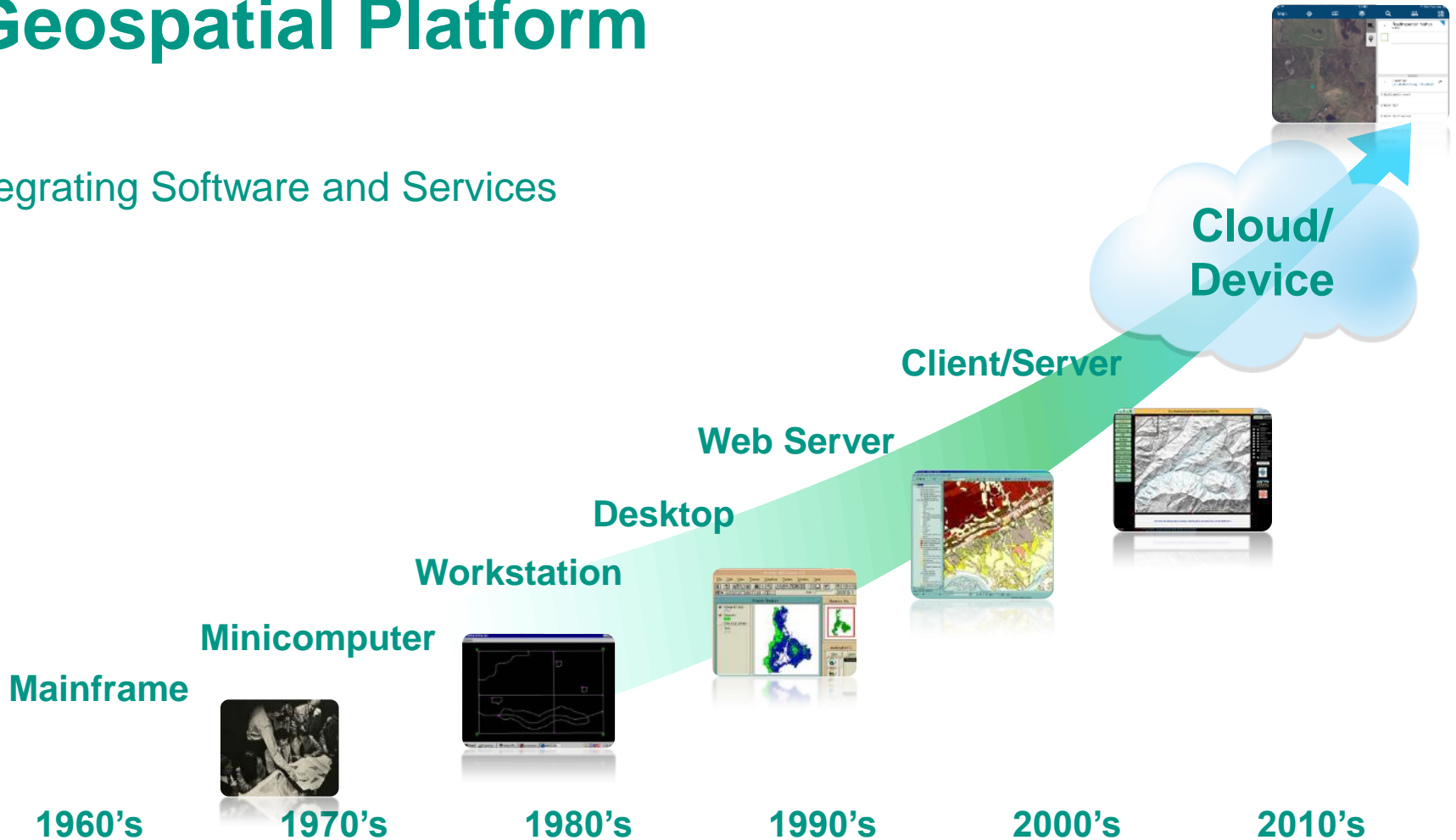# Web Maps & Apps

extending the reach of GIS via the Cloud

Nathan Enge   nenge@esri.ca

GIS is Being Transformed Into a Geospatial Platform

Integrating Software and Services

Cloud/ Device

Client/Server

Web Server

Desktop

Workstation

Minicomputer

Mainframe

| 1960's | 1970's | 1980's | 1990's | 2000's | 2010's |

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The Emerging Cloud GIS Platform

Extend the power of GIS

Front Counter Staff

Manager's / TL Access

Public Engagement
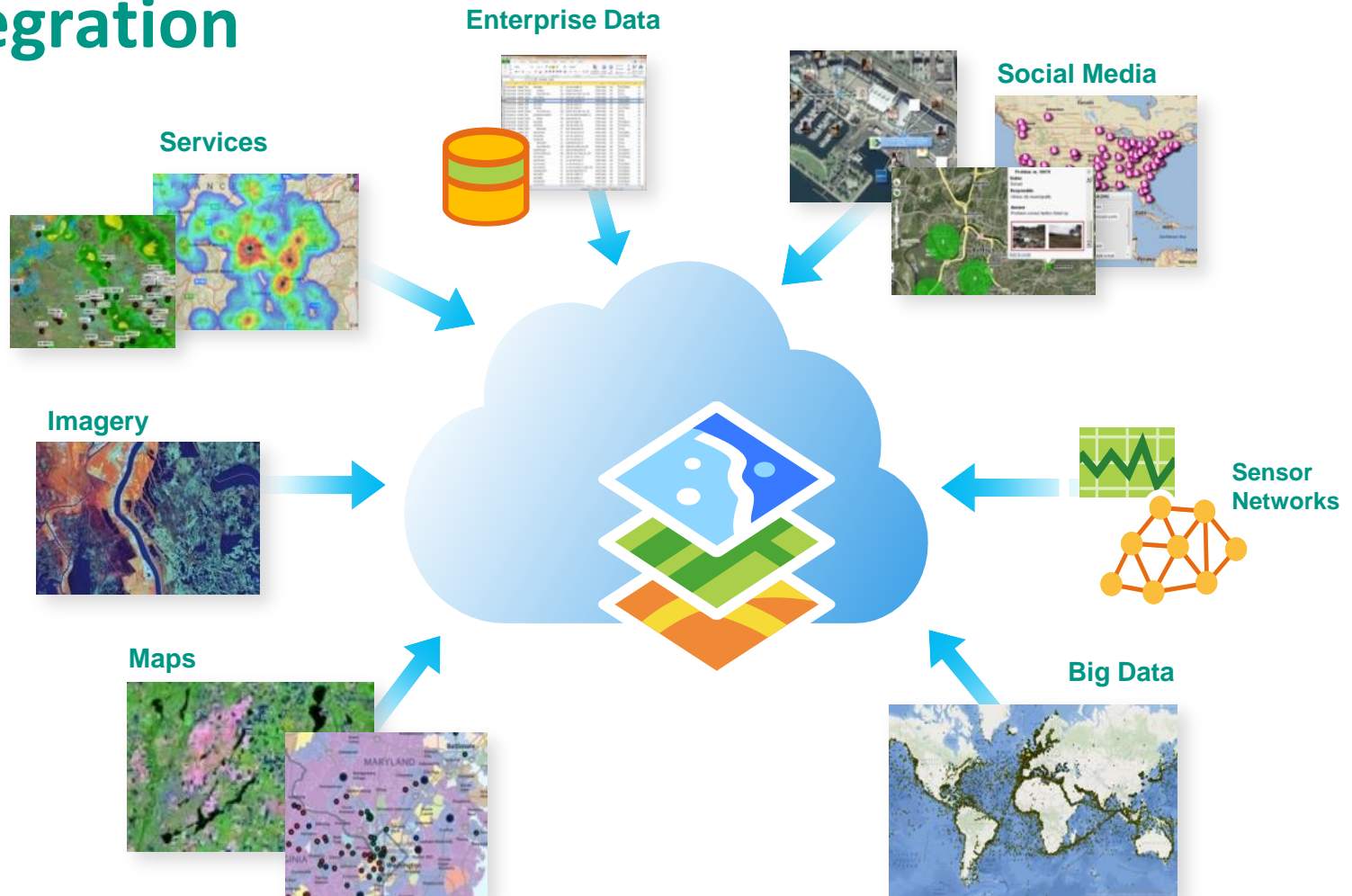
Work Anywhere

Enterprise Integration
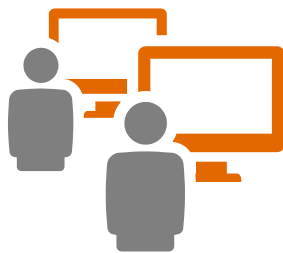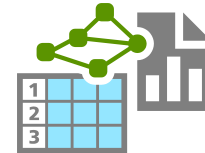
Web GIS

Targeted Web Maps and Apps

Fast, Intuitive, Informative…

Professional GIS

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Cloud GIS Provides a New Pattern of Integration

Enterprise Data

Social Media

Services

Imagery

Maps

Sensor Networks

Big Data

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4

Cloud GIS Platform

- Cloud GIS content management system

- Deployment Patterns

- Access maps, tools and apps

- Upload data

- Create maps & applications

- Share content

- Secure access

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Location-aware Field Mobility Applications

- iOS, Android, Windows Mobile

- **Enables you to:**

  - Capture, update, and report data in the field, Personnel tracking

  - Disconnected Editing

  - Updates automatically seen in the office/on other devices

  - Plan routes and get directions

  - Improve data collection quality with data-driven forms

  - Capture photos and video

Situational/Operational Awareness

- Desktop application

- Create a Common Operational Picture

- Monitor and Respond to Activities and Events

- Create and Share Operational Views

  - Include interactive maps, lists, charts, gauges and other indicators based on live geographic data

- Customise with extra widgets including; chat, query and summary

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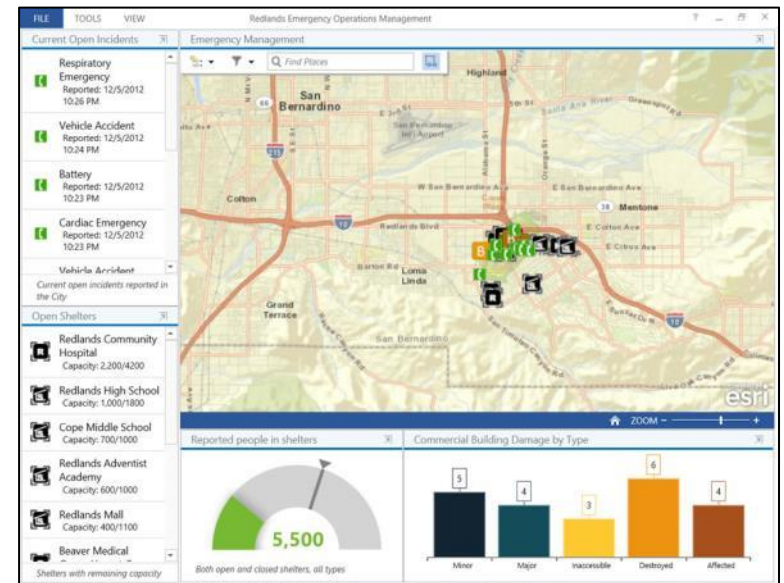
Evolution of GIS in the Web

- **Traditional – "Web GIS":**
  - Multi-Use
  - Multi-Choice
  - Immersive Experience
  - Lots of features
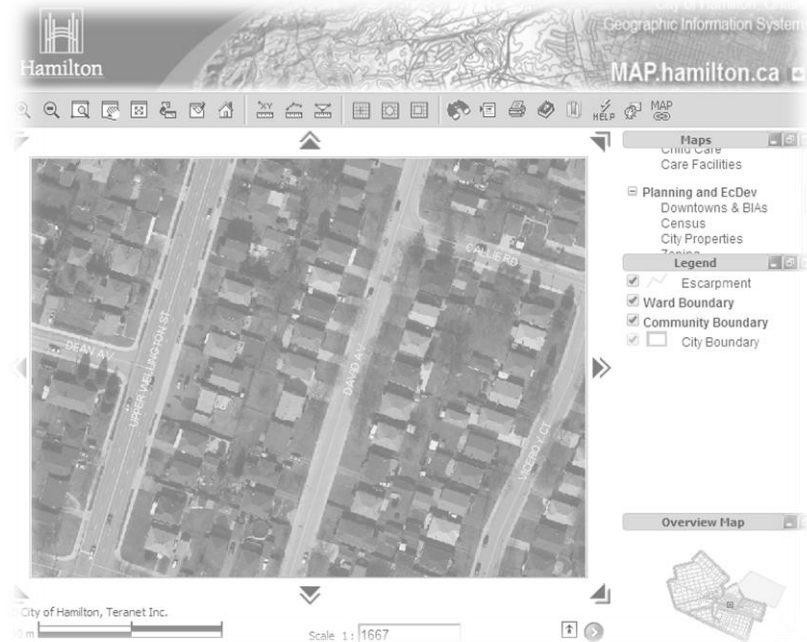
- **Emerging - "Quick Information Retrieval":**
  - Obvious contextualized searches with autocomplete
  - Baked-in layers, Reduce to single topic
  - Reduce in-browser Features, Icons and Tools
  - More Links, Balloons, and Links INSIDE Balloons
  - Browser/Device agnostic, Ditch the plug-ins
  - Targeted Apps for Targeted Users

Fast, Intuitive, Informative…

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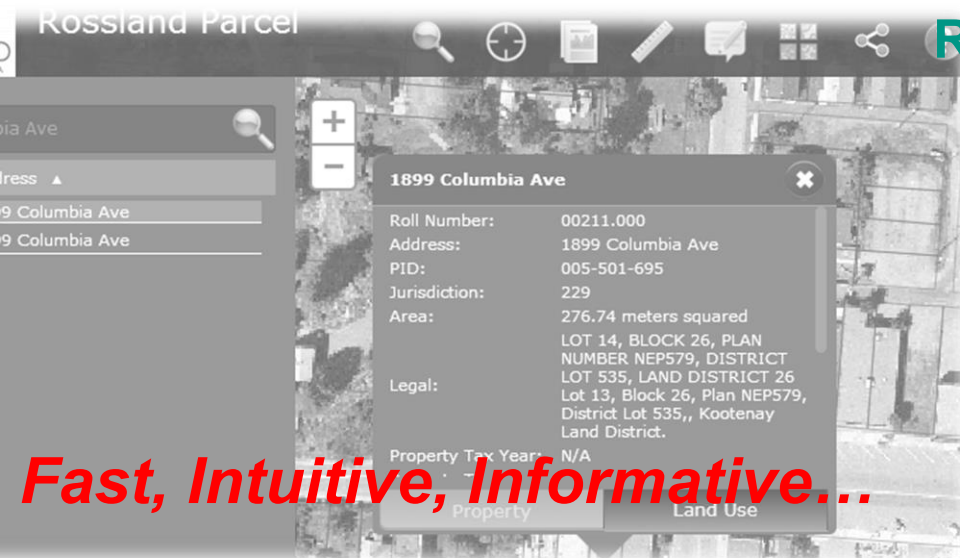
Case Study, Examples, Demo

- Oil and Gas Implementation – Total Nigeria

- Web Map Applications leveraging the cloud
  - Banff Maps
  - Rossland
  - Vernon
  - Peel Region OCP
  - Olympics
  - North Vancouver
  - RDCO

- Operation Awareness / Mobile Field Collection

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