from the September 2014 snowstorm from thousands of homes and public property.
- Created a Business Continuity guide and templates to help small businesses in Calgary prepare for and respond during a business interruption or disaster.
- Worked with the Chamber of Commerce to create an emergency notification database that provides information to over 9,500 businesses about events that could affect their operation.
- Piloted a community preparedness program called ReadyCalgary that will assist communities in helping themselves and each other in disasters.
- Worked with other City business units to submit Disaster Recovery Program claims for City infrastructure and recoup expenditures from other levels of government.
- Collaborated with our partners to ensure that our first responders had protective equipment available to them should they be asked to attend a call where infectious disease was suspected.
- Conducted training with Canada Task Force 2, a specialized disaster response team, to ensure the safety and well-being of all Calgarians in the event of a disaster.
- Continued to uphold our mission: Enable Calgary to better manage an expanding crisis through risk assessment, prevention, mitigation, preparedness and recovery while facilitating a collaborative multiple agency response to both natural and human-induced disasters.



HISTORY

In the event of an emergency or disaster situation, the Calgary Emergency Management Agency's (CEMA) role is to facilitate a coordinated response of multiple Agency members and external partners. CEMA also provides various levels of support and direction in the mitigation and preparedness of potential risks in Calgary.

CEMA was formed in 2009 as a result of Section 11.2 of the *Emergency Management Act* which directs that a municipality will establish an emergency management agency to act as the agent of the local authority in exercising the local authority's powers and duties under the Act.

"There shall be a Director of the Emergency Management Agency, who shall prepare and co-ordinate emergency plans and programs for the municipality; act as Director of emergency operations on behalf of the emergency management agency; co-ordinate all emergency services and other resources used in an emergency; and perform other duties as prescribed by the local authority."

Prior to January 1, 2015, CEMA was a division under the Calgary Fire Department. The role of Director of CEMA was that of the Fire Chief, and day-to-day operations were handled by a Deputy Fire Chief. The Calgary Fire Department's support

has ensured that CEMA has grown into a comprehensive Agency, encompassing more than 35 members and partners. These partnerships have contributed to Calgary's ability to handle emergency events, protect lives, critical infrastructure and our city's environment and economy.

In Action Plan 2015 – 2018, Calgary City Council approved the following strategies specific to CEMA, in the Community Service and Protective Services (CS&PS) plan:

N2 – Build resiliency to flooding.

N2.1 – Evaluate, prioritize, and implement strategies developed from lessons learned following the 2013 June flood, including The Corporation's work arising from agreed-upon internal and external review recommendations.

N3 – Enhance The City's capacity and resiliency to prepare for and respond to pandemics, natural disasters and emergency situations.

N3.1 – Continue to implement the comprehensive emergency management model to reduce risk, mitigate hazards, build resiliency, advance business continuity and recovery.

N3.2 – Support neighbourhoods in the development of community support programs that promote self-sufficiency, enhance preparedness and build resiliency.

On January 1, 2015, CEMA will become its own business unit, with a Director appointed by and reporting to the General Manager of the Community Services and Protective Services (CS&PS) department.



CORE SERVICES

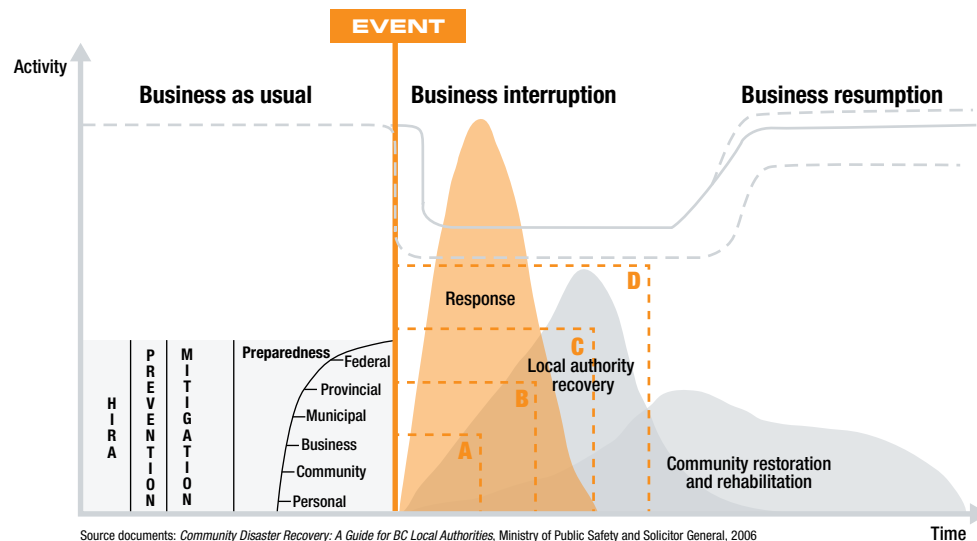
CEMA continues to build and refine the Comprehensive Emergency Management Model which provides a framework to structure all emergency management activities. This model illustrates that emergency management is a continuum that includes non-response activities (risk assessment, prevention, mitigation and preparedness) as well as response, recovery and rehabilitation.

Additionally, the model illustrates that regular business can be interrupted due to an emergency event, and the ultimate goal of all emergency

management efforts is to return to a routine state of business quickly and effectively and ideally returning to a more prepared and resilient state.

The model is not specific to any one risk, but instead takes an “all-hazards” approach which can be used for any situation.

Comprehensive Emergency Management Model



CORE SERVICES

The phases of the model are described as follows:

Hazard identification and risk assessment

Risk assessment helps to provide an understanding of the hazards that threaten a community, the most vulnerable elements, and the likelihood of specific consequences if hazards are realized.

Prevention

The development and approval of policies, programs, arrangements or measures intended to avoid the occurrence of negative consequences associated with a given threat.

Mitigation

Apply and implement changes, as well as collaborate with stakeholders to implement changes, based on lessons learned and best practices derived from conducting training and exercises as well as response and recovery experiences.

Preparedness

Securing and sustaining capacity and developing action plans, gathering the equipment and facilities outlined in the plans, training the right people in the plan and with the equipment, and exercising the elements with rigorous tests.

Response

Coordinated response includes all actions taken during an emergency event to save lives, protect property, and limit damage to the environment and economy.

This can include two levels of response:

1. Site Response – the immediate task of eliminating hazards or moving people out of harm's way. If residents have been evacuated, re-entry activities to return evacuees are considered response activities.
2. Site Support – activities at the Emergency Operations Centre that provide resources, information and direction to site(s) and ensure that business units remain operational (business continuity).

Local authority recovery

Activities aimed at restoring normal conditions after an emergency. While a local authority is responding to an emergency, the challenge of internal recovery/ business continuity may be required to ensure:

1. Restoration of damaged infrastructure
2. Continuation of public services

Community restoration and recovery

The community (i.e. individuals, families, business owners, non-profit groups, community groups etc.) consciously and collectively act to limit losses and reduce suffering. This includes attention to the psycho-social viability and economic health of the community and its inhabitants.





STRATEGIC RESULTS

1. Reduce risk and mitigate hazard and vulnerability in Calgary

Respond and support emergency events in a timely and efficient manner

CEMA provides support and coordination for emergency events. Additionally, CEMA frequently staffs the Emergency Operations Centre (EOC) with CEMA personnel and key members and partners for pre-planned events.

CEMA also provides assistance to various Agency members and partners for smaller-scale events. In 2014 CEMA provided support for events such as fires (residential and commercial), hazardous materials, gas line breaks and more.

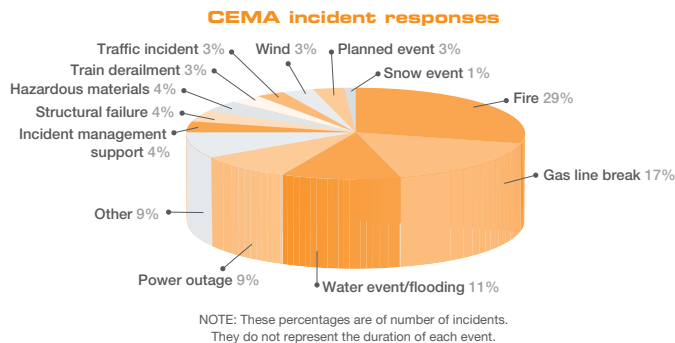
CEMA provided coordination assistance to approximately 100 events, including a closure on Fourth Avenue (due to a Calgary Police Service investigation); a water main break that caused lane closures on Centre Street and Memorial Drive; and an industrial fire at a shingle manufacturing plant.

With the June 2013 flood still very recent, CEMA was highly active in flood preparedness and monitoring in the first half of 2014. With other City business units and provincial entities, CEMA participated in over a dozen public open houses and information sessions.

Two large events that occurred within weeks of each other in the fall stretched CEMA staff, members and partners – the “Snowtember” snow event in September and the October underground fire and resulting power outage. The snow event required activation of the EOC for almost two weeks, and the power outage event lasted almost five days.

While the snow event caused power outages to approximately 70,000 customers, most outages were short in duration. Isolated pockets remained without power, mostly due to damage at the connection point of the home and service line. Because most people were not displaced from their homes, no activation of Emergency Social Service occurred.

Many City business units and external Agency members and partners collaborated to clear tree debris from streets and on power lines. A Tactical Operations Centre (TOC) was set up within the Parks business unit to deal with ongoing tree issues, debris management and recovery operations. CEMA provided assistance and support to Parks in setting up their TOC. It is estimated that half of all



STRATEGIC RESULTS

trees (private and on City property) were affected, and the full impact of the damage will not be known until at least spring 2015 and likely beyond.

In October, an underground fire in the west end of the downtown core caused a power outage that lasted almost five days, and affected 112 buildings and approximately 5,000 citizens. CEMA's Emergency Social Services team was activated and provided services to several hundred Calgarians, including shelter and other basic needs.

As a coordinating Agency, CEMA works with its over 35 members and partners to provide services to Calgarians. These services may include such things as The City's Animal & Bylaw Services providing pet care to displaced residents or Alberta Health Services providing medical and mental health care for affected citizens. The City's Water Services stations potable water wagons in areas that may be without water. CEMA, working in collaboration with Agency members and partners, ensures continuity of services and care of affected residents.

Understand and assess risk, hazard and vulnerability in the city of Calgary

The Hazard Identification and Risk Assessment (HIRA) for The City of Calgary is designed to assess hazards that pose a threat to public safety, infrastructure, the economy and the environment. This assessment aids in the prioritization of resources to develop prevention, mitigation, preparedness, response and recovery plans, as well as promote community resiliency.

The compilation of the HIRA is done annually as new risks emerge and others are mitigated. The 2014 HIRA was presented to City Council in October 2014. The list of hazards is comprised of natural, technological, and human-induced. Natural hazards include events that are caused by natural forces (flood, hail). Technological hazards originate from industrial or technological accidents, infrastructure failures or certain human activities (rail incident, Information Technology failure). Human-induced hazards are caused directly by human action or inaction, which can be intentional or unintentional (cyber attack, mass gathering). Understanding the risks allows

CEMA and The City to make informed decisions to address underlying vulnerabilities.

Some of the trends seen in the HIRA include the increasing frequency of disasters (increase in the number of disasters worldwide; awareness and perception of disaster; and population growth and increased population density in areas prone to events, such as flood plains) and the increasing impact of disasters due to population change and growth, increasing urbanization, and a societal shift towards reliance on technology and a delicate and intricate supply chain.

According to the Insurance Bureau of Canada, in the last decade, Alberta has accounted for 67 per cent of all disaster-related insurance payouts in all of Canada. The June 2013 flood was the costliest natural disaster in Canadian history, estimated to be almost \$2 billion.

The 2014 HIRA identified the following top ten risks in the city of Calgary:

Hazard	Rank
Flood	1
Tornado*	2
Rail incident*	3
Hazardous materials – air contamination incident	4
Explosion/fire	5
Pandemic*	6
Hail	7
Energy supply emergency	8
Windstorm	9
Lightning	10

* Indicates the hazard may not yet have occurred to full potential, but ranked based on supporting information which indicates the potential for significant impact.

In 2014, the HIRA was reviewed by a third party to ensure consistency and accuracy of the data collection process and information presented. This independent review is completed on a three year cycle.

Develop the CEMA business plan and budget

CEMA, through the Calgary Fire Department, participated in the creation of Action Plan 2015 – 2018, an outline of City of Calgary priorities and budgets for departments. In Action Plan 2015 – 2018, Calgary City council approved the following strategies specific to CEMA, in the Community Services and Protective Services (CS&PS) plan:

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N3.1 – Continue to implement the comprehensive emergency management model to reduce risk, mitigate hazards, build resiliency, advance business continuity and recovery.

N3.2 – Support neighbourhoods in the development of community support programs that promote self-sufficiency, enhance preparedness and build resiliency.

Under the Calgary Fire Department, CEMA typically accounts for approximately two per cent of the Fire department's annual budget.

Coordinate Employee Response Plan practices

CEMA created and distributed to City employees myERP, an employee-focused general emergency response plan, in 2011. Since 2011, there have been several world-wide incidents which have had an impact on employee safety everywhere. It is a continued priority for The Corporation and CEMA to ensure the safety of City employees and visitors to City facilities.

In 2014, CEMA updated myERP and will distribute 15,000 copies to City employees in early 2015.

STRATEGIC RESULTS

Continue to research and develop policy and process on notification

CEMA collaborated with the Alberta Emergency Management Agency (AEMA) on the introduction of their Alberta Emergency Alert (AEA) app for Android and iOS platforms. The app allows users to sign up from their smart devices to receive information about Alberta Emergency Alerts. Alerts are geo-tagged (if allowed by the user) to ensure that relevant alerts reach the user in their geographic location. CEMA promotes the AEA app as another notification method for emergencies and disasters, including evacuation orders.

Pandemic planning and seasonal flu campaign

CEMA partnered with The City's Human Resources to promote seasonal flu awareness and vaccination to employees.

2014 saw an increase of approximately 50 per cent from 2013 in the number of City of Calgary employees receiving the flu vaccination at clinics operated by The City's Human Resources business unit. This reflects only the number at City clinics; many more likely received the vaccination through other means such as Alberta Health Service vaccination clinics, doctors or pharmacies. The increase indicates that flu awareness campaigns are effective in reaching employees and motivating them to get vaccinated.

Promote civic interests in resource development in urban areas

CEMA co-chairs The City's Gas and Oil Committee. This group is cross-departmental with representatives who review and make recommendations about oil and gas development in the city of Calgary. Regulatory matters are a provincial responsibility through the Alberta Energy Regulator (AER) but oil and gas development affects civic matters such as planning and development, and emergency

response. CEMA continues to work to establish oil and gas policies as they relate to urban development. This includes working closely with companies to transfer high-pressure pipelines into transportation utility corridors and away from areas of population.

CEMA continues to comment on land use planning development proposals throughout the city to promote and encourage new and existing communities to be prepared for, resilient to and more easily recovery from, emergencies and disasters. In 2014 CEMA has provided comments on approximately 25 submissions ranging from road closures to full area developments.





2. Build community capacity and resiliency

Enable our communities and citizens to be prepared for and resilient during an emergency event by improving community education

CEMA participates in educational initiatives such as the annual Safety Expo. This annual March event educates children in grades four to seven about safety at home, school, and play. In 2014, CEMA presented emergency preparedness information to almost 500 children during the two-day event, which attracted more than 3,000 children, teachers and parent volunteers.

CEMA's signature public event is Disaster Alley at McMahon Stadium. More than 25 exhibitors, including CEMA members and partners such as Alberta Health Services, Animal and Bylaw Services, ATCOGas, the Calgary Fire Department, Calgary Police Service, Canada Task Force 2, Calgary Transit and Enmax, participated in the fifth annual Disaster Alley in 2014.

Disaster Alley 2014 saw a record number of exhibitors, including some new organizations like Operation Lifesaver (train and rail safety),

The City's Customer Service and Communications department, Flood Recovery Operations Centre and Development and Building Approvals. Attendance was down in 2014 due to adverse weather. However, Disaster Alley continues to be a strong and well-loved public event generating positive and extensive media coverage.

CEMA continues to be a source of information for citizens. In the spring months leading up to flooding season in 2014, calls to 311 increased exponentially. Requests for materials increased also to an average of 1,000 copies of CEMA collateral material (Important Document bags, *Household Emergency Action Plan*, *Plain Language Household Emergency Action Plan*, 72-hour kit checklist, and *Flood Preparation: Frequently Asked Questions*) sent out per week for several weeks in the spring.

CEMA updated and reorganized all the content on its website (calgary.ca/cema) to better fulfill the public need for easily accessible information.

CEMA attended other events – in September, the Badges and BBQs event at the Calgary Police Service

Westwinds campus, and the District 1 Community Fair at the Military Museum. CEMA also attended open houses at Fire Stations 15 (Bowness) and 32 (Saddle Ridge) during Fire Prevention Week.

In response to public concern about the potential for spring flooding, CEMA collaborated with other City business units to produce a *Flood Preparation: Frequently Asked Questions* brochure that was distributed to communities and individuals through 311, Calgary Public Libraries, recreation facilities, and Calgary Police Service stations. Over 35,000 brochures were distributed in the first half of 2014.

CEMA continues to expand relationships with organizations representing diverse groups, to work together to better respond to and recover from emergencies and disasters. This includes seniors' groups, care facilities, shelters and more. Preparedness is a shared responsibility and CEMA encourages everyone, including not-for-profit groups and those providing care or services to disadvantaged individuals, to have their own emergency plans in place.

STRATEGIC RESULTS

CEMA staff members completed open houses and information sessions in the communities of Bowness, Hillhurst/Sunnyside, Elbow Park, and Chinatown. Additionally, CEMA staff members also presented to the Conference Board of Canada Council for IT Executives, Public Works of Alberta, Alberta Architects Associations, GeoAlberta, Alberta Emergency Management Agency (AEMA) Emergency Management directors, The City of Calgary's Community and Neighborhood Services (CNS), the Canadian Emergency Management conference, Civic Partners BC, SAIT Polytechnic, the Canadian Water Resources Association (Alberta) conference, the Urban and Regional Information Systems Association (URISA) conference, Building Owners and Managers Association (BOMA), Disaster Forum conference, and the Emergency Social Services Network of Alberta (ESSNA).

Develop educational outreach programs

CEMA is committed to providing education to citizens wishing to self-organize in their communities and businesses wanting more information about how they can prepare for a disaster as well as business continuity plans to help them get through an interruption.

In summer 2014, CEMA created and produced a Business Continuity Guide. The guide was promoted and provided to small businesses through the Calgary Chamber of Commerce. The guide was made available online at Calgary.ca/cema along with fill-in templates. CEMA also collaborated with the Chamber on the creation of their emergency business contact database for Calgary businesses. Over 9,500 businesses have registered for the notification, which will enable them to receive relevant and timely information about emergency events that may affect their operations.

In early 2014 CEMA began developing a community guide for individuals and communities who wish to self-organize to prepare for a disaster. The community guide leads into a community preparedness course

(ReadyCalgary) that will be provided to interested communities. The course was piloted with a select number of communities in late 2014. The course will be "train-the trainer" style and supplies will be made available to trainers in communities. The course content and the introductory brochure will be available in early 2015.

The ReadyCalgary program was reviewed by nine Agency members and partners and eight community or service organizations.

Build relationships with other responders and organizations

CEMA continues to build relationships with other organizations that have similar objectives. A new partnership with the Calgary Chamber of Commerce and Calgary Economic Development contributed to publication and promotion of a Business Continuity Guide. The Chamber used the guide as a launch to their emergency business contact database, which allows businesses to self-register to receive information about events that could potentially affect their businesses.

A newly invited partner in 2014 is TransAlta Utilities.

Emergency Social Services program delivery

The 134 Emergency Social Services (ESS) members come from 29 business units, representing all seven City of Calgary departments.

Training on policy, procedures, and emergency management is provided to all ESS members. As well, a number of subject-matter experts presented development opportunities to members about worker care, mentorship, and psychological awareness.

ESS members participate in the Emergency Social Services Network of Alberta (ESSNA), a voluntary group of ESS representatives across the province who collaborate and share best practices. In 2014, ESS worked with other municipalities affected by the June 2013 flood to share learnings from the flood and ways to move forward. Members assisted in organizing an ESSNA forum in November 2014 where 180 ESSNA members shared ESS successes and challenges.

Emergency Social Services was activated once, for the October downtown fire and power outage. Although an evacuation was not ordered, it became increasingly uncomfortable for residents to remain in their homes for five days without power. More than 70 ESS members assisted with the immediate needs of displaced residents. The power outage began halfway through the Thanksgiving weekend and lasted approximately five days. Services such as accommodation, food and pet care were provided to over 700 individuals.

Additionally, ESS members volunteered their time at Disaster Alley in May 2014, handing out preparedness information to attendees.





SUN MEDIA CORP.

3. Build operational readiness

CEMA Members

As per the Emergency Management Bylaw 25M2002, membership of the Calgary Emergency Management Agency is comprised of appointed members and those invited by the Director. The following Members lists identify the current appointed Agency membership. The Invited Partners list provides examples of those agencies and organizations that work in collaboration with the Agency.

Internal Members: City of Calgary

Animal & Bylaw Services
Calgary Fire Department
Calgary Police Service
Calgary Transit
City Manager's Office
City Solicitor
City Treasurer
Community & Neighbourhood Services
Corporate Security
Customer Service & Communications
Inspections and Permit Services
Fleet Services
Human Resources
Information Technology
Infrastructure & Information Services
Law Department
Parks
Public Safety Communications
Roads
Supply Management
Waste & Recycling Services
Water Services/Water Resources

External Members

Alberta Emergency Management Agency (AEMA)
Alberta Energy Regulator
Alberta Environment and Sustainable Resource Development (AESRD)
Alberta Health Services – Administration
Alberta Health Services – EMS
Alberta Health Services – Medical Officer of Health
ATCO Gas
Calgary Board of Education
Calgary Catholic School District
ENMAX Power Corporation
Environment Canada
TELUS

Invited Partners

Invited partners include agencies and organizations that work in collaboration with the Agency at the invitation of the Director of CEMA. These include non-governmental organizations (NGOs), government agencies, private companies and subject matter experts.

STRATEGIC RESULTS

The Emergency Management Bylaw was modified in October 2014 to allow for the transition of CEMA from under the Calgary Fire Department to an independent business unit, including appointment of a Director. Effective January 1, 2015 the Emergency Management Bylaw was amended to reflect additions and revisions of internal members (City business units), external members, and, effective January 1, 2015, the appointment of the CEMA Director by the General Manager of Community Services and Protective Services. Prior to amendment, the Director of CEMA was also the Fire Chief of The City of Calgary.

Conduct training and exercises for Agency members and partners and CEMA staff

CEMA offers training opportunities for members and partners. Two infectious disease exercises were conducted in 2014 in conjunction with the Calgary Airport Authority; the first exercise was a tabletop exercise that allowed for sharing and discussion of procedures and protocols in the event of an infectious disease arriving in Calgary; the second was a review of

procedures regarding the donning and doffing of protective clothing and gear.

These are in addition to planned event tabletop exercises for events such as the Stampede Parade and Globalfest.

A tabletop flood exercise was conducted in May with CEMA members and partners. This exercise was based on the events of the June 2013 flood, and focused on fundamental elements in the Emergency Operations Centre (EOC) including the situational reporting process and strategic thinking.

CEMA training for Agency members and partners included several webinars, Incident Command System (ICS) courses, and training on CEMA's software suite including the Common Operating Picture (COP) and the Incident Management System (IMS).

Five CEMA staff members completed a 200-hour (total) incident leadership course in January 2014. Three staff members completed the EOC Operations Section Chief Course. CEMA staff members who were not already authorized users also completed the Alberta Emergency Alert training.

Increased communication with Agency members and partners

CEMA communicates with its members and partners through information bulletins. In 2014, over 30 bulletins were sent regarding training opportunities, pre-planned events, emergency events, and weather advisories.

By ensuring CEMA's members and partners are well-informed about risks and potential events, they can be prepared to respond to emergency events more quickly and with greater collaboration.

Undertake post event review

Several independent third party reports were commissioned regarding the response and early recovery efforts to the June 2013 flood. Two reports relating specifically to the June 2013 flood are the Conference Board of Canada and the Jacobs report. The Jacobs report was released in early 2014 and the Conference Board report in summer 2014.

The Conference Board report, *Forewarned and Forearmed*, includes the feedback from over 40 representatives of the public

and private sectors, many of whom worked in the Emergency Operations Centre (EOC) during the flood or had critical roles in the response. The report includes best practices and recommendations. These recommendations are:

1. Enhance the pre-existing relationships that Emergency Operations Centre officials have with agencies.
2. Information flow between the Province and The City need to be addressed in terms of responsibility; a better conduit to share information with the private sector should be established, and enhance communication between the Emergency Operations Centre and those in the field.
3. Advance private sector preparedness through business education and formalizing of business continuity plans and emergency response plans (ERPs).
4. Review and develop a volunteer framework that can build a skill inventory.

5. Prioritize the mental health and well-being of those in the Emergency Operations Centre and first responders.

CEMA and The City are reviewing the recommendations, and implementing steps to address these recommendations through a comprehensive workplan prepared by CEMA and its partners. CEMA is tracking the status of these recommendations through the workplan and will be reporting back to Council in 2015. *Forewarned and Forearmed* is available online through calgary.ca/cema.

In July 2014, City Council approved a directive to Administration to consolidate the recommendations of the June 2013 Flood Internal Debrief results and the Conference Board report to develop a workplan for the recommendations, and return to the Emergency Management Committee in April 2015.

CEMA submitted a Disaster Recovery Program (DRP) application to the Province for flood expenses and coordinated The City's submission to the Government of Alberta's Flood Readiness Grant. The Financial Recovery Operations Team will report on corporate DRP finances.

Costs associated with two events in the fall of 2014 – the “Snowtember” event and the October downtown fire and power outage – have been submitted for Disaster Recovery Program funding by The City of Calgary.

Of the over 2,800 claims for Disaster Recovery Program assistance from Calgary homeowners, non-profits and small businesses for the June 2013 flood, about 475 remain open. More than \$28 million in financial assistance has been paid out.



4. Plan for business continuity and recovery

Develop and test continuity and recovery plans to prepare for business interruption

Business continuity – continued business operation during an interruption and recovery after an interruption – was a major focus in 2014. CEMA developed and implemented a Corporate Business Continuity Planning Policy, which is intended to guide the The Corporation's efforts and ensure services will continue during emergencies and disasters.

CEMA completed a corporate Business Impact Analysis (BIA) which effectively identified strengths and vulnerabilities through The Corporation. This data will be used in 2015 to develop and implement new programs that will increase The Corporation's resiliency in future emergencies and disasters.

The catalogue of essential services was updated in 2014, so that CEMA has a strong understanding of which City services require prioritization and resourcing during emergencies and disasters.

Recovery Operations Centre and Tactical Operations Centre operations

The Flood Recovery Operations Centre (ROC), opened in response to the June 2013 flood, remained operational throughout 2014. This was due to the level of newly identified mitigation strategies, and ongoing recovery and restoration work in the community and in The Corporation. It is anticipated that ROC will continue to function until mid-2015, with some aspects of the flood recovery work being absorbed by City business units for several years.

CEMA maintained a presence on the Flood Recovery Task Force, facilitated a ROC Committee flood debrief as well as a Committee session regarding the Conference Board of Canada (CBoC) 2013 flood report and the Corporate Business Continuity policy. The Flood Recovery Task Force provides citizen-centric services to Calgarians, monitors and supports recovery staff in all City business units, optimizes resources and process efficiencies, manages financial impacts including recovery to flood-related expenses, and aligns cross-departmental interests.

CEMA staff provided support to ROC activities, especially flood preparedness for individuals and City of Calgary activities in preparation for flood season.

Effective recovery also takes into consideration reducing the risk of future disaster events in order to build a more disaster-resilient community. To that end, CEMA supports City efforts to develop and sustain long-term resiliency in order to prepare The City for the next emergency event. The Flood Recovery Task Force continues to coordinate The City's rebuilding and recovery efforts and liaise with other levels of government and partners on a broad community-focused approach. Parks' Tactical Operations Centre (TOC) works to support recovery efforts for the "Snowtember" event. Recovery Operations Centres and Tactical Operations Centres are two examples of multi-faceted, multiple business unit recovery initiatives that occurred in 2014.

STRATEGIC RESULTS

Infectious disease resources and supply chain

CEMA continued its work to identify and stock pandemic supplies in 2014. Increased product rotation and limitation of the number of similar products were further identified leading to greater efficiencies in the supply chain.

As news of an Ebola outbreak came from west Africa, CEMA and its partners conducted preparatory activities in the event that Ebola (or other infectious disease) be detected in Calgary. Working closely with Public Health Agency Canada, Alberta Health Services, the Calgary Airport Authority, Calgary Police Service and the Calgary Fire Department, protocols and procedures were aligned and coordinated between agencies should a suspected case arrive in Calgary. This included the provision of protective supplies (suits, face

shields, N95 masks, gloves) to the fire station at the Calgary International Airport and “go kits” placed with Calgary Police Service and Calgary Fire Department units.

Social media and emergency management technology

CEMA hosted an expert panel and supported the development of the federally published report “Social Media in Emergency Management” (SMEM). The report outlines efforts to understand the state of maturity of SMEM as well as create an outline for effective use of SMEM in Canada. The research involved conducting an environmental scan, consultation with experts and case study analysis.

CEMA represented the Mayor and City on a panel on emergency leadership at the Multinational Resilience Policy Group workshop. CEMA met with an international group of senior policy

leader from 11 countries to assist their governments in conceptualizing emergency management through community resilience.

CEMA attended the Canada-US Enhanced Resiliency Experiment (CAUSE III), a technology experiment series that provides opportunities to use communications technology in a simulated setting to learn how different technology performs under different circumstances. CAUSE III is a collaborative effort between Defence Research and Development Canada’s Centre for Security Science (DRDC CSS), Public Safety Canada and the US Department of Homeland Security’s Science and Technology Directorate in partnership with other provincial, municipal and non-governmental organizations.





5. Strengthen the Agency

Enhanced operational readiness in the Emergency Operations Centre

Operations in the Emergency Operations Centre (EOC) were reviewed in 2014 to ensure maximum efficiency – including ensuring that all members and partners are supported and have access to the resources they require, and accurate information is provided internally and to citizens of Calgary.

The concept of operations was further refined in 2014. The concept includes inclusion of the Incident Command System (ICS) principles, with like business units and partners grouped into smaller organizational components; the creation of planning, logistics, operations and financial groups; and ensuring adequate representation and clear communication at situational reports.

A sustainable staffing model for the EOC was developed. With a small staff contingent, CEMA may face staffing challenges during a prolonged event.

The sustainable staffing model allows CEMA to leverage the leadership and skill sets of Agency members and partners. The model results in cross-training opportunities, increased Agency collaboration and more resilient operations.

The City's Infrastructure & Information Services (IIS) business unit continued to support CEMA and the Common Operating Picture (COP) software. This included finalization of the COP terms of use and training for Calgary Police Service, Calgary Fire Department and City of Calgary Roads so that the COP could be updated directly by those business units during emergency events; enhanced social media widgets such as inclusion of Instagram which allows real-time situation awareness (allowing COP users to search up to 100 public Instagram images within up to a 5 km radius from a point in the COP); tracking of the ten most common trending words or hashtags used in the Instagram application; enhanced Twitter widget which also allows for a search of up

to 100 tweets within a 50 km radius of a point in the COP, which generates more specific and reliable results; and an updated Flickr widget that can be adapted quickly when external websites modify their applications.

Canada Task Force 2 (CANTF2) training and readiness

In 2014, CANTF2 provided support to several events within Calgary. CANTF2 partnered with Alberta Health Services to deploy emergency medical staff and a field hospital to support the Calgary Stampede parade. CANTF2 provided emergency generators during the October downtown power outage which were used to power traffic signals at key intersections in the affected area (freeing up Calgary Police Service traffic officers); and supported the Calgary Police Service with a small deployment related to an investigation.

CANTF2 members saw a large deployment in Calgary during the "Snowtember" event in September 2014. Members assisted with the

STRATEGIC RESULTS

mitigation of safety hazards and the debris cleanup throughout the city. CANTF2 operated its own Tactical Operations Centre (TOC) from which personnel were deployed; however, CANTF2 command staff were stationed in the Emergency Operations Centre (EOC) which provided instant access to critical information and operational objectives.

There were several training initiatives in 2014 including Incident Management (including Planning, Logistics, and Operations Section Chief), UAV (Unmanned Aerial Vehicle) drone training, CPR training, structural collapse model training, canine training, medical and logistics training.

Thirty-five new members were recruited and completed a three-day intensive boot camp June 6 – 8, 2014, which consisted of completion of a rescue practices certificate, initiation into CANTF2 and training on equipment, policies and procedures. Many of the new members were able to put their learnings into action quickly with participation in the “Snowtember” event in various capacities.

A third full-time staff member was hired for the Logistics Lead position. This position is responsible for the management and maintenance of all of CANTF2's equipment cache. With the exception of the small administrative staff, all members are volunteers. In 2014, the 135 members contributed over 15,000 personnel hours into the program.

CANTF2 provision of support to emergency events and incidents outside of Calgary

As a part of Emergency Preparedness week in May 2014, CANTF2 staged a two day exercise in High River to better prepare the town for an emergency event. CANTF2 members coached and mentored High River officials and partners through a flood response that simulated the events of 2013.

The purpose of this exercise was to establish a system of preparedness, response and recovery to best suit High River's needs. CANTF2 deployed to the Town of High River and provided all of the logistical support including the supply and set-up of a fully functional Emergency Operations

Centre (EOC), sleeping quarters, media assembly area, kitchen, mess hall, washroom and shower facilities and a communications and IT network. The temporary EOC was deployed to as a backup facility for the High River EOC should the facility be impacted by an event (such as from flooding, which did occur in 2013). By strengthening processes such as transfer of command, operations and planning, the temporary EOC would serve to limit the effect of a disaster on a municipality by allowing the response to continue uninterrupted.

Together as partners, CANTF2 (as a part of CEMA) and the Town of High River demonstrated their capacity to collaborate in a large scale event. The exercise demonstrated the partnership's sustainability and resiliency as well as the importance of interoperability between various agencies during a time of need. This is especially important as CANTF2 is available as a municipal, provincial, national and international resource.

LOOKING FORWARD

As of January 1, 2015, the Calgary Emergency Management Agency becomes an individual business unit within the Community Services and Protective Services (CS&PS) department. This transition recognizes the important and expanding role of emergency management and business continuity in Calgary. CEMA's capacity to coordinate emergency response across The Corporation and with external Agency members was tested repeatedly in 2013 and 2014, which provided further acknowledgement that emergency management and business continuity are transforming into primary services that require dedicated resources to meet citizens' needs and The City of Calgary's responsibilities.

The creation of CEMA as a business unit is the next step in the organization's evolution. As a separate business unit, CEMA will be led by a Director who will be the Emergency Planning Official for the city.

Some of the key benefits include:

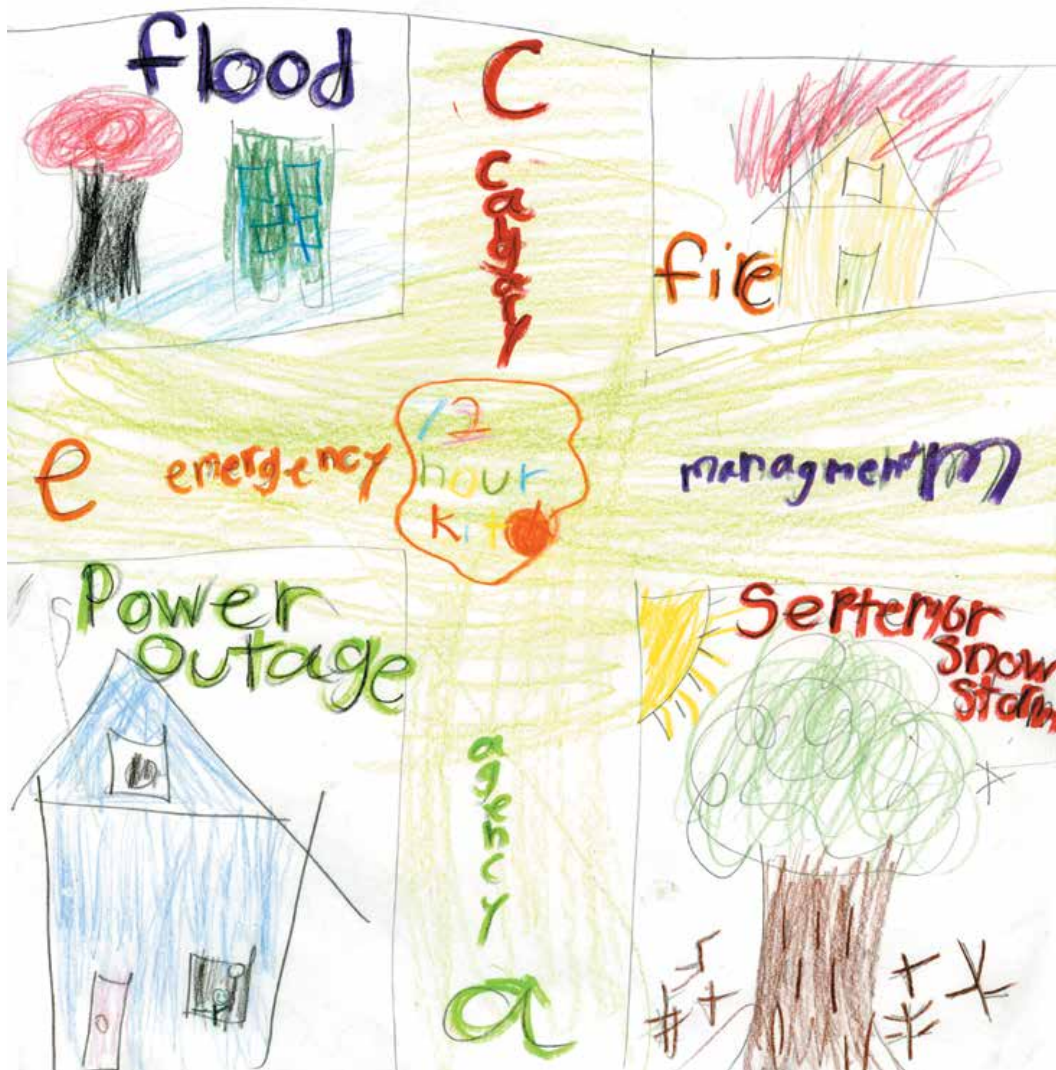
- The City of Calgary will have an Agency with the mandate and focus on comprehensive emergency management and business continuity priorities on behalf of the entire Corporation, ensuring The City's responsibilities and obligations are met. CEMA's

management and staff will undertake a process toward developing a renewed vision and strategic business plan for CEMA, including an implementation plan.

- A dedicated Director will continue to build and leverage the partnerships and relationships with CEMA members, partners, across the community with businesses and volunteers, and with other emergency management and business continuity organizations to further the achievement of CEMA's mandate in all phases of emergency management.

- Positioning The Corporation to better deal with broad emerging trends and issues related to risks or large-scale emergencies or disasters.

CEMA will continue to work year-round to build operational readiness, support community and Corporate recovery from events, support community resiliency, mitigate risk and vulnerability, and provide support for pre-planned events. 2015 will be an exciting year for CEMA as a renewed course is charted and CEMA continues to be a leader in the fields of emergency management and business continuity.



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