ArcGIS Online for Emergency Management

Presented by: Jason Hannigan BES GISP, GIS Project Leader, County of Lambton
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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
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, crowdsourcing reporter
Resources

- Esri Public Safety Webinars -
- GitHub Widgets - https://github.com/Esri/solutions-webappbuilder-widgets

Questions?
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