Cross Jurisdictional Information Sharing with ArcGIS Online

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Division of Fire
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Henrico Division of Fire
FEMA Type 2 Event – NASCAR at RIR each year in the Spring and Fall
Special Event Operations

- Spectator capacity of 98,000
- More than 50 public safety organizations involved in operations
- 1,200+ individuals report for duty on Saturday
  - Walking teams
  - Bike teams
  - Carts
... with camping, tailgating, and drivers racing at nearly 200 mph.

It's not just the winners that make the news!
Public Safety Service to a 48-hour city...

More than 500 sites for RV and tent camping.

Establishing a Common Operating Picture is Essential.

A midway of activities.
Jackson Baynard
IMT Planning Chief

Henrico Division of Fire
An Encounter with Esri Public Safety - 2/2014

• Templates!
  - Pre-Incident Planning
  - Common Operating Picture

• Richmond International Raceway
  - NASCAR Spring and Fall Events
  - Unified Command – Fire and Police
  - GIS maps proposed for COP

ArcGIS Online
Incident Management Team + Applied GIS Technology partner with Esri to provide the Richmond International Raceway COP

- IMT Planning - began working with Police to agree on the view
- Fire GIS - used symbology from Public Safety COP template
- Moved map layer datasets into the cloud via Henrico Fire AGOL Organization
- Develop component web maps and mobile apps
- Smartphones could be used to communicate spatial information to/from the field
2014 Events

- Provided ‘Just In Time’ training

- Tested tracking of personal mobile devices

- Provided dashboard view of operations to Command Center
  - In-event exercise – Damage Assessment
  - Operational Briefing

- Fall – Tested tracking with DeLorme InReach
Spring of 2015 – Henrico Event Accountability and Resource Tracking System

• Real-time location information of both incidents and response personnel
  - To increase personnel safety (last known position)
  - To decrease response time to incidents by dispatching closest available resource

• Provide a dynamic Common Operating Picture accessible by all event staff, including personnel from other jurisdictions and agencies
  - Provide map updates from Incident Command in real time during the event
  - Receive new information from Field Observers

• Properly manage incident data (call types, resources dispatched, response times, disposition) consistent with national reporting requirements
Now visual georeferenced information supplements radio communications to and from the field...

- IMT Observers reporting from field
  - Incident locations and photos
  - Reporting issues – locations and photos
- COP Updates to the field
Unified Command
Unified Command
The NIMS has changed, and will continue to change, in response to changing conditions.

- 1. The NIMS will evolve in response to new technologies, new information, new policy, and events.

- 2. The NIMS will also evolve in response to stakeholder feedback and observed best practices.

- 3. The ability of the system to change is a positive characteristic of the system and should be a factor that encourages jurisdictions and organizations to implement the system.

Source: training.fema.gov  Session 9: NIMS Implementation
Any Map
Anywhere
Any Device

Common Operating Picture
Robin Patton
Applied Technology Specialist
Henrico Division of Fire
If you are Public Safety and you are not using ArcGIS Online…

You need to get in the game!
Groups! Interjurisdictional Data Sharing in Real Time!!
Public Safety Staff Participates In Development and Maintenance

Before and during the event

We’ve learned to include emergency layers from the beginning.
Richmond International Raceway Spring 2015 Data Plan

Creating a scalable process with minimal dependence on technology expertise!
Chief Cox will tell you how this idea is gaining momentum....
Henrico Incident Management Team

- Multi-agency team including fire, police, health, public works, utilities, rec & parks
- Deployed for any significant incident
- Unified Command between fire, police, and RIR
- Manages the safety, accountability, and tactical deployment of hundreds of personnel from multiple agencies
- One Logistics section, with a check in process that covers all agencies, including the application of mobile applications and just in time training
- Utilize GIS resources during the year long planning process and during the event to maintain a common operating picture
- Henrico’s team is also a member of the Central Virginia All Hazards Incident Management Team
Executive Management’s Goals for IMT Incidents

- Enhance event communications and information management.
- Optimize resource management / response.
- Provide Incident Command, Agency Management, and event personnel with timely information for situational awareness and decision support.
- Manage the records of response actions at the event.
Spring 2015 – Successful Implementation

- Full Tracking of Response Resources Integrated with Incident Dispatch

- Dashboards specific to Command and Dispatch
  - Ability to monitor resource demands
  - Ability to monitor incident types
  - Ability to identify response team status and location
AGOL Dashboards – Custom Views

Communications

Incident Command

EOC
Cloud Services Eliminate Interoperability Problems

- Authorized logins can access/change various operational views.
- AGOL Organizational Account Groups
  - Keep functional views discreet to functional group members
  - Allow admission of user logins from other organizational accounts
- Dispatch assignments consider resource type, status and location
- The Command Center is able to monitor and share dynamic views
  - Location and status of tracked teams
  - Event incident statistics
  - Information feeds from other spatial services (ex traffic and regional weather overlays)
- Scalable – CAD and Tracking for incident dispatch, Tracking for SAR, Collector for Damage Assessment
Dashboard, Web Maps and Mobile Apps connect All Event Staff

- EOC
- Throughout the event site
- On any device!
UCI WORLD ROAD CYCLING CHAMPIONSHIPS AT A GLANCE

- 450,000 onsite spectators from the Richmond region and across the globe over the course of the nine-day event
- TV audience in the hundreds of millions
- 1000 athletes
Richmond, Hanover, Henrico and VA Department of Emergency Management

Meeting in the Cloud for Planning and Operations
ArcGIS Online, Esri’s Partners and The Cloud Provided the Solution

- Real Time Information
- Accessible Common Operating Picture
- Capitalizes on existing systems and data
- Scalable
- Reliable

Henrico County Fire
ArcGIS Online
Thank You

Henrico County Division of Fire
Henrico, Virginia

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http://henrico.us/fire/