



**ALBERTA**  
**EMERGENCY**  
**ALERT**

**Government of Alberta ■**

**2014 Stakeholder Summit**

**Nov. 24, 2014**

**Stop • Listen • Respond**

# Alerts Are Happening (Nov. 22)

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## ALBERTA

### Environment Canada

- 6 Snowfall Warnings
- 3 Wind Warnings

12 Serious Road Closures

## CANADA

- British Columbia – Cost of North Vancouver flood nears \$1 million
- Ontario – Power restored to east end after natural gas leak forced shutoff
- Prince Edward Island – Poor weather leading to ferry and bridge shutdowns
- Saskatchewan – Icy highways closed in northwest, eastern Sask.

## INTERNATIONAL

- China – 6.3 Magnitude Quake Jolts SW China, 1 Killed
- Madagascar – Plague kills 40 in Madagascar as WHO warns the toll could climb
- United Kingdom – Hotel gas blast at Hyatt Regency in London sees 14 hurt
- United States – With Snow Still Piled High, Buffalo Faces Flooding

**ALBERTA EMERGENCY ALERT**

# Follow Alberta Emergency Alert?

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## Airdrie sour gas leak emergency alert ends

Emergency crews say rotten egg odour may be bothersome but is not harmful

[CBC News](#) Posted: Nov 23, 2014 9:21 AM MT Last Updated: Nov 23, 2014 1:14 PM MT

The Alberta Emergency Alert issued over a sour gas leak near Airdrie has ended.

According to the website, the gas is no longer being released and residents who had been evacuated will be allowed to return home as the utilities are restored.

**The press  
and public  
do**



**ALBERTA EMERGENCY ALERT**

# A Digital Alerting System

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- **Province-wide coverage (about 4.1 million people)**
- **Government-owned infrastructure, multiple contracts**
- **Web-based tool for Public Safety Partner users**
  - » **Federal and Provincial Government Departments**
  - » **All Municipalities, First Nations, Police Agencies**
- **Alerts received/distributed by equipment at voluntary broadcasters**
- **Automatically posted to social media, sign systems (511)**
- **Based on standard (Common Alerting Protocol - Canadian Profile)**

# Advantages of a Digital System

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- **Fast & Mobile Activations (web-based)**
- **Type into blank fields and send (templates)**
- **Audio automatically generated through a text-to-speech engine**
- **Expandable to additional languages**

# Creating An Alert

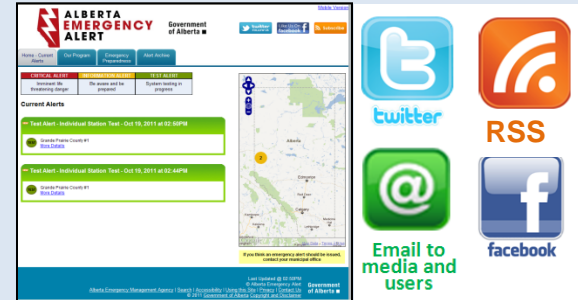
## Trained Users



- Government Departments
- First Nations
- Municipalities



## Public



[www.emergencyalert.alberta.ca](http://www.emergencyalert.alberta.ca)



- Media Partners (Distributors)
- AB Transportation Signs

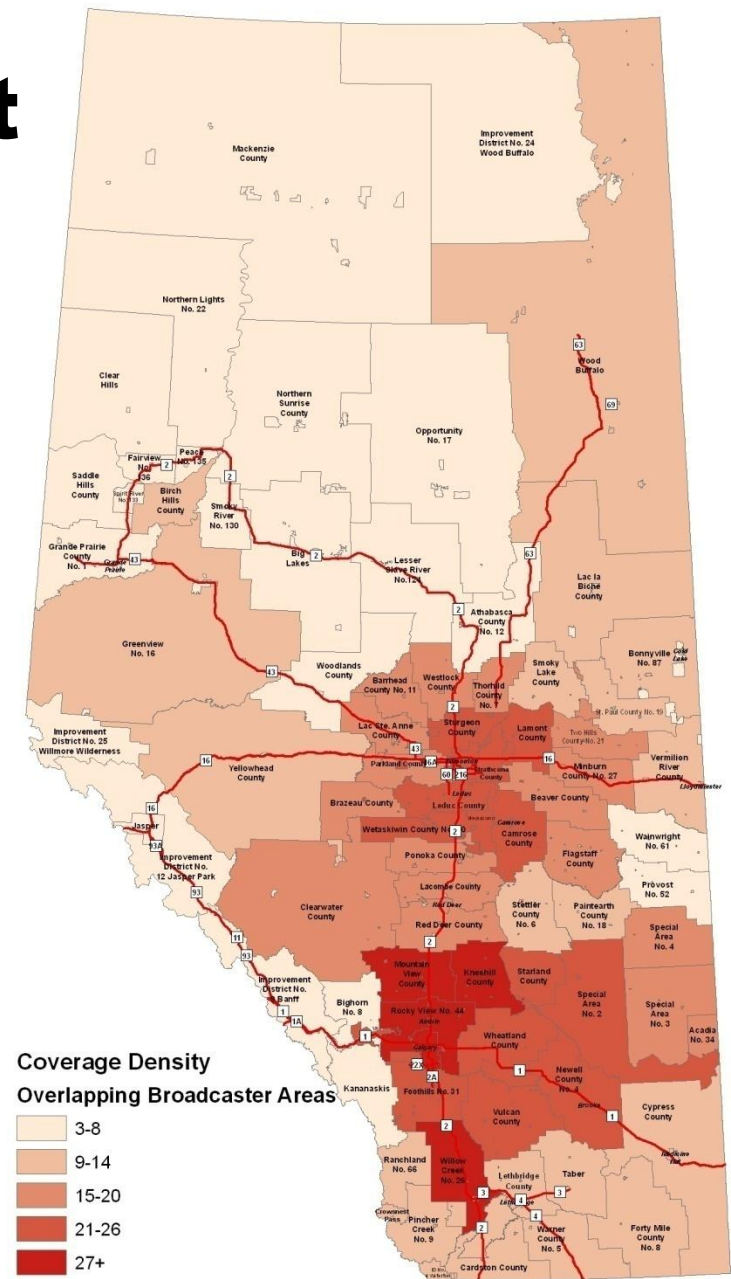
# Distribution Methods

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- **Alberta Emergency Alert utilizes various ways to distribute alerts to Albertans**
  - Radio and television
  - Mobile Application for Smartphones (iOS and Android)
  - RSS Feed
  - Facebook and Twitter
  - Road signs
  - Amateur Radio (Southern Alberta Repeater Network)
  - AMBER Alert email to all GoA employees
  - Commercial digital outdoor signs

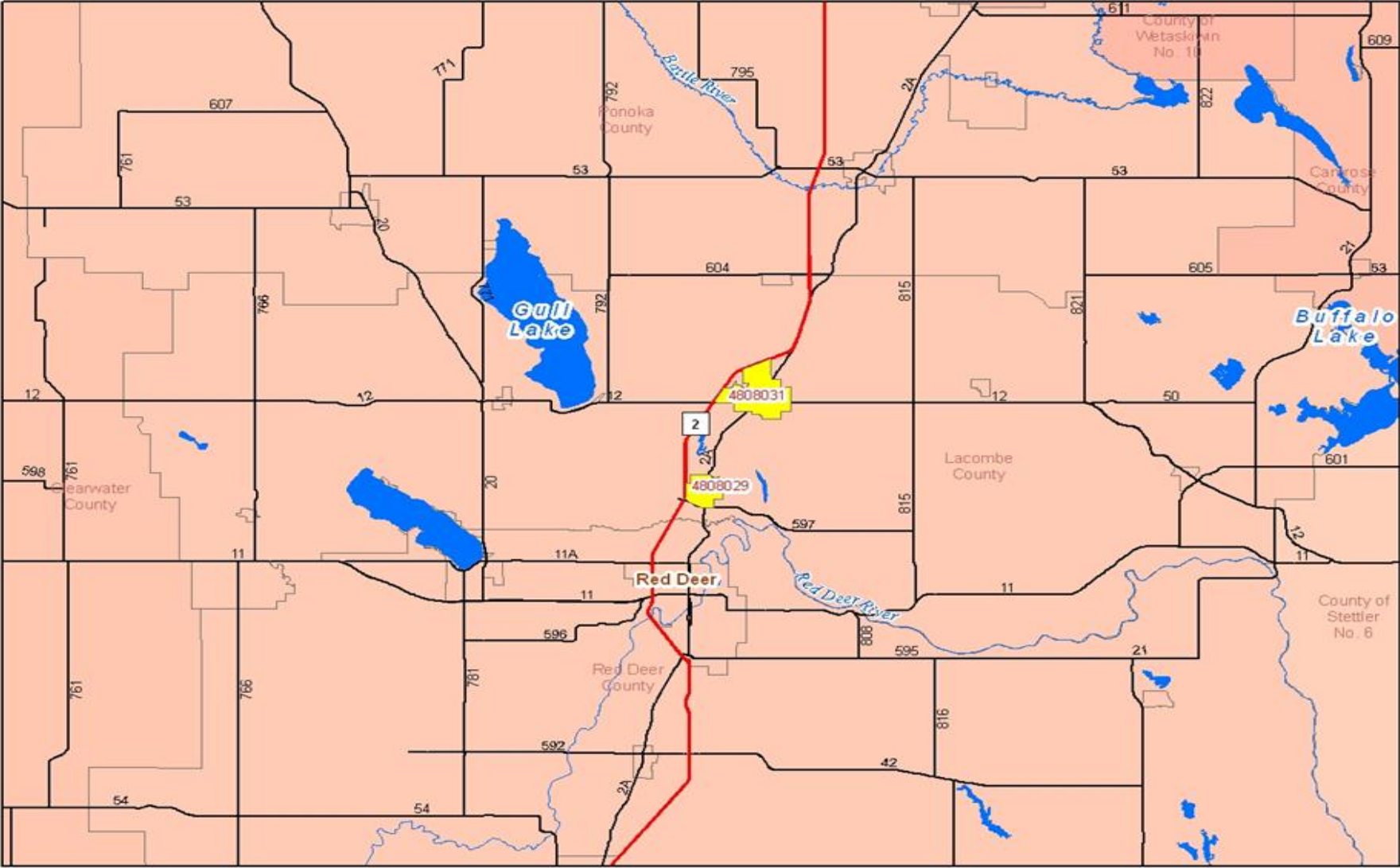
# Participating Broadcast Distributors

- Dedicated IP equipment at each site
- VPN feeds
- 131 television and radio distributors
  - » Includes French





# Increasingly Precise Locations



# A Dedicated Website

The screenshot shows the homepage of the Alberta Emergency Alert website. At the top left is the logo for Alberta Emergency Alert, featuring a stylized red and white arrow pointing upwards and to the right, with the text "ALBERTA EMERGENCY ALERT" in bold. To the right of the logo is the text "Government of Alberta". In the top right corner, there is a link for "Mobile Version" and three social media icons: Twitter (Follow Us), Facebook (Like Us On Facebook), and a "Subscribe" button.

Below the header is a navigation bar with four buttons: "Home - Current Alerts", "Our Program", "Emergency Preparedness", and "Alert Archive".

Under the navigation bar is a table with three columns: "CRITICAL ALERT" (Imminent life threatening danger), "INFORMATION ALERT" (Be aware and be prepared), and "TEST ALERT" (System testing in progress).

Below the table is the "Current Alerts" section, which contains two identical alert entries. Each entry has a green header with the text "NEW Test Alert - Individual Station Test - Oct 19, 2011 at 02:50PM" and "02:44PM" respectively. Below the header is a white box containing a "TEST" icon and the text "Grande Prairie County #1" with a link to "More Details".

On the right side of the page is a map of Alberta with a yellow circle containing the number "2" in the western part of the province. The map shows major cities like Edmonton, Red Deer, Calgary, Kamloops, Kelowna, Lethbridge, and Medicine Hat.

At the bottom of the page is a blue footer with the text "Last Updated @ 02:50PM", "© Alberta Emergency Alert", and "Government of Alberta". There are also links for "Search", "Accessibility", "Using this Site", "Privacy", and "Contact Us".

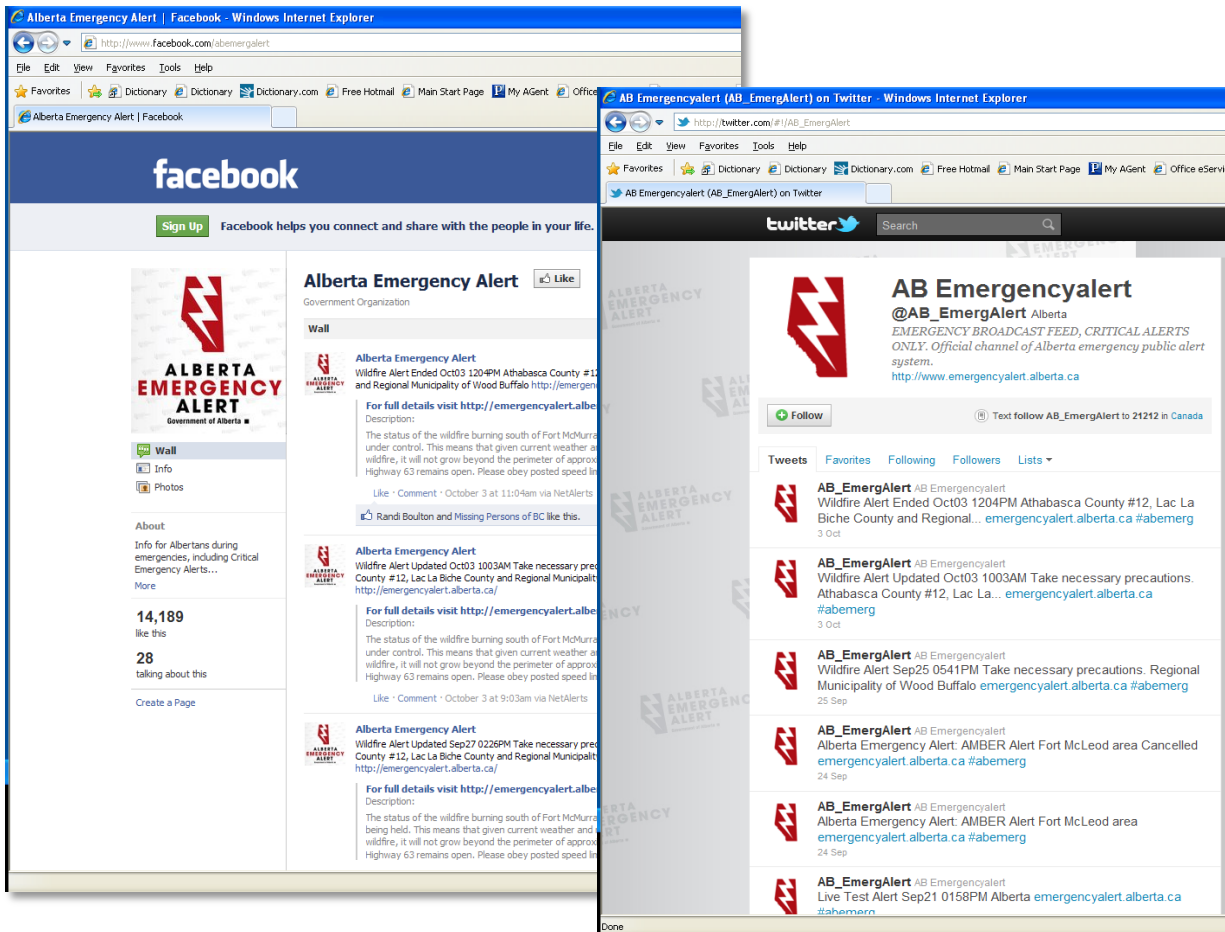
Now linked to the  
GoA [www.Gov.ab.ca](http://www.Gov.ab.ca)  
and  
Alberta 511  
<http://511.alberta.ca/>

- **63.5 M hits** in 2013 to the dedicated website. 84 M anticipated in 2014
- **Average 1500 visitors per day**

If you think an emergency alert should be issued, contact your municipal office

<http://www.emergencyalert.alberta.ca/>

# Automatic Post to Social Media



- 72K Facebook
- 52K Twitter
- Over 122,000 followers

<https://www.facebook.com/abemergalert>

[https://twitter.com/AB\\_EmergAlert](https://twitter.com/AB_EmergAlert)

**ALBERTA EMERGENCY ALERT**

# How Often is Alberta Emergency Alert Used?

Event	2014 by Type (YTD)			2013			2012		
	Information	Critical	Total	Information	Critical	Total	Information	Critical	Total
Water Supply/Quality	9	1	10	1		1	2	1	3
Telephone Service	8	1	9	1		1	2		2
High Water Level	8		8	23	4	27	5	1	6
9 1 1 Service Inoperative	5	1	6		1	1		2	2
Overland Flood	4		4	9	6	15			0
Flood Warning	4		4	3		3	1		1
AMBER Alert		3	3		1	1			0
Electricity Supply	3		3	1		1	2		2
Flood Watch	2		2	5		5	4		4
Wildfire	2		2		2	2	6	7	13
Civil Emergency (water)	2		2						
River Freeze/Break-up Advisory	2		2	1		1	2		2
Spring Runoff Advisory	2		2	1		1			0
Train accident	2		2						
Roadway Closure	1		1	9		9	2		2
Possible Tornado		1	1		8	8	1	10	11
High Stream flow Advisory	1		1	4		4	3		3
Hazardous Road Condition	1		1	3		3	1		1
Hazardous Materials	1		1	1	1	2	1		1
Ice Jam Advisory	1		1	1		1			0
Air Quality	1		1						
AMBER Alert - Interprovincial	1		1			0	1		1
Natural Gas Supply	1		1			0	1		1
Flash Flood			0	2	4	6			0
Water Quality			0	3		3			0
Dam Overflow			0	2		2			0
River Breakup Advisory			0	2		2	2		2
Strong Winds			0	1		1	4		4
Tornado			0		1	1	2	3	5
Bridge Closure			0			0	1		1
Winter Storm			0			0	1		1
<b>Total</b>	<b>61</b>	<b>7</b>	<b>68</b>	<b>73</b>	<b>28</b>	<b>101</b>	<b>44</b>	<b>24</b>	<b>68</b>
Percentage Change (2013 - 2012)				65.9%	16.7%				

# Full Range of Alerts

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- **Critical Alerts**



- **Information Alerts**

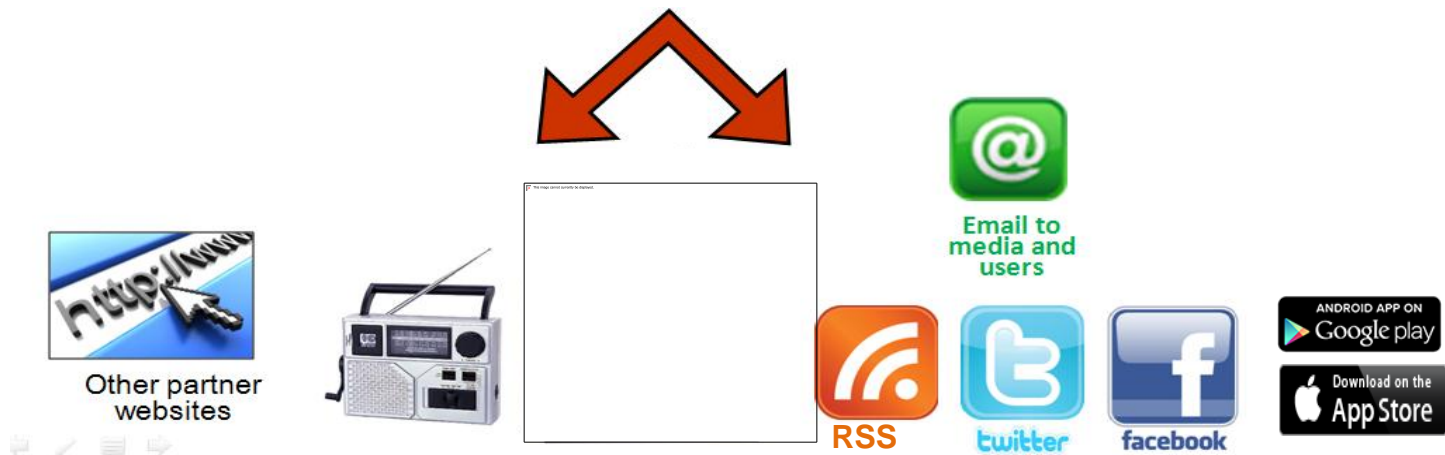


# Critical Alerts

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*Where life and safety are under immediate threat  
and time is critical*

- Directly and automatically interrupt radio and television
- Goes to all available mediums



# Examples of **Critical Alerts**

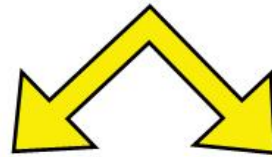
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- **Deadly Air/ Water Quality Issue**
- **Aircraft Crash**
- **Civil Emergency**
- **Terrorism**
- **Wildfire/ Forest Fire**
- **Industrial/ Wide Spread Urban Fire**
- **Flash Flood**
- **Dam Overflow**
- **Earthquake**
- **Magnetic Storm**
- **Landslide**
- **Meteorite**
- **Chemical/Biological/Radiological Threat**
- **Explosives**
- **AMBER Alert**
- **Catastrophic loss of 911**
- **Train Derailment**
- **Tornado**

# Information Alerts

*Where life and safety are NOT under an immediate threat.*

- To be aware and get prepared
- Less intrusive, emailed to users/broadcasters posted on webpage



[www.emergencyalert.alberta.ca](http://www.emergencyalert.alberta.ca)



Other partner websites



Email to media and users



RSS



facebook





# Examples of Information Alerts

- Animal Health/ Dangerous Animal
- **Air Quality**
- High Water
- Overland Flooding
- Avalanche
- Volcano Effects
- Hazardous Materials
- **Blood, Drug and Food Shortage**
- **Hospital Incidents (closures, lock downs, redirection to alternate facilities)**
- Marine Incidents
- Missing Vulnerable Person
- **Infectious Diseases (Human/Animal/Plant)**
- **Essential Services (School Lockdowns,**
- Transit/Bridge/Road Closures, Critical Service Outages, Loss of Ambulance Service)**
- **Water Quality**
- Winter Storm/Ice
- Wind/Dust Storm
- Freezing Rain
- Heavy Rainfall, Thunderstorm, Flash Freeze, Cold Wave, Wind Chill, Frost
- High Heat and Humidity, Heat Wave
- Utility Outages



# Current State of Alerting

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- The frequency and severity of events are increasing
- Alberta Emergency Alert (AEA) provides lifesaving alerts that inform Albertans of disaster and emergency events
- The public trusts, recognizes and relies on AEA – as a result - AEA is a national and international alerting leader
- Communities across Alberta participate in AEA
- Today 131 out of 250 broadcasters voluntarily participate in Alberta Emergency Alert
- The public's way of receiving information is changing

# Do You App?

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## Alberta Emergency Alert App

<http://www.emergencyalert.alberta.ca/content/about/signup.html>

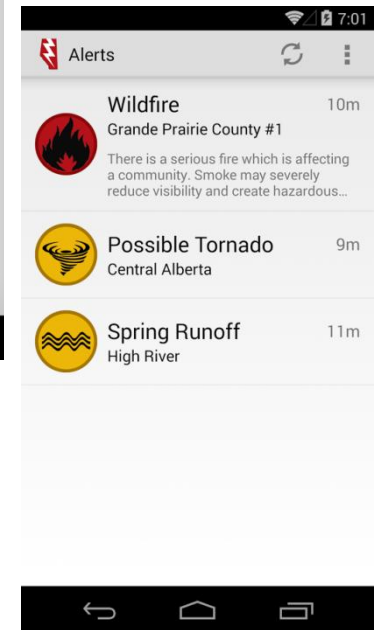
OR

## Android

<https://play.google.com/store/apps/details?id=ca.ab.gov.aea>

## Apple

<https://itunes.apple.com/us/app/alberta-emergency-alert/id887604348>



**ALBERTA EMERGENCY ALERT**



**ALBERTA**  
**EMERGENCY**  
**ALERT**

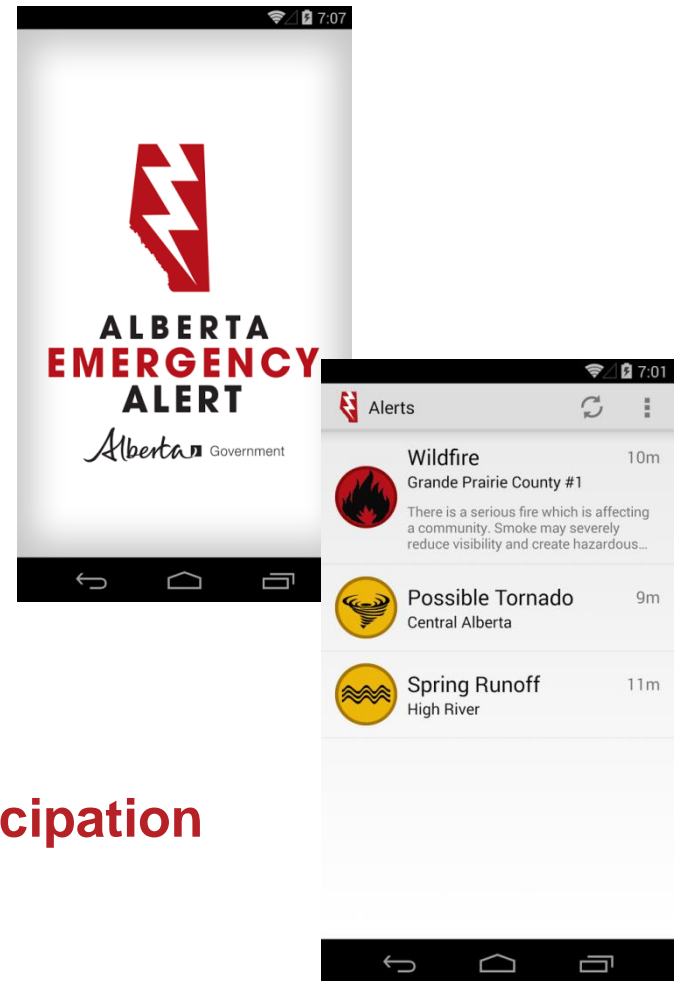
Government of Alberta ■

**What's Next**

Stop • Listen • Respond

# What's next in Alberta?

- **Extend Alberta Emergency Alert's reach**
  - E-mail to all GoA employees
- **Improve infrastructure hardware**
- **Improve the software**
- **Enhance community engagement**
  - New communications strategy
  - First Nations training
  - Digital outdoor signs
  - New on-line training
  - Linking to other services
- **Continuing to support broadcaster participation**



# What's next in Canada

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- **Alerting is coming to other provinces**
- **Changing Regulatory Environment**
  - CRTC decision (2014-444)
  - Common Look and Feel Committee
  - Public Awareness Campaign
- **Changing Technology - Needs**
  - Wireless Public Alerting Service
  - National Wireless Technology Group

# Other Provinces

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- **National Alert Aggregation & Dissemination System (NAADS)**
- **September 4, 2014** – The CRTC has issued a regulatory policy that requires all TV, radio, cable and satellite operators to broadcast important “threat to life” public safety alerts distributed over Pelmorex’s National Alert Aggregation & Dissemination (NAAD) System.

# **CRTC Decision**

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- **“Public alerting is at the core of the public service obligation of all broadcasters”**
- **March 31 2015 and 2016 deadlines**
- **National public awareness campaign 2015**
- **Broadcaster liability clarified**
- **Alberta and NAADS**
- **CLF as the guidance document**
- **Wireless Public Alerting Service**



# Common Look and Feel

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- **CLF Guidance Document recognized as guidelines for public alerting**
- **Work has started so your voice is important**

# Wireless Public Alerting Service

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- Represents the future of public alerting and will be created over the next three years
- Canadian Wireless Public Alerting Requirements completed
  - Compatible with American Wireless Emergency Alerts (WEA) Service
- Requires changes to handset specifications

# National Technical Working Grp.

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- WPAS requires new technology so CRTC task its Interconnection Steering Committee (CISC)
- WPAS specs. (Task TIF33) due March 31, 2015

# Summary

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- **Public alerting is changing because the public's needs are changing**



**ALBERTA**  
**EMERGENCY**  
**ALERT**

Government of Alberta ■

**The Future: Social Media and Emergency  
Management**

Stop • Listen • Respond

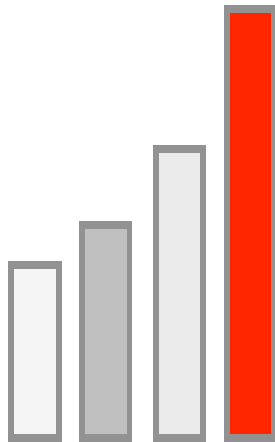
# Current Situation

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**Alerting is about effectively  
communicating**

**Force = Mass (big data) x  
Acceleration**

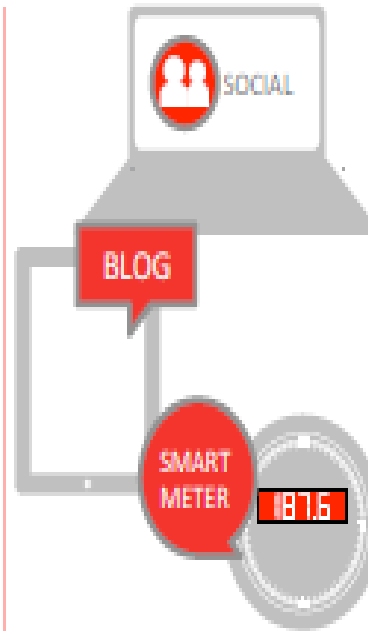
# Elements of Big Data (4V's)



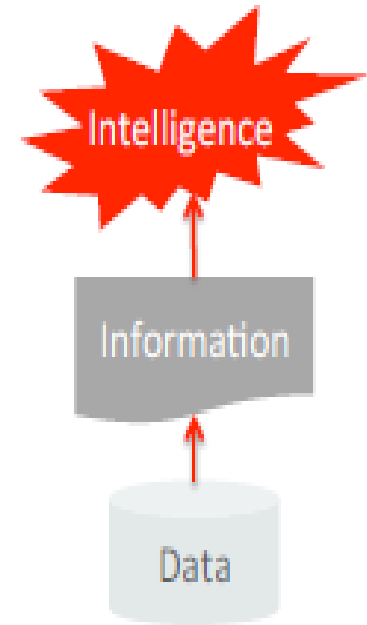
VOLUME



VELOCITY



VARIETY



VALUE

Source: Hong-Eng Koh, Global Lead, Justice & Public Safety, Oracle Corp.

# Social Media Issues

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- **Outgoing**
  - Feed the beast or be behind the curve
  - Poorly handled messaging
  - Mixed and/or multiple messages from sources of truth
- **Incoming**
  - Too much data – too little information – even less intelligence
  - Information validation

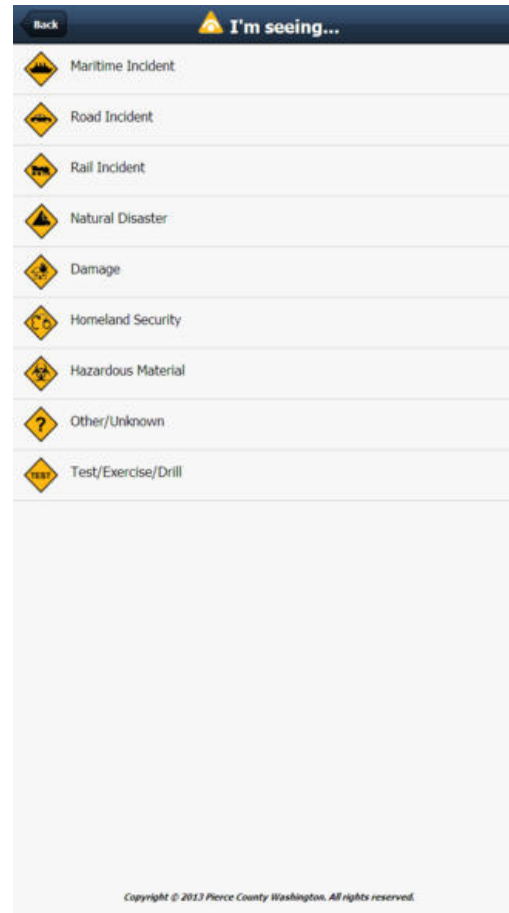
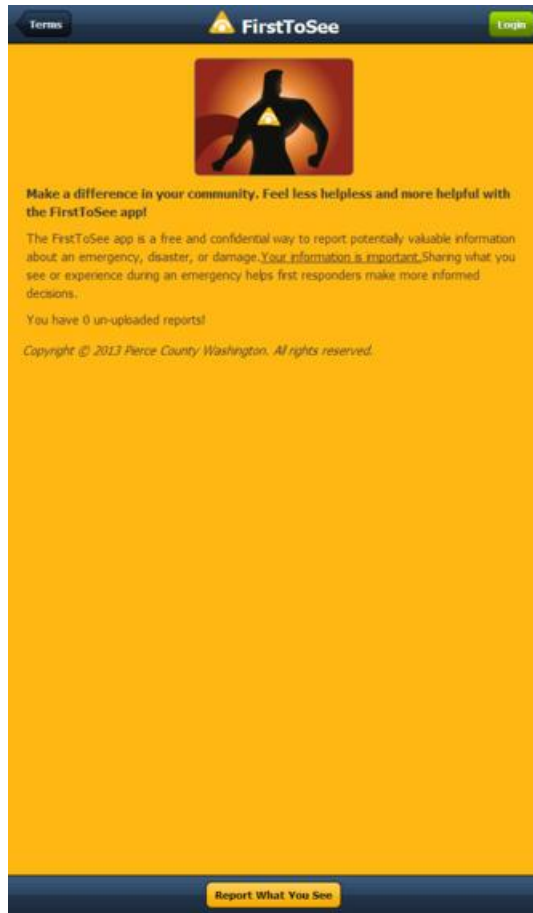


# Coordinating EM's Public Face

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- **Single source of truth or at least similar messages**
- **What is your agency's plan after an alert is issued and EOC is activated?**
- **How can we plan to work together?**

# Moving to a Dialogue



## FirstToSee App

Puget Sound  
Pierce County  
Washington

**Engage, interact,  
participate ....  
not just  
broadcasting**

# Suggested Material

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- **Using Social Media in Emergencies: Smart tips for category 1 responders using social media in emergency management, UK, March 2012.**
- **Kaminska, Kate. Social Media in emergency management, DRDC. May 2014**
- **Vroegop, Ruben. Forewarned and Forearmed: The Calgary Emergency Management Agency and the 2013 Flood. Ottawa: The Conference Board of Canada, July 2014.**

# Summary

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- Public alerting is in its infancy
- Public alerting is now a right and responsibility
- Alerting is about communicating effectively
- Alerting is not static so we need to plan what's next

Good afternoon  Good afternoon



**ALBERTA  
EMERGENCY  
ALERT**

**Thank you**

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**Tim Trytten**

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