OZARKS TRANSPORTATION ORGANIZATION

Technical Planning Committee Meeting Agenda
Wednesday, February 3, 2016 12:00 p.m.
OTO Offices
Chesterfield Village
2208 W Chesterfield Boulevard, Suite 101
Springfield, MO

Call to Order ..... 12:00 PM

I. Administration

A. Introductions

B. Approval of the Technical Planning Committee Meeting Agenda
(1 minute/Martin)

TECHNICAL PLANNING COMMITTEE ACTION REQUESTED TO APPROVE THE AGENDA

C. Public Comment Period for All Agenda Items
(5 minutes/Martin)
Individuals requesting to speak are asked to state their name and organization (if any) they represent before making comments. Individuals and organizations have up to five minutes to address the Technical Planning Committee.

II. New Business

A. Revise Amendment Number Nine to the FY 2015-2018 TIP .....Tab 1
(5 minutes/Longpine)
There is one additional change requested to the Transportation Improvement Program included for member review.

TECHNICAL PLANNING COMMITTEE ACTION REQUESTED TO RECOMMEND APPROVAL OF REVISED TIP AMENDMENT NUMBER NINE TO THE BOARD OF DIRECTORS

B. Draft Long Range Transportation Plan Document Overview.....Tab 2
(10 minutes/Longpine)
Staff will review and lead discussion on elements of the draft Long Range Transportation Plan Document.

TECHNICAL PLANNING COMMITTEE ACTION REQUESTED TO PROVIDE CONSENSUS ON THE CONTENTS OF THE LONG RANGE TRANSPORTATION PLAN

C. Prioritization Criteria and Points.....Tab 3
(20 minutes/Longpine)
Draft Prioritization Criteria is provided.

TECHNICAL PLANNING COMMITTEE ACTION REQUESTED TO APPROVE PRIORITIZATION CRITERIA

D. Project List and Scoring..... To Be Distributed at Meeting
(45 minutes/Longpine)
Staff will provide an overview of the projects proposed for inclusion in the LRTP and have been ranked according to the proposed criteria in II.C.

TECHNICAL PLANNING COMMITTEE ACTION REQUESTED TO PRIORITIZE PROJECTS FOR THE FISCALLY CONSTRAINED PORTION OF THE PLAN.

III. Other Business

NONE

IV. Adjournment

Targeted for 1:30 P.M. The next Technical Planning Committee meeting is scheduled for Wednesday, March 16, 2016 at 1:30 P.M. at the OTO Offices, 2208 W. Chesterfield Blvd, Suite 101.

Attachments and Enclosure:
Pc: Bob Cirtin, Presiding Commissioner Greene County
Dan Smith, City of Springfield Mayor's Designee
Senator McCaskill's Office
Senator Blunt's Office
Matt Hough, Congressman Long's Office
Area News Media

Si usted necesita la ayuda de un traductor del idioma español, por favor comuníquese con la Debbie Parks al teléfono (417) 865-3042, cuando menos 48 horas antes de la junta.

Persons who require special accommodations under the Americans with Disabilities Act or persons who require interpreter services (free of charge) should contact Debbie Parks at (417) 865-3042 at least 24 hours ahead of the meeting.

If you need relay services please call the following numbers: 711 - Nationwide relay service; 1-800-735-2966 - Missouri TTY service; 1-800-735-0135 - Missouri voice carry-over service.

OTO fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. For more information or to obtain a Title VI Complaint Form, see www.ozarkstransportation.org or call (417) 865-3042.

TAB 1

TECHNICAL PLANNING COMMITTEE AGENDA 2/3/2016; ITEM II.A.

Revised Amendment 9 to the FY 2015-2018 Transportation Improvement Program

Ozarks Transportation Organization
(Springfield, MO Area MPO)

AGENDA DESCRIPTION:

There are ~~four~~ five total items included as part of Amendment 9 to the FY 2015-2018 Transportation Improvement Program.

1. *New* Scoping for Route 160 Safety Improvements (CC1601)
   Scoping for high friction surface treatment on the westbound lanes south of Route AA for a total programmed amount of $3,000.

2. *New* Scoping for Kansas Expressway Safety Improvements (GR1603)
   Scoping for high friction surface treatment on the southbound lanes of Kansas Expressway (MO 13) north of Division Street for a total programmed amount of $3,000.

3. *New* Scoping for Chestnut Expressway Safety Improvements (SP1604)
   Scoping for high friction surface treatment on the westbound lanes of Chestnut Expressway (LP 44) east of College for a total programmed amount of $3,000.

4. *New* Mount Vernon Street Bridge over Jordan Creek (SP1605)
   Replacement of Mount Vernon Street Bridge over Jordan Creek for a total cost of $1,200,000, using $731,651 in BRM funding.

5. *Amended* Campbell and Plainview Intersection Phase I (GR1309)
   Adding the US 160 outer road (Market) to the west, from Bryant Street south 525 feet toward Plainview Road. Adding $290,848 in STP-Urban funding.

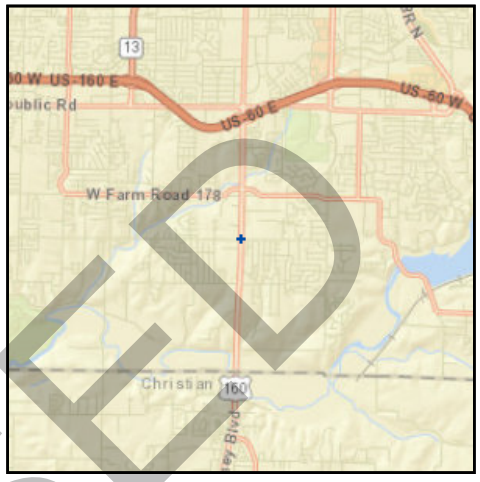
TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:

Recommend the revised FY 2015-2018 Transportation Improvement Program Amendment 9 to the Board of Directors.

E) Roadways Section

TIP # GR1309 CAMPBELL AND PLAINVIEW INTERSECTION PHASE 1

Route Campbell and Plainview
From Campbell
To Plainview
Location/Agency City of Springfield
Federal Agency FHWA
Responsible Agency MoDOT
Federal Funding Category NHPP(NHS), STP
MoDOT Funding Category Major Projects and Emerging Needs
AC Year of Conv. FY 2014
STIP # 8S0690



Project Description
Phase I intersection improvements at Campbell Avenue (Route 160) and Plainview Road, including design for Phase I and scoping for Phases II and III. Amended to include the US 160 outer road (Market) to the west from Bryant Street, approximately 525 feet south towards Plainview Road.

Fund Code	Source	Phase	FY2015	FY2016	FY2017	FY2018	Total
FHWA (STP-U)	Federal	CON	$0	$290,848	$0	$0	$290,848
LOCAL	Local	CON	$0	$72,712	$0	$0	$72,712
Totals			**$0**	**$363,560**	**$0**	**$0**	**$363,560**

Notes
Source of MoDOT Funds: State transportation revenues. Previously programmed funds of $108,000. Source Local Funds: Springfield 1/8-cent Transportation Sales Tax.

Prior Cost	$832,980
Future Cost	$0
Total Cost	$1,196,540

TAB 2

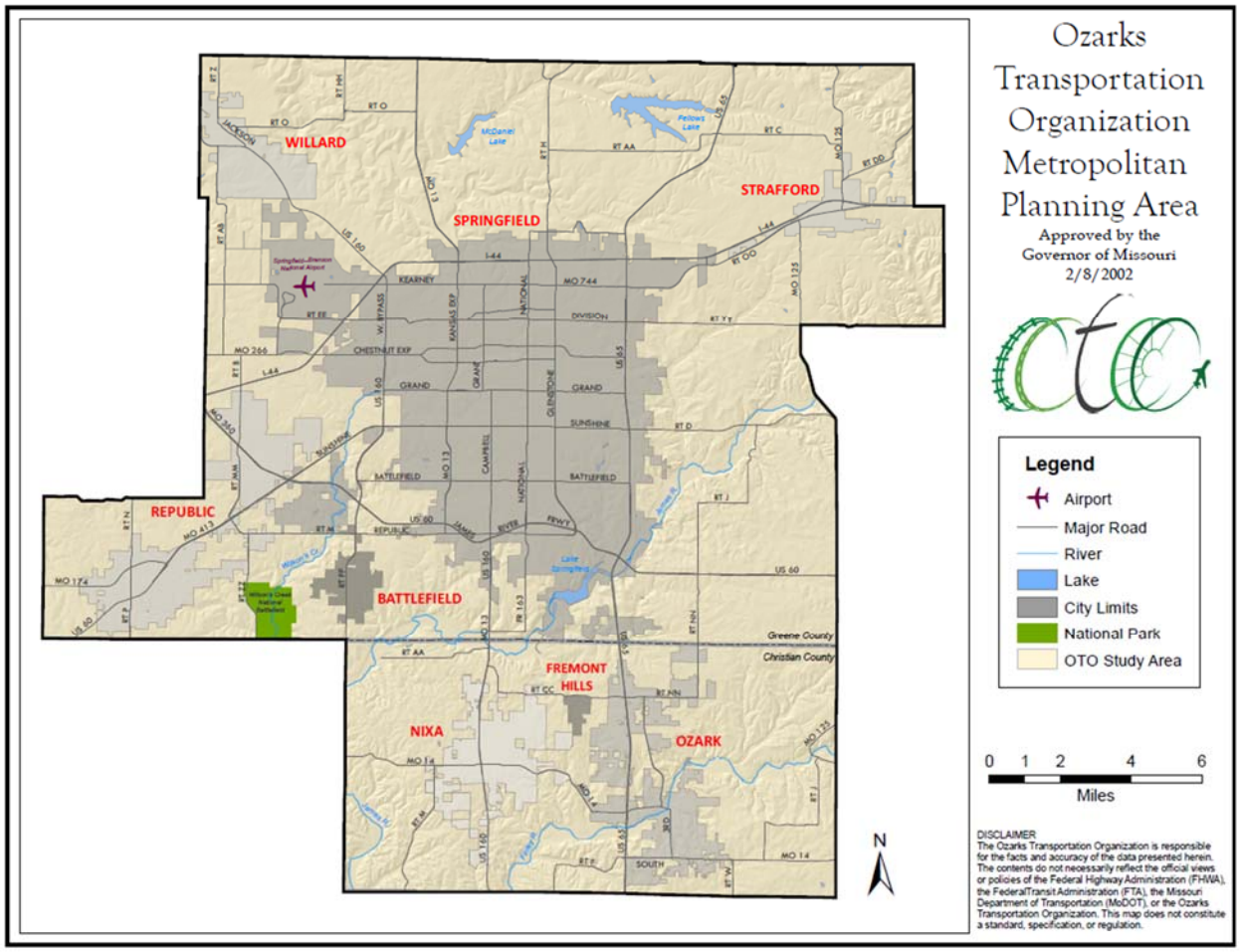
Table of Contents

Introduction and Federal Compliance

Every five years the Ozarks Transportation Organization undertakes an update of the region's long range transportation plan, looking to assess regional transportation needs for, at least, the next twenty years. This newest update, *Transportation Plan 2040*, projects population and employment, as well as travel demands, to the year 2040. Extensive public input has been incorporated into the process, while background data and trends help form the basis for plan recommendations.

The Ozarks Transportation Organization

The Ozarks Transportation Organization (OTO) is the federal designated metropolitan planning organization (MPO) that serves as a forum for cooperative transportation decision-making by state and local governments, as well as regional transportation and planning agencies. MPOs are charged with maintaining and conducting a "continuing, cooperative, and comprehensive" regional transportation planning and project programming process for the MPO's study area. The study area is defined as the area projected to become urbanized within the next 20 years.



The MPO includes local elected and appointed officials from Christian and Greene Counties, as well as the Cities of Battlefield, Nixa, Ozark, Republic, Springfield, Strafford, and Willard. It also includes technical staffs from the Missouri Department of Transportation, Federal Highway Administration, Federal Transit Administration, and the Federal Aviation Administration. Staff members from local governments and area transportation agencies serve on OTO's Technical Planning Committee which provides technical review, comments, and recommendations on draft plans, programs, studies, and issues.

The OTO study area has a population of about 320,000 people covering 428 square miles. Greene County is the fifth-largest county in the state of Missouri and Christian County is among the fastest growing counties in the United States. By the year 2040, the population of the OTO region is expected to reach about 480,000, an increase of 50 percent over the next 25 years.

Transportation Plan 2040 Considerations

Congress and the Department of Transportation set guidance for OTO to follow when developing a long range transportation plan. The current version of this guidance was renewed in the FAST (Fixing America's Surface Transportation) Act. The FAST act maintains the performance-based planning process as was prescribed in MAP-21 (Moving Ahead for Progress in the 21st Century), the prior surface transportation bill. This process maintains the multi-modal aspects of prior legislation, but the ideas of system performance and evaluation headline the guidance.

Planning Factors

Federal transportation law describes the planning process for the Long Range Transportation Plan. The metropolitan planning process for a metropolitan planning area under this section shall provide for consideration of projects and strategies that will:

1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2) Increase the safety of the transportation system for motorized and nonmotorized users;
3) Increase the security of the transportation system for motorized and nonmotorized users;
4) Increase the accessibility and mobility of people and for freight;
5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7) Promote efficient system management and operation;
8) Emphasize the preservation of the existing transportation system;
9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
10) Enhance travel and tourism.

Livability Principles

In June of 2009, the US Secretary of Transportation Ray LaHood, US Secretary of Housing and Urban Development Shaun Donovan, and US Environmental Protection Agency Administrator Lisa Jackson announced an interagency Partnership for Sustainable Communities. To guide this effort, the three agencies outlined six livability principles that demonstrate how federal transportation policy, environmental protection efforts, and housing investment strategies can be coordinated:

1) Provide more transportation choices to decrease household transportation costs, reduce our dependence on oil, improve air quality and promote public health;
2) Expand location- and energy-efficient housing choices for people of all ages, incomes, races and ethnicities to increase mobility and lower the combined cost of housing and transportation;
3) Improve economic competitiveness of neighborhoods by giving people reliable access to employment centers, educational opportunities, services and other basic needs;
4) Target federal funding toward existing communities – through transit-oriented and land recycling – to revitalize communities, reduce public works costs, and safeguard rural landscapes;
5) Align federal policies and funding to remove barriers to collaboration, leverage funding and increase the effectiveness of programs to plan for future growth; and
6) Enhance the unique characteristics of all communities by investing in healthy, safe and walkable neighborhoods, whether rural, urban or suburban.

Planning Emphasis Areas

The Federal Highway and Transit Administrations have encouraged metropolitan planning organizations to consider the following planning emphasis areas in the planning process. These are part of Secretary Anthony Foxx's strategic objectives for the surface transportation program.

MAP-21 and FAST Act Implementation

MPOs are encouraged to further develop their performance management approach to transportation planning. Scenario planning might also be an appropriate option in the development of the metropolitan transportation plan.

Regional Models of Cooperation

MPOs are asked to ensure a regional approach to transportation planning by promoting cooperation and coordination across transit agency, MPO, and state boundaries. The goal is that such coordination can support common goals and reduce project delivery times, while enhancing the efficient use of resources.

Ladders of Opportunity

FHWA and FTA encourage MPOs to identify transportation connectivity gaps in accessing essential services, such as employment, health care, schools/education, and recreation.

Beyond Traffic

Beyond Traffic is USDOT's thirty-year framework for the future that looks to employ three strategies:

1. Take care of legacy transportation systems
2. Build what is new and necessary
3. Use technology and better design

The Beyond Traffic report produced by the U.S. Department of Transportation cites several national trends that will shape transportation in the future:

- America's population will grow by 70 million by 2045, with growth in the South and the West, twice as many older Americans, and megaregions will dominate.
- Freight volume will increase by 45 percent.
- Technological changes and innovation will change vehicles, infrastructure, and logistics.
- Climate change will mean sea level rise and more storm events, impacting infrastructure.
- New financing mechanisms will be needed.

The Beyond Traffic initiative is meant to spur conversation among the public about big ideas that can solve the challenges of tomorrow.

Performance Based Planning

MAP-21 established and the FAST Act maintained a performance-based approach to transportation investments with this national policy, "Performance management will transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision-making through performance-based planning and programming"[§1203; 23 USC 150(a)].

With this, seven nation performance goals were established for the Federal-aid highway program.

1. Safety
   To achieve a significant reduction in traffic fatalities and serious injuries on all public roads

2. Infrastructure Condition
   To maintain the highway infrastructure asset system in a state of good repair

3. Congestion Reduction
   To achieve a significant reduction in congestion on the National Highway System

4. System Reliability
   To improve the efficiency of the surface transportation system

5. Freight Movement and Economic Vitality
   To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development

6. Environmental Sustainability
   To enhance the performance of the transportation system while protecting and enhancing the natural environment

7. Reduced Project Delivery Delays
   To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

Planning Process

In keeping with the performance-based planning directive, OTO will expand on its congestion management process to develop investment priorities for the region. The process is spelled out current federal transportation law for the development of a performance based plan.

1. Identify Transportation Facilities
    a. Emphasize National and Regional Connections
    b. 20-Year Forecast Period
2. Performance Measures and Targets
    a. Safety
    b. Condition
    c. Congestion
    d. Reliability
    e. Freight
    f. Environment
    g. Project Delivery
3. System Performance Report
4. Environmental Mitigation
5. Financial Plan
6. Strategies to Improve Performance
7. Project Selection and Enhancements

The planning process was conducted via the OTO Long Range Transportation Plan Subcommittee with review by the Technical Planning Committee and Board of Directors. Regular meetings of the Subcommittee were held with discussion at each stage of the planning process. Additional meetings by relevant subcommittees were also held, such as the Bicycle-Pedestrian Advisory Committee, the Congestion Management Process Subcommittee, and the newly created Traffic Incident Management Subcommittee.

Public Input

OTO undertook an intensive public input process, which included extensive outreach to gain more input than normally gathered through a typical public meeting process.

Staff developed a survey titled, “What transportation projects matter to you?” This question became the tenet of the campaign. The survey was made available in English and Spanish. Participants were given the opportunity to win a Kindle Fire HD 7 or one of two $50 gift cards to a local fueling station. OTO member jurisdictions were encouraged to promote the survey in addition to staff outreach efforts.

OTO developed promotional materials to gain visibility for the Plan and dedicated its public comment site, giveusyourinput.org, to the campaign.

Public outreach events included:

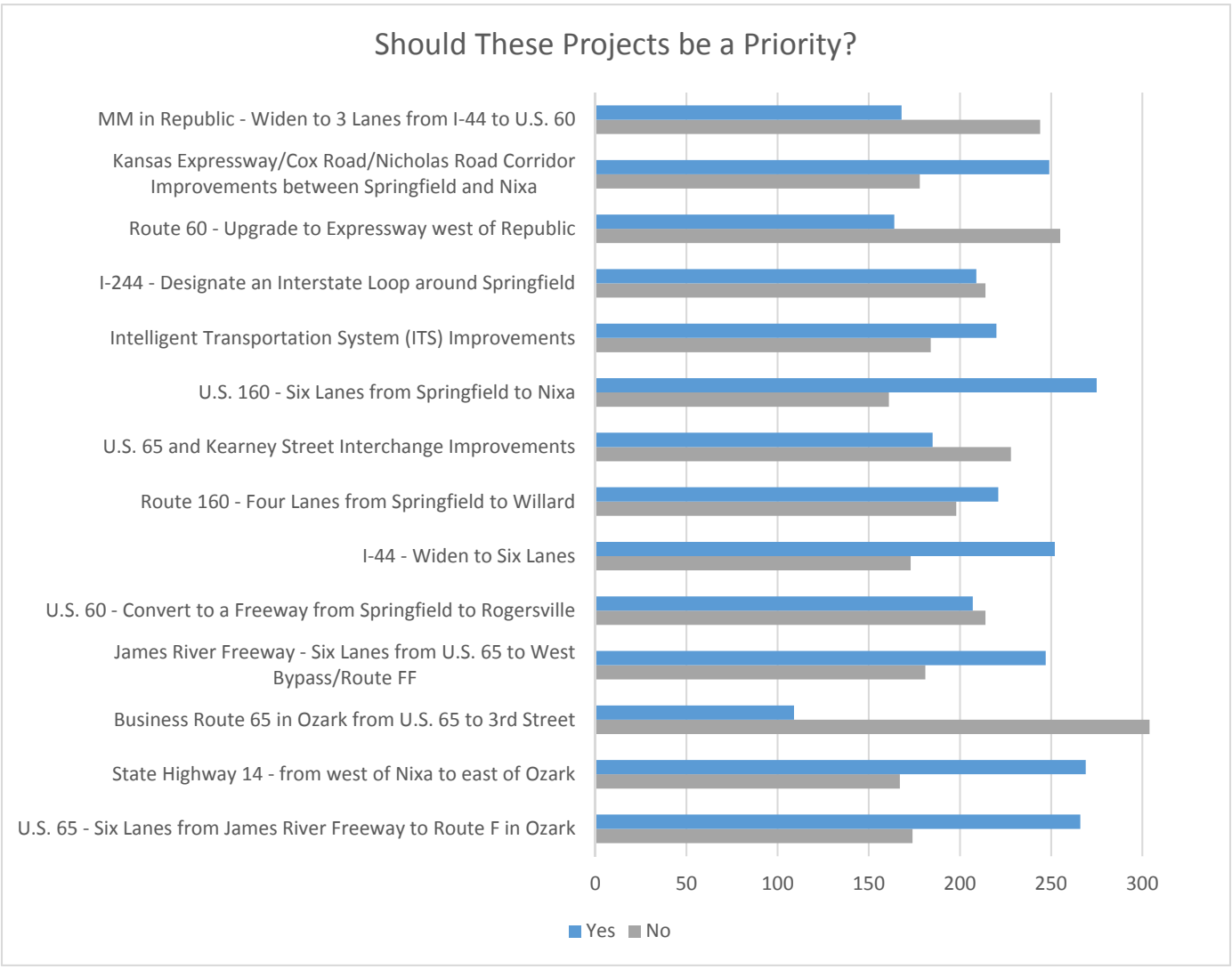
- Republic Business Expo – March 7, 2015
- Nixa Business Expo – March 14, 2015
- Ozark Business Expo – March 28, 2015
- Ozark Greenways Annual Meeting – March 31, 2015
- Safe and Sound Saturday in Springfield – April 18, 2015
- Farmer’s Market of the Ozarks in Springfield – May 16, 2015

Other outreach included links on the websites of the Repubic, Nixa, and Ozark Chambers of Commerce and MoDOT. The survey was advertised on the City of Battlefield Facebook page, in the Strafford City Newsletter, in the Willard Utility Mailer, and in the City of Republic Newsletter.

Survey Results

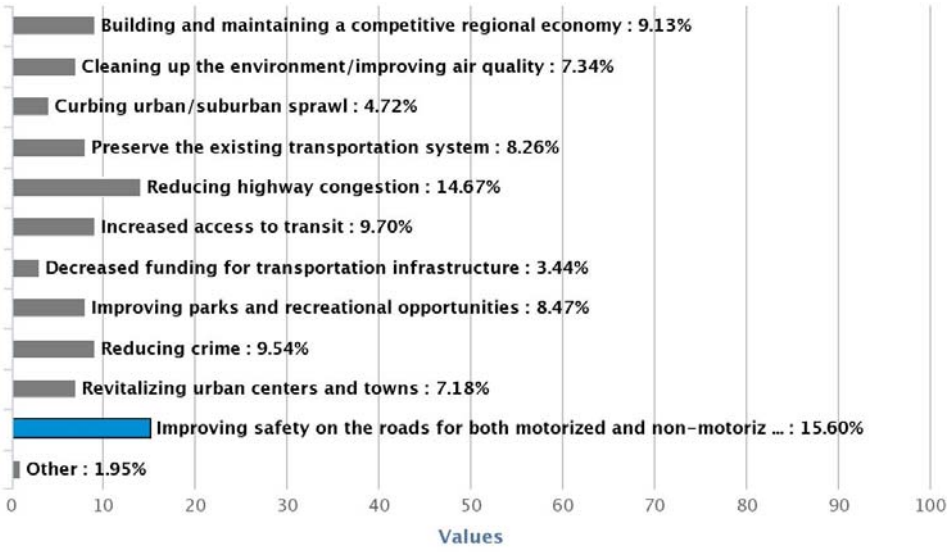
Over the course of the public input campaign, 483 surveys were received. The survey first asked about project priorities, then focused on a variety of questions to understand needs and funding priorities.

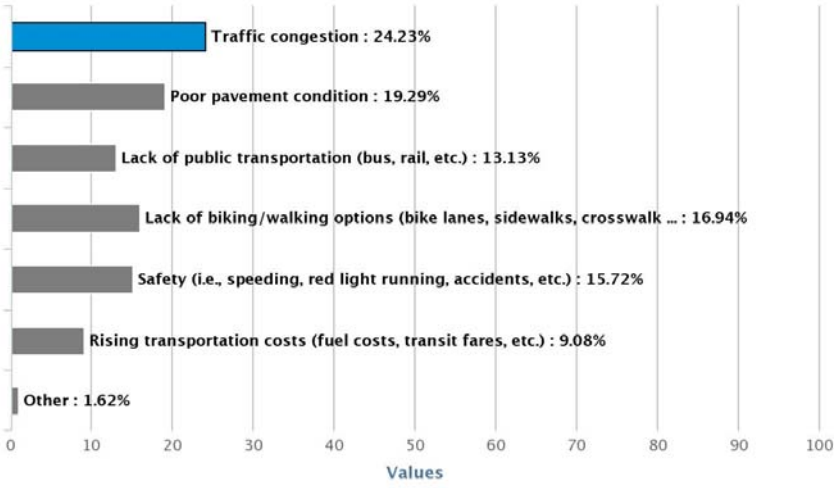
High priority projects include US 160 – Six Lanes from Springfield to Nixa, I-44 – Widen to Six Lanes, James River Freeway – Six Lanes from US 65 to West Bypass, State Highway 14 from west of Nixa to east of Ozark, and US 65 – Six Lanes from James River Freeway to Route F in Ozark. Projects that were marked as not being a priority include MM in Republic, Route 60 west of Republic, and Business Route 65 in Ozark. Several other projects had much closer results regarding whether they should be priorities.



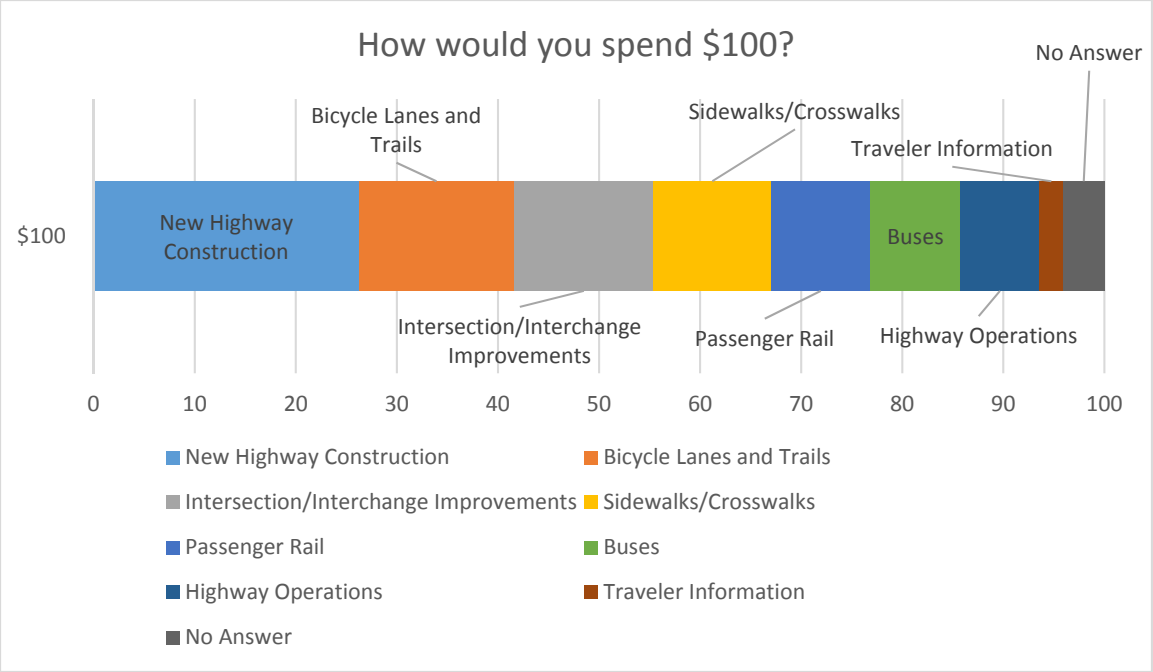
The Survey asked respondents to mark all issues that are considered to be the most important facing the OTO region. Improving safety on the roads for both motorized and non-motorized vehicles came in first, while reducing highway congestion was next.

Respondents were also asked which transportation problems with which they are most concerned. Traffic congestion came in first with poor pavement condition next. Traffic congestion was also cited as the most critical issue at the neighborhood level, though many respondents could not pick just one issue.





When the survey asked how respondents would allocate $100 for transportation, most of the funding went to new highway construction, while bicycle lanes and trails, along with new intersection/interchange improvements took the next priority in funding.



The top three choices for funding transportation included increasing the gas tax, government backed low-interest loans and bonds, and public-private partnerships.

The following word cloud provides some insight as to respondents' vision of transportation in the OTO region in 2040:

Public Comment

OTO followed a similarly intensive public comment process to gather input from the region on recommendations in the Plan.

Staff revisited the Expos in Nixa, Ozark, and Republic. Additional effort was made to reach the remainder of the OTO region.

Public comment received:

Vision and Measuring Performance

Vision

An excellent transportation system supporting the success of the OTO region.

Goals

Through public input and discussion among the Long Range Transportation Plan Subcommittee, twelve goals were developed. These goals help shape the recommendations to come from this plan and guide the actions of the OTO over the life of this plan.

1. Support the economic vitality of the region
2. Encourage productive land use through consistency between planned growth, economic development patterns and transportation improvements
3. Increase the safety and security of the transportation system for all users
4. Increase accessibility and mobility for all transportation modes
5. Improve connections within and between all modes of transportation
6. Encourage efficient system management and operations
7. Preserve the existing transportation system and monitor system performance
8. Maximize resources by promoting partnerships, collaboration, and good planning principles
9. Actively seek secure and reliable transportation funding
10. Provide education and advocacy for transportation
11. Protect and enhance the environment when planning for transportation improvements
12. Support the efficient movement of goods

Actions

OTO has developed a series of actions for each goal that will guide the implementation of this plan. These actions embolden priorities and outline plans and studies for staff to put the plan into action.

1. **Support the economic vitality of the region**
    a. Prioritize projects that encourage job creation, retention, and wage growth.
    b. Use the congestion management system to identify improvements that reduce congestion and improve mobility.
    c. Encourage a balanced multimodal system providing transportation to all.
    d. Connect the bicycle network to national routes and provide local bicycle wayfinding.

2. **Encourage productive land use through consistency between planned growth, economic development patterns and transportation improvements**
    a. Regularly update the Major Thoroughfare Plan and Bicycle/Pedestrian Plan to align with land use decisions by local governments.
    b. Review development proposals for compliance with the Major Thoroughfare Plan and Bicycle/Pedestrian Plan
    c. Encourage all jurisdictions align their design standards with the Major Thoroughfare Plan and Bicycle/Pedestrian Plan.

d. Make land use recommendations where gaps in commercial uses exist along arterials and proposed new arterials, expressways, and nodes.

3. Increase the Safety and Security of the Transportation System for all users

a. Support the MoDOT Blueprint for Safety and other efforts to reduce traffic accidents.
b. Prioritize projects that support the recommendations of state and local highway safety plans.
c. Review local Emergency Management and Hazard Mitigation plans to ensure that transportation is included.
d. Conduct an inventory of flood-vulnerable transportation facilities.
e. Support the coordination of education programs for bicyclists, pedestrians, and motorists.
f. Continue to support safe routes to school through TAP prioritization.

4. Increase accessibility and mobility for all transportation modes

a. Develop and provide to member jurisdictions model policies for a complete street network and other facilities.
b. Review roadway improvement projects for opportunities to provide for all modes of transportation.
c. Look for opportunities to expand transit ridership.
d. Identify a high frequency transit corridor with fewer stops and develop a land use plan to promote the density needed to support transit.
e. Give priority to Project Selection criteria for improvements that make bus stops more accessible.
f. Continue to develop Bicycle and Pedestrian Implementation plans and update periodically to ensure relevancy.
g. Share best practices via a single resource regarding bicycle and pedestrian facilities.
h. Create and support the position of a regional bicycle and pedestrian coordinator in partnership with and within the OTO region.
i. Continue to support efforts to bring inter-city passenger rail to Springfield.

5. Improve connections within and between all modes of transportation

a. Draft a model ordinance providing for subdivision street connections and cross access requirements and encourage area jurisdictions to adopt.

6. Encourage efficient system management and operations

a. Promote transportation demand management strategies.
b. Encourage efficient traffic incident management (TIM) principles.
c. Partner with the Transportation Management Center of the Ozarks efforts to coordinate signals, new technologies and monitor congestion and expand coordination.
d. Develop a traffic incident management subcommittee

7. Preserve the existing transportation system and monitor system performance

a. Emphasize system preservation when allocating available funding.

b. Continue to monitor the condition of roads, bridges, transit facilities, and the bicycle/pedestrian network.
c. Publish an annual report documenting system performance.

8. Maximize resources by promoting partnerships, collaboration and good planning principles

a. Encourage collaboration among OTO jurisdictions.
b. Maximize resources by encouraging the use of multiple funding sources including local, state, federal and private for a single project.
c. Develop sample ordinances that require neighborhood connectivity and prohibit private street networks, require multiple ingress and egress and support the development of a grid pattern street network and encourage jurisdictions to adopt.

9. Actively seek secure and reliable transportation funding

a. Create a subcommittee to monitor funding and be actively engaged in order to respond to discretionary funding opportunities.
b. Educate elected officials and the public regarding the need for additional stable transportation funding.
c. Provide letters of support for activities related to Transportation Plan 2040 priorities.

10. Provide education and advocacy for transportation

a. Provide presentations to elected officials, board and community committees on the transportation system.
b. Use media outlets to educate the public on transportation issues.

11. Protect and enhance the environment when planning for transportation improvements

a. Inventory environmentally sensitive areas for consideration in planning decisions.
b. Continue to monitor air quality standards and encourage actions that might pre-empt a nonattainment designation.
c. Support water quality best practices where feasible.

12. Support the efficient movement of goods

a. Continue to pursue funding for the Springfield Railroad Reconfiguration Plan.
b. Identify essential freight corridors and monitor freight performance.
c. Conduct a regional freight study to better understand needs and impacts of goods movement.

Performance Based Planning

MAP-21 established and the FAST Act maintained a performance-based approach to transportation investments with this national policy, “Performance management will transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision-making through performance-based planning and programming”[§1203; 23 USC 150(a)].

National Performance Goals

With this, seven nation performance goals were established for the Federal-aid highway program.

1. Safety
   To achieve a significant reduction in traffic fatalities and serious injuries on all public roads

2. Infrastructure Condition
   To maintain the highway infrastructure asset system in a state of good repair

3. Congestion Reduction
   To achieve a significant reduction in congestion on the National Highway System

4. System Reliability
   To improve the efficiency of the surface transportation system

5. Freight Movement and Economic Vitality
   To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development

6. Environmental Sustainability
   To enhance the performance of the transportation system while protecting and enhancing the natural environment

7. Reduced Project Delivery Delays
   To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

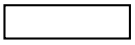
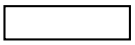
Guidance for these goals are still a work in progress and should be expected from FHWA sometime during 2016. Upon release of final guidance, the Missouri Department of Transportation will develop statewide performance measures and goals. The OTO will have six months following development of the state goals to finalize goals at the regional level. These regional goals will be reflected in a performance measures report, as discussed below.

Regional Performance Goals

With *Journey 2035*, the OTO developed eleven performance measures, providing a benchmark for the region in terms of safety, system performance, and public health. OTO produces an annual report, indicating the current trend for each measure. The 2014 Annual Performance Measures Report is included in the Appendix.

Throughout this process, OTO has encountered challenges in reporting performance. Data is not always available for each desired measure or timeframe. The disparate sizes of the OTO communities dictate which American Community Survey timeframes are available. Other data is not collected annually, meaning it does not change from one report to the next. The MAP-21 requirements, carried into the FAST Act, only stipulate that reports are made with the update of the long range transportation plan.

This may solve some of the data availability issues for the measures related to meeting these requirements. The lessons learned in this process will be employed in the development of additional measures meeting the requirements of federal transportation law.

Performance Measure	Target	2014 Status
Vehicle Miles Traveled per Capita	That VMT per Capita will grow no more than 5 percent from its peak in 2004, at a value of 19, by 2035. Growth should be captured in other modes	
Modal Balance	Decrease "Drove Alone" to 75 percent for the region by 2035	
Bicycle/Pedestrian Network Completion	If, on average, 4 miles of sidewalk are added each year within the OTO area, but no new roadways, by 2035, the total percent of roadways with sidewalks would be 33.5	
Total Disabling Injury and Fatal Crashes per Million Vehicle Miles Traveled	That disabling injury and fatal crashes/MVMT will continue a downward trend	
On-Time Performance of Transit System	The CU service standard is 90 percent. The system will be considered to have acceptable on-time performance at this 90 percent level	
Percent of Housing Units within ¼-mile of a Bus Route	That the percent of housing units within the CU Transit service area and the OTO area within ¼-mile of a bus route is on the upward trend between now and 2035	
Average Commute Time	Keep the average commute time less than 25 minutes by 2035	
Peak Travel Time	That less than 20 percent of the OTO area roadways will be severely delayed	
Percent of Roadways in Good Condition	That 85 percent or more of the Major Roads in the OTO region are in Good Condition	
Bridge Condition	That the percent of bridges in Fair or Better Condition will stay above 90 percent	
Ozone Levels	That the region will be able to demonstrate transportation conformity for its plans, programs, and projects	

Design Standards

OTO has an established Major Thoroughfare Plan that shows the projected functional class of the roadway system through 2040 and beyond. This differs from the Federal Functional Classification System, which reflects how roadways currently function. The MTP roadway classification system provides guidelines for designing a roadway network for the efficient movement of people and goods throughout the OTO study area. Both systems use a set of standards which group roadways based on similar characteristics.

Adopted Standards

In *Journey 2030*, the OTO adopted design standards, which are desired minimums based on the recommendations of the Major Thoroughfare Plan. OTO jurisdictions are encouraged to adopt more stringent standards, as well as employ best practices. "Complete Streets" and "Livable Streets" are among the most recent best practices in roadway design.

Recommended Changes

With the review of the Major Thoroughfare Plan in preparation for the *Transportation Plan 2040* planning process, one change was recommended to the Design Standards. This was the inclusion of a Rural Collector. This designation is only applied to certain collectors in Christian County outside of the Tier 2 planning areas. These roadways would have a 50-foot right-of-way applied and open ditch would replace curb, gutter, and sidewalk requirements. With the adoption of Transportation Plan 2040, this change will be incorporated into the OTO Design Standards.

The revised Design Standards are included in the Appendix.

Variance from the Standard

These standards are intended for new construction or the retrofitting of existing roadways. In the event that a roadway project has not been constructed, but is has been designed and right-of-way has been purchased to previous standards, the project is not required to meet these standards. Otherwise, deviations from the OTO Design Standards require recommendation of a variance from a special subcommittee of the OTO Technical Planning Committee to the Board of Directors, who can approve or deny the request.

Bicycle and Pedestrian Design Standards

With the adoption of *Journey 2035*, OTO adopted minimum standards for bicycle and pedestrian facilities in the region, revised from the initial Comprehensive OTO Area Bicycle-Pedestrian Plan. These are also included in the Appendix.

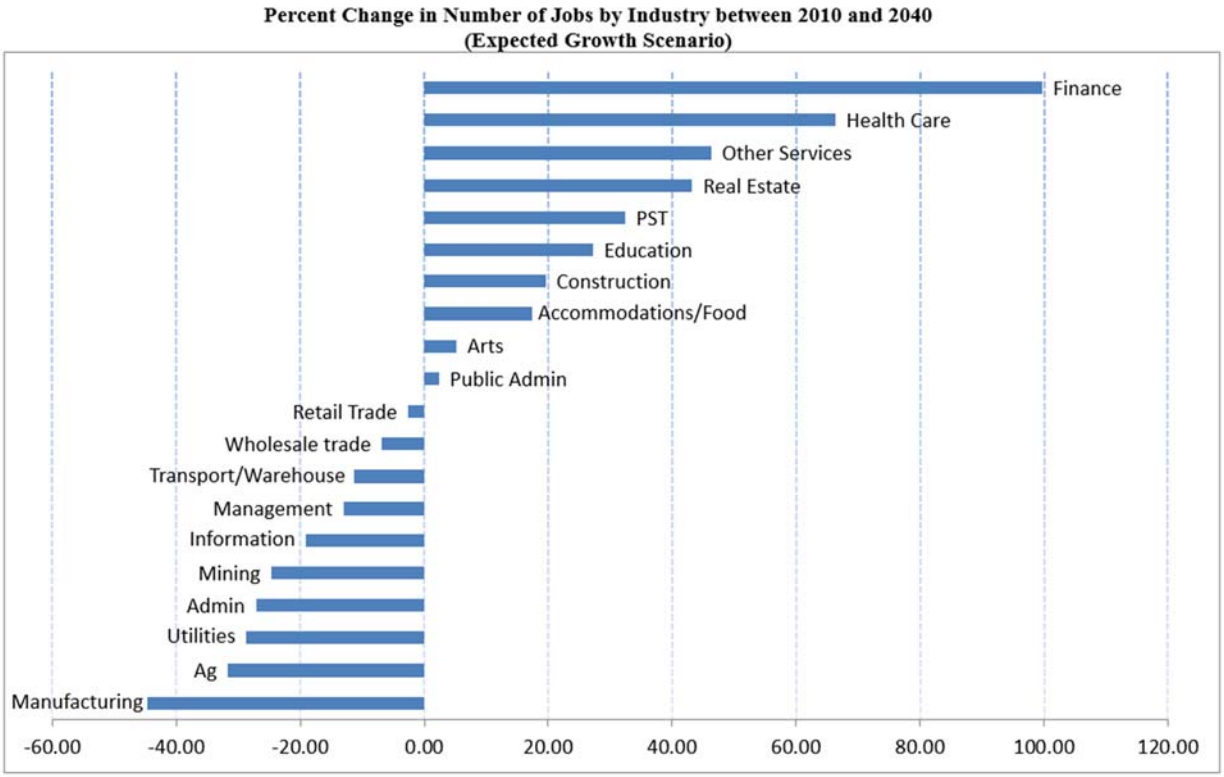
Existing Conditions and Special Studies

Socioeconomic and Demographic Trends

With the development of the travel demand model, OTO contracted with the Bureau of Economic Analysis at Missouri State University to project population and employment for 2040. These projections were done at the TAZ level for the entirety of Christian and Greene Counties, with 2010 as a base year, and projections developed for 2020, 2030, and 2040, using Slow, Expected, and High Growth scenarios. More can be found in the *OTO Travel Demand Model Summary Report-2014*.

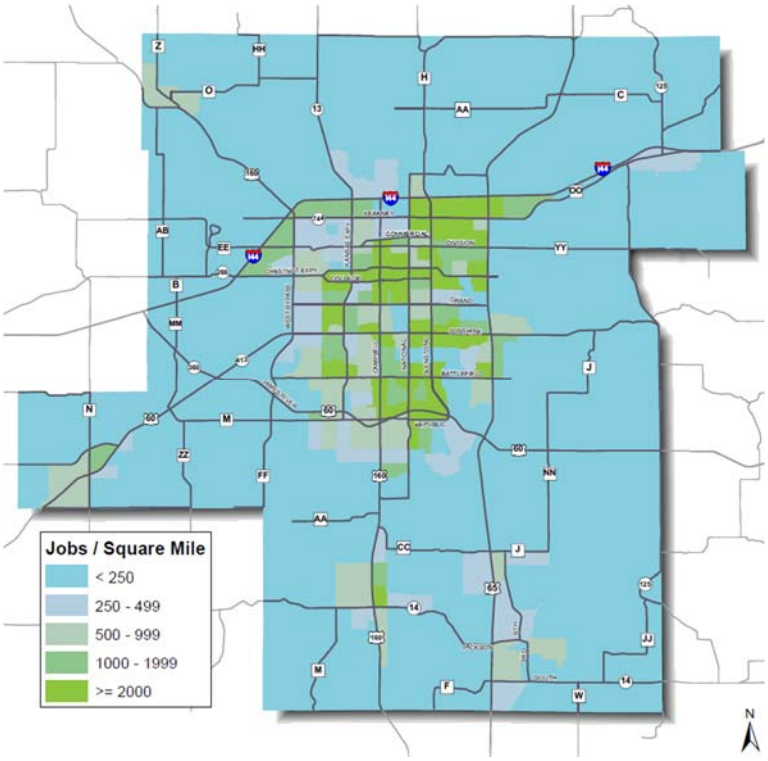
Employment Growth

For the expected-growth scenario, Finance and Healthcare are predicted to be the fastest growing industries in the two-county region. Manufacturing and Agriculture are expected to see the largest declines.

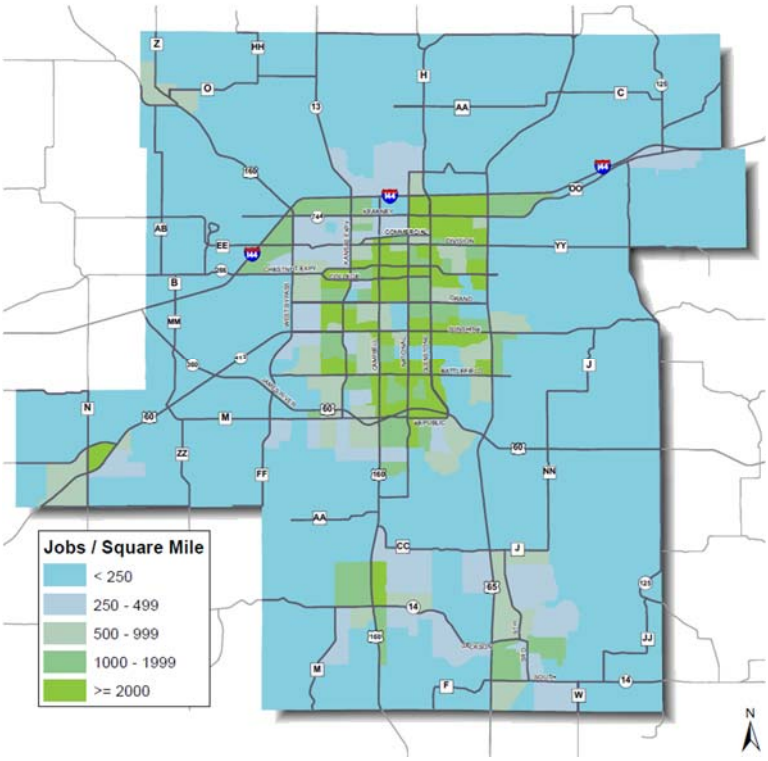


Projected employment density, however, remains strong in Springfield, with some growth seen in northern Christian County and the Republic area. The decrease in the manufacturing sector does have an impact on the future employment distribution of the OTO region, as can be seen in the northeast and northwest corners of Springfield. Employment is shown to decrease in the TAZs where the industrial parks are located. Of note, is that the employment projections for each TAZ over the next 30 years are based on the existing industries in those TAZs.

2010 Jobs per Square Mile by TAZ

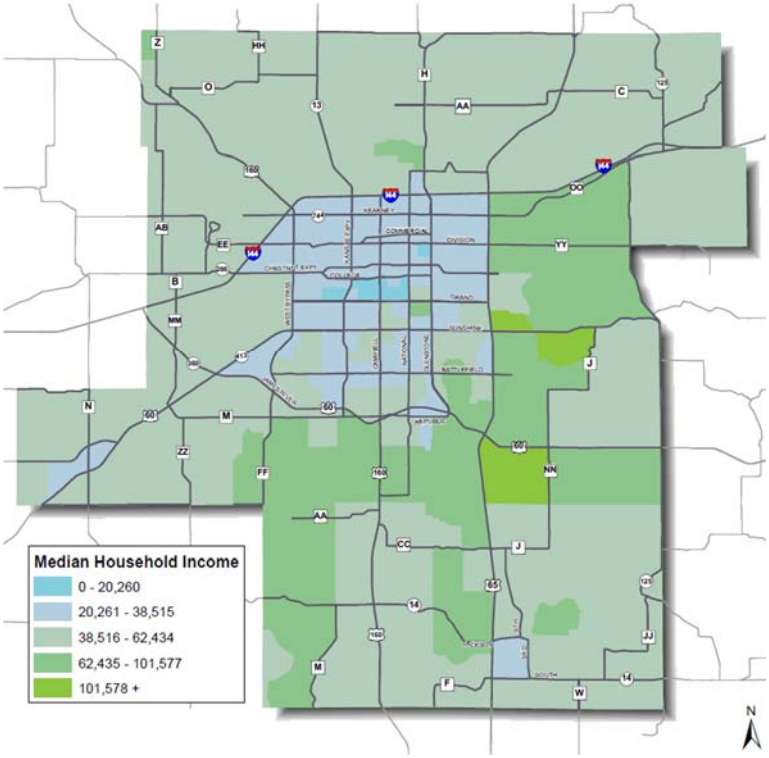


2040 Jobs per Square Mile by TAZ

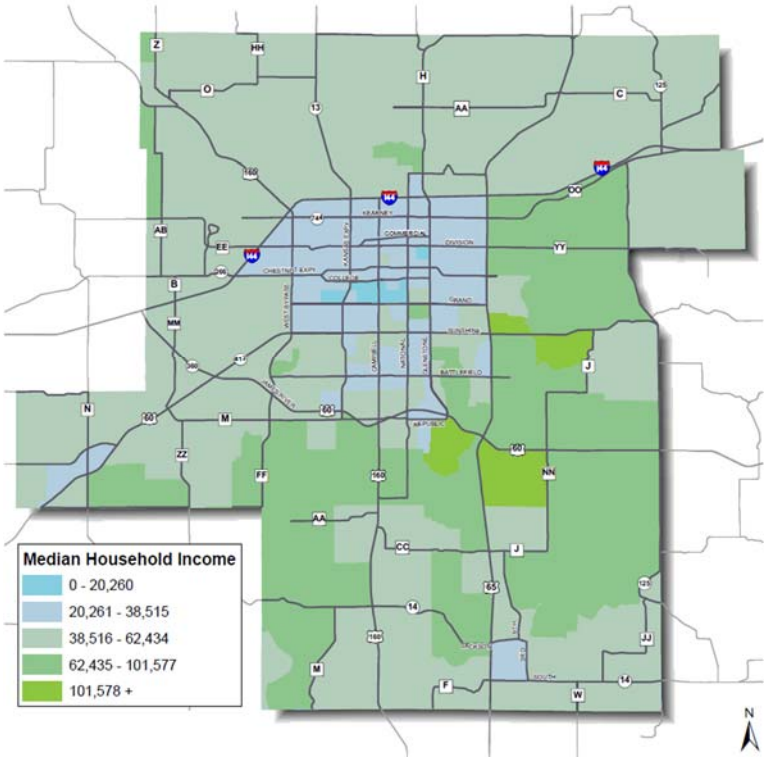


Income distribution across the region does not dramatically change.

2010 Median Household Income by TAZ



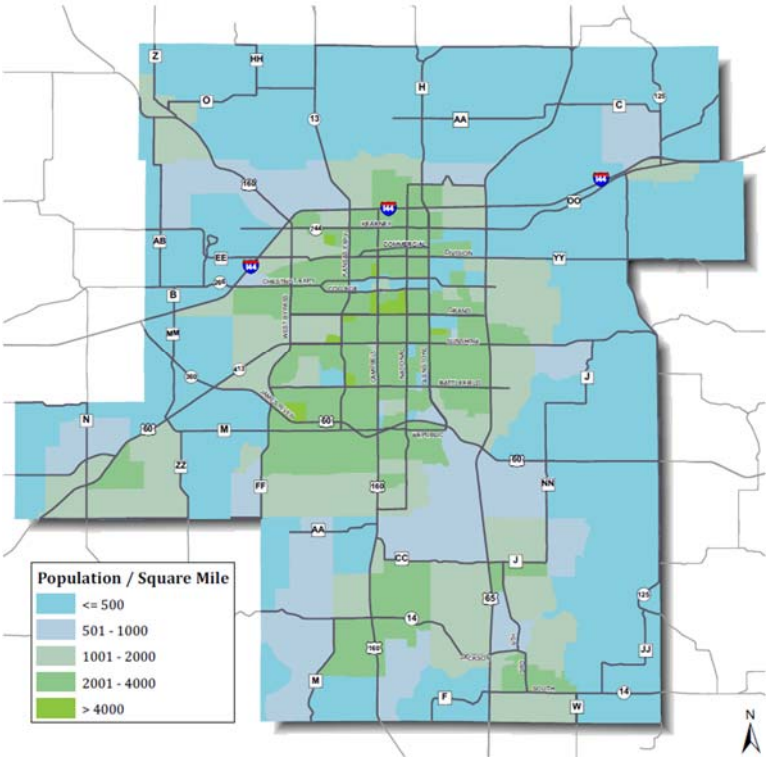
2040 Median Household Income by TAZ



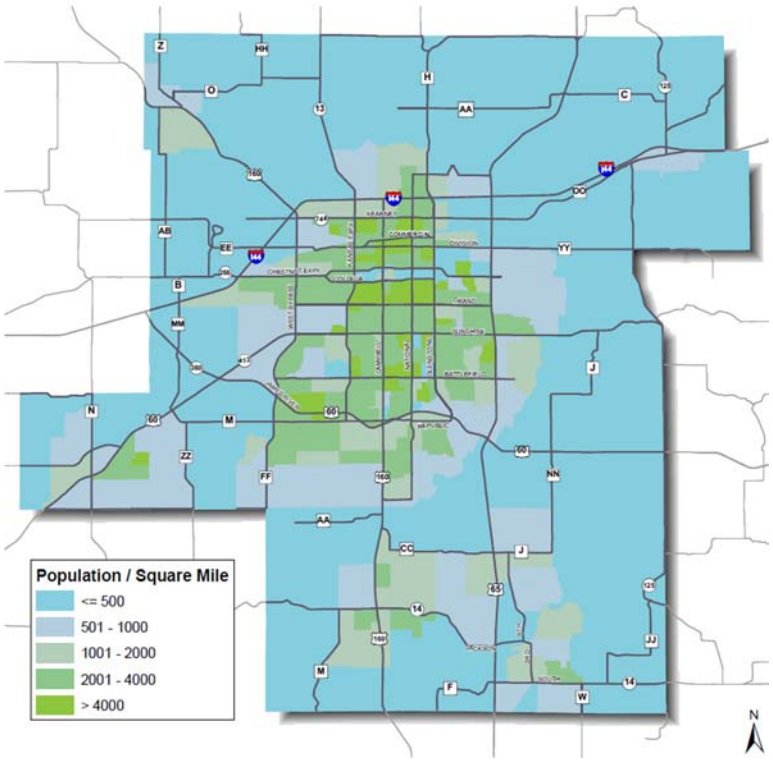
Population Growth

Population projections redistribute the population of the region, reducing density in the Springfield core and adding population and density to northern Christian County. The City of Springfield can expect an increase between 16 and 22 percent in population over the next thirty years, while Greene County could grow from 22.5 percent to almost 28 percent. This is relatively minor, however, compared to the growth in Christian County, which could range from 71 percent to 79 percent.

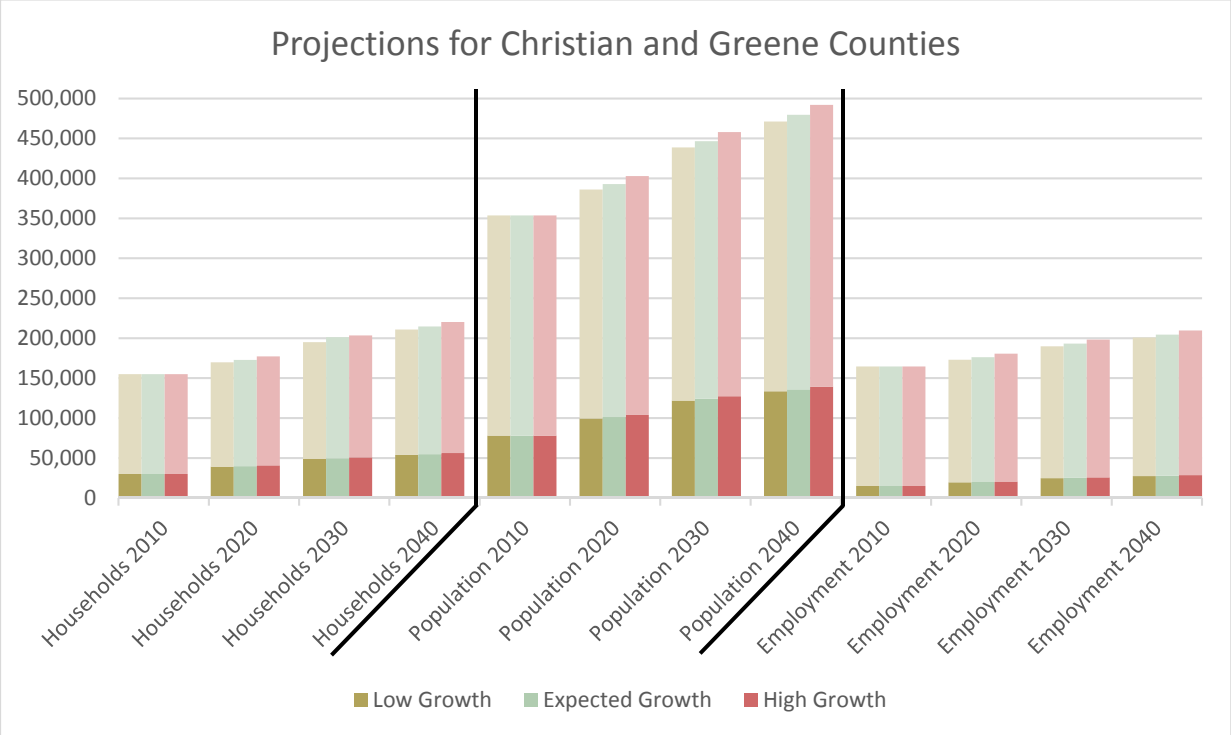
2010 Population per Square Mile by TAZ



2040 Population per Square Mile by TAZ



		High Growth			Expected Growth			Low Growth		
		All Greene	All Christian	**TOTAL**	All Greene	All Christian	**TOTAL**	All Greene	All Christian	**TOTAL**
2010	**Households**	124,873	30,114	**154,987**	124,873	30,114	**154,987**	124,873	30,114	**154,987**
	Population	275,638	77,999	**353,637**	275,638	77,999	**353,637**	275,638	77,999	**353,637**
	Jobs	149,614	14,946	**164,560**	149,614	14,946	**164,560**	149,614	14,946	**164,560**
2020	**Households**	136,375	40,886	**177,261**	132,971	39,864	**172,835**	130,655	39,166	**169,821**
	Population	299,032	103,865	**402,897**	291,563	101,271	**392,834**	286,477	99,508	**385,985**
	Jobs	160,139	20,525	**180,664**	156,134	20,015	**176,149**	153,422	19,663	**173,085**
2030	**Households**	152,628	50,892	**203,520**	151,685	49,620	**201,305**	146,219	48,751	**194,970**
	Population	330,734	127,249	**457,983**	322,464	124,069	**446,533**	316,847	121,901	**438,748**
	Jobs	172,330	25,856	**198,186**	168,029	25,213	**193,242**	165,097	24,770	**189,867**
2040	**Households**	164,037	56,161	**220,198**	159,924	54,755	**214,679**	157,134	53,800	**210,934**
	Population	352,511	139,412	**491,923**	343,694	135,929	**479,623**	337,710	133,555	**471,265**
	Jobs	181,078	28,547	**209,625**	176,560	27,835	**204,395**	173,476	27,348	**200,824**



Three growth scenarios were developed, low, expected, and high growth. There is not a large difference between the three growth scenarios. The report did not specify the assumptions used to develop the lower than expected or higher than expected growth rates. The 2040 model forecasts were developed based on the expected growth scenario.

Historic Population Trends

A complete Census count has not been conducted since *Journey 2035*. There are estimates available for each OTO community, however, through July 1, 2014. The OTO region, especially Christian County, experienced incredible growth between 1990 and 2000, with continued strong growth through 2010. Nixa grew the fastest between 2010 and 2014, with Republic next. The communities in OTO's southern region continue this trend, which follows the growth that has been seen over the past few decades.

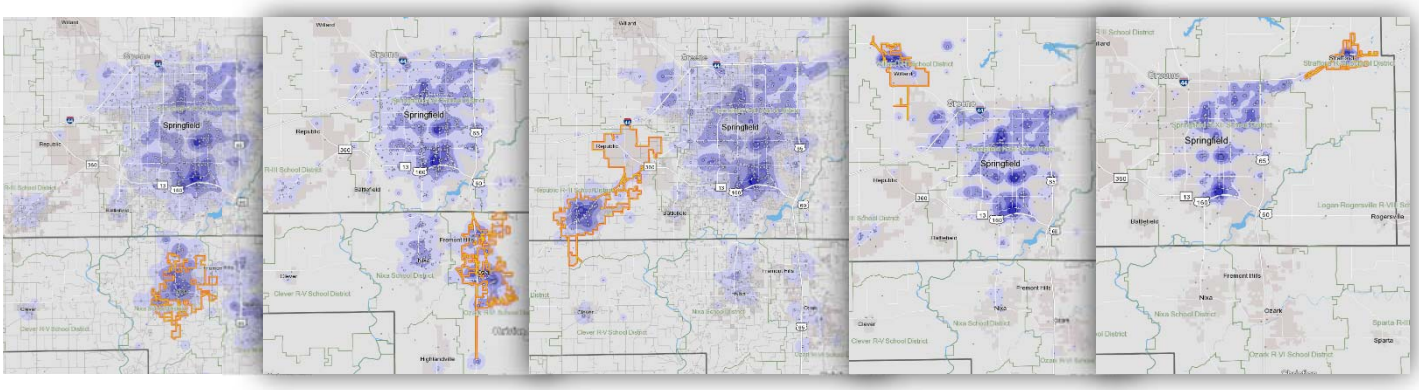
Jurisdiction	1990	2000	2010	1990-2000	2000-2010	1990-2010	2014 Estimate	2010-2014
Christian (All)	32,644	54,285	77,422	66.3%	42.6%	137.2%	82,101	6.0%
Christian (MPO)	--	14,049	16,196	--	15.3%	--	--	--
Greene (All)	207,949	240,391	275,174	15.6%	14.5%	32.3%	285,865	3.9%
Greene (MPO)	--	54,459	68,934	--	26.6%	--	--	--
Battlefield	1,526	2,385	5,590	56.3%	134.4%	266.3%	5,925	6.0%
Fremont Hills	201	597	826	197.0%	38.4%	310.9%	856	3.6%
Nixa	4,707	12,124	19,022	157.6%	56.9%	304.1%	20,570	8.1%
Ozark	4,243	9,665	17,820	127.8%	84.4%	320.0%	18,871	5.9%
Republic	6,292	8,438	14,751	34.1%	74.8%	134.4%	15,680	6.3%
Springfield	140,494	151,580	159,498	7.9%	5.2%	13.5%	165,378	3.7%
Strafford	1,166	1,845	2,358	58.2%	27.8%	102.2%	2,366	0.3%
Willard	2,177	3,193	5,288	46.7%	65.6%	142.9%	5,454	3.1%
OTO Region	--	258,335	310,283	--	20.1%	--	--	--

Commuting Patterns and Congestion

Major Employers

When evaluating the location of major employers for OTO's outlying communities, the same locations continue to be highlighted – downtown and the surrounding institutions of higher education, Sunshine and National and the Mercy Hospital campus, and National and U.S. 65 and the Cox Health Campus.

Selected Employment Patterns



Additional concentrations can be seen in OTO's more industrial areas. Overall, this graphic demonstrates that most of the OTO region commutes to similar locations each day for work.

Time Leaving for Work

The morning commute in the OTO region is fairly concentrated between the hours of 6:30 a.m. and 8:30 a.m., with most communities falling into a 90-minute window. The City of Nixa is the exception, with a gap from 7:30 to 7:59 a.m., and the commute picking back up at 8:00 a.m., giving Nixa the longest stretch for the morning commute. This information provides details on when and where to look for morning congestion along OTO's major corridors.

	Christian	Greene	Battlefield	Fremont Hills	Nixa	Ozark	Republic	Springfield	Strafford	Willard
Total:	35,539	126,708	2,795	312	8,715	8,453	6,868	73,106	1,052	2,351
12:00 a.m. to 4:59 a.m.	1,248	4,043	47	0	282	286	347	2,291	10	171
5:00 a.m. to 5:29 a.m.	1,007	3,010	93	0	230	326	157	1,635	57	20
5:30 a.m. to 5:59 a.m.	1,432	5,222	158	6	354	222	397	2,690	73	46
6:00 a.m. to 6:29 a.m.	3,121	7,770	127	18	685	625	546	3,665	111	293
6:30 a.m. to 6:59 a.m.	3,748	12,059	364	27	1,103	700	771	5,858	137	218
7:00 a.m. to 7:29 a.m.	7,215	18,506	599	70	1,582	1,606	1,249	8,832	169	418
7:30 a.m. to 7:59 a.m.	4,200	20,734	494	58	824	1,089	1,151	11,485	195	372
8:00 a.m. to 8:29 a.m.	3,924	14,353	196	22	1,164	994	636	8,175	69	384
8:30 a.m. to 8:59 a.m.	1,444	5,451	85	16	408	354	51	3,274	20	138
9:00 a.m. to 9:59 a.m.	2,072	7,541	54	19	373	740	247	5,192	86	11
10:00 a.m. to 10:59 a.m.	845	3,713	78	11	275	225	204	2,658	11	47
11:00 a.m. to 11:59 a.m.	397	2,697	80	0	62	93	72	2,044	8	29
12:00 p.m. to 3:59 p.m.	1,973	10,490	246	13	575	507	422	7,619	54	148
4:00 p.m. to 11:59 p.m.	2,913	11,119	174	52	798	686	618	7,688	52	56
Average Travel Time to Work	25.5	19.0	22.2	24.4	24.4	23.8	21.9	17.3	22.0	23.6

Travel Time to Work

	1980	1990	2000	2005-2009	2007-2011	2008-2012	2009-2013
Christian	24.0	27.4	25.1	24.1	24.5	24.9	25.6
Greene	17.2	17.6	19.2	19.5	19.2	18.8	19.0
Battlefield	22.1	22.6	23.1	22.7	23.1	22.1	22.7
Fremont Hills	N/A	17.0	19.8	19.7	23.6	23.2	23.8
Nixa	20.8	19.1	23.8	21.9	22.4	23.4	24.9
Ozark	21.0	19.2	21.6	22.0	23.1	23.3	23.3
Republic	20.5	21.6	25.1	23.4	22.2	22.3	21.5
Springfield	15.4	15.7	17.0	17.6	17.3	16.9	17.3
Strafford	19.2	20.4	22.4	23.0	23.7	20.8	22.1
Willard	20.6	23.2	23.0	23.8	23.1	24.8	26.1
Average of Greene/Christian	**20.6**	**22.5**	**22.2**	**21.8**	**21.9**	**21.9**	**22.3**
Average of OTO Cities	**19.9**	**19.9**	**22.0**	**21.8**	**22.3**	**22.1**	**22.7**

	Blue cells show improvement from prior timeframe
	Red cells show decline from prior timeframe
	White cells show no change from prior timeframe

Travel time to work appears to have gotten worse over the years, but considering the incredible population growth experienced in the region in the past fifteen years, as well as the growth in vehicle miles traveled, the changes in travel time have not been as significant as one would expect. Travel times in Greene County, Battlefield, Republic, and Strafford have actually improved between the 2009-2013 American Community Survey and the 2000 decennial census. The small sample sizes in the American Community Survey could also explain the variations seen over the past few years.

Average Delay

The OTO Congestion Management Process analyzed delay calculated from travel time runs conducted throughout the OTO region in 2005, 2008, and 2012. The table below demonstrates changes between the AM and PM peaks over these time periods. For both AM and PM peak, improvements were seen in all directions except Eastbound. Some of these differences could be related to changes in the corridors selected for analysis during each timeframe. The extents of each corridor do not match from year to year.

Peak Hour / Direction	2005	2008	2012
	Average Delay per Lane Mile	Average Delay per Lane Mile	Average Delay per Lane Mile
AM Eastbound	5.69	5.03	7.86
AM Westbound	5.73	8.23	7.26
AM Northbound	6.51	9.93	7.06
AM Southbound	7.58	8.62	7.68
PM Eastbound	6.31	8.43	8.76
PM Westbound	6.57	8.87	8.53
PM Northbound	9.11	12.42	11.89
PM Southbound	9.95	11.21	11.14
Average	7.19	9.09	8.77
Source: Data from OTO Travel Time Runs			

This data was also analyzed to determine OTO area roadways that are significantly delayed. This is a Performance Measure for the region. In this case, AM peak improved over 2008, though PM peak did not. It is thought that PM travel is likely influenced by factors other than the journey to or from work, while travel during the AM peak can mostly be attributed to commuting to work and/or school.

	AM Peak Total		
	2005	2008	2012
Miles 20+ mph below speed limit	12.85	33.63	25.26
Total Travel Time Mileage	265.04	343.23	342.57
Percent Significantly Delayed	5%	10%	7%

	PM Peak Total		
	2005	2008	2012
Miles 20+ mph below speed limit	18.37	46.23	48.93
Total Travel Time Mileage	264.27	354.8	339.48
Percent Significantly Delayed	7%	13%	14%

Reliability

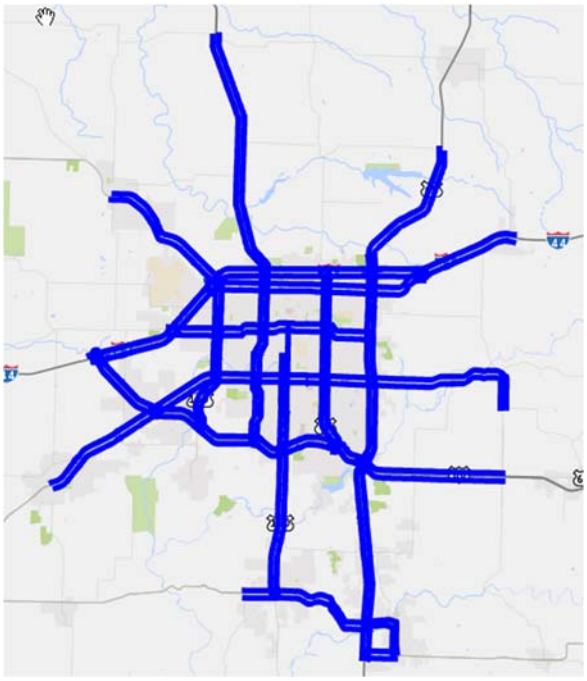
Since *Journey 2035*, OTO has increased access to data about the region's roadways. This includes data from HERE, which uses over 100 sources and billions of GPS probe points to create its traffic data. This information is available through RITIS (Regional Integrated Transportation Information System) at the University of Maryland CATT (Center for Advanced Transportation Technology) Lab.

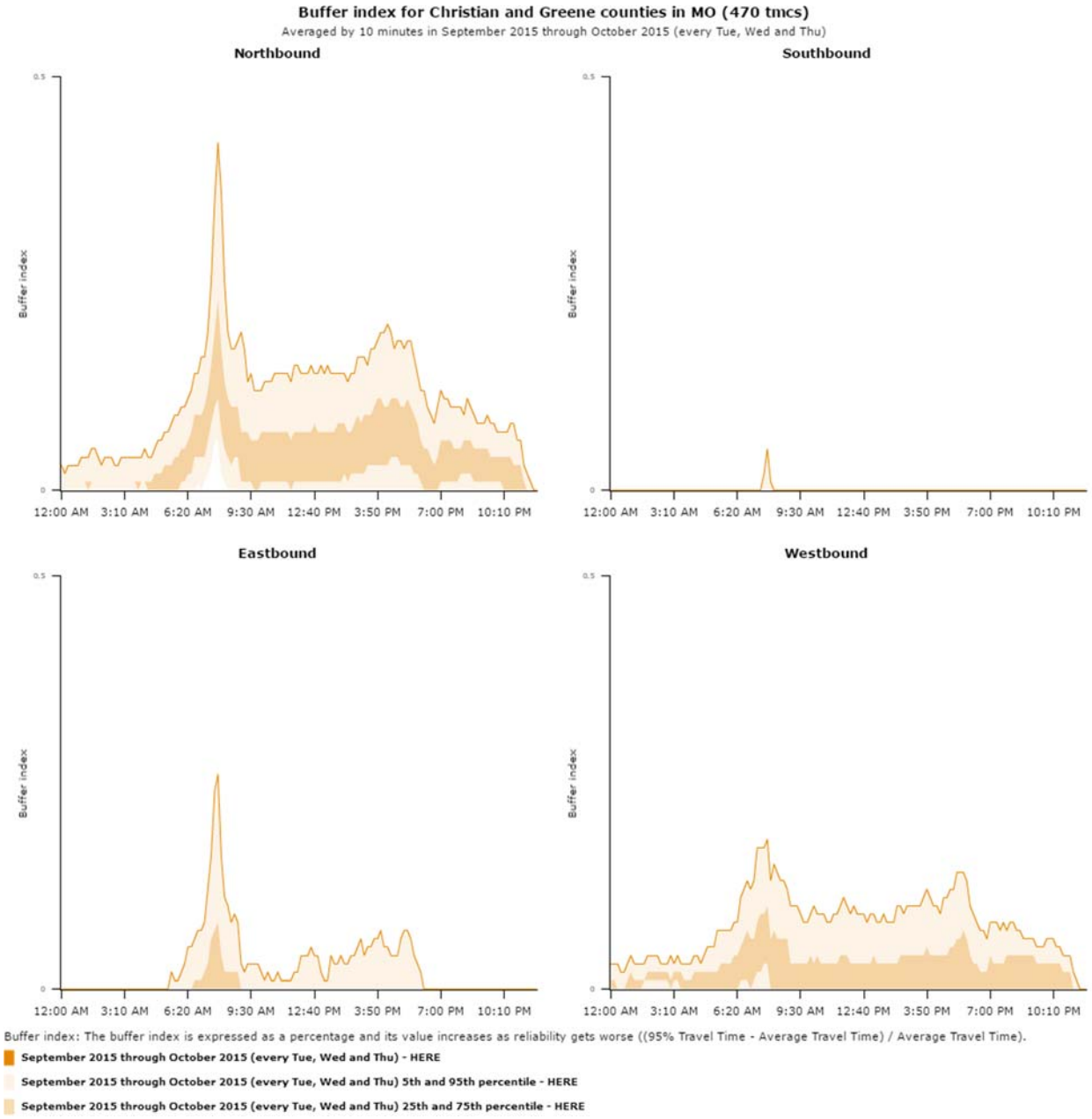
Buffer Index

A number of factors provide information for travel along a roadway. To compare these measures across roadways, they must be length neutral. For example, travel time becomes the travel time index and planning time becomes the planning time index. The travel time index is "travel time represented as a percentage of the ideal travel time (travel time/free-flow travel time)," while the planning time index is "the total travel time that should be planned when an adequate buffer time is included (95% travel time/free-flow travel time) [1]." The buffer index, on the other hand, is the buffer time's percent of the average travel time. Buffer time is "the extra time that travelers must add to their average travel time when planning trips to ensure on-time arrival," so the Buffer Index is the "(95% travel time – average travel time)/average travel time [1]." The Buffer Index increases the worse reliability gets.

In the OTO

The highlighted roadways in the graphic to the right were used for analysis. For typical workdays in September and October 2015, the northbound roadways in the OTO region are the least reliable, especially in the AM Peak. The eastbound roadways echo this pattern, though with less severity. The westbound roadways show a more pronounced daylong higher buffer index, as well as a PM peak issue. Reliability differs from delay in that it speaks to the unpredictability of travel time along a roadway.





Travel Demand Model

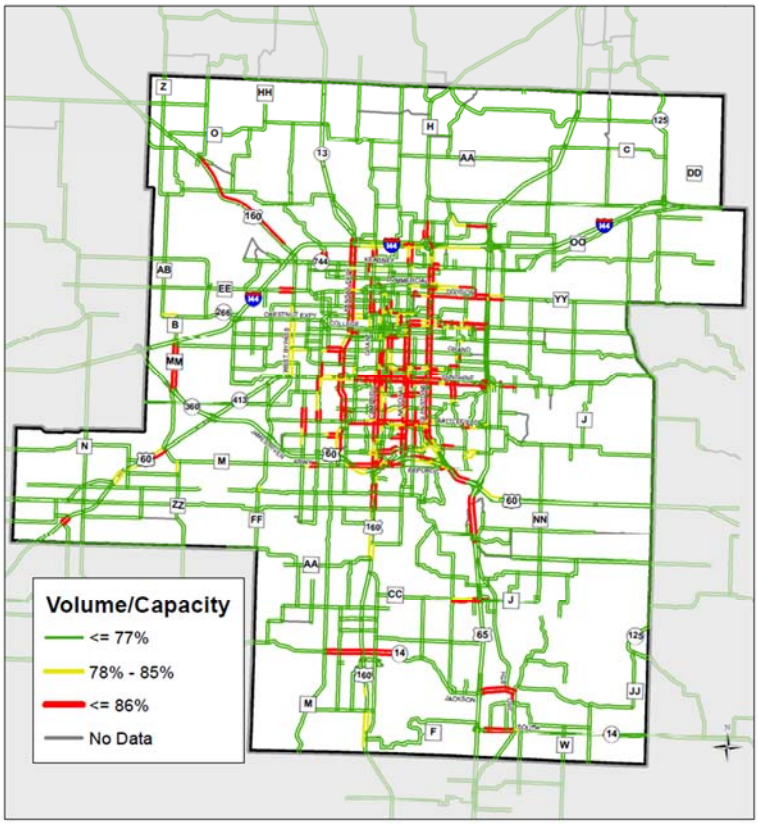
The OTO has developed a new four-step travel demand model with a 2012 base year and transit mode split. The demographic and socioeconomic data found at the beginning of this Chapter were used in the development and calibration of the model. This new model incorporates several unique features, including consideration for node delay in addition to link delay, dynamic trip assignment and distribution, and the use of cellular data to provide information on internal/external trips.

In addition to the 2012 base model, 6 scenarios were developed for the OTO region:

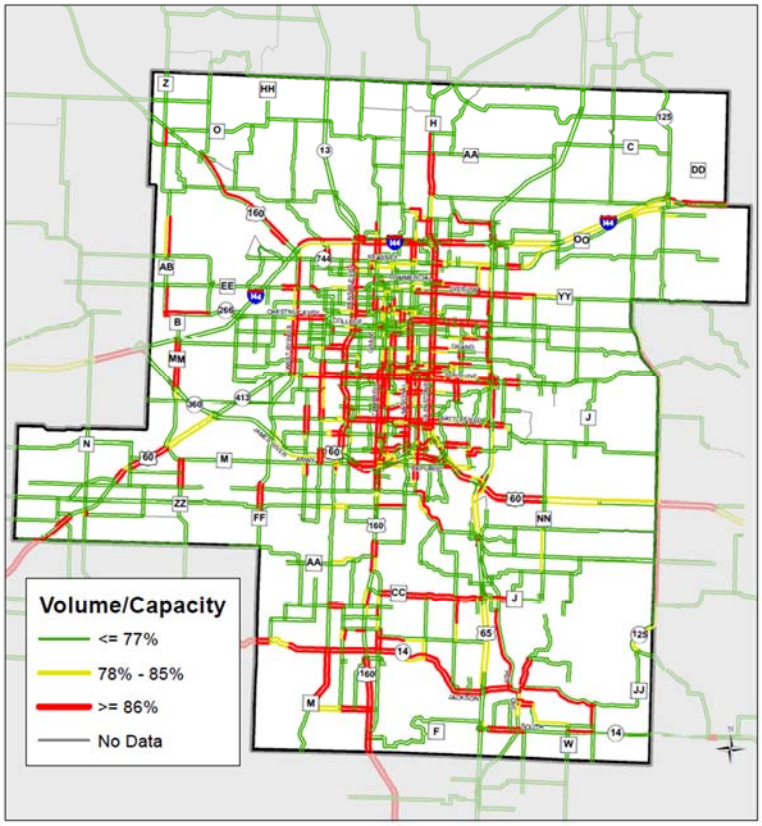
1) 2030 Existing plus Committed Network
2) 2040 Existing plus Committed Network
3) 2040 Regionally Significant Projects
4) 2040 Fuel Price Increase
5) 2040 Transit Share Increase
6) 2040 Southwest OTO Projects

Below is a comparison of the Base scenario and the 2040 Existing plus Committed (no-build) scenario. A report outlining the complete model results can be found in the appendix.

2012 Base Year



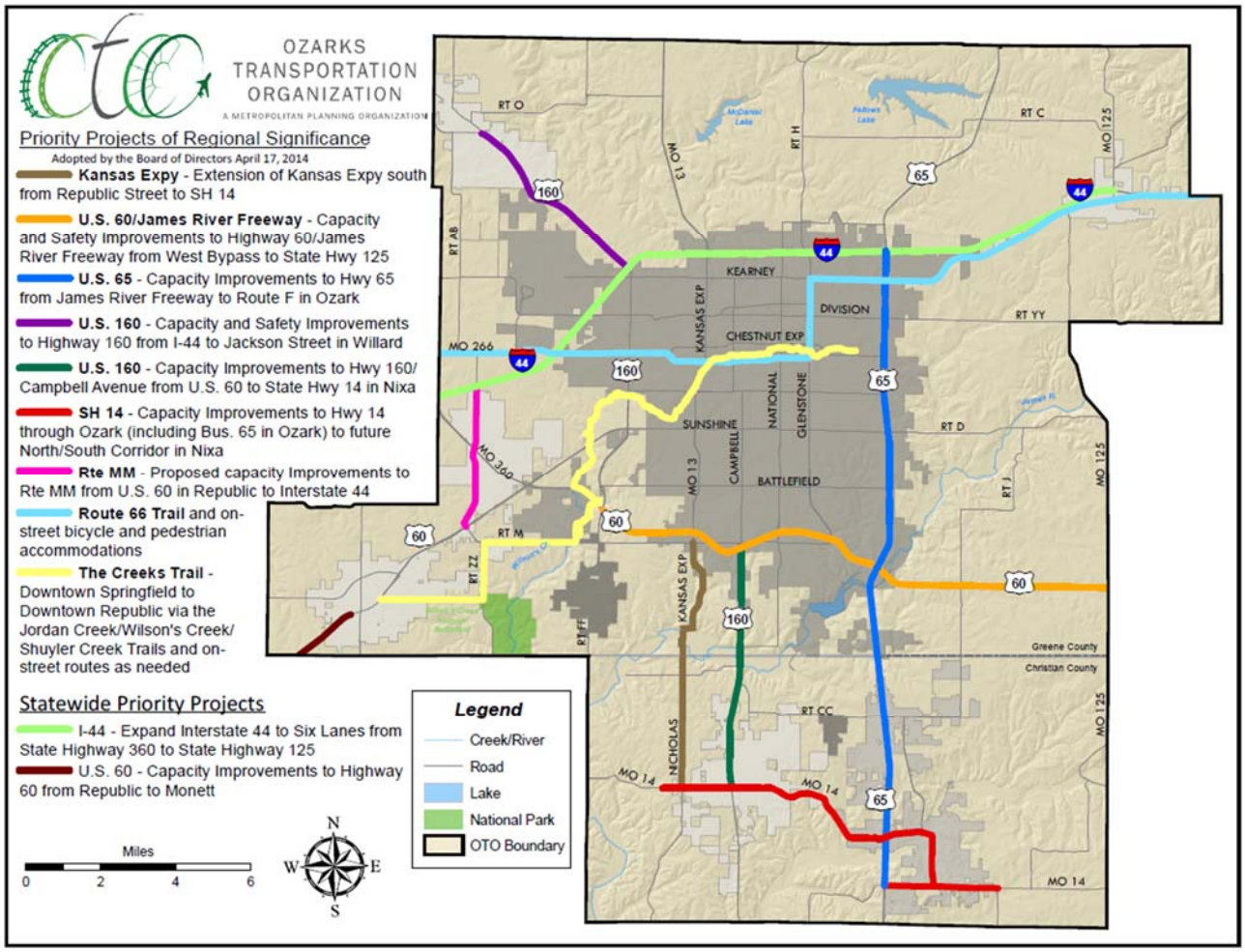
2040 Existing plus Committed Network



Compared to the base year, congestion on OTO's arterials is more widespread. The existing plus committed improvements appear to have eased congestion on U.S. 65 south of James River Freeway, but time has added more congestion north of James River Freeway. Congestion deepens for Ozark south of CC on U.S. 65. Traffic is more proliferated along Highways 14 and CC in Christian County and increases are seen on U.S. 160 through and south of Nixa. U.S. 60 heading southwest from Republic also sees an increase in congestion.

Priority Corridors of Regional Significance

In order to identify priorities at a high level, the OTO has recognized select corridors throughout the region that represent the highest priority for regionally significant projects. This list has been used to communicate legislative priorities, as well as selection criteria for project scoring. This list has been updated as projects have been completed and additional corridors have been identified as priorities. Most recently, two trail corridors have also been added, providing a multi-modal dimension to the list.



Transit

Providers

City Utilities is the primary fixed-route transit operator in the OTO region. Fixed route service is provided within the City of Springfield seven days a week. City Utilities also offers paratransit service for those who cannot ride the fixed-route bus due to a disability or health condition. CU Transit operates both day and night routes, as well as on weekends and holidays. Routes and schedules may be found at http://www.cityutilities.net/transit/transit.htm.

Missouri State University contracts with a private provider for regular shuttle service in and round the MSU campus. This service is available to the public at no charge. The MSU routes run days and evenings, with limited service when school is not in session.

Numerous agencies provide additional human-service transportation throughout the region. Some serve only their specific clients, and others, like OATS, Inc., provide demand-response service for the disabled and elderly in Springfield, and the general public in Christian and Greene Counties.

2012 Route Study

OTO, in partnership with City Utilities Transit, conducted an in-depth transit analysis of both the existing system and a proposed regional system in 2012. The purpose of the study was to determine how well the current fixed-route serves local needs, identify opportunities for improvement, test scenarios, and evaluate a regional service concept.

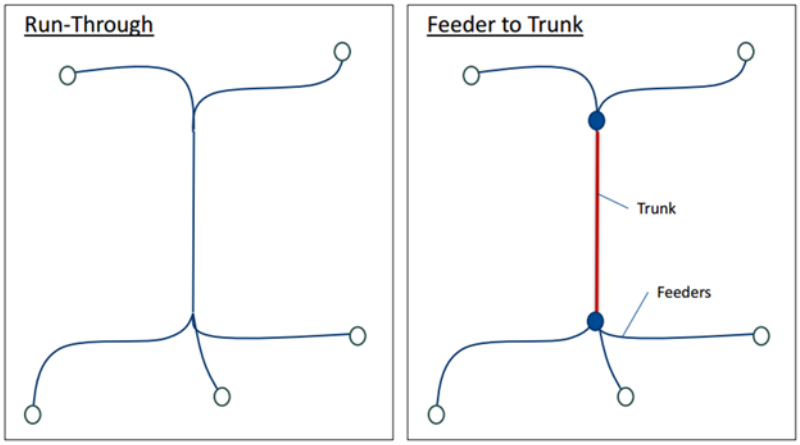
The study, found on the OTO website, recommended improvements for five different levels of improvement:

1) Improve reliability
2) Improve frequency
3) Expand east-west options on far south side
4) Additional frequency improvements and limited stop service
5) 15-minute frequency and ½-mile spacing

Each scenario presents specific improvements and the estimated necessary capital costs for implementation.

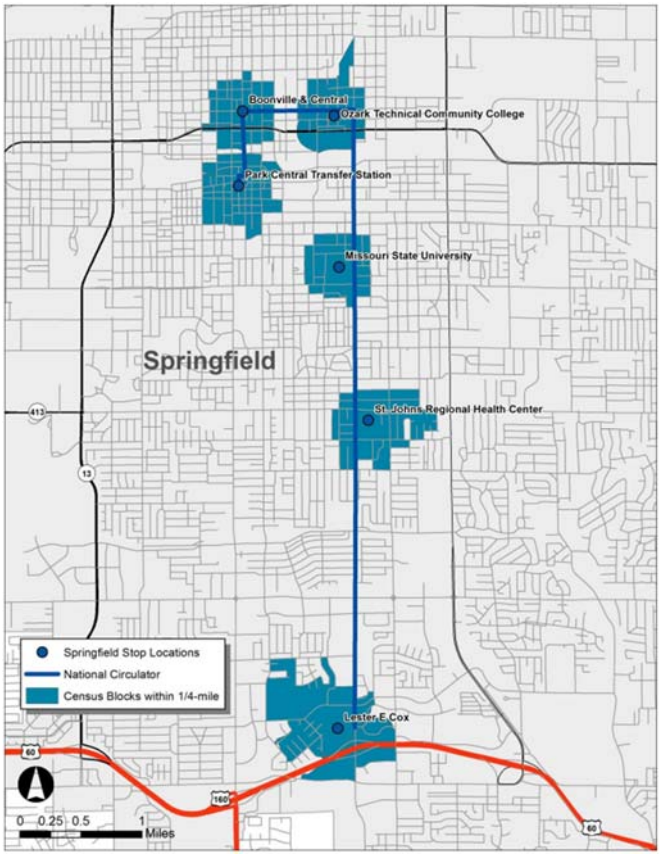
The regional service analysis reviewed eleven candidate communities and two service designs: run-through and feeder-to-trunk. Eight routes were eventually selected for cost and route analysis:

1) Branson
2) Fair Grove
3) Nixa-Ozark
4) Rogersville
5) Republic-Battlefield
6) Strafford
7) Walnut Grove-Ash Grove-Willard
8) Limited Stop Circulator



From this plan, the Limited Stop Circulator has received the most attention as feasible. Using National, this route connects the Medical mile with MSU, OTC, Government Plaza and the downtown Transfer Station. The new transfer station at Main and College was not finalized at the time of this study, but that should not impact the findings related to this proposed route.

This route and variations on it are receiving additional attention through the City of Springfield's Impacting Poverty Initiative. Corresponding to the Major Employers Hot Spot maps seen earlier in this Chapter, this route should effectively serve the public's needs.



Bicycle and Pedestrian Planning

Planning Efforts

OTO has an active Bicycle and Pedestrian Planning program, with guidance from the OTO Bicycle and Pedestrian Advisory Committee. In addition to the bicycle and pedestrian measures in the OTO Performance Measures Report, a report is produced annually that highlights bicycle and pedestrian activities in the region as they relate to the 5 Es (Engineering, Encouragement, Enforcement, Evaluation, and Education).

Inventory

OTO strives to maintain an inventory of bicycle and pedestrian facilities in the OTO region. This includes an annual review of new sidewalk construction and working with member jurisdictions to catalogue existing bike routes and trails. This base data feeds the OTO Performance Measures Report, the Bicycle and Pedestrian Annual Report, and serves as the background for the Existing and Future Bicycle and Pedestrian Facilities Map, which is included in the Range of Alternatives Chapter.

Priorities

This plan carries forward the bicycle and pedestrian priorities set forth in *Journey 2035* (not in prioritized order):

Top 5 Policy Priorities

- Sidewalks on School Walking Routes
- Sidewalks on Streets with Commercial Land Use, especially High Volume Bus Routes
- Emphasize Projects that Extend from Communities and Enhance the Regional System
- Complete Bike/Ped Projects with appropriate Roadway Projects
- Develop Implementation Plan for Bike/Ped Plan, including details such as easements

Additional Policy Priorities

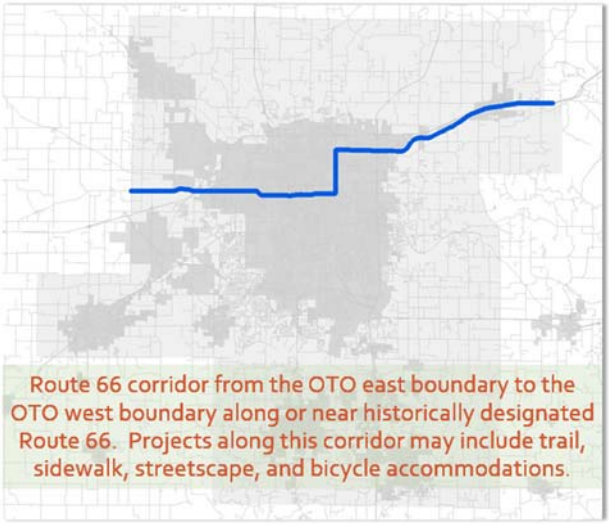
- North-South Connections between Trails, including The Link in Springfield
- Streetscapes in Urban Centers
- Trail Connections between Communities
- Development of a Trail Loop around Springfield
- Reclamation of Rail Bed – including following the status of active rail
- Educational Campaign
- Focus on bringing Trails toward Wilson's Creek National Battlefield at a Designated Access Point

Top Project Priorities

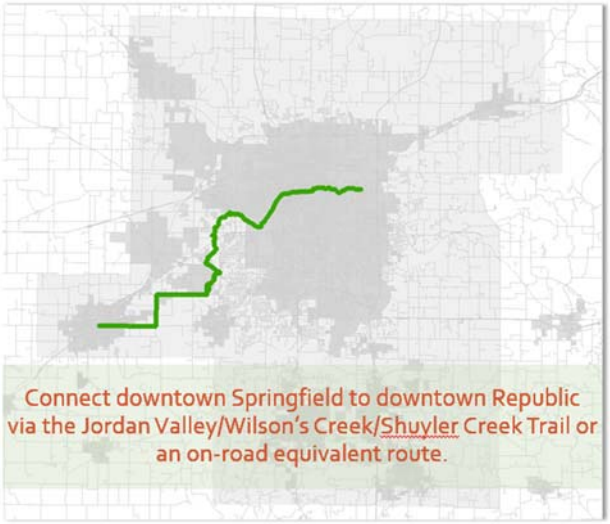
Journey 2035 included several trail projects as priority projects for the Plan. These have mostly been consolidated into two longer projects – the Route 66 Corridor and the Southwest Trail.

- Route 66 Corridor
- Southwest Trail (Creeks Trails)
- Trail of Tears – from Close Memorial Park to City of Battlefield
- Ozark Finley River Trail and other Future Linear Trails as shown on the OTO Bike/Ped Map in Christian County
- Christian County and Regional Addendum to the now completed Greene County Destination Plan
- James River Trail – from Chrighton Landing east of Springfield to Delaware Landing west of Nixa

OTO is also in the process of developing an implementation plan for the top two priority trail corridors. These are incorporated into OTO's Priority Corridors of Regional Significance Map. Each trail is broken into segments, including those that are complete.



Route 66 corridor from the OTO east boundary to the OTO west boundary along or near historically designated Route 66. Projects along this corridor may include trail, sidewalk, streetscape, and bicycle accommodations.



Connect downtown Springfield to downtown Republic via the Jordan Valley/Wilson's Creek/Shuyler Creek Trail or an on-road equivalent route.

Route 66

1) Strafford Trail – Sports Complex to Washington Avenue
2) Strafford Trail – Washington Avenue to Partnership Drive
3) Partnership Drive to Glenstone
4) Glenstone, from Kearney to St. Louis
5) St. Louis, from Glenstone to National
6) St. Louis, from National to Kimbrough
7) Complete from Kimbrough to Market
8) College, from Market to Kansas
9) College, from Kansas to Chestnut Expressway
10) Chestnut Expressway, from College to West Bypass
11) Chestnut Expressway, from West Bypass to I-44
12) Chestnut Expressway (266), from I-44 to OTO West Boundary

Southwest Trail (Creeks Trail System)

1) Jordan Creek, from Cedarbrook to Sherman
2) **Complete** from Sherman to Campbell
3) Jordan Creek, from Campbell to Fort
4) Jordan Creek, from Fort at West Meadows to Mount Vernon w/Alternate
5) **Complete** from Mount Vernon to Hillcrest
6) Wilson's Creek, from Hillcrest Ave to Rutledge Wilson
7) **Complete** from Rutledge Wilson to Farm Road 156
8) Wilson's Creek, from Farm Road 156 to South Creek
9) **Complete** from South Creek to M Highway
10) M Highway, from Wilson's Creek Greenway to ZZ
11) ZZ, from M to Farm Road 182
12) Farm Road 182, from ZZ to Kentwood/Lee
13) **Complete** from Lee to Cherrywood
14) Trail from Cherrywood to RR on Route 174
15) Route 174 Multi-Use Trail – Under Construction

Aviation and Goods Movement

Aviation

The main air facility in southwest Missouri is the Springfield-Branson National Airport. This is the primary air connection to the national and international markets. The region also has a private aircraft airport, the Downtown Airport, which coupled with the general aviation facility at the Springfield-Branson airport, serves the charter and private aircraft needs for the community.

The new midfield terminal at the Springfield-Branson National Airport opened in May of 2009 and was built with expansion in mind. The new terminal was built with 10 gates in operation and can grow to 60 gates at full operation. A number of roadway improvements were made with the opening of the new terminal. This impacted how travelers navigate to the airport. Rather than take Kearney directly to the terminal, drivers now need to use Route 266, Route EE, and the newly built Airport Boulevard. This has put more through traffic on EE and this connection should be monitored for safety.

The general aviation facility at the Springfield-Branson National Airport serves all the additional flights at the airport that are not part of the scheduled passenger flights or related to cargo. Supporting cargo, the airport is also considered part of a 23-county Foreign Trade Zone, allowing for the deferment of U.S. Custom's duty payment until goods are sold in the United States. With nearby Partnership Industrial Park West, freight and intermodal transfers are important considerations for this area of the OTO region.

Freight

The Missouri State Freight Plan was finalized in February of 2015 and outlines how freight moves through Missouri, highlighting major facilities throughout the State and the Springfield region. Stakeholders throughout the region were involved in the planning process, with several meetings in Springfield.

Springfield is home the following freight facilities:

- Class I railroad – BNSF
- Interstate I-44 and other major highways
- Springfield-Branson National Airport
- Petroleum Product Pipelines and Natural Gas Pipelines
- Six Intermodal Facilities (two air to truck/rail, 3 rail to truck, and 1 truck to truck)

The rail line traveling through Springfield is a major carrier of coal from the Powder River Basin to Memphis, where it is then distributed throughout the southeastern United States.

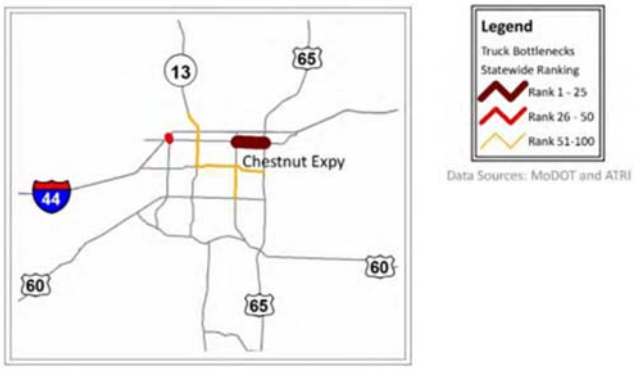
Springfield is also a source for several of the top 100 freight generators in Missouri. This map corresponds with industrial and warehouse sites within in the region.

Source: MoDOT, ESRI, and ATRI

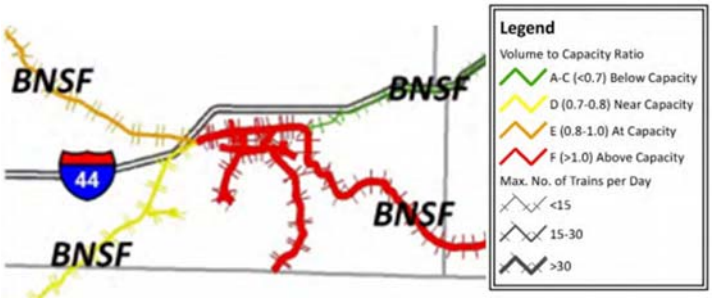
As highlighted in *Journey 2035*, Interstate 44 continues to carry more tonnage than Interstate 70, updated for 2011 numbers. The region is also passage for several secondary truck routes. The value of goods carried on I-44 also outpace I-70. The 2013 MoDOT Traffic Volume maps show truck traffic to be over 26 percent of the traffic on I-44 in the OTO region.

The Missouri State Freight Plan identifies the most congested trucking bottlenecks in Springfield. The rail system through the OTO region is congested as well, receiving a Level of Service F for a good portion of the rail system in Springfield and traveling to the south and east.

The recommendations from the Missouri State Freight Plan that fall within the OTO boundary will be considered alongside other priorities for consideration in this plan.



Source: CDM Smith, ATRI, ESRI



Ongoing Studies and Reports

OTO produces several reports on an ongoing basis, which provide continual feedback on the planning process. Below is a summary of each document and its update schedule.

1. Performance Measures Report
   This is an annual report produced for the performance measures contained in the long range transportation plan. This report provides an overview of each performance measure, how that measure is trending, and factors which may affect that trend.

2. Congestion Management Process Report
   Every three years, the OTO reviews recurring and non-recurring congestion throughout the region in accordance with federal requirements. This congestion is compared to transportation improvements made throughout the region, allowing for evaluation of strategies that address congestion.

3. Annual Transportation Report Card
   OTO is in the process of developing an annual transportation report card that reviews additional statistics about transportation in the region beyond those included in the performance measures report.

4. LRTP Implementation Plan
   Transportation Plan 2040 includes a list of actions that OTO should perform in order to address the goals of this Plan. OTO will produce an annual report outlining progress toward this implementation plan and how those efforts are helping the region attain its vision of an excellent transportation system.

References

[1] "Missouri Analytics Tools Help," [Online]. Available: https://missouri.ritis.org/analytics/help/#overview. [Accessed 16 October 2015].

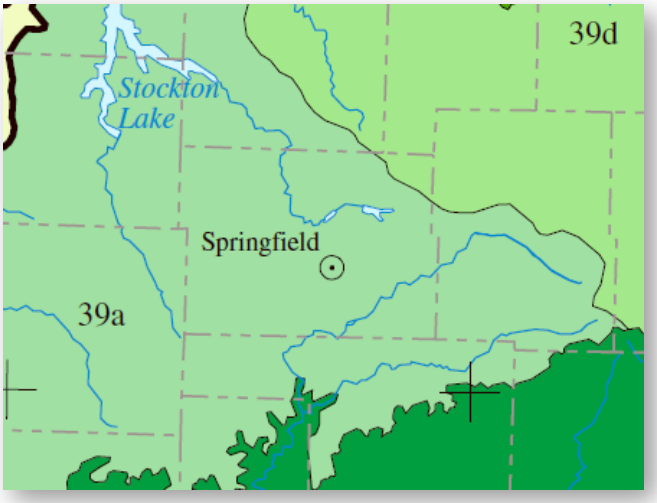
Environmental Considerations

Already this Plan recommends many strategies that benefit the environment by reducing congestion, encouraging transit and promoting facilities that support bicycling and walking. The OTO region and southwest Missouri have experienced an incredible amount of growth over the past 20 years. One attraction is the natural environment and open spaces that exist in this region. The region also has a number of cultural and historic resources that continue to make the area attractive. The transportation system should strive to protect and enhance these advantageous qualities of the Ozarks.

Natural Environment

Ecoregions

OTO Ecoregions
Source: Environmental Protection Agency



The Ozarks Transportation Organization planning area can be divided into two ecoregions. The majority of the region is covered by the Springfield Plateau, while a portion of the OTO in Christian County is covered by the White River Hills. Ecoregions denote areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources. They are designed to serve as a spatial framework for the research, assessment, management, and monitoring of ecosystems and ecosystem components. The Springfield Plateau and White River Hills are part of the Ozark Highlands. The Ozark Highlands is characterized by an irregular physiography, forested areas, and limestone bedrock. The Springfield Plateau has moderate topography with karst features and rocky soils. Land cover is a mix of woodland and areas of pastureland in the cleared prairies. Bicyclists throughout the region benefit from the relatively flat nature of the Springfield Plateau. The White River Hills has more extreme topography and is characterized by cliffs, sinkholes, and caves. Much of the land is wooded and is in public lands.

Endangered Species

The Missouri Department of Conservation has identified sixteen terrestrial and aquatic species, as well as eight plant species, as endangered within the State of Missouri. Christian and Greene County both have several of these species, as well as some species unique to each county.

Christian County
Black-tailed Jackrabbit

- State Status – Endangered
- No Federal Status

Gray Bat

- State Status – Endangered
- Federal Status – Endangered

Missouri Bladder-pod

- State Status – Endangered
- Federal Status – Threatened

Plains Spotted Skunk

- State Status – Endangered
- No Federal Status

<u>Greene County</u>

Black-tailed Jackrabbit

- State Status – Endangered
- No Federal Status

Geocarpon

- State Status – Endangered
- Federal Status – Threatened

Gray Bat

- State Status – Endangered
- Federal Status – Endangered

Missouri Bladder-pod

- State Status – Endangered
- Federal Status – Threatened

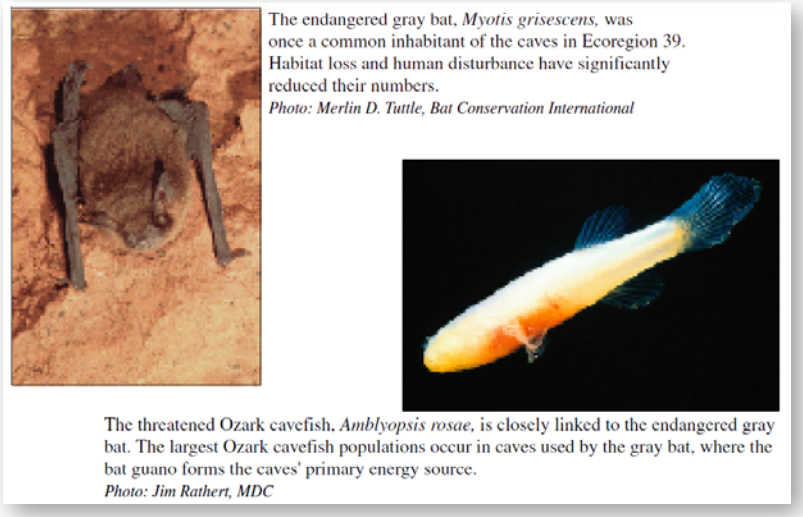
Niangua Darter

- State Status – Endangered
- Federal Status – Threatened

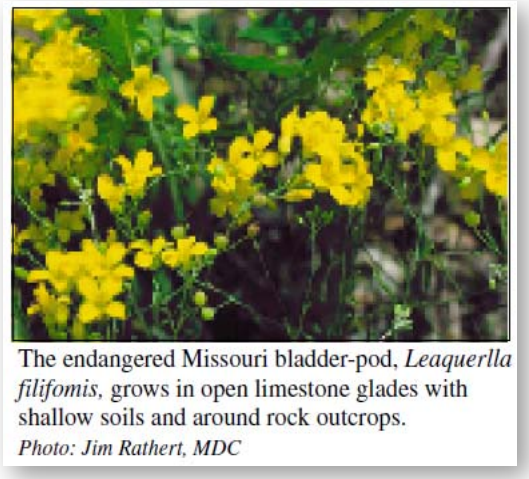
Ozark Cavefish

- State Status – Endangered
- Federal Status – Threatened

Endangered Species in the Ozarks
Source: Environmental Protection Agency
ftp://ftp.epa.gov/wed/ecoregions/mo/moia_front.pdf



Missouri Bladder-Pod
Source: Environmental Protection Agency
ftp://ftp.epa.gov/wed/ecoregions/mo/moia_front.pdf



Cultural and Historical Resources

Items of cultural significance in the region include religious facilities, cemeteries, historical facilities, airports, public and private schools, universities, and local markets. Besides those items on the National Register Listings, Route 66 has a strong presence through the OTO region. Route 66 received its name at the former Historic Colonial Hotel in downtown Springfield. Route 66 travels from Strafford at the east OTO boundary, through Springfield, and out west from there.

Christian County National Register Listings

Ozark Courthouse Square Historic District

- Portions of 2nd Ave, Church, Elm, and 2nd Streets, on the Courthouse Square in Ozark
- The Courthouse is a Classic Revival designed by H. H. Hohenschild
- The buildings on the square were constructed between 1880 and 1945

Southwest Missouri Prehistoric Rock Shelter and Cave Sites Discontiguous Archeological District

- Address restricted
- Cave sites with prehistoric human occupations, circa 12,000 – 250 B.P.

Wilson's Creek National Battlefield

- Southwest of Springfield on MO 174
- The Battlefield includes virtually the entire scene of action of the Battle of Wilson's Creek in 1861.

Greene County National Register Listings

Greene County has many facilities listed on the National Register. Additional details can be found on the State Historic Preservation Office website through the Missouri Department of Natural Resources - http://dnr.mo.gov/shpo/greene.htm.

- Abou Ben Adhem Shrine Mosque
- Ambassador Apartments
- Anderson, Elijah Teague, House
- Bentley House
- Benton Avenue AME Church
- Berry Cemetery
- Boegel and Hine Flour Mill-Wommack Mill
- Boone, Nathan, House, Nathan Boone Homestead State Historic Site
- Camp Manor Apartments
- Campbell Avenue Historic District
- Christ Episcopal Church
- College Apartments
- Commercial Street Historic District
- Day House
- Fallin Brothers Building
- Finkbiner Building
- Franklin Springfield Motor Co. Building
- Gillioz Theater
- Gilmore Barn
- Gottfried Furniture Co. Building
- Greene County Courthouse
- Heer's Department Store
- Holland Building
- Hotel Sansone
- Jefferson Street Footbridge
- Keet-McElhany House
- King, J.E., Manufacturing Co.
- Kite, Robert B. and Vitae A., Apartment Building
- Landers Theater
- Lincoln School
- McDaniel Building
- Marquette Hotel
- Marx-Hurlburt Building
- Mid-Town Historic District
- Netter-Ullman Building
- Oberman, D. M., Manufacturing Co. Building,
- Old Calaboose (Old Springfield City Jail)
- Palace Hotel
- Pearl Apartments and Windsor Apartments
- Pearson Creek Archaeological District
- Producers Produce Co. Plant

- Pythian Home of Missouri
- Rail Haven Motel
- Rock Fountain Court Historic District
- Route 66 Steak 'n Shake
- St. John's Mercy Hospital Building
- St. Paul Block
- Schneider, Henry, Building
- South Avenue Commercial Historic District
- South-McDaniel-Patton Commercial Historic District
- Springfield Furniture Co.
- Springfield Grocer Co. Warehouse
- Springfield National Cemetery
- Springfield Public Square Historic District
- Springfield Seed Co. Office and Wholesale Building
- Springfield Warehouse and Industrial Historic District
- Stone Chapel, Drury College Campus
- U.S. Customhouse and Post Office
- Walnut Street Historic Commercial District
- Walnut Street Historic District
- Washington Avenue Baptist Church (Second Baptist Church)
- West Walnut Street Commercial Historic District
- Wilhoit, E. M., Building
- Wilhoit, Edward M. and Della C., House
- Wilshire Apartments
- Wilson's Creek National Battlefield
- Wise Feed Co. Building
- Woods-Evertz Stove Co. Historic District

Environmental Justice

Environmental justice is a fundamental ideal that ensures federally funded plans and projects do not create a disproportionately adverse effect on minorities, low-income, disabled, elderly and/or under age 18 populations. This ideal is built on the framework of Title VI of the Civil Rights Act of 1964, which states, “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” In 1994, President Clinton issued an Executive Order directed to all Federal agencies to consider and address the effects of all program, policies, and activities on “minority and low-income populations.” This has been further expanded to include the elderly, disabled, and the under 18-years of age populations. President Bush signed an Executive Order in 2000, expanding protection against national origin discrimination, by ensuring programs are accessible by people with limited English proficiency.

Federally funded recipients are to ensure that there are no disproportionate adverse impacts in these communities, or those considered transportation dependent due to age or physical limitations, when allocating or spending federal funds. These recipients are also required to review the benefits and burdens of projects and programs (in this case, transportation improvements) are balanced between the population at large and those traditionally underserved in the planning and programming process.

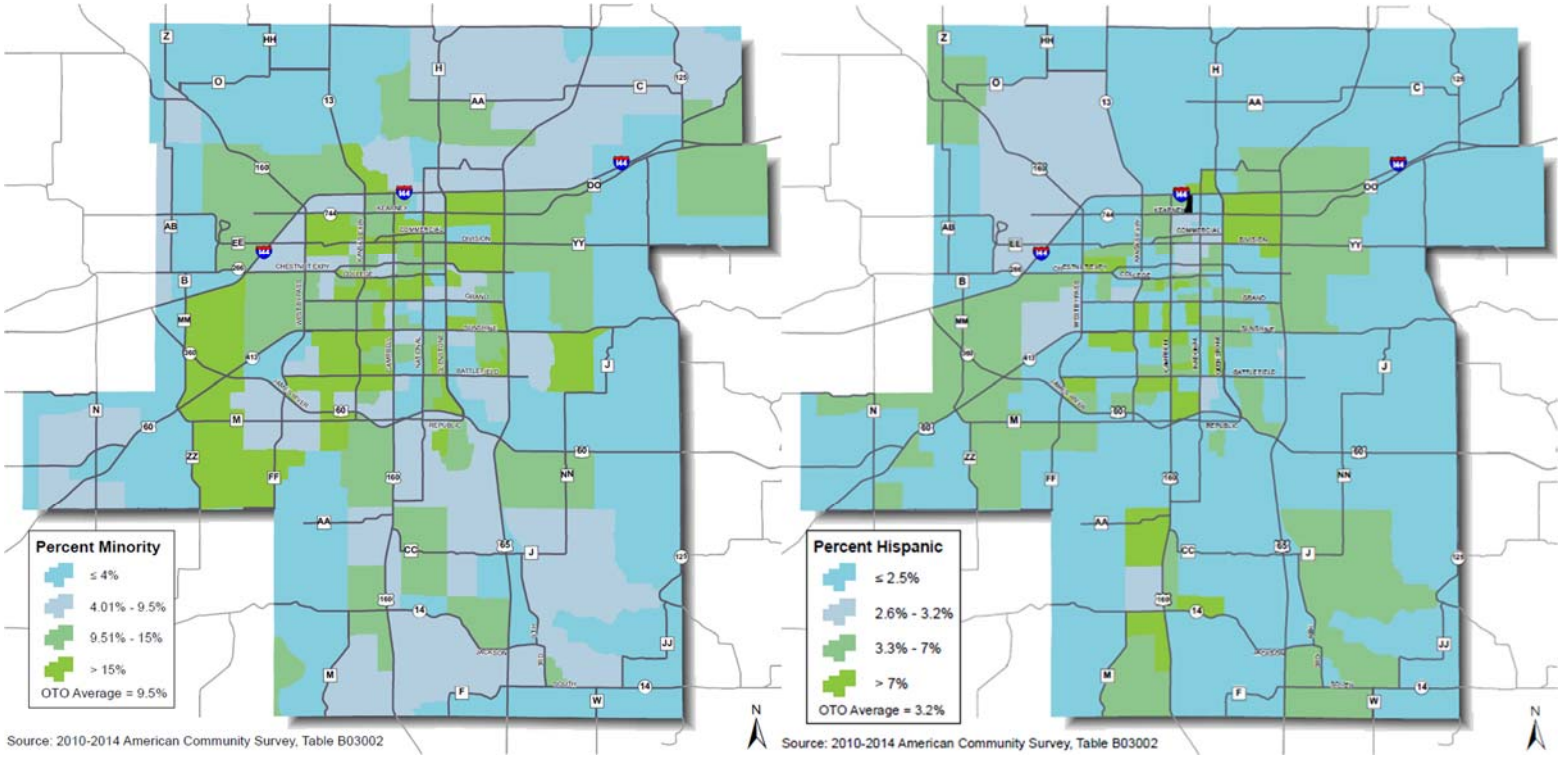
While it is difficult to make any significant change to the transportation system without negatively affecting someone, the focus of environmental justice is on these impacts and alternative solutions. Any major transportation system change should first consider whether society will be better off with the change, and second, determine the distributional impacts. The first consideration addresses the

economic efficiency of a project; that is benefit-cost analysis. The second addresses the equity of who will receive more of the benefits and who will pay more of the costs. This question of equity is the concern of environmental justice. If it is determined that a project negatively impacts a population, the project can be rejected or the population impacted can be compensated. Should a project still move forward, attempts should be made to minimize the negative impacts.

Analysis

OTO has identified minority and Hispanic, low-income, disabled, elderly and youth, and limited English proficiency populations within the OTO region. Federal guidance identifies significant areas as those which contain more of the vulnerable population than the average for the region. The location of these populations will be compared to the location of the constrained projects included in the Long Range Transportation Plan once they are determined. That information will be contained here.

Minority and Hispanic Populations

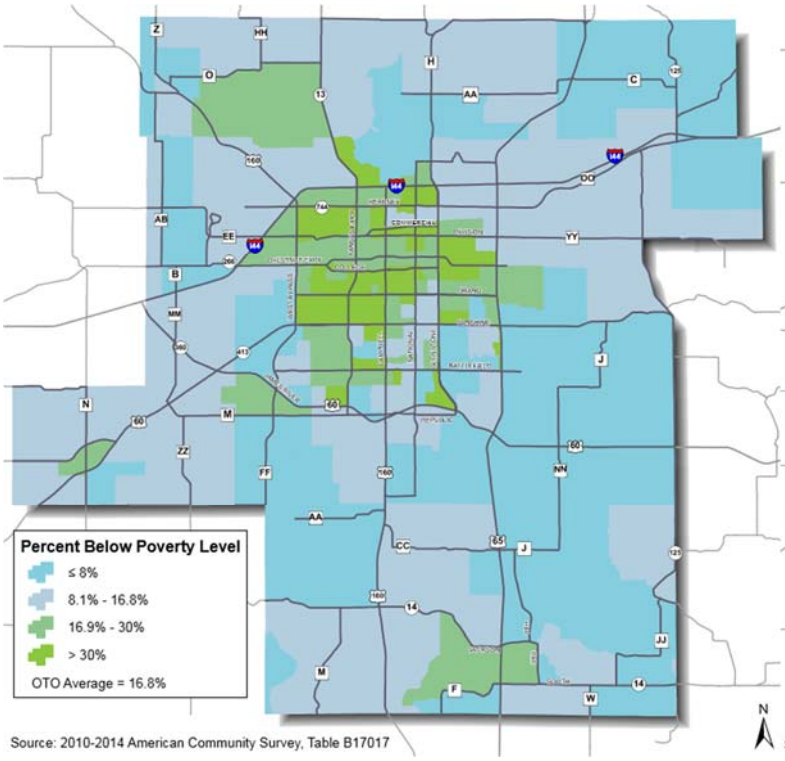


There is a stronger minority and Hispanic presence in Springfield, though the Hispanic population does have a broader distribution among the surrounding communities, while the minority population is stronger in Springfield.

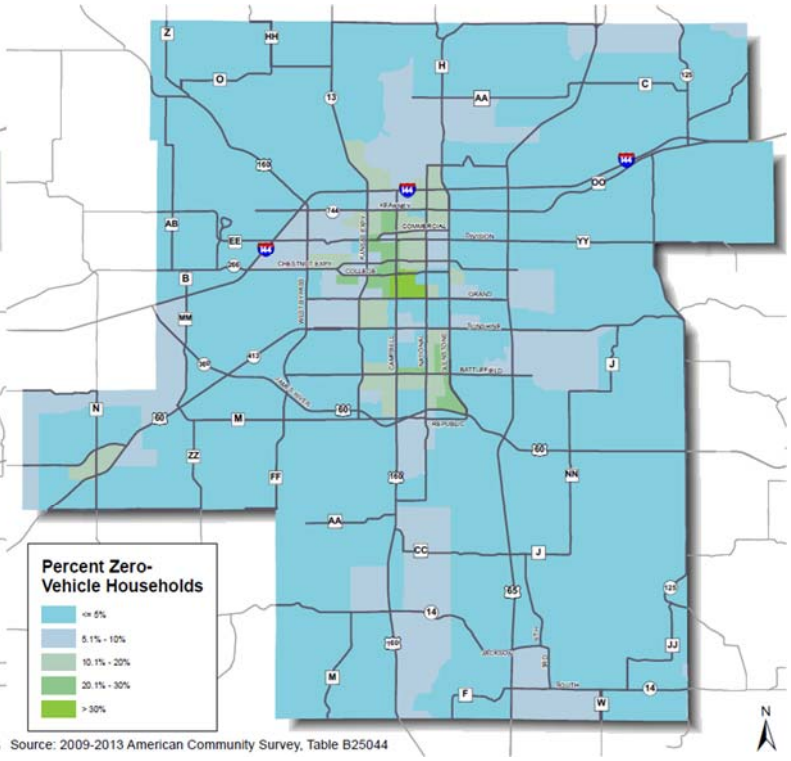
Low-Income Population

The population below the poverty level is concentrated in Springfield and Republic, though there are strong pockets in central Nixa and Ozark, as well as north of I-44 near Willard and along I-44 near Strafford.

The households without a vehicle are mostly located in Springfield, with other portions allocated near the city centers of Republic and Ozark, as well as along US 160 south.



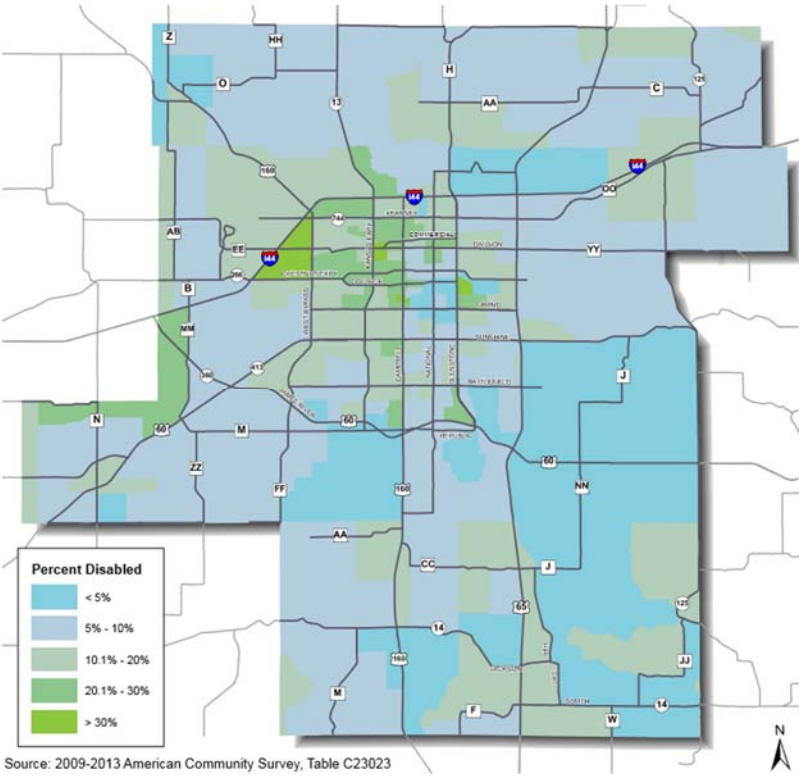
Source: 2010-2014 American Community Survey, Table B17017



Source: 2009-2013 American Community Survey, Table B25044

Disabled Population

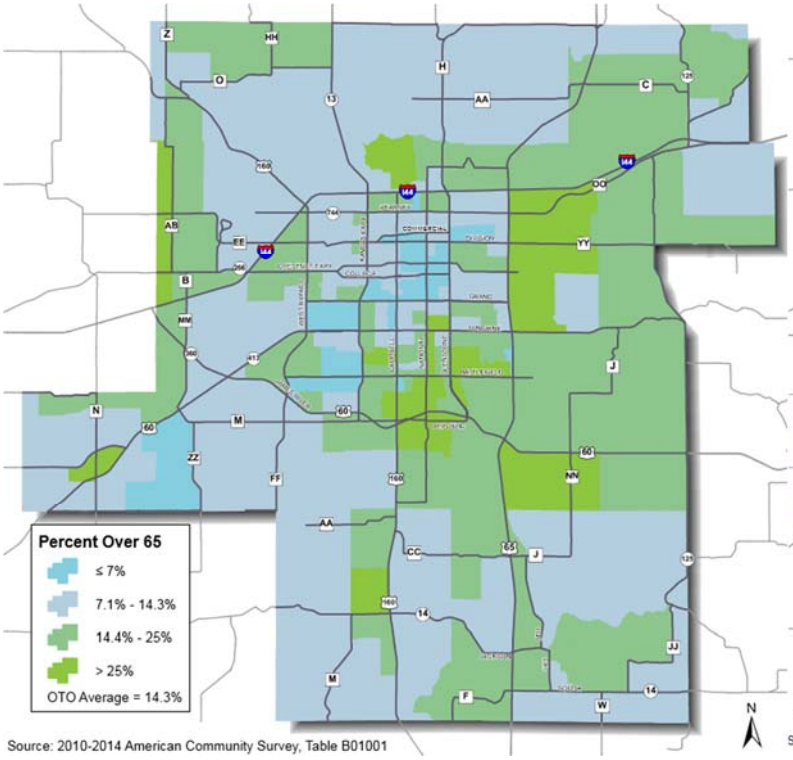
The population that is disabled is mostly located in central and northwest Springfield.



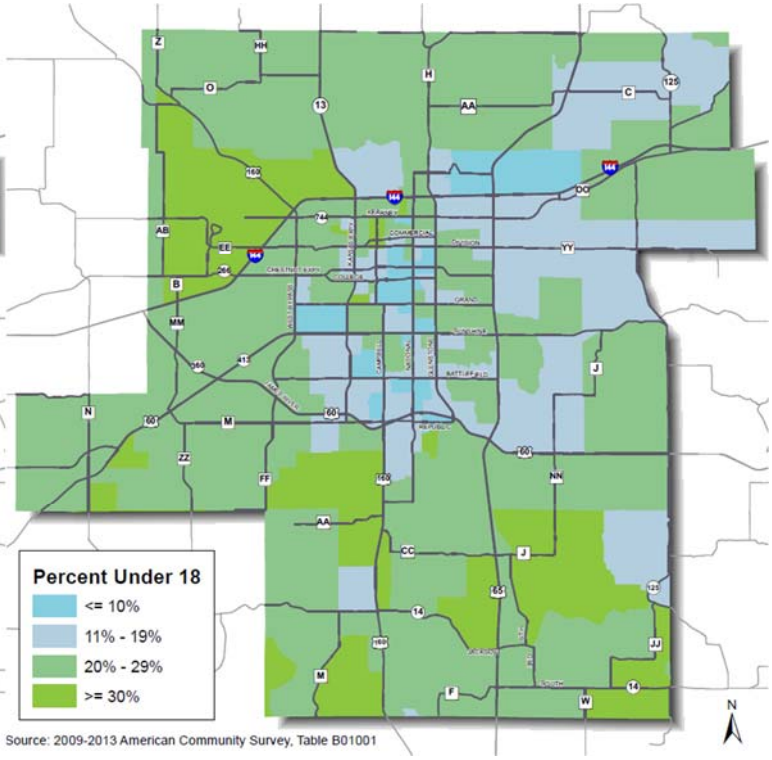
Source: 2009-2013 American Community Survey, Table C23023

Elderly and Youth Populations

The elderly and youth populations in the region are not generally co-located. The elderly population is more concentrated along the eastern portion of Greene County, while the youth population resides mostly in western Greene County and in Christian County.



Source: 2010-2014 American Community Survey, Table B01001



Source: 2009-2013 American Community Survey, Table B01001

Limited English-Proficient Population

OTO regularly updates the Limited English-Proficient Plan, following federal guidance to properly identify the LEP population in the region, as well as what languages are needed to improve communication with those populations. Demographics of the OTO region are also well-tracked through the OTO Title VI Program, which also incorporates the LEP Plan.

At last analysis in 2013, the OTO had four populations that are considered significant:

- Spanish
- German
- Chinese
- French

To engage the largest of these populations, OTO has translated the LEP Plan into Spanish and provided the surveys for this Plan into Spanish. OTO meeting agendas, including LRTP subcommittee meetings, provide information in Spanish advising that assistance is available.

Insert Maps from LEP Plan (currently updating for 2014).

Air Quality

Air quality throughout the region is regulated through the Clean Air Act, which was last amended in 1990. The Clean Air Act and its Amendments requires the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. When areas exceed the levels set by these standards, they are considered non-attainment. The 7 regulated pollutants include:

- Carbon Monoxide
- Lead
- Nitrogen Dioxide
- Particulate Matter (PM_{10})
- Particulate Matter ($PM_{2.5}$)
- Ozone
- Sulfur Dioxide

If these standards are not met, then an area become known as non-attainment. Should an area come back into attainment, then they are on a 20-year maintenance plan, during which time, the area must continue to stay in attainment, or the process starts all over. Currently, no part of the OTO region is non-attainment for any of these pollutants.

Ozone and $PM_{2.5}$

Ozone and PM2.5 are two pollutants that are impacted by mobile emissions. Ground-level ozone is the byproduct of several pollutants (NOx and VOCs) reacting with heat, especially over the course of the day. Particulate matter is the term for a mixture of solid particles and liquid droplets found in the air. Fine particulate matter is the main cause behind haze in parts of the United States. Sources include emissions from power plants, industry, and automobiles.

Ozarks Clean Air Alliance

OTO was a founding member of the Ozarks Clean Air Alliance and has held several leadership positions within the organization. The Ozarks Clean Air Alliance currently serves an eleven county region. OCAA started in 2007 as a subcommittee of the Environmental Collaborative at the Community Partnership of the Ozarks. The group has grown into an active coalition of stakeholders including city, county, and state government officials, local businesses and non-profits, area utility companies, and interested citizens.

Clean Air Action Plan

The Clean Air Action Plan was first adopted in 2009 and originally only addressed ground-level ozone pollutant concerns. Over the past few years, the plan and efforts of the OCAA have grown to include fine particulate matter ($PM_{2.5}$). The Clean Air Action Plan now serves as the Path Forward Document for the Ozone and PM Advance Programs through EPA.

The Advance Program is a collaborative effort between EPA, states, tribes, and local governments. The program encourages reductions in ozone and fine particulate matter attainment areas to help these areas meet the NAAQS. The goal is to help keep these areas in attainment.

Transportation Conformity

Violating Ozone and $PM_{2.5}$ limits can impose additional requirements upon a metropolitan planning area within a non-attainment area. These requirements are known as transportation conformity. This means

that the projects proposed in an MPO's long range transportation program, as well as those programmed in the transportation improvement program, must help keep the region within attainment.

Conformity is established by a regional emissions analysis, which determines if projected emissions for the Plan and TIP exceed emissions limits established by a State Implementation Plan (SIP). A SIP contains region-specific information and goals on appropriate emissions levels that will keep a region in attainment. The regional emissions analysis must be conducted following a process established by EPA. This includes providing data produced by the OTO travel demand model. The recently completed by OTO meets the requirements for air quality analysis. When finalized, the conformity determination shows that the toal emissions projected for the long range transportation plan or TIP are within the on-road mobile source emission limits established by the SIP. Transportation conformity is a public process that must include interagency consultation.

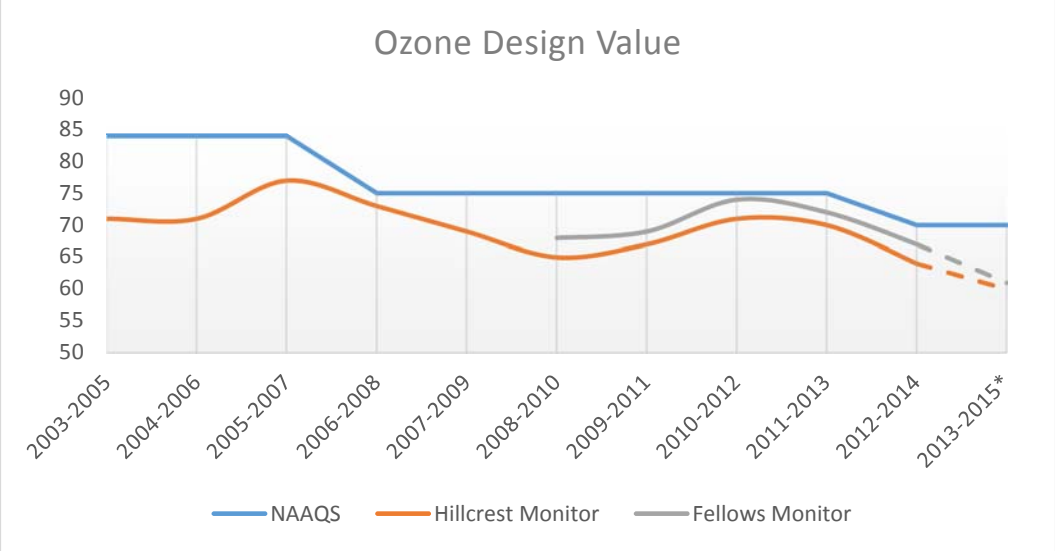
Staying in attainment is ideal for the OTO region. If OTO were to be non-attainment, the LRTP and TIP must be updated more frequently and some TIP amendments could also trigger a conformity analysis. Also, the initial conformity determination timeframe is considerably short.

When to Determine Conformity

- On a long range transportation plan or TIP
  - At least every four years
  - 24 months after SIP motor vehicle emissions budgets are found adequate or are approved
  - Within 12 months after new non-attainment designations become effective
- Prior to acceptance of a new or updated long range transportation plan, TIP, and certain plan or TIP amendments
- Prior to the first time a non-exempt federal project is adopted, accepted, approved, or funded (project-level conformity)
  - Applies 12 months after the effective date of non-attainment designation

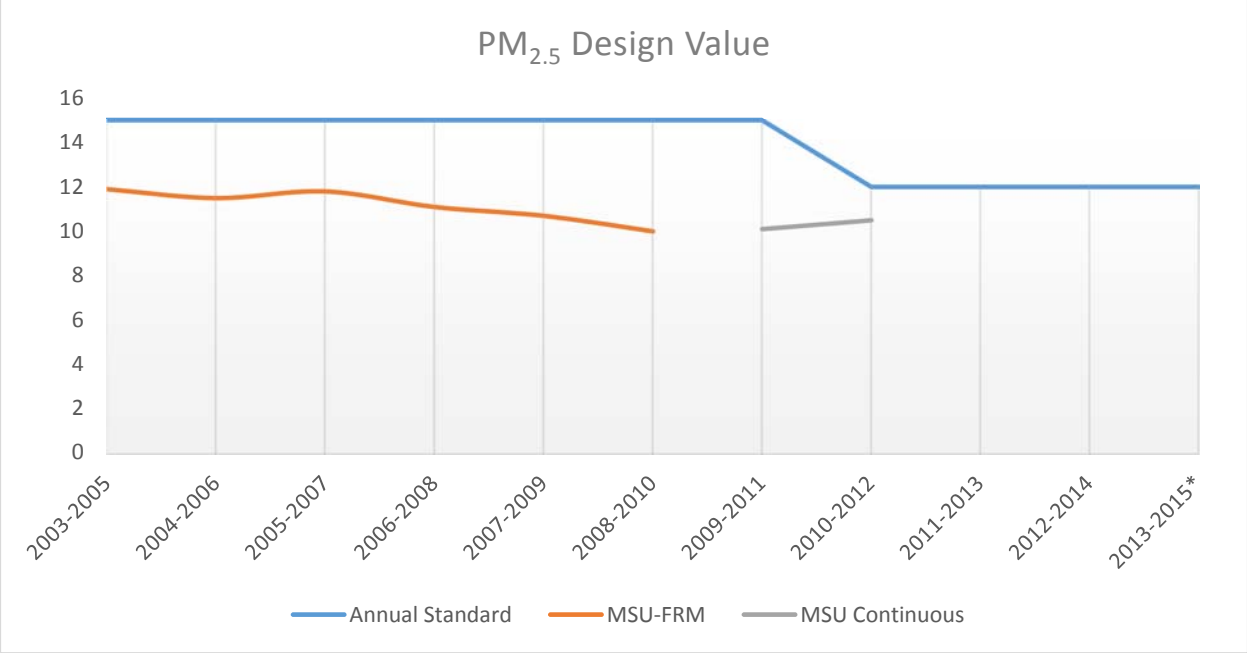
Meeting the Standards

Even as the standard for Ozone becomes stricter, the OTO region has continued to meet it. The Springfield area has 2 Ozone monitors, one at Fellows Lake and one at Hillcrest High School.



* 2013-2015 Design Value will not be certified until 2016

Similar results have been seen with fine particulate matter.



* 2013-2015 Design Value not available due to moving monitor to another location

Water Quality

According to the Victoria Transport Policy Institute, roads and parking facilities concentrate stormwater, increase flooding and siltation, reduce surface and groundwater recharge, and create physical barriers to fish. Manholes in the roadway can also be a source of infiltration for stormwater into the sewer system.

The Missouri Department of Transportation and local OTO jurisdictions are mindful of requirements to protect water quality during roadway construction. Ozark Greenways has piloted efforts to use trail easements along waterways for riparian corridors, also providing education to farmers on the impacts of cattle in the waterways.

OTO member jurisdictions do need to be aware of impacts from the new Clean Water Rule from EPA. This rule clearly defines and protects tributaries that impact the health of downstream waters. The inclusion of tributaries has expanded which waterways a community may need to protect when designing and constructing a project.

Resiliency

Resilience in transportation can also be referred to as reliability or risk management and considers the transportation network's ability to adapt to unexpected conditions without catastrophically failing.

Reliability in the sense of daily traffic has been considered previously. Extreme weather events can have an additional impact on the resiliency of the transportation system.

Flooding is a major concern along roadways in the OTO area. There have been a number of events that have damaged roadways and necessitated repair in 2015. The flooding has also highlighted those

locations lacking alternate routes. Unfortunately, flooding issues can be transient depending upon where the rain falls within the watershed.

OTO has initiated a Traffic Incident Management subcommittee who will review strategies to help the region respond when unexpected events impact the movement of traffic. Strategies include incident response, using ITS and dynamic message signs, and specialized signal timing plans.

Financial Capacity

The fiscal portion of the Plan addresses the existing and potential funding resources currently available and projected to be available for the implementation of the Long Range Transportation Plan. Financing techniques and available funding resources are described and discussed. Projected funding available for implementing the LRTP is critical for creating a fiscally constrained project list. Reviewing the financial capacity of the region ensures that the Plan can be implemented through 2040.

Revenue Sources

Federal and State

Funding for the Missouri Department of Transportation consists of both federal and state revenue, as well as proceeds received from the sale of bonds. With the passage of the FAST Act and an increase in state revenues, MoDOT has a more stable funding outlook than what has been the case for the previous few years. This will allow OTO to be confident in the funding levels projected to 2040. The cost share with MoDOT is still suspended, and OTO has not included that funding in its projections, but it should be noted that the availability of that funding would increase the number of projects that could be completed in the region.

The largest source of transportation revenue for MoDOT is from the federal government and includes the 18.4-cents per gallon tax on gasoline and 24.4-cents per gallon tax on diesel fuel. Other sources include various taxes on tire, truck, and trailer sales, as well as heavy vehicle use. These highway user fees are deposited in the federal Highway Trust Fund and distributed to the states based on formulae prescribed by federal law through transportation funding acts. This revenue source also includes multi-modal and highway safety grants.

The next largest source of MoDOT's transportation revenue is from the state fuel tax. Fuel taxes represent the state share of revenue received from the State's 17-cent per gallon tax on gasoline and diesel fuels which must be spent on highways and bridges. This revenue source also includes a 9-cent per gallon excise tax on aviation fuel which must be spent on airport projects. In July 2013, the state legislature eliminated the state motor vehicle use tax and replaced it with the state motor vehicle sales tax, which directs a greater portion to local government agencies.

MoDOT receives a portion of the state sales and use taxes paid upon the purchase or lease of motor vehicles. This revenue source also includes the sales tax paid on aviation fuel, which is dedicated to airport projects. In November 2004, Missouri voters passed Constitutional Amendment 3, which set in motion a four-year phase-in redirecting motor vehicle sales taxes previously deposited in the State's general revenue fund to a newly-created State Road Bond Fund. In state fiscal year 2009, the process of redirecting motor vehicle sales taxes to transportation was fully phased in and the rate of growth in this revenue source has slowed.

Vehicle and driver licensing fees include the state share of revenue received from licensing motor vehicles and drivers. This revenue source also includes fees for railroad regulation which are dedicated

to multi-modal programs. Similar to the motor fuel tax, the motor vehicle and driver licensing fees are not indexed to keep pace with inflation and there have been no annual registration fee increases since 1984.

The State General Revenue Fund provides approximately 1 percent of MoDOT's transportation revenue. This funding is appropriated by the Missouri General Assembly for multi-modal programs.

Suballocated STP

The Surface Transportation Program (STP) funding is distributed to varying programs and public agencies for implementation of the authorizing legislation requirements. This distribution includes a specific allocation to urbanized areas over 200,000 by percentage of population. These urbanized areas are part of metropolitan planning areas, and more specifically, transportation management areas (TMAs). The Ozarks Transportation Organization (OTO) is the TMA for the Springfield, Missouri urbanized area.

STP-Urban

STP-Urban funding is a subcategory of the Surface Transportation Program consisting of funding that is directly suballocated to metropolitan planning areas with urbanized area populations over 200,000. The federal share for this funding is generally 80 percent, with some specific exceptions for certain Interstate and Safety projects. A variety of activities are eligible under this funding category provided the funding is spent on roads federally functionally classified as collector or higher, excepting bridges not on federal-aid highways and carpool, biking, pedestrian walkway improvements and other transportation alternatives also not on federal-aid highways.

Small-Urban

The Small-Urban program is a subset of statewide STP funding, which is allocated to jurisdictions whose urbanized cluster or area population is greater than 5,000, but smaller than 200,000. The Missouri Highways and Transportation Commission allocates $3.5 million in surface transportation program funds annually to this small-urban program. Project eligibility is the same as that described under the STP-Urban program. Currently, the City of Republic receives this funding in the OTO area, but this is changing now that they are part of the Springfield Urbanized area, while the City of Willard will start receiving Small-Urban as they are now their own urbanized area.

Bridge Rehabilitation and Maintenance

This program funds the replacement or rehabilitation of deficient bridges located on roads federally functionally classified as urban collectors, rural major collectors, and arterials.

STP-Set Aside (formerly TAP)

The STP-Set Aside program encompasses all previously eligible projects under the former Transportation Alternatives Program. It encompasses Enhancements, Recreational Trails, and Safe Routes to School.

Local

Most of the transportation revenue for local agencies is received through sales taxes. Many communities have a sales tax dedicated to transportation. Local jurisdictions can choose to fund projects and maintenance from a wide array of funding sources which are also described herein.

Sales Tax

The Cities of Nixa, Republic, and Springfield all have voter-approved transportation sales taxes. Nixa has a 1/2-cent transportation sales tax, Republic's tax is 1/4-cent, and Springfield's tax is 1/8-cent. Other jurisdictions do not have a transportation sales tax in place but could elect to enact one. Springfield also has a 1/4-cent capital improvements tax, a portion of which goes toward transportation improvements. Willard recently approved a 1/2-cent capital improvements tax which may also be used on transportation projects within the City. Christian and Greene Counties both have sales taxes that can be used for transportation as well. Greene County levies a 1/2-cent sales tax, half of which is dedicated to the road and bridge fund. Christian County levies two 1/2-cent sales taxes, one of which goes to the County for County road operations and projects, and the remaining is distributed to road projects throughout the County based on need.

Development Agreements

A city or county may enter into agreements with developers to fund capital improvements with tax revenues generated by the new development. Typically, the developer builds the improvement and is reimbursed by utilizing up to 50 percent of the sales tax generated by the business activity. Projects are usually funded up to a set amount, plus interest, and paid back over three to five years.

Missouri Transportation Finance Corporation

The Missouri Transportation Finance Corporation (MTFC) is financed by federal highway funds, transit funds, and state and local matching funds. The Corporation may loan money to finance projects or provide collateral to gain favorable financing elsewhere. A local corporation is usually established to participate in the funding. The funds available under the MTFC are available throughout the State of Missouri and are applied for competitively. The funds are paid back to the Corporation following the construction of projects. These funds will rollover and subsequent projects will not have the federal requirements associated with the project. Currently, most of the funds available under the Corporation are programmed for projects. Based on the competitive nature of securing Corporation funding, this funding mechanism is not included in the Feasible Funding Sources section.

Neighborhood Improvement District (or Community Improvement District)

State law authorizes cities and counties to establish Neighborhood Improvement Districts (NIDs) and Community Improvement Districts (CIDs) for the purpose of improving public infrastructure. Once established, the jurisdiction may issue temporary notes and long-term general obligation (GO) bonds (up to 20 years) to pay for improvements. Bonds are repaid through a special assessment on the properties within the district. NIDs and CIDs require the support of a majority of the property owners within the district and City Council or County Commission approval.

Charges for Services

Charges for curb cuts and other transportation-related services generate $400,000. These funds are included in the Feasible Funding Sources section.

The City of Republic levies a fee for street lights which nets about $105,550 per year.

Railroad and Public Utility Tax

The Railroad and Public Utility Tax is paid by railroads and public utilities to Greene County, generating $106,800 for the road and bridge fund.

County Funding Sources

The majority of funding for Greene County projects which appear in the TIP is sourced from STP and BRO funding, while local matching funds are derived from state revenue first, then local revenues.

Property Tax

Greene County levies eight cents per $100 assessed valuation for both real and personal property for the road and bridge fund. Real property tax revenue for the road and bridge fund in 2015 is estimated to be $4,534,400 while personal property tax for 2015 is estimated to be $939,500.

Programmed Projects

The OTO has already identified funding and programmed projects for the 2015-2018 Transportation Improvement Program. Additional projects will be programmed for 2019 with the new TIP to be developed this spring. These can be seen in the Appendix. For this reason, funding projections start in the year 2018.

Funding Projections

The funding projections carry through the end of the Plan timeframe of 2040. The OTO, as a singular organization, plans, programs, and authorizes improvement, expansion, or maintenance revenues, and receives an annual sub-allocation of Surface Transportation Program funds for capital, planning, or engineering improvements.

Federal and State Revenue Estimated Projections

OTO has developed two scenarios for federal and state transportation revenues – Expected and High. With the conservative estimates that have been employed in recent years, OTO is optimistic that additional funding, both at the state and federal levels, will become available to the OTO area. As projects are prioritized, OTO will identify those that would be possible under a High funding scenario. Should that scenario come to fruition, OTO expects that those projects would be able to move forward to programming in the TIP and construction.

2018-2022

EXPECTED

MODOT Allocated Funding for OTO area					
	2018	2019	2020	2021	2022
TCOS	$8,200,000	$8,282,000	$8,364,820	$8,448,468	$8,532,953
Safety	$1,437,129	$1,451,500	$1,466,015	$1,496,597	$1,511,563
MPEN	$3,327,400	$3,360,674	$3,394,281	$3,441,308	$3,488,937
Flex	$5,659,200	$5,715,792	$5,772,950	$5,832,905	$5,893,482
TOTAL	$18,623,729	$18,809,966	$18,998,066	$19,219,278	$19,426,934
Note: Applying OTO Percentage of Statewide Funds for OTO Area to Statewide Expected Funds					

Suballocated Funding					
STP-Urban	$5,722,200	$5,836,644	$5,953,377	$6,072,444	$6,193,893
TAP	$780,300	$795,906	$811,824	$828,061	$844,622
BRM	$572,220	$583,664	$595,338	$607,244	$619,389
Local Match	$1,414,944	$1,443,243	$1,472,108	$1,501,550	$1,531,581
TOTAL	$8,489,664	$8,659,457	$8,832,646	$9,009,299	$9,189,485

TOTAL	**$27,113,393**	**$27,469,424**	**$27,830,712**	**$28,228,577**	**$28,616,420**

HIGH

MODOT Allocated Funding for OTO area					
	2018	2019	2020	2021	2022
TCOS	$8,200,000	$8,282,000	$8,364,820	$8,448,468	$8,532,953
Safety	$1,400,000	$1,414,000	$1,428,140	$1,442,421	$1,456,846
MPEN	$12,300,000	$12,423,000	$12,547,230	$12,672,702	$12,799,429
Flex	$5,400,000	$5,454,000	$5,508,540	$5,563,625	$5,619,262
TOTAL	$27,300,000	$27,573,000	$27,848,730	$28,127,217	$28,408,489
Note: Applying OTO Percentage of Statewide Funds for OTO Area to Statewide Expected Funds					

Suballocated Funding					
STP-Urban	$5,722,200	$5,836,644	$5,953,377	$6,072,444	$6,193,893
TAP	$780,300	$795,906	$811,824	$828,061	$844,622
BRM	$572,220	$583,664	$595,338	$607,244	$619,389
Local Match	$1,414,944	$1,443,243	$1,472,108	$1,501,550	$1,531,581
TOTAL	$8,489,664	$8,659,457	$8,832,646	$9,009,299	$9,189,485

TOTAL	**$35,789,664**	**$36,232,457**	**$36,681,376**	**$37,136,517**	**$37,597,975**

2023-2027

EXPECTED

MODOT Allocated Funding for OTO area					
	2023	2024	2025	2026	2027
TCOS	$8,618,282	$8,704,465	$8,791,510	$8,879,425	$8,968,219
Safety	$1,526,678	$1,541,945	$1,557,365	$1,572,938	$1,588,668
MPEN	$3,537,174	$3,586,027	$3,635,504	$3,685,611	$3,736,357
Flex	$5,954,687	$6,016,526	$6,079,007	$6,142,136	$6,205,920
TOTAL	$19,636,822	$19,848,964	$20,063,386	$20,280,111	$20,499,164
Note: Applying OTO Percentage of Statewide Funds for OTO Area to Statewide Expected Funds					

Suballocated Funding					
STP-Urban	$6,317,771	$6,444,127	$6,573,009	$6,704,469	$6,838,559
TAP	$861,514	$878,745	$896,319	$914,246	$932,531
BRM	$631,777	$644,413	$657,301	$670,447	$683,856
Local Match	$1,562,213	$1,593,457	$1,625,326	$1,657,832	$1,690,989
TOTAL	$9,373,275	$9,560,741	$9,751,955	$9,946,994	$10,145,934

TOTAL	**$29,010,097**	**$29,409,705**	**$29,815,341**	**$30,227,105**	**$30,645,098**

HIGH

MODOT Allocated Funding for OTO area					
	2023	2024	2025	2026	2027
TCOS	$8,618,282	$8,704,465	$8,791,510	$8,879,425	$8,968,219
Safety	$1,471,414	$1,486,128	$1,500,989	$1,515,999	$1,531,159
MPEN	$12,927,424	$13,056,698	$13,187,265	$13,319,137	$13,452,329
Flex	$5,675,454	$5,732,209	$5,789,531	$5,847,426	$5,905,900
TOTAL	$28,692,574	$28,979,500	$29,269,295	$29,561,988	$29,857,608
Note: Applying OTO Percentage of Statewide Funds for OTO Area to Statewide Expected Funds					

Suballocated Funding					
STP-Urban	$6,317,771	$6,444,127	$6,573,009	$6,704,469	$6,838,559
TAP	$861,514	$878,745	$896,319	$914,246	$932,531
BRM	$631,777	$644,413	$657,301	$670,447	$683,856
Local Match	$1,562,213	$1,593,457	$1,625,326	$1,657,832	$1,690,989
TOTAL	$9,373,275	$9,560,741	$9,751,955	$9,946,994	$10,145,934

TOTAL	**$38,065,849**	**$38,540,241**	**$39,021,250**	**$39,508,983**	**$40,003,542**

2028-2032

EXPECTED

MODOT Allocated Funding for OTO area					
	2028	2029	2030	2031	2032
TCOS	$9,057,901	$9,148,480	$9,239,965	$9,332,365	$9,425,689
Safety	$1,604,554	$1,620,600	$1,636,806	$1,653,174	$1,669,706
MPEN	$3,787,749	$3,839,796	$3,892,504	$3,945,883	$3,999,940
Flex	$6,270,365	$6,335,479	$6,401,268	$6,467,739	$6,534,899
TOTAL	$20,720,570	$20,944,355	$21,170,543	$21,399,161	$21,630,233
Note: Applying OTO Percentage of Statewide Funds for OTO Area to Statewide Expected Funds					

Suballocated Funding					
STP-Urban	$6,975,330	$7,114,836	$7,257,133	$7,402,276	$7,550,321
TAP	$951,181	$970,205	$989,609	$1,009,401	$1,029,589
BRM	$697,533	$711,484	$725,713	$740,228	$755,032
Local Match	$1,724,809	$1,759,305	$1,794,491	$1,830,381	$1,866,989
TOTAL	$10,348,853	$10,555,830	$10,766,947	$10,982,286	$11,201,931

TOTAL	**$31,069,423**	**$31,500,185**	**$31,937,490**	**$32,381,446**	**$32,832,165**

HIGH

MODOT Allocated Funding for OTO area					
	2028	2029	2030	2031	2032
TCOS	$9,057,901	$9,148,480	$9,239,965	$9,332,365	$9,425,689
Safety	$1,546,471	$1,561,936	$1,577,555	$1,593,331	$1,609,264
MPEN	$13,586,852	$13,722,721	$13,859,948	$13,998,547	$14,138,533
Flex	$5,964,959	$6,024,609	$6,084,855	$6,145,704	$6,207,161
TOTAL	$30,156,184	$30,457,746	$30,762,323	$31,069,947	$31,380,646
Note: Applying OTO Percentage of Statewide Funds for OTO Area to Statewide Expected Funds					

Suballocated Funding					
STP-Urban	$6,975,330	$7,114,836	$7,257,133	$7,402,276	$7,550,321
TAP	$951,181	$970,205	$989,609	$1,009,401	$1,029,589
BRM	$697,533	$711,484	$725,713	$740,228	$755,032
Local Match	$1,724,809	$1,759,305	$1,794,491	$1,830,381	$1,866,989
TOTAL	$10,348,853	$10,555,830	$10,766,947	$10,982,286	$11,201,931

TOTAL	**$40,505,037**	**$41,013,576**	**$41,529,270**	**$42,052,232**	**$42,582,577**

2033-2037

EXPECTED

MODOT Allocated Funding for OTO area					
	2033	2034	2035	2036	2037
TCOS	$9,519,945	$9,615,145	$9,711,296	$9,808,409	$9,906,493
Safety	$1,686,403	$1,703,267	$1,720,299	$1,737,502	$1,754,877
MPEN	$4,054,684	$4,110,123	$4,166,265	$4,223,118	$4,280,692
Flex	$6,602,756	$6,671,316	$6,740,587	$6,810,577	$6,881,292
TOTAL	$21,863,788	$22,099,850	$22,338,447	$22,579,607	$22,823,355
Note: Applying OTO Percentage of Statewide Funds for OTO Area to Statewide Expected Funds					

Suballocated Funding					
STP-Urban	$7,701,328	$7,855,354	$8,012,461	$8,172,711	$8,336,165
TAP	$1,050,181	$1,071,185	$1,092,608	$1,114,461	$1,136,750
BRM	$770,133	$785,535	$801,246	$817,271	$833,616
Local Match	$1,904,328	$1,942,415	$1,981,263	$2,020,888	$2,061,306
TOTAL	$11,425,970	$11,654,489	$11,887,579	$12,125,331	$12,367,837

TOTAL	**$33,289,758**	**$33,754,339**	**$34,226,026**	**$34,704,937**	**$35,191,192**

HIGH

MODOT Allocated Funding for OTO area					
	2033	2034	2035	2036	2037
TCOS	$9,519,945	$9,615,145	$9,711,296	$9,808,409	$9,906,493
Safety	$1,625,357	$1,641,610	$1,658,026	$1,674,606	$1,691,353
MPEN	$14,279,918	$14,422,717	$14,566,945	$14,712,614	$14,859,740
Flex	$6,269,232	$6,331,925	$6,395,244	$6,459,196	$6,523,788
TOTAL	$31,694,452	$32,011,397	$32,331,511	$32,654,826	$32,981,374
Note: Applying OTO Percentage of Statewide Funds for OTO Area to Statewide Expected Funds					

Suballocated Funding					
STP-Urban	$7,701,328	$7,855,354	$8,012,461	$8,172,711	$8,336,165
TAP	$1,050,181	$1,071,185	$1,092,608	$1,114,461	$1,136,750
BRM	$770,133	$785,535	$801,246	$817,271	$833,616
Local Match	$1,904,328	$1,942,415	$1,981,263	$2,020,888	$2,061,306
TOTAL	$11,425,970	$11,654,489	$11,887,579	$12,125,331	$12,367,837

TOTAL	**$43,120,422**	**$43,665,886**	**$44,219,090**	**$44,780,157**	**$45,349,212**

2038-2040

EXPECTED

MODOT Allocated Funding for OTO area					
	2038	2039	2040		TOTAL
TCOS	$10,005,558	$10,105,614	$10,206,670		
Safety	$1,772,426	$1,790,150	$1,808,052		
MPEN	$4,338,996	$4,398,037	$4,457,825		
Flex	$6,952,740	$7,024,930	$7,097,868		
TOTAL	$23,069,721	$23,318,731	$23,570,415		$482,935,195
Note: Applying OTO Percentage of Statewide Funds for OTO Area to Statewide Expected Funds					

Suballocated Funding					
STP-Urban	$8,502,888	$8,672,946	$8,846,405		
TAP	$1,159,485	$1,182,674	$1,206,328		
BRM	$850,289	$867,295	$884,640		
Local Match	$2,102,532	$2,144,583	$2,187,475		
TOTAL	$12,615,194	$12,867,498	$13,124,848		$244,884,046

TOTAL	**$35,684,915**	**$36,186,229**	**$36,695,263**		**$727,819,241**

HIGH

MODOT Allocated Funding for OTO area					
	2038	2039	2040		
TCOS	$10,005,558	$10,105,614	$10,206,670		
Safety	$1,708,266	$1,725,349	$1,742,602		
MPEN	$15,008,337	$15,158,421	$15,310,005		
Flex	$6,589,026	$6,654,916	$6,721,466		
TOTAL	$33,311,188	$33,644,300	$33,980,743		$702,055,040
Note: Applying OTO Percentage of Statewide Funds for OTO Area to Statewide Expected Funds					

Suballocated Funding					
STP-Urban	$8,502,888	$8,672,946	$8,846,405		
TAP	$1,159,485	$1,182,674	$1,206,328		
BRM	$850,289	$867,295	$884,640		
Local Match	$2,102,532	$2,144,583	$2,187,475		
TOTAL	$12,615,194	$12,867,498	$13,124,848		$244,884,046

TOTAL	**$45,926,382**	**$46,511,798**	**$47,105,591**		**$946,939,086**

Local

A 2 percent growth rate has been applied to the local revenue estimates through 2040.

Source	Initial 2018 Revenue	2018-2040 Revenue
City of Springfield 1/8 and 1/4 cent	$729,262	$21,035,540
City of Nixa 1/2 cent	$87,019	$2,510,061
Greene Couty Sales Tax	$315,250	$9,093,361
Christian County Property Tax	$74,002	$2,134,573
City of Ozark General Revenue	$81,501	$2,350,887
City of Republic Transportation Tax	$67,493	$1,946,828
City of Battlefield CART	$25,610	$738,734
City of Strafford CART	$10,754	$310,186
City of Willard CART	$24,196	$697,920
TOTAL	**$1,415,085**	**$40,818,089**

Total Revenue

Expected Funding for New Projects	
MoDOT State and Federal Funding	$482,935,195
OTO SubAllocated Funding	$244,884,046
Local Match Funding	$40,818,089
	$768,637,330.00
Funds needed to maintain current system	($356,938,095.03)
Amount Available for new projects	**$411,699,237.97**

High Funding for New Projects	
MoDOT State and Federal Funding	$702,055,040
OTO SubAllocated Funding	$244,884,046
Local Match Funding	$40,818,089
	$987,757,175.00
Funds needed to maintain current system	($356,938,095.03)
Amount Available for new projects	**$630,819,079.97**

Transit

Local Match

As the main fixed-route transit provider for the region, City Utilities transit provides the local match for the transit revenues it uses from the income generated by the fare box and advertising, with the majority coming from their utility rate payers. Local agencies provide their match from their own operating revenues.

Federal Transit Funding

Urbanized Area Formula Program (5307)

The Urbanized Area Formula Funding program (49 U.S.C. 5307) makes Federal resources available to urbanized areas and to Governors for transit capital and operating assistance in urbanized areas and for transportation related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census.

Enhance Mobility of Seniors and Individuals with Disabilities Program (5310)

This funding is available for several types of projects. Fixed-Route transit systems may use a portion of the funding for projects that go above and beyond the requirements of the American's with Disabilities Act. The other portion is to be used to help human-service agencies buy vehicles for the transportation they provide.

Bus and Bus Facilities (5339)

This program provides capital funding to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities.

Revenue Estimates

2018-2022

Source	2018	2019	2020	2021	2022
FTA 5307	$2,655,917.98	$2,709,036.34	$2,763,217.07	$2,818,481.41	$2,874,851.04
FTA 5310	$276,609.60	$282,141.79	$287,784.63	$293,540.32	$299,411.13
FTA 5339	$278,608.28	$284,180.45	$289,864.05	$295,661.34	$301,574.56
City Utilities Local Share	$6,487,397.69	$6,682,019.62	$6,882,480.21	$7,088,954.62	$7,301,623.25
State of Missouri	$29,324.10	$29,617.34	$29,913.51	$30,212.65	$30,514.78
Medicaid	$29,278.78	$29,571.57	$29,867.28	$30,165.96	$30,467.62
Other local agencies	$29,863.59	$30,460.86	$31,070.08	$31,691.48	$32,325.31
TOTAL	**$9,787,000.02**	**$10,047,027.97**	**$10,314,196.84**	**$10,588,707.77**	**$10,870,767.68**

2023-2027

Source	2023	2024	2025	2026	2027
FTA 5307	$2,932,348.06	$2,990,995.02	$3,050,814.92	$3,111,831.22	$3,174,067.84
FTA 5310	$305,399.35	$311,507.34	$317,737.48	$324,092.23	$330,574.08
FTA 5339	$307,606.05	$313,758.17	$320,033.34	$326,434.00	$332,962.68
City Utilities Local Share	$7,520,671.95	$7,746,292.11	$7,978,680.87	$8,218,041.30	$8,464,582.54
State of Missouri	$30,819.92	$31,128.12	$31,439.40	$31,753.80	$32,071.34
Medicaid	$30,772.29	$31,080.01	$31,390.82	$31,704.72	$32,021.77
Other local agencies	$32,971.82	$33,631.26	$34,303.88	$34,989.96	$35,689.76
TOTAL	**$11,160,589.45**	**$11,458,392.03**	**$11,764,400.71**	**$12,078,847.23**	**$12,401,970.01**

2028-2032

Source	2028	2029	2030	2031	2032
FTA 5307	$3,237,549.20	$3,302,300.18	$3,368,346.19	$3,435,713.11	$3,504,427.37
FTA 5310	$337,185.56	$343,929.27	$350,807.86	$357,824.01	$364,980.49
FTA 5339	$339,621.94	$346,414.38	$353,342.67	$360,409.52	$367,617.71
City Utilities Local Share	$8,718,520.01	$8,980,075.62	$9,249,477.88	$9,526,962.22	$9,812,771.09
State of Missouri	$32,392.05	$32,715.97	$33,043.13	$33,373.56	$33,707.30
Medicaid	$32,341.99	$32,665.41	$32,992.06	$33,321.98	$33,655.20
Other local agencies	$36,403.55	$37,131.62	$37,874.26	$38,631.74	$39,404.38
TOTAL	**$12,734,014.30**	**$13,075,232.45**	**$13,425,884.04**	**$13,786,236.14**	**$14,156,563.53**

2033-2037

Source	2033	2034	2035	2036	2037
FTA 5307	$3,574,515.92	$3,646,006.24	$3,718,926.36	$3,793,304.89	$3,869,170.99
FTA 5310	$372,280.10	$379,725.70	$387,320.22	$395,066.62	$402,967.96
FTA 5339	$374,970.06	$382,469.46	$390,118.85	$397,921.23	$405,879.66
City Utilities Local Share	$10,107,154.22	$10,410,368.85	$10,722,679.91	$11,044,360.31	$11,375,691.12
State of Missouri	$34,044.37	$34,384.81	$34,728.66	$35,075.95	$35,426.71
Medicaid	$33,991.75	$34,331.67	$34,674.99	$35,021.74	$35,371.96
Other local agencies	$40,192.46	$40,996.31	$41,816.24	$42,652.56	$43,505.61
TOTAL	**$14,537,148.89**	**$14,928,283.05**	**$15,330,265.23**	**$15,743,403.30**	**$16,168,013.99**

2038-2040

Source	2038	2039	2040	TOTAL
FTA 5307	$3,946,554.41	$4,025,485.49	$4,105,995.20	**$76,609,856.42**
FTA 5310	$411,027.31	$419,247.86	$427,632.82	**$7,978,793.74**
FTA 5339	$413,997.25	$422,277.19	$430,722.74	**$8,036,445.59**
City Utilities Local Share	$11,716,961.85	$12,068,470.71	$12,430,524.83	**$210,534,762.78**
State of Missouri	$35,780.97	$36,138.78	$36,500.17	**$754,107.41**
Medicaid	$35,725.68	$36,082.93	$36,443.76	**$752,941.94**
Other local agencies	$44,375.73	$45,263.24	$46,168.51	**$861,414.21**
TOTAL	**$16,604,423.20**	**$17,052,966.21**	**$17,513,988.03**	**$305,528,322.08**

Transit Revenue Summary

Source	TOTAL through 2040
FTA 5307	**$76,609,856.42**
FTA 5310	**$7,978,793.74**
FTA 5339	**$8,036,445.59**
City Utilities Local Share	**$210,534,762.78**
State of Missouri	**$754,107.41**
Medicaid	**$752,941.94**
Other local agencies	**$861,414.21**
TOTAL	**$305,528,322.08**

Range of Alternatives

Funding over the next 24 years will be limited. For this reason, the OTO has reviewed potential projects over that same time frame, so there is a realistic understanding of what can be accomplished. OTO solicits needs and projects from member jurisdictions. These projects are then subjected to a prioritization process. This list of prioritized projects is compared to the available funding amounts through 2040 and a limited (constrained) list of priority projects is selected.

Project Submissions

Project needs were collected through several methods. Jurisdictions were asked to submit a list of project needs through the Plan horizon of 2040. MoDOT was also asked to submit a list of project needs based on the state highway system. Projects included in the prior plan that had not yet been programmed were included as well. Submitted projects were then assigned a cost estimate and projected year of completion. The cost estimates were then inflated by three percent, based on average increases in the Construction Price Index, to the project year of completion.

Project Prioritization Process

To prioritize the projects, the LRTP Subcommittee developed a set of prioritization factors based on the goals which had been set within the Plan. Each prioritization factor includes a set of criteria, which are assigned points. Projects were scored based on these criteria. A glossary defining each criterion is included in the Appendix.

Once projects are prioritized, the potential list is compared against available funding. The results can be seen in the constrained project list. Additional projects are also included in the event the High Funding Scenario is realized.

Prioritization Factors

Factors	Criteria	Points
1. Priority Projects		**20**
Located along a Priority Corridor of Regional Significance	Yes	*20*
	No	*0*
2. Safety		**25**
Fatal/Injury Crash Rate	Worse than rates on similar OTO FCs	*18*
	Better than rates on similar OTO FCs	*0*
Safety Concern	Yes	*5*
	No	*0*
Improvement or Removal of At-Grade Railroad Crossing	Yes	*2*
	No	*0*
3. Congestion Management		**20**
Volume-to-Capacity Ratio	Current ≥ 0.86	*7*
	Future (2040) ≥ 0.86	*5*
Travel Delay	≤ 85% of Freeflow (not to exceed posted)	*7*
	≥ 85% of Freeflow (not to exceed posted)	*0*
Complies with MTP Access Management	Yes	*3*
	No	*0*
Included in Regional ITS Arch.	Yes	*3*
	No	*0*
4. Environmental Justice		**10**
	Inside 4 EJ Tracts	*10*
	Inside 3 EJ Tracts	*7.5*
	Inside 2 EJ Tracts	*5*
	Inside 1 EJ Tract	*2.5*
	Inside 0 EJ Tracts	*0*
5. Multi-modal		**10**
Intermodal Benefit (Bike/Ped/Transit and Truck/Rail)	Connects more than 2 modes or services	*7*
	Facilitates transfer or intermodal potential between 1 to 2 modes	*5*
	No intermodal potential	*0*
Vehicle Trip Reduction	Project encourages reduction of trips/discourages SOV use	*3*
	Project will result in some trip reduction	*1*
	No trip reduction	*0*
6. Economic Development		**15**
Improves access to major freight centers or corridors	Yes	*5*
	No	*0*
State Freight Plan	Yes	*5*
	No	*0*
Local Priority Project	Defined leadership and strong political support	*5*
	Unknown or no leadership or political support	*0*
TOTAL		**100**

Programmatic Project List

Maintenance - $356,938,095

As shown in the Financial Capacity Chapter, maintenance must be considered when determining funding available for new projects. Over the life of this Plan, it is estimated that over $350 million will be allocated to taking care of the transportation system.

Safety - $18,000,000

A variety of projects can qualify for safety-specific funding, however, certain improvements may be difficult to identify ahead of a systemic review of safety data. Locations for smaller improvements, such as rumble stripes, guard cable, and high friction surface treatments, among others, have not been exhaustively identified. Some funding from this plan will be reserved for these types of improvements.

Bicycle and Pedestrian - $10,000,000

The OTO region receives funding allocated specifically for bicycle and pedestrian projects through federal transportation legislation, though the name for this funding has changed over the years. OTO recognizes that a number of roadway projects can address both bicycle and pedestrian needs, however, a number of projects are needed independent of a roadway improvement. This funding can be used for the competitive transportation alternatives program through OTO, ADA improvements, and other specific bicycle and pedestrian projects that may arise over the course of this Plan's horizon.

Constrained Project List

The constrained project list is sorted by the name of the roadway where the project is located. Transit projects are also included. A second list is included that would be referenced should the High Funding Scenario be realized. Project costs are shown based on the estimated year of completion. Projects in the Transportation Improvement Program must be derived from this priority list of projects. The TIP may include projects from the unconstrained list if financing is identified and proper justification is provided as to why the OTO should implement the project prior to one already on the Constrained list.

Expected Funding for New Projects after Programmatic Amounts - $383,699,235

High Funding for New Projects after Programmatic Amounts - $602,819,080

Transit Funding Available - $10,870,768

INSERT LIST

Unconstrained Project List

The unconstrained project list contains the remaining projects that were submitted, but not prioritized for funding. This list is also sorted by roadway name.

INSERT LIST

Implementation Program

Major Thoroughfare Plan

Bicycle and Pedestrian Facilities Map

Schedule for 5-Year Implementation of *Transportation Plan 2040* Actions

TAB 3

Prioritization Factors

Factors	Criteria	Points
1. Priority Projects		**20**
Located along a Priority Corridor of Regional Significance	Yes	*20*
	No	*0*
2. Safety		**25**
Fatal/Injury Crash Rate	Worse than rates on similar OTO FCs	*18*
	Better than rates on similar OTO FCs	*0*
Safety Concern	Yes	*5*
	No	*0*
Improvement or Removal of At-Grade Railroad Crossing	Yes	*2*
	No	*0*
3. Congestion Management		**20**
Volume-to-Capacity Ratio	Current ≥ 0.86	*7*
	Future (2040) ≥ 0.86	*5*
Travel Delay	≤ 85% of Freeflow (not to exceed posted)	*7*
	≥ 85% of Freeflow (not to exceed posted)	*0*
Complies with MTP Access Management	Yes	*3*
	No	*0*
Included in Regional ITS Arch.	Yes	*3*
	No	*0*
4. Environmental Justice		**10**
	Inside 4 EJ Tracts	*10*
	Inside 3 EJ Tracts	*7.5*
	Inside 2 EJ Tracts	*5*
	Inside 1 EJ Tract	*2.5*
	Inside 0 EJ Tracts	*0*
5. Multi-modal		**10**
Intermodal Benefit (Bike/Ped/Transit and Truck/Rail)	Connects more than 2 modes or services	*7*
	Facilitates transfer or intermodal potential between 1 to 2 modes	*5*
	No intermodal potential	*0*
Vehicle Trip Reduction	Project encourages reduction of trips/discourages SOV use	*3*
	Project will result in some trip reduction	*1*
	No trip reduction	*0*
6. Economic Development		**15**
Improves access to major freight centers or corridors	Yes	*5*
	No	*0*
State Freight Plan	Yes	*5*
	No	*0*
Local Priority Project	Defined leadership and strong political support	*5*
	Unknown or no leadership or political support	*0*
TOTAL		**100**