

Transportation Plan Development

Planning Factors

SAFETEA-LU legislation requires that all Transportation Plans take into consideration the following eight factors while developing Transportation Plans:

- *Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency.*

Through identifying congestion strategies and efficiently selecting priority projects based on the network model, input from local citizens and related surveillance and monitoring data, the best projects emerge to address infrastructure and transportation needs. The development of the 2035 Transportation Plan addresses the efficient movement of people and goods (through the continuing development of freight movement studies). In addition, the Michiana Area Council of Governments has worked with the Economic Development Administration (EDA) to identify regional funding resources and to pursue regional coordination and cooperation in urban and rural counties to further address the region's economic vitality.

- *Increase the safety for motorized and non-motorized users.*

Through the Indiana State Highway Safety Plan and other programs MACOG provides crash analysis and accident intersection and corridor planning data to its jurisdictions and INDOT District Offices. This data is used by these agencies to develop projects that will result in a safer regional transportation network. MACOG annually produces a listing of high frequency crash locations in each jurisdiction. Regularly MACOG receives requests from INDOT and local planning agencies to do crash research and analysis on intersections and corridors for project planning purposes. MACOG and its local jurisdictions have been successful in funding over \$7 million dollars worth of intersection improvements addressing safety concerns since 2004.

MACOG also produces a bike and pedestrian safety brochure, which is annually distributed to

4th and 5th grade students throughout the region.

Transit operators in the MACOG region have recently installed security cameras on vehicles to increase safety for passengers and bike riders using bike racks on the rear of buses.

- *Increase the security for motorized and non-motorized users.*

As previously mentioned security cameras have been installed on transit buses to ensure the safety and security of transit riders throughout the region.

MACOG has also taken a proactive role in security planning through the development of the ITS Regional Architecture. MACOG regularly meets with Local Emergency Planning Committees and Emergency Management Agencies to discuss regional efforts for disaster preparedness and response. MACOG has also worked through the ITS plan to identify critical facilities for not only communications purposes but also for emergency purposes. These facilities not only include key government building, but highways and transit systems as well.

- *Increase the accessibility and mobility options available to people and freight.*

The Michiana Area Council of Governments conducted a Goods Movement Study in 1999 and completed a Freight Inventory and Survey in 2004. MACOG has developed a Freight Committee to review and address the need for increased freight mobility. The projects identified by the Committee and freight-haulers have been considered as part of the 2035 Transportation Plan.

In the South Bend and Elkhart/Goshen Urban Areas four transit systems currently operate providing accessible transportation services to much of the region.

- *Protect and enhance the environment, promote energy conservation, and improve quality of life, promote consistency of transportation plan and*

transportation improvements with State and local planned growth and economic development patterns.

MACOG annually conducts a Public Information and Awareness Campaign on the importance of Clean Air. MACOG houses the St. Joseph River Basin Commission whose mission it is to enhance public awareness regarding clean water, both surface and ground water. MACOG is also in the process of completing an update to its Ground Water Contamination Site Maps, which will aid the community in identifying areas of ground water concern. Finally, MACOG promotes and actively participates in Livable Communities initiatives distributing thousands of Livable Communities brochures every year.

MACOG has worked with local planning and economic development agencies to develop a regional Comprehensive Economic Development Strategy which examines eleven topic areas and how each relates to improving the quality of life and economic sustainability of the region. Some of the topic areas include: transportation, infrastructure, environment, education, and workforce development.

- *Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.*

One of the 2035 Transportation Plan goals is to enhance the transportation system's ability to efficiently move goods and people. Many of MACOG's activities are designed to integrate these improvements. The Transportation Technical Advisory Committee (TTAC) acts as a mechanism for discussion and coordination between members representing air, transit and highway interests. The MACOG region hosts one of the only multi-modal facilities in the country at the South Bend Regional Airport. The facility includes air, taxi, fixed route bus, commuter rail and over the road long distance bus services.

- *Promote efficient system management and operation.*

As a transit system operator, MACOG has designed its program to use community resources in delivering public transit through the use of private sector and non-profit transit providers. In addition, the selection of projects identified for inclusion in the 2035 Plan come from the consideration of the Congestion Management System, the TDF models LOS (Level Of Service) projections, and other related system performance and efficiency mechanisms.

- *Emphasize the preservation of the existing transportation system.*

MACOG recognizes the need to first enhance and, where necessary, expand the region's transportation system. One goal of the 2035 Transportation Plan is to provide a plan that will meet the region's preservation and expansion needs. MACOG promotes the consideration of efficient system management and operation in transportation planning processes and recognizes that it cannot simply build its way out of congestion, but where opportunities exist, will make efforts to better manage and operate the existing system.

As noted in the financial plan of this document, MACOG has taken into consideration the preservation, and operation and maintenance of the region's transportation system as well as its expansion in calculating the funding levels available.

Project Identification and Selection

The project identification and selection process involved many meetings with citizens, engineers, Chambers of Commerce, planning agencies, INDOT representatives and elected officials. Project recommendations were received from all sources. In developing the 2035 Transportation Plan, only the expansion projects adding capacity to the road network were specifically identified. Road reconstruction projects, resurfacing and road rehabilitation projects are considered in the Financial Plan. It is understood that federal funding may also be used for road reconstruction projects without amendment to the Plan.

Public Transit

Public transit needs in the MACOG region are met with a variety of services and modes of travel options. Various improvements in the past three years have enhanced the coordination of services and the connection of travel modes across the region. The following discusses the public transit services available and improvements made in the urbanized areas of South Bend and Elkhart/Goshen. A brief discussion of transit service in Niles, Michigan is also included as the South Bend urbanized area includes the City of Niles.

South Bend Urban Area:



The South Bend Public Transportation Corporation (TRANSPO) operates a radial system of eighteen fixed transit routes that serve the cities of South Bend and Mishawaka on 30 minute and 60 minute headways. TRANSPO provided 2,831,544 unlinked passenger trips in 2008. This represents 10.2 trips per capita. According to the National Transit Database (NTD) for 2005, an average of 9,848 passenger trips were taken on weekdays and 6,159 on Saturdays. No Sunday or holiday service is operated. TRANSPO operates a fleet of 65 revenue vehicles with a base hour requirement of 37 buses. TRANSPO operates paratransit service in compliance with ADA regulations using eight vans for demand-response service.

Due to private development in the South Bend downtown business district, TRANSPO was required to relocate its South Bend transfer facility. This move was taken as an opportunity to develop an intermodal facility adjacent to the AMTRAK rail tracks, with improved passenger shelter and amenities for TRANSPO riders. This new facility opened in 1998 and is known as South Street Station. TRANSPO riders enjoy a temperature-controlled building with public restrooms. A staffed information desk also provides improved communication and a convenient place to purchase monthly bus passes. All areas of South Street Station are well lighted, enhancing passenger safety and security. In 2004 TRANSPO implemented the use of four diesel fueled trolley-replica vehicles

to provide shuttle service in the downtown South Bend area.

The future connection with AMTRAK was to be developed at South Street Station to accommodate rail passengers boarding from its upper floors. Negotiations for this project broke down when AMTRAK rail rights at the South Street Station site were sold to Norfolk Southern. As a result, TRANSPO deleted this project in 2004.

TRANSPO plans to replace its aging maintenance and administrative headquarters. \$5.6 million in federal funds designated for the AMTRAK project have been reprogrammed to this project, as well as an additional \$1 million in federal transit funds secured for the building replacement project. TRANSPO has purchased property in the Studebaker Corridor and has relocated its operations, administrative, and maintenance functions in a LEEDS Platinum transit facility which will open in November, 2010. This facility is near the South Street Station which will result in service efficiencies for TRANSPO.

The City of Niles, MI provides public transit services for the portion of the South Bend Urbanized Area in Michigan. The City of Niles contracts with a private sector management firm to operate the Niles Dial-A-Ride, a general public demand response service. Service is operated seven days per week, including all holidays except Christmas Day. The transit fleet is comprised of nine vehicles that are all lift-equipped. The Niles service also coordinates with Buchanan Dial-A-Ride, which provides demand response service in Buchanan and shuttle service to Niles on a demand-response basis. In addition, two rural transit systems also coordinate with the Niles service: Cass County Public Transit and Berrien Bus of Berrien County. During 2007 Niles Dial-A-Ride provided 75,940 passenger trips.



The South Shore Line, operated by the Northern Indiana Commuter Transportation District, provides interurban electric commuter train service between South Bend and Chicago, IL.

The South Bend boarding site is located at the South Bend Regional Airport and links the South Shore with domestic airline service and inter- and intra-city bus service. The passenger station at the airport provides a raised boarding platform that gives riders safe, covered and well lit access to the trains. A comfortable waiting and ticketing area is also provided inside the airport. Seven daily trains leave from South Bend bound to Chicago, with five trains offering return service. The weekend and holiday schedule offers eight trains that originate from South Bend and seven trains that provide return service.

There has been interest expressed for extending this train service to Elkhart, however, no funding resources have been identified to support this capital-intensive project.

The South Bend Regional Airport is the only multi-modal passenger facility operating in the Michiana area.



In a true coordination of travel modes, the South Shore boarding station for train passengers is located at the east end of the SBN facility, while two inter-city bus lines board riders from the west side of the airport terminal. TRANSPO city buses and private taxicabs board passengers along the arrival/departure drive. SBN is a full service commercial airport categorized as a Small Hub by the Federal Aviation Administration and consists of three active runways. Five commercial airlines operate from SBN providing links to hubs and destinations such as: Atlanta, Chicago, Cincinnati, Cleveland, Detroit and Minneapolis, Las Vegas, Orlando, and St. Petersburg.

SBN has seen a decrease of freight handling since an annual total of 1,500 tons in 2008 compared to approximately 750 tons in 2009. Three primary companies handle airfreight at SBN; FedEx, UPS and Town Air Freight.

Elkhart/Goshen Urban Area:

Fixed route transit service was introduced in the Elkhart/Goshen Urbanized Area in 1999 with establishment of what is now The Interurban Trolley system. The Interurban Trolley is a five-

route system connecting the south side of Goshen to the north side of Elkhart and primarily Concord Township. MACOG has contracted with a local transportation provider to operate a bus route connecting downtown Elkhart with Goshen. Ridership totaled 178,516 passenger trips in 2009.



Interurban Trolley service was expanded in 2009 to establish a transit connection between the Elkhart/Goshen and the South Bend/Mishawaka area in coordination with TRANSPO. An east-west route was put into service connecting three times per day with Ivy Tech.

Heart City Rider (HCR) is a demand response public transit system operating in Elkhart under a contract between



MACOG and a private taxicab firm. This service

has operated since 1986 and provides 24-hour general public transit service seven days per week. The taxi firm provides 20 cabs for general service and a fleet of seven ramp-equipped minivans provides accessible service for persons using wheelchairs. Federal, State, and local funds provide up to a \$3.00 fare subsidy. 103,711 passenger trips were provided in 2009.

Goshen Transit Service (GTS) provides similar public transit service in Goshen during the same operating hours, and has operated in this format



since 1992. The two systems are coordinated and operate under the same fare structure

to provide seamless trips between the cities of Goshen and Elkhart. 20,486 passenger trips were provided in 2009.

By contracting out service, both HCR and GTS use established private fleet vehicles for public rides to reduce reliance on capital funds.

Other Transit Services

AMTRAK service is available across the MACOG region. Passenger stations are located in South

Bend and Elkhart for train service westward to Chicago as well as Washington D.C. and New York City to the east. Passenger service from the Niles, Michigan station provides connections to both Chicago and Detroit.

Coordinated Transit Planning

SAFETEA-LU requires that projects selected for funding fewer than three specific federal programs must be “derived from a locally developed, coordinated public transit-human services plan” and that the plan be “developed through a process that includes representatives of public, private, and non-profit transportation and human services providers and participation by members of the public.” The three federal programs are the Elderly Individuals and Individuals with Disabilities (Section 5310 program), the Job Access and Reverse Commute (JACR) program, and the New Freedom program.

To comply with these regulations, MACOG has completed a four-county regional plan for Elkhart, Kosciusko, Marshall, and St. Joseph County. The Coordinated Plan has been updated annually since its inception and has accomplished many of its goals and objectives. A fleet inventory of the transit providers in this region has been developed and will be maintained, as well as a database of the human services agencies in the region.

To facilitate public participation in the coordinated transit planning process, MACOG utilized a two-fold planning process. First a survey of more than 200 local human services agencies was implemented to learn what transit resources and services were currently in place. The second effort was to hold a series of Stakeholder Meetings in the region. At these meetings local transit providers and not-for-profit human service agencies described their services in terms of routing, riders (public and client-specific), service areas and operating hours. Transit needs for the elderly, persons with disabilities and persons with low incomes were discussed and the areas where these persons lived were mapped. Information was then reviewed to add the location of job sites, medical facilities, and other travel destinations. Service gaps and unmet travel needs were then identified. Several pending projects were

identified in each county that may help to widen transit access.

Each county’s information was utilized to develop a regional plan that includes an assessment of available services that identifies current providers, an assessment of transportation needs for individuals with disabilities, older adults, and people with low incomes, strategies and activities to address identified gaps and achieve efficiencies in service delivery, and relative priorities for project implementation. An updated report is annually prepared for presentation to the MACOG Policy Board for its approval. Similar to the Transportation Improvement Program (TIP) the Coordinated Plan will be maintained to include annual projects proposed to improve transit access.

Intermodal Projects

Bicycle and Pedestrian Planning

MACOG has worked with the Bicycle and Pedestrian Committees for both St. Joseph and Elkhart County to update the Bicycle/Pedestrian Plan and incorporates that process as part of the 2035 Transportation Plan. The original committees were developed in 1993 to assist MACOG in preparing the Bicycle/Pedestrian Plan incorporated as part of the 2015 Transportation Plan. The committees met on a monthly basis during the first two years while completing the bike and pedestrian blueprint. The MACOG TTAC



and Policy Board adopted the Plan, originally as part of the 2015 TP, but have continued its vision in the current TPs.

Several ad hoc committees have formed over the years. MACOG staff routinely participates in these group committees.

In preparing The Bicycle/Pedestrian Element of the MACOG 2015 Transportation Plan, the committee established a mission statement:

“In order to mitigate congestion, improve air quality, and respond to the importance of establishing an accessible and efficient non-motorized transportation network (referenced to in TEA-21), the MACOG is developing a comprehensive bikeway and pedestrian walkway plan for St. Joseph and Elkhart Counties.”

The plan lists recommendations from the public, gathered through surveys, and recommendations from the committee as to where the development of bicycle and pedestrian facilities should be considered in both St. Joseph and Elkhart Counties. These recommendations will be further refined and prioritized as to focus where the limited amount of transportation resources should be spent over the following years.

The Bike/Pedestrian Plan identifies several roadways where an adjoining bike and pedestrian facility should be constructed to facilitate the safe, accessible movement of non-motorized vehicles.

Freight Planning

The efficient movement of goods is an important part of the overall transportation system. In 2004, MACOG undertook a Freight Inventory and Study for North Central Indiana. This Study surveyed, over 100 freight haulers, manufacturers, and warehouse in Elkhart, Kosciusko, Marshall and St. Joseph County about the status of freight movement in the region. This survey returned several results that identified needs for improved infrastructure to help make freight movement in and around the region more efficient.



Intelligent Transportation Systems

An Intelligent Transportation System (ITS) includes a set of technology tools that can assist a region in actively managing its transportation system from one minute to the next, rapidly responding to the region’s ever changing traffic

conditions. ITS planning should result in improvements to the region’s incident detection, response time to traffic conditions using state of the art control technologies, and improved communication technologies. The goal of the plan is to improve the efficiency, reliability, communication and safety of our transportation systems through the deployment of these various technologies.



MACOG completed a fiber optic study in the spring of 2005 that identifies where high priority government institutions are located and how they are connected to receive data or voice communication. For the facilities that are not connected, highway routes from the 2035 TP will be identified where fiber optic cables could be installed while the roadway is open for construction. Various projects have also been identified in the ITS Plan to enhance the movement, safety and security of the region’s traffic system. For more information about the MACOG ITS Plan, see that document.

Highway Projects

The original project process involved meetings with engineers, Chambers of Commerce, land use management, natural resource, historic, and planning agencies, INDOT representatives and elected officials. Project recommendations were



received from all sources. In developing the 2035 Long Range Transportation Plan, only the expansion projects adding capacity to the road network were specifically identified. Road reconstruction projects, resurfacing and road rehabilitation projects are considered in the Financial Plan. It is understood, however, that

federal funding may also be used for similar road reconstruction projects without amending the 2035 Long Range Plan. The update process was less cumbersome as the changes contemplated by the various LPA's were not extensive.

In developing and selecting projects for inclusion in the TP, several data resources were employed. The update of the network model provided Level of Service (LOS) data indicating which road segments would peak to LOS F (the lowest LOS) by five-year increments. The Congestion Management Process, using a different methodology, was used to further substantiate the need for the added travel lanes strategy to mitigate congestion and address better traffic flows. The eight items listed by SAFETEA-LU legislation as planning factors were considered as part of the identification and selection process, as were the Environmental Justice maps developed by staff to ensure that low income and minority populations are not unjustly burdened by, or provided less opportunities for participation than, others in our community.

Rural Transportation Planning



In addition to being an MPO, MACOG also represents Kosciusko and Marshall County in Indiana. These two, primarily rural, counties are not part of the Metropolitan Planning Area. However, MACOG has a commitment to these communities to provide the same level of service in transportation planning. MACOG maintains a traffic count inventory, railroad crossing inventory, vehicle crash data, and other information for these counties. As a part of the 2035 Transportation Plan Update, an illustrative listing of rural projects is listed separately in Appendix C for these counties.

Safety and Security Analysis

Under SAFETEA-LU this plan must include a discussion of safety and security on the regional transportation system: "The metropolitan transportation plan should include a safety element that incorporates or summarizes the

priorities, goals, countermeasures, or projects for the MPA contained in the Strategic Highway Safety Plan required under 23 U.S.C. 148, as well as emergency relief and disaster preparedness plans and strategies and policies that support homeland security and safeguard the personal security of all motorized and non-motorized users" (CFR 450.322h). Following is a discussion of the SHSP and other activities that are being undertaken in the MPA to address safety and security issues on the regional transportation network.

MACOG planning staff have been trained in the Road Safety Audit for Instructor's course in 2010. This will allow the team to complete a safety assessment inventory.

INDOT released a Strategic Highway Safety Plan in late 2006 addressing safety and security needs of the State's transportation network. The SHSP focused on four main goal areas: Driver Behaviors, Special Vehicles/Users, Serious Crash Types/Locations, and Crash Management. Each of the areas is further broken down into emphasis areas, which employ strategies to achieve a safer transportation system.

Under the first goal area, Driver Behaviors, INDOT has outlined several initiatives to increase safety. These initiatives include: developing safer young drivers, increasing occupant protection, and reducing the number of impaired drivers. Each of these areas are carried out through legislative action, law enforcement and public awareness campaigns.

To address Special Vehicles/Users, INDOT has listed the following emphasis areas: improve motorcycle safety, reduce large truck crashes, and reduce deaths and injuries to non-motorists. These programs are being carried out through legislative action, law enforcement, public awareness campaigns, and the development of separate non-motorized transportation systems. MACOG plays an important role when it comes to helping to ensure the safety of non-motorized transportation users. For several years now MACOG has produced and handed out a bike and pedestrian safety brochure to 4th and 5th graders in the region each spring. MACOG also works with local jurisdictions to develop bike

and pedestrian pathways separate from the highway network through the Transportation Enhancements (TE) and Safe Routes to School Programs. Transit operators in both Elkhart and South Bend also provide bike racks on transit vehicles for the use of riders.

To address Serious Crash Types/Locations, INDOT is looking to reduce high risk rural road crashes, reduce the consequences of leaving the roadway, improve intersection safety, and



railroad crossing safety. The Indiana State Police maintains a database of all crashes in the State which INDOT and MPOs regularly access to research crashes at specific locations and to determine the need for potential improvements.

MACOG has been a leader in developing intersection improvements through the State's former Hazard Elimination Safety (HES) program. Local jurisdictions throughout the region are also developing intersection safety improvements especially through the use of roundabouts,



which also reduce congestion and improve air quality. MACOG currently does traffic counts and analysis at all railroad crossings

in the region for INDOT and maintains this as a part of the overall traffic count program. MACOG works with local jurisdictions and INDOT to develop projects for railroad crossing improvements, especially in rural areas. MACOG also annually produces an accident book of high-frequency crash locations throughout the region to help local jurisdictions plan to reduce crashes locally.

To address Crash Management INDOT has laid out the following emphasis areas: enhance emergency response to crashes, expedite crash clearance, and improve the quality of crash data used to make safety improvement decisions. Through the deployment of Intelligent Transportation Systems INDOT, MACOG, and other state and local agencies are improving in each of these areas. MACOG has produced a Regional ITS Plan and Architecture, which highlights projects such as signal pre-emption for emergency vehicles, and the enhancement of the regions telecommunications infrastructure. Several local agencies along with the State now participate in programs to allow various emergency response agencies to communicate with one another on different radio frequencies. The Indiana State Police, INDOT and local police agencies are working to develop ways to report crash data more accurately to be used later in crash analysis for intersections and corridors. Currently many law enforcement agencies throughout the state submit crash data in an electronic format reducing spelling and location errors. MACOG has developed techniques to analyze older data to improve data errors when conducting site specific and regional studies.

Overall, MACOG working with local and state agencies through the State's Strategic Highway Safety Plan are addressing key emphasis areas to improve the safety of the regions' transportation network for both motorized and non-motorized users.

Transit providers in the MACOG region are also addressing safety and security concerns. MACOG, as the operator of the Interurban Trolley and demand response systems in Elkhart County, has implemented video surveillance systems on the fixed route transit vehicles and is currently researching ways to improve the safety and security of the demand response systems through the use of smart card and other technology solutions.

Environmental Mitigation Activities

As prescribed in new SAFETEA-LU legislation, MACOG as the MPO "shall consult with State and local agencies responsible for land use management, natural resources, environmental

protection, conservation, and historical preservation concerning the development of the transportation plan” (CFR 450.322g).



MACOG has used the regional GIS website to assist in consulting with State and local agencies responsible for environmental activities. During the original public comment period for this Plan, MACOG produced a secure website where organizations would be able to overlay data layers on the proposed highway projects to determine any impact these projects might have on environmentally sensitive sites in the region.

In addition to providing a resource for State and local agencies to review the proposed Plan and environmentally sensitive sites during the public comment period, MACOG is also required by SAFETEA-LU Metropolitan Planning regulations to outline ways in which the impacts at a policy/strategy level of the plan might be mitigated. MACOG, local highway agencies and INDOT will have to consider the environmental impacts of each project on a case-by-case basis. However, in each project case the following non-inclusive list of agencies and consultation partners will be contacted: Indiana Department of Environmental Management, Indiana State Historic Preservation Office, Indiana Department of Natural Resources, local land use planning agencies, local health departments, US Fish and Wildlife Service, local parks departments, US Army Corp of Engineers, local housing agencies, etc.

Non-SOV/CMS Analysis

As a Transportation Management Area (Metropolitan Planning Area population is greater than 200,000), all projects in MACOG’s LRP are run through a non-SOV analysis.

The non-SOV analysis is established in the CMS (Congestion Management System) to identify all

traffic congestion mitigation methods, other than adding travel lanes to relieve congestion, as stated in Federal Regulations 23CFR500.109c. First, projects are reviewed by the following criteria: if a project is already in the current TIP, or a project has been through the EA (Environment Assessment) process, or a project is not regional significant (not adding travel lanes), or a project is not using federal funds, that project will pass the CMS analysis. Projects that are listed in the illustrative section are also not analyzed.

Then, projects that need further CMS analysis are checked for their congestion status in the no-build 2035 scenario in the TDF model. If the road segments of the projects are not congested, they are subject to further analysis.



A transit and bike/pedestrian path analysis is then completed. The analysis assumes a certain percentage of population within the service buffer of transit and bike pedestrian paths (existing or planned) will switch to these modes instead of driving cars. If the congestion is not relieved, then a further detailed analysis of non-SOV mitigation is needed. The detailed analysis process is available in the separate CMS documentation report. If the road segments of the projects were still found congested, then the



project passes the CMS analysis by finding that the non-SOV mitigation will not relieve the congestion. If the congestion was relieved by non-SOV mitigation however (transit or bike and pedestrian paths), then the project needs further analysis.

The projects that are not congested by applying non-SOV mitigation strategies are checked for current transit service as well as bike and pedestrian route availability. If any of them are already available, that mitigation method is removed from the analysis. The availability is defined within a buffer area, as stated in the CMS documentation.



All of the projects that need further analysis are listed with justification for the projects. A project road segment might not show congestion, but has a significantly high accident rate; therefore, a center turn lane is needed for safety purposes. Some roads are built as connectors to major economic development areas. Other road segments are part of a major traffic-moving corridor. All of these and other reasons might lead to the conclusion that adding travel lanes is necessary, even though the road is not congested.

MACOG provides the Congestion Management System data to local traffic engineers through its TTAC membership for their practical use in implementing congestion activities as they relate to traffic operations. The membership includes representatives from St. Joseph, Elkhart, Marshall and Kosciusko Counties in Indiana. ITS project information is also provided to the TTAC.

2035 Transportation Plan Update

Various State and Local projects in 2009 have been removed as part of the update to the 2035 Transportation Plan. A color coded explanation of the changes can be found in Appendix A. Also

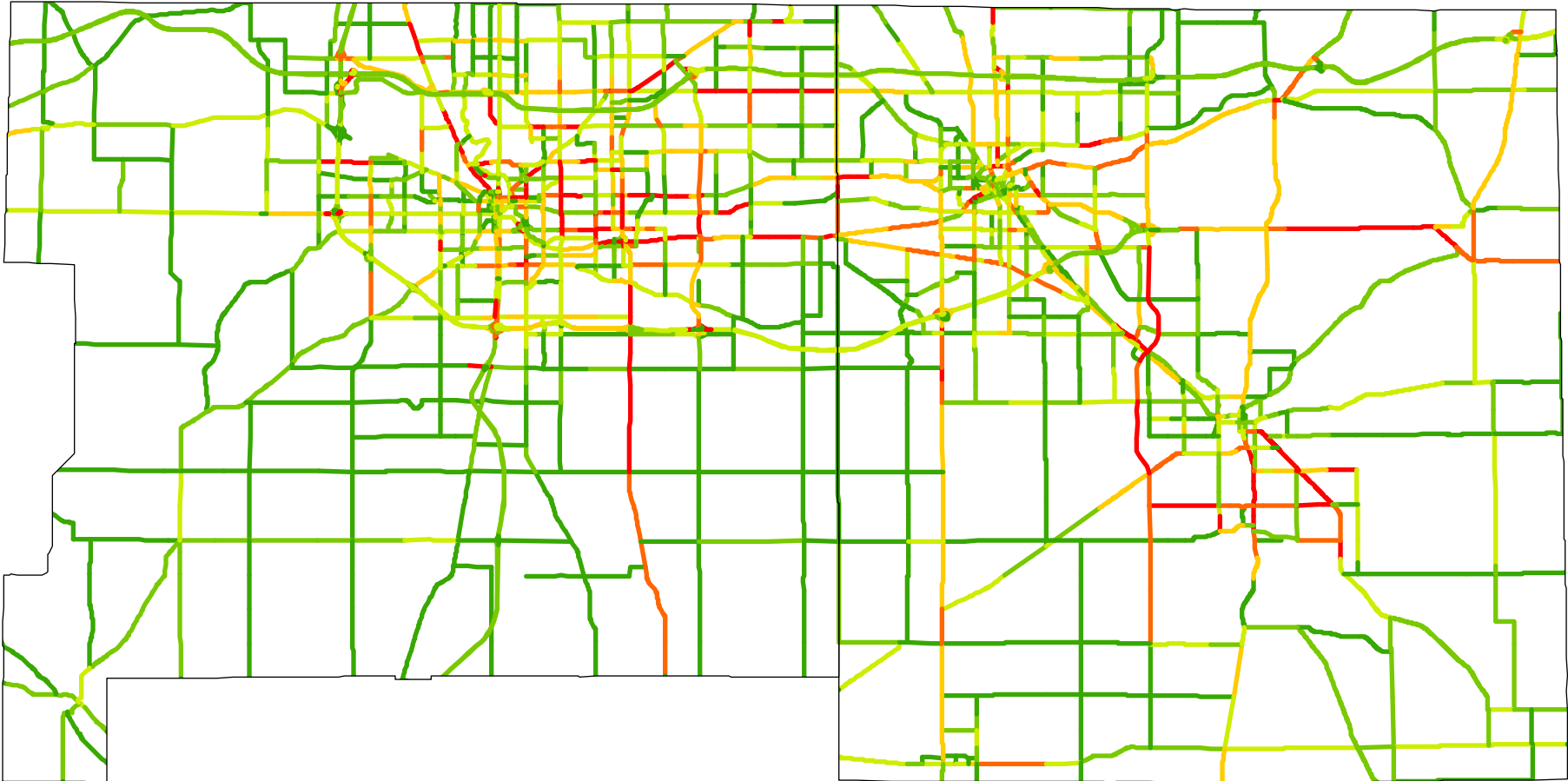
included in Appendix B is a table of the current project listing by analysis year, which is followed by a brief narrative description of each project.

All projects listed in the 2035 Transportation Plan Update meet the “financially reasonable” test. As part of the process, letters from project sponsors for large grade separations or added capacity projects have been added as further documentation of the financial funding commitment.

Where funding commitment has not yet been identified, project sponsors have been advised that there is an amendment process once funding commitment is secured. As an example, Portage Prairie, a project in South Bend, has been a collaborative and cooperative project involving the City, INDOT and the private sector. The project has not identified a specific funding source for the construction of an interchange proposed to be located on US 31/20 Bypass @ Adams Rd. However, the City has moved forward with the preliminary engineering (PE) and design using local funds, while following the federal aid process. Once the City and its partners have identified a funding source commitment, the 2035 Transportation Plan can be amended to include the project in the TP with a corresponding conformity analysis.

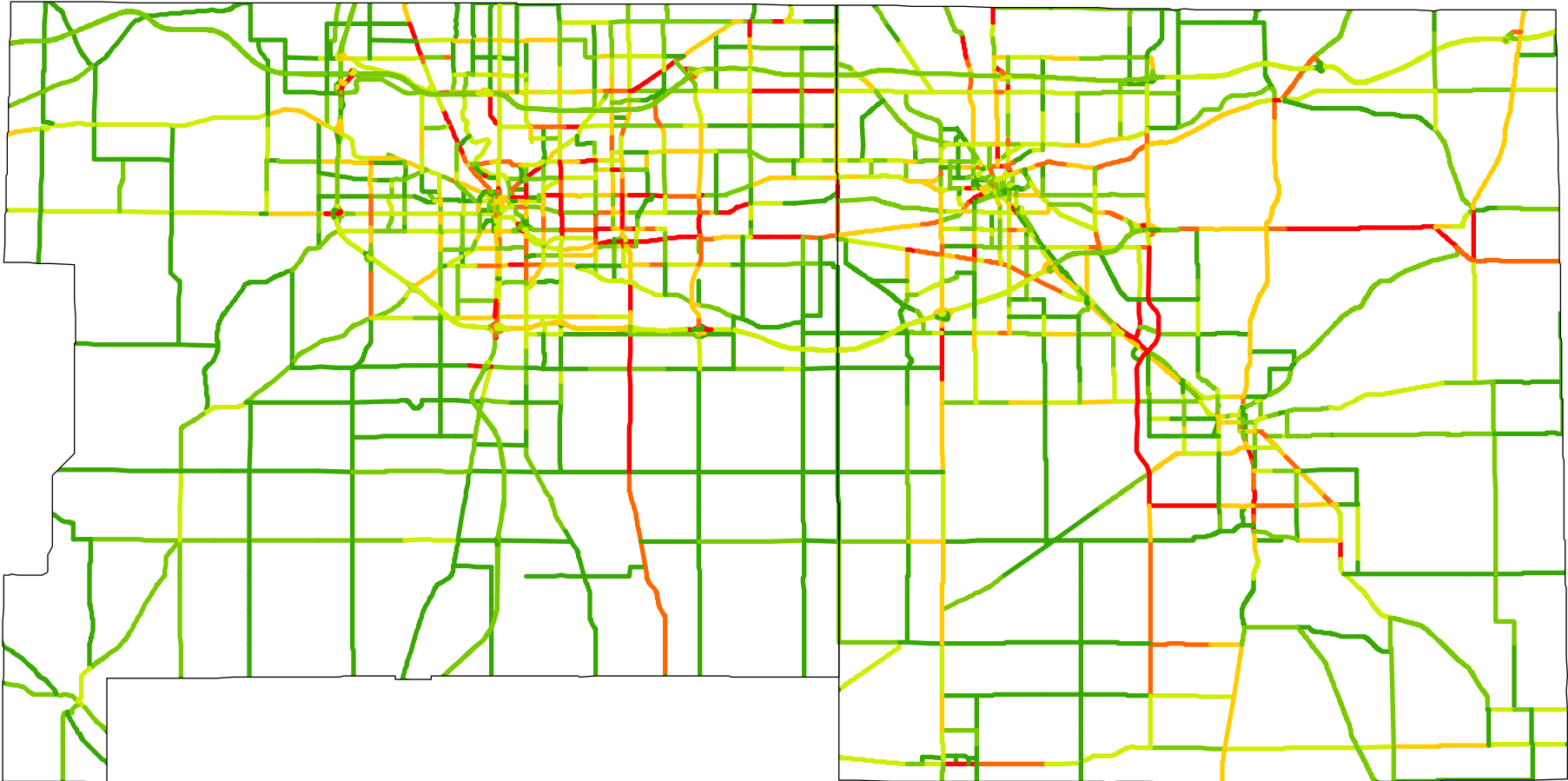
St. Joseph and Elkhart County are considered maintenance areas for air quality and are bound by joint regulations found in the Clean Air Act and SAFTEA-LU to complete an Air Quality Conformity Analysis. A detailed description of the process can be found at the end of this document. The 2035 Transportation Plan Update will use a 2015 analysis year to complete proposed EPA regulatory requirements. Additionally, projects listed in the 5-year analysis years are assumed to be open to traffic by December 31, of the analysis year. As an example projects listed in 2020 must be open to traffic between January 1, 2016 and December 31, 2020.

2015 Level of Service



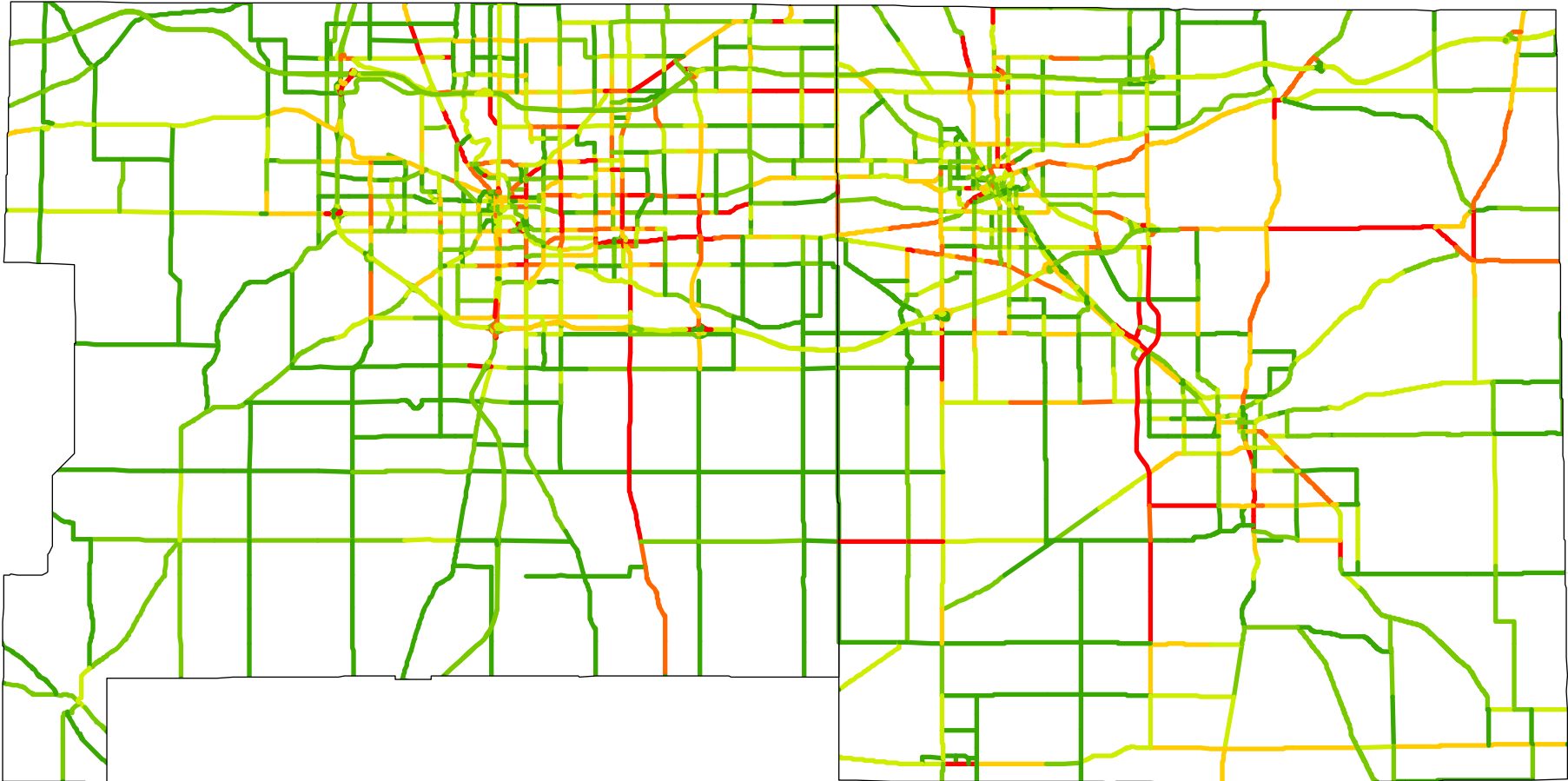
- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F

2020 Level of Service



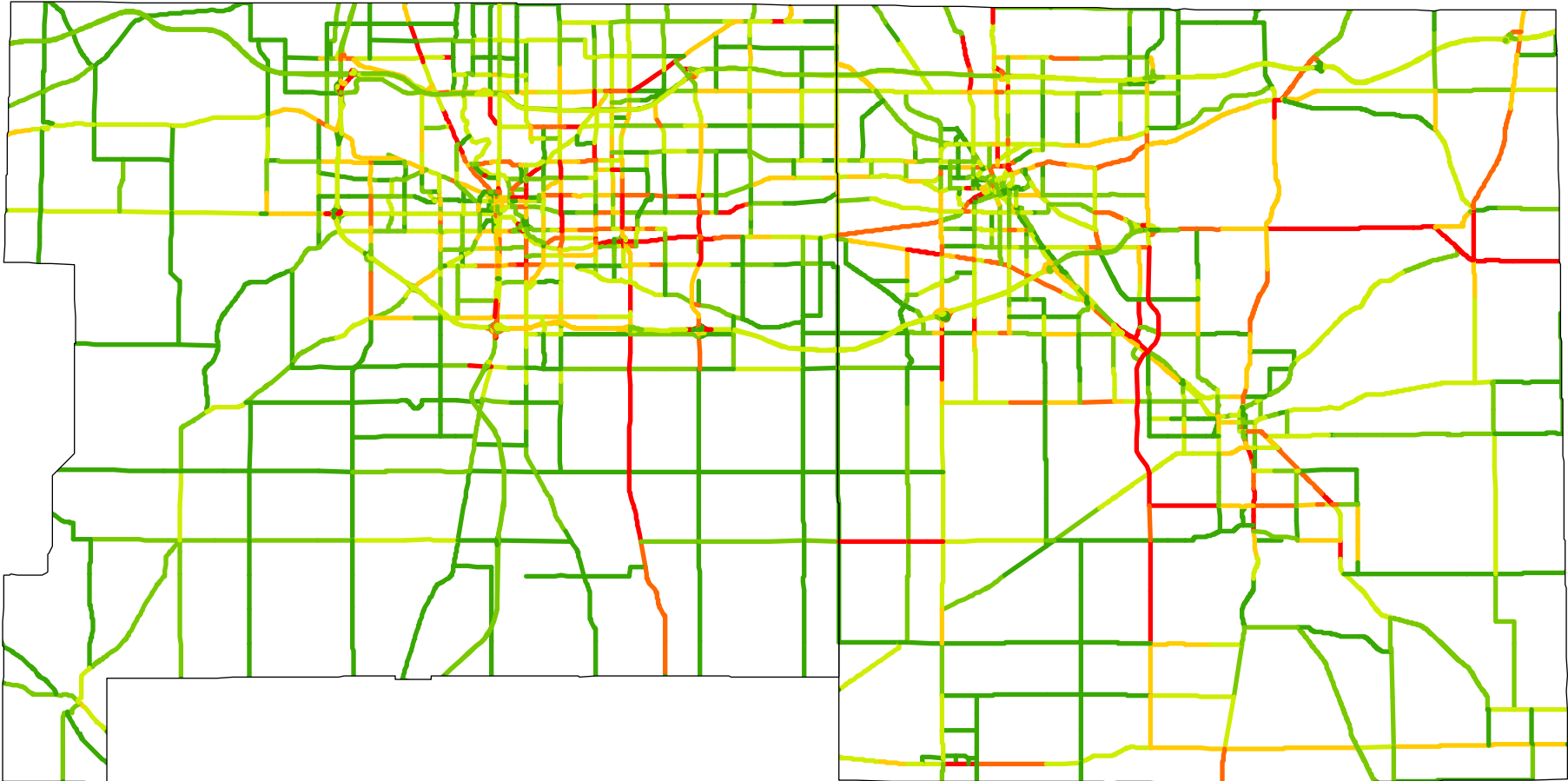
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- LOS D
- LOS E
- LOS F

2025 Level of Service



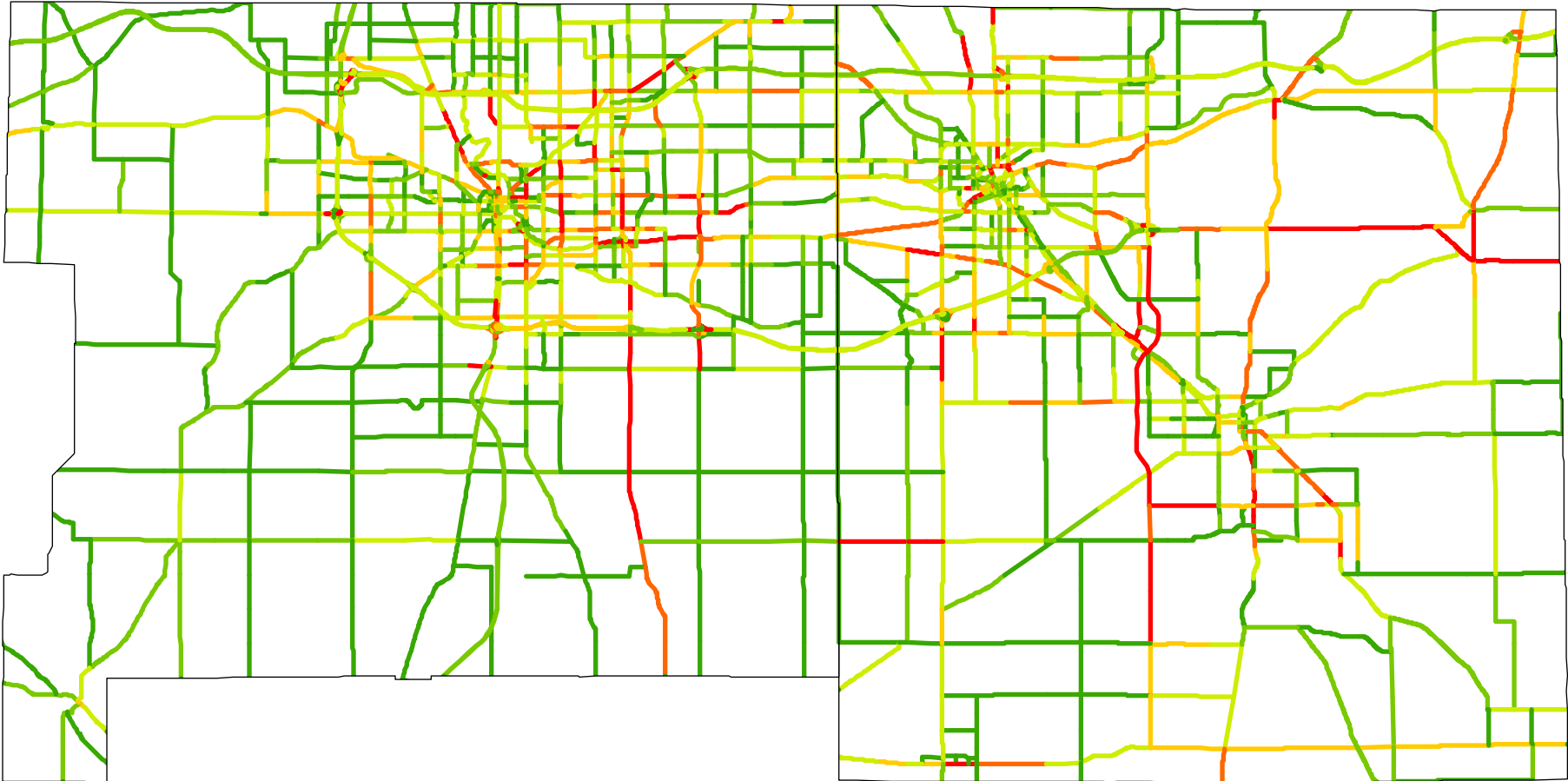
- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F

2030 Level of Service



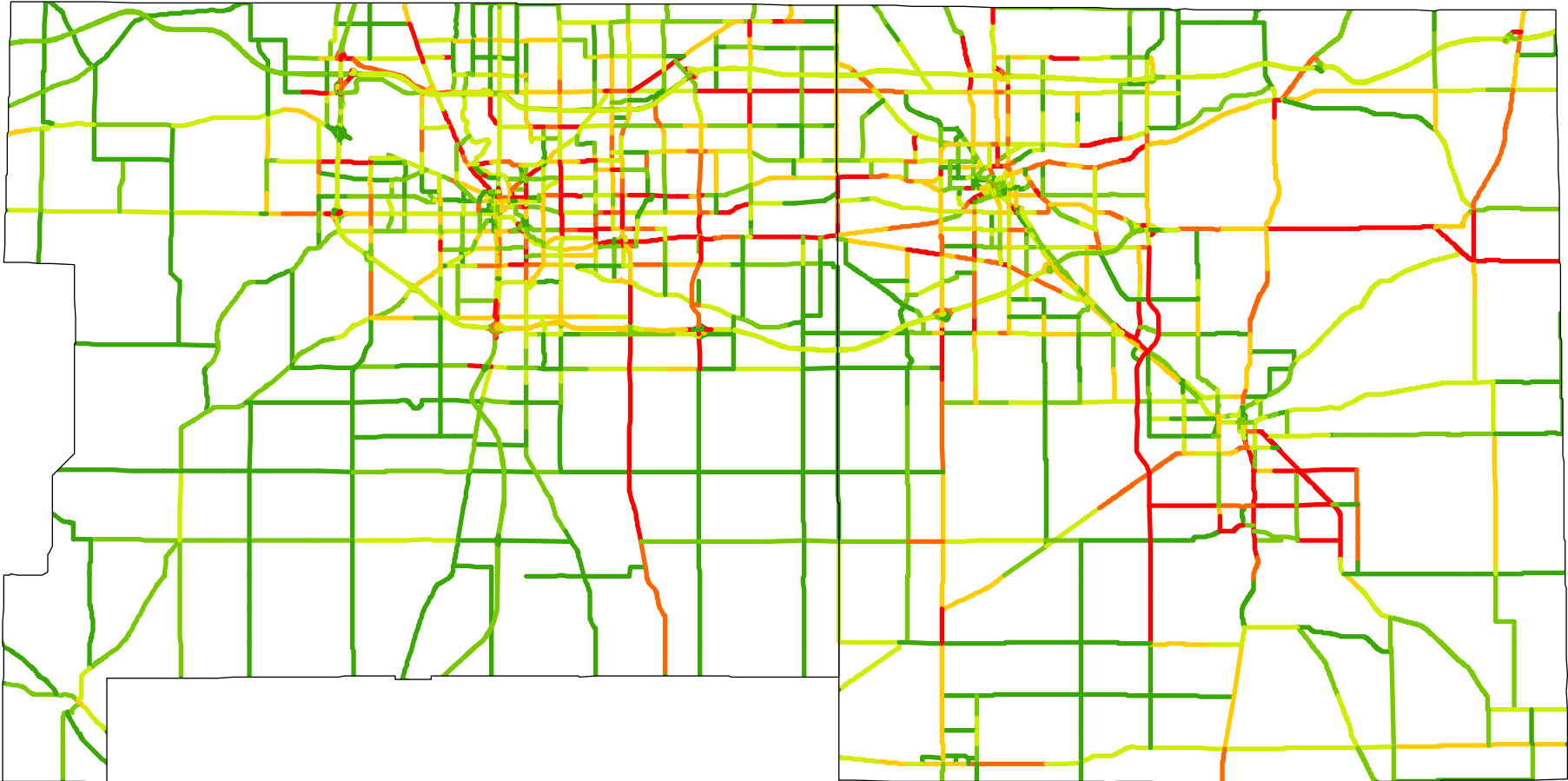
- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F

2035 Level of Service



- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F

No Build Level of Service



- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F