OZARKS TRANSPORTATION ORGANIZATION
A METROPOLITAN PLANNING ORGANIZATION

Safe Streets and Roads
For OTO

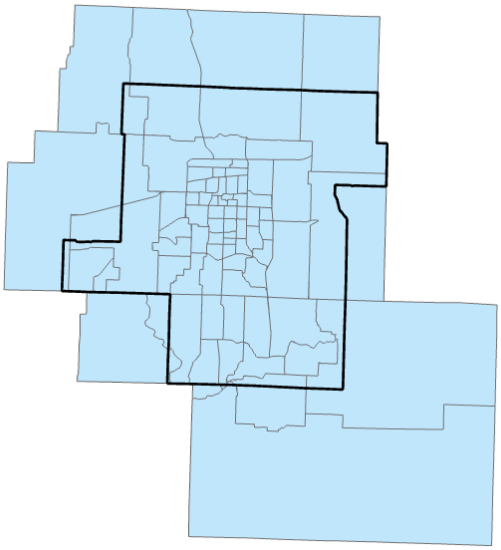
Supplemental Material for the OTO Safe Streets and Roads of All Application

The Ozarks Transportation Organization is submitting a Safe Streets and Roads for All Action Plan Application with the intent of developing a regional plan that serves all of our member jurisdictions.

This supplemental document contains information and links relating to the planning capacity of the Ozarks Transportation Organization, as well as ongoing efforts throughout the OTO region that support the development of a Safety Action Plan. Please use this supplemental, as well as information found throughout the OTO website, to learn more about our commitment to safety, public input, and ability to deliver a quality Safety Action Plan.

OTO SS4A website with additional documentation:
www.ozarkstransportation.org/ss4a

OTO Census Tracts



About the Ozarks Transportation Organization

The Ozarks Transportation Organization (OTO) is the regional Metropolitan Planning Organization for the Springfield region. The MPO, located in southwest Missouri, includes elected and appointed officials from Christian and Greene counties and the cities of Battlefield, Nixa, Ozark, Republic, Springfield, Strafford, and Willard. The OTO has identified safety as the number one priority in its planning process. The OTO is submitting the application to write a Safe Streets and Roads for All Safety Action Plan for the OTO membership.

Using the methods described in the Notice of Funding Opportunity, the 2019 OTO Census Tract population is 368,479 persons. Crash data was obtained via the same method, with 222 fatal crashes between

2016 and 2020. Crash data was sourced from the Missouri Department of Transportation and their internal Data Zone crash statistics map - https://modatazone.modot.org/index.php/safety.

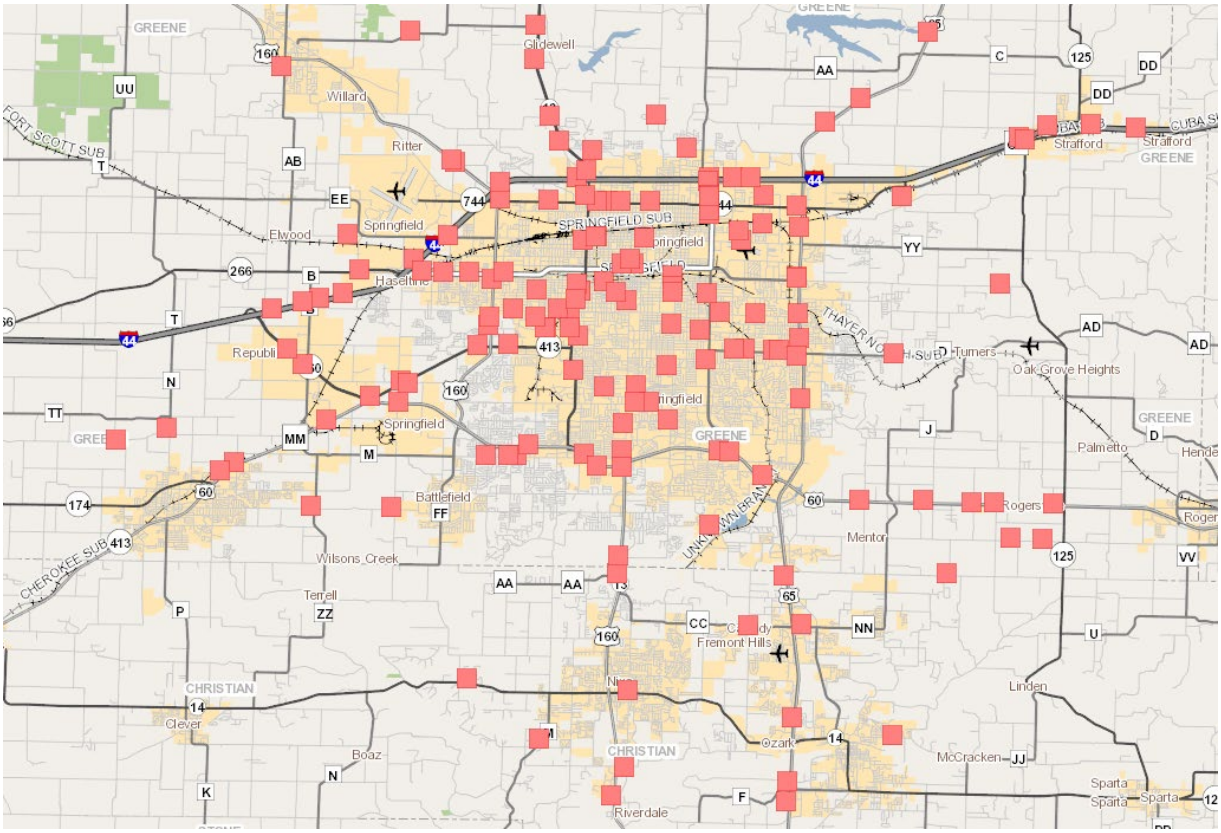
The estimated 2019 population for the OTO planning area, shown in the separately uploaded map and available in this online map, is 330,016. The underserved population by census tract, 65,515, lies fully in the OTO boundary. To the right is a map showing the OTO boundary and relevant census tracts.

The OTO has consistently developed its own planning documents and is familiar with using consultants and purchased data as needed. Please visit the most recently adopted long range transportation plan, *Destination 2045*, to view how OTO can take extensive public input, diverse needs, and varied data to create a comprehensive, prioritized, and actionable transportation plan. We have also used visualization and web-based tools to develop an immersive experience.

Long Range Transportation Plan – *Destination 2045*
https://www.ozarkstransportation.org/what-we-do/long-range-transportation-plan

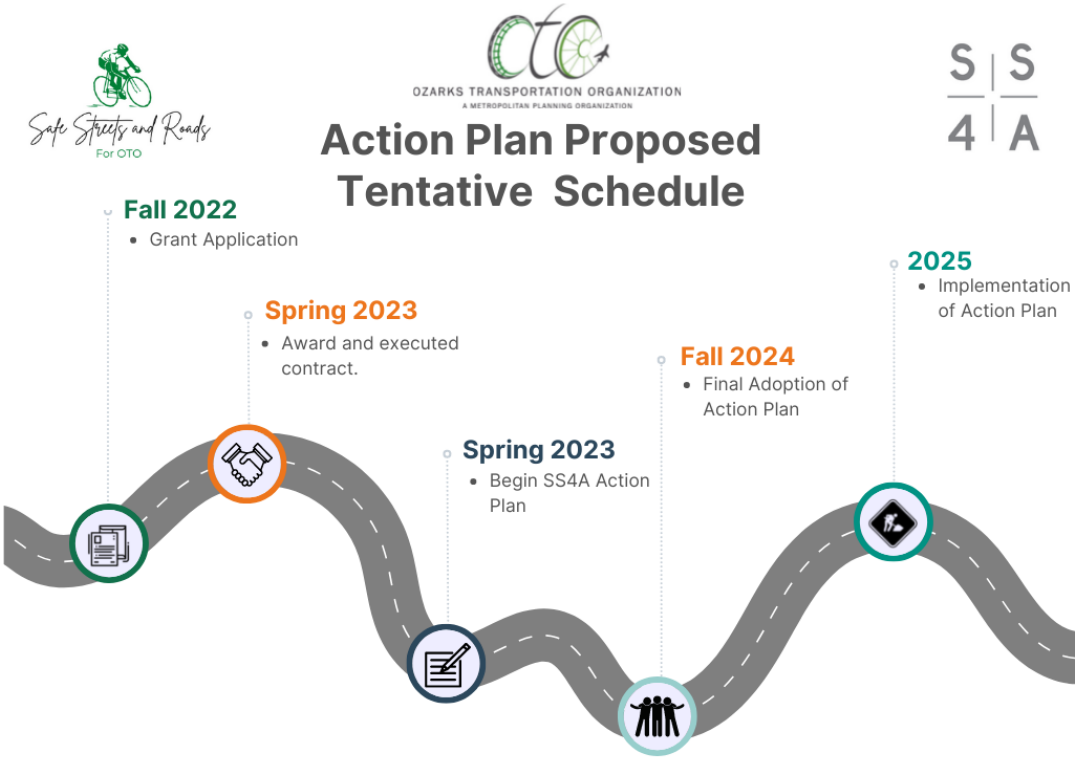
Immersive Site –
https://storymaps.arcgis.com/stories/d26b1beb1aab4a878b00617c83efa32f

Fatal Crashes in the OTO Area (2016-2020)



Plan Timeline

The OTO proposes an 18-month timeline for plan development.



* Timing is dependent on a grant award being made in 2022 or early 2023.

Public Input Tools

The OTO has made a concerted effort to provide the public with multiple avenues for input. We have a dedicated website linked through https://giveusyourinput.org, which redirects to https://www.ozarkstransportation.org/give-us-your-input. Recent press releases are highlighted. The public can visually share and respond to concerns through an interactive map - https://www.ozarkstransportation.org/give-us-your-input#map. OTO has a presence on Facebook and Twitter. We also have a specific email address for the public – comment@ozarkstransportation.org. All comments are shared with Technical Planning Committee members and Board members in a standardized format in each agenda - https://www.ozarkstransportation.org/our-resources/agendas-minutes#b-bod-agendas. OTO recently launched a new web portal for the Transportation Improvement Program that also allows the public to directly comment on individual projects with proposed changes - https://oto.ecointeractive.com/.

The Public Participation Plan recommends how and when the OTO engages the public, as well as recommending tools to improve that engagement. Annually, staff evaluates the PPP and makes further recommendations for improvement - https://www.ozarkstransportation.org/what-we-do/ppp.

Equity Analysis in the OTO Region

The Ozarks Transportation Organization has taken an active role in developing equity analysis tools for the Springfield, MO metropolitan planning area. The USDOT website shows an

underserved population in the central-north region of the City of Springfield. The OTO has found the size of census tracts throughout the region to be rather large and hence, masking the presence of additional underserved populations. With the formation of the latest long range transportation plan, *Destination 2045* – adopted in September 2021, the OTO developed an analysis technique using hexbins that distributes census data on a much more precise scale throughout the region, showing better representation of underserved populations than census tracts would otherwise show. The OTO has created a page on its website highlighting the results - https://www.ozarkstransportation.org/our-resources/civil-rights. The maps can be viewed directly here - https://www.ozarkstransportation.org/uploads/documents/EnviroJusticeAreas2020.pdf. The incorporation of this into *Destination 2045* can be viewed here - https://www.ozarkstransportation.org/uploads/documents/Amendment2_Destination2045_07212022.pdf#page=71

This has now been taken one step further with the development of an Equity Index, still in prototype form, visible here - https://oto.maps.arcgis.com/apps/mapviewer/index.html?webmap=6a502f1802824d7192a2c42dbcff4210.

Previously, the OTO also created a tool to view accessibility by transit throughout the region, providing details regarding transit's impact on moving about - https://oto.maps.arcgis.com/apps/webappviewer/index.html?id=76ead4a0a16e4c7ebe591eca575bf169

Complete Streets

The OTO Design standards included in the long-range plan, Destination 2045, recommended pedestrian and bicycle accommodations on a number of roadway classifications. Guidelines for those accommodations are currently included in the Design Standards. The OTO maintains a Complete Street Toolbox with links to resources for member jurisdictions complete street policy development found here: https://www.ozarkstransportation.org/our-resources/planning-tools/cstools. The OTO was commended for the creation of this toolbox during the 2021 Federal Certification Review.

Climate Change, Resiliency, and the Environment

The OTO area participates in the Ozone and PM Advance Programs. Analysis of impacts on environmental justice communities is a part of the regular planning process. The OTO assesses projects through its in-house EnviroSmart program, a database which includes both natural and environmental justice-related elements and was developed in consultation with Missouri Department of Natural Resources, Missouri Department of Conservation, Missouri State Parks, the State Historic Preservation Office, and MoDOT, with additional resources from US EPA, US DOT, and the US Census. The OTO mapped minority, low-income, disabled, and elderly populations against the location of projects in its *Destination 2045* long range planning process to ensure that environmental justice was factored into the planning process.

Making lower-carbon transportation options available and accessible to more users is expected to reduce greenhouse gas emissions and **improve quality of life.**

Environmental Chapter of LRTP - https://www.ozarkstransportation.org/uploads/documents/Amendment2_Destination2045_07212022.pdf#page=60

Culture of Safety and Performance Measures

Use of crash data in prioritization for LRTP and TIP since creation as a TMA and tracked as a locally developed performance measure since 2011 long range transportation plan – highlighted in annual state of transportation report, as seen in the report for 2021 - https://www.ozarkstransportation.org/what-we-do/state-of-transportation.

Additionally, OTO has participated in the Missouri Blueprint for Roadway Safety/Southwest Coalition for Roadway Safety since its inception. OTO also stepped up for the region when it helped create a Traffic Incident Management (TIM) committee. This group is comprised of emergency responders and meets quarterly to build relationships, improve response times, and ensure responder safety. This cooperation also makes the region's roads safer for the traveling public. The TIM committee coordinated with the Coalition for Roadway Safety to access funding to supply high-visibility vests for incident responders.

Innovative Technology

The region has a strong partnership in the Transportation Management Center (TMC), jointly operated by MoDOT and the City of Springfield. Together they have made great efforts to use ITS and other technology to promote safety throughout the region. A summary of TMC Operations can be found here - https://www.ozarkstraffic.com/about-us/about-its/

Several years ago, MoDOT took part in the FHWA Every Day Counts 5 (EDC-5) initiative, which focused on a Crowdsourcing for Operations Peer Exchange. Now, MoDOT is part of the EDC-6 initiative focusing on Crowdsourcing for Advancing Operations, putting lessons learned into practice. In particular, the TMC is receiving Waze events into the ATMS software, whereby TMC operators can utilize CCTV cameras to view the event, enter the verified incident into their Event Management, and send Motor Assist personnel, if necessary.

Effort is underway to develop infrastructure to vehicle communications. The TMC has partnered with Traffic Technology Services (TTS) for them to receive real-time traffic signal timing from the TMC Transparity Central Signal Software, which can be shown within the vehicle display. An example in action would be when a traffic signal is red and shares a countdown of how much time will remain until the signal changes to green.

Fiber is continually being deployed to improve coverage and convert wireless connections at signals throughout the region. Over the past 3 years, MoDOT and the City of Springfield have installed 22 CCTV cameras at new locations and 30 more are planned, awaiting delivery. Such deployments allow better coverage for detecting and managing incidents, enabling signal engineers a view of real-time traffic to make signal timing modifications, and to provide the public with views of weather-related impacts to road conditions.

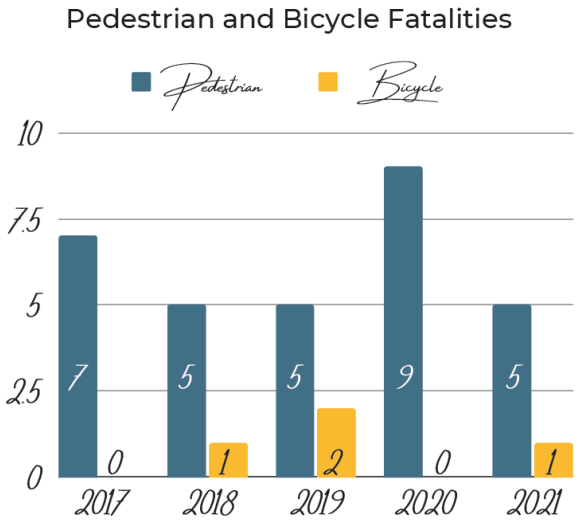
The City of Springfield has installed advance detection to measure arrivals on green and to collect volume and speed data to improve traffic flow and enhance safety at 34 intersections with plans for an additional 26 approaches by the end of 2022.

Accessible pedestrian signals have been installed at a total of 53 city-maintained signals, with an additional 25 planned for installation by the end of 2023. Leading pedestrian intervals have been implemented at 67 City of Springfield-maintained intersections, while flashing yellow arrow left turn signals have been installed at 47 locations.

While CCTV camera footage is not recorded, traffic data such as volumes and speed studies are shared with the Police Department to help focus enforcement efforts. This has evolved into a traffic count and speed study website - https://cosmo.maps.arcgis.com/apps/webappviewer/index.html?id=7fe158f7862049ab9363f639df80202f.

Bicycle and Pedestrian Safety

OTO intends to include a bicycle and pedestrian focus in the Safety Action Plan. As shown in the State of Transportation Report, pedestrian fatalities experienced a recent peak in 2020, when daily vehicle miles traveled per capita were at a similarly recent low. To better understand the contributing factors and trends behind these deaths, OTO has undertaken an analysis of all pedestrian-involved incidents between 2016 and 2020. This information and process will be helpful to developing the Safety Action Plan for the region. The map on the next page highlights some of the results.



According to the Ozarks Alliance to End Homelessness, 581 persons were considered unsheltered in January 2021 - https://cpozarks.org/programs/ozarks-alliance-to-end-homelessness/. This population is especially vulnerable to roadway safety, often on foot or bike. It will be important that this Safety Action Plan involve representatives for this group, as well as propose action items that benefit a mobile population.

Identifying Pedestrian-Involved Incident Hotspots

Hotspots: Areas with Multiple Incidents Included in 3 to 4 Clusters
2016-2020

Initial Clusters Created Using *Density-Based Clustering Tool* and Incident Characteristics

381 Total Incidents; 107 Fatal, Disabling, or Suspected Serious Injury