



ArcGIS Online for Emergency Management

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Lambton County Emergency Management

- **The County of Lambton is an upper-tier municipality comprised of eleven member municipalities and three First Nations with a total population of 126,638**
- **The County has one Emergency Management Coordinator and each lower-tier has a designated Emergency Management Coordinator. There are two Emergency Management Operation Centres - one located in Wyoming at the County Administration Building and the other at Police Headquarters in Sarnia**

Emergency Management Priorities

- **Transportation – Highway 402 & Bluewater Bridge, CN Rail Tunnel, International Border and St. Clair River**
 - **Bluewater Bridge**
 - **#1 entry point for carriers of hazardous, radioactive and flammable materials between Michigan and Canada**
 - **#2 entry point in the US for hazardous materials**
 - **CN International Rail Tunnel**
 - **The CN rail yard in Sarnia is the largest rail yard handling dangerous goods in the Great Lakes Region**
 - **The CN rail yard is also considered the second largest “international” rail yard in Canada carrying more freight than any other U.S. – Canada border rail crossing**

Emergency Management Priorities Cont'd

- **Pipelines and Chemical Valley**

- Approximately 30 pipelines connect the U.S. and Canada beneath the St. Clair River
- Carry a product value greater than \$2 Billion
- Chemical Valley represents one of the largest groupings of petro-chemical industries and refineries in Canada
- These industries, pipelines, and transportation corridors account for 40% of the chemicals in Canada and 80% of chemicals in Ontario

- **Dawn Natural Gas Storage**

- Union Gas has a storage and transmission hub for natural gas in rural Dawn-Euphemia handling 2.7 billion cubic feet of gas daily.

Emergency Management & GIS

- **Previous attempts at solutions**
 - ArcGIS Explorer Desktop, Flex Viewer Widgets, MASAS, Cross-border pilot projects
- **What has changed?**
 - CAUSE IV Pilot Project
 - **ArcGIS Online, Web AppBuilder, Esri Public Safety Group**
 - ArcGIS for Emergency Management Solution
<http://solutions.arcgis.com/gallery>
 - ArcGIS for Emergency Management
<http://arcgis4em.maps.arcgis.com/home/index.html>

Current Solution

- **Combination of ArcGIS Online and Web AppBuilder standard applications and custom widgets**
- **Relies on a combination of ArcGIS Server security, ArcGIS Online Users, Groups and Roles, Esri .NET Proxy and SSL**

Demo

Lambton COP

Station: Sarnia Airport

At 3/7/2017, 8:00 AM, wind direction is 190 degrees with a speed of 30 km/h.

The temperature is 51.8 °F with 87% humidity.

- Sky Conditions:** Scattered Clouds at 980 meters AGL, Broken Clouds at 4300 meters AGL, Broken Clouds at 5200 meters AGL, Broken Clouds at 5800 meters AGL
- Visibility:** 14,000 m

[Zoom to](#) [Set As Incident](#)

ERG

Demographics

Age 65 and Over

Total population Age 65 and Over for selected DAs in 2011: **1,305**

Incident
 Weather
 Demographics
 Critical Infrastructure
 Evacuation Centres
 Schools

Download CSV	1 Kilometers: 0.4	2 Kilometers: 0.74	3 Kilometers: 0.75	4 Kilometers: 0.79	5 Kilometers: 0.81	6 Kilometers: 0.9	7 Kilometers: 1.1	8 Kilometers: 1.1
Download CSV	Private Homes 229 Wellington St., Sarnia, 3316-6551 Vision Nursing Home	Social Services Department 150 Christina St., Bayside Mall, 2nd floor County of Lambton (433-	Private Day Care Centres 160 George St., Sarnia, 383-7111 Miss Helen's Place	Bluewater Health-Mitton Site (Emergency Department) 220 Mitton St., Sarnia, 464-4400	Lambton County Emergency Medical Services 320 George St., Sarnia County of Lambton	Private Day Care Centres 297 Stuart St., Sarnia, 337-8906 St. Paul's Co-op Nursery	Private Day Care Centres 297 Stuart St., Sarnia, 337-8906 Beacons of Light Daycare	Bluewater Health-Norman/Russell Site 89 Norman St., Sarnia, 4400

Benefits

- **ArcGIS Online and Web AppBuilder provides quick deployment of focused web applications while supporting multi-level security**
- **Supports a variety of devices**
- **Allows Upper-tier, lower-tier, and first responders to collaborate**
- **Low-cost**

Future Plans

- **Expand datasets available, add social media feeds, MASAS, Ontario 2-1-1**
- **Explore other ArcGIS Online emergency management applications – operation dashboard, geoforms, crowdsource reporter**

Resources

- ArcGIS for Emergency Management - <http://solutions.arcgis.com/emergency-management/gettingstarted/>
- Esri Public Safety Webinars -
 - <http://www.esri.com/industries/public-safety/webinar-series>
- ArcGIS Online Emergency Management Group - <http://arcgis4em.maps.arcgis.com/home/index.html>
- GitHub Widgets - <https://github.com/Esri/solutions-webappbuilder-widgets>

Questions?

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