Collaboration in the Great Lakes Megaregion
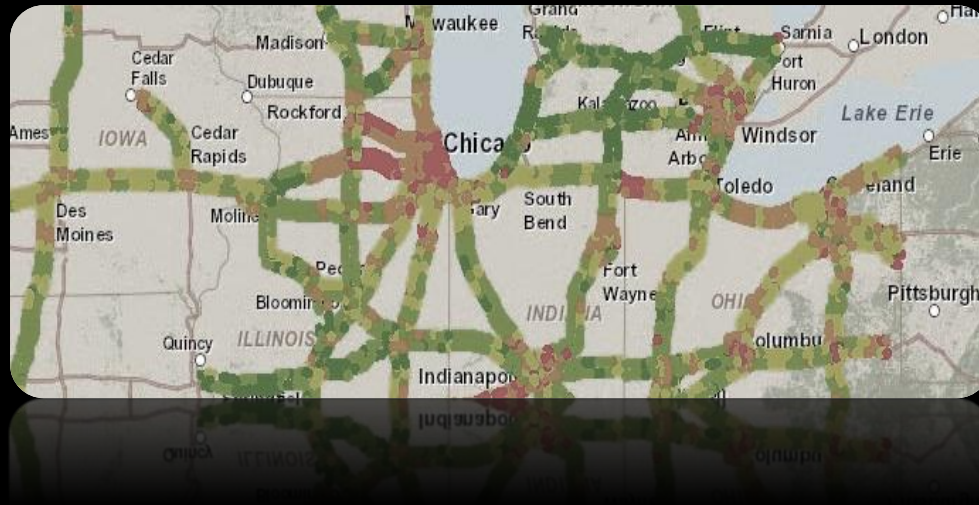
GLRTOC Connected Centers Project
August 2016
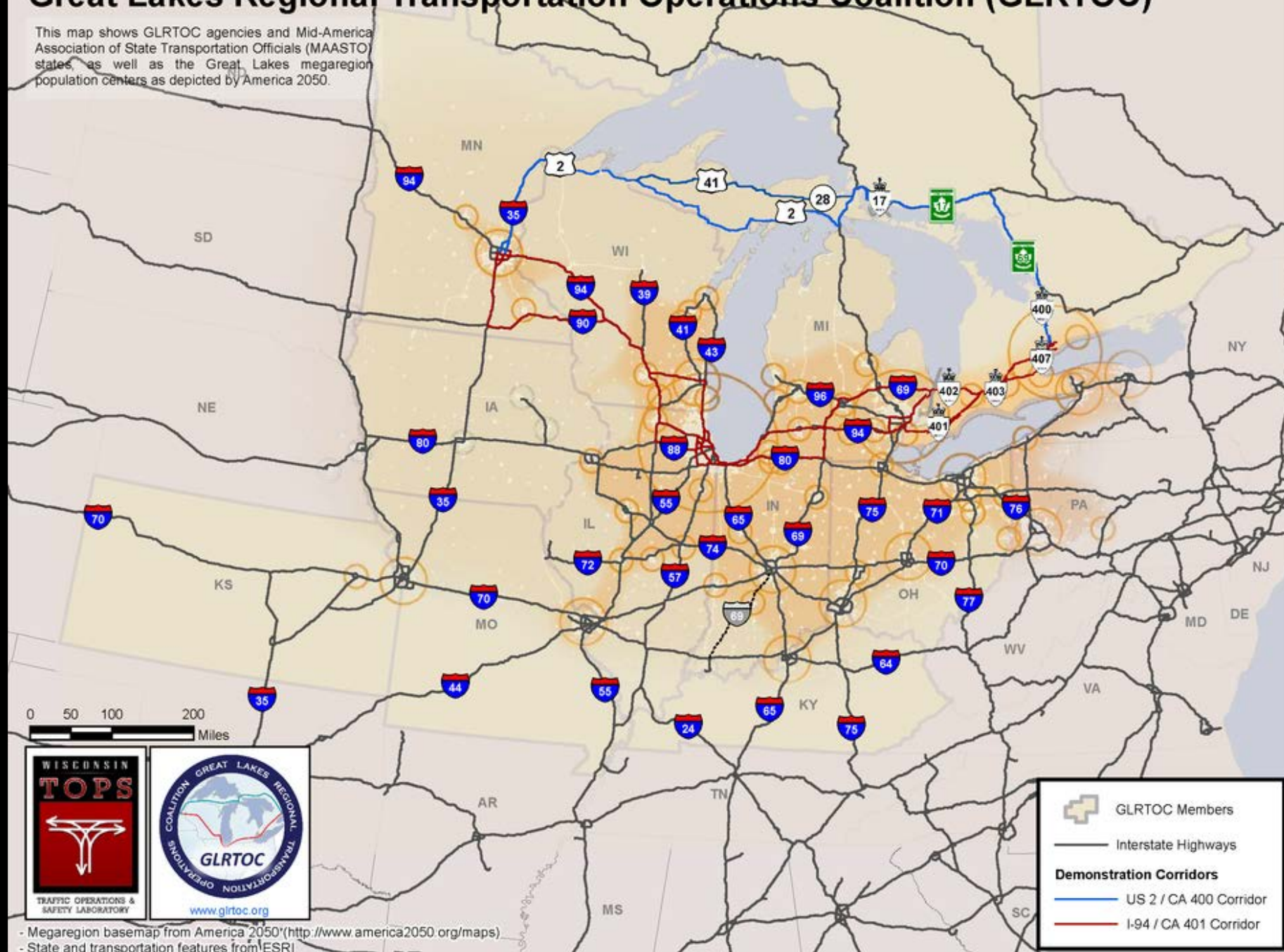
Megaregions
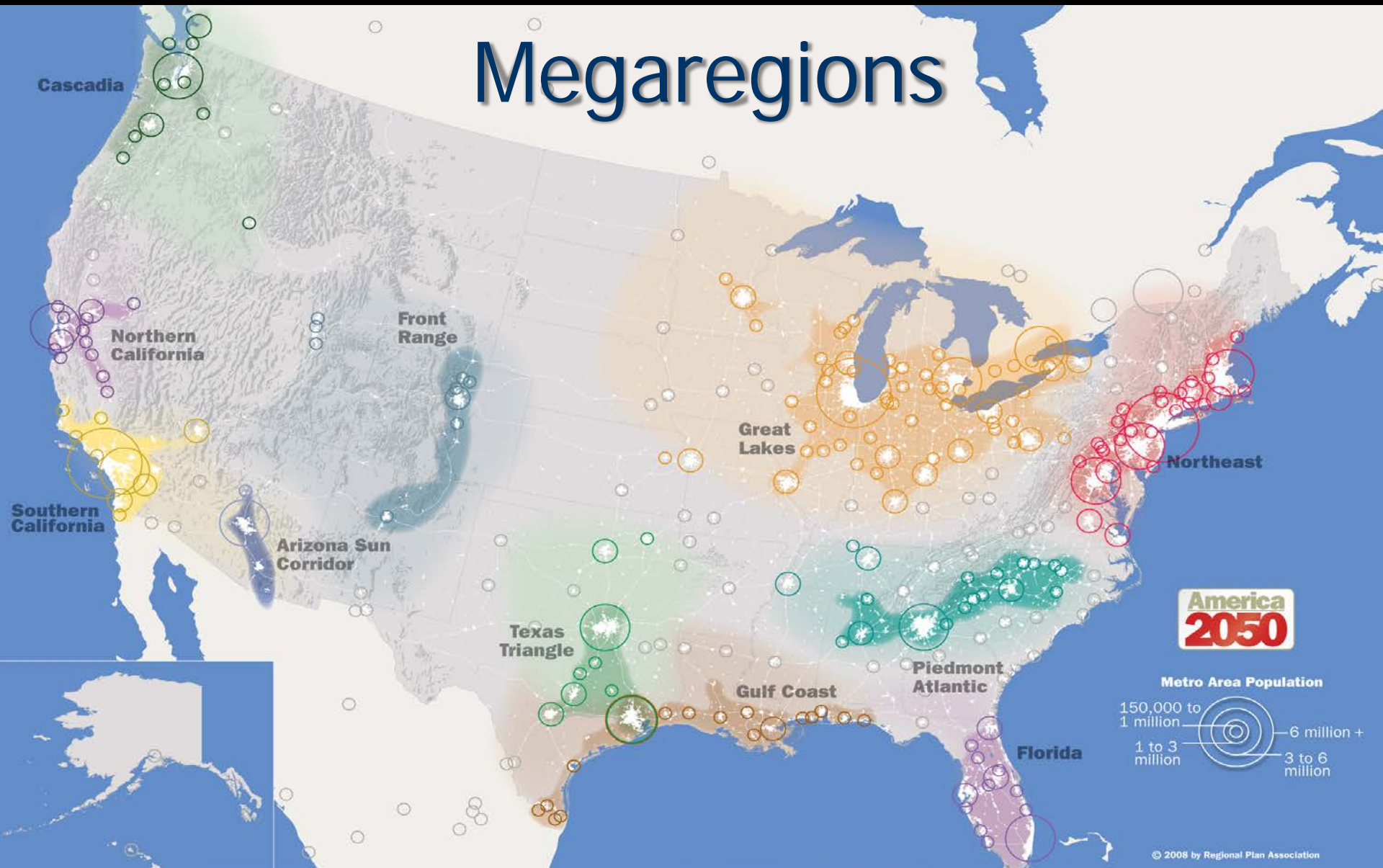
GLRTOC Mission & Partners

Founded in 2010

> *Improve cross-regional transportation operations in support of regional economic competitiveness and improved quality of life.*

Great Lakes Regional Transportation Operations Coalition (GLRTOC)

This map shows GLRTOC agencies and Mid-America Association of State Transportation Officials (MAASTO) states, as well as the Great Lakes megaregion population centers as depicted by America 2050.

0   50   100   200
Miles

WISCONSIN
TOPS
TRAFFIC OPERATIONS & SAFETY LABORATORY

GREAT LAKES REGIONAL TRANSPORTATION OPERATIONS COALITION
GLRTOC
www.glrtoc.org

- Megaregion basemap from America 2050'(http://www.america2050.org/maps)
- State and transportation features from ESRI

Legend

GLRTOC Members

Interstate Highways

Demonstration Corridors

US 2 / CA 400 Corridor

I-94 / CA 401 Corridor

Lake Michigan Interstate Gateway Alliance (LMIGA)

- Founded 1993
- 1993–2006, Gary-Chicago-Milwaukee (GCM) ITS Priority Corridor
- Since 2006, broader operations and geographic extent
- Focus on traffic operations along major corridors in the greater Chicago region to improve safety and mobility

- Ongoing coordination between GLRTOC and LMIGA

Strategic Focus Areas

1. Efficient freight operations
2. Reliable mobility
3. TIM / ETO

MCOM Current Project Areas

| Work Zones	• Annual High Impact Work Zone Review • Online Work Zone Mapping Application • Work Zone Monitoring (Bluetooth) • Smart Work Zones Best Practices
Traveler Information	• Gateway Expansion • Gateway Enhancements • Incident Alerts
Connected Centers	• Systems Engineering • Operations Centers Profiles • Operations Centers Information Exchange • Gateway Automated Incident Response System (GAIRS)
Performance Management	• MAP-21 Performance Measures • Freight Mobility • Work zone and weather impacts • Monthly Reporting

Traveler Information

- Gateway Expansion
- Gateway Enhancements
- Incident Alerts

- Gateway coverage extended to Minnesota farther into Michigan (and all of Illinois under separate funding)

- Enhancements to backend data, customizable reports, additional map presets

- Increased operations staff support

- High impact alerts

  - GLRTOC email alerts

  - Gateway Automated Incident Response System (GAIRS)
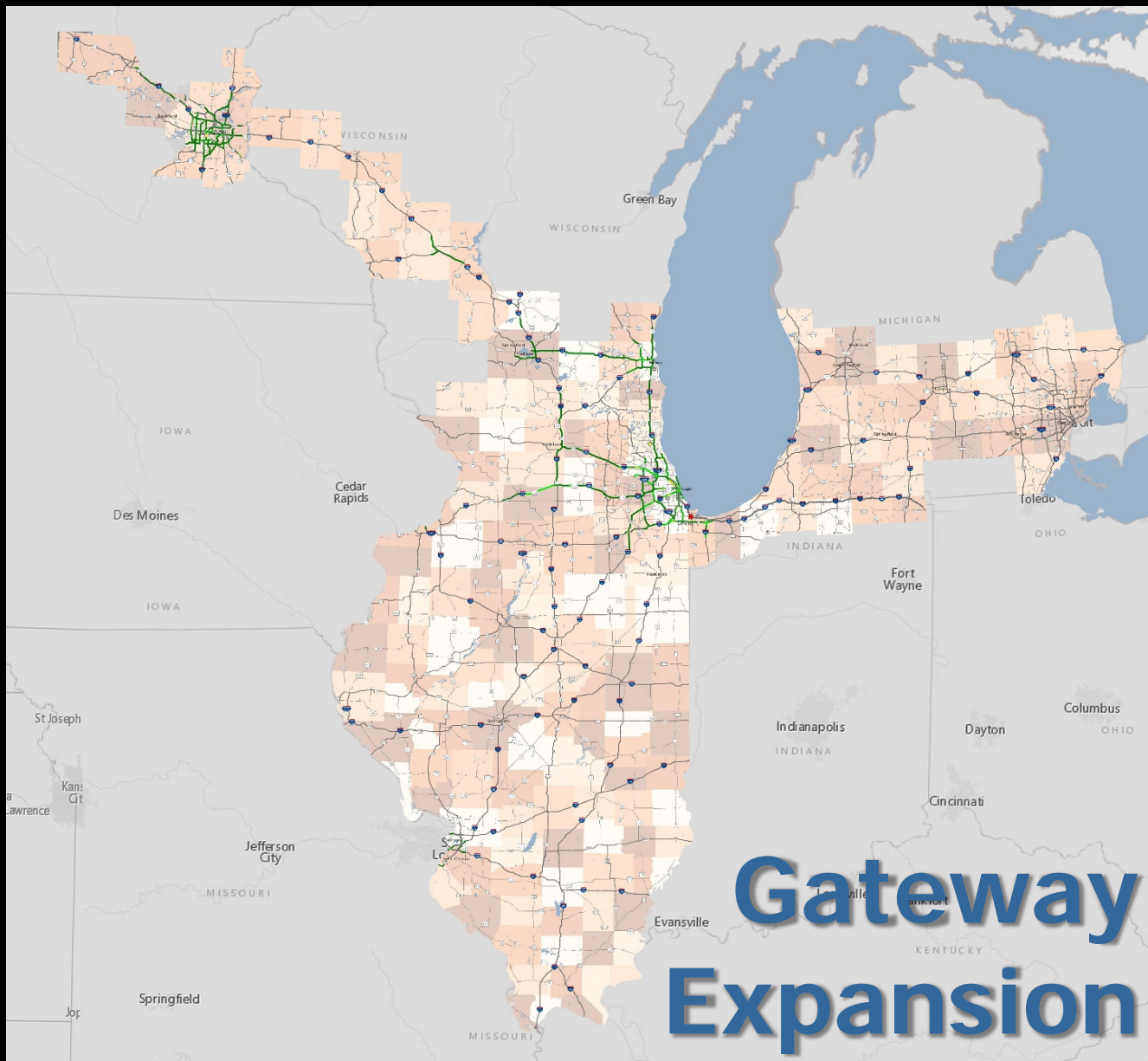
Gateway Expansion

Connected Centers

- Systems Engineering
- Operations Centers Profiles
- Operations Centers Information Exchange
- Gateway Automated Incident Response System (GAIRS)

- Systems engineering process and operations centers outreach pinned down requirements

- Three projects:

  - Online operations centers profiles

  - Improved information exchange

    - Online operations map and resources

  - GAIRS enhancements

Connected Centers

- Systems Engineering
- Operations Centers Profiles
- Operations Centers Information Exchange
- Gateway Automated Incident Response System (GAIRS)

- **Deliverable 1: GLRTOC Connected Centers Information Resources**
  - TOC Profiles
  - Standard Operating Procedures
- **Deliverable 2: GLRTOC Connected Centers Information Exchange Tools**
  - Role of Travel Midwest
  - Information Exchange Format
  - TOC Collaboration

Athey Creek
CONSULTANTS

Connected Centers

- Systems Engineering
- Operations Centers Profiles
- Operations Centers Information Exchange
- Gateway Automated Incident Response System (GAIRS)

TOC Profiles Include…

- Contact Information
- Hours of Operation and Staffing
- Coverage Area by Major Interstates
- Traveler Information System Capabilities

2.22. Travel Midwest Gateway Traveler Information System (GTIS)	
Address	201 West Center Court, Schaumburg, IL 60196 The Travel Midwest GTIS Operations Center is co-located with the IDOT District 1 Traffic Systems Center
Primary Contact [1]	
Secondary Contact	*Not available*
Hours of Operation	24/7
Staffing	*Services are available and supported on all staffing shifts*
Coverage Area by Major Interstates	• **Minnesota:** I-35, I-35E, I-35W, I-94, I-394, I-494, I-694, US-52 • **Michigan:** I-69, I-75, I-94, I-96, I-194, I-196, I-275, I-375, I-475, I-496, I-696, US-23, US-31, US-127, US-131, M-6, M-10, M-14, M-39, M-53 • **Wisconsin:** I-39, I-43, I-90, I-94, I-794, I-894, US-12, US-41, US-45, WI-16, WI-119, Miller Park Way • **Indiana:** I-65, I-69, I-80, I-90, I-94, US-20, US-31, IN-912, Indiana Toll Road • **Illinois:** I-24, I-39, I-55, I-57, I-64, I-70, I-72, I-74, I-80, I-88, I-90, I-94, I-155, I-172, I-180, I-190, I-255, I-270, I-280, I-290, I-294, I-355, I-474, US-34/IL-110, US-41, IL-53, IL-390, IL-394, Skyway The Travel Midwest GTIS existing coverage area stretches from the Minneapolis/St. Paul, Minnesota metropolitan area to Detroit and Port Huron, Michigan and encompasses 86 counties in five states (Minnesota, Wisconsin, Illinois, Indiana, and Michigan) under the auspices of the Great Lakes Regional Transportation Operations Coalition (GLRTOC). Travel Midwest GTIS also covers all 102 counties in Illinois (21 counties as part of the GLRTOC).

Services Offered along Major Interstates	• **Traveler Information Web Site:** www.TravelMidwest.com
	  - Offers travel time, congestion, construction, special event, roadway conditions, incident, weather information, and long-term planning data on major projects.
	  - An important resource to intelligently plan travel on the interstate highways and major limited access roadways.
	  - Identifies road closures due to weather and other causes and frequently identifies alternate routes.
	  - Travel advisories round out the information package.
	• **Traveler Information App:** Travel Midwest

# Great Lakes Regional Transportation Operations Coalition

- Illinois Department of Transportation District 1 Communications Center
- Illinois Department of Transportation District 4 Peoria Communications Center
- Illinois Department of Transportation District 8 Transportation Management Center
- Illinois Tollway Traffic Operations Center
- Indiana DOT Borman Traffic Management Center
- Iowa Department of Transportation Traffic Management Center
- Kansas Department of Transportation WICHway Traffic Management Center
- Kansas and Missouri Departments of Transportation Kansas City Scout Traffic Management Center
- Kentucky Transportation Cabinet TRIMARC Control Center
- Michigan Department of Transportation Statewide Transportation Operations Center
- Michigan Department of Transportation West Michigan Transportation Operations Center
- Michigan Department of Transportation Southeast Michigan Transportation Operations Center
- Michigan Department of Transportation Blue Water Bridge Transportation Operations Center
- Ministry of Transportation Ontario London COMPASS Traffic Operations Centre
- Ministry of Transportation Ontario Toronto COMPASS Traffic Operations Centre
- Minnesota Department of Transportation Regional Transportation Management Center
- Minnesota Department of Transportation Rochester Transportation Operations and Communications Center
- Missouri Department of Transportation St. Louis Transportation Management Center
- Missouri Department of Transportation Springfield Transportation Management Center
- Ohio Department of Transportation Statewide Traffic Management Center
- Travel Midwest Gateway Traveler Information System
- Wisconsin Department of Transportation Statewide Transportation Operations Center

Connected Centers

- Systems Engineering
- Operations Centers Profiles
- Operations Centers Information Exchange
- Gateway Automated Incident Response System (GAIRS)
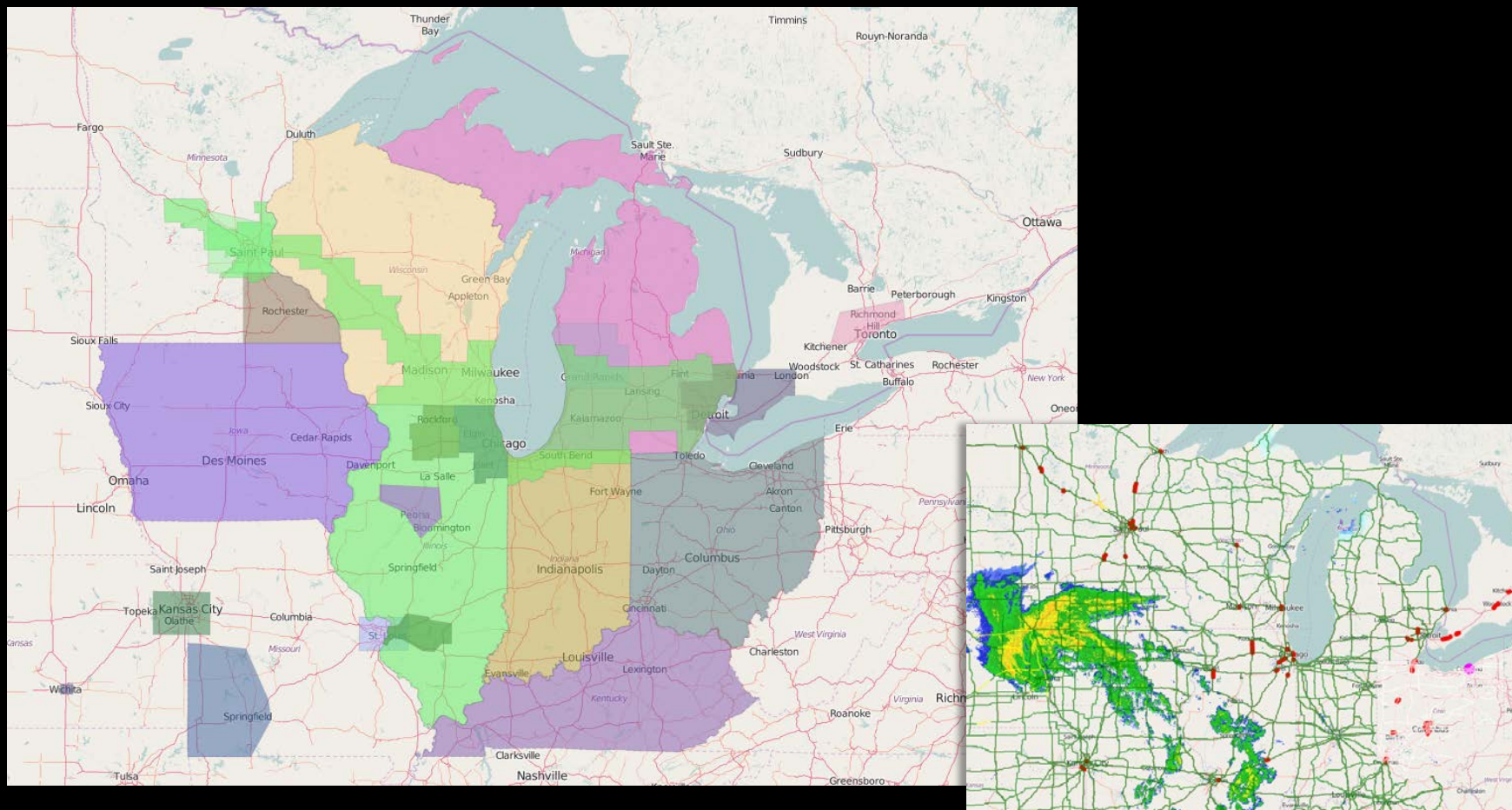
Scenarios	Interaction Between Travel Midwest and Agency TOCs	
	Areas with GTIS Coverage	**Areas without GTIS Coverage**
1. Agency TOC sends events continuously and automatically to Travel Midwest via **XML feed**	• Events are **automatically posted and updated** for Travel Midwest website as data sharing agreements allow	• Unavailable
2. Travel Midwest receives event information via **XML feed** and a significant amount of time expires without any status updates	• Travel Midwest **calls or emails** Agency TOC staff to inquire about event status • Events may **temporarily be manually posted and updated** for Travel Midwest website	• Unavailable
3. Travel Midwest receives no or intermittent event information from Agency TOC via **XML feed**	• Travel Midwest **calls or emails** Agency TOC technical contact (not TOC operations contact) to investigate as time allows • Events may **temporarily be manually posted and updated** for Travel Midwest website	• Unavailable
4. Agency TOC **calls or emails** event information to Travel Midwest	• Agency TOC determines when necessary to **supplement XML feed** • Events may be **manually posted and updated** for Travel Midwest website	• Events may be **manually posted and updated as "floodgate messages"** on the Travel Midwest website (message only; no map coverage)
5. Travel Midwest receives initial **call or email** about an event from an Agency TOC and a significant amount of time expires without an update from Agency TOC	• Travel Midwest **calls or emails** Agency TOC staff to inquire about event status • Events are **manually updated** for Travel Midwest website	• Travel Midwest **calls or emails** Agency TOC staff to inquire about event status • "Floodgate messages" are **manually updated** for Travel Midwest website
6. Travel Midwest becomes aware of a significant event and has not received a **call or email** from Agency TOC	• Travel Midwest **emails** Agency TOC to inquire about event • If no response after 15 minutes, Travel Midwest **calls** Agency TOC to inquire about event • Events may be **manually posted and updated** for Travel Midwest website	• Unavailable

Upcoming Events

Sep 21, 2016: GLRTOC Annual Meeting, Louisville

Sep 22-23, 2016: ITS Midwest Annual Meeting, Louisville

Oct TBD, 2016: TOC Collaboration Quarterly Meeting

Oct 24-25, 2016: Mid-Continent Transportation
                          Research Symposium, Madison

More at www.glrtoc.org/about/calendar

For more information, please visit:
www.glrtoc.org

Contacts:
Peter Rafferty, prafferty@wisc.edu
Adam Francour, afrancour@wisc.edu