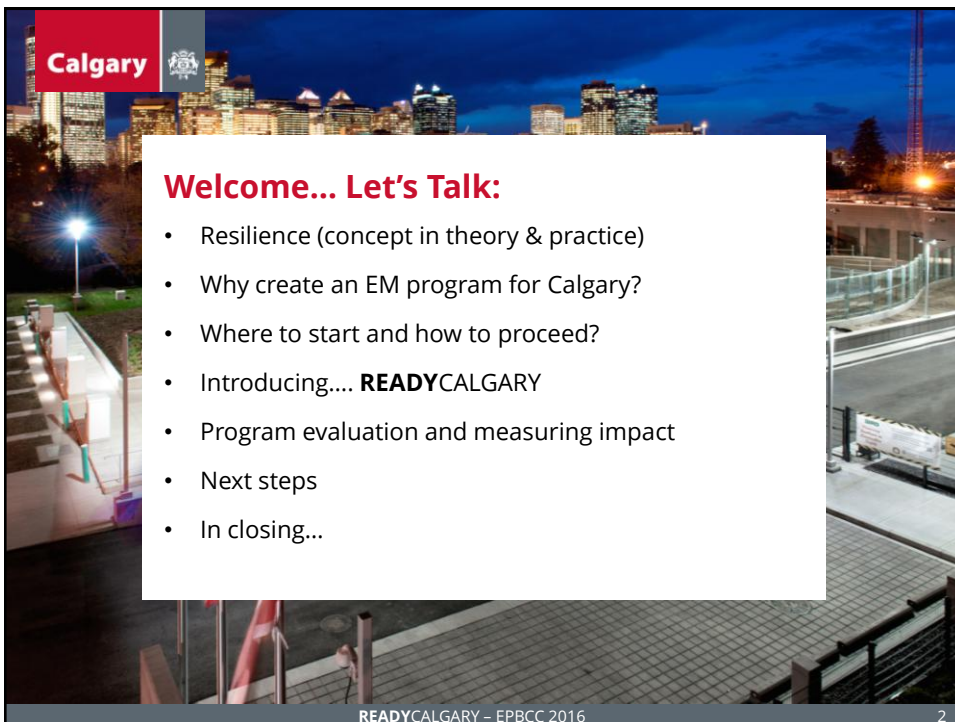**READY**CALGARY
Building Community Resilience

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Calgary Emergency Management Agency (CEMA)
Email: Charles.Bowerman@Calgary.ca

READYCALGARY – EPBCC 2016 1

Welcome… Let's Talk:

- Resilience (concept in theory & practice)
- Why create an EM program for Calgary?
- Where to start and how to proceed?
- Introducing…. **READY**CALGARY
- Program evaluation and measuring impact
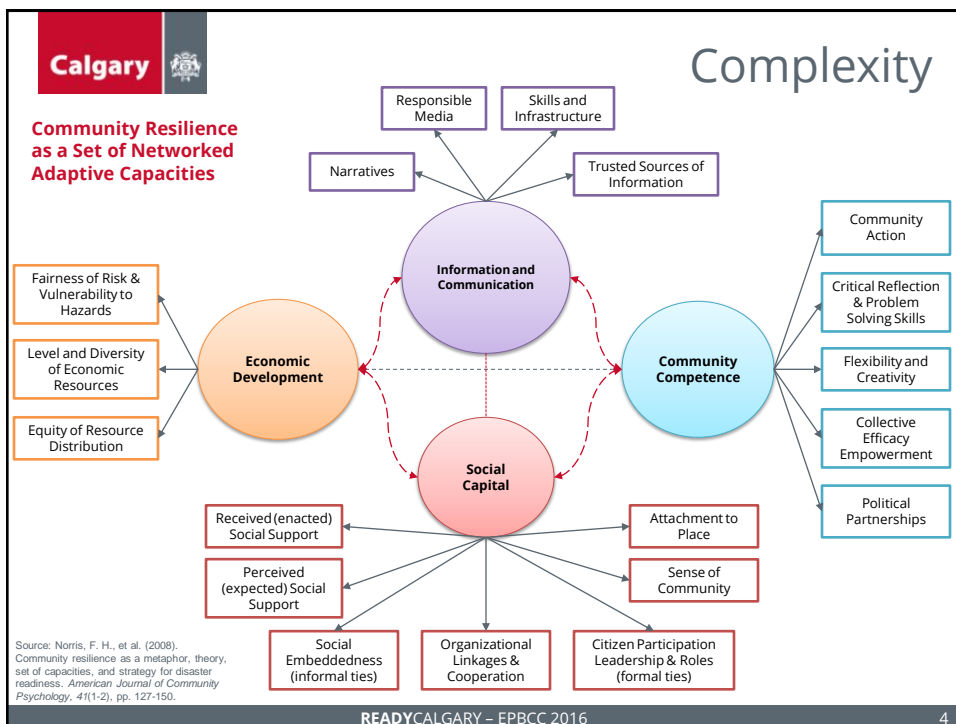- Next steps
- In closing…

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Resilience - Concept

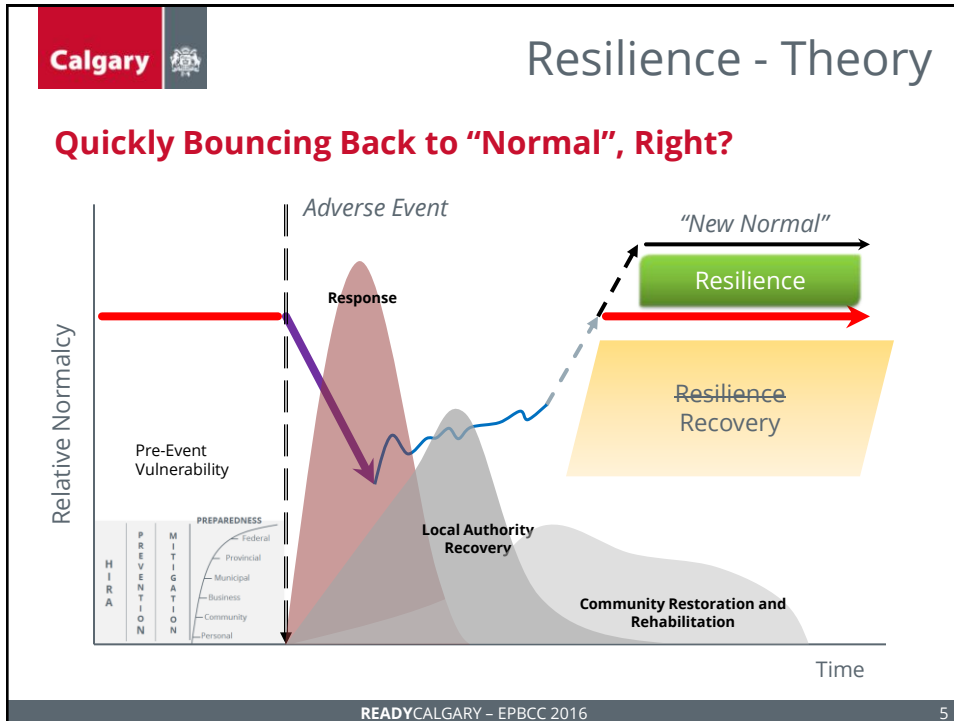**Let's Talk Resilience**

Ontological   Phenomenological   Adaptation   Resistance

Trajectory   Predictability   Temporal

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Complexity

Community Resilience as a Set of Networked Adaptive Capacities

Source: Norris, F. H., et al. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology, 41*(1-2), pp. 127-150.

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2

Resilience - Theory

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Quickly Bouncing Back to "Normal", Right?

In Sum

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So, What is Resilience?

Resilience is…

- <u>Theory</u>: A positive adaptation in the context of significant adversity [1]

- <u>Pragmatic</u>: *Decreasing* vulnerability while *increasing* adaptive capacity

Characteristics of a Resilient Community

- Is aware of its vulnerabilities and local assets

- Has diverse and redundant systems to cope

- Is integrated and shares information ('whole community')

- Is engaged, proactive, adaptive and flexible [2]

[1] Kirmayer, L. J., Sehdev, M., & Isaac, C. (2009). Community resilience: Models, metaphors and measures. *International Journal of Indigenous Health*, *5*(1), 62.
[2] emergencymgmt.com/disaster/What-Is-Community-Resilience.html
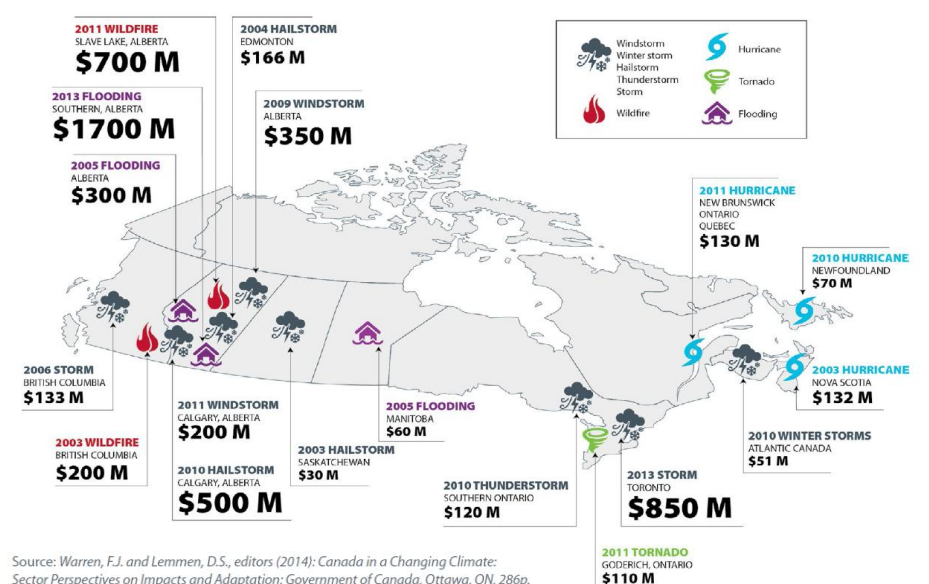
The Need

Date	Name	Summary
2016	Fort McMurray Wildfire	2,400 homes/buildings; Costliest disaster & largest wildfire evacuation in Canadian history.
2014	Downtown Power Outage (Calgary)	Affected approx. 5,000 residents & 10,000 workers for four days.
2014	September Snow Storm (Calgary)	130 yr snowfall high; Affected half of the city's tree population; 74,000 customers without power.
2013	Southern Alberta Floods	Largest evacuation order in the city's history (+75,000); Second costliest disaster ($5b).
2011	Slave Lake Fire	Forced complete evacuation of Slave Lake's 7,000 residents; Destroyed 40% of the town.
2010	Airdrie Train Derailment	30 cars derailed; 8 contained ammonia; Evacuation of 40,000 residents avoided.
2009	H1N1 Pandemic	1,278 confirmed cases hospitalized; 71 died.
2000	Pine Lake Tornado	4th deadliest Canadian tornado.

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The Need

Source: Warren, F.J. and Lemmen, D.S., editors (2014): Canada in a Changing Climate: Sector Perspectives on Impacts and Adaptation; Government of Canada, Ottawa, ON, 286p.

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Calgary

The Need

Stats Canada Report on EM in Canada, 2014
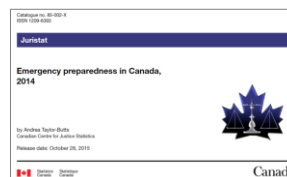
Table 4: **Precautionary measures taken in case of emergency, by census metropolitan area, 2014**

	Canadians whose household has:				
	Battery-operated or wind-up radio	Alternative heat source	Back-up generator	Alternative water source	Other emergency precautions employed in the home [1]
Census metropolitan area			Percent		
Calgary	49	44	10	37	15
Canada	58	48	23	43	21

1. 'Other' emergency precautions includes measures such as: checking and replenishing emergency supplies, having an extra supply of fuel on hand, keeping exits clear and ensuring arrangements have been made for pets.
Note: Responses of 'don't know/not stated' are included in the percentage calculation but are not shown when representing 5% or less of respondents.
Source: Statistics Canada, Survey of Emergency Preparedness and Resilience in Canada, 2014.

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ISSN 1209-6393

Juristat

Emergency preparedness in Canada, 2014

by Andrea Taylor-Butts
Canadian Centre for Justice Statistics
Release date: October 28, 2015

Statistics Statistique
Canada Canada   Canadá

Calgary

The Need

Stats Canada Report on EM in Canada, 2014

Table 6: **Emergency planning activities, by census metropolitan area, 2014**

	Canadians whose household has:						
	Emergency exit plan	Designated meeting place for household members [1]	Contact plan for household members [1]	Household emergency supply kit [2]	Vehicle emergency supply kit [3,4]	Extra copies of important documents	List of emergency contact numbers	Plan for meeting special health needs [5]
Census metropolitan area				Percent			
Calgary	58	27	52	39	65	54	67	64
Canada	60	33	55	47	59	53	69	62

1. Excludes single-person households (13%).
2. A household emergency supply kit could include items to be used in an emergency, for example, water, food, medicine, flashlight, cash, etc. (e.g., a 72-hour emergency kit).
3. A vehicle emergency supply kit could include items such as a blanket, first aid kit, flashlight, shovel, etc.
4. Excludes those who reported that they lived in a household that did not have a vehicle (6%).
5. Percentage based only on those indicating that they or someone in their household has special medical needs (e.g., dependence on medication, special medical equipment or mobility issues) (22%).
Note: Percentage calculation includes responses of "don't know" and not stated.
Source: Statistics Canada, Survey of Emergency Preparedness and Resilience in Canada, 2014.

The Need

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Stats Canada Report on EM in Canada, 2014

Table 10: **Types of weather-related, natural disasters and human-induced risks Canadians believe their community is likely to face, by province, 2014**

Weather-related/natural disaster risks	Percent						
	Blizzards, winter storms, ice storms or extreme cold	Floods	Wildfires or forest fires	Droughts	Tornadoes	Industrial or transportation accident	No risk
Alberta	90	45	51	48	49	56	17
Total (=N)	86	42	39	34	32	50	13

E use with caution
F too unreliable to be published
Note: Responses of 'don't know/not stated' are included in the percentage calculation but are not shown when representing 5% or less of respondents. Respondents were asked to indicate which events they believe their community is likely to experience. Respondents were asked to include only events that would result in a severe disruption to their daily activities and could provide as many responses as applied.
Source: Statistics Canada, Survey of Emergency Preparedness and Resilience in Canada, 2014.

Need = ✓

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Ok, There's a Need. Where to Start?

Establish Vision

1. Top/Down and Bottom/Up Approach
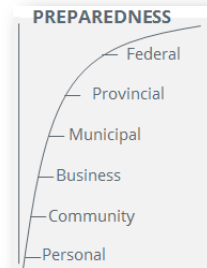2. Pragmatic

Establish Scope

- Who is our target audience?
  - Dependent on definition of '*community*'
    - ✓ People who aim to be more prepared for future emergencies and disasters
    - ✓ People who enjoy engaging their neighbourhoods and communities
    - ✓ People who enjoy learning in a team environment

Who?

Roles & Responsibilities for Stakeholders

- City of Calgary / CEMA
- Agency Members, Invited Partners & Other Emergency Management Organizations / Resources
- Community Associations, Special Interest Groups, NPO, NGO
- Citizens

PREPAREDNESS
- Federal
- Provincial
- Municipal
- Business
- Community
- Personal

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First Steps

Stakeholder Sessions

CEMA
Strategic Planning Sessions

Partners & Stakeholders
- Public Safety Canada
- Alberta Emergency Management Agency (AEMA)
- Alberta Health Services (AHS)
- CALSARA
- Calgary Fire Dept.
- Calgary Police Service
- City of Calgary
  - Calgary Neighbourhoods (CN)
  - Customer Service & Communications (Crisis Comms)

Community Focus Group
- Bridges of Love   (Faith based CERT)
- Calgary Chinese Community Service Association (CCCSA)
- Calgary Chinese Elderly Citizen's Association (CCECA)
- Carya   (prev: Calgary Family Services)
- East Village Residents Association
- Hillhurst / Sunnyside Comm. Assoc.
- Ismail Council for the Prairies
- United Way / CCVO (NPO/NGO sector)

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Research

Acknowledgements

- Alberta Emergency Management Agency (AEMA)
- British Columbia Housing's Rapid Damage Assessment Program
- CEMA Agency Members (internal business units at The City of Calgary, external governmental agencies and external partners) and invited partners (NPOs and NGOs)
- Emergency Management Ontario, Ministry of Community Safety and Correctional Services - *Hazard Identification and Risk Assessment for the Province of Ontario, 2012*
- Federal Emergency Management Agency (FEMA)
- FEMA/Ready.gov
- Getprepared.gc.ca (Government of Canada)
- Insurance Bureau of Canada (IBC)
- Justice Institute of British Columbia (JIBC)
- Public Safety Canada
- Seattle Office of Emergency Management's '*Seattle Neighborhoods Actively Prepare (SNAP)*' program
- The City of Bellevue's '*Strengthening Preparedness Among Neighbors (SPAN)*' program
- The City of Calgary
- The Government of Alberta
- Washington Military Department - Emergency Management Division's '*Map Your Neighborhood (MYN)*' program
- Worker's Compensation Board - Alberta

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Building Community Resilience

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Vision

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Program Goals

1. To actively engage and **empower** individuals to create a whole community.
2. To educate and inform Calgarians on the importance of emergency **preparedness**.
3. To develop forms of **resilience** to the negative impacts of future disasters.

Intent

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Course Objectives

1. Support overall prevention/mitigation, preparedness, response and recovery building efforts in Calgary.
2. Identify and reduce potential risks.
3. Prepare for a major emergency or disaster.
4. Identify preparedness, response and recovery activities.
5. Support those in need until emergency services personnel arrive.
6. Provide information effectively and efficiently to emergency services personnel when required.
7. Assist others to relieve their own stressors and of those affected.
8. Tailor activities to engage all sectors of the community.
9. Identify and build on existing strengths.
10. Encourage personal and organizational preparedness.
11. Participate in donation and volunteer opportunities for ongoing community safety.
12. Share information on municipal, provincial and federal support services with others.

Materials

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What is the READYCALGARY Program?

Approach

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Course Format

Section 1: **Individual & Family**	Section 2: **Community**
Unit 1: Introduction	Unit 6: Introduction
Unit 2: Preparedness	Unit 7: Preparedness
Unit 3: Neighbourhood Preparedness	Unit 8: Response
Unit 4: Response	Unit 9: Recovery
Unit 5: Recovery	Unit 10: Course Review

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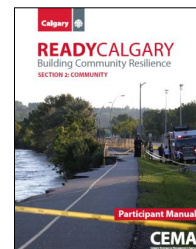## Content

Section 1: Individual & Family

Includes:
- ➤ Creating & Testing Emergency Action Plans (home, work, children, pets)
- ➤ 72-hour Kits (home, work, children, pets)
- ➤ Mitigating Home Hazards
- ➤ Vulnerable Populations
- ➤ Neighbourhood Hazards and Risks (pre- and post-emergency/disaster)
- ➤ Evacuation & Shelter-in-Place Procedures
- ➤ Community Support & Reception Centres
- ➤ Protective Actions & Equipment
- ➤ Insurance and Financial Recovery
- ➤ Replacing Important Documents
- ➤ Psychosocial Support
- ➤ Volunteering & Donations
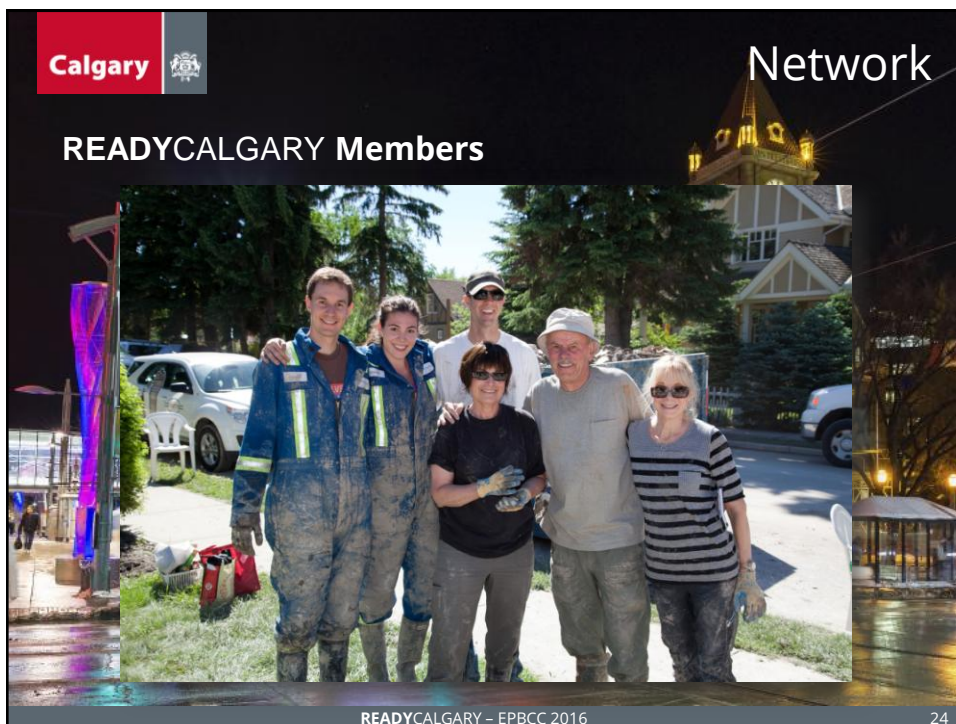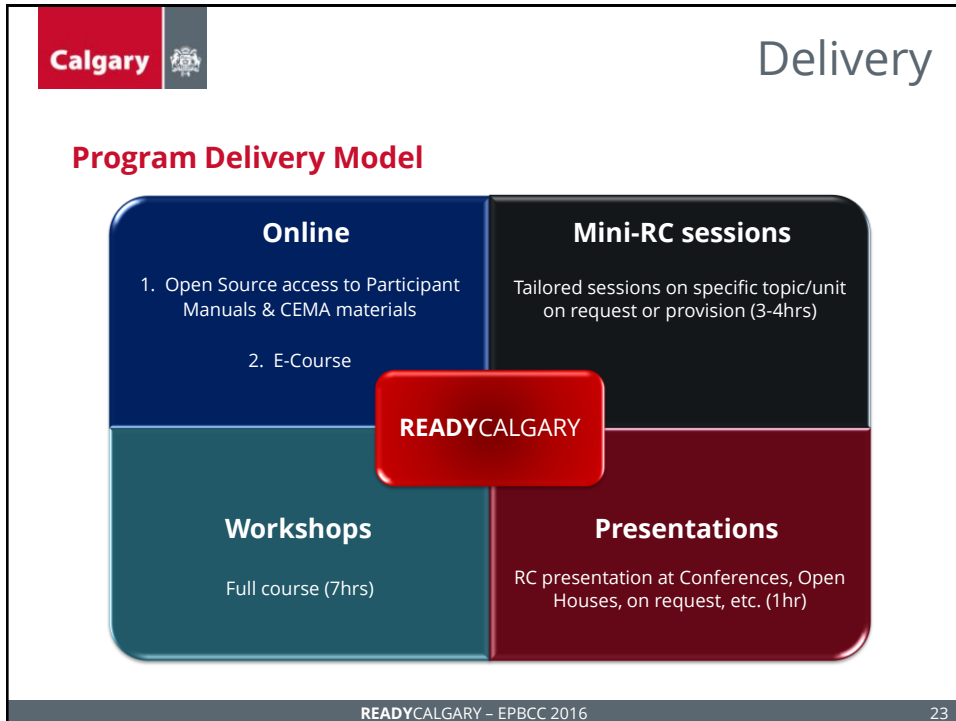- ➤ Provincial, Municipal and Community Services

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Building Community Resilience
SECTION 1: INDIVIDUAL & FAMILY

Participant Manual
CEMA

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Content
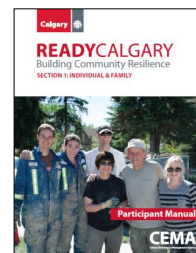
Section 2: Community

Includes:
- ➤ Community Hazards and Risks
- ➤ Hazard Identification and Risk Assessment (HIRA)
- ➤ Build a Community Map
- ➤ Community-Level Emergency Action Plan (EAP)
- ➤ Business Continuity
- ➤ Developing an Emergency Communications Plan (ECP)
- ➤ Exercises, Practice and Program Maintenance
- ➤ Community Response
- ➤ Activating your Community Emergency Action Plan
- ➤ Activating an Emergency Communications Plan (ECP)
- ➤ Developing a Community Support Structure
- ➤ Donation Policy & Volunteer Management
- ➤ Psychosocial Support and Services

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Building Community Resilience
SECTION 2: COMMUNITY

Participant Manual
CEMA

Delivery

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Program Delivery Model

Online	Mini-RC sessions
1. Open Source access to Participant Manuals & CEMA materials	Tailored sessions on specific topic/unit on request or provision (3-4hrs)
2. E-Course	

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Workshops	Presentations
Full course (7hrs)	RC presentation at Conferences, Open Houses, on request, etc. (1hr)

Network

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READYCALGARY **Members**

Measuring Resilience

Measuring Community Resilience

What is Resilience, again?

- <u>Conceptual</u>: A positive adaptation in the context of significant adversity

- <u>Pragmatic</u>: *Decreasing* vulnerability while *increasing* adaptive capacity

Quantitative (indicators of resilience)
- Industry surveys (Stats Canada)
- Articles, creation of plans & new initiatives, donations, volunteerism
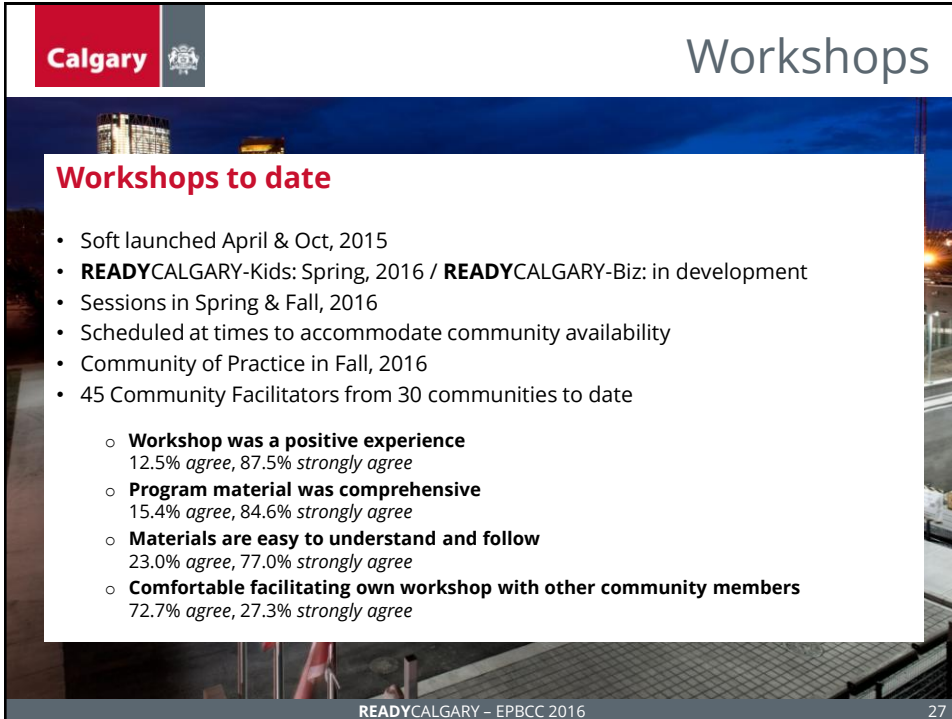- HIRA results

Qualitative (perceptions of resilience)

- Narratives (citizens, community, media, professionals)
- Surveys, articles, academic journals
- Stories of individual and shared experience, perception
- Social (human) capital development

Challenges

Program Challenges

- Organizational Commitment, Capacity, Resources, Funding

- Legal Concerns

- Liability / Insurance

- Volunteer Management

- Communication with Members (non-/activations)

- Promotion

- Registration Process (PIC, security clearance check, TOA, community endorsement letter)
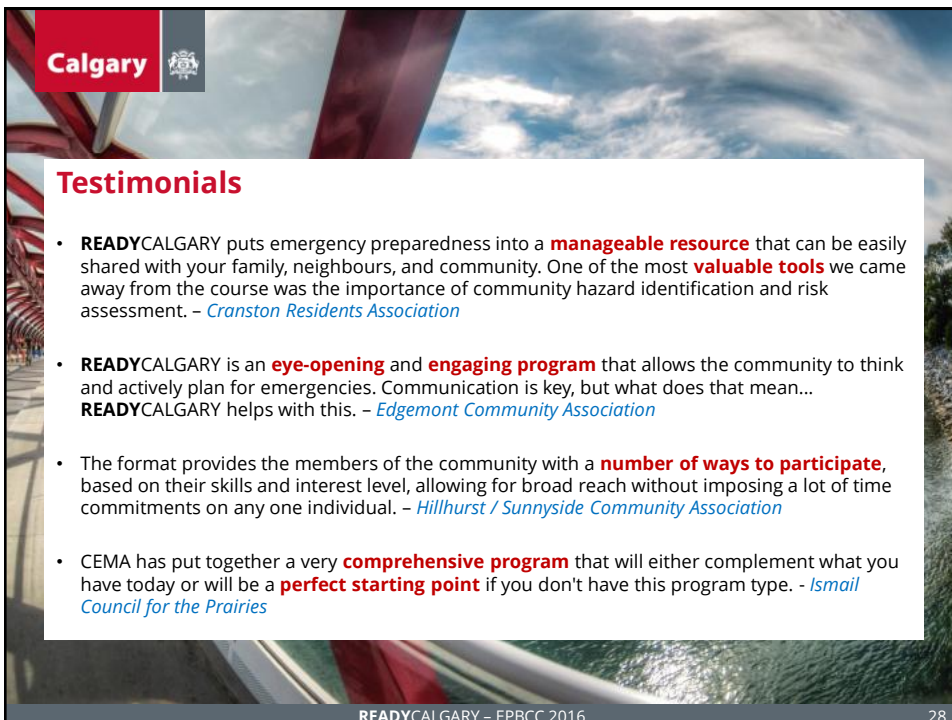
- Engagement Strategy

Workshops

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Workshops to date

- Soft launched April & Oct, 2015
- **READY**CALGARY-Kids: Spring, 2016 / **READY**CALGARY-Biz: in development
- Sessions in Spring & Fall, 2016
- Scheduled at times to accommodate community availability
- Community of Practice in Fall, 2016
- 45 Community Facilitators from 30 communities to date

  o **Workshop was a positive experience**
    12.5% *agree*, 87.5% *strongly agree*
  o **Program material was comprehensive**
    15.4% *agree*, 84.6% *strongly agree*
  o **Materials are easy to understand and follow**
    23.0% *agree*, 77.0% *strongly agree*
  o **Comfortable facilitating own workshop with other community members**
    72.7% *agree*, 27.3% *strongly agree*
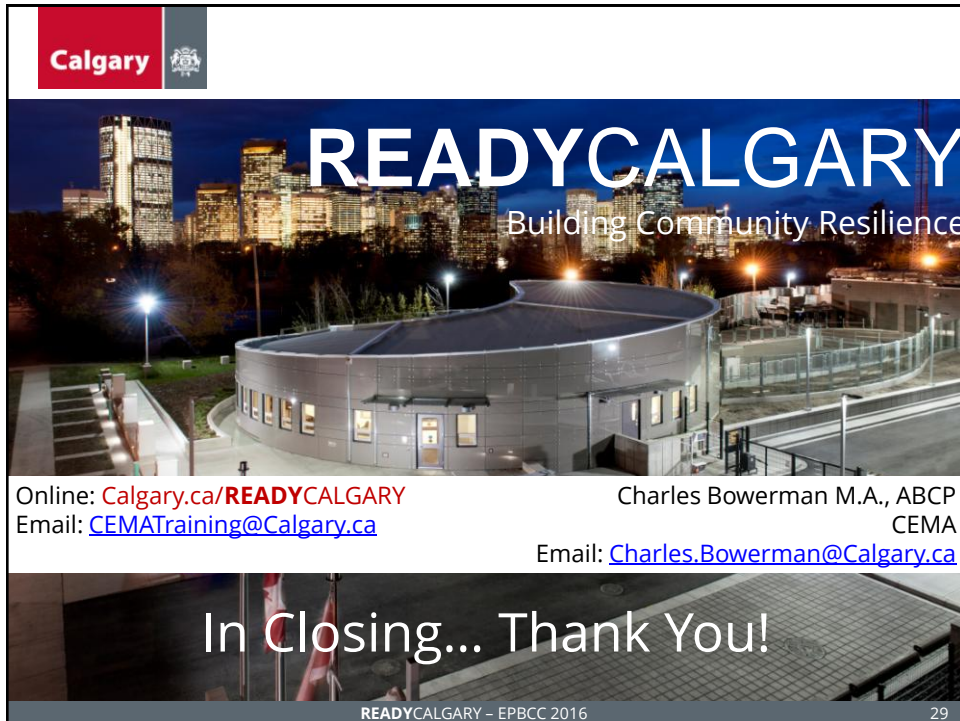
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Testimonials

- **READY**CALGARY puts emergency preparedness into a **manageable resource** that can be easily shared with your family, neighbours, and community. One of the most **valuable tools** we came away from the course was the importance of community hazard identification and risk assessment. – *Cranston Residents Association*

- **READY**CALGARY is an **eye-opening** and **engaging program** that allows the community to think and actively plan for emergencies. Communication is key, but what does that mean... **READY**CALGARY helps with this. – *Edgemont Community Association*

- The format provides the members of the community with a **number of ways to participate**, based on their skills and interest level, allowing for broad reach without imposing a lot of time commitments on any one individual. – *Hillhurst / Sunnyside Community Association*

- CEMA has put together a very **comprehensive program** that will either complement what you have today or will be a **perfect starting point** if you don't have this program type. - *Ismail Council for the Prairies*

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In Closing… Thank You!

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