



What's Cookin'?

- ▶ **Missouri's GIS Advisory Council Addresses National, State and Local Geospatial Issues and Topics**



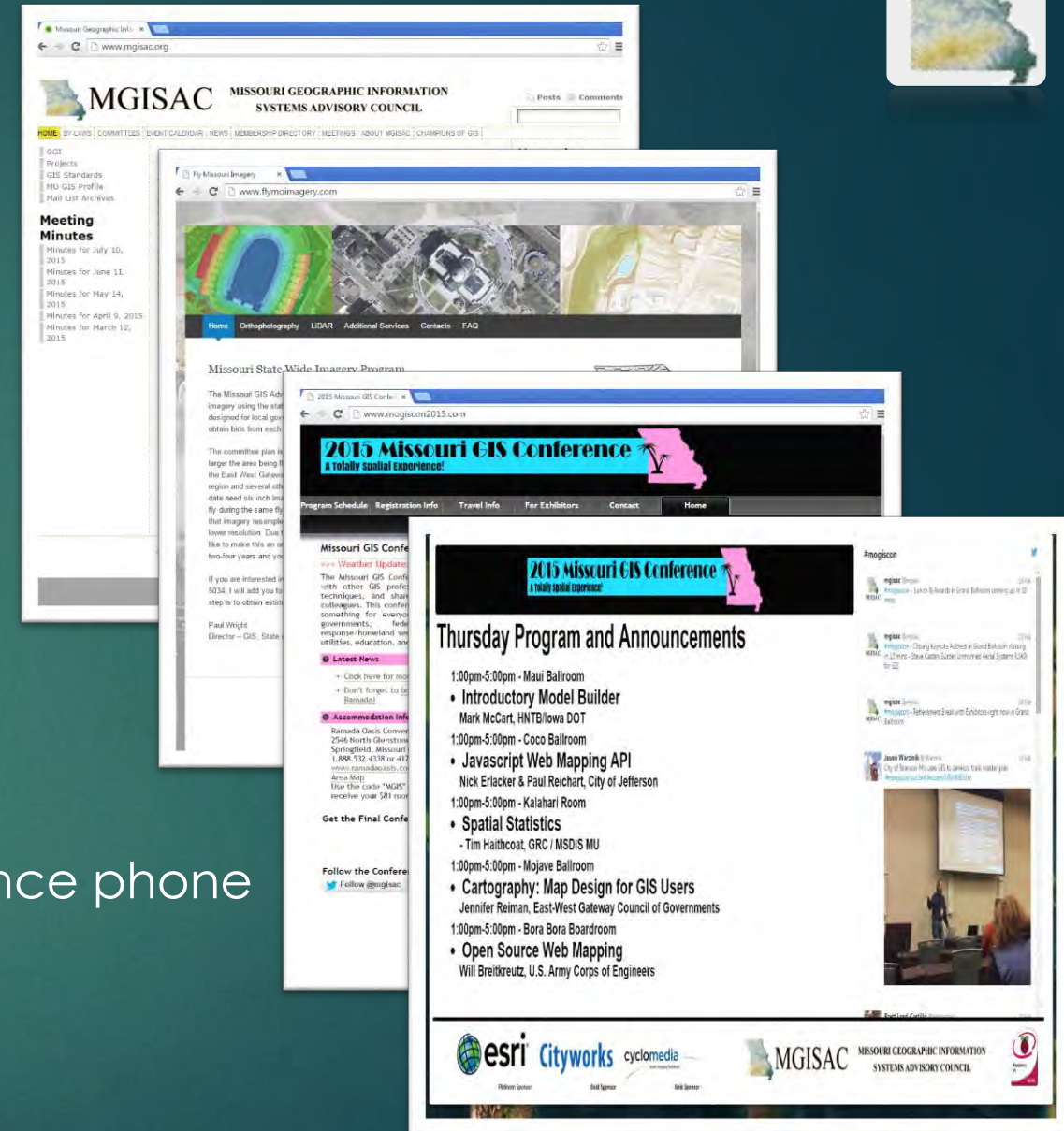
Marketing and Communications Committee

- ▶ MISSION: Provide marketing and communication support to the council and committees including the development and maintenance of the organizational, Missouri GIS Conference, and project specific websites; provide support for the development of high quality print and email marketing materials; and provide technical support to enable the organization and its members to show a consistent public image.

Activities



- ▶ Websites
- ▶ Mo GIS Conference
 - ▶ Agenda Yapp App
 - ▶ Digital Schedule & Social Media Display
- ▶ Email marketing templates
- ▶ MGISAC Tabletop Display Update
- ▶ New meeting/webinar service & conference phone





Committee Members or POCs & Email Addresses

- ▶ Jason Warzinik (Chair) – Boone County GIS Manager
jwarzinik@boonecountymo.org
- ▶ Mark Duewell – MSDIS Senior GIS Specialist
duewellm@missouri.edu
- ▶ Tim Donze – Surdex V.P Business Development
TimD@SURDEX.COM
- ▶ Melissa Johnson – Cole County GIS Manager
mjohnson@colecounty.org
- ▶ Steve Marsh – City of Lee's Summit Chief Technology Officer
Steve.Marsh@cityofls.net



Data Development Committee

- ▶ **Mission:** The committee's focus is to **assess the geospatial data needs** in the state of Missouri, develop plans of action to meet those needs, and work to ensure that the data meets those needs. The data development subcommittee is committed to making all geospatial data discoverable or available to the general public through the State's spatial data clearinghouse.



Hot Topics – Data Development Committee

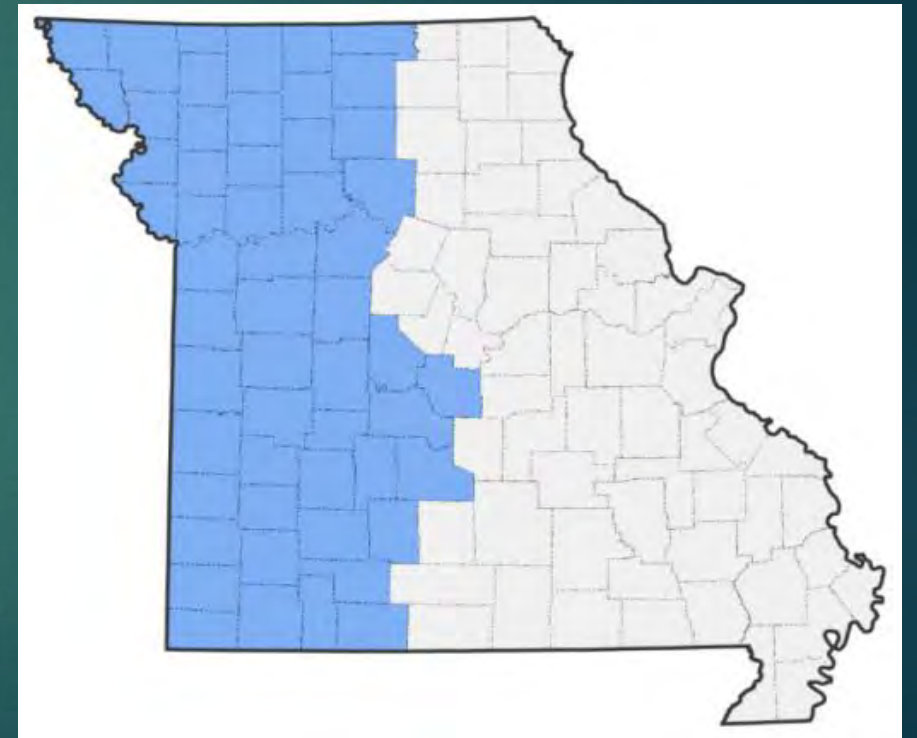
- ▶ Pre-approved 4 geospatial firms for imagery, LiDAR and other services. State contract is available for local government use and greatly simplifies contracting process
 - ▶ Surdex Corporation
 - ▶ Woolpert, Inc.
 - ▶ Quantum Spatial, Inc.
 - ▶ Fugro EarthData, Inc.

For more visit www.flymoimagery.com

Hot Topics – Data Development Committee



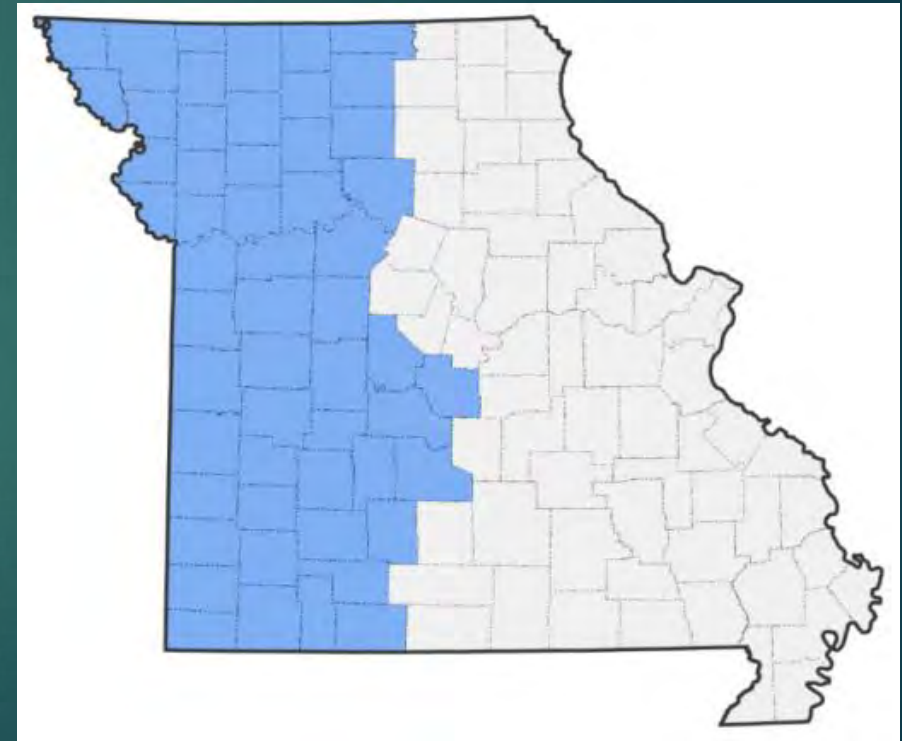
- ▶ Quantum Spatial, Inc. was contracted to produce 18-inch GSD leaf-off imagery for the western half of Missouri



Hot Topics – Data Development Committee



- ▶ Flying was completed in April, 2015. Imagery are currently being quality-controlled.





Hot Topics – Data Development Committee

- ▶ ITSD-GIS is heading the effort to secure funds for flying the eastern half of the State in the November 2015-April 2016 timeframe. Some funding has been committed; partners are still being sought
- ▶ EXCELLENT opportunity for local governments to tag on to the contract for economies of scale

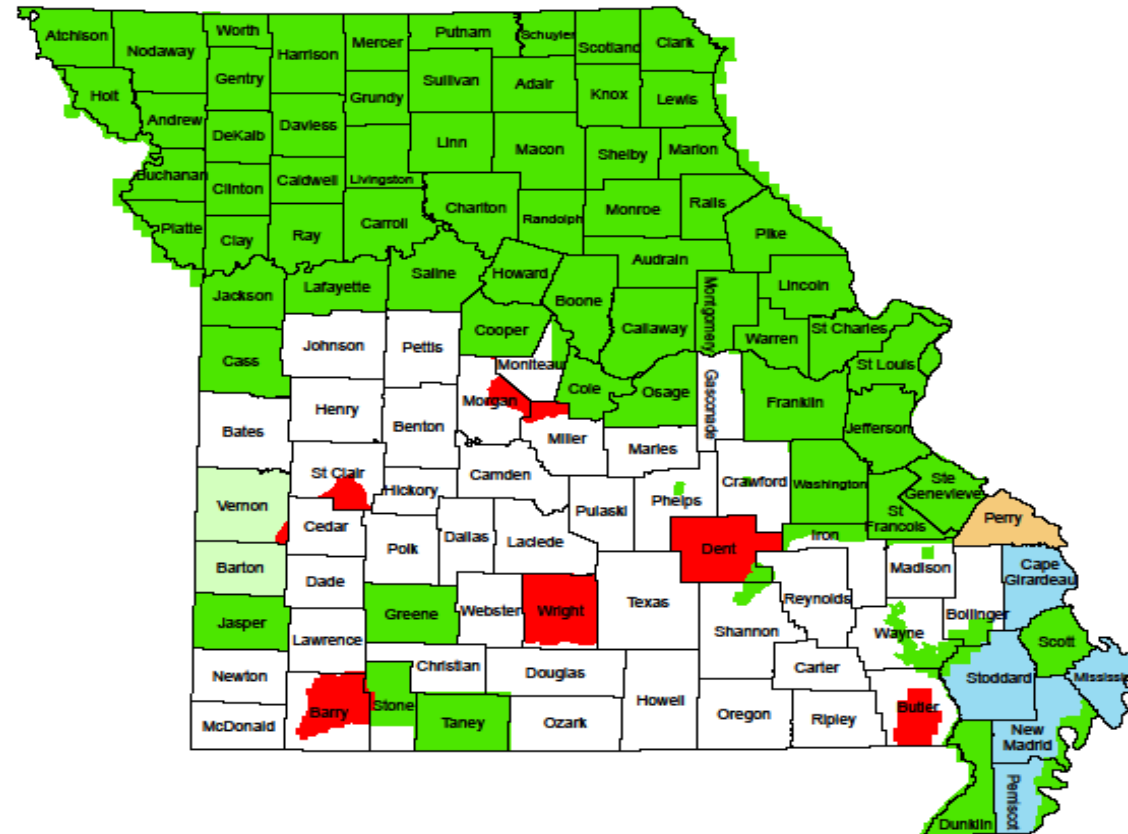


Hot Topics – Data Development Committee

- ▶ LiDAR acquisitions
 - ▶ Collaborative funding and grouping acquisitions into large areas saves money
 - ▶ Contracts are handled by the USACE-STL Center of Expertise using pre-qualified firms, simplifying the contracting process



Status of Elevation mapping from Airborne LiDAR in Missouri



Legend

- DUE 9/2015 RMSE \leq 18.5 cm
- DUE 11/2015; RMSE \leq 9.2 cm
- Completed; RMSE \leq 18.5 cm
- Completed; failed USGS QC; Being Reprocessed
- Completed; RISKMAP specs

NOTE: RMSE (Root Mean Square Error) is the square root of the average of the set of squared differences between the modeled (DEM) elevation values and known elevations from an independent surveyed source. The overall vertical accuracy of a DEM is 1.96 times RMSE at the 95% confidence level.

RISKMap specs vary some, but generally have an RMSE of 72.6cm and only the floodplain areas are processed into DEMs. For more details on RISKMap see www.fema.gov/library/viewRecord.do?id=4345

August 2015



Hot Topics – Data Development Committee

- ▶ Next LiDAR project likely cover these counties:

Bates, Johnson, Pettis (QL3), Ripley, Butler, Wayne (QL2).



Hot Topics – Data Development Committee

- ▶ MGISAC/MSDIS collaborated on a data discovery and download tool for LiDAR LAS tiles and bare earth DEMs



<http://www.msdis.missouri.edu/data/lidar/download/modem.html>

MSDIS LIDAR DEM File Download Tool - Windows Internet Explorer

http://www.msdis.missouri.edu/data/lidar/download/modem.html

U.S. Department of Agricu... Free Hotmail RealPlayer Enterprise Web Slice Gallery

MSDIS LIDAR DEM File Download Tool

MSDIS
Making
Missouri
Available
Digitally

MOLiDAR DEM File Download Tool

Zoom In Zoom Out Full Extent Prev Extent Next Extent Pan Select Tiles Clear Selection Help

Selected Tiles:
Linn_Sullivan_Warren, 38091-f1, ([Download](#))

Trusted site



Data Development Committee Co-Chairs

- ▶ Jason Warzinik, Boone Co.
 - ▶ jwarzinik@boonecountymo.org
- ▶ Elizabeth Cook, USDA-NRCS
 - ▶ elizabeth.cook@mo.usda.gov



Local Government Committee

- ▶ **Mission** : Support and be a voice for local governments serving as liaison between local government and State government. Our committee assists with GIS activities between Local, State, Federal and other government agencies as needed.
- ▶ The Local Government Committee continues to look for ways to work with local governments to identify and assist with GIS issues and look for educational opportunities geared toward local government.
- ▶ Work on the development/adoption of geospatial related standards such as metadata, E911, parcels, etc.



Activities or issues being tracked...

- ▶ The Local Government Committee has been working on partnerships between state and local government that provide cost savings for the purchase of imagery and LiDAR and provide support to facilitate those types of partnerships.
- ▶ This committee works to track who and where GIS technology is being used in the state and identify the needs of local governments.
- ▶ We have recently started a pilot program; the Local Government GIS Support Team. The goal of the team will be to assist local governments by matching them with a GIS professional who can assist with things such as RFP reviews, site visits or tours or general questions; any aspect of GIS and related technology.



Committee Members or POCs & Email Addresses

The MGISAC Local Government Committee:

- ▶ Melissa Johnson (Cole County) – Chair * mjohnson@colecounty.org
- ▶ Jennifer Bowden (Camden County) * jennifer_gordon@camdenmo.org
- ▶ Jason Warzinik (Boone County) * JWarzinik@boonecountymo.org
- ▶ Matt Gerike (City of Columbia) * mjgerike@gocolumbiamo.com
- ▶ Mark Duewell (MSDIS) * duewellm@missouri.edu
- ▶ Steve Marsh (Lee's Summit) * Steve.Marsh@cityofls.net



Outreach Committee

► Mission:

Facilitate outreach activities and events that support the Council by providing a conduit to the general GIS community in Missouri as a way to expand the overall GIS knowledge base and provide networking opportunities to those with GIS and related interests.



Activities and Events Include:

- ▶ Partner with local regions to hold regional *GIS Workshops*
- ▶ Partner with Federal, State and Local partners to hold regional *LiDAR Workshops*
- ▶ *SEMO GIS Symposium* every year in September



Committee Co-Chairs & Email Addresses

- ▶ Mark Duewell – MSDIS – Program Manager – GIS Specialist Sr.
duewellm@Missouri.edu
- ▶ Colin Duewell – OA ITSD - Dept. of Economic Development – GIS Specialist
Colin.Duewell@oa.mo.gov
- ▶ Tim Donze – Surdex VP Business Development
TimD@SURDEX.COM



Strategic Planning Committee

- ▶ Coordinate the strategic plan and provide annual reporting on the actions and program of MGISAC as it establishes a foundation and grow to meet its goals.



Activities or issues being tracked...

- ▶ Updated the motto, mission, and vision for the current plan.
- ▶ Organizing committee-level tasks around five MGISAC-wide goals:
 - ▶ MGISAC will broaden its standing as the state geospatial council: coordinating activities statewide, collaborating with other states organizations, facilitating resolutions to geospatial issues impacting the state, and providing, guidance, oversight, and support to the state clearinghouse.
 - ▶ Missouri will develop full-time geospatial leadership to: champion geospatial technologies at all levels and scales throughout the state; lead collaborative geospatial data programs in Missouri; and foster cooperation and coordination in response to federal geospatial initiatives.
 - ▶ MGISAC will coordinate and recommend best practices for data use, development, distribution, standards, schemas, and programs to implement, maintain, and support the use of geospatial technologies.
 - ▶ MGISAC will work with federal, state, and local agency partners to coordinate, develop, and broaden the interoperability of geospatial data.
 - ▶ MGISAC will work to develop and expand geospatial technology knowledge, skills, and abilities for Missouri's current and future workforce.



Committee Members or POCs & Email Addresses

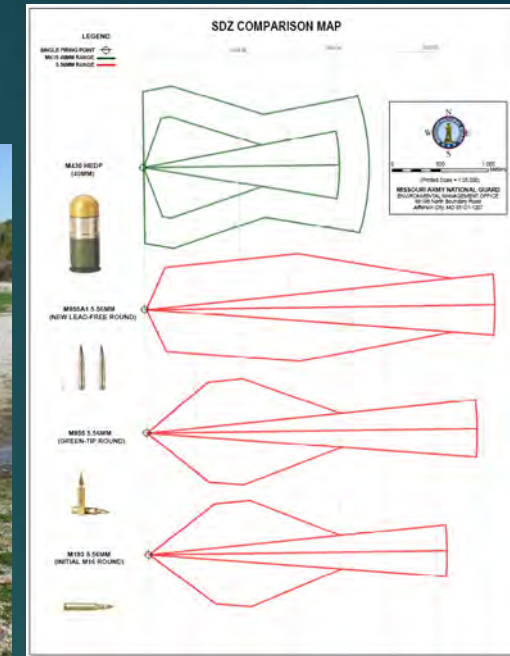
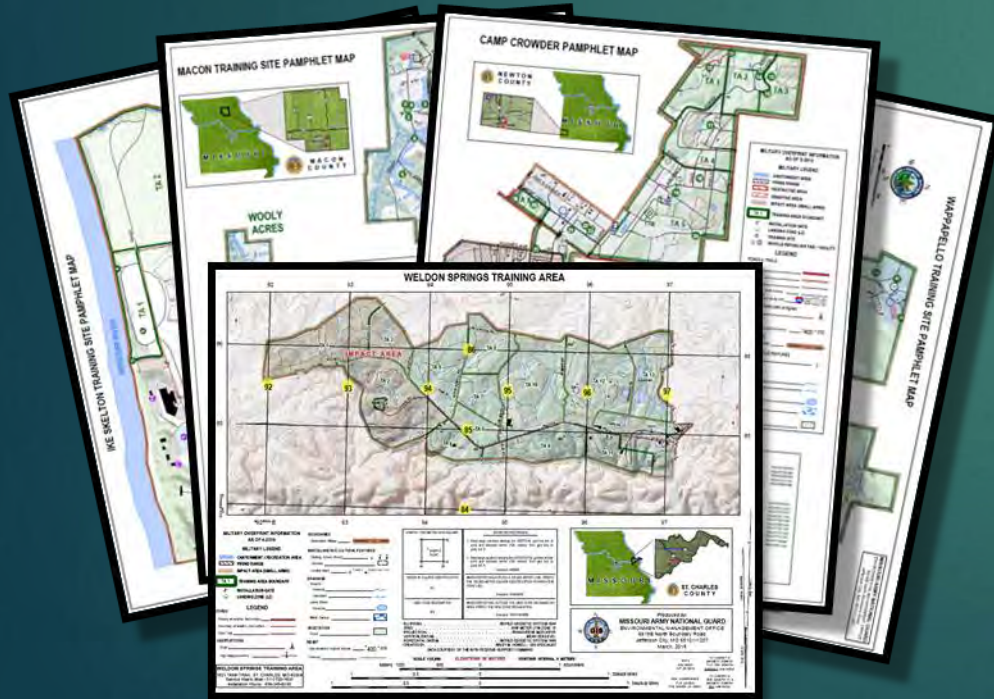
- ▶ Contact:

- ▶ Matt Gerike – mjgerike@gocolumbiamo.com

MISSOURI ARMY NATIONAL GUARD

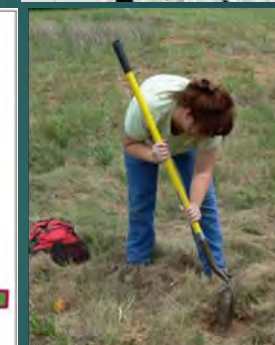
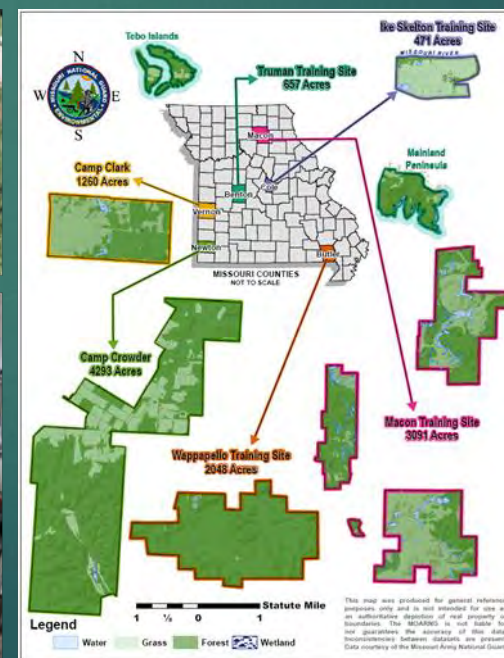
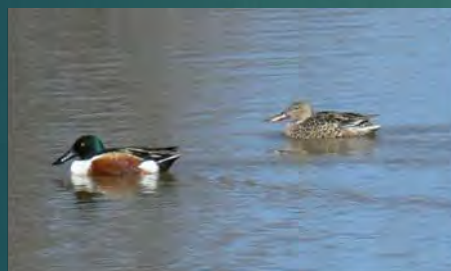
► The MOARNG GIS Program Supports: OPERATIONS & TRAINING

- Military Cartography
- State Emergency Duty Support
- Ballistic Surface Danger Zone Modeling



MISSOURI ARMY NATIONAL GUARD

- ▶ The MOARNG GIS Program Supports: **SUSTAINABILITY**
 - ▶ Real Property Inventory / GPS Survey / Design & Construction Support
 - ▶ Remote Sensing of Training Sites & Environmental Spatial Analysis
 - ▶ Cultural Resources / Historic Preservation & Archeology
 - ▶ Natural Resource Management / Conservation



MISSOURI ARMY NATIONAL GUARD



Wiley M. Howell
GIS Specialist



MISSOURI ARMY NATIONAL GUARD
Environmental Management Office
6819B North Boundary Road
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(573) 638-9775 (Comm)
(573) 639- 9511 (Fax)

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Missouri Department of Transportation

- ▶ The following GIS based projects which impact all Missourians, along with strategic investments in our transportation system improve the safety and quality of life for Missourians and improve the economic vitality of the state.

Interactive, recently updated, and available through mobile apps.



Traveler Information Map

Check MoDOT's Traveler Info Map for weather-related road conditions, flood closures & work zone locations.



Tips for using the map

Text Report - Road conditions

Text Report - Road Closures and delays

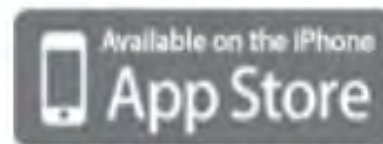
Links to surrounding states



Text Alerts - Sign Up Now!

Email Notifications - Sign Up Now!

Get Your Mobile Apps



Rate Our Work Zone

Rate our Work Zones!

Incident

- ☐ Planned
- ☐ Closed
- ☒ Expect Delays
- ☒ Possible Delays

Flooding

- ☐ Closed
- ☐ Expect Delays

Work Zone

- ☐ Closed
- ☒ Expect Delays
- ☐ Possible Delays
- ☐ Future Work

Winter Weather

- ☐ Closed
- ☐ Road Conditions
 - Closed
 - Covered
 - Partly Covered
 - Mostly Clear
 - Clear

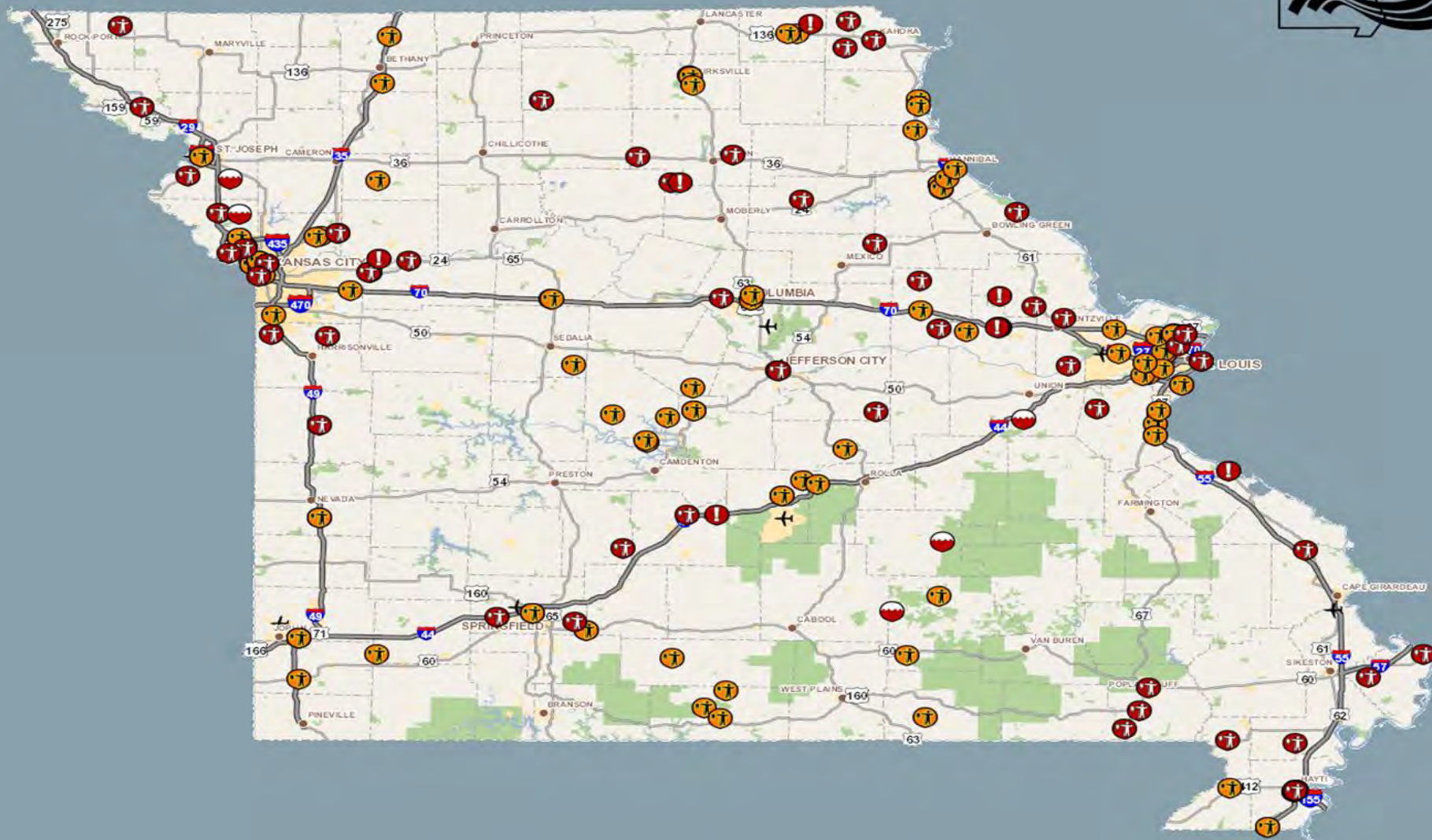
Traffic

- ☐ Real-time Traffic
 - Slow
 - Medium
 - Normal
- ☐ Traffic Camera
- ☐ Commuter Lot
- ☐ Message Board

Weather

- ☐ Weather Radar

Animation: [Start](#) [Stop](#)





Gateway Guide is the Missouri Department of Transportation's St. Louis Metro area intelligent transportation program.



*Better Information ...
Smarter Travel*

brought to you by
the Missouri Department of Transportation



HOME | ABOUT | ROAD CONDITIONS | MOTORIST ASSIST | HWY SNAPSHOTS | MY STL TRAFFIC | SCORECARD | LINKS |
CONTACT US |
News/Alerts:..TERNATE ROUTE.



Springfield Area - ITS



FAQ | LOG IN | NEWS | RSS | CONTACT US

OZARKSTRAFFIC

SPRINGFIELD, MO
REGIONAL TRAFFIC INFORMATION

SEARCH

MAP | TRAFFIC ALERTS | EMAIL NOTIFICATION | TRAVEL LINKS | ABOUT US | QUICKLINKS

INCIDENTS

CAMERAS

MESSAGE BOARDS

CONGESTION

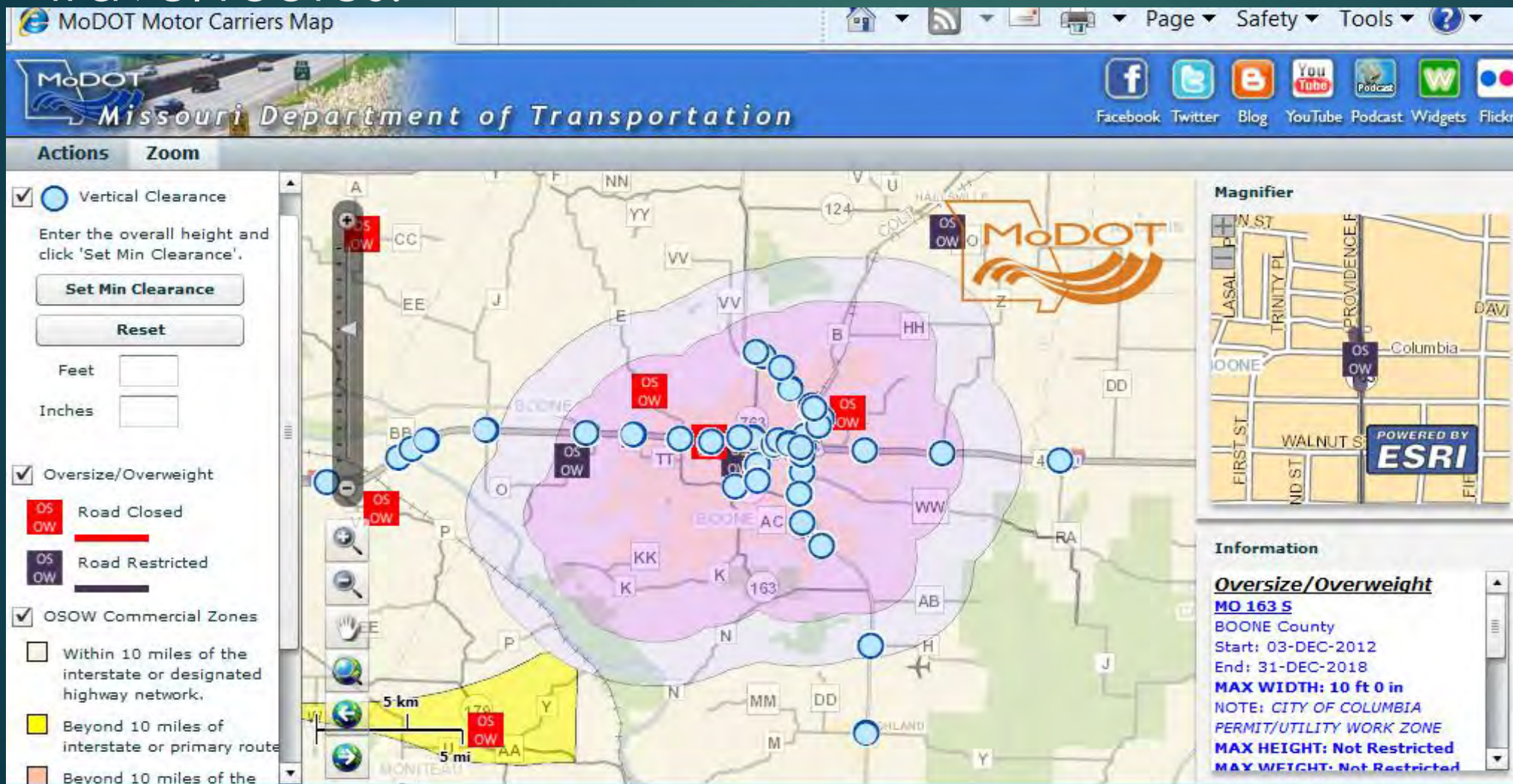
CONSTRUCTION

Back to School
Back to Basics
Obey Speed Limit

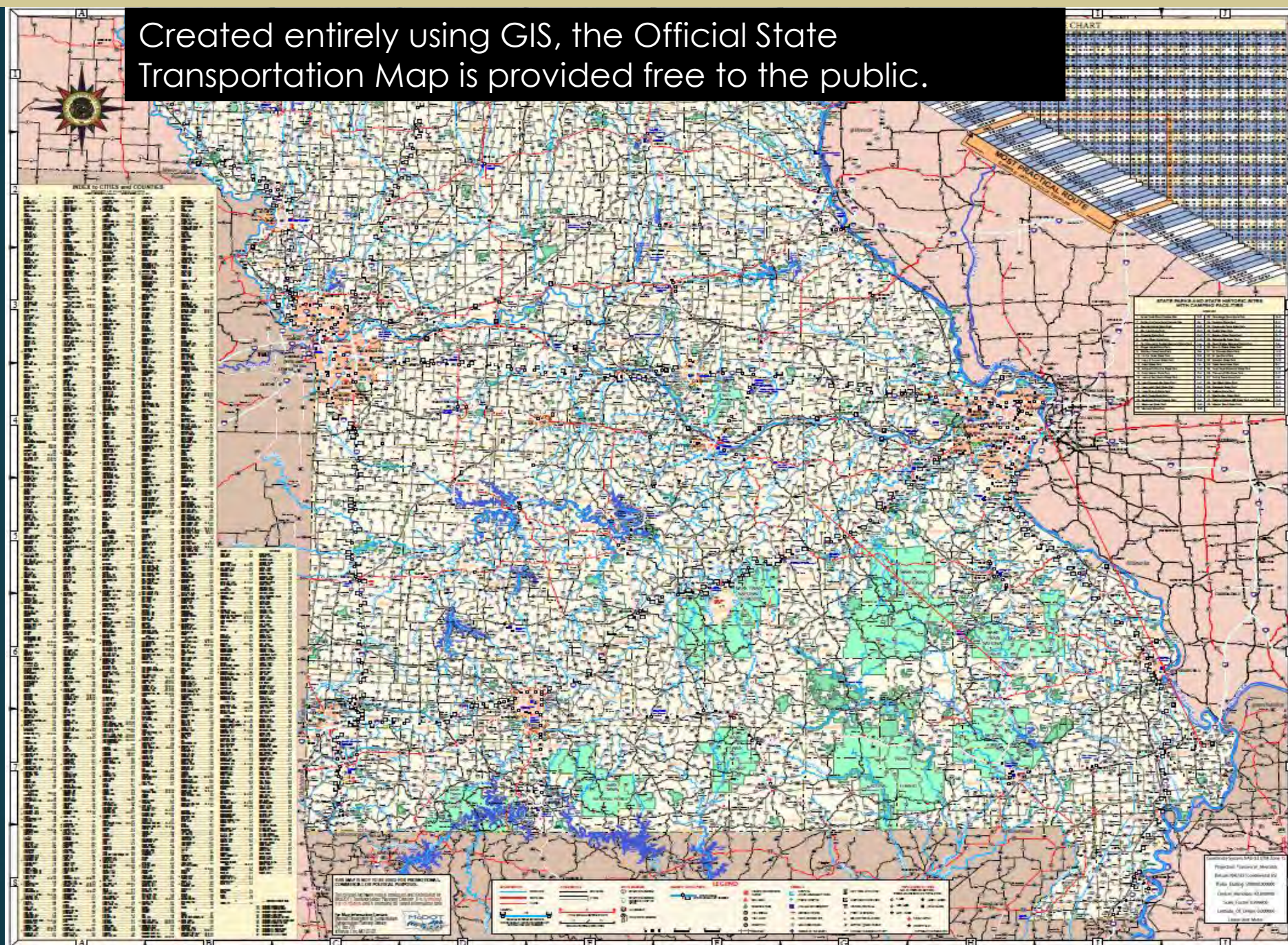
<http://www.ozarkstraffic.com/>



MoDOT Motor Carriers Interactive Map application, serves as a tool for planning oversize/overweight travel routes.



Created entirely using GIS, the Official State Transportation Map is provided free to the public.



MISSOURI HIGHWAY MAP
CENTENNIAL EDITION

MISSOURI

GOVERNOR
MICHAEL DOUGHERTY

COMMISSIONER
JAMES W. COOPER

MISSOURI HIGHWAY MAP
CENTENNIAL EDITION

MISSOURI

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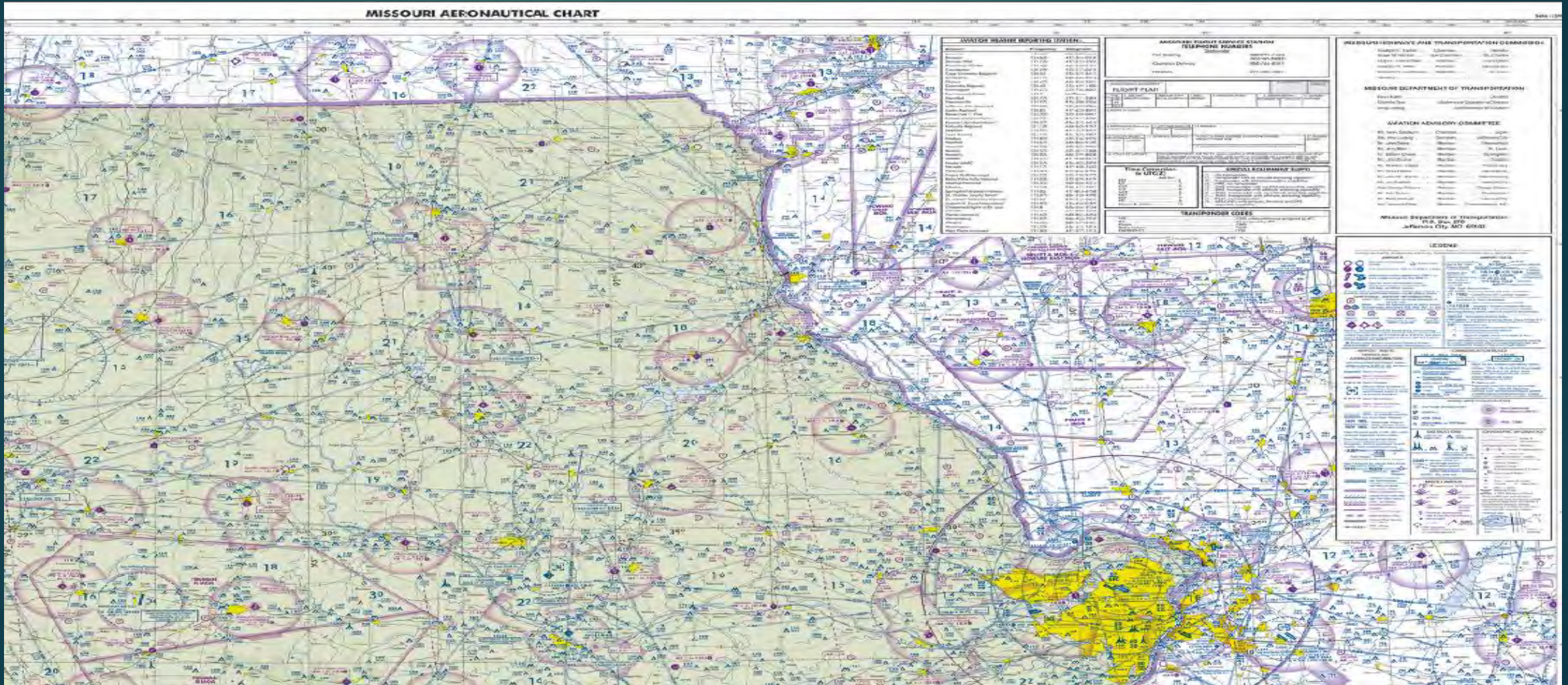
COMMISSIONER
JAMES W. COOPER



Missouri 2013-2014 Aeronautical Chart



The Missouri Aeronautical chart is created using GIS software and provides information on controlled airspace; airport data; visual and radio aid navigation; restricted areas; obstructions; and related data for visual flight navigation in the State of Missouri. **Provided free to the public.**

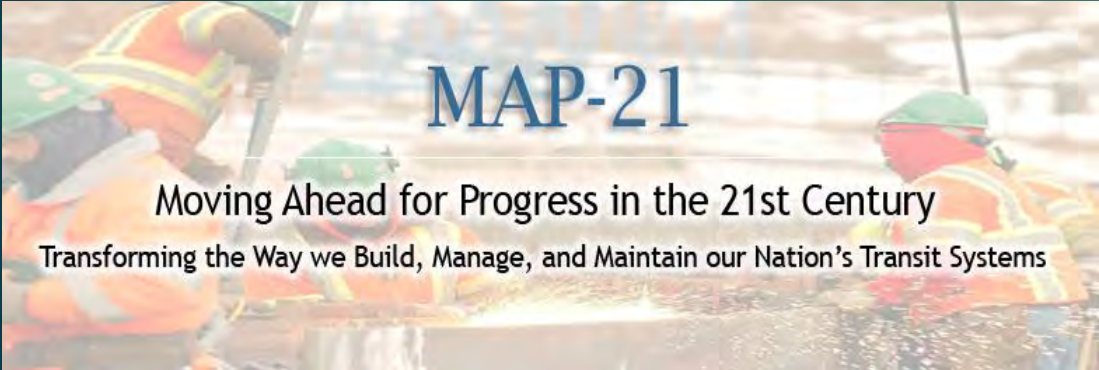


MoDOT's Geospatial Network (Shared through MSDIS) for all Public Roads (Base Data) is collected from construction plans, county map books, Transportation Management Systems (TMS), Automated Road Analyzer (ARAN), and other GIS-based sources.



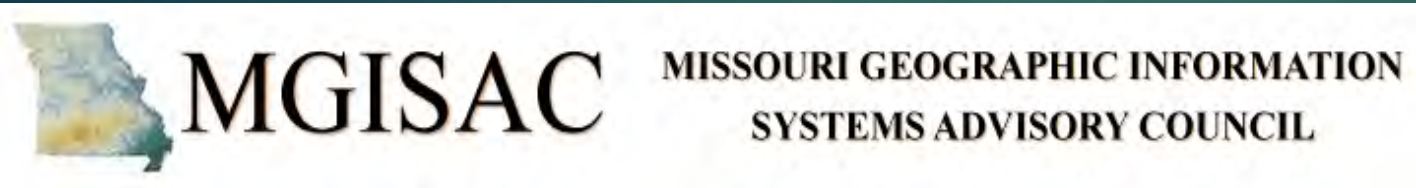
To Finish

From Start

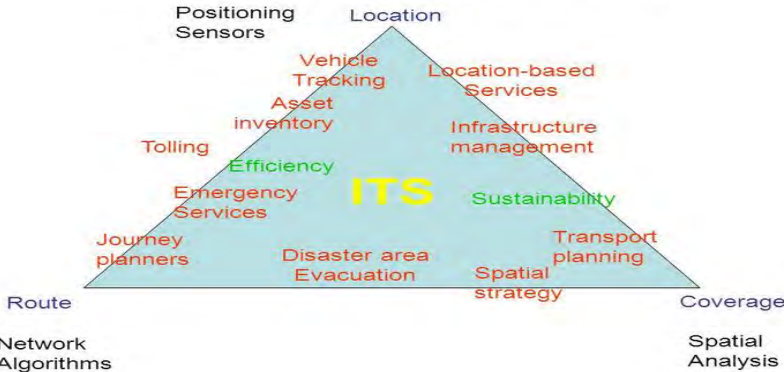




MoDOT supports GIS in Missouri through:



GIS-T Applications



MISSOURI BOARD ON GEOGRAPHIC NAMES



The National Map Corps





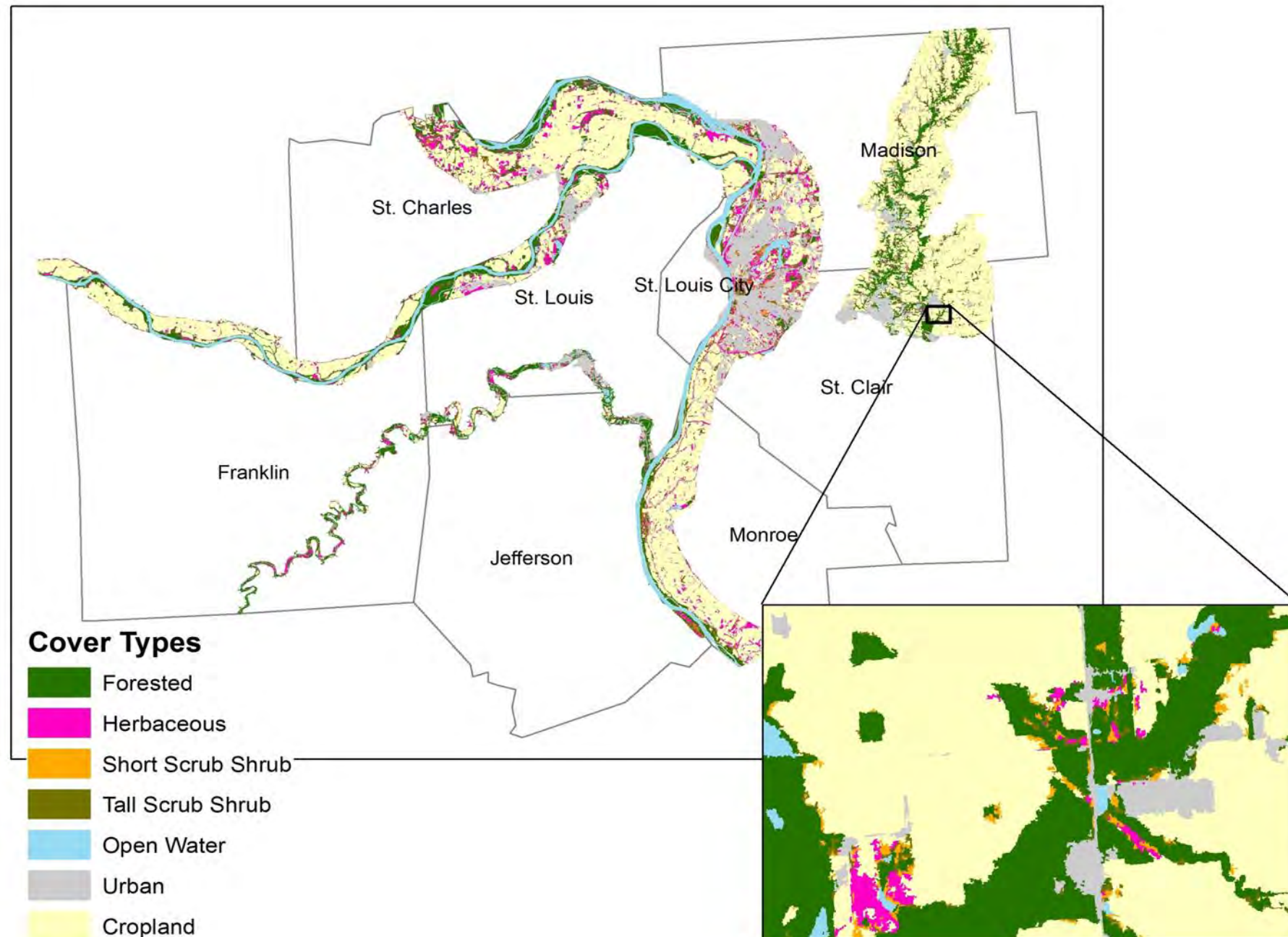
Joseph A. Carter, GIS Specialist

▶ Joseph.Carter@modot.mo.gov

Eco-Logical Approach to Infrastructure Development: Wetlands Mapping and Analysis for the East West Gateway



C. Diane True, Missouri Resource Assessment Partnership (MoRAP); David D. Diamond, MoRAP; Ronnie Lea, MoRAP; Clayton F. Blodgett, MoRAP; Lee F. Elliott, MoRAP; Mary Grace Lewendowski, East-West Gateway Council of Governments (EWG); and Jennifer Reiman, EWG



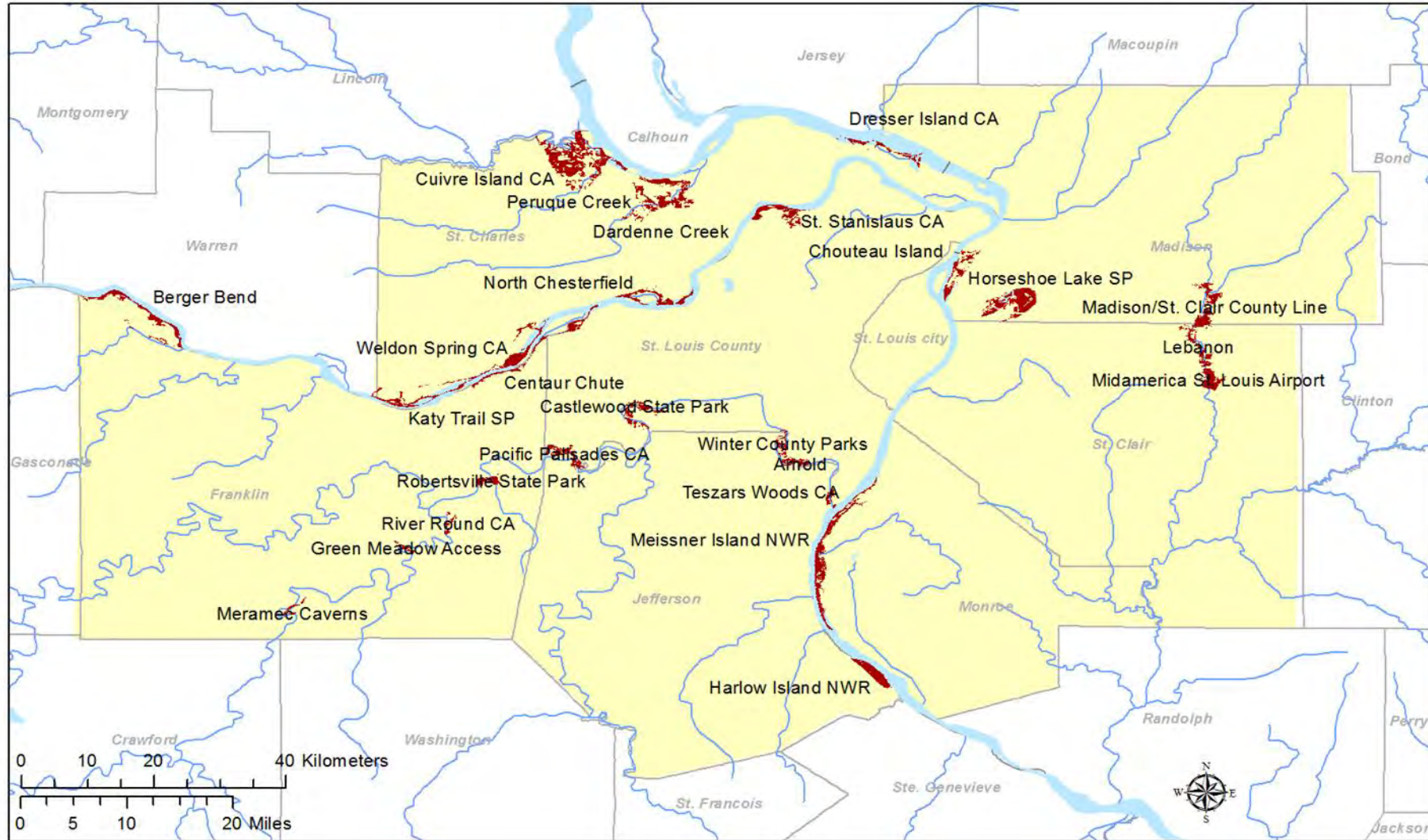


Locations of Very Highly Ranked Wetland Complexes



EAST-WEST GATEWAY
Council of Governments

Creating Solutions Across Jurisdictional Boundaries





What is NSGIC?

- ▶ 501 (c) 6 nonprofit organization started in 1991
- ▶ Principal members are State GIOs & Coordinators
- ▶ Support States
 - ▶ Best practices, funding opportunities, hot news, etc.
- ▶ Support members in Washington
 - ▶ Federal agencies, Congress, FGDC
- ▶ Forum for discussing national issues
- ▶ Each State has A single VOTE on the Council

NSGIC Liaison



- ▶ Represent Missouri's geospatial community at NSGIC and facilitate coordination.





Activities or issues being tracked...

- ▶ National Spatial Data Structure
- ▶ National Address Database
- ▶ NG9-1-1 (geospatial perspective)
- ▶ Advocacy – National Geospatial Data Act
- ▶ Geospatial Privacy
- ▶ UAS and related technology and issues
- ▶ Geospatial Inventory
- ▶ ...and so much more....



POCs & Email Addresses

- ▶ Tony Spicci – MoGISAC Liaison to NSGIC
 - ▶ Tony.Spicci@mdc.mo.gov
 - ▶ 573.815.7901 x3614



Office of Geospatial Information

State of Missouri

The mission of the Office of Geospatial Information (OGI) is to provide effective geospatial resources to state agencies, local governments, and other stakeholders in order to benefit and serve the citizens, the environment, and the economy of Missouri.



Activities



GIS Analysis and Design - patterns and relationships between features (real world objects).

Spatial Database Design & Development - design activities and reviews of end users systems requiring spatial data.

GIS Data Creation and Maintenance - convert digital information into meaningful and reliable GIS database layers.

GIS/GPS Technical Support & Training - assist with your training and technical needs for desktop GIS and GPS software.

Cartographic Services – map creation.

Emergency GIS Support - allows information to be visualized spatially, shared among state agencies, and updated real time empowering decision makers and saving lives.

GIS Web Application – map services for web based applications or as stand-alone applications.



Points of Contact

Paul Wright – Director, *Paul.Wright@oa.mo.gov*

Arnold Williams – GIS Manager, *Arnold.Williams@oa.mo.gov*

OGI Email:

MO.GIS@oa.mo.gov

Main Office:

301 West High Street
Room 840
Truman State Office Building
Jefferson City, MO 65101



U.S. Army Corps of Engineers – St Louis District

- ▶ The St. Louis District, which encompasses 28,000 square miles and is almost equally divided between Missouri and Illinois, is an engineering and water resource agency dedicated to maintaining a proper and healthy balance of the varying uses of the heartland's waterways.



Activities or issues being tracked...

- ▶ We support the needs of the community and the environment through many civil works missions. To fight the devastating effects of floods, 87 levees (totaling 750 miles in length) constructed to protect 575,000 acres of economic and agricultural interests in the region.

To ensure the safe passage of commerce on our waterways, we also maintain a Congress-mandated nine-foot navigation channel on 300 miles of the Middle Mississippi River, 80 miles of the lower Illinois River and 36 miles of the Kaskaskia River. This is accomplished through several different types of river engineering practices, including locks and dams, which maintain a pool at a depth necessary to meet navigation requirements, while still fulfilling the needs of the environment.

The St. Louis District also operates and maintains five lakes and their associated recreational areas. These lakes, which serve a variety of purposes ranging from flood protection and recreation to potable water supply and hydroelectricity, average over 15 million visitors a year.

Other missions include environmental restoration, environmental river engineering (created by the St. Louis District), water supply, emergency responses to natural disasters, regulatory oversight (issuance of permits and wetland delineation), hydropower, recreation, Ordinance and Explosive Waste Program, and clean up hazardous and toxic waste material connected to Department of Energy activities in the 1940s-1960s.



Committee Members or POCs & Email Addresses

- ▶ Michael Gawedzinski
- ▶ email:michael.j.gawedzinski@usace.army.mil



U.S. Geological Survey (USGS)

- ▶ The USGS is a science organization that provides impartial information on the health of our ecosystems and environment, the natural hazards that threaten us, the natural resources we rely on, the impacts of climate and land-use change, and the core science systems that help us provide timely, relevant, and useable information.
- ▶ As the Nation's largest water, earth, and biological science and civilian mapping agency, the USGS collects, monitors, analyzes, and provides scientific understanding about natural resource conditions, issues, and problems. The diversity of our scientific expertise enables us to carry out large-scale, multi-disciplinary investigations and provide impartial scientific information to resource managers, planners, and other customers.



National Geospatial Program (NGP)

As a program within the USGS, the NGP organizes, maintains, and publishes the geospatial baseline of the Nation's topography, natural landscape, and built environment.

- The baseline is **The National Map**, a set of databases of map data and information from which customers can download data and derived map products and use web-based map services.
- Through the **National Map Liaison Network**, the NGP works with cooperators to share the costs of acquiring and maintaining these geospatial data. Liaisons also provide outreach and support to the user communities.
- The **Federal Geographic Data Committee** promotes consistent data and metadata standards, system interoperability, and cross-government best business practices for geospatial resources, policies, standards, and technology as part of the National Spatial Data Infrastructure.



Committee Member:

▶ **Shelley Silch**

- ▶ **National Map Liaison for Missouri and Illinois**
- ▶ **1400 Independence Road**
- ▶ **Rolla, MO 65401**
- ▶ **Cell – 217-418-0315**
- ▶ **ssilch@usgs.gov**