# SE MN GIS user group meeting – Mn/DOT services and flood information

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*Your Destination...Our Priority*

We are competing with the world for our message.

# Introductions

1. Name
2. County, City or Agency
3. What you do with GIS
4. Were you involved with the flood support either in Spring or Fall of 2010?

# ArcIMS Services

- Mn/DOT has several ArcIMS services available. They can be accessed through ArcMap or ArcCatalog with the URL: http://gisservices.dot.state.mn.us
- Some of the services are:
  - Mndot_basemap (Common layers)
  - Mndot_construction_external (Road construction info.)
  - Mndot_hpms (Highway Performance Monitoring System data)
  - Mndot_geodetic (Geodetic Monuments)
  - Mndot_rail (Railroad info.)
  - Mndot_row (Right of Way)

# ArcGIS Services

- Mn/DOT has over 20 external ArcGIS services available. They can be accessed through ArcMap or ArcCatalog with the following URL: http://gisservices.dot.state.mn.us/arcgis/services
- - Layers are put into specific subsets, for example:
    - MNDOT_BOUNDARIES
    - MNDOT_COMMON_LAYERS
    - MNDOT_ROADS
    - MNDOT_RAIL
    - MNDOT_BIKEWAYS
    - MNDOT_IMAGERY
    - MNDOT_TRANSPORTATION_ASSETS

-REST stands for *Representational State Transfer*, this basically means that each unique URL is a representation of some object. You can get the contents of that object using an HTTP GET command.

-Google Earth is WGS 1984 projection.  These REST services are in UTM coordinates.

-View the MNDOT_METRO_PROJECT_IMAGERY

NOTE: Google images are wrapped around the globe and are imagery is flat.

# WMS Services

- MnDOT offers a couple services externally.
- Below are some examples:
- County Image Services:
- http://gisservices.dot.state.mn.us/arcgis/services/County_Image_Services/MapServer/WMSServer?
- Common Layers:
- http://gisservices.dot.state.mn.us/ArcGIS/services/MNDOT_COMMON_LAYERS/MapServer/WMSServer?

Geocortex Essentials is an add-on product engineered for ArcGIS Server

Uses ESRI's .NET web application developer framework and ArcGIS Server REST API.

**New Enhancements**: The overall look and feel is more visually appealing

Easier to use the tools

Expanded toolbox

Ability to add .shp files

Easier to navigate

Expanded print capabilities with default layouts

# Some other Mn/DOT applications

- Right of Way Mapping & Monitoring viewer (IMS)
  - http://gisservices.dot.state.mn.us/website/mndot-row/viewer.htm
- Geodetics viewer (Geocortex)
  - http://gisservices.dot.state.mn.us/mndot-geodetic/
- Aggregate Source Information System (IMS)
  - http://www.mrrapps.dot.state.mn.us/gisweb/viewer.htm?activelayer=8

# Mn/DOT Data

- Downloadable at http://www.dot.state.mn.us/maps/gisbase/html/statewide.html
- Some files are very large! Trunk Highway data is updated quarterly.

• Each County Road closure viewer opened up to each counties extent.

# State Road Information Source

Mn/DOT 511

# Local Road Information Sources

Websites, Press Releases, email lists, phone and by fax

Had the ability to create each counties Editor Application at will. The SE MN border counties were created but were never used.

•Used in the Fall 2010 floods

Created a different Road viewer with Silverlight technology.

•Advantages: Faster, quicker and better graphics. Include damage pictures

•Disadvantages: Required the Silverlight plug-in for the public to view

Kept the same road editor from the Spring & Fall (GeoCortex)

# HSEM Common Operations Viewer

Road Status Web Service Use

Used MapBook to created daily county road closure maps available on Mn/DOT public website.

We also helped out with imagery production and hosting several image sets of the Red River valley and North Dakota.

**STOP – 10-15 minute break.

## Demo – County Contributers

County Editor Application

# Flood support for Spring 2011

For Spring 2011 flood:

- ArcGIS service will be called "MN_STATEWIDE_ROADVIEWER"
- Mn/DOT's Road Viewer will be linked from our mainpage at http://www.dot.state.mn.us/

- Keep the same Silverlight road viewer from Fall 2010.
- Continue to do the daily pdf MapBooks by county

# Questions & Answers session ?

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