

Managing your own Tracking Application

ESRI Canada – URISA Go Green

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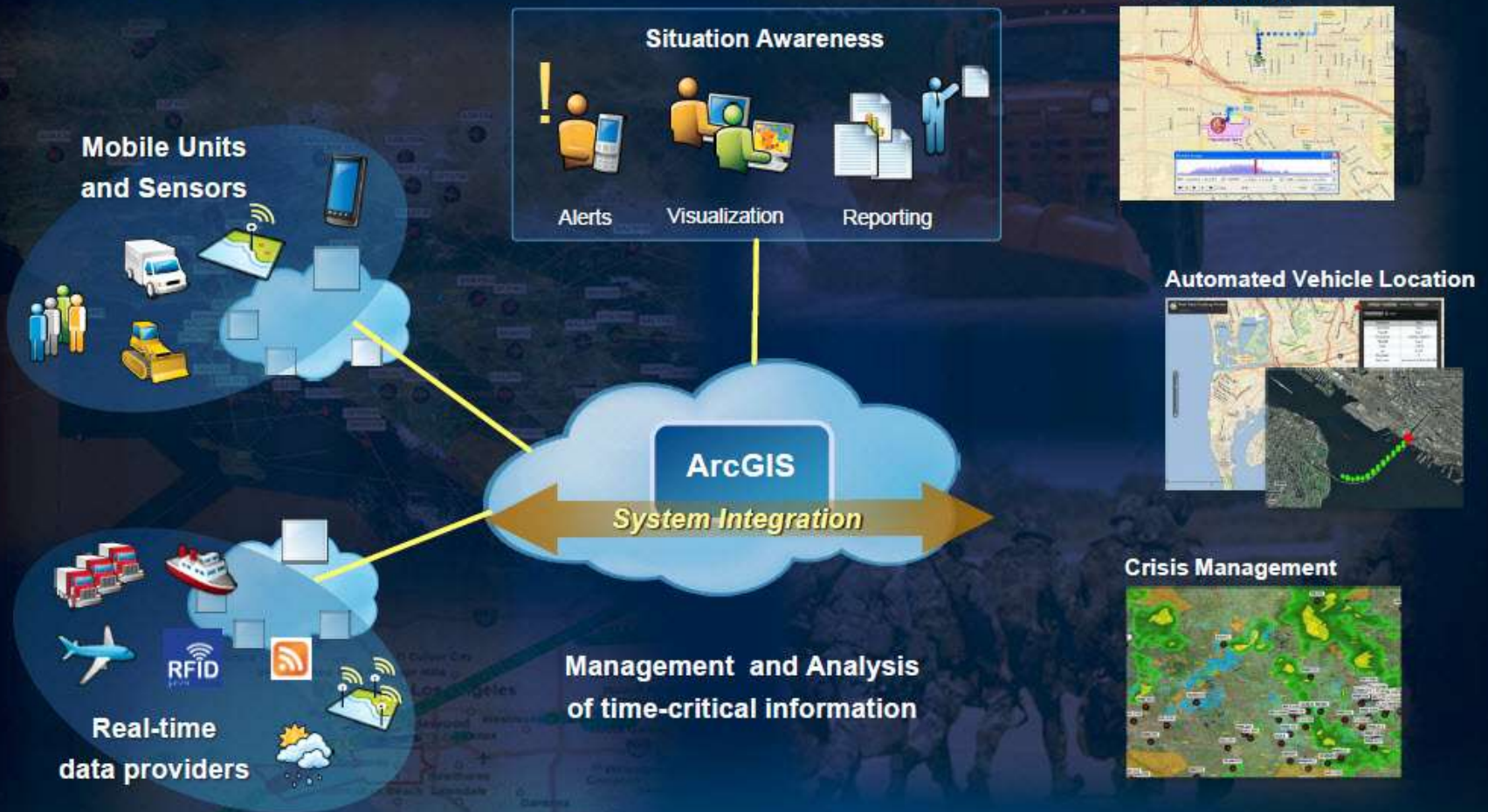


Agenda

- Overview of Tracking
- Demonstration
- Questions & Answers
 - Or just go golfing

Tracking with ArcGIS

Integrates Dynamic Data.....



... Enabling a Complete Real-Time GIS

Common Application of Tracking

Assets

People

**Mobile Resource
Management**

Vehicles

Border Protection

**National
Security**

Defense

Intelligence

Lightning

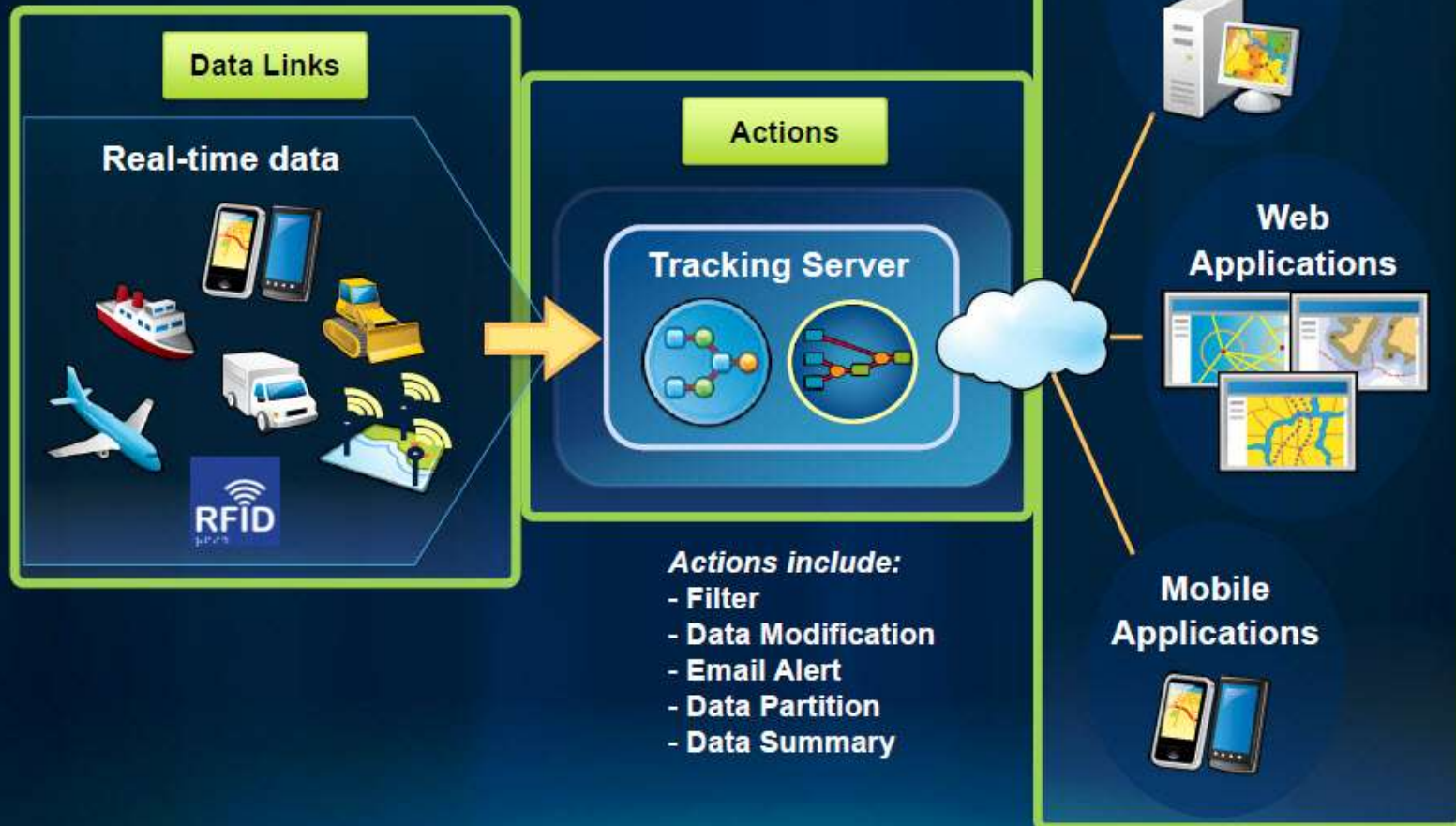
Seismic

**Environmental
Sensors**

Hydrographic

Event Driven Pattern

Enabling ArcGIS with real-time data and analysis



Advantages of AVL

- Value of AVL Within our Organization
 - 1. Assist Litigations (What happened and when)
 - Reporting where a vehicle was at what time
 - Accompanying Weather Data
 - Save Time with providing evidence
 - 2. Performance Review (How did we do?)
 - 3. Dealing with Complaints
 - 4. Real Time Monitoring

City of Saint John's AVL application

AVL - Windows Internet Explorer provided by The City of St. John's
 http://avl.stjohns.ca/avl/frame/index.jsp

AVL

Map Tools

AVL Tools

City of St. John's
Automatic Vehicle Location

My Profile Logout FAQ

MAP Lines INFO

Vehicles:

- 0044
- 0047
- 0050
- 0058
- 0090
- 0105
- 0106

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AVL

Map Tools

AVL Tools

City of St. John's
Automatic Vehicle Location

My Profile Logout FAQ

Vehicle Information

View:

Profile Vehicle Count: 255

97

Updated: Tue May 17 15:47:24 GMT 2011

Current Vehicles

Late Vehicles (More than 1 hr)

Vehicle ID	Time	Location	Speed	Head	Flow	Wet Rate	Dry Rate	Locate
0047	Time 2011-05-17 10:07:28.0		4 kph	NE	UP	Wet NA	Dry NA	⇒
0090	Time 2011-05-17 15:39:21.0	200 BLACKMARSH RD	0 kph	%	UP	Wet NA	Dry NA	⇒
0148	Time 2011-05-17 14:54:18.0	276 BLACKMARSH RD	0 kph	%	DOWN	Wet NA	Dry NA	⇒
0221	Time 2011-05-17 15:39:11.0	MUNICIPAL DEPOT - BLACKMARSH ROAD	0 kph	%	NA	Wet NA	Dry NA	⇒
0222	Time 2011-05-17 15:28:41.0	MUNICIPAL DEPOT - BLACKMARSH ROAD	1 kph	%	UP	Wet NA	Dry NA	⇒
0248	Time 2011-05-17 15:46:16.0	215 BLACKMARSH RD	0 kph	%	UP	Wet NA	Dry NA	⇒

Location	Speed	Head	Flow	Wet Rate	Dry Rate	Locate
-17	4 kph	NE	UP	Wet NA	Dry NA	⇒
-17	0 kph	N	UP	Wet NA	Dry NA	⇒

City of Boston Snow COP application

The screenshot displays the 'Boston SnowCOP' application interface. The main window features a map of East Boston with numerous colored markers (red, green, yellow) representing snow plow locations. A 'Snow Plow Tracker' panel is open on the right, containing a search bar and a list of vehicle IDs: C00241B-MB930, DA024199, ENFPICKUPMB2034, ENFSUVESCAPMB1804, ES14, and ES15. Below the list are icons for CRM and GPS, with the GPS checkbox checked. A tooltip for 'snow4625' is visible over a red marker on the map. The interface includes a scale bar (500m, 1000ft) and various navigation controls.

City of Boston Snow COP

Snow Plow Tracker

Find:

- C00241B-MB930
- DA024199
- ENFPICKUPMB2034
- ENFSUVESCAPMB1804
- ES14
- ES15

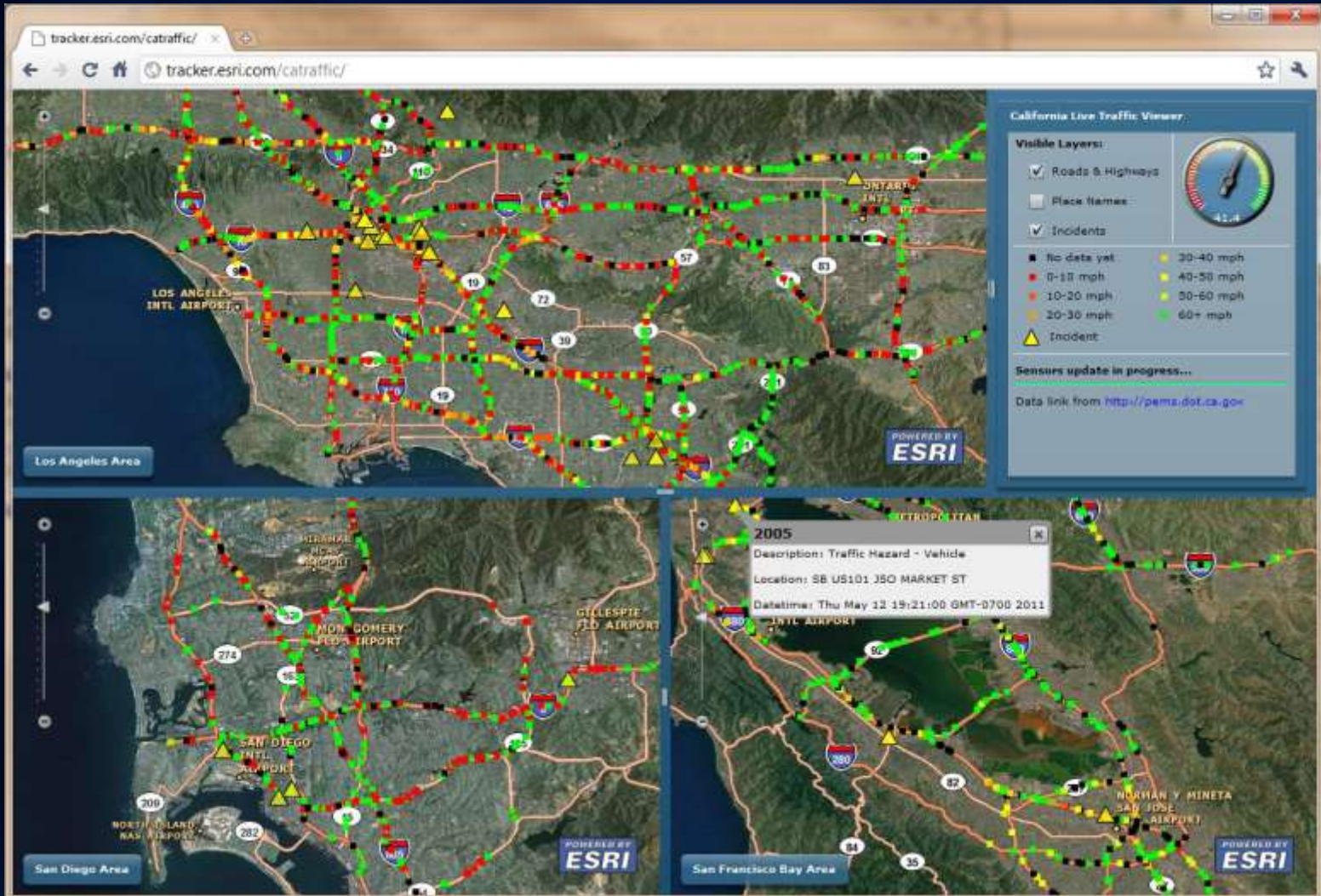
CRM GPS

East Boston

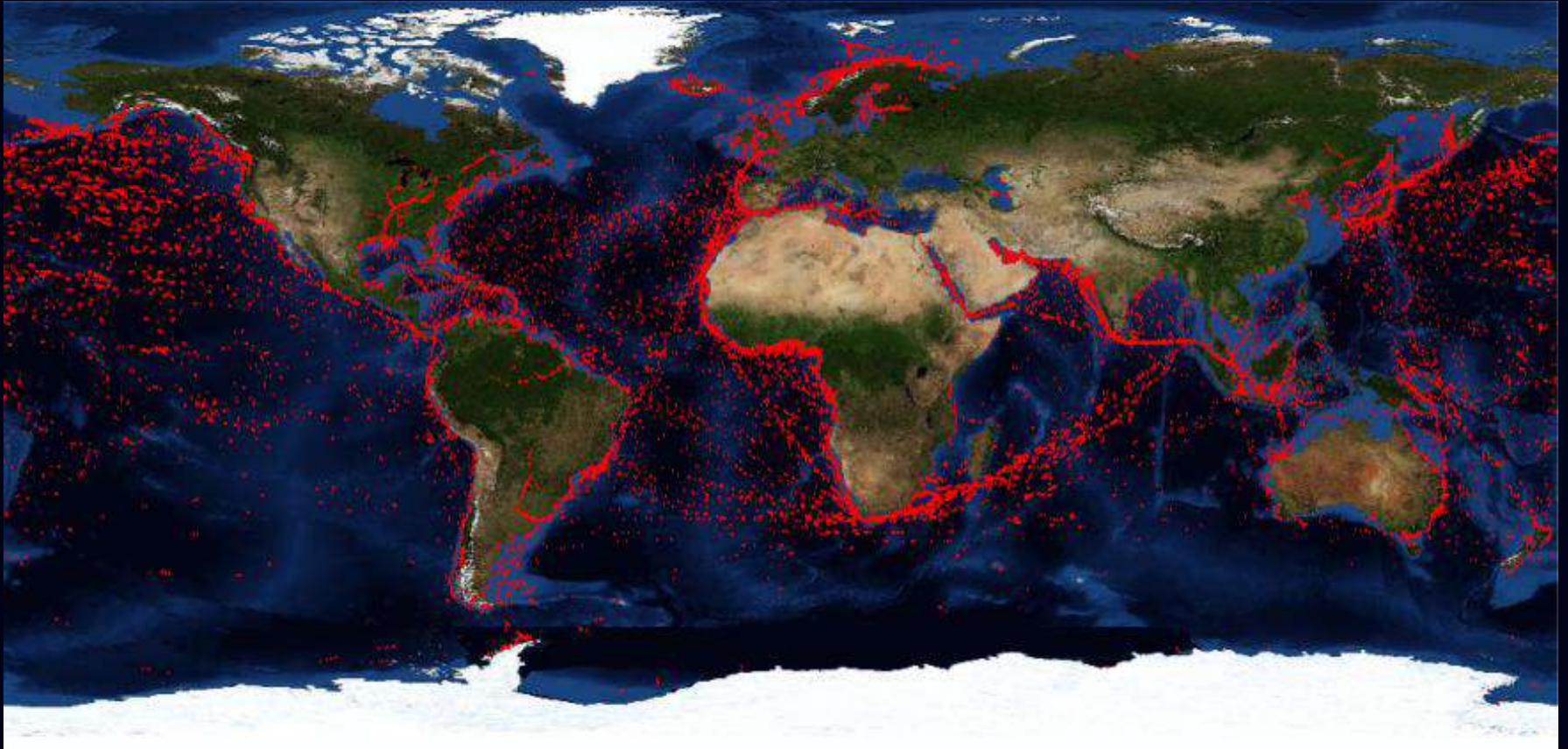
snow4625

500 m
1000 ft

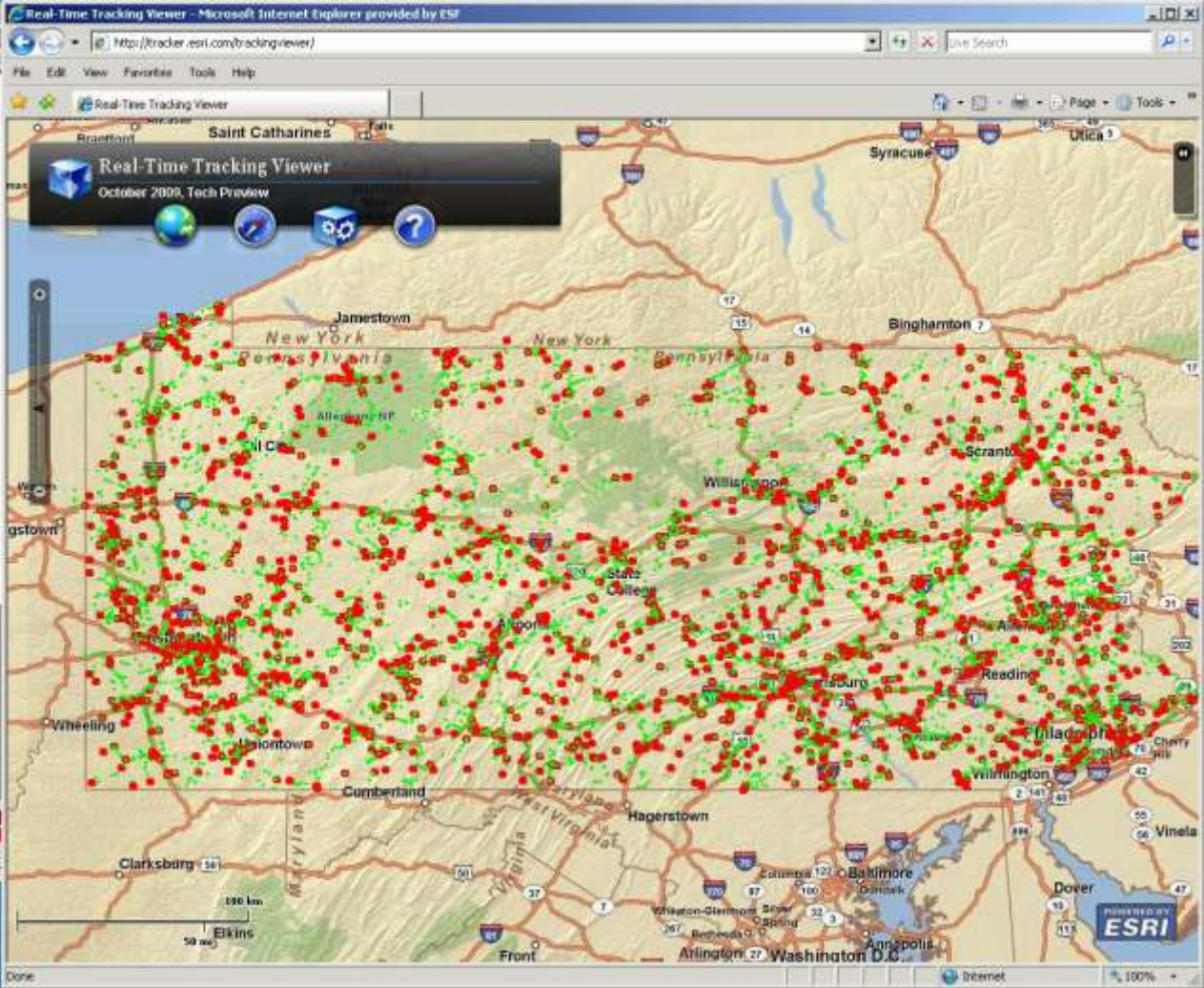
Live Traffic in Southern California



AIS Ship tracking -Worldwide



State of Pennsylvania



ESRI Canada AVL Template

- Based on resources.arcgis.com template
- ArcGIS Server with Tracking Server
- AVL specific functions:
 - Ability to filter vehicles of specific types
 - Alerts
 - Ability to playback historical tracking data
 - Reporting and Charting modules such as speed graphs, and vehicle status reports and export (pdf or xls)
 - Add additional web services, e.g. Environment Canada
 - User controlled symbology
 - Export map (jpg)

Demonstration

ArcGIS Viewer for Flex - Windows Internet Explorer

http://50.16.206.225/leaviewer/tracking/sudbury/

File Edit View Favorites Tools Help

ESRI Canada ArcGIS Viewer for Flex

Greater Sudbury - ArcGIS Tracking Viewer for Flex

Roads and Transportation Division vehicle movement during a winter storm

Streets Topo Bing Road Bing Aerial

Tracking Widget

Manager Symbology Monitoring Tracking

Sudbury feed started

Map Extent:

Map Time Extent: Minutes

Connection Status: Connected

Services:

Tracking Layers

Sudbury

30 km
10 mi

Espanola Walden Dowling Chelmsford Harmer Capreol Sudbury

144 537 535

Wapiti Provincial Park

Internet 100%

Start ArcGIS Viewer for Fle... Inbox - Microsoft Outlook iTunes Search Desktop 1:22 PM

ArcGIS Viewer for Flex - Windows Internet Explorer

http://50.16.208.225/flexviewer/tracking/sudbury/

File Edit View Favorites Tools Help

Google Search

ESRI Canada ArcGIS Viewer for Flex

Greater Sudbury - ArcGIS Tracking Viewer for Flex

Roads and Transportation Division vehicle movement during a winter storm

More Streets Topo Bing Road Bing Aerial

Tracking Widget

Manager Symbology Monitoring Tracking

Layer: Sudbury

Latest Observations

Simple Picture MOLE

All Observations

circle

Track Lines

none

Aging

	Newest	Oldest
Color	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Opacity	1	0.25
Size	10	1

Labeling

Label By: TRACKED

	Font	Background	Outline
Size	10		
Color	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Opacity	1		

Purging

Observations Per Track: 10

Done

Start ArcGIS Viewer for Fle... Inbox - Microsoft Outlook iTunes

Internet 100%

Search Desktop 1:24 PM

ArcGIS Viewer for Flex - Windows Internet Explorer

http://50.16.208.225/flexviewer/tracking/sudbury/

File Edit View Favorites Tools Help

Greater Sudbury - ArcGIS Tracking Viewer for Flex
Roads and Transportation Division vehicle movement during a winter storm

Tracking Widget

Manager Symbology Monitoring Tracking

Layer: Sudbury

Filter: Show All Columns

Track ID	Timestamp
Sudbury 605 cs440	13:25:33, 4/1/2011
Sudbury 634	13:25:31, 4/1/2011
Sudbury S-499	13:25:31, 4/1/2011
Sudbury 51037 DJ	13:25:33, 4/1/2011
Sudbury 616	13:25:31, 4/1/2011
Sudbury Nortean Grader	13:25:15, 4/1/2011
Sudbury 611 cs440	13:25:31, 4/1/2011
Sudbury 642 cs440	13:25:32, 4/1/2011
Sudbury 51027 DJ	13:25:30, 4/1/2011
Sudbury 640 cs440	13:25:32, 4/1/2011
Sudbury S-495	13:25:32, 4/1/2011
Sudbury 610 cs440	13:25:30, 4/1/2011
Sudbury 51033 DJ	13:25:19, 4/1/2011
Sudbury 626	13:25:31, 4/1/2011
Sudbury 51021 DJ	13:25:33, 4/1/2011
Sudbury 51031 DJ	13:25:32, 4/1/2011

Auto Update (secs) 5 Update

Done

Start ArcGIS Viewer for Fle... Inbox - Microsoft Outlook iTunes

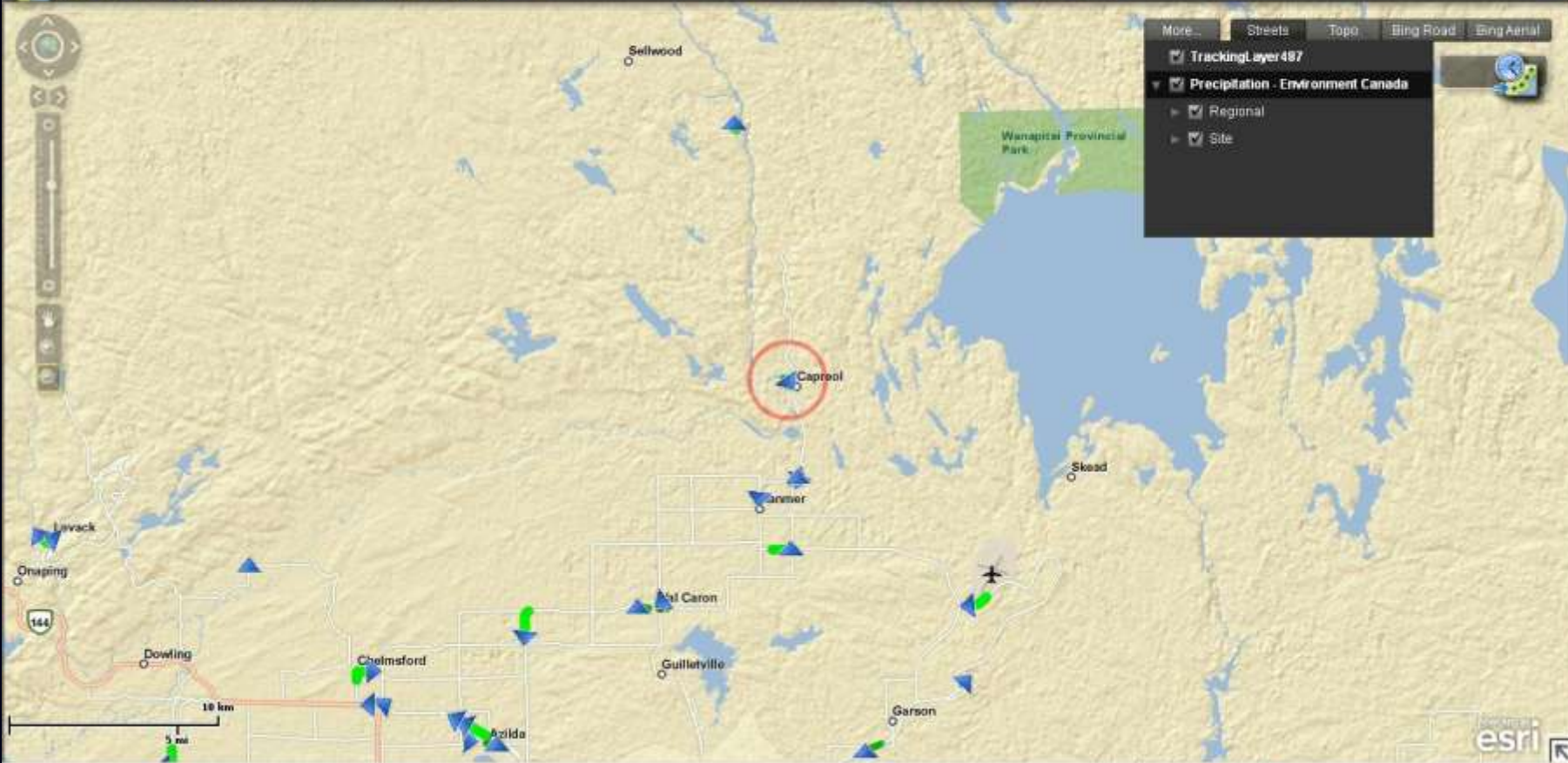
Internet 100%

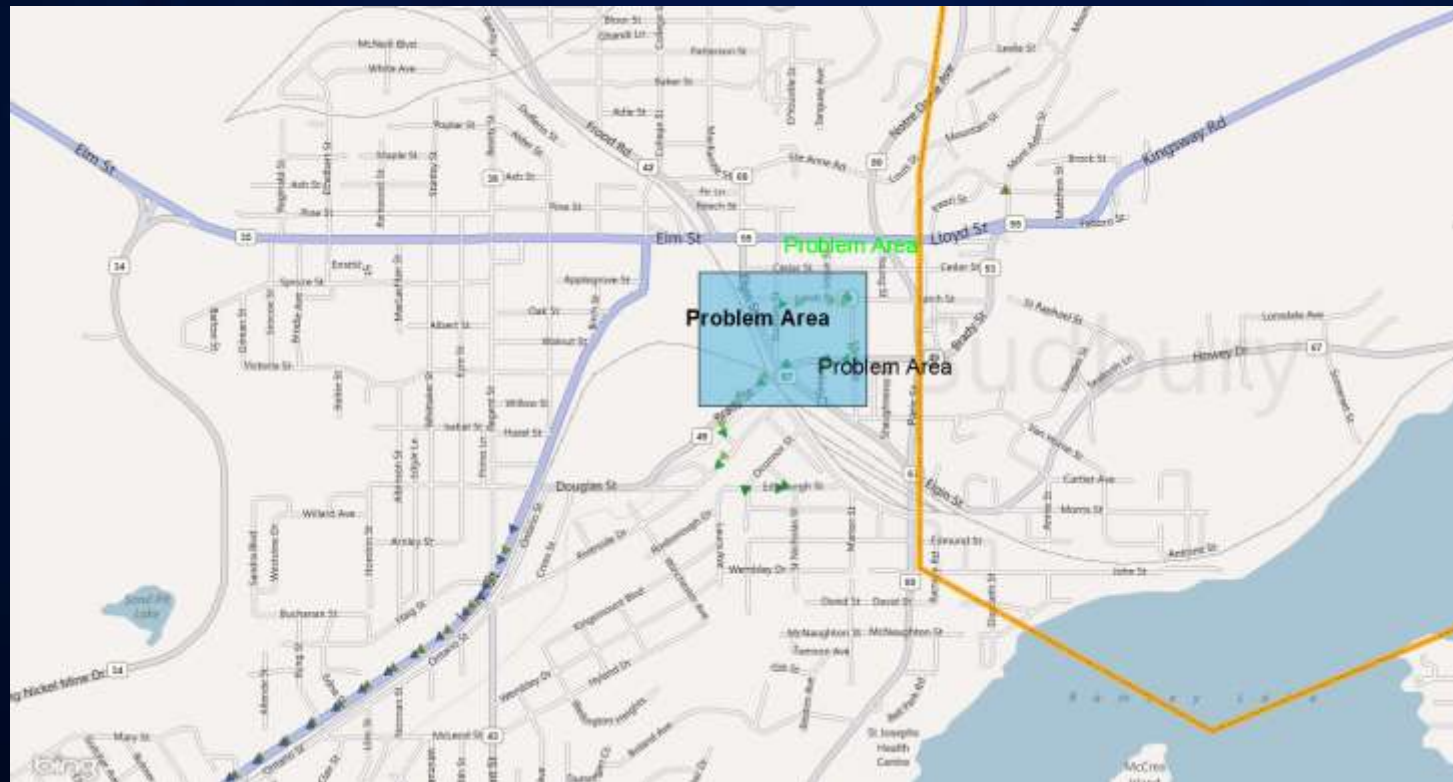
Search Desktop 1:25 PM

Greater Sudbury - ArcGIS Tracking Viewer for Flex

Roads and Transportation Division vehicle movement during a winter storm

About





Questions & Answers

Or just go golfing?

Thank You

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ESRI Canada