

## OZARKS TRANSPORTATION ORGANIZATION

A METROPOLITAN PLANNING ORGANIZATION

# Technical Planning Committee MEETING AGENDA

MARCH 18, 2020 1:30 - 3:00 PM

OTO CONFERENCE ROOM, SUITE 101 2208 W. CHESTERFIELD BLVD., SPRINGFIELD



# Technical Planning Committee Meeting Agenda Wednesday, March 18, 2020 1:30 p.m. 2208 W Chesterfield Boulevard, Suite 101 Springfield, MO

	Cal	l to Order
ı.	<u>Ad</u>	<u>ministration</u>
	A.	Introductions
	В.	Approval of the Technical Planning Committee Meeting Agenda (1 minute/Nelson)
		TECHNICAL PLANNING COMMITTEE ACTION REQUESTED TO APPROVE THE AGENDA
	C.	Approval of the January 15, 2020 Meeting Minutes Tab 1 (1 minute/Nelson)
		TECHNICAL PLANNING COMMITTEE ACTION REQUESTED TO APPROVE THE MINUTES
	D.	Public Comment Period for All Agenda Items
	E.	Staff Report (5 minutes/Fields) Sara Fields will provide a review of Ozarks Transportation Organization (OTO) staff activities since the last Technical Planning Committee meeting.
	F.	Legislative Reports (5 minutes/Legislative Staff) Representatives from the OTO area congressional delegation will have an opportunity to give updates on current items of interest.
II.	<u>Ne</u>	w Business
	A.	FY 2020-2023 Administrative Modification 3
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В.	OTO Growth Trends Report
	NO ACTION REQUIRED
C.	Congestion Management Process
	TECHNICAL PLANNING COMMITTEE ACTION REQUESTED TO RECOMMEND APPROVAL OF DRAFT CONGESTION MANAGEMENT PROCESS TO THE BOARD OF DIRECTORS
D.	2021-2025 STIP Programming
	NO ACTION REQUIRED – INFORMATIONAL ONLY
E.	Destination 2045 Visioning Summary
	NO ACTION REQUIRED – INFORMATIONAL ONLY
F.	TIP Subcommittee (5 minutes/Longpine) OTO is requesting the appointment of a subcommittee to prepare the FY 2020-2023 Transportation Improvement Program.
	TECHNICAL COMMITTEE ACTION REQUESTED TO APPOINT A TIP SUBCOMMITTEE
<u>Otl</u>	ner Business
A.	Technical Planning Committee Member Announcements (5 minutes/Technical Planning Committee Members) Members are encouraged to announce transportation events being scheduled that may be of interest to OTO Technical Planning Committee members.
В.	Transportation Issues for Technical Planning Committee Member Review (5 minutes/Technical Planning Committee Members)  Members are encouraged to raise transportation issues or concerns they have for future agenda items or later in-depth discussion by the OTO Technical Planning Committee.
C.	Articles for Technical Planning Committee Member Information Tab 8

III.

#### IV. Adjournment

Targeted for 3:00 P.M. The next Technical Planning Committee meeting is scheduled for Wednesday, May 20, 2020 at 1:30 P.M. at the OTO Offices, 2208 W. Chesterfield Blvd, Suite 101.

CC: Travis Cossey, OTO Chairman

Ken McClure, City of Springfield Mayor

Senator Hawley's Office Senator Blunt's Office

Jeremy Pruett, Congressman Long's Office

Area News Media

Si usted necesita la ayuda de un traductor, por favor comuníquese con Andy Thomason al (417) 865-3042, al menos 48 horas antes de la reunion.

Persons who require special accommodations under the Americans with Disabilities Act or persons who require interpreter services (free of charge) should contact Andy Thomason 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 <a href="https://www.ozarkstransportation.org">www.ozarkstransportation.org</a> or call (417) 865-3042.

# TAB 1

#### TECHNICAL PLANNING COMMITTEE AGENDA 3/18/2020; ITEM I.C.

**January 15, 2020 Meeting Minutes** 

## Ozarks Transportation Organization (Springfield, MO Area MPO)

#### **AGENDA DESCRIPTION:**

Attached for Committee member review are the minutes from the Technical Planning Committee January 15, 2020 meeting. Please review these minutes prior to the meeting and note any changes that need to be made. The Chair will ask during the meeting if any member has any amendments to the attached minutes.

#### TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:

A member of the Technical Planning Committee is requested to make one of the following motions:

"Move to approve the Technical Planning Committee January 15, 2020 meeting minutes."

OR

"Move to approve the Technical Planning Committee January 15, 2020 meeting minutes with the following corrections..."

# OZARKS TRANSPORTATION ORGANIZATION TECHNICAL PLANNING COMMITTEE MEETING MINUTES January 15, 2020

The Technical Planning Committee of the Ozarks Transportation Organization met at its scheduled time in the OTO Conference Room. A quorum was declared present and the meeting was called to order at approximately 1:30 p.m. by Vice Chair Todd Wiesehan in Chair Garrett Tyson's absence.

#### The following members were present:

Mr. Joel Binkley, Greene County

Ms. Kristy Bork, Springfield/Branson Airport (a)

Ms. Paula Brookshire, City of Springfield (a)

Mr. Randy Brown, City of Willard

Mr. Eric Claussen, City of Springfield (a)

Ms. Brandie Fisher, City Utilities Transit

Mr. Martin Gugel, City of Springfield

Mr. Zeke Hall, MoDOT

Mr. Adam Humphrey, Greene County

Mr. Kirk Juranas, Springfield Public Works

Mr. Joel Keller, Greene County (a)

Ms. Mary Kromrey, Ozark Greenways

Mr. Frank Miller, MoDOT

Mr. Andrew Nelson, City of Republic (a)

Mr. Jeremy Parsons, City of Ozark (a)

Mr. Danny Perches, Springfield Chamber

Mr. Cole Pruitt, Missouri State University

Mr. Jeff Roussell, City of Nixa

Mr. Frank Schoneboom, City of Battlefield

Mr. Todd Wiesehan, Christian County

Ms. Eva Voss, MoDOT

(a) Denotes alternate given voting privileges as a substitute when voting member not present

#### The following members were not present:

Mr. Mokhtee Ahmad, FTA Representative

Mr. Joshua Bird, Christian County (a)

Mr. King Coltrin, City of Strafford

Mr. Matt Crawford, City Utilities

Mr. John Caufield, BNSF

Mr. Doug Colvin, City of Nixa (a)

Ms. Brandi Fischer, City Utilities (a)

Ms. Dawne Gardner, City of Springfield (a)

Mr. Kevin Lambeth, City of Battlefield (a)

Mr. Bradley McMahon, FHWA

Mr. Joel Keller, Greene County (a)

Mr. Garen McElroy, Greene Co Highway (a)

Mr. John Montgomery, Ozarks Greenways (a)

Mr. Mr. John McCart, City of Ozark (a)

Mr. Dave O'Conner, City of Willard (a)

Mr. Jason Ray, SMOG (a)

Ms. Beth Schaller, MoDOT (a)

Mr. David Schaumburg, Springfield/Branson Airport

Mr. Frank Schoneboom, City of Battlefield

Mr. Travis Shaw, Springfield Public Schools

Mr. Jonathan Shelden, Springfield Public Schools (a)

Mr. Jeremiah Shuler, FTA Representative (a)

Ms. Mary Lilly Smith, City of Springfield

Ms. Janette Vomund, MoDOT

Mr. Chad Zickefoose, MoDOT (a)

Others present: Mr. Jeremy Pruett, Congressman Billy Long's Office; Mr. Dan Wadlington, Senator Blunt's Office; Mr. Neil Brady, Bartlett West; Ms. Megan Clark, SMCOG; Ms. Rachel Krispin, Ozark Greenways; Mr. Chad Bybee, City of Rogersville; Mr. Brad Kelley, MoDOT; Mr. Garrett Brickner, City of Republic; Mr. David Faucett, Ms. Sara Fields, Ms. Markee Hebden, Ms. Natasha Longpine, and Mr. Andy Thomason, Ozarks Transportation Organization.

#### I. <u>Administration</u>

#### A. Introductions

Those in attendance made self-introductions stating their name and the organization they represent.

#### B. Approval of the Technical Planning Committee Meeting Agenda

Mr. Perches moved for approval of the Technical Planning Committee Meeting Agenda for January 15, 2020. Mr. Juranas seconded the motion and it was unanimously approved.

#### C. Approval of the November 20, 2019, Meeting Minutes

Ms. Kromrey moved for approval of the minutes from the November 20, 2019 Technical Planning Committee Meeting. Mr. Humphrey seconded the motion and it was unanimously approved.

#### D. Public Comment Period for All Agenda Items

There were no speakers present to address the Committee.

#### E. Staff Report – Ms. Sara Fields

Ms. Fields began her report by speaking about the OTO's Long Range Transportation Plan, *Destination 2045*. She made sure to mention the Public Input process, including a TPC event on February 5<sup>th</sup> at the Library Center.

She said she is keeping a close eye on the legislative session, where Speaker Elijah Haahr has said they will not be considering a fuel tax this session.

Ms. Fields moved onto MoDOT talking about increasing registration and licensing fees for additional revenue. She explained that the Governor's Bridge Bonding Program will need to be paid back, and these additional fees will help. Income projections should be available in the near future.

She spoke about the joint MoDOT/OTO/Republic public meeting for the US60 West Planning and Safety Study to get out ahead of any engineering solutions. They would like to get ideas on balancing access with travel times, traffic flow, and safety. She noted that funding was not promised, but they are looking for the public's initial thoughts on the development of that corridor.

Ms. Fields ended her report by saying she believes there is more Omnibus funding that came out of the Federal Funding Bill, but she does not know the exact amount as of yet.

#### F. Legislative Reports - Mr. Dan Wadlington and Mr. Jeremy Pruett

Mr. Wadlington began by stating the senate will not be operating for the next 6 weeks outside of the impeachment trials. They were able to sign a deal on trade with China before the trials begin.

Mr. Pruett spoke on the idea that there will not be a lot passed this year due to 2020 being an election year. He confirmed there will not be a gas tax, as Ms. Fields stated in her report.

#### II. New Business

#### A. OTO Area Online Base Map Demo – Mr. Dave Faucett

Mr. Faucett gave a demonstration of the OTO's online Base Map that provides a plethora of information about the OTO region. He pointed out how the map functions and how it is layered to reveal different pieces of information at varying zoom levels. The layers include include trails, major highways and local roads, building footprints, housing permits, the Major Thoroughfare Plan, bus routes, bridges, and crash statistics, among other informational components.

# B. Transportation Alternatives Project Award Recommendation – Mr. Andy Thomason Mr. Thomason began by pointing out that this round of funding was geared specifically toward trail creation and maintenance. He said that there is roughly \$1.7 million available, \$100,000 set aside for planning services, and the last \$1.6 million is for construction costs. Mr. Thomason stated that in total there were five applications: Ozarks Greenways applied for the \$100,000 for planning services, then Ozark, Springfield, Republic and Battlefield, applied for projects that added up to \$2.4 million. He explained that after much deliberation from the Scoring Committee, they decided it would be best to recommend the funds to be awarded as such: fully funding Ozark and Springfield, leaving \$500,000 to be divided among Republic and Battlefield. He said that Republic could do Right-of-Way and design for about \$400,000, and the remaining \$100,00 would go to Battlefield, who would commit their own STBG-Urban funding for the remainder of their project.

Mr. Thomason then went on to highlight what the construction projects will be in the different cities. He said the City of Ozark would like to put the funds toward the Chadwick Flyer with pedestrian walkways under Highway 65 and along Highway 14. He said that this will benefit both trail users and students of the high school and junior high. The Ozark Public School System is a major partner in this project. The City of Springfield would like to extend the Fassnight Trail through Phelps Grove Park and up to the Art Museum. This plan supports the Art Museum Master Plan. The City of Republic applied to extend the Shuyler Creek Trail from Elm Street & FR 182 out to connect to the entryway of Wilson's Creek National Battlefield. Battlefield applied to connect Elm to Somerset through Trail of Tears Park with trail.

Mr. Juranas motioned to recommend these projects for funding to the Board. Mr. Perches seconded the motion and it passed unanimously.

#### C. Amendment Number 3 to the FY 2020-2023 TIP – Ms. Natasha Longpine

Ms. Longpine explained there are eight items to this TIP Amendment, the first five of which are the projects that Mr. Thomason had just spoken on. She moved onto item six, which is to add scoping for the CRISI Rail project in Republic. Item seven was to add funding to the Campbell and Republic Road project in Springfield. The last item is for US 65 bridge preventative maintenance.

Mr. Cole Pruitt moved to recommend Amendment 3 to the FY 2020-2023 TIP to the Board. Mr. Perches seconded and it was unanimously approved.

#### D. Federal Functional Classification Change Request - Mr. Andy Thomason

Mr. Thomason explained the City of Battlefield has put in an application for Azalea and Cloverdale. He showed on a graphic that Azalea has a gap, and Battlefield would like to connect Azalea to make it one street. Battlefield is applying to have both streets gain the status of Minor Collector so they would be eligible for federal funding. Mr. Thomason showed that both streets are predicted to have the traffic flow in the future that would coincide with Minor Collector roads. He said that the OTO needs to recommend the classification change before the request is sent to MoDOT and Federal Highway.

Mr. Artman motioned to recommend the approval of the change. Mr. Juranas seconded the motion and it passed unanimously.

#### E. MoDOT Update - Mr. Frank Miller

Mr. Miller presented on the updates for the 2021-2025 STIP. He mentioned that the Governor's Bridge Program created a funding source, which for OTO is about \$18 million will be available for programming. He said that there are meetings in February where the use of funding through FY 2025 will be discussed.

He addressed the interchange at 60 and 125, stating that MoDOT is currently looking at a compromise between the less expensive option that many local business owners were upset about and a new, more expensive option that was agreeable with the business owners. He said he does not have any cost estimates as of yet.

#### F. FY 2021 UPWP Subcommittee – Ms. Sara Fields

Ms. Fields asked the members of the Committee to volunteer to be a part of the UPWP Subcommittee, which discusses projects and ideas for projects for the upcoming fiscal year. Cole Pruitt, Eva Voss, and Kirk Juranas volunteered to be on the committee.

Mr. Parsons motioned to adopt the members. Mr. Miller seconded the motion and it passed unanimously.

#### III. Other Business

#### A. Technical Planning Committee Member Announcements

Ms. Eva Voss invited members of the committee to the Statewide MPO meeting in Jefferson City.

#### B. Transportation Issues for Technical Planning Committee Member Review

There were no issues from members of the Committee.

#### C. Articles for Technical Planning Committee Member Information

Ms. Fields pointed out the article that covers Kansas City providing free public transit. She said there were more articles of interest, including one covering electric vehicles verses gas tax, and what is currently going on in Washington D.C.

#### **Adjournment**

With no additional business to come before the Committee, Mr. Perches moved to adjourn the meeting, and Mr. Brown seconded the motion. It carried unanimously and the meeting was adjourned at approximately 2:15 p.m.

# TAB 2

#### TECHNICAL PLANNING COMMITTEE MEETING 3/18/2020; ITEM I.D.

#### **Public Comment**

## Ozarks Transportation Organization (Springfield, MO Area MPO)

#### **AGENDA DESCRIPTION:**

Attached for Committee member review are Public Comments for the time frame between January 15, 2020 and March 18, 2020.

#### **BOARD OF DIRECTORS ACTION REQUESTED:**

This item is informational only, no action is required.

#### Concerning US 65 & Bluegrass Rd.

A new map comment has been posted at <a href="http://map.ototrailstudy.com">http://map.ototrailstudy.com</a>. 1/21/2020

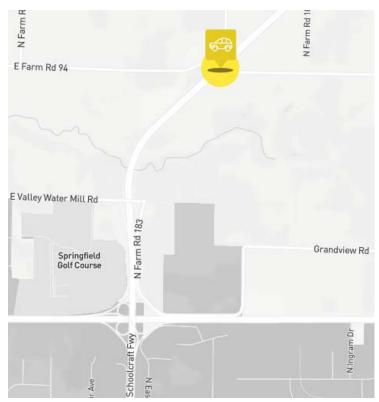
Name: Steve Stader

Type: Point

**Coordinates:** [-93.21465969085693,37.27272095630884]

Category: motor-point

**Comment:** US 65 & Bluegrass Rd. It is dangerous crossing 65 east and west especially during heavy traffic. Conflict between through traffic and those making turns on to 65 and lack of understanding about yielding to oncoming traffic is cause for many near misses and dangerous conditions.



#### Concerning: 65 N and I-44

Name: Bottleneck

Type: LineString

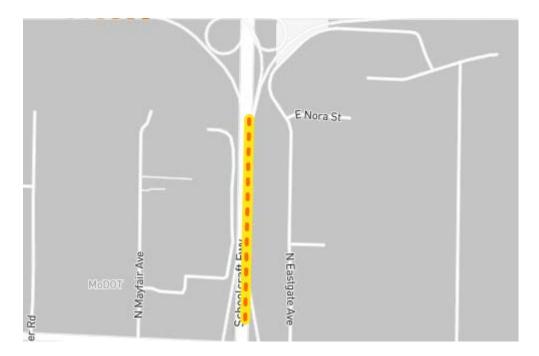
**Date:** 1/30/20

Coordinates: [[-93.22461605072021,37.239758611970714],[-

93.22444438934326,37.246591370760015]]

**Category:** motor-route

**Comment:** Most traffic going north on 65 gets off to go either east/west on 44. Yet, three lanes continue north with the left one ending at bridge. Having the right "thru" lane on 65 N become the first of two exit lanes to 44 and having the left two lanes be the thru lanes might help.



#### **Concerning: Pedestrians on Glenstone**

Name: Matt

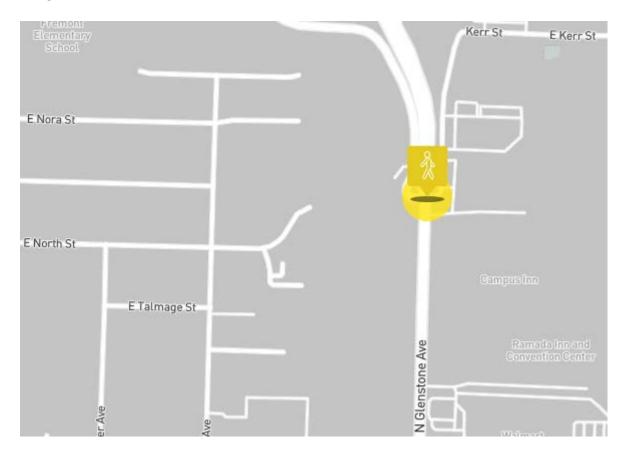
Type: Point

**Date:** 1/30/20

**Coordinates:** [-93.26079368591309,37.24573730978843]

Category: pedestrian-point

**Comment:** People try to cross Glenstone here all the time. With it so hard to see since the cross road curves, a crosswalk would help. Also, having a sidewalk on Kerr/Evergreen through Holiday Inn Express property to connect the sidewalk on Glenstone with that in front of Hampton inn is needed. People walk along road all the time.



#### **Concerning: Problems on Kearney**

Name: Jeff

**Type:** LineString

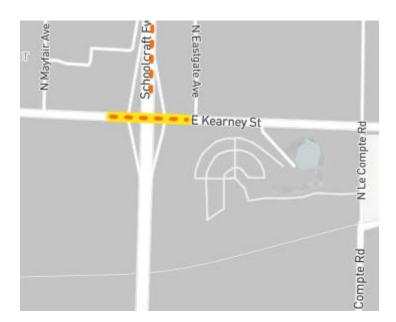
**Date:** 1/30/20

Coordinates: [[-93.2263433933258,37.238891661417],[-93.22470724582672,37.23884468351599],[-

93.2230657339096,37.238797705585725]]

Category: pedestrian-route

**Comment:** Several problems. Really need two thru lanes and at longer left turn lanes. Pedestrians also walk across bridge all the time. Could use a sidewalk. Pavement extremely rough, especially when turning from NB 65 ramp to go west on Kearney.



Concerning: Traffic build up on 44 and 65

Name: Jeff

**Type:** LineString

**Date:** 2/1/2020

Coordinates: [[-93.22877883911131,37.250075839213565],[-

93.23706150054932,37.25014416051372]]

Category: motor-route

**Comment:** Traffic on 44 heading east gets backed up in the mornings because of cars slowing down and jockeying for position to get on ramp to 65 south. Extending that exit lane would make a big difference. Not sure why it wasn't done when all of the other 44 ramps in Springfield were extended recently. Ideally having an auxiliary lane all way to Glenstone on both sides of 44 would be ideal. But, just extending the off ramp from 44 east to 65 south a bit would help a lot.



# TAB 3

#### TECHNICAL PLANNING COMMITTEE AGENDA 3/18/2020; ITEM II.A.

#### FY 2020-2023 Administrative Modification 3

## Ozarks Transportation Organization (Springfield, MO Area MPO)

#### **AGENDA DESCRIPTION:**

The following changes are included as part of Administrative Modification Three to the FY 2020-2023 Transportation Improvement Program.

#### Changes in a project's programmed amount less than 15% (up to \$2,000,000)

1. SP2012-20A2 to SP2012-20AM3

Pavement Improvements on Sunshine, National, and Battlefield Adding \$390,000 in total funding, with \$312,000 in STBG-Urban and \$78,000 in local funding.

SP2014-20A2 to SP2014-20AM3
 ADA Improvements on Sunshine, National, and Battlefield
 Adding \$210,000 in total funding, with \$168,000 in STBG-Urban and \$42,000 in local funding.

#### **TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:**

INFORMATIONAL ONLY. NO ACTION REQUIRED

#### OZARKS TRANSPORTATION ORGANIZATION



A METROPOLITAN PLANNING ORGANIZATION

205 PARK CENTRAL EAST, SUITE 205 SPRINGFIELD, MO 65806 417-865-3042 [p] 417-862-6013 [f]

5 February 2020

Ms. Eva Voss Transportation Planning Missouri Department of Transportation P. O. Box 270 Jefferson City, Missouri 65102

Dear Ms. Voss:

I am writing to advise you that the Ozarks Transportation Organization approved Administrative Modification Number Three to the OTO FY 2020-2023 Transportation Improvement Program (TIP) on February 5, 2020. The adoption included demonstration of fiscal constraint as required by federal regulations. Please find enclosed the administrative modification, which is outlined on the following pages.

Please let me know if you have any questions about this or the administrative modification or need any other information.

Sincerely,

Natasha L. Longpine, AICP

**Principal Planner** 

**Enclosures** 





Project Detail by Section and Project Number with Map

#### F) Roadways Section

TIP # SP2012-20A2 PAVEMENT AND ADA IMPROVEMENTS SUNSHINE, NATIONAL, BATTLEFIELD

Route Sunshine, National, Battlefield

From To

**Location** City of Springfield

Federal Agency FHWA

Project Sponsor City of Springfield

**Federal Funding Category** STBG-U **MoDOT Funding Category** N/A

Bike/Ped Plan? Yes EJ? Yes

STIP # Federal ID #

**Project Description** 

Overlay for various locations on Sunshine Street, National Avenue, and Battlefield Road.



Fund Code	Source	Phase	FY2020	FY2021	FY2022	FY2023	Total
FHWA (STBG-U)	Federal	CON	\$2,080,000	\$0	\$0	\$0	\$2,080,000
LOCAL	Local	CON	\$520,000	\$0	\$0	\$0	\$520,000
Totals			\$2,600,000	\$0	<b>\$0</b>	\$0	\$2,600,000

Notes

Non-Federal Funding Source: City of Springfield 1/4-cent sales tax

Prior Cost \$0 Future Cost \$0

**Total Cost** \$2,600,000



Project Detail by Section and Project Number with Map

#### F) Roadways Section

TIP # SP2012-20AM3 PAVEMENT AND ADA IMPROVEMENTS SUNSHINE, NATIONAL, BATTLEFIELD

Route Sunshine, National, Battlefield

From To

**Location** City of Springfield

Federal Agency FHWA

Project Sponsor City of Springfield

**Federal Funding Category** STBG-U **MoDOT Funding Category** N/A

Bike/Ped Plan? Yes EJ? Yes

STIP # Federal ID #

**Project Description** 

Overlay for various locations on Sunshine Street, National Avenue, and Battlefield Road.



Fund Code	Source	Phase	FY2020	FY2021	FY2022	FY2023	Total
FHWA (STBG-U)	Federal	CON	\$2,392,000	\$0	\$0	\$0	\$2,392,000
LOCAL	Local	CON	\$598,000	\$0	\$0	\$0	\$598,000
Totals			\$2,990,000	\$0	\$0	\$0	\$2,990,000

Notes

Non-Federal Funding Source: City of Springfield 1/4-cent sales tax

Prior Cost \$0 Future Cost \$0

**Total Cost** \$2,990,000



Project Detail by Section and Project Number with Map

#### F) Roadways Section

TIP # SP2014-20A2 PAVEMENT AND ADA IMPROVEMENTS SUNSHINE, NATIONAL, BATTLEFIELD

Route Sunshine, National, Battlefield

From To

**Location** City of Springfield

Federal Agency FHWA

Project Sponsor City of Springfield

**Federal Funding Category** STBG-U **MoDOT Funding Category** N/A

Bike/Ped Plan? Yes EJ? Yes

STIP # Federal ID #

**Project Description** 

ADA improvements at various locations on Sunshine Street, National Avenue, and Battlefield Road.



Fund Code	Source	Phase	FY2020	FY2021	FY2022	FY2023	Total
FHWA (STBG-U)	Federal	CON	\$1,120,000	\$0	\$0	\$0	\$1,120,000
LOCAL	Local	CON	\$280,000	\$0	\$0	\$0	\$280,000
Totals			\$1,400,000	\$0	\$0	\$0	\$1,400,000

Notes

Non-Federal Funding Source: City of Springfield 1/4-cent sales tax

Prior Cost \$0 Future Cost \$0

**Total Cost** \$1,400,000



Project Detail by Section and Project Number with Map

#### F) Roadways Section

TIP # SP2014-20AM3 PAVEMENT AND ADA IMPROVEMENTS SUNSHINE, NATIONAL, BATTLEFIELD

Route Sunshine, National, Battlefield

From To

**Location** City of Springfield

Federal Agency FHWA

Project Sponsor City of Springfield

**Federal Funding Category** STBG-U **MoDOT Funding Category** N/A

Bike/Ped Plan? Yes EJ? Yes

STIP # Federal ID #

**Project Description** 

ADA improvements at various locations on Sunshine Street, National Avenue, and Battlefield Road.



Fund Code	Source	Phase	FY2020	FY2021	FY2022	FY2023	Total
FHWA (STBG-U)	Federal	CON	\$1,288,000	\$0	\$0	\$0	\$1,288,000
LOCAL	Local	CON	\$322,000	\$0	\$0	\$0	\$322,000
Totals			\$1,610,000	\$0	\$0	\$0	\$1,610,000

**Notes** 

Non-Federal Funding Source: City of Springfield 1/4-cent sales tax

Prior Cost \$0 Future Cost \$0

**Total Cost** \$1,610,000

oadways

EARLY SUMMARY	Y																	
PROJECT	FHWA (STBG-U) FH	IWA (SAFETY) F	HWA (BRIDGE)	FHWA (I/M)	FHWA (130)	Federal FHWA (BRO)	FHWA (NHPP)	FHWA (STBG)	FHWA(BUILD)	FRA (CRISI)	FEMA	LOCAL	OTHER	MoDOT	MoDOT-GCSA State	MoDOT-AC	SEMA	TOTAL
020 BA1801-18	\$0	\$0	\$0	\$0	\$0	\$0	\$413,600	\$0	\$0	\$0	\$0	\$0	\$0	\$103.400	\$0	\$0	\$0	\$517,00
C0901	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,000	\$0	\$0	\$0	\$0	\$0	\$2,000	\$0	\$0	\$0	\$10,00
C1102	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$2,00
01703 01802	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$40,000	\$4,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,000 \$10,000	\$0 \$0	\$0 \$0	\$0 \$0	\$5,00 \$50.00
1803-18	\$0	\$1,800	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$200	\$0	\$0	\$0	\$2,0
1901-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$1,600	\$0 \$0	\$2,00
1902-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$1,600	\$0	\$2,00
2001-20 R1403-18A1	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$6,400 \$8,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,600 \$2,000	\$0 \$0	\$0 \$0	\$0 \$0	\$8,00 \$10,00
R1501	\$16,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000	\$0	\$0	\$0	\$0	\$0	\$20,00
R1703	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,160	\$0	\$0	\$0	\$0	\$0	\$9,040	\$0	\$0	\$0 \$0	\$45,20
R1707-17A6 R1801-18	\$0 \$0	\$0 \$22,500	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,000 \$0	\$0 \$0	\$0 \$2,500	\$0 \$0	\$0 \$0	\$0 \$0	\$1,0 \$25,0
1804-18	\$0 \$0	\$22,300	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$537,600	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$134,400	\$0 \$0	\$0 \$0	\$0	\$672,0
1901-20A1	\$16,091,664	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,603,429	\$0	\$0	\$0	\$0	\$0	\$23,695,09
1902-20A1	\$2,935,796	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$733,949	\$0	\$0	\$0	\$0	\$0	\$3,669,7
1903-19 1905-19	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$224,100	\$0 \$0	\$0 \$0	\$29,600 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$7,400 \$24,900	\$0 \$0	\$0 \$0	\$0 \$0	\$37,0 \$249,0
1905-19	\$0 \$0	\$0 \$0	\$0 \$0	\$224,100 \$0	\$0 \$0	\$0 \$0	\$76.000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$24,900 \$19,000	\$0 \$0	\$0 \$0	\$0 \$0	\$249,0 \$95.0
1907-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$4,000	\$0	\$5,0
1908-19	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0 \$0	\$2,0
1909-19	\$0	\$0	\$27,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,800	\$0	\$0	\$0	\$34,0
1910-19 2001-20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$39,200 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$9,800 \$128,400	\$0 \$0	\$0 \$513,600	\$0 \$0	\$49,0 \$642,0
2001-20	\$0	\$0	\$0	\$0	\$0	\$0	\$848,000	\$0	\$0	\$0	\$0	\$0	\$0	\$212,000	\$0	\$0	\$0	\$1,060,0
R2003-20	\$0	\$0	\$0	\$0	\$0	\$0	\$3,200	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$0	\$0	\$0 \$0 \$0	\$4,00
R2004-20	\$0	\$0	\$0	\$0	\$0	\$0	\$8,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$0	\$0	\$0	\$10,00
R2005-20 R2006-20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$8,800 \$2,000	\$0 \$0	\$35,200 \$8,000	\$0 \$0	\$44,00 \$10,00
R2006-20	\$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$8,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$2,000	\$0	\$0,000	\$0	\$10,00
R2008-20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,200	\$0	\$44,800	\$0	\$56,00
R2009-20AM1	\$440,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,000	\$0	\$0	\$0	\$0	\$0	\$550,0
R2010-20A1	\$0	\$9,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$10,00
01405	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0	\$15,00
D1719-18A5	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$50,00
D1720 D1721-18A5	\$0 \$0	\$0 \$54,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$4,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,000 \$6,000	\$0 \$0	\$0 \$0	\$0 \$0	\$5,00 \$60.00
01721-18A5 01722	\$0 \$0	\$54,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$40,000	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$10,000	\$0 \$0	\$0 \$0	\$0 \$0	\$50,00
01723	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$50,00
01803-18	\$0	\$182,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,300	\$0	\$0	\$0 \$0	\$203,00
01804-18	\$332,000	\$0	\$0	\$0 \$0	\$0	\$0	\$0 \$0	\$800 \$0	\$0	\$0 \$0	\$0	\$83,000	\$0	\$200	\$0	\$0 \$0	\$0	\$416,00
D1903-19 D1904-19	\$0 \$0	\$245,700 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$27,300 \$400	\$0 \$0	\$1,600	\$0 \$0	\$273,00 \$2,00
01905-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,000	\$0	\$0	\$0	\$35.00
02001-20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,900	\$0	\$197,100	\$0 \$0	\$219,00
D2002-20	\$0 \$0	\$775,800 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$356,800	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$86,200 \$89,200	\$0 \$0	\$0 \$0	\$0 \$0	\$862,00 \$446,00
O2003-20 O2004-20	\$0 \$0	\$7,200	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	008,0064 02	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$89,200 \$800	\$0 \$0	\$0 \$0	\$0 \$0	\$446,00
02005-20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$181,200	\$0	\$724,800	\$0	\$906,00
02006-20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,000	\$0	\$0	\$0	\$0	\$0	\$2,000	\$0	\$0	\$0	\$10,0
)2007-20 )2008-20	\$0 \$0	\$0 \$900	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$26,000 \$100	\$0 \$0	\$104,000 \$0	\$0 \$0	\$130,0 \$1.0
)2008-20 )2010-20	\$0 \$0	\$900 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$100 \$10,000	\$0 \$0	\$90,000	\$0 \$0	\$1,0 \$100,0
02101-18	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$572,800	\$0	\$0	\$0	\$0	\$0	\$143,400	\$0	\$800	\$0	\$717,0
2103-19	\$0	\$181,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,200	\$0	\$0	\$0	\$202,0
1701-20A2 1704	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$204,364 \$1,600	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$5,000 \$0	\$0 \$0	\$46,091 \$400	\$0 \$0	\$0 \$0	\$0 \$0	\$255,4 \$2,0
1803-18A2	\$584,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$424,000	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$145,500	\$0 \$0	\$400 \$106,500	\$0 \$0	\$0 \$0	\$0 \$0	\$1,260,0
1901-19	\$0	\$0	\$0	\$0	\$0	\$0	\$456,800	\$0	\$0	\$0	\$0	\$0	\$0	\$114,200	\$0	\$0	\$0	\$571,0
1902-19	\$0	\$0	\$0	\$0	\$0	\$0	\$71,200	\$0	\$0	\$0	\$0	\$0	\$0	\$17,800	\$0	\$0	\$0	\$89,0
2001-20 1401-18AM4	\$0 \$1,512,439	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$1,372,151	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$378,111	\$0 \$0	\$120,000 \$343,037	\$0 \$0	\$480,000 \$0	\$0 \$0	\$600,0 \$3,605,7
1401-18AM4 1701-20A2	\$1,512,439 \$0	\$835,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,372,151 \$2,533,170	\$0 \$0	\$0 \$0	\$0 \$0	\$378,111 \$374.950	\$0 \$0	\$343,037 \$935,780	\$0 \$0	\$0 \$0	\$0 \$0	\$4,678.5
802-19A3	\$800,000	\$035,000	\$0	\$0	\$0 \$0	\$350,151	\$0 \$0	\$2,555,170	\$0	\$0	\$740,993	\$595,814	\$0	\$933,760	\$0	\$0 \$0	\$123,499	\$2,610,
1803	\$105,200	\$0	\$0	\$0	\$0	\$0	\$2,674,800	\$0	\$0	\$0	\$0	\$26,300	\$0	\$668,700	\$0	\$0	\$0	\$3,475,
1901-19	\$0	\$0	\$0	\$0	\$0	\$0	\$25,600	\$0	\$0	\$0	\$0	\$0	\$0	\$6,400	\$0	\$0	\$0	\$32,
	\$210,000	\$0 \$748,800	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$52,500 \$0	\$0 \$0	\$0 \$83,200	\$0 \$0	\$0 \$0	\$0 \$0	\$262,5 \$832,6
1901-19A5		\$748,800	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$8,000	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$83,200	\$0 \$0	\$0 \$0	\$0 \$0	\$10,0
1901-19A5 0901-18A1	\$0 \$0				\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0 \$0	\$2,
1901-19A5 0901-18A1 1701 1703-17A3	\$0 \$0	\$0	\$0	\$0			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$1,600	\$0	\$2.0
1901-19A5 1901-18A1 1701 1703-17A3 1704-17A3	\$0 \$0 \$0	\$0	\$0	\$0	\$0	\$0											90	
1901-19A5 0901-18A1 1701 1703-17A3 1704-17A3 1802-18	\$0 \$0 \$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$1,234,400	\$0	\$0	\$0	\$0	\$0	\$0	\$308,600	\$0	\$0	\$0	
1901-19A5 60901-18A1 11701 11703-17A3 11704-17A3 11802-18 11803-18	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0	\$0 \$0	\$1,234,400 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0 \$0	\$0 \$0	\$308,600 \$171,200	\$0 \$0	\$0 \$684,800	\$0 \$0	\$856,0
71901-19A5 G0901-19A5 G0901-18A1 P1701 P1703-17A3 P1704-17A3 P1802-18 P1803-18 P1901-19A5	\$0 \$0 \$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$1,234,400	\$0	\$0			\$0	\$0	\$308,600	\$0	\$0	\$0	\$1,543,00 \$856,00 \$1,696,00 \$7,00
F1901-19A5 50901-18A1 91701 91703-17A3 91704-17A3 91802-18 91803-18 91901-19A5 91401 91401-19A5	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$1,234,400 \$0 \$1,356,800 \$5,600 \$40,000	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$308,600 \$171,200 \$339,200 \$1,400 \$10,000	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$684,800 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$856,00 \$1,696,00 \$7,00 \$50,00
71901-19A5 60901-18A1 91701 91703-17A3 91704-17A3 91802-18 91803-18 91901-19A5	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$1,234,400 \$0 \$1,356,800 \$5,600	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$308,600 \$171,200 \$339,200 \$1,400	\$0 \$0 \$0 \$0	\$0 \$684,800 \$0 \$0	\$0 \$0 \$0 \$0	\$856,0 \$1,696,0 \$7,0

Roadways

YEARLY SUMMARY									-									
	FHWA (STBG-U) FI	JIM/A (CAEETY) E	CHWA (PRIDCE)	ELIMA (IAA)	EUWA (120)	Federal	EUWA (NUDD)	ELIMA (STDC)	ELIWA/BIIII D)	EDA (CDISI)	FEMA	Loca LOCAL	OTHER	MoDOT	State MoDOT-GCSA	MeDOT AC	SEMA	TOTAL
2020 Continued																		
SP1419-18A1 SP1708	\$0 \$0	\$0 \$0	\$0 \$0	\$9,000 \$0	\$0 \$0	\$0 \$0	\$0 \$800	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,000 \$200	\$0 \$0	\$0 \$0	\$0 \$0	\$10,000 \$1,000
SP1709	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$16,000	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000	\$0	\$0	\$0	\$20,000
SP1710 SP1801-18	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$23,200 \$1,600	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$5,800 \$400	\$0 \$0	\$0 \$0	\$0 \$0	\$29,000 \$2,000
SP1802-18 SP1805-18	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$1,467,000	\$0 \$0	\$0 \$0	\$1,600 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$400 \$163,000	\$0 \$0	\$0 \$0	\$0	\$2,000 \$1,630,000
SP1809-18	\$0	\$0	\$0	\$0	\$0	\$0	\$1,449,600	\$0	\$0	\$0	\$0	\$0	\$0	\$362,400	\$0	\$0	\$0 \$0	\$1,812,000
SP1811-18 SP1812-18	\$0 \$0	\$2,000 \$2,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$2,000 \$2.000
SP1815-18A2	\$0	\$0	\$0	\$0	\$0	\$0	\$28,000	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000	\$0	\$0	\$0	\$35,000
SP1816-18A2 SP1817-18A2	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$58,400 \$55,200	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$14,600 \$13,800	\$0 \$0	\$0 \$0	\$0 \$0	\$73,000 \$69,000
SP1818-20A3	\$1,160,800	\$0	\$0	\$0	\$0				\$0	\$0	\$0	\$573,200	\$0		\$0	\$0		\$4,088,000
SP1902-18A4 SP1903-19	\$1,120,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$8,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$280,000 \$0	\$0 \$0	\$0 \$2,000	\$0 \$0	\$0 \$0	\$0 \$0	\$1,400,000 \$10,000
SP1904-19 SP1906-19	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$14,400 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$3,600 \$400	\$0 \$0	\$0 \$1,600	\$0 \$0	\$18,000 \$2,000
SP1907-19	\$0	\$995,000	\$0	\$0	\$0	\$0	\$16,865,800	\$0	\$0	\$0	\$0	\$0	\$0	\$4,465,200	\$0	\$0	\$0	\$22,326,000
SP1908-19A2 SP1909-19A2	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$8,000 \$40,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$2,000 \$10,000	\$0 \$0	\$0 \$0	\$0 \$0	\$10,000 \$50,000
SP1910-19A2	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$5,000
SP1911-19A2 SP1912-19A5	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$46,000	\$0 \$0	\$1,600 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$400 \$0	\$0 \$6.000	\$0 \$0	\$0 \$0	\$2,000 \$52,000
SP2002-20	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$2,000
SP2003-20 SP2004-20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$1,221,600	\$504,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$126,000 \$305,400	\$0 \$0	\$0 \$0	\$0 \$0	\$630,000 \$1,527,000
SP2005-20A3										\$0 \$0						\$0		\$1,009,000
SP2006-20 SP2007-20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$2,000 \$8,000	\$0 \$0	\$8,000 \$32,000	\$0 \$0	\$10,000 \$40,000
SP2008-20 SP2009-20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$8,000 \$3,200	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$2,000 \$800	\$0 \$0	\$0 \$0	\$0 \$0	\$10,000 \$4,000
SP2010-20	\$0	\$0	\$0	\$0	\$0	\$0	\$2,373,600	\$0	\$0	\$0	\$0	\$0	\$0	\$593,400	\$0	\$0	\$0	\$2,967,000
SP2011-20 SP2012-20AM3	\$1,260,000 \$2,392,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$315,000 \$598,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,575,000 \$2,990,000
SP2013-20	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$2,000
SP2014-20AM3 SP2015-20A2	\$1,288,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$6,579,495	\$0 \$0	\$0 \$0	\$322,000 \$1,644,874	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,610,000 \$8,224,369
ST1901-19AM2 SUBTOTAL	\$0 \$30,247,899	\$0 \$4,064,200	\$0 \$28,800	\$0 \$1,700,100	\$0 \$46,000	\$0	\$0 \$33,800,164	\$0 \$5,119,881	\$0	\$0 \$10,000	\$0 \$740,993	\$0	\$0 \$0	\$13,400 \$11,478,348	\$0 \$16,000	\$53,600 \$2,990,300	\$0 \$123,499	\$67,000 \$111,142,457
	\$30,247,099	\$4,004,200	\$28,800	\$1,700,100	\$46,000	\$350,151	\$33,800,164	\$5,119,061	\$6,579,495	\$10,000	\$740,993	\$13,846,627	30	\$11,476,346	\$16,000	\$2,990,300	\$123,499	\$111,142,437
2021 CC0901	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,000	\$0	\$0	\$0	\$0	\$0	\$2,000	\$0	\$0	\$0	\$10,000
CC1102	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$2,000
CC1703 CC1802	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$252,800	\$4,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,000 \$63,200	\$0 \$0	\$0 \$0	\$0 \$0	\$5,000 \$316,000
CC1803-18 CC1901-19	\$0 \$0	\$1,800 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$200 \$400	\$0 \$0	\$0 \$1,600	\$0 \$0	\$2,000 \$2,000
CC1902-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$1,600	\$0	\$2,000
CC2001-20 GR1403-18A1	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$476,000 \$8,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$119,000 \$2,000	\$0 \$0	\$0 \$0	\$0 \$0	\$595,000 \$10,000
GR1703	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$565,600	\$0	\$0	\$0	\$0	\$0	\$141,400	\$0	\$0	\$0	\$707,000
GR1707-17A6 GR1801-18	\$0 \$0	\$0 \$1,800	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,000 \$0	\$0 \$0	\$0 \$200	\$0 \$0	\$0 \$0	\$0 \$0	\$1,000 \$2,000
GR1903-19 GR1905-19	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$3.842.100	\$0 \$0	\$0	\$1,864,800	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$466,200 \$426,900	\$0 \$0	\$0 \$0	\$0	\$2,331,000 \$4,269,000
GR1906-19	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0 \$1,178,400	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$294,600	\$0	\$0	\$0 \$0	\$1,473,000
GR1907-19 GR1908-19	\$0 \$0	\$0 \$0	\$0 \$237,600	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$4,600 \$59,400	\$0 \$0	\$18,400 \$0	\$0 \$0	\$23,000 \$297,000
GR1909-19	\$0	\$0	\$1,144,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$286,200	\$0	\$0	\$0	\$1,431,000
GR1910-19 GR1912-19	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$200,000	\$0 \$0	\$0 \$0	\$534,400 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$133,600 \$0	\$0 \$50,000	\$0 \$0	\$0 \$0	\$668,000 \$250,000
GR2003-20	\$0	\$0	\$0	\$0	\$0	\$0	\$3,200	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$0	\$0	\$0	\$4,000
GR2004-20 GR2005-20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$12,800 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$3,200 \$139,800	\$0 \$0	\$0 \$559,200	\$0 \$0	\$16,000 \$699,000
GR2006-20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$82,200	\$0	\$328,800	\$0	\$411,000
GR2007-20 GR2008-20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,600 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$400 \$177,000	\$0 \$0	\$0 \$708,000	\$0 \$0	\$2,000 \$885,000
GR2010-20A1 GR2011-20A3	\$0	\$9,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$10,000
GR2101-20	\$0	\$0	\$0	\$0	\$240,000	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$60,000	\$0	\$0	\$300,000
MO1405 MO1719-18A5	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$40,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$15,000 \$10,000	\$0 \$0	\$0 \$0	\$0 \$0	\$15,000 \$50,000
MO1720	\$0	\$0	\$0	\$0	\$0	\$0	\$3,200	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$0	\$0	\$0	\$4,000
MO1721-18A5 MO1722	\$0 \$0	\$54,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$40,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$6,000 \$10,000	\$0 \$0	\$0 \$0	\$0 \$0	\$60,000 \$50,000
MO1723	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$50,000
MO1904-19 MO1905-19	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$20,000 \$12,000	\$0 \$0	\$80,000 \$0	\$0 \$0	\$100,000 \$12,000
MO2004-20	\$0	\$457,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,800	\$0	\$0	\$0	\$508,000
FY 2021 continued on n	next page																	

Roadways

YEARLY SUMMARY																		
	FHWA (STBG-U) F	HWA (SAFETY) F	HWA (BRIDGE)	FHWA (I/M)	FHWA (130)	Federal FHWA (BRO)	FHWA (NHPP)	FHWA (STBG)	FHWA(BUILD)	FRA (CRISI)	FEMA	LocaL LOCAL	OTHER	MoDOT	MoDOT-GCSA State	MoDOT-AC	SEMA	TOTAL
2021 Continued MO2006-20 MO2008-20 MO2008-20 MO2008-20 MO2101-18 MO2104-19 MO2104-19 MO2104-19 MO2104-19 MO2104-19 MO2104-19 MO2104-19 MO2105-20 MO2101-19 MO2105-20 MO2101-19 MO2105-20 MO2101-19 MO2105-20 MO2101-19 MO2105-20 MO2101-19 MO2105-20 MO2101-19 MO2105-20 M	\$0 \$0 \$0 \$332,000 \$0 \$202,270 \$0 \$220,500 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$183,600 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$10 \$20 \$20 \$20 \$20 \$20 \$20 \$20 \$20 \$20 \$2	\$0 \$0 \$0 \$0 \$0 \$0 \$1,607,600 \$1,607,600 \$0 \$0 \$0 \$3,600 \$1	\$40,000 \$0 \$0 \$0 \$0 \$0 \$5 \$515,200 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1,600 \$1,600 \$2,944,000 \$2,9448,000	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	SO S	OTHER  S0  S0  S0  S0  S0  S0  S0  S0  S0  S	\$10,000 \$20,400 \$10,000 \$10,000 \$20,400 \$128,800 \$22,500 \$409,400 \$409,400 \$400 \$400 \$400 \$400 \$400 \$400 \$1,1000 \$400 \$1,1000	MoDOT-GCSA	MoDOT-AC	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$50,000 \$204,000 \$100,000 \$415,000 \$444,000 \$225,000 \$247,340 \$2,247,000 \$2,755,825 \$1,798,000 \$2,000 \$2,000 \$2,000 \$2,000 \$2,000 \$2,000 \$3,0000
SP2002-20	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$2,000

#### Roadways

YEARLY SUMMAR	Y																,	
PDO IFOT	FUNNA (OTDO III)	TIBALA (CAFETY)   FUI	WA (DDIDOE)	FIRMA (IMA)	F1844 (400)	Federal	FURALA (AUUDD)	FURNA (CTDO)	FURALA (PULIU P)	EDA (ODICI)	FF14.4	Loc		M-DOT	Sta		OFM.	TOTAL
PROJECT 2022 Continued	FHWA (STBG-U)	HWA (SAFETY) FH	WA (BRIDGE)	FHWA (I/M)	FHWA (130)	FHWA (BRO)	FHWA (NHPP)	FHWA (STBG)	FHWA(BUILD)	FRA (CRISI)	FEMA	LOCAL	OTHER	MoDOT	MoDOT-GCSA	MoDOT-AC	SEMA	TOTAL
SP1812-18	\$0	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
SP1815-18A2	\$960,000	\$0	\$0	\$0	\$0	\$0	\$702,400	\$0	\$0	\$0	\$0	\$240,000	\$0	\$175.600		\$0	\$0	\$2,078,000
SP1816-18A2	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000		\$0	\$0	\$5,000
SP1817-18A2	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400		\$0	\$0	\$2,000
SP1906-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$800		\$3,200	\$0	\$4,000
SP1908-19A2	\$0	\$0	\$0	\$0	\$0	\$0	\$2,782,400	\$0	\$0	\$0	\$0	\$0	\$0	\$695,600	\$0	\$0	\$0	\$3,478,000
SP1909-19A2	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400		\$0	\$0	\$2,000
SP1910-19A2	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400		\$0	\$0	\$2,000
SP1911-19A2	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400		\$0	\$0	\$2,000
SP2002-20	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400		\$0	\$0	\$2,000
SP2006-20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$297,800		\$1,191,200	\$0	\$1,489,000
SP2008-20	\$0 \$0	\$0 \$0	\$0	\$0	\$0 \$0	\$0	\$1,423,200	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0	\$0	\$355,800		\$0	\$0	\$1,779,000
SP2009-20 SP2013-20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$780,000	\$0 \$0	\$0 \$0		\$0 \$0	\$0 \$0	\$0 \$0	\$195,000		\$0 \$0	\$0 \$0	\$975,000
SP2013-20 SP2201-20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$800.000	\$0 \$0	\$1,600 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$400 \$0		\$0 \$0	\$0 \$0	\$2,000 \$1,000,000
SUBTOTAL	\$4,774,004	\$13,289,500	\$0 \$0	\$0 \$0	\$800,000	\$0	\$10,979,200	\$619,200	\$0	\$5,000	\$0 \$0	\$1,636,402	\$0 \$0	\$5,268,000		\$3,413,600	\$0 \$0	\$40,989,906
SUBTUTAL	\$4,774,004	\$13,209,300	ŞU.	30	\$000,000	<b>3</b> 0	\$10,979,200	\$619,200	<b>3</b> 0	\$5,000	ŞU	\$1,030,402	<b>3</b> 0	\$3,266,000	\$205,000	\$3,413,000	<b>3</b> 0	\$40,909,906
2023																		
CC0901	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,000	\$0	\$0	\$0	\$0	\$0	\$2,000	\$0	\$0	\$0	\$10,000
CC1102	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$2,000
CC1802	\$0	\$0	\$0	\$0	\$0	\$0	\$8,268,800	\$0	\$0	\$0	\$0	\$0	\$0	\$2,067,200		\$0	\$0	\$10,336,000
CC1901-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400		\$1,600	\$0	\$2,000
CC1902-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400		\$1,600	\$0	\$2,000
GR1502	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0		\$0	\$0	\$1,000,000
GR1707-17A6	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0		\$0	\$0	\$1,000
GR1801-18	\$0 \$0	\$1,800	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0	\$200		\$0	\$0	\$2,000
GR1902-19 GR2003-20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$16,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$4,000,000 \$0	\$0 \$0	\$0 \$4,000		\$0 \$0	\$0 \$0	\$4,000,000 \$20,000
GR2003-20 GR2007-20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$1,984,000	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$496,000		\$0 \$0	\$0 \$0	\$2,480,000
GR2010-20A1	\$0	\$9.000	\$0	\$0	\$0	\$0	\$1,304,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000		\$0	\$0	\$10,000
MO1405	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0	\$15,000
MO1719-18A5	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000		\$0	\$0	\$50,000
MO1721-18A5	\$0	\$54,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,000		\$0	\$0	\$60,000
MO1722	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$50,000
MO1723	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$10,000		\$0	\$0	\$50,000
MO1904-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$518,000		\$2,072,000	\$0	\$2,590,000
MO1905-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000	\$0	\$0	\$0	\$12,000
MO2301-20	\$336,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$84,000	\$0	\$0		\$0	\$0	\$420,000
NX1704	\$0	\$0	\$0 \$0	\$0	\$0 \$0	\$0	\$1,600	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0	\$0	\$400		\$0	\$0 \$0	\$2,000
OT1901-19A5 SP1401	\$243,101 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$425,600	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$60,775 \$0	\$0 \$0	\$106.400		\$0 \$0	\$0 \$0	\$303,876 \$532.000
SP1401 SP1405-18A1	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$425,600 \$1,600	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$106,400 \$400		\$0 \$0	\$0 \$0	\$532,000 \$2,000
SP1405-18A1 SP1413-19	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$400 \$142,200		\$568.800	\$0 \$0	\$2,000 \$711.000
SP1802-18	\$0 \$0	\$0	\$0	\$0 \$0	\$0	\$0	\$1,600	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$142,200		\$500,000	\$0 \$0	\$2,000
SP1906-19	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$265,400		\$1,061,600	\$0	\$1,327,000
SP1909-19A2	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400		\$0	\$0	\$2,000
SP1910-19A2	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400		\$0	\$0	\$2,000
SP1911-19A2	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400		\$0	\$0	\$2,000
SP2002-20	\$0	\$0	\$0	\$0	\$0	\$0	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$600		\$0	\$0	\$3,000
SP2013-20	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400		\$0	\$0	\$2,000
SUBTOTAL	\$579,101	\$64,800	\$0	\$0	\$0	\$0	\$10,789,600	\$48,000	\$0	\$0	\$0	\$5,145,775	\$0	\$3,670,000	\$0	\$3,705,600	\$0	\$24,002,876

#### FINANCIAL CONSTRAINT

#### Roadways

	Federal Funding Source																
												TOTAL		MoDOT Programmed		State Operations and	
	STBG-U	Safety	Bridge	I/M	130	BRO	NHPP	STBG	BUILD	CRISI	FEMA	Federal Funds	Local	Funds	Other	Maintenance	TOTAL
2020 Funds Programmed	\$30,247,899	\$4,064,200	\$28,800	\$1,700,100	\$46,000	\$350,151	\$33,800,164	\$5,119,881	\$6,579,495	\$10,000	\$740,993	\$82,687,683	\$13,846,627	\$14,484,648	\$123,499	\$5,380,129	\$116,522,586
2021 Funds Programmed	\$799,570	\$2,329,600	\$1,382,400	\$3,851,100	\$440,000	\$0	\$14,192,403	\$4,556,800	\$14,381,327	\$10,000	\$0	\$41,943,200	\$3,845,103	\$8,930,322	\$0	\$5,476,971	\$60,195,596
2022 Funds Programmed	\$4,774,004	\$13,289,500	\$0	\$0	\$800,000	\$0	\$10,979,200	\$619,200	\$0	\$5,000	\$0	\$30,466,904	\$1,636,402	\$8,886,600	\$0	\$5,575,557	\$46,565,463
2023 Funds Programmed	\$579,101	\$64,800	\$0	\$0	\$0	\$0	\$10,789,600	\$48,000	\$0	\$0	\$0	\$11,481,501	\$5,145,775	\$7,375,600	\$0	\$5,675,917	\$29,678,793
Total	\$36,400,574	\$ 19,748,100	\$ 1,411,200	\$ 5,551,200	\$ 1,286,000	\$ 350,151	\$69,761,367	\$ 10,343,881	\$ 20,960,822	\$ 25,000	\$ 740,993	\$166,579,288	\$ 24,473,907	\$ 39,677,170	\$ 123,499	\$22,108,574	\$252,962,438

	Prior Year	FY 2020	FY 2021	FY 2022	FY 2023	TOTAL
Available State and Federal Funding	\$10,127,993	\$ 52,790,375	\$35,099,179	\$40,074,500	\$ 26,219,000	\$164,311,047
Federal Discretionary Funding	\$0	\$ 20,985,822	\$	\$ -	\$ -	\$20,985,822
Available Operations and Maintenance Funding	\$0	\$5,380,129	\$5,476,971	\$5,575,557	\$5,675,917	\$22,108,574
Funds from Other Sources (inc. Local)	\$123,499	\$13,846,627	\$3,845,103	\$1,636,402	\$5,145,775	\$24,597,406
Available Suballocated Funding	\$27,323,332	\$1,254,632	\$6,826,962	\$6,963,501	\$7,102,771	\$49,471,197
TOTAL AVAILABLE FUNDING	\$37,574,824	\$94,257,585	\$51,248,215	\$54,249,960	\$44,143,463	\$281,474,046
Prior Year Funding		\$37,574,824	\$15,309,822	\$6,362,441	\$14,046,938	-
Programmed State and Federal Funding		(\$116,522,586)	(\$60,195,596)	(\$46,565,463)	(\$29,678,793)	(\$252,962,438)
TOTAL REMAINING	\$37,574,824	\$15,309,822	\$6,362,441	\$14,046,938	\$28,511,608	\$28,511,608

Additional Funds from Other Sources include one-time FEMA and SEMA grant funding for the Riverside Bridge Replacement.

Available State and Federal Funding shown here does not include Funding Available shown on Bike/Ped Financial Constraint Page.

See Table H.9 for details on Local Share Financial Capacity.

#### Advertising

City Utilities Transit receives over \$100,000 per year on their transit advertising contract. Advertisements are sold on buses, inside the fixed route buses, bus shelters with ad panels, and bus benches.

#### **Utility Ratepayers**

The City Utilities Customers for Electric, Gas, Water, and SpringNet provide the local match for public transportation in Springfield, Missouri. The net amount absorbed by the Utility customers varies from year to year based on the amount of budgeted expenditures for operations, maintenance, and capital expenditures.

#### **Human Service Providers**

FTA Section 5310 funding is competitively awarded on a regular basis to area Human Service Transportation providers. The 5310 awards are administered by MoDOT as set forth in an MOU and the Program Management Plan. The responsibility is on MoDOT to confirm financial capacity in administering these projects. As part of the application process and in executing vehicle purchase agreements with MoDOT, awardees are required to demonstrate financial capacity for both the match and the maintenance of any vehicle purchased. Sources for this funding depends upon the agency, but projects are not awarded to those agencies who cannot provide the requisite match.

#### **PROJECTED REVENUES**

In an effort to demonstrate that the local jurisdictions and agencies are able to fund the projects programmed in the TIP, in addition to maintaining the federal aid system, the following revenue estimates are included. OTO is not using any inflation in these revenue projections as the sources are fuel taxes, sales taxes, and property taxes, rather, the projections are adjusted each year with the revised TIP. The TIP financial element is consistent with the OTO Long Range Transportation Plan, *Transportation Plan 2040*.

#### STATE AND FEDERAL

Table H.1 Summary	2020	2021	2022	2023	Total
MoDOT State/Federal Funding	\$60,230,000	\$42,020,000	\$43,902,500	\$27,859,000	\$174,011,500
BUILD (2019 Springfield Award)	\$20,960,822	\$0	\$0	\$0	\$0

<sup>\*</sup>Includes Engineering and Rail funding

Table H.2	STBG-Urban	ТАР	5307	5310	5339
Carryover Balance through FY2019	\$27,323,331.7 <b>5</b>	\$853,353.32	\$0	\$555,612	\$2,585,441
Anticipated Allocation FY2020	<mark>\$6,693,099.69</mark>	\$421,887.06	\$2,717,660	\$283,845	\$389,993
Anticipated Allocation FY2021	<mark>\$6,826,961.68</mark>	\$430,324.80	\$2,772,013	\$289,521	\$396,792
Anticipated Allocation FY2022	<mark>\$6,963,500.92</mark>	\$438,931.30	\$2,827,453	\$295,312	\$403,728
Anticipated Allocation FY2023	<mark>\$7,102,770.93</mark>	\$447,709.92	\$2,861,385	\$301,218	\$411,803
Total Anticipated Allocation	<mark>\$27,586,333.22</mark>	\$1,738,853.08	\$11,178,511	\$1,169,896	\$1,602,316
Programmed through FY2023	(\$41,839,042.00)	(\$1,215,847.00)	(\$9,350,178)	(\$1,042,675)	(\$2,552,742)
Estimated Carryover Balance	<mark>\$13,070,622.97</mark>	\$1,376,359.40	\$1,828,333	\$682,833	\$1,635,015
Through FY 2023					

Table H.9 Local Share Financial Capacity	2020	2021	2022	2023
City of Battlefield				
Total Available Revenue	\$380,610.00	\$380,610.00	\$380,610.00	\$380,610.00
Carryover Balance from Prior Year		\$159,735.00	\$454,269.66	\$811,715.75
Estimated Operations and Maintenance Expenditures	(\$22,352.00)	(\$22,754.34)	(\$23,163.91)	(\$23,580.86)
Estimated TIP Project Expenditures	(\$198,523.00)	(\$63,321.00)	\$0.00	\$0.00
Amount Available for Local Projects	\$159,735.00	\$454,269.66	\$811,715.75	\$1,168,744.89
City of Nixa				
Total Available Revenue	\$2,137,719.00	\$2,137,719.00	\$2,137,719.00	\$2,137,719.00
Carryover Balance from Prior Year		\$1,703,973.64	\$3,396,508.94	\$5,324,640.36
Estimated Operations and Maintenance Expenditures	(\$202,241.36)	(\$205,881.70)	(\$209,587.58)	(\$213,360.15)
Estimated TIP Project Expenditures	(\$231,504.00)	(\$239,302.00)	\$0.00	\$0.00
Amount Available for Local Projects	\$1,703,973.64	\$3,396,508.94	\$5,324,640.36	\$7,248,999.21
City of Ozark				
Total Available Revenue	\$1,889,656.00	\$1,889,656.00	\$1,889,656.00	\$1,889,656.00
Carryover Balance from Prior Year		\$290,104.16	\$1,860,616.75	\$3,724,676.75
Estimated Operations and Maintenance Expenditures	(\$24,698.84)	(\$25,143.41)	(\$25,596.00)	(\$26,056.72)
Estimated TIP Project Expenditures	(\$1,574,853.00)	(\$294,000.00)	\$0.00	\$0.00
Amount Available for Local Projects	\$290,104.16	\$1,860,616.75	\$3,724,676.75	\$5,588,276.03
City of Republic				
Total Available Revenue	\$2,033,343.00	\$2,033,343.00	\$2,033,343.00	\$2,033,343.00
Carryover Balance from Prior Year		\$1,763,962.45	\$3,623,404.03	\$5,479,715.38
Estimated Operations and Maintenance Expenditures	(\$170,826.55)	(\$173,901.42)	(\$177,031.65)	(\$180,218.22)
Estimated TIP Project Expenditures	(\$98,554.00)	\$0.00	\$0.00	\$0.00
Amount Available for Local Projects	\$1,763,962.45	\$3,623,404.03	\$5,479,715.38	\$7,332,840.16
City of Springfield	l			
Total Available Revenue	\$25,582,262.00	<mark>\$25,582,262.00</mark>	<mark>\$25,582,262.00</mark>	<mark>\$25,582,262.00</mark>
Carryover Balance from Prior Year		\$18,107,675.28	\$35,100,498.08	\$55,187,221.8 <mark>6</mark>
<b>Estimated Operations and Maintenance Expenditures</b>	(\$2,575,693.72)	(\$2,622,056.20)	(\$2,669,253.22)	(\$2,717,299.77 <mark>)</mark>
Estimated TIP Project Expenditures	(\$4,898,893.00)	(\$5,967,383.00)	(\$2,826,285.00)	(\$2,826,285.00)
Amount Available for Local Projects	\$18,107,675.28	\$35,100,498.08	\$55,187,221.86	<mark>\$75,225,899.09</mark>

Table H.9 Local Share Financial Capacity cont.	2020	2021	2022	2023
City of Strafford				
Total Available Revenue	\$115,568.00	\$115,568.00	\$115,568.00	\$115,568.00
Carryover Balance from Prior Year		\$63,598.00	\$175,398.39	\$287,130.96
Estimated Operations and Maintenance Expenditures	(\$3,701.00)	(\$3,767.61)	(\$3,835.43)	(\$3,904.47)
Estimated TIP Project Expenditures	(\$48,269.00)	\$0.00	\$0.00	\$0.00
Amount Available for Local Projects	\$63,598.00	\$175,398.39	\$287,130.96	\$398,794.49
City of Willard				
Total Available Revenue	\$484,421.00	\$484,421.00	\$484,421.00	\$484,421.00
Carryover Balance from Prior Year		\$381,887.44	\$804,746.36	\$1,226,497.15
Estimated Operations and Maintenance Expenditures	(\$60,473.56)	(\$61,562.08)	(\$62,670.20)	(\$63,798.27)
Estimated TIP Project Expenditures	(\$42,060.00)	\$0.00	\$0.00	\$0.00
Amount Available for Local Projects	\$381,887.44	\$804,746.36	\$1,226,497.15	\$1,647,119.89
Christian County				
Total Available Revenue	\$5,761,618.00	\$5,761,618.00	\$5,761,618.00	\$5,761,618.00
Carryover Balance from Prior Year		\$5,681,090.80	\$11,360,732.11	\$17,038,897.84
Estimated Operations and Maintenance Expenditures	(\$80,527.20)	(\$81,976.69)	(\$83,452.27)	(\$84,954.41)
Estimated TIP Project Expenditures	\$0.00	\$0.00	\$0.00	\$0.00
Amount Available for Local Projects	\$5,681,090.80	\$11,360,732.11	\$17,038,897.84	\$22,715,561.43
Greene County				
Total Available Revenue	\$24,496,117.00	\$24,496,117.00	\$24,496,117.00	\$24,496,117.00
Carryover Balance from Prior Year	\$1,062,967.00	\$17,564,435.81	\$41,433,241.35	\$64,037,252.28
Estimated Operations and Maintenance Expenditures	(\$615,237.19)	(\$626,311.46)	(\$637,585.07)	(\$649,061.60)
Estimated TIP Project Expenditures	(\$7,379,411.00)	(\$1,000.00)	(\$1,254,521.00)	(\$5,001,000.00)
Amount Available for Local Projects	\$17,564,435.81	\$41,433,241.35	\$64,037,252.28	\$82,883,307.68
City Utilities				
Total Available Revenue	\$8,161,500.00	\$8,850,500.00	\$9,695,500.00	\$10,299,500.00
Estimated Operations and Maintenance Expenditures	(\$5,845,455.00)	(\$5,962,365.00)	(\$6,081,612.00)	(\$6,081,756.00)
Available for TIP Project Expenditures	\$2,316,045.00	\$2,888,135.00	\$3,613,888.00	\$4,217,744.00
Carryover from Prior Year		\$2,054,562.00	\$4,718,251.00	\$7,973,990.00
Estimated TIP Project Expenditures	(\$261,483.00)	(\$224,446.00)	(\$358,149.00)	\$0.00
Amount Available for Local Projects	\$2,054,562.00	\$4,718,251.00	\$7,973,990.00	\$12,191,734.00

# TAB 4

#### TECHNICAL PLANNING COMMITTEE AGENDA 3/18/2020; ITEM II.B.

#### **OTO Growth Trends Report**

## Ozarks Transportation Organization (Springfield, MO Area MPO)

#### **AGENDA DESCRIPTION:**

The Growth Trends report is based on the most recent census data and building permit information collected from area jurisdictions.

This report includes information for residential units permitted, growth trend maps, as well as demographic and employment data providing a view of growth for the OTO service area and the five county Metropolitan Statistical Area (Christian, Dallas, Greene, Polk and Webster counties). The report is published for information purposes and can be viewed in full on the OTO website <a href="https://media.ozarkstransportation.org/documents/2019-Growth-Trends-Report.pdf">https://media.ozarkstransportation.org/documents/2019-Growth-Trends-Report.pdf</a>.

#### Conclusions from the report include:

- Single-family residential unit permitting for the OTO area reached its highest total since 2007 (1,558) at 914
- The areas with the largest growth in single-family residential units in 2018 were Greene County OTO area only (267) and Nixa (246), Republic (149), and Ozark (127)
- Multi-family residential unit permitting for the OTO lagged considerably during 2019 (263) compared to 2018 (983), Greene County-OTO area only had the highest total (118). The number of multi-family units in Springfield (95) was the lowest since 2010 (20)
- Year-over-year population percent change for the Springfield, MO MSA 2018 -2019 was 0.99%, year-over-year percent change in population for the MSA has not been over 1% since 2009 -2010.
- From 2017 to 2018, 4,761 jobs were added in the Springfield MSA, the highest increase since 2015 to 2016. Although jobs numbers rose in every county in the MSA, the percentage of MSA jobs within Greene County has remained at around 83%.

If there is additional information that the Technical Planning Committee is interested in seeing in the annual growth trends report, members are asked to let staff know.

#### TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:

INFORMATIONAL ONLY. NO ACTION REQUIRED.

# Growth Trends Report

Through December 31, 2019

2208 W. Chesterfield Blvd, Suite 101

Springfield, Missouri 65807



# OZARKS TRANSPORTATION ORGANIZATION

A METROPOLITAN PLANNING ORGANIZATION

### Disclaimer

The information compiled in this report was retrieved from a variety of sources. Permit data and employment information were derived from federal and local administrative records and should be considered fairly reliable.

It is important to note that demographic information from the American Community Survey is derived from sampling methods used by the U.S. Census Bureau and is reported with a margin of error. For the sake of presentation, margins of error are not included in the tables and charts.

To account for margins of error, five-year comparisons of ACS data and tests for statistical differences are addressed in the narrative sections where appropriate.

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### Introduction

Each year, the Ozarks
Transportation Organization
(OTO) analyzes residential
construction activity and
demographic information for the
MPO study area and member
jurisdictions.

This report is comprised of three sections that include tables, charts, and maps along with narrative descriptions of noteworthy trends within the OTO.

This year's report includes information from the U.S. Census Local Employment and Household Dynamics (LEHD) data for the Springfield, MO MSA at the county level. In addition, employment at the census block level for 2016 & 2017 was added to track employment for places and portions of counties in the OTO area.

### Residential Units

Single-family and multi-family residential construction and demolition activity for each jurisdiction within the OTO study area is tabulated and discussed here.

### Growth Trend Maps

Maps displaying the distribution of permitted residential construction within the OTO Study area are presented in this section. In addition, IRS tax statistics for county-to-county inflow and outflow for 2017 & 2018 were mapped and are presented.

### Demographics & Employment

Historical and current population, income, poverty, education, commuting, employment, and workforce statistics are presented in charts and graphs to identify trends.

#### Residential Units

#### **Building Permit Activity**

Building permit data for new single-family, duplex, and multi-family structures was collected for each county and municipality in the OTO area for 2019. For the purpose of this report, single-family structures represent one residential unit and any structures divided into more than one residence are counted as multi-family units including duplexes.

In addition, permits for demolitions of existing residential units were included and subtracted from the total of newly constructed residential structures or existing structures converted to residential use to produce a net total of housing units added in each city or county within the OTO area. Only permit activity within the OTO boundary is included for unincorporated portions of counties in this report.

The new housing units added in 2019 for each permitting jurisdiction are compared to the previous ten years of building permit activity by jurisdiction for single-family, multi-family, and total residential units in this section of the report. A table of permit activity in the OTO area from 2001 – 2019 is included as an appendix.



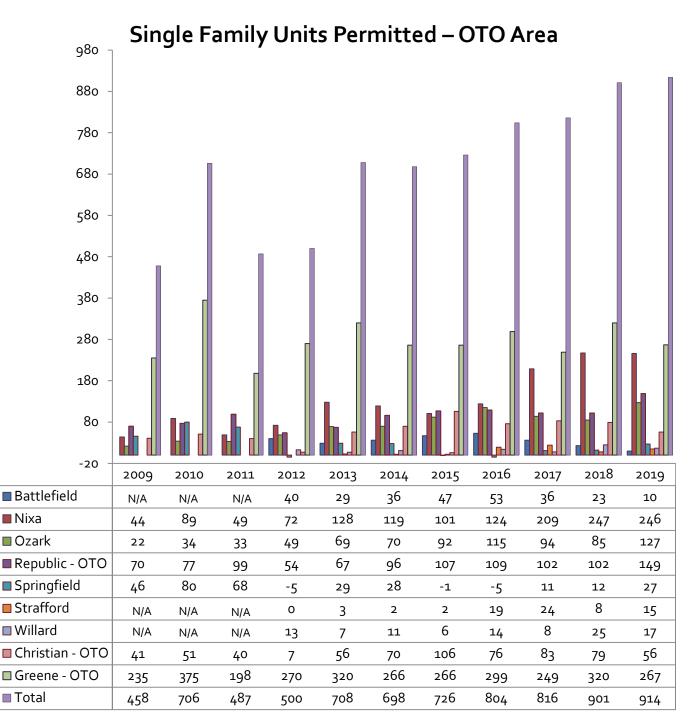
# Residential Units

#### Single-Family

The information on this page depicts permitted construction of single family housing in the OTO area from 2009 – 2019.

In 2019, single-family housing permits reached the highest level since the mid-2000s. The increase is mostly attributable to development in Green County, Nixa, Republic, and Ozark.

The permit total for new single-family structures in the OTO Area was offset by the demolition 132 houses. The majority of demolitions occurred in Springfield (66) and Greene County (39).



#### **Multi-Family Units Permitted - OTO Area**

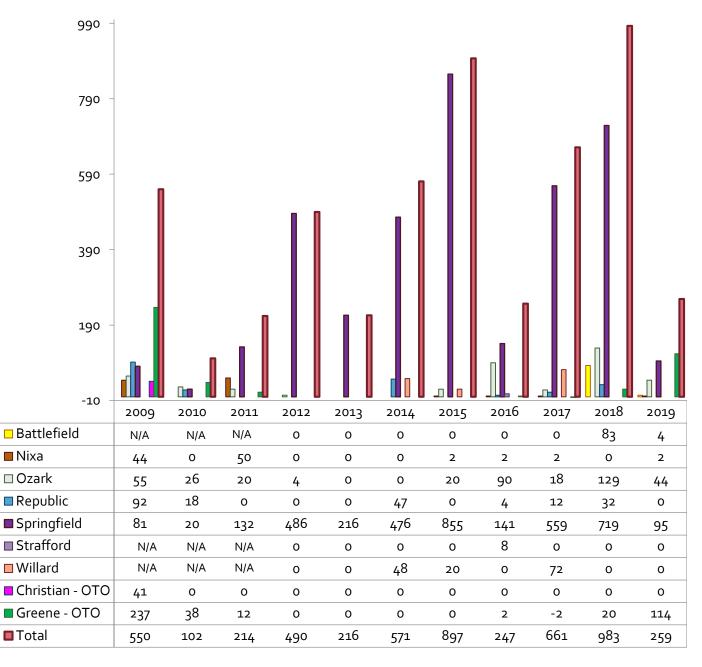
# Residential Units

#### Multi-Family

From 2009 to 2019, the majority of multi-family housing construction permits were issued in Springfield.

In 2019, the total number of multi-family units permitted dropped to the fourth lowest total since 2009 (95). The largest number of the 259 multi-family units added in the OTO area were in the unincorporated parts of Greene County (114)

Ozark nearly permitted the balance of multifamily structures in the OTO area. The majority of multi-family permits were issued for senior housing developments.



#### Residential Units

#### Totals

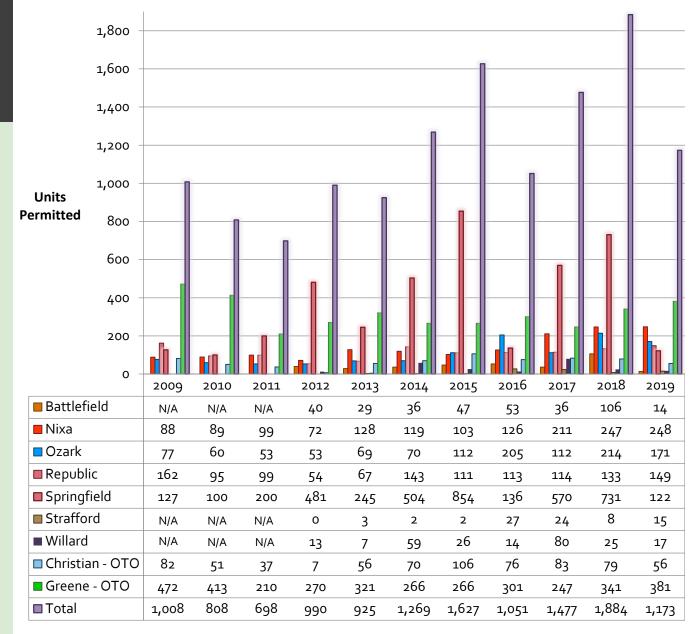
The information on this page depicts the net total of housing units permitted for the entire OTO area and each jurisdiction within it for 2019 compared to the previous ten years.

While residential unit construction peaked in the mid-2000s, it had dropped considerably by 2009 after the collapse of the housing bubble leading to the "great recession."

Area permit data from 2001 - 2019 indicates a downturn in permitting after 2007 bottoming out in 2011 (see Appendix A). Growth in residential structure permits has recovered somewhat in recent years driven mostly by multi-family development in Springfield.

In 2019, the highest number of single-family structures were permitted in the OTO area since 2009 but a dip in multi-family permitting led to a drop in total residential unit permitting as was the case in 2016 & 2013.

#### OTO Area 2019 Total Residential Units Permitted



# **Growth Trend Maps**

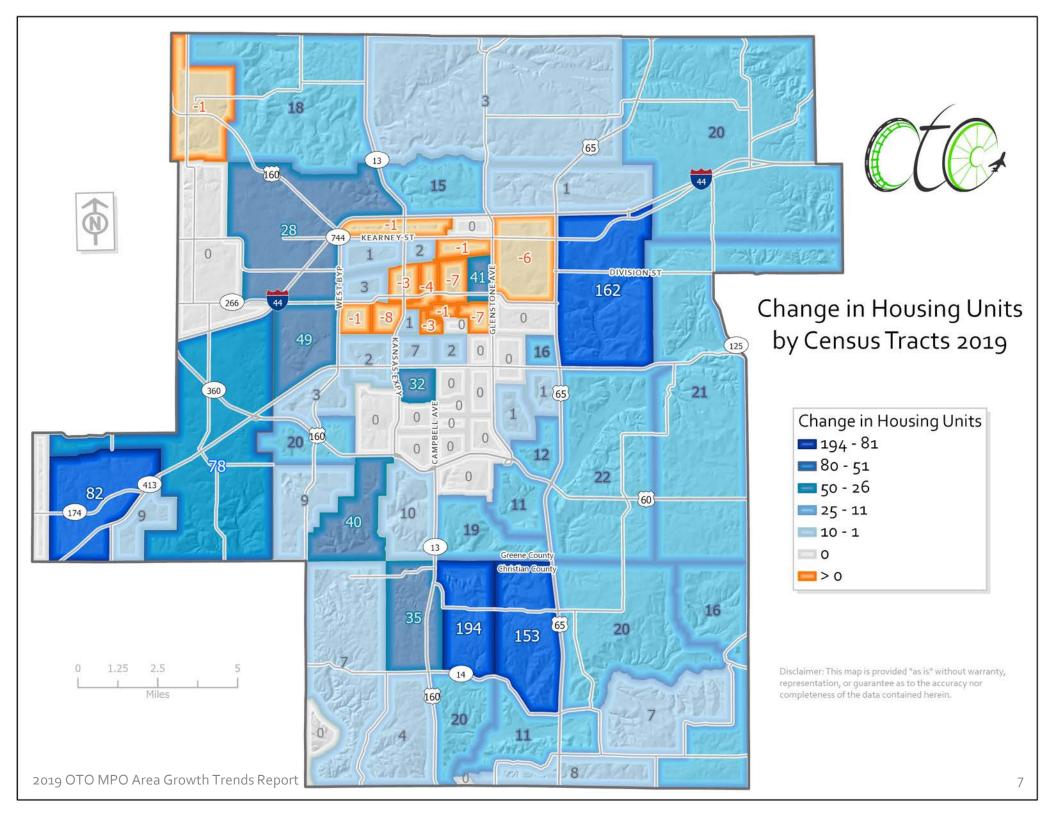
#### Changes in Housing Units & Migration

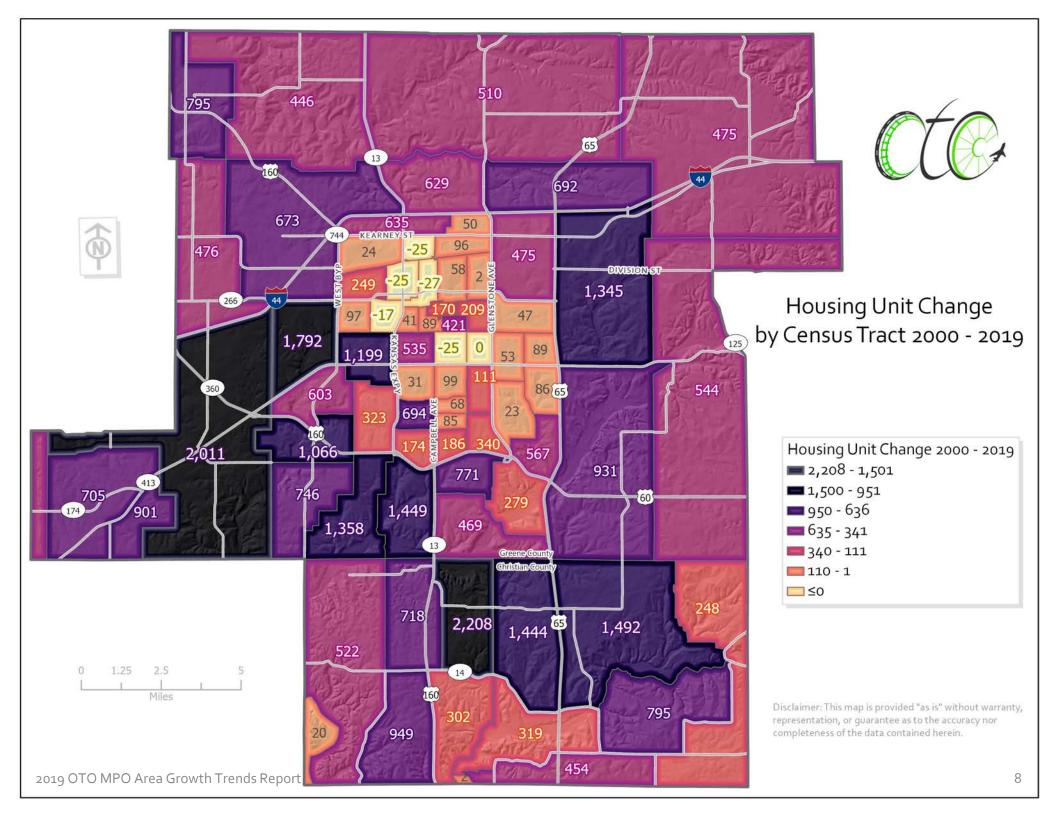
The maps on the following pages illustrate the net change in housing units by Census Tract for 2019 as well as the period from 2000 to 2019.

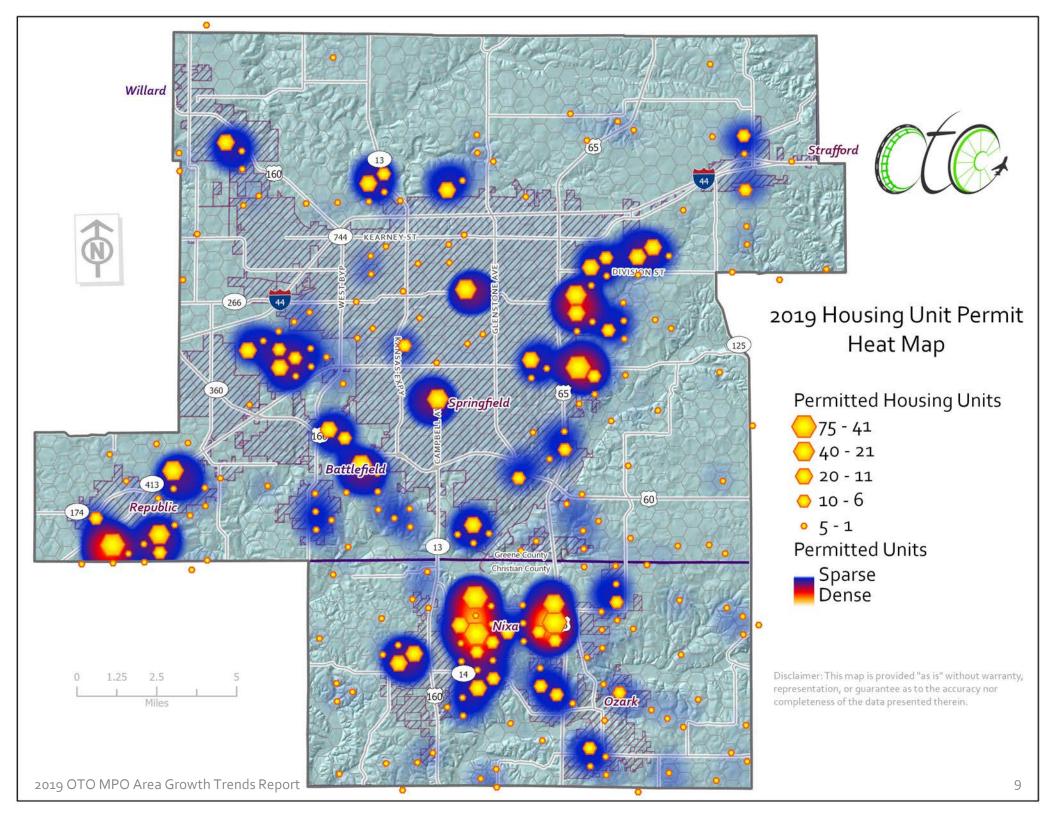
Additionally, a permit heat map has been created to demonstrate densities of new residential structure development. An overlay of geocoded permit address points aggregated into a grid of hexagons was added to provide more information about the location and magnitude of residential development in 2019 as well as 2010 - 2019.

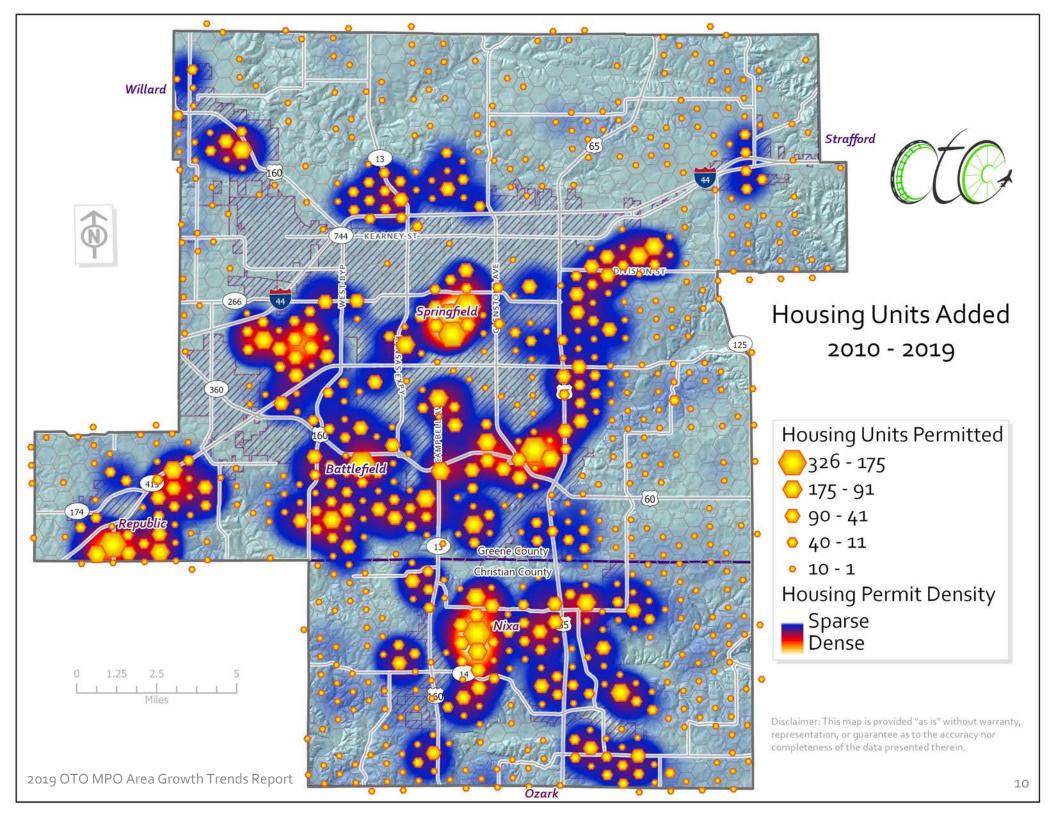
Lastly, IRS tax statistics for county-to-county inflow and outflow for 2017 & 2018 were mapped to inform from where and to where people are moving out of and into the OTO area.

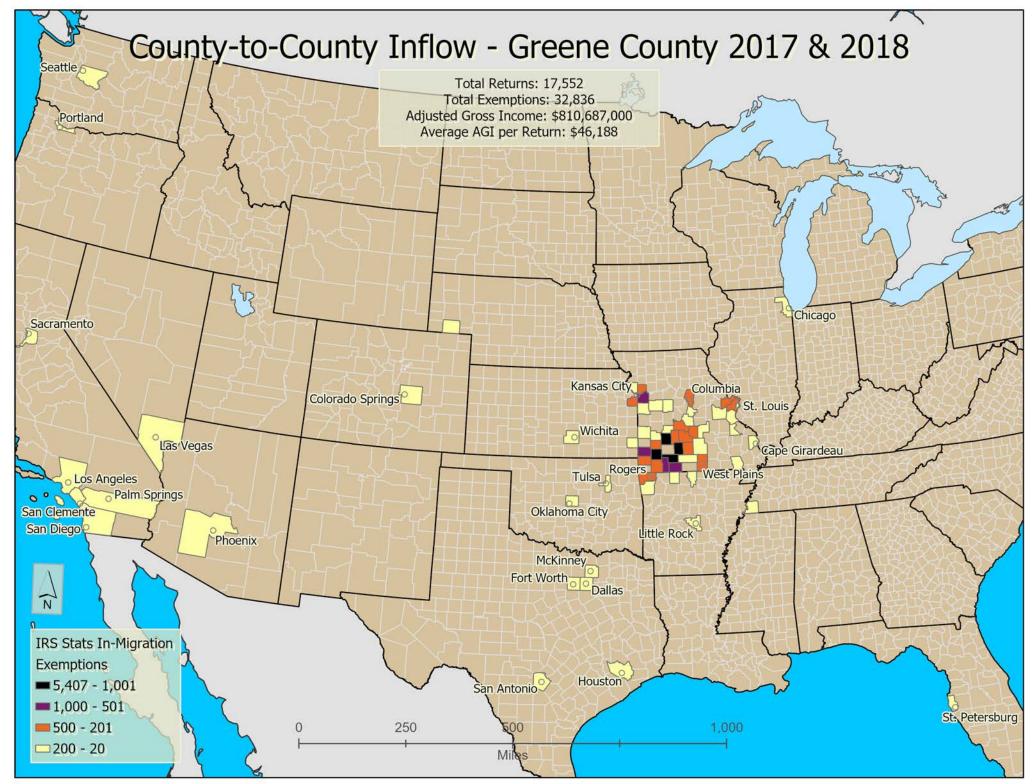


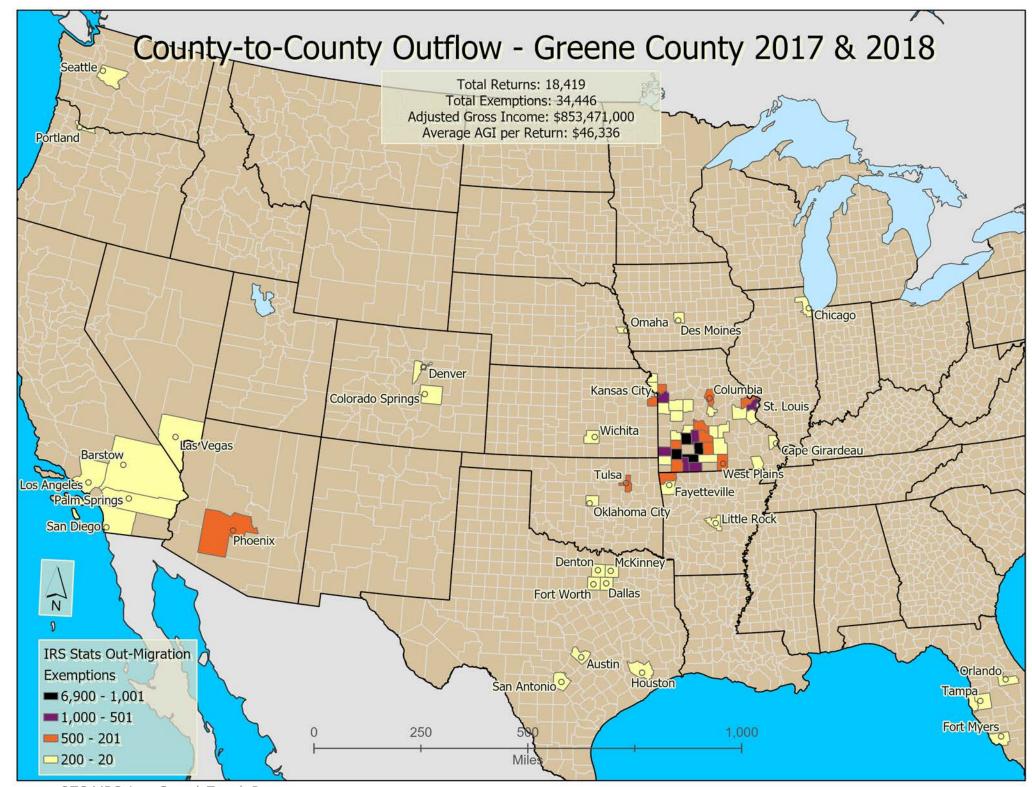


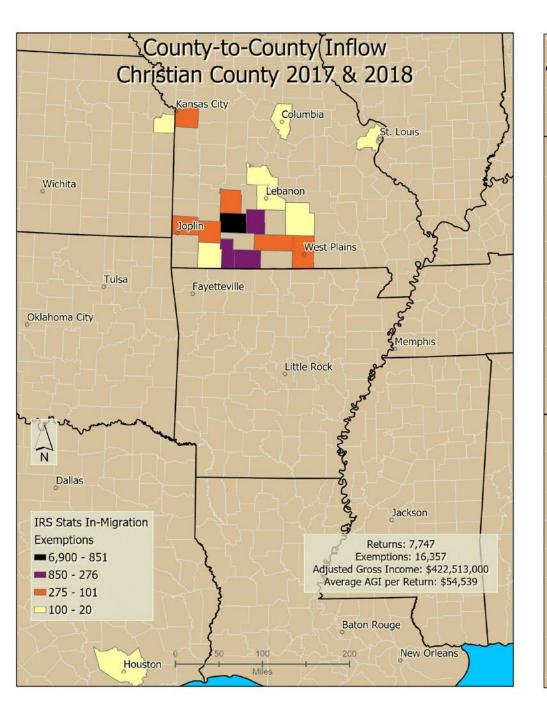


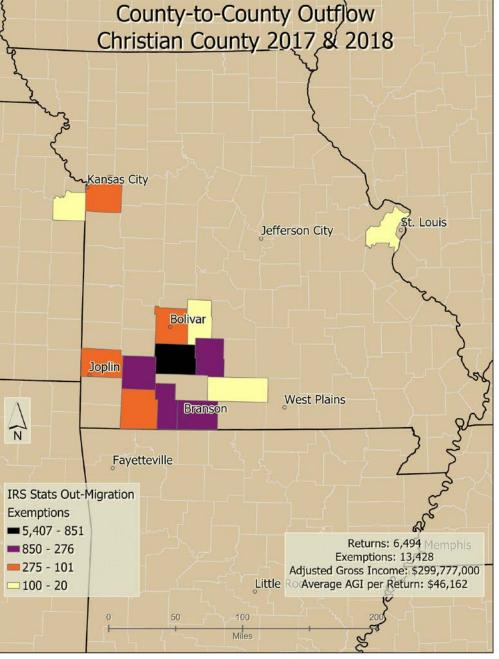












### Demographics & Employment

#### Population Change

This section contains population census data for the Springfield, Missouri Metropolitan Statistical Area (MSA). The Springfield MSA is made up Christian, Dallas, Greene, Polk, and Webster counties in southwest Missouri. Metropolitan Statistical Areas are designated by the U.S. Census Bureau based on the economic ties to a large population center. The number of workers from the five counties in the MSA that are employed in the OTO area have a tremendous impact on the transportation system and local economies.

The OTO prepares the Growth Trends report annually to keep stakeholders and the public informed of changes and trends in population and employment aimed at facilitating cooperative decision making in support of an excellent regional transportation system.

Other transportation related demographics for municipalities and counties in the OTO area as well as the MSA, such as population growth, income, poverty, mean travel time, workforce by industry, and job growth by jurisdiction are presented in this section.



#### Springfield MSA

The Springfield, Missouri Metropolitan Statistical Area (MSA) includes Greene, Christian, Webster, Polk, and Dallas Counties.

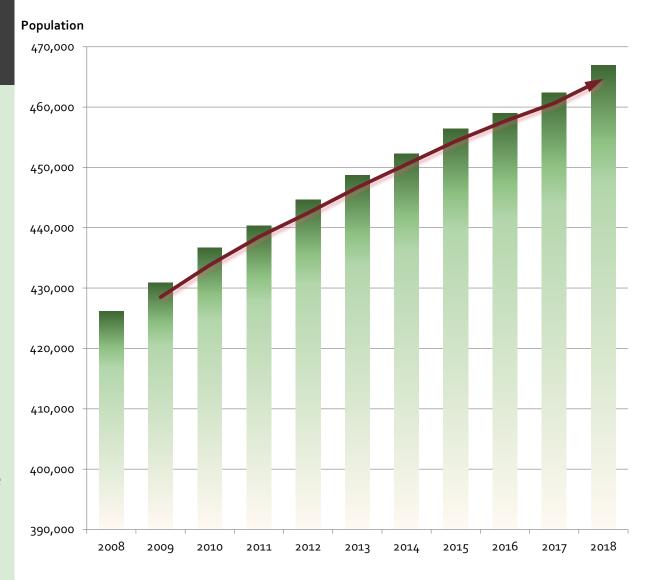
The chart on this page shows the steady increase of the combined MSA county populations.

From 2008 to 2018, the MSA population has increased from 426,144 to 466,978. This is an overall increase of 9.5%, equaling a 0.87% rate of annual growth.

Using the rule of 70, at an annual growth percent of 0.87, it will take the Springfield MSA over 80 years to double in population to 933,956.

# Springfield MSA Population (Greene, Christian, Webster, Polk and Dallas Counties)

Source: U.S. Census Bureau, 2018 Population Estimates



#### Springfield MSA

#### Continued

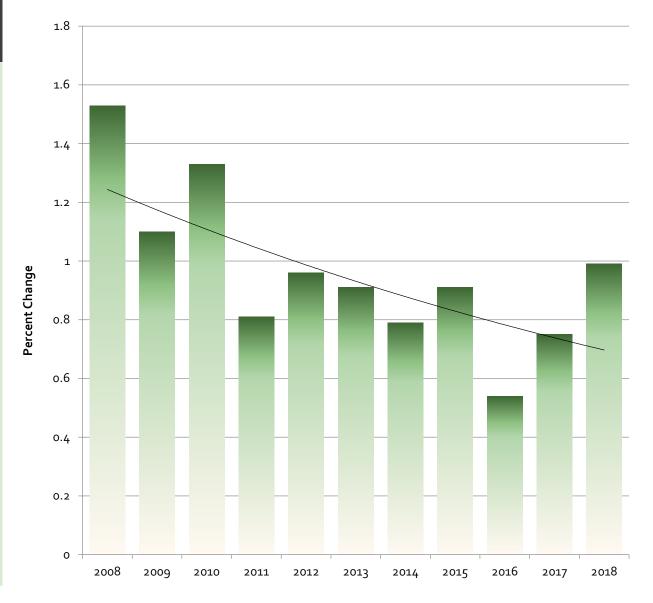
Information for the year-overyear population percent change for the five-county Springfield MSA is presented here.

Although population growth within the MSA has been consistently positive, the percent of change varies from year-to-year. The highest year-over-year percent change during the 11-year period from 2008 to 2018 was from 2007 to 2008.

The lowest year-over-year percent change was from 2015 to 2016 at 0.52%. The change in percent has not been over 1% since 2010.

#### Year-over-Year Population Percent Change Springfield MSA

Source: US Census Bureau, Annual Population Estimates



# Individual Counties

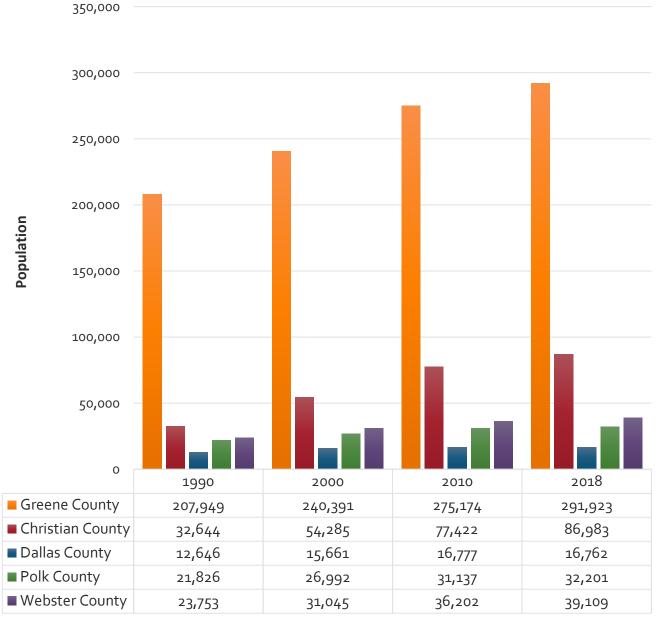
The chart on this page shows population growth for individual counties in the Springfield MSA for each decennial census from 1990 to 2010 and the latest estimate.

Christian county was the fastest growing county in the MSA in terms of percent change during the 28-year period adding 54,339 people. Greene county grew the most in terms of raw numbers adding 83,974 people.

Since 2010, the proportion of the total MSA population has decreased for Greene, Dallas, and Polk counties and increased for Christian and Webster counties.

### Population Increase Springfield MSA Counties 1990-2018

Source: Missouri Census Data Center



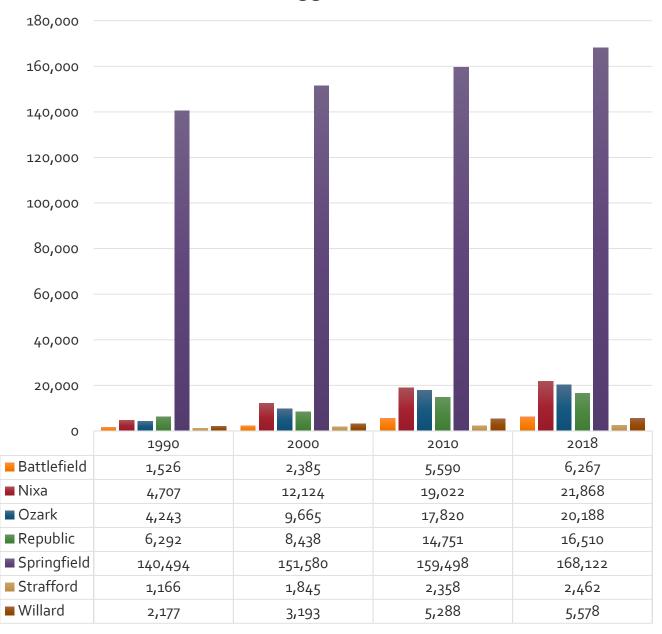
# Cities in the OTO Area

The information on this page shows population growth for cities within the OTO area from 1990 to 2018.

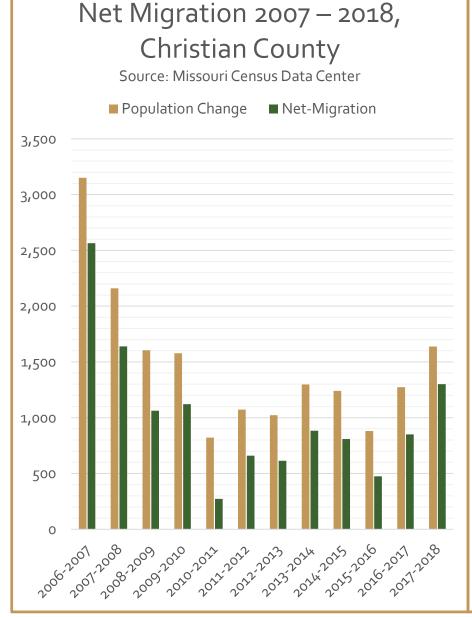
The City of Springfield has experienced steady growth since 2010 and remains the employment and activity hub for the OTO area.

Although more people were added to the region in surrounding cities than Springfield from 2000 to 2010, 27,179 and 7,918 respectively, the opposite is true from 2010 to 2018. During this time Springfield added 8,624 people compared to 7,754 in all other surrounding cities combined.

#### Population Growth for Cities in the OTO Area From 1990 to 2018



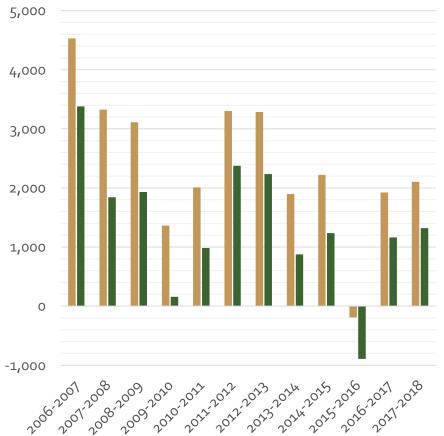
### Net Migration



#### Net Migration 2007 – 2018, Greene County

Source: Missouri Census Data Center

■ Population Change ■ Net Migration



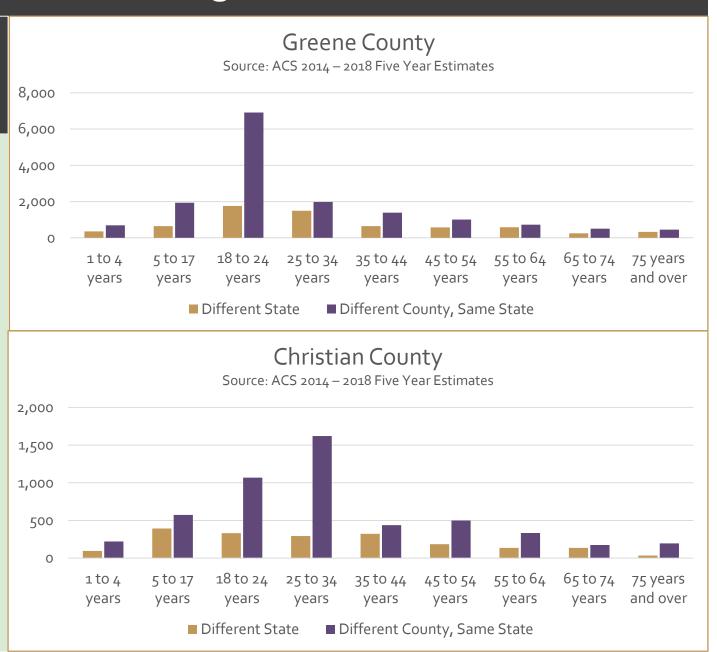
#### In-Migration

#### Age Characteristics

The age characteristics for individuals migrating into Greene and Christian counties in 2018 are presented on this page.

The overwhelming majority of individuals migrating into Greene county were 18 to 24 years old coming from other counties in Missouri. The median age for all in-migrants from other counties in Missouri into Greene County was estimated to be 21.7.

The largest age group migrating into Christian county were individuals 25 to 34 years old from different counties within Missouri. The median ages for in-migrants into Christian County were 28.9 and 29.5 for those from other counties in Missouri and from other states, respectively.



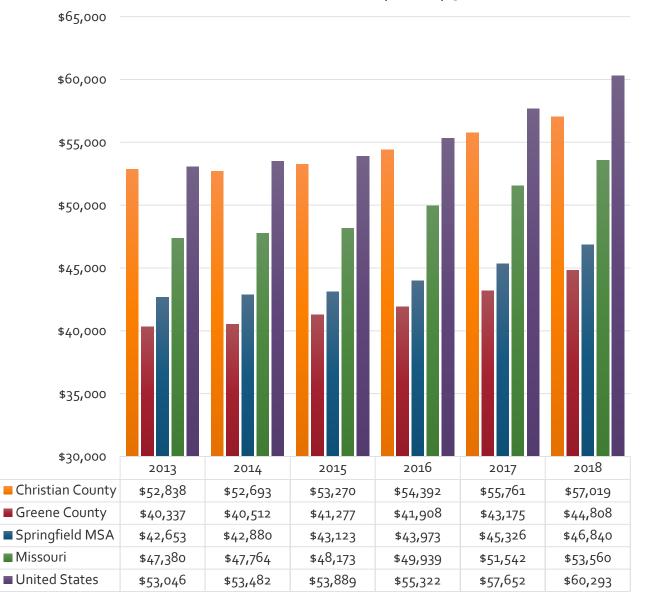
### Median Household Income

Median household income for Greene and Christian Counties, the Springfield MSA, Missouri, and the United States for each year from 2013 to 2018 is presented here.

The American Community Survey data is based on sampling methods and represents a 90% confidence that these figures are within a specified margin of error. The5year estimates should only be compared at five-year intervals.

A comparison of statistical difference between 2013 and 2018 income levels indicates that median household income has risen in all geographies. Based on the sample margins of error, the median income of households in all other counties in 2018 is statistically higher than median household income in 2013 in these areas.

#### Median Household Income Springfield MSA Counties



#### Per Capita Income

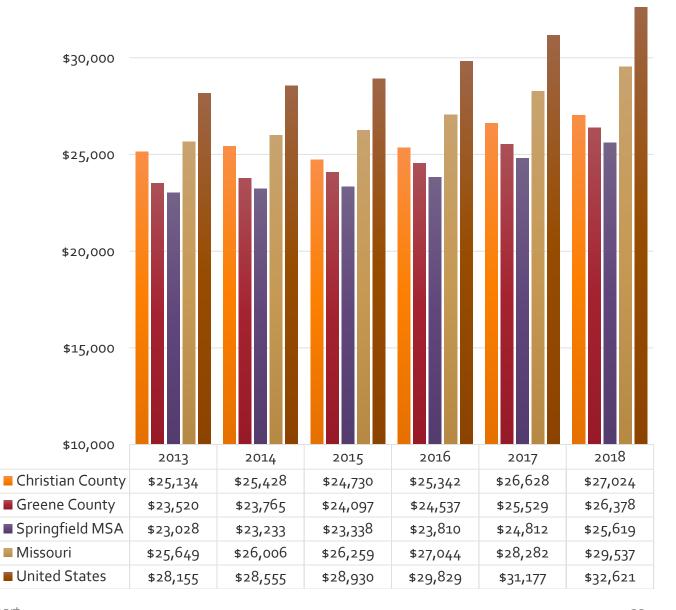
\$35,000

The chart to the right shows per capita income for the United States, Missouri, Greene and Christian Counties, and the Springfield MO MSA.

The counties and MSA are below both the national (\$32,621) and state (\$29,537) per capita income levels for 2018.

As with the ACS data for median household income, comparing 2013 and 2018 per capita income for statistical difference between samples indicates that Greene and Christian Counties and MSA have seen a statistically significant increase in per capita income.

#### Per Capita Income Springfield, MO MSA and Counties



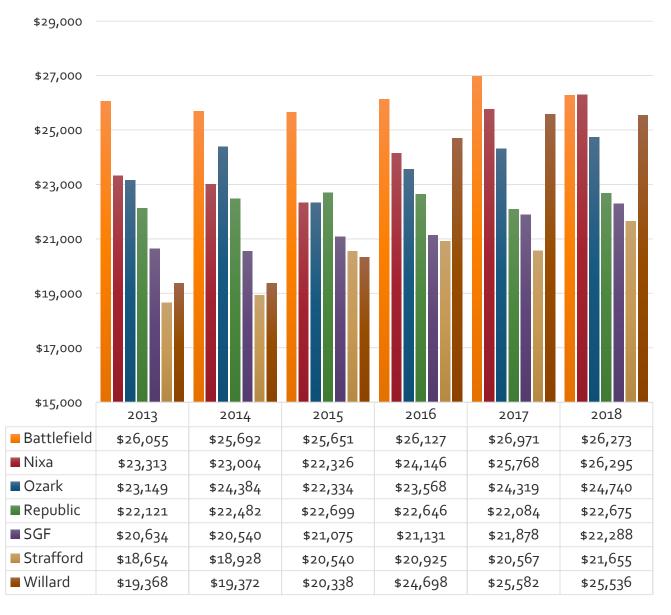
#### Per Capita Income

The chart to the right shows per capita income for the cities within the OTO planning area.

Although there are some noticeable differences in the per capita income for several cities in 2018 compared to 2013, per capita income estimates for Nixa, Springfield, and Willard are statistically different and have increased during this period.

Estimates for Battlefield, Ozark, Republic, and Strafford in 2018 are not statistically different from 2013 estimates of per capita income.

#### Per Capita Income OTO Area Cities

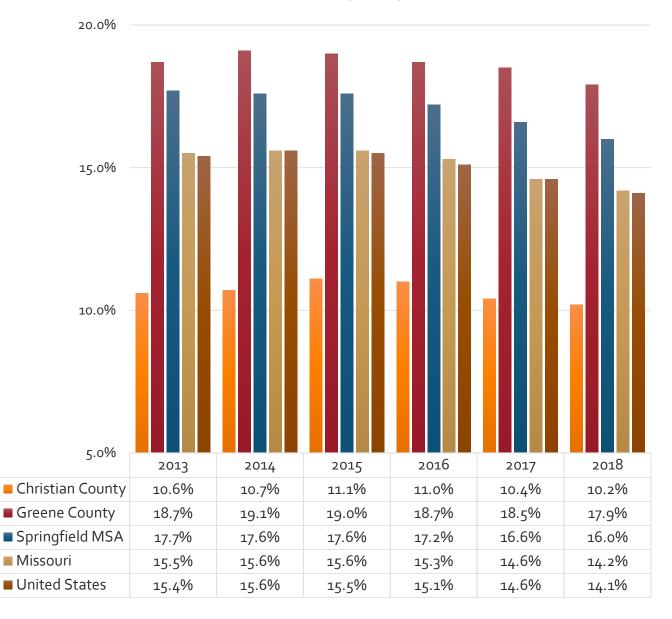


### Individuals Living Below Poverty

In 2018, Greene County had the highest percentage of people living at or below the poverty level with 17.9% in the Springfield, MO MSA. From 2013 to 2018 both Missouri and the United States saw a decrease in the percentage of persons living at or below the poverty level.

Although the estimates for Greene and Christian Counties have decreased between the 2013 and 2018 surveys, they are not statistically different. However, there is 90% confidence that the percentage of people living in poverty has decreased between 2013 and 2018 in the Springfield MSA.

# Persons Living Below Poverty Level Springfield, MO MSA and Counties



# Children Living in Poverty

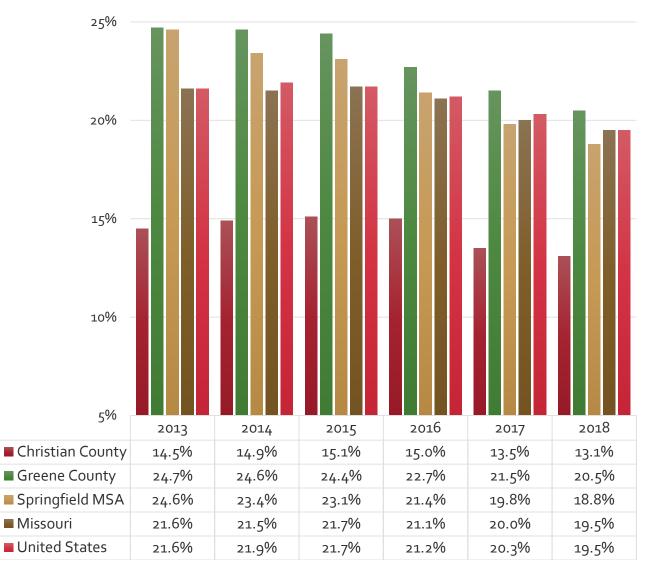
30%

Estimates for the number of Children ages 17 and younger living at or below the poverty level for the Springfield MSA and Greene and Christian Counties are compared to Missouri and the United States in the chart.

The estimates for Missouri and the United States show a decrease in the percentage of children living at or below the poverty level from 2013 to 2018. The estimates for Missouri and the United States are statistically different for 2013 and 2018 and should be considered indicative of a trend for children living in poverty.

Christian County is the only county in the MSA that the 2013 and 2018 decrease is not statistically different. All other estimates are statistically different from 2013 to 2018 and represent a significant decrease.

#### Children Living in Poverty Springfield MSA Counties



### Workforce Education Levels

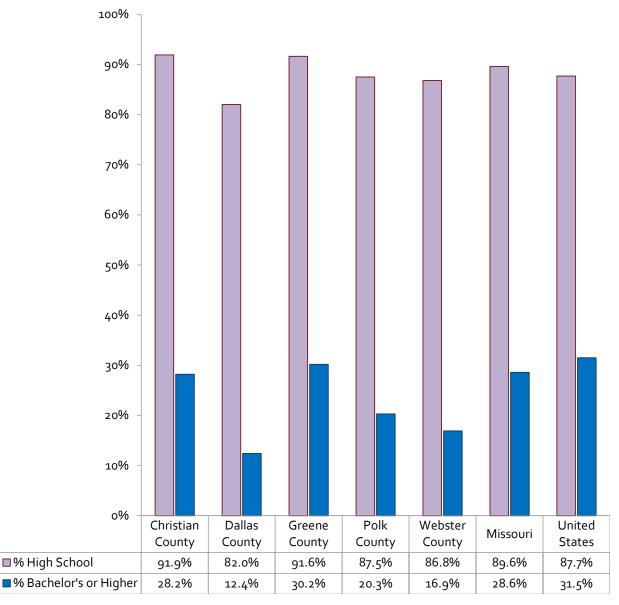
Workforce education levels affect employment and earning levels within communities.

Christian and Greene Counties have the highest percentages of residents 25 years of age or older with a high school diploma. Greene County has the highest percentage of residents 25 years of age or older with a four-year college degree at 30.2 percent.

Within the Springfield MSA, Dallas County has the lowest percentage of high school graduates at 82 percent in addition to the lowest percentage of college graduates at 12.4 percent.

# Workforce Education Levels Percent with High School Diploma and College Degrees in Springfield MSA Counties

Source: 2018 ACS 5-Year Estimates



# Commuting Patterns

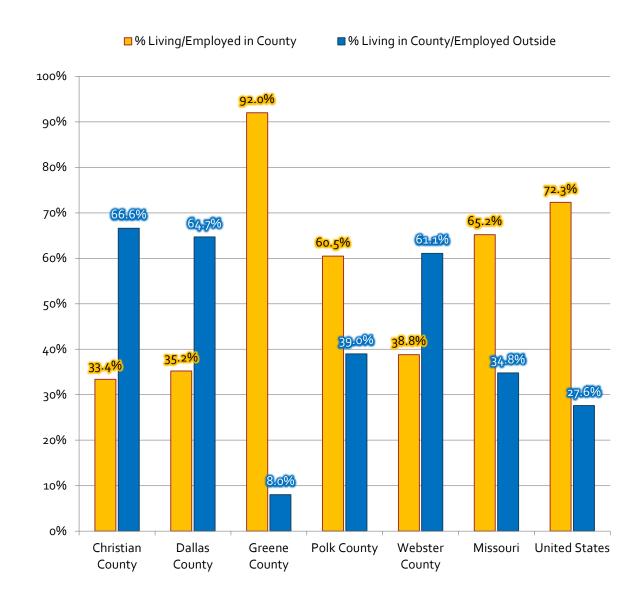
The chart to the right shows the percentage of local workers who work in their county of residence compared to the percentage who work in a different county.

Almost 92 percent of the people who work in Greene County also live in Greene County, as would be expected of the county where the region's primary employment center, Springfield, is located. Conversely, nearly 66.6% of Christian County residents commute to another county for work, as do over 61.1% of workers in Webster County and 64.7% of workers in Dallas County.

Polk County is the only MSA county that is comparable to Missouri or The United States in county of residence vs. county of employment percentages.

#### County of Residence vs. County of Employment

Source: 2018 ACS 5-Year Estimates

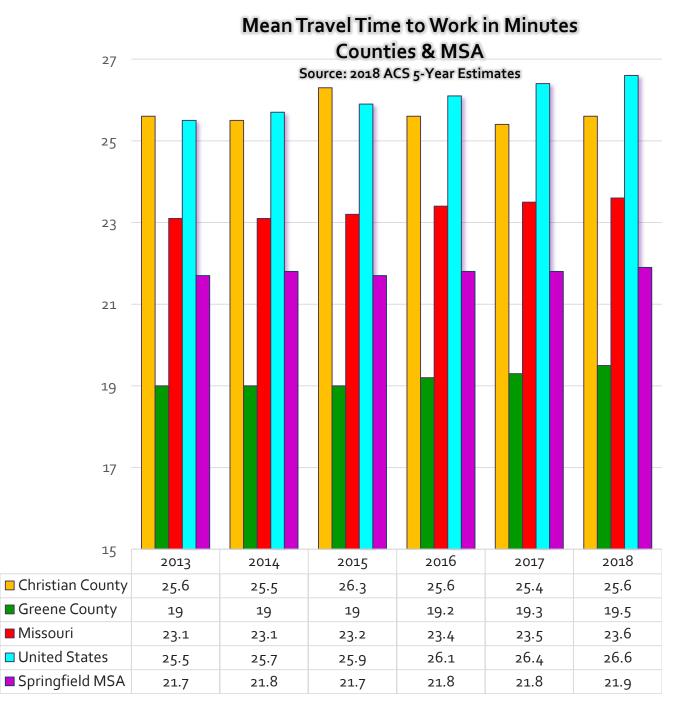


# Mean Travel Time to Work

The chart to the right shows the average commute time for individuals living in Greene and Christian Counties, the State of Missouri, the United States, and the Springfield, MO MSA.

Residents of Greene County have the shortest commutes to work at 19.5 minutes. Workers living in Christian County have the longest commutes with an estimated mean of 25.6 minutes. This is comparable to the United States as a whole.

The travel time estimates between 2013 and 2018 are statistically different and have increased for Missouri and the United States. However, neither of the estimates for Greene and Christian Counties and the MSA are statistically different.

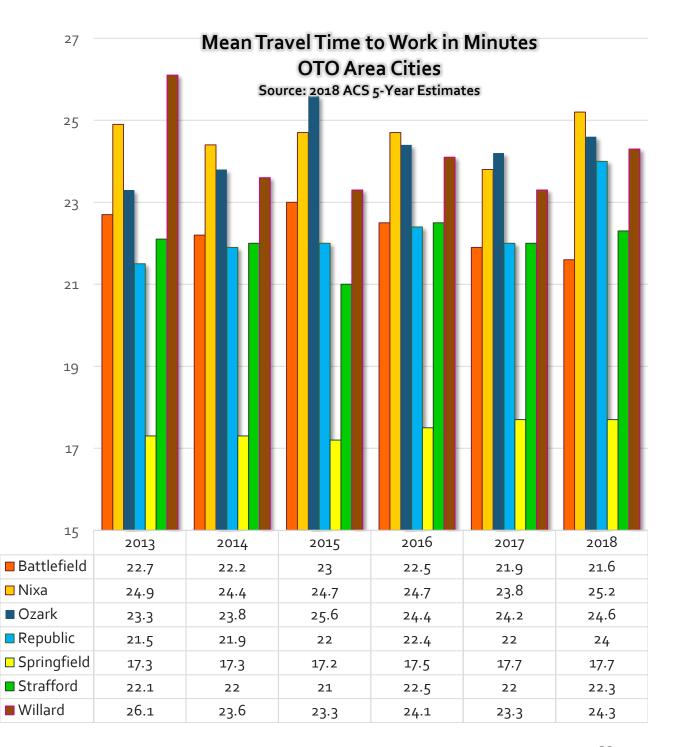


# Mean Travel Time to Work

The chart to the right shows the average commute time for residents living in the seven cities within the OTO area.

Residents of Springfield have the shortest commutes to work at 17.7 minutes followed by those of Battlefield and Strafford at 21.6 minutes and 22.3 minutes, respectively. Workers living in Nixa have the longest commute time with an estimated average of 25.2 minutes to work. Ozark, Republic, and Willard have approximately equal mean travel times to work at 24.6, 24, and 24.3 minutes, respectively.

The travel time estimates between 2013 and 2018 are not statistically different for any of the cities within the OTO area.



### Workforce By Industry Springfield MSA

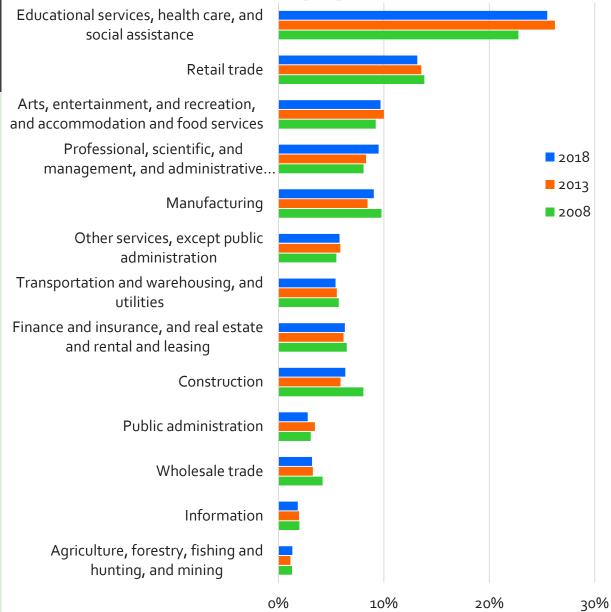
The chart to the right shows the various industries in which the residents of Christian, Dallas, Greene, Polk, and Webster counties are employed.

Educational service, health care, and social assistance continues to employ the largest percentage of the workforce.

The Springfield MSA is home to Missouri State University, has a number of regional hospitals, and not-for-profit public assistance agencies.

## Springfield MSA Percentage of Workers by Industry \*2008, 2013, & 2018



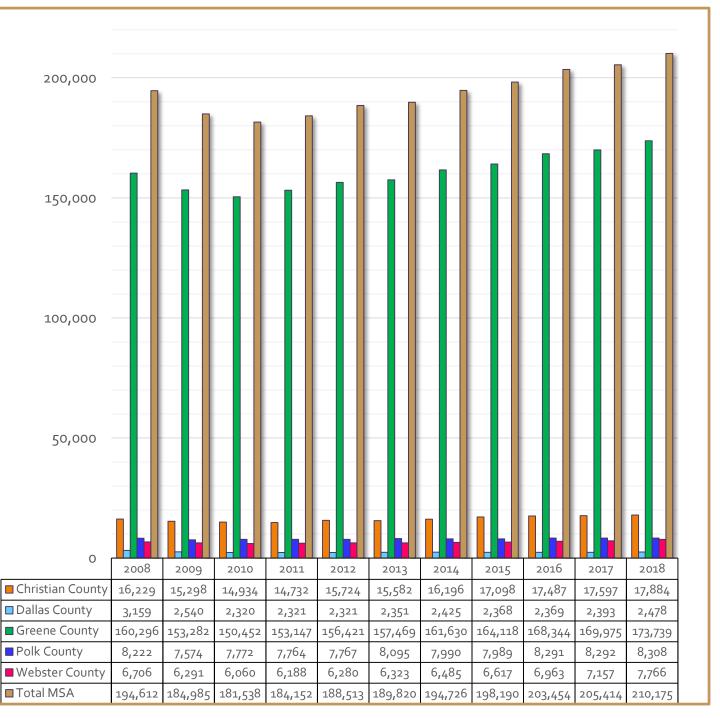


# Number of Jobs by MSA County

The data contained in the chart on this page was retrieved from the U.S. Census Bureau The Local Employment and Household Dynamics (LEHD) Quarterly Workforce Indicators.

The jobs data is derived from the Bureau of Labor Statistics Quarterly Census of Employment and Wages. The data was collected at the county level and summarized for the Springfield MSA.

The data show job losses from 2008 to 2010. Beginning in 2011, jobs numbers start to rebound and climb every year through 2018. The overwhelming number of jobs in the MSA are located in Greene County. Although jobs numbers have risen in every county in the MSA, the proportion of MSA jobs within Greene County from 2008 to 2018 has remained relatively constant.



#### **Data Sources**

The figures provided in this report are for informational purposes only. The Ozarks Transportation Organization (OTO) offers no warranty, either expressed or implied, that the population and housing unit numbers published here are accurate and assumes no liability for any use to which the data may be put.

Building permit data were provided by the Springfield Department of Building Development Services, the Greene County Department of Building Regulations, the Christian County Planning and Development Department, and the cities of Battlefield, Republic, Nixa, Ozark, Strafford, and Willard.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns.

Other data sources include:

Internal Revenue Service, 2020 SOI Tax Stats - Migration Data 2017 – 2018. Accessed 1/24/2020. <a href="https://www.irs.gov/statistics/soi-tax-stats-migration-data-2017-2018">https://www.irs.gov/statistics/soi-tax-stats-migration-data-2017-2018</a>

U.S. Census Bureau, 2020. Quarterly Workforce Indicators. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program, accessed on 1/25/2020 <a href="https://lehd.ces.census.gov/data/#qwi">https://lehd.ces.census.gov/data/#qwi</a>.

U.S. Census Bureau. 2020. LEHD Origin-Destination Employment Statistics (2002-2017) LEHD Origin-Destination Employment Statistics (2002-2017) at <a href="https://onthemap.ces.census.gov">https://onthemap.ces.census.gov</a>. LODES 7.4 [version]

Missouri Census Data Center, 2020. <a href="http://mcdc.missouri.edu/decennial-census/1980-1990.shtml">http://mcdc.missouri.edu/decennial-census/1980-1990.shtml</a>

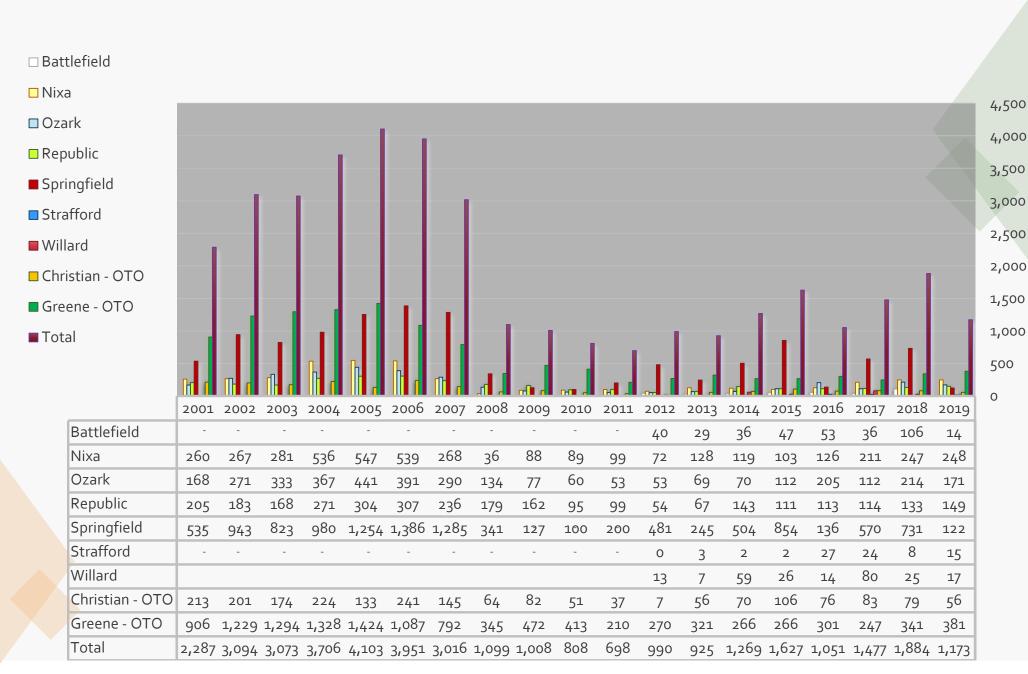
Missouri Census Data Center, 2020. <a href="http://mcdc.missouri.edu/decennial-census/2000.shtml">http://mcdc.missouri.edu/decennial-census/2000.shtml</a> Missouri Census Data Center, 2020. <a href="http://mcdc.missouri.edu/decennial-census/2010.shtml">http://mcdc.missouri.edu/decennial-census/2010.shtml</a>

U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates

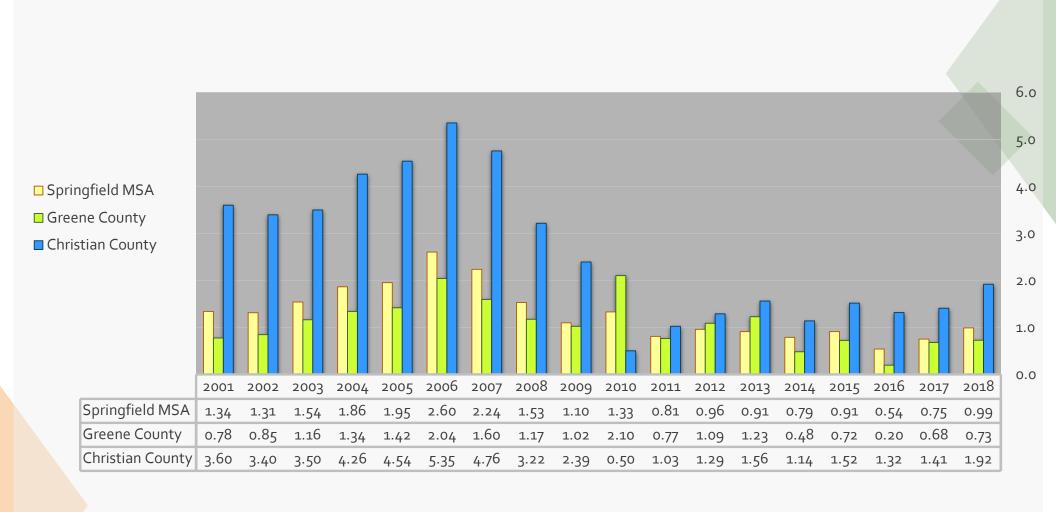
U.S. Census Bureau, 2008 American Community Survey 3-Year Estimates



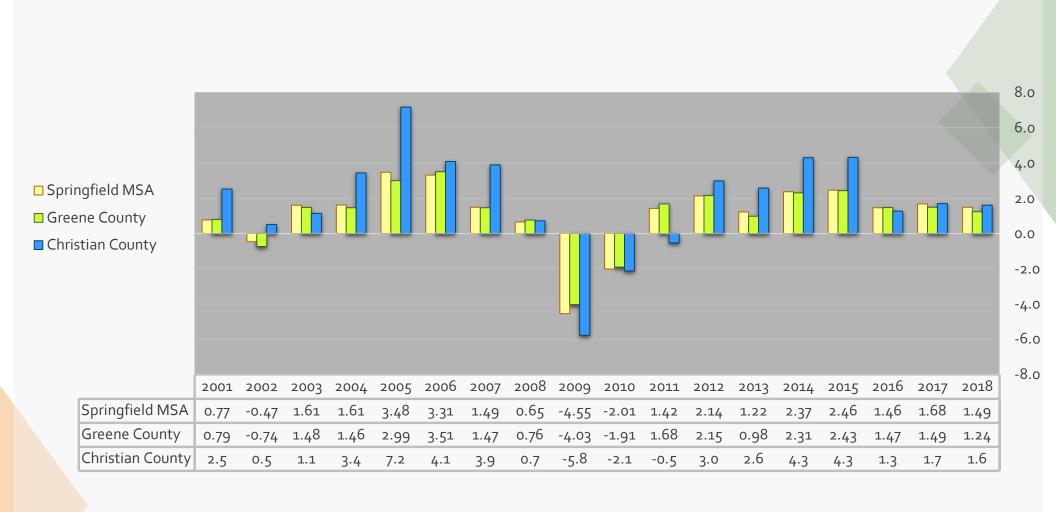
### Appendix A: OTO Area Permit Activity 2001 - 2019



# Appendix B: Year-over-Year Population Percent Change 2000 - 2018



# Appendix C: Year-over-Year Total Jobs Percent Change 2000 - 2018



# TAB 5

#### TECHNICAL PLANNING COMMITTEE AGENDA 3/18/2020; ITEM II.C.

#### Congestion Management Process: Congestion Monitoring and Strategy Evaluation

### Ozarks Transportation Organization (Springfield, MO Area MPO)

#### **AGENDA DESCRIPTION:**

All MPO's that serve a metropolitan area with a population greater than 200,000 are required by federal law to develop a Congestion Management Process (CMP). The CMP is a multi-phased program that monitors congestion and tracks efforts to mitigate that congestion. Mitigation includes operational improvements, behavioral changes, and added capacity.

The OTO began its Congestion Management Process in 2005. The CMP Subcommittee and staff have completed expansions and updates to the process in 2008, 2012, 2017, and now in 2020. The process evaluates congestion based on (1) volume-to-capacity ratio, (2) average travel delay, (3) accident frequency, and (4) intersection level of service measures. Where three or more measures show unsatisfactory performance, congestion exists. The process also tracks capacity and operational improvements completed in the OTO area. Completed projects can be compared to changes in congestion to measure the success of the completed projects.

Below are road segments and intersections that are considered congested using the CMP methodology.

Table 8: Congested Facilities, 2019	
Method #1	Method #2
Crashes, V/C Ratio, Travel Speed	Intersection LOS, V/C Ratio, Travel Speed
Campbell	Campbell and Republic
Primrose to Republic	Kansas and Sunshine
Glenstone	Kansas and Walnut Lawn
At Kearney	Kansas and WB James River Freeway
Chestnut to Monroe	Sunshine and National
Portland/Cinderella to Battlefield	US 60 and Rt. MM/M
Kansas	
Talmage to Kearney	
Bennett to Sunshine	
Battlefield to James River Freeway	
Kearney	
US 65 to Le Compte	
National	
At Battlefield	
Sunshine	
At Campbell	
National to Glenstone	
Lone Pine to Oak Grove	
Deeswood to US 65	
US 160	
Rt. AA to Rt. CC	

The CMP subcommittee generally felt the results of the study matched what drivers experienced on area roads. Congestion was only measured on area arterials; James River Freeway, US 65, and I-44 had some volume and travel speed issues but were not considered congested.

Efforts were again made to evaluate the effectiveness of congestion mitigation activities. The current analysis focuses on evaluating the system's performance across time and before and after improvements. Operational improvements and adding capacity seem to be the most effective mitigation strategies. The current analysis is different than what was performed in 2017. The previous evaluation relied on a detailed statistical analysis that was ultimately inconclusive.

#### **SUBCOMMITTEE RECOMMENDATION:**

The CMP subcommittee recommends Technical Committee endorsement of the *Congestion Management Process: Congestion Monitoring and Strategy Evaluation* and adoption by the Board of Directors.

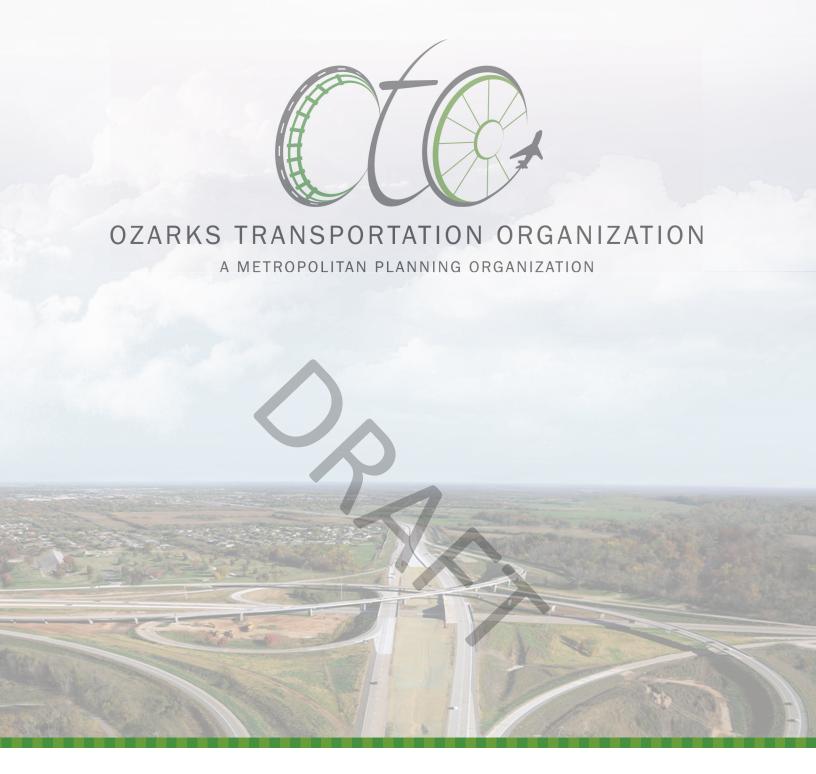
#### **TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:**

A member of the Technical Planning Committee is requested to make the following motion:

"Move to recommend that the Board of Directors approve the *Congestion Management Process: Congestion Monitoring and Strategy Evaluation,* dated April 2020."

OR

"Move to recommend that the *Congestion Management Process: Congestion Monitoring and Strategy Evaluation*, dated February 2020, have the following revisions..."



# **Congestion Management Process**

Congestion Monitoring and Strategy Evaluation

Board of Directors Adoption: Expected April 2020



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### Report Highlights

This report offers an updated looked at congestion in the OTO area. Data on current congestion was collected and recent system improvements, either capacity or operations related, were added to a list of completed projects. Changes in congestion and implemented projects were compared to determine if regional investments were having a positive impact on congestion.

The following are highlights found during the Congestion Monitoring Process.

#### **Volume-to-Capacity Ratio**

- Only 5.8 miles of roadway, of the 134 miles with data available for comparisons, have seen peak hour volumes rise above roadway capacities since the publication of the 2016 CMP update
- Approximately 90 of the 134 miles of roadway with volume data available have remained or improved to an acceptable Volume-to-Capacity ratio

#### **Crash Frequency**

- 130 of 175 signalized intersections have an average or below average frequency of crashes
- 18% of CMP mileage have crash frequencies above the MPO average for a given road type
- The percentage of roads and intersections with above-average crash frequencies is higher than recorded in the 2017 CMP.

#### **Average Travel Speeds**

- The average delay decreased from 8.8 to 8.2 mph below posted speed limits since 2016.
- PM Northbound, Southbound, and Westbound traffic have the highest average delay.
- Travel speeds have increased along freeway segments with recently added capacity.

#### Intersection Level-of-Service

- 93% of intersections during the AM commute and 95% of intersections during the PM period have an acceptable LOS.
- More intersections experienced declines in service than experienced improvements.
- Only 7 intersections function at an LOS F, all during the AM commute.

#### Congested Facilities and Facility of Concern

Congested Facilities, 2019					
Method #1	Method #2				
Crashes, V/C Ratio, Travel Speed	Intersection LOS, V/C Ratio, Travel Speed				
Campbell	Campbell and Republic				
Primrose to Republic	Kansas and Sunshine				
Glenstone	Kansas and Walnut Lawn				
At Kearney	Kansas and WB James River Freeway				
Chestnut to Monroe	Sunshine and National				
Portland/Cinderella to Battlefield	US 60 and Rt. MM/M				
Kansas					
Talmage to Kearney					

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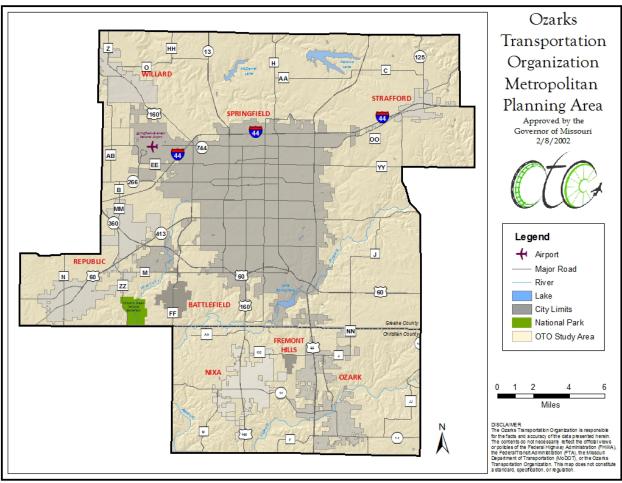
Congested Facilities, 2019, continued						
Method #1	Method #2					
Crashes, V/C Ratio, Travel Speed	Intersection LOS, V/C Ratio, Travel Speed					
Kansas (continued)						
Bennett to Sunshine						
Battlefield to James River Freeway						
Kearney						
US 65 to Le Compte						
National						
At Battlefield						
Sunshine						
At Campbell						
National to Glenstone						
Lone Pine to Oak Grove						
Deeswood to US 65						
US 160						
Rt. AA to Rt. CC						

#### Facility of Concern

There is one area that has been identified as a *Facility of Concern*. Route CC, between 22<sup>nd</sup> and US 65, has issues related to all four congestion indicators but there isn't sufficient overlap to meet the strict definition of congestion using Method #1 or Method #2. There are safety and capacity concerns throughout this area. The intersection at 22<sup>nd</sup> has LOS issues, and there are speed issues related to the interchange.

### Introduction

The Congestion Management Process (CMP) is a systematic approach to addressing congestion within the Ozarks Transportation Organization's (OTO) planning area, shown in **Map 1**. The process was developed through a collaborative effort involving area jurisdictions and technical experts. The intent of the CMP is to improve the efficiency and effectiveness of both the existing and future transportation system through the implementation of Transportation System Management (TSM), which includes Intelligent Transportation Systems (ITS) and Travel Demand Management (TDM) techniques.



Map 1: Ozarks Transportation Organization Metropolitan Planning Area Map

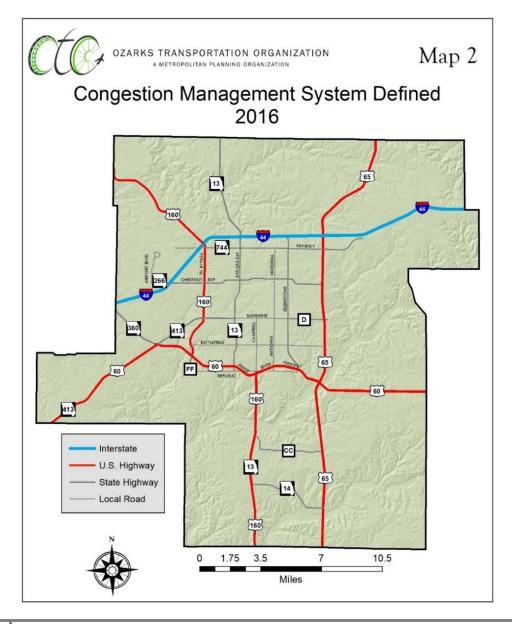
#### **Overview of Previous Phases**

The CMP consists of three main phases. Phase I, completed in 2005, is a methodology to identify congestion and designate specific strategies to address congestion. Phase II, completed in 2008, is the identification of where congestion is occurring or is expected to occur during the 20-year plan horizon and the implementation of identified strategies. Phase III, first completed in 2012, is the development of a monitoring program to determine if selected strategies are effective in dealing with congestion at

identified locations, and if not, identify other strategies to alleviate congestion. This 2020 Congestion Monitoring report is an update to Phase III and should be updated every three to five years.

#### **Overview of CMP Network**

Phase I and II of the CMP identified the CMP network as OTO-area roadways that are part of the National Highway System (NHS). With passage of MAP-21, the CMP network was expanded in Phase III to include the Enhance-NHS, the traditional NHS and principal arterials. In addition, committee members chose to include segments of some principal arterials not included in the Enhanced-NHS, such as National north of Chestnut Expressway or Kearney west of I-44. These additional segments provide useful local information. No major changes were made in response to the passage of the FAST Act. The CMP network defined in 2016 can be seen in **Map 2** below.



### **Congestion Monitoring**

The following four measures are the indicators the OTO has elected to monitor to determine where congestion is occurring. These measures are (1) Volume-to-Capacity Ratio, (2) Crash Frequency, (3) Average Travel Speed, and (4) Intersection Level of Service. These measures are defined in this congestion monitoring report.

#### 1. Volume-to-Capacity Ratio

The first measure OTO utilizes to monitor congestion is peak hour volume-to-capacity ratio. This ratio is used to determine which roads have peak volumes that exceed the road's capacity and which roads are

Table :	Table 1: OTO Daily Vehicle Miles Traveled					
Year	or VMT OTO Population		VMT per Capita			
2018	5,460,490	332,321*	16.43			
2017	5,502,933	329,330*	16.71			
2016	5,395,874	327,861*	16.46			
2015	5,229,938	326,321*	16.03 15.67			
2014	5,061,794	323,031*				
2013	4,933,188	933,188 320,259*				
2012	<b>2</b> 4,954,024 316,298*		15.66			
2011	<b>11</b> 4,931,037 312,126*		15.80			
2010	5,010,884	310,283	16.14			
2009	<b>9</b> 4,969,336 303,720*		16.36			
2008	5,063,022	298,910*	16.94			
*Census Estimate						

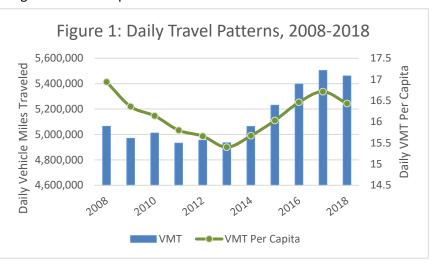
approaching capacity. Peak hour traffic volumes that are used in the ratios can be found on Map 3.1. These traffic volumes are calculated from intersection turning movement studies and segment counts conducted over the last few years. Data is not available for all road segments. Roadway capacities are a function of the number of traffic lanes. Capacities have been calculated for each type of road in the OTO area, including the section of 4+1 lane expressway National Avenue, south of Walnut Lawn, and the 5+1 lane section of Campbell, south of Primrose. An important indicator of traffic volumes is Vehicle Miles Traveled (VMT). The indicator represents the total number of miles driven by the OTO population each day. If VMT is rising, it is likely associated with increased traffic volumes. Recent trends show a rebound in VMT for the area.

#### **Daily Vehicle Miles Traveled (VMT)**

 $\textbf{Table 1} \ \text{shows the 2018 VMT for the OTO area is down}$ 

from 2017, but is generally continuing to follow the upward trend that has existed since 2014. The

overall increase is associated with a strong national economy and low energy costs. Data shows the VMT increase of 527,303 miles traveled, or 10.7 percent, since 2013. Per Capita VMT, as shown **Figure 1**, has experienced more change over the last decade. Since 2013, has track closely with VMT. This suggests VMT is rising faster than population growth. People are driving more.



#### **Volume-to-Capacity Ratio**

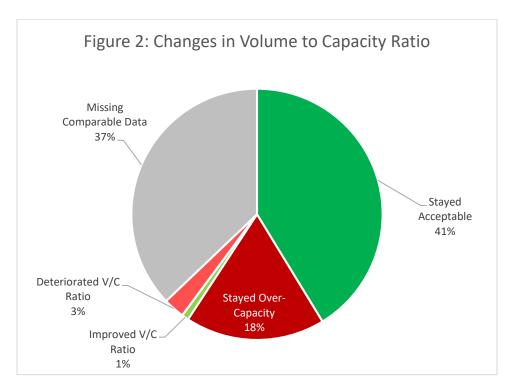
Map 3.1 includes volume-to-capacity ratios broken into three categories: *below capacity, nearing capacity,* and *at or above capacity*. Segments with a volume-to-capacity ratio of 0 to 0.77 are *below capacity* and offer an LOS of A, B, or C. Segments with a ratio of .78 to .86 are *nearing capacity* and offer a LOS of D. Ratios of 0.86 or above offer LOS E or F and are *at or above capacity*. For purposes of this study, LOS A, B, C, or D are acceptable. The Volume to Capacity status of roads can be reviewed in **Table 2** below. Approximately 90 of the 134 miles of roadway with volume data available have remained or improved to an acceptable Volume-to-Capacity ratio, as shown in **Figure 2**.

	Stayed Over-	Improved V/C	Deteriorated V/C	
Stayed Acceptable	Capacity	Ratio	Ratio	Missing Data
I-44				
Entire OTO segment				
James River Freeway	(I-44 to US 65)			
I-44 to Campbell	Campbell to US 65			
US 65				
I-44 to Division	Battlefield to US 60			Division to Sunshine
Sunshine to	Battleffeld to 03 60			Sunsnine
Battlefield				South of US 60
US 60 West / MO 413				
Illinois to Hines	Oakwood to Rt MM			Rt MM to JRF
JRF to McCurry				
US 60 East				
Rt. NN/J to MO 125				US 65 to Rt. NN/J
US 160 North (Willard	to I-44)			
OTO Line to Fm Rd. 94	Fm Rd 94 to I-44			
US 160 South (Nixa to	Springfield)			
		Bentwater to		Melbourne to Rt
JRF to Melbourne	Rt AA to Rt CC	Tracker	Rt CC to Bentwater	СС
Kathryn to OTO Line				
MO 13 (North of Sprin	gfield)	ı		
Radio Ln to I-44				OTO Line to Radio
West Bypass / Rt F (/-4	44 to Republic Rd)			
Entire OTO segment				
Kansas Expressway				
	Chestnut to JRF		I-44 to Division	Division to Chestnut
	Chestilut to Jili		ויייין ווייייין וויייייין ווייייייייייי	JRF to Republic

Table 2: Volum	Stayed Over-	Improved V/C	Deteriorated V/C	
Stayed Acceptable	Capacity	Ratio	Ratio	Missing Data
Campbell (Sunshine t	o JRF)			
	Sunshine to			Broadmoor to
	Broadmoor			Primrose
	Primrose to JRF			
National				
	St Louis to			Battlefield to
Primrose to JRF	Battlefield			Primrose
Kearney to St Louis				
Glenstone		I		
Battlefield to JRF	I-44 to Sunset		Scenic to Battlefield	
Kearney				
General Aviation to		Glenstone to		
Glenstone	US 65 to Le Compte	Barnes		Le Compte to I-44
Barnes to US 65				
Chestnut Expressway	1	1		
West Bypass to				Airport Blvd to
West St.	Belcrest to US 65	Grant to Drury		West Bypass
Kansas to Grant				
Drury to Belcrest				
Sunshine		1		
McCurry to Kansas	Kansas to US 65			
Battlefield				
West Bypass to Scenic	Scenic to Kansas			Fort to Fremont
Kansas to Fort	Lone Pine to US 65			
Glenstone to Lone Pine				
Republic				
	Harvard to			Golden to
Fremont to Harvard	JRF/Glenstone			Broadway
Rt. CC				
US 160 to Main				Main to US 65
MO 14				
	Fort to 22 <sup>nd</sup>	US 160 to Fort		22 <sup>nd</sup> to US 65

#### **Volume-to-Capacity Level of Service Summary**

Only 5.8 miles of roadway, of the 134 miles with data available for comparisons, have seen peak hour volumes rise above roadway capacities since the publication of the 2017 CMP update. During this time, 6,000 people have moved to the region and daily VMT has increased by 4.4%.



The pace at which roads are becoming overcapacity seems to correspond with the region's overall growth.

#### 2. Crash Frequency

Crash frequency is important to consider because it affects the reliability of the transportation system. A fender bender may only cause traffic to back up for a few minutes, but for every minute a lane is blocked, it takes four minutes for traffic to return to normal flows. This slow recovery helps contribute to congestion. Crash data used in this analysis is provided by the Missouri Highway Patrol and the Missouri Department of Transportation. Crash frequencies are analyzed for both intersections and along roadways. For comparison purposes, intersections are divided into major intersection (*over 30,000 entering volume*) and minor intersections (*under 30,000*). Range, or roadway, crash frequencies are compared to same year MPO crash frequencies for each type of road; such as freeway, expressway, 5-lane, or 3-lane. **Map 4.1** and **4.2** contains crash frequency information for both intersections and segments, for the OTO entire area and focused on the City of Springfield respectively.

#### Range Crash Frequency

The roadway segment crash frequency is calculated by using the formula below. The 3-year crash frequency for each segment is then compared to the MPO average crash frequency for that period for that type of segment, i.e. freeway or 5-lane.

Formula for Crash Frequency (Range): Segment Crash Frequency = Number of Crashes (3yr)

Length of Segment

Below Average: Crash frequency for that segment is 50% or less of the MPO average crash frequency

for that type of road during the same period.

**Average:** Crash frequency for that segment is between 50.1% and 150% of the MPO average

crash frequency for that type of road during the same period.

**Above Average:** Crash frequency for that segment exceeds 150% of the MPO average crash frequency for that type of road during the same period.

**Table 3** shows the change in crash frequencies along CMP road segments. Five segments along four roads experienced decreased crash frequencies relative to the average, and 15 segments along eight roads experienced increases relative to the average.

Table 3: Road Segments Experiencing a Change in Crash						
Decline in	Crashes		Increase in Crashes			
Above Average Segment Now in Average or			Segment Moved into <b>Above Average</b> Category			
Below Avera	ge Category					
Glenstone			Battlefield			
Division to Chestnut			Lone Pine to US 65			
US 65			Kansas			
SB Evans to County Line	NB Kearney to I-44		SB Kearney to Grand	NB JRF to Battlefield		
US 160 (North Of Springfie	eld)		James River Freeway			
Farm Road 102 to I-44			WB Campbell to Kansas	WB US 65 to Glenstone		
<b>US 160</b> (South of Springfie	US 160 (South of Springfield)		EB National to Glenstone			
Farm Road 186 to to JRF			MO 14			
			US 160 to Cheyenne	EB Fremont to US 65		
			Rt. CC			
			US 160 to Cheyenne	Fremont to US 65		
			US 60 (West)			
			Oakwood to MO 174			
			US 65			
			SB Battlefield to	NB Business 65 to MO		
			Glenstone	14		
			US 160 (South of Springfield)			
			SB County Line to Rt. CC	NB Rt. CC to County Line		

Overall, 18% of CMP segment length, both divided and undivided, have crash frequencies above the MPO average. This amount is a sizeable increase from 2016, when only 10% of segment length had above average frequencies.

#### **Intersection Crash Frequency**

The intersection crash frequency is calculated by using the formula below. The 3-year crash frequency for each intersection is then compared to MPO average intersection crash frequencies for that period. Two values are calculated for MPO intersection crash averages, intersections at or above 30,000 entering volumes and intersections below 30,000 entering volumes.

#### Formula for Crash Frequency (Intersection):

Intersection Crash Frequency = Number of Crashes (3yr)

#### \*\*\*Draft\*\*\*

Below Average: An intersection is considered to have a below average crash frequency if the three-

year crash frequency is 50.0 percent or less of the MPO average crash frequency for

signalized intersections during the same period.

Average: Intersection is considered to have an average crash frequency if the three-year

average crash frequency for that segment is between 50.1 percent and 150.0 percent of the MPO's average crash frequency for signalized intersections during the same

period.

Above Average: An intersection is considered to have an above average crash frequency if the three-

year crash frequency for that segment exceeds 150.0 percent of the MPO's average

crash frequency for signalized intersections during the same period.

**Tables 4** shows changes in crash frequencies at CMP intersections. Twenty-one intersections experienced increases in crashes, compared to MPO averages. Twelve intersections experienced decreases in crashes. 166 of 220 measured signalized intersections have an acceptable frequency of crashes. Conversely, 25% of measured signalized intersections have an above-average crash frequency. This is an increase as compared to approximately 19% of measured intersections having an above-average crash frequency in 2016.

Declir	ne in Crashes	Increase in Crashes			
Above Average Intersection Now in		Intersection Move	Intersection Moved into Above Average		
Average or Below Average Category		Ca	tegory		
Battlefield		Battlefield			
Campbell <sup>A</sup>	Glenstone <sup>B</sup>	Fort			
Campbell		Chestnut Expresswa	ay		
Sunset	Battlefield <sup>A</sup>	Grant			
Chestnut		Glenstone			
Benton	National <sup>C</sup>	EB I-44 Ramp			
Glenstone		Kansas Expressway			
Bennett	Battlefield <sup>B</sup>	Mount Vernon	Elfindale		
Kansas		Kearney			
Division	Walnut Lawn	Grant	Mayfair		
National		NB US 65 Ramp	National <sup>A</sup>		
Sunshine <sup>D</sup>	Chestnut <sup>C</sup>	Republic	Republic		
Republic		Cox			
Fremont		Rt. CC			
Sunshine		US 160 <sup>B</sup>			
West Bypass <sup>E</sup>	National <sup>D</sup>	Sunshine			
US 60		Zimmer			
Rt. MM/Rt. M		<b>US 13</b> (North of Spri	ingfield)		
West Bypass		Rt. O			
Mt. Vernon	Sunshine <sup>E</sup>	<b>US 160</b> (North of Sp	ringfield)		
		Rt. AB	Jackson		
		US 160 (South of Sp.	ringfield)		
		Tracker	Aldersgate		
		Wasson	Rt. CC <sup>B</sup>		
		West Bypass (1-44 to	o JRF)		
		EB I-44 Ramp	Division		
		WB JRF Ramp			
		National			
		Kearney <sup>A</sup>			

<sup>\*</sup>Superscripts indicate a major intersection that is listed along both intersecting corridors.

A total of 25% of signalized intersections on the CMP network have above average crash frequencies in 2019. This is an increase from 19% in 2016. These crashes are also negatively impacting the experienced level of service at the affected intersections.

#### **Crash Frequency Summary**

Within the OTO area, increasing numbers of crashes is concerning. Twenty-three intersections and 15 road segments moved into the above average category from 2016-2019.

#### 3. Average Travel Speed

Historical data collected through real-time traffic monitoring programs Acyclica<sup>©</sup> and RITIS<sup>©</sup>, commonly referred to as probe data, was used to calculate travel speeds along the CMP network in 2019. Data from the morning rush, 7am-8am, and evening rush, 5pm-6pm in Springfield and 5:30-6:30 outside of Springfield, was during April and May 2019. Samples ranged from several hundred travel times to several thousand, depending on the corridor and time of day. To better represent the range in delay experienced, 25<sup>th</sup> percentile speeds were used in delay calculations. These 25<sup>th</sup> percentile speeds are then compared to posted speed limits to calculate delay. A road is considered severely delayed if the travel speed is greater than 20mph below the posted speed limit. **Maps 5.1** and **5.2** shows travel delay for the AM and PM peaks, respectively.

**Table 5** identifies the average peak hour travel time delays in miles per hour by direction of travel. Overall, average delay is down. Delay is improved in three of the four AM commutes and in one of the four PM commutes. Overall delay has increased slightly when compared to 2016. PM Southbound continues to suffer the most delay of any commute.

Table 5: Average Delay-MPH Below the Posted Speed Limit					
Peak Hour /	2016	2019			
Direction	Average Delay	Average Delay			
AM Eastbound	7.2	7.0			
AM Westbound	6.2	7.0			
AM Northbound	8.0	7.2			
AM Southbound	8.1	8.0			
PM Eastbound	9.4	9.8			
PM Westbound	9.0	10.1			
PM Northbound	11.0	10.4			
PM Southbound	12.9	13.5			
Average	8.8	9.0			

#### **Travel Speed Summary**

The corridors experiencing severe delay in 2019 are similar to the corridors identified in 2016. Many of these are urban primary arterials or expressways that carry significant traffic volumes. The corridors have constrained rights-of-ways and many intersecting streets. Highways, such as US 60 West and US 160 South, have ongoing planning and design projects aimed at improving traffic flow or evaluating the public's interest in maintaining traffic flow. The planned extension of Kansas Expressway to the south will also provide traffic relief for existing highways in southern Greene county. These projects and studies are important steps towards holding travel delay steady or seeing it decline.

#### 4. Intersection Level of Service (LOS)

Intersection level of service is a function of delay. Accordingly, an intersection with LOS A would have a shorter delay than an intersection with LOS F. The longer traffic is delayed at an intersection, the lower/worse the level of service for that intersection. **Maps 6.1** and **6.2** show changes in intersection LOS for the entire OTO region. **Maps 6.3** and **6.4** show changes within the City of Springfield.

#### \*\*\*Draft\*\*\*

#### **Level OF Service Scale:**

LOS A, B, C (Green) LOS D (Yellow) LOS E (Orange) LOS F (Red)

**Table 6** and **Table 7** contain summaries of intersection LOS for the AM and PM commutes. All intersections with 2019 data are represented in the totals included in each table.

Table 6: AM Peak Intersection LOS Summary									
			LOS Improved from 2016			LOS	<b>Declined</b>	from <b>201</b> 6	
LOS in 2019	Total, 2019	No Change Since 2016	From LOS D	From LOS E	From LOS F	From LOS A,B,C	From LOS D	From LOS E	From LOS E
LOS A,B,C	194	157	14	2	2				
LOS D	30	11		2	2	13			
LOS E	11	2			2	4	2		
LOS F	7	0				5	0	1	

Table 7: PM Peak Intersection LOS Summary									
			LOS Improved from 2016		LOS	Declined	from <b>201</b> 6		
LOS in 2019	Total, 2019	No Change Since 2016	From LOS D	From LOS E	From LOS F	From LOS A,B,C	From LOS D	From LOS E	From LOS E
LOS A,B,C	178	140	13	3	3				
LOS D	51	25		2	4	16			
LOS E	12	1			0	3	7		
LOS F	0	0				0	0	0	

An intersection must have data for 2016 and 2019 for it to be represented in the change statistics shown in Table 6 and 7.

#### **Intersection LOS Summary**

Overall, OTO's intersections are providing acceptable service. A total of 24 intersections saw improved LOS and 25 intersections saw deteriorated LOS during morning commutes between 2016-2019. The PM commute saw similar movements, with 25 improving and 26 deteriorating.

#### 5. Congested Facilities

There are two methods for identifying congested facilities used in this CMP. A facility must be shown as unacceptable for three different congestion measures. All facilities identified as congested have a Volume-to-Capacity ratio over 0.86 and a travel delay of 20mph or greater. Facilities identified with Method #1 also have above average crash frequencies, while facilities identified with Method #2 also have an intersection LOS of E or F. Method #1 identifies intersections and segments as congested since its three factors include both intersections and segments. Method #2 only identifies intersections as congested since all three factors do not contain segments. **Table 8** contains a listing of congested facilities identified with both methods. Congested Facilities are also shown in **Maps 7.1** and **7.2**, allow with data on the three relevant measures. New for 2020, one area has been identified as a *Facility of* 

*Concern.* Facilities of Concern show as unacceptable by three or more congestion measures, but do not meet the strict definition of Method #1 or #2.

Table 8: Congested Facilities, 2019					
Method #1	Method #2				
Crashes, V/C Ratio, Travel Speed	Intersection LOS, V/C Ratio, Travel Speed				
Campbell	Campbell and Republic				
Primrose to Republic	Kansas and Sunshine				
Glenstone	Kansas and Walnut Lawn				
At Kearney	Kansas and WB James River Freeway				
Chestnut to Monroe	Sunshine and National				
Portland/Cinderella to Battlefield	US 60 and Rt. MM/M				
Kansas					
Talmage to Kearney					
Bennett to Sunshine					
Battlefield to James River Freeway					
Kearney					
US 65 to Le Compte					
National					
At Battlefield					
Sunshine					
At Campbell					
National to Glenstone					
Lone Pine to Oak Grove					
Deeswood to US 65					
US 160					
Rt. AA to Rt. CC					

The facilities identified in this CMP are comparable to the facilities identified in the 2017 CMP. Similar portions of Kansas Expressway, Campbell, National, Glenstone, Kearney, Sunshine, Battlefield, and south US 160 are congested in both study periods. There are some differences between the periods. US 65, south of US 60, is no longer considered congested, while US 60 at Rt. MM/M is now considered congested.

As discussed in the 2017 CMP, many of congested facilities are located within built-out urban areas. These roadways have constrained rights-of-way and strong travel demand from both workers commuting home and from local Springfield residents. Some portions of these roadways will likely always be congested.

#### **Facilities of Concern**

There is one area that has been identified as a *Facility of Concern*. This is a new designation, but it captures a known issue. Route CC, between 22<sup>nd</sup> and US 65, has issues related to all four congestion indicators but there isn't the required overlap to meet the strict definition of congestion using Method #1 or Method #2. There are safety and capacity concerns throughout this area. The intersection at 22<sup>nd</sup> has LOS issues, and there are speed issues related to the interchange.

# Strategies for Recurring Congestion Mitigation

Phase I of the adopted Congestion Management Process outlined five main strategies on which to focus the OTO Congestion Management Process. Recent projects related to the five strategies are outlined below.

#### **Strategy #1: Improve Roadway Operations**

• Intersection Geometric Improvements: Table 9 contains a selection of major interchange and intersection improvements were made to improve overall efficiency and operation of the CMP Network. Improvements listed for Congested Corridors and for other corridors in the CMP Network.

Many projects have been completed and are planned along congested corridors. Many of these corridors are arterial streets that are right-of-way constrained and serve both local and through traffic. Improvements along US 60 and US 160 are addressing know bottlenecks.

Table 9: Congested Corridors with Projects to Improve Intersection  Geometrics (Non-Exhaustive)				
Recent Improvements	Programed / Under Construction Improvements			
Glenstone Avenue				
Added turn lanes at Glenstone and EB I-44 Intersection	Intersection improvements at WB James River Freeway			
Access to Glenstone Terrace removed at Peele St. Intersection and RIRO access added to Glenstone from Glenstone Terrace to the north.	Intersection improvements at EB James River Freeway			
Signal Removed at Republic Ct. and access to E Republic Rd eliminated				
Added 4 <sup>th</sup> leg to Independence St intersection to accommodate realigned E Republic Rd/Luster.				
Sunshine Street				
Added signal at McCurry and realigned Old Sunshine Road, eliminated access to Sunshine from Old Sunshine Rd to the east.	none			
Kansas Expressway				
Added turn lanes for SB Kansas at EB James River Freeway	Intersection Improvements at Walnut Lawn St.			
Added 2 <sup>nd</sup> WB left turn lane to Norton St.	Intersection Improvements at Sunset St.			
Kearney Street				
Added signal at Packer Rd.	Intersection improvements at West Bypass			

Table 9: Congested Corridors with Projects to Improve Intersection				
Geometrics (Non-Exhaustive) (continued)				
Recent Improvements Programed / Under Construction Improvements				
Campbell Avenue				
Added 2 <sup>nd</sup> SB left turn, 2 <sup>nd</sup> WB left turn, and 2 <sup>nd</sup> EB through lanes at Primrose intersection	Intersection improvements at Walnut Lawn St.			
Added NB right turn lane at Grand	Intersection improvements at Republic Rd.			
Intersection improvements at Plainview Rd.				
Realigned Weaver Rd and added new signal				
with turn lanes				
National Avenue				
Intersection improvements at Republic Rd.	Intersection Improvements at Sunset			
US 160 (South to Nixa)				
Intersection Improvements at Mount Vernon (Rt. 14)	J-turn at Farm Road 192			
	Intersection Improvements at Tracker Rd			
US 60 West				
Intersection Improvements at Rt. M/MM	Intersection Improvements at Rt. 174			

Improvements have also been made to the CMP Network to address issues before congestion develops, as shown in **Table 10**. These improvements have included interchanges on US 60 east and the intersection improvements apart of the US 160 widening project.

Table 10: Other CMP Corridors with Projects to Improve Intersection				
Geometrics (Non-Exhaustive)				
Recent Improvements	Programed / Under Construction Improvements			
Chestnut Expressway				
Removed at-grade railroad crossing west of Ingram Mill Rd and added signal at Ingram Mill Rd	None			
US 160 (North to Willard)				
None	Intersection improvements at Rt. AB			
	Roundabout at Jackson			
	Roundabout at Farm Road 94.			
	J-turn at Farm Road 115			
	J-turn at Farm Road 123			
US 60 East				
Interchange at Rt. NN/J	Interchange at Rt. 125			
Route CC				
Diverging diamond interchange at US 65	Intersection improvements at US 160			
Add signal at 22 <sup>nd</sup> St.				
Route 13 (north of Norton Rd.)				
Remove signal and add J-turn at Rt. O	None			
J-turn at Rt. WW				
Interstate 44				
Ramp extensions at Kansas Expressway and West Bypass	None			

Intersection Signalization Improvements: Traffic engineers at the TMC of the Ozarks regularly
observe individual intersections and corridors and make timing adjustments based on actual
functionality. As technology allows, these improvements might be refined signal offsets, adjusted
cycle lengths, changes to coordination status, creation of optional timing plans, or even peer-to-peer
operations. Table 11 contains a selection of signalization improvements made over the last few years.

Table 11: Selected Intersection Signalization Improvements				
Adjusted Cycle	Changes to		Peer-to-peer	
Lengths	<b>Coordination Status</b>	Optional Timing Plans	operations	
Kimbrough: Madison	Division & Grant: Set	National & Sunshine:	Hammons: Trafficway	
to Trafficway AM Peak	to free operation	alternative patterns	to St Louis	
Cycle length increased		were created to		
from 65 to 75 seconds		accommodate the		
		regular fluctuations		
		during long PM Peak		
National: Trafficway to	<u>Battlefield &amp;</u>	<u>Battlefield &amp; Fremont</u> :	<u>Division</u> : Cedarbrook	
Grand weekend peak	Woodstock: set to run	alternative patterns	to Packer	
plan increased from 90	in free operation	were created to		
to 100 seconds	except the AM and PM	accommodate the		
	peaks	regular fluctuations		
		during long PM Peak		
<u>Battlefield</u> : Lone Pine	Kearney: Corridor	<u>Campbell &amp; Sunshine</u> :	<u>Division</u> : Grant to	
to US65 included in	coordinated	alternative patterns	Weaver pedestrian	
the 100 second Off		were created to	signal	
Peak plan operational		accommodate the		
area		regular fluctuations		
		during long PM Peak		

- Incident Management Detection, Response & Clearance: The OTO region continues to make great strides with its incident management program. The region's TIM committee meets quarterly and hosts an annual regional TIM exercise. Major incidents are debriefed at these quarterly meetings and actions are identified to address issues experienced during response efforts. The TMC of the Ozarks also continues to make progress in its ability to detect and track incidents. The TMC is able to deploy warnings on the region's digital message signs and make alterations to signal timing if needed.
- Bus Turnout Construction: The City Utilities has discontinued the construction of future turnouts due to transit service delays caused by reentry of buses into traffic flow. City Utilities has partnered with the City of Springfield to add signage and striping at bus turnouts along city streets. The goal is to encourage drivers not to block buses. Drivers have seen some improvements in their ability to reenter traffic, but City Utilities still does not plan to add additional turnouts to its system.

### Strategy #2: Reduce Vehicle Miles Traveled (VMT) At Peak Travel Times

• Land Use Policies/Regulations: OTO communities have land use policies and regulations that support mixed use developments. These developments create the opportunity to live and work in the same location. Existing mixed-use developments include Farmers Park and Quarry Town in Springfield. Planned developments include Field Stone PDD in Republic and Gauge Crossing in Willard.

• Employer Flextime Benefits/Compressed Work Week: Encouraging employers to consider allowing employees to maintain a flexible schedule - thus allowing the employee the option to commute during non-peak hours. Table 12 shows some of the public and non-profit employers than are offering flexible schedules.

Table 12: Flexible Work Schedules in the OTO Area					
Flextime Compressed Work Week Non-Peak/Offset Schedule					
MoDOT	City of Springfield	Area Schools			
Ozarks Transportation Org	Greene County	Cox Hospital			
City Utilities of Springfield		Mercy Hospital			

#### Strategy #3: Shift Trips from Automobile to Other Modes

This strategy includes improvements beyond those made adjacent to roadways that are included in the Congestion Management Process network. Improvements made anywhere in the OTO study area that encourage people to use alternative modes may lessen the impacts of traffic system area wide.

- Fleet Expansion/Bus Service Expansion: City Utilities Transit has no plans to make any major fleet expansions in the next couple years. The utility has recently reduced the number of spare vehicles it has in its fleet to be better in line with FTA standards. The utility was also awarded two electric buses in late 2019. These new buses will be replacement vehicles. The utility continues to make incremental improvements to the new routes implemented in May 2016. Incremental improvements are aimed at improving on time performance. One feature of the new routes is each route stops at a Walmart. This reduces the need for riders to make transfers.
- Improve/Expand Bicycle and Pedestrian Networks: The region's overall bicycle and pedestrian network is growing each year, as shown in **Table 13**. Ozark Greenways has completed portions of the Trail of Honor and the Fullbright Springs Trail. As new subdivisions are built, the region's sidewalk network is expanded. Additionally, the municipalities are actively completing and implementing ADA Transition Plans on public rights-of-way. The construction work associated with these plans are improving the accessibility of the region's sidewalks. The OTO has also invested nearly \$4 million in TAP funding towards sidewalk and trail projects that will be completed during 2020 and 2021.

Table 13: Bicycle and Pedestrian Network Size					
Type of Network	2016	2017	2018		
Bike lane (SGF)	28.69	28.78	29.44		
Shared Lanes (SGF)		29.58	29.58		
Trails	62.6	64.51	64.51		
Sidewalks	1,048		1,115		
Percent of Roads with Sidewalks	31.10%	32.07%	32.07%		

#### Strategy #4: Shift Trips from SOV to HOV Automobile/Van

• **Rideshare Matching Services:** The OTO continues to offer carpool services through OzarksCommute.com. The service currently has 2,798 registered users.

- Vanpool/Employer Shuttle Programs: Several area employers and multifamily housing complexes have implemented vanpool or shuttle programs. Examples include Mercy Medical Center, TLC Properties, Missouri State University, and Prime Trucking.
- Improved/Increased Park-and-Ride Facilities & Capital Improvements: There is one MoDOT park-and-ride lot at US 65 and Evans Road. The lot has 50 spaces and is currently underutilized. No expansions are planned.

#### **Strategy #5: Add Capacity**

The OTO recognizes that added roadway capacity is often not a long-term fix for a congestion problem. Induced demand and the continuation of existing development patterns often result in increased traffic volumes. However, additional capacity is often needed to serve growing traffic volumes. Capacity has been added to corridors than are identified as congested and to non-congested corridors that have a volume-to-capacity problem. Projects aimed to add capacity to congested CMP roads are listed in **Table 14**, while projects along non-congested CMP roads are shown in **Table 15**.

Table 14: Congested Corridors with Projects to Add Capacity (Non-Exhaustive)					
Recent Improvements	Programed / Under Construction Improvements				
Glenstone Avenue					
Added 6-lane segmented between Battlefield	None				
and James River Freeway					
Kansas Expressway					
None	Extension of Kansas Expressway south of Republic				
INOTIC	Road to Plainview				
Campbell Avenue					
Extend 3 <sup>rd</sup> NB travel lane between Republic Rd					
and Primrose					
Extended 6 lane segment between Republic					
Road and south of Plainview Rd.					
National Avenue					
Add 3 <sup>rd</sup> SB travel lane between Walnut Lawn St.	Add 3 <sup>rd</sup> SB travel lane between Battlefield and				
and James River Freeway	Walnut Lawn				
US 160 (South to Nixa)					
Extend 2 <sup>nd</sup> SB Travel Lane through Mount	Conscitu Improvements between Dt. AA and Dt. CC				
Vernon (Rt. 14) intersection	Capacity Improvements between Rt. AA and Rt. CC				

Table 15: Other CMP Corridors with Projects to Add Capacity (Non-Exhaustive)				
Recent Improvements	Programed / Under Construction Improvements			
US 160 (North to Willard)				
None	New 4-lane expressway segment between Jackson Rd and I-44			
James River Freeway (I-44 to US 65)				
Add auxiliary lanes between Kansas Expressway and Campbell Ave.	Add 3 <sup>rd</sup> travel lane between National and US 65			
Add auxiliary lanes between Campbell Ave. and National Ave.				
Add auxiliary lanes between National Ave and Glenstone.				
Add SB auxiliary lane between Glenstone and US 65				
US 65				
Add auxiliary lanes between Sunshine and Battlefield	None			
Extend 6-lane segment south between US 60 and Rt. CC				
Route CC				
Extend 5 lane segment from 22 <sup>nd</sup> St. to 25 <sup>th</sup> St.				
Route 14 (US 160 to US 65)				
Add 5-lane segment between US 160 and Fort St.	Add 5-lane segment between Fort St and east of Ridgecrest Ave.			
	Add 5-lane segment between west of Fremont and 22 <sup>nd</sup> St.			
Republic Road				
Extend 5 lane segment from Golden to Rt. FF	Extend 5 lane segment from Republic Road to Chase			
Extend 5 lane segment from Lark to Republic Rd				

#### **Strategy Effectiveness**

Efforts to maintain or improve congested conditions have had successes. Observable successes are primarily the result of two mitigation strategies: *Improving Roadway Operations* and *Adding Capacity*. Despite rising volumes, the region has maintained acceptable Intersection LOS at a vast majority of signalized intersections and has seen improved travel times associated with capacity projects. Strategies that rely on people using their automobiles less have been less effective. The region also has not had the same level of success getting businesses to alter work schedules. Many large employers have employee shift changes outside of peak commute times, but a large percentage of workers still work typical office hours and commute during peak commute times.

A complex geospatial statistical evaluation of was completed for the 2017 report, but the analysis was inconclusive. This analysis tried to identify connections between capacity or operational improvements

to changes in congestion. Some weak relationships were found, but no clear connections were revealed. A recommendation was made to focus on before/after analysis or other more anecdotal types of analysis. The following sections will describe observed successes.

#### **Improve Roadway Operations**

The City of Springfield and MoDOT work constantly to maintain and improve roadway operations throughout the OTO region. **Tables 6** and **7** contain the Intersection LOS data for 2019. Ninety-three percent of intersections during the AM commute and 95 percent of intersections during the PM period have an acceptable LOS, defined as LOS D or above. Of those intersections, 87 percent of acceptable intersections during the AM commute and 85 percent of intersections during the PM were acceptable during the 2017 CMP update. Additionally, 8 and 12 intersections improved to an acceptable LOS during the AM and PM commutes, respectively. The consistent performance of signalized intersections, despite the rise in VMT and per capita VMT outlined in **Table 1** and **Figure 1**, demonstrates the efforts of area traffic engineers have been successful.

#### **Add Capacity**

The region has been able to strategically add capacity to manage and mitigate congestion on the CMP network. A limited number of lane miles have seen traffic exceed capacity during the last three years. Additionally, added capacity has been able to improve the function of the system, as demonstrated in higher travel speeds.

**Steady Volume-to-Capacity Ratios**. The region has been able to successfully manage the growing volumes of traffic on CMP roads. As previously described, just under six miles of CMP roads, with data available, have experienced a shift to unacceptable volume-to-capacity ratios. This does not mean that capacity issues do not exist. Rather, it means the region has been able to limit the expansion of capacity problems. The region is successfully managing those areas nearing capacity.

**Capacity and Travel Speed**. Where capacity has been added along the region's freeways, travel speeds have increased. Volumes seem to be rising faster than capacity is being added, as seen in **Map 3.1**, but observed speeds are increasing. The improved speeds, despite the rising volumes, suggests that the added capacity has address bottlenecks. Anecdotally, drivers have more time to enter or exit the freeways and can maintain their travel speeds.

Table 16: Added Capacity and Associated Travel Speed Improvements				
	AM Travel Speed	PM Travel Speed		
Recent Improvement	2016/2019	2016/2019		
James River Freeway:	EB: 60/62	EB: 60/63		
Connected Ramps Between Kansas and Campbell	WB: 56/50*	WB: 55/46*		
James River Freeway:	EB: 60/62	EB: 58/62		
Connected Ramps Between Campbell and National	WB: 60/62	WB: 60/62		
James River Freeway:	EB: 58/61	EB: 54/58		
Connected Ramps Between National and Glenstone	WB: 60/62	WB: 59/63		
US 65:	NB: 60/63	NB: 60/63		
Connected Ramps Between Sunshine and Battlefield	SB: 61/63	SB: 59/63		

While adding capacity is no panacea, it can address bottleneck situations and improve travel speeds. Only WB traffic on James River Freeway between Campbell and Kansas saw slower speeds between the two analysis periods.

### **Action Plan**

The OTO will continue to implement the five *Strategies for Recurring Congestion Mitigation* identified in Phase 1 of the CMP. These strategies represent the region's best opportunities for reducing congestion. Specific geometric and engineering solutions are included in the strategies, along with behavioral changes. Additionally, the OTO will evaluate the methods used to measure CMP congestion in light of MAP-21/FAST Act performance-based planning requirements. The OTO wants to ensure efficiency and limit duplication in its data collection and analysis.

#### **Strategies for Recurring Congestion Mitigation**

The five strategies for recurring congestion mitigation identified in OTO's CMP continue to be appropriate for the region. Engineering and behavior modifications are activities likely to reduce congestion. Recent priorities are in line with these broad strategies.

It is important to note congestion within the City of Springfield, such as along Glenstone, Battlefield from Campbell to Glenstone, or National from Battlefield to James River Freeway, will be difficult to improve with engineering solutions. Existing development patterns limit the ability to add capacity or remove traffic signals to improve traffic flow. Additionally, crashes in these areas not the result of poor engineering, but rather the result of human error. Significant behavioral changes by regional residents will be needed to address these problem areas.

#### Strategy #1: Improve Roadway Operations

The OTO has prioritized several projects to improve roadway for inclusion in the 2021-2024 Transportation Improvement Program (TIP) and has programed a number of projects in the 2020-2023 TIP. Prioritized projects include fiber connections between Springfield and Ozark and operational improvements along Kansas Expressway from Norton Road to James River Freeway. Programed Projects include an operational and safety study of US 60 from Main Street in Republic to James River Freeway, a study of US 160 between Rt. AA and Rt. CC, along with intersection improvements as Kansas and Sunset, Kansas and Walnut Lawn, Campbell and Walnut Lawn, Campbell and Republic Road, and Kearney and West Bypass. Additionally, funding has been set aside for improvements along Glenstone. These projects will help improve roadway operations.

#### Strategy #2: Reduce Vehicle Miles Traveled (VMT) At Peak Travel Times

The OTO will continue to encourage local business to offer flex time and move shift changes to non-peak travel times. The OTO will also work with area communities to encourage land use patterns that facilitate transit service and walking/biking. Behavioral strategies, such as this, rely on expanded cooperation between elected officials in OTO communities and business leaders to implement these local level decisions.

#### Strategy #3: Shift Trips from Automobile to Other Modes

The OTO will continue to pursue policies that encourage and facilitate alternative modes of transportation. For example, the OTO is working towards the completion of a Bike and Pedestrian Trail Investment Study. This study will help the OTO complete an integrated network of trails connecting OTO communities. This trail network will provide a viable alternative to autos for regional intercity travel. The

OTO has also prioritized sidewalk construction with all MoDOT sponsored projects. The OTO wants to see sidewalks built alongside road projects. The OTO is also involved with *Let's Go Smart: Transportation Collaborative*, a community partnership designed to encourage residents to consider their transportation choices every day. The organization encourages walking, biking, riding the bus, and other forms of active transportation. The City of Springfield's Sustainability Office helps coordinate city activities related to environmental sustainability, including the sustainability of transportation choices. This office is involved with many area transportation initiatives. These actions all make it easier for OTO residents to shift to other modes of travel.

#### Strategy #4: Shift Trips from SOV to HOV Automobile/Van

The OTO is working with the City of Springfield to market the OzarksCommute website for the OTO area. This new portal will offer expanded opportunities for area businesses to encourage carpooling and for residents to find rides on their own. Facilitating the creation of rideshare groups is an important way the OTO can encourage shifts in people's commuting behaviors.

#### Strategy #5: Add Capacity

The OTO recognizes that added roadway capacity is often not a long-term fix for a congestion problem. Induced demand and the continuation of existing development patterns often result in increased traffic volumes. However, additional capacity is often needed to serve growing traffic volumes. The OTO has prioritized additional travel lanes along US 60/James River Freeway and I-44. Projects have been programed along MO 14 and James River Freeway, and construction is underway along US 160 towards Willard. This added capacity will ensure efficient movement within and across the region as populations continue to grow.

#### **Evaluation of Current Congestion Measurement**

The performance-based planning required by MAP-21 and the FAST Act may result in the OTO reevaluating its methods for measuring congestion. Safety performance measures (PMs) for fatalities and serious injuries and system performance PMs for reliable travel will require annual data collection and analysis. The existing CMP processes may be replaced by these new performance management processes. The annual nature of performance management may result in the CMP being updated annually as well. The annual nature may also result in the simplification of the CMP process. The current CMP is too detailed to be completed on an annual basis. The OTO will not know how the CMP will be affected by the new performance management requirements until the new rules come into full effect. The OTO will ensure any changes made to the CMP will not lower the quality of the process.

### Conclusion

This congestion monitoring report looks at the identified network and the efforts taken to address congestion. There have been extensive efforts undertaken in the past three years which are outlined in the implementation strategies section of the report. To summarize, there have been numerous geometric improvements and additions of capacity. Extensive work has been done to better time and coordinate the traffic signal system. Incident management remains a priority. Great strides have been made in new sidewalk and trail construction. Many miles of bicycle lanes have been signed and striped.

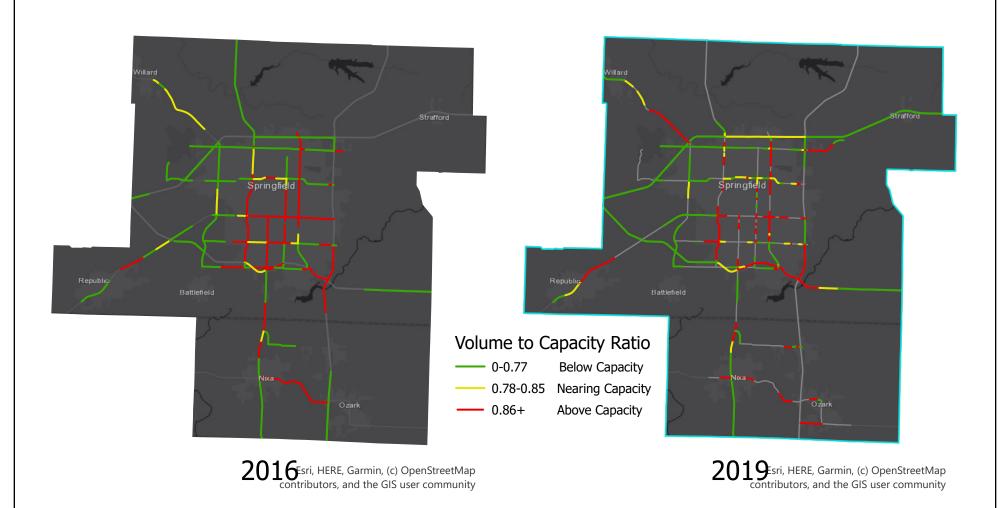
Four indicators of congestion were used to identify areas of significant congestion. Approximately 90 of the 134 miles of roadway with volume data available have remained or improved to an acceptable Volume-to-Capacity ratio. The crash frequencies showed some increase from 2016. The decline of average delay travel delay indicated an overall improvement in speeds. The intersection level of service ratings relatively unchanged. Ninety three percent of intersections in the AM commute and ninety five percent of intersections during the PM commute offered acceptable levels of service. There were only seven intersections with LOS F service.

The OTO will continue to pursue the five strategies for recurring congestion mitigation. The strategies include important engineering and behavior solutions for congestion. Early priorities for the 2021-2025 STIP include several projects drawing from these strategies.

The facilities identified in this CMP are comparable to the facilities identified in the 2017 CMP. Similar portions of Kansas Expressway, Campbell, National, Glenstone, Kearney, Sunshine, Battlefield, and south US 160 are congested in both study periods. There are some differences between the periods. US 65, south of US 60, is no longer considered congested, while US 60 at Rt. MM/M is now considered congested. Some physical improvements are possible along the region's freeways, but changes in transportation behavior are required to dramatically improve traffic on the region's arterial system.



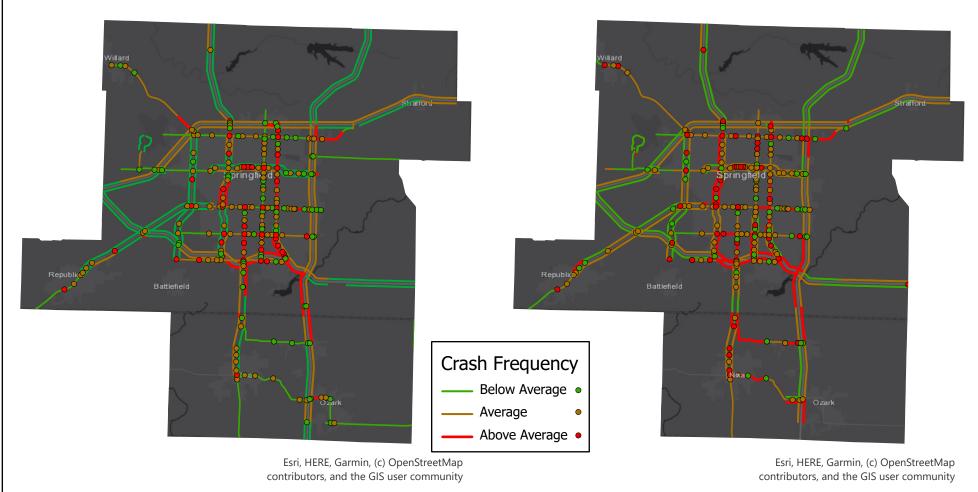
# Volume to Capacity Ratio



What facilities are at or above capacity?



# Crash Frequency



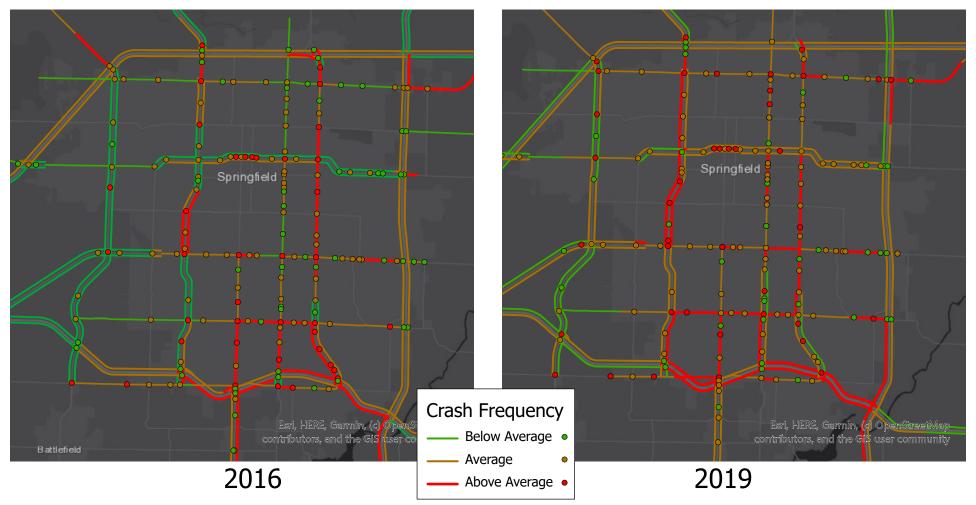
2016 2019

Where are crashes frequently happening?

Map 4.1



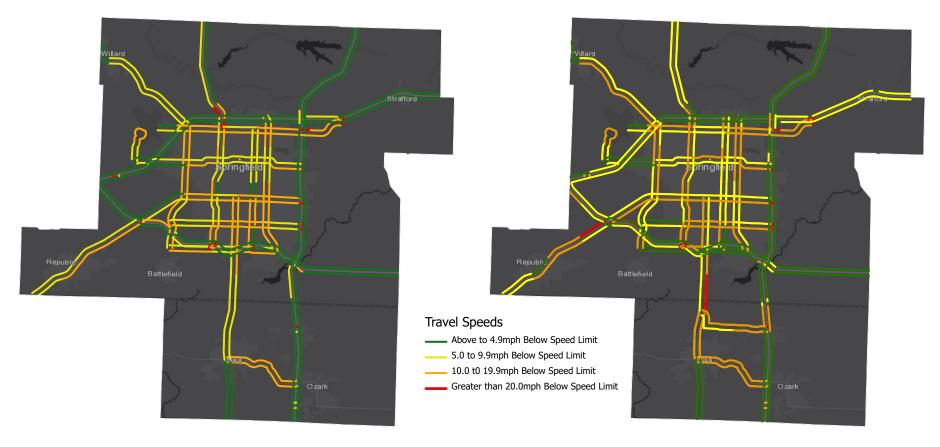
# Crash Frequency: Springfield Focus



Where are crashes frequently happening?



# Morning Travel Delay



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

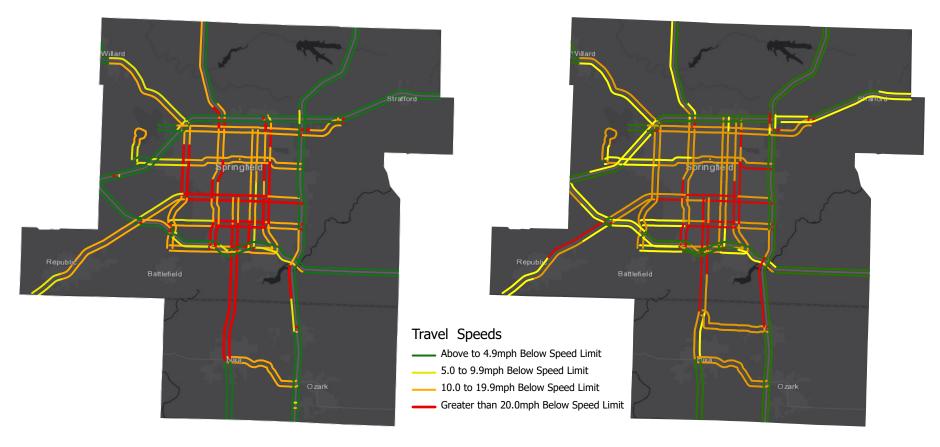
2016 2019

How badly are drivers delayed?

Map 5.1



# **Evening Travel Delay**



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

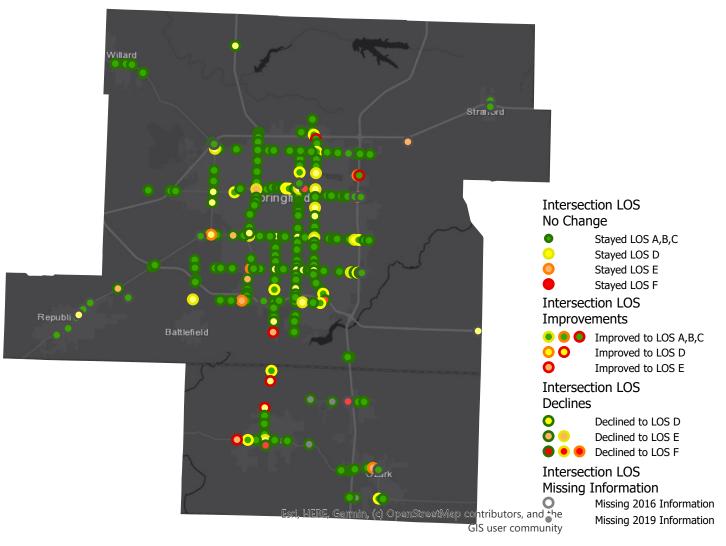
2016 2019

How badly are drivers delayed?

Map x.x



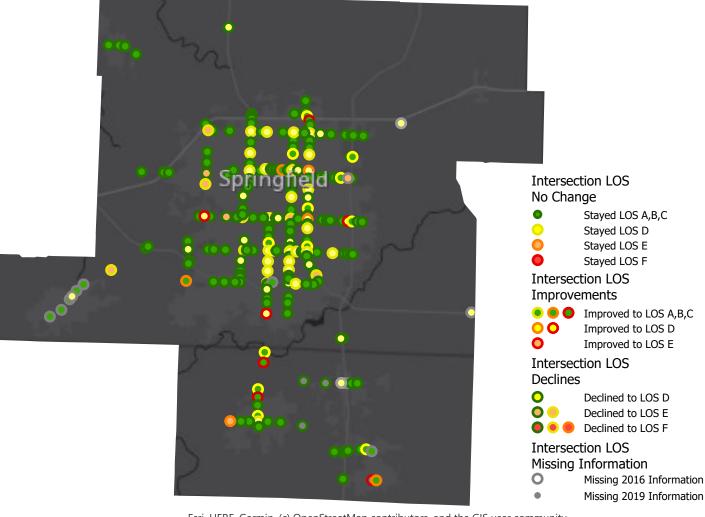
## Morning Intersection Level of Service



Where are intersections a source of congestion?



# Evening Intersection Level of Service

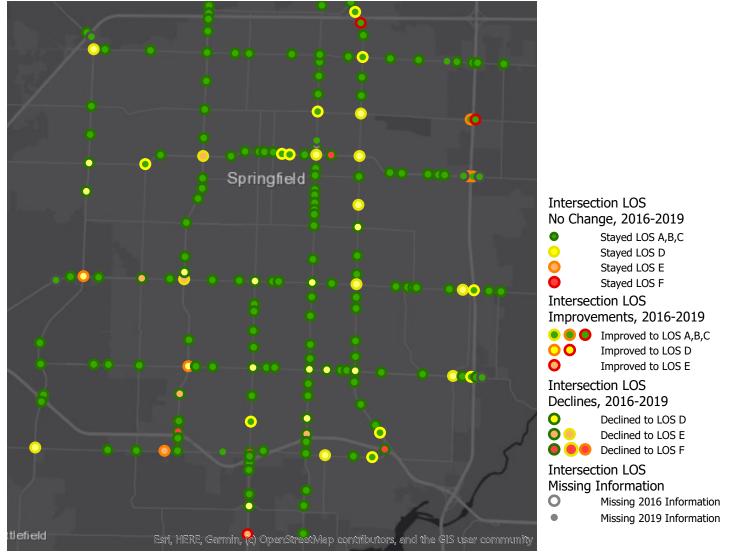


Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Where are intersections a source of congestion?



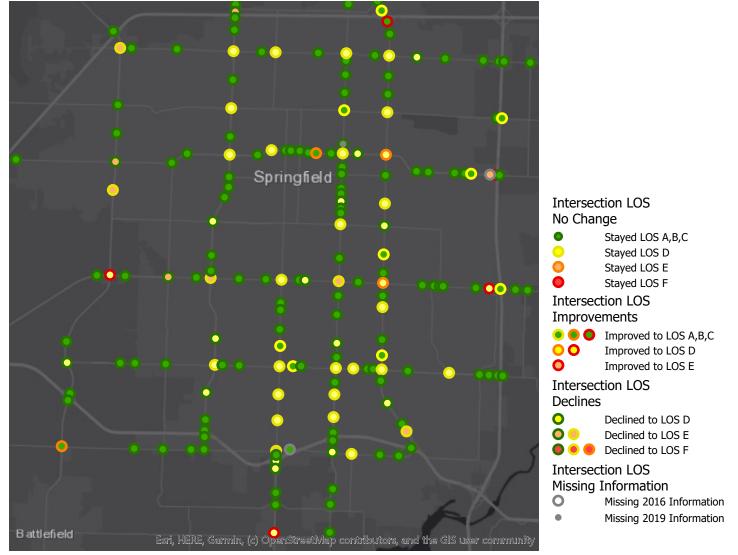
# Morning Intersection Level of Service: Springfield Focus



Where are intersections a source of congestion?



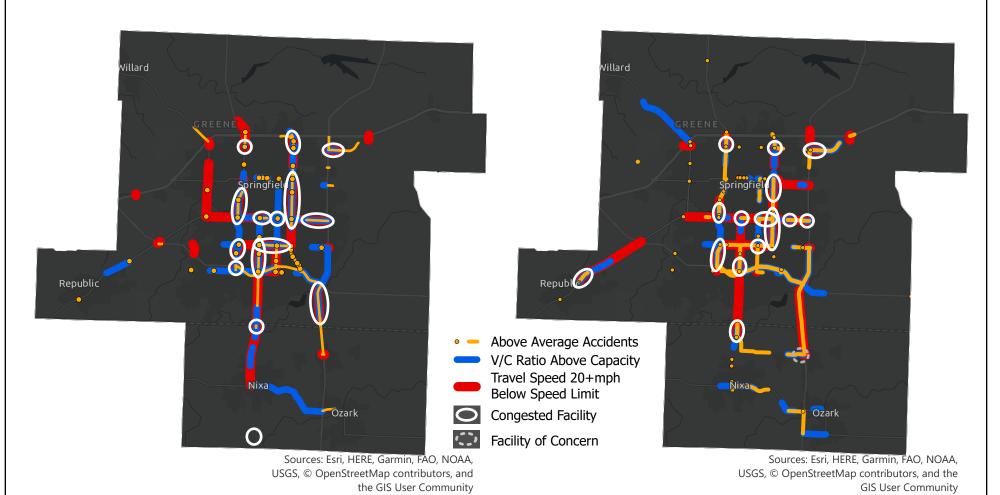
# Evening Intersection Level of Service



Where are intersections a source of congestion?



# Congested Facilities: Method #1



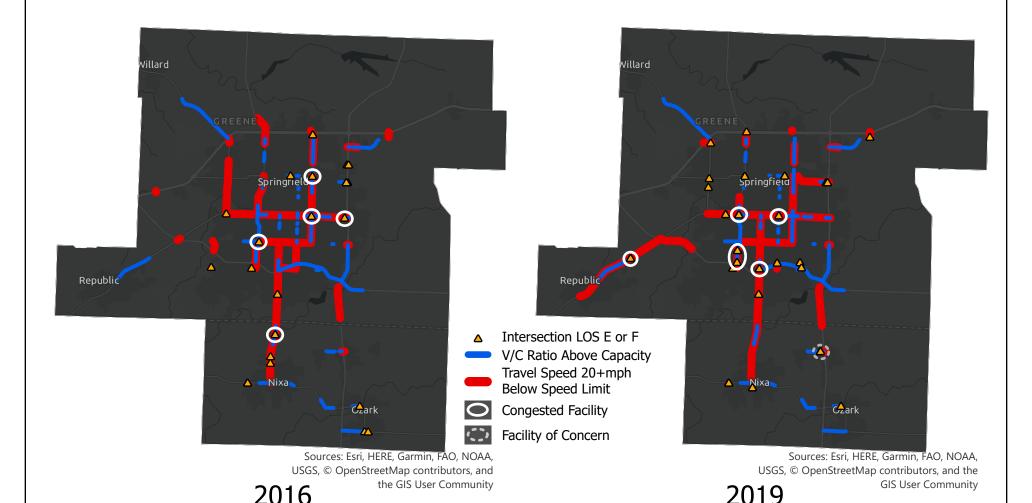
2016 2019

Which roads are delayed, very full, and prone to crashes?

Map 7.1



# Congested Facilities Method #2



Which roads are delayed, very full, and have problem intersections?

Map 7.2

# TAB 6

## TECHNICAL PLANNING COMMITTEE AGENDA 3/18/2020; ITEM II.D 2021-2025 STIP Programming

## Ozarks Transportation Organization (Springfield, MO Area MPO)

### **AGENDA DESCRIPTION:**

As part of the process in selecting projects to be added to the 2021-2025 Statewide Transportation Program (STIP), MoDOT requested additional meetings with the Technical Planning Committee to discuss possible projects to program with available funding.

Two meetings were held in February resulting in the recommendations shown in the attachment. This list represents the recommendations by OTO not a commitment by MoDOT. The timelines are subject to adjustment as the STIP is developed.

Important Items to note in the proposal include:

- Additional funds for the 60/125 Interchange (\$4 million)
- The 160/CC and 160/AA Intersection projects are being phased (160/CC in FY23 and 160/AA in FY25)
- I-44 will include widening from US65 to Glenstone (unless an INFRA award is received then the project will extend to West Bypass)
- James River Freeway widening from National to Kansas Expressway in FY22
- ITS Improvements to continue to build out the network in FY21
- Widening of Route CC from 22<sup>nd</sup> to Fremont in FY25

A listing of scoping priorities is also included. If possible, better estimates for these projects will be developed by MoDOT in the next year.

The 2021-2025 Statewide Transportation Improvement Program is currently being developed by MoDOT and a draft will be made available in late Spring. In July, the Missouri Highways and Transportation Commission will officially approve the STIP.

### **TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:**

INFORMATIONAL ONLY. NO ACTION REQUIRED.

### Southwest Urban - Governor's Bridge Program Funds and System Improvement Funds

				.2		

Job	Description	Category	2020 E	stimate	2021	L	2022	2023	2024	2025	Comments	Plg Partner
813044	I-44 Six-laning: Route H/Glenstone to Route 65		\$	9,100					\$ 9,100		Adjusting estimate to match INFRA grant, not full inflation	
8P3032	JRF Six-laning Kansas to National		\$	17,200		\$	18,248					
TBD	ITS: W. Bypass, James River Frway, Ozark		\$	890	\$ 8	390						
8S0736	Route CC from Fremont Road to 22nd Street		\$	4,000						\$ 4,637		
	1 Split JRF to 22 and 25; leave 160 and AA/CC in FY23	3rd										
	· · · · · · · · · · · · · · · · · · ·											
	2 Route 160 and CC in 23, Rte. AA in 25, try to keep JRF in 22											
	3 Delay 160 AA/CC to 25; JRF in 22	2nd										
	Total				\$ 8	390 \$	18,248	\$ -	\$ 9,100	\$ 4,637		

F	Total - All Years	\$ 32,875
Ī	Funds Available - 0G3101I	\$ 18,200
1	Funds Available - System Improvement	\$ 14,285
1	Balance	\$ (390)

Scoping	Priorities		
Job	Description	Comments	
813044	I-44 Capacity Improvements	Focus on Route 160 to Route 65 section	
8S3195	Route 13 (Kansas Expwy) from Bennett St. to Rte. 60	New north scoping limit	
8P3032	Route 60 (James River Freeway)	Focus on West Bypass to Kansas Expressway	
TBD	Route 65 and Kearney Street Interchange	Driven by bridge condition	
8S3159	Route 60/413 Corridor, Springfield-Republic	Focus on priorities that come out of current study	
TBD	Route 14 from 6th to Route W	Can be phased with a split at 14th Ave.	

SW	VII	Estim	hate	Fund	lc Ava	ilable
J V	V	LJUII	ıateu	I UIIU	ıs Ava	Habic

### **DRAFT 02.26.2020**

		2021	2022	2023		2024		2025	Notes	21-23
Funds Available	\$	46.666	\$ 28.751	\$ 31.636	\$	21.445	\$	21.711	02.25.2020 Percent Programmed Report	
5 . 5 . 1 A . 11 . 1		46.666	 20.754	 24.626	4	24.445	_	24 744		
Est. Funds Available	\$	46.666	\$ 28./51	\$ 31.636	\$	21.445	\$	21./11		\$107.05
Program Goal		105%	100%	95%		50%		50%		
Funds to Program	\$	48.999	\$ 28.751	\$ 30.054	\$	10.723	\$	10.856		
Funds Programmed	\$	46.933	\$ 28.014	\$ 40.903	\$	3.372	\$	0.292	02.25.2020 Percent Programmed Report	\$115.850
Funds Remaining	\$	2.066	\$ 0.737	\$ (10.849)	\$	7.351	\$	10.564		
Current Percent Programmed		100.6%	97.4%	129.3%		15.7%		1.3%		
AMP funds to program										
Majors										
Minors									Wait to program chip seals until future STIP	
Bridges										
Safety										
Ongoing									Wait to program on-calls until a future STIP	
AMP Total	\$	-	\$ -	\$ -	\$	-	\$	-		
Funds available to program										
	\$	2.07	\$ 0.74	\$ (10.85)	\$	7.35	\$	10.56		
FY 24 and 25 Programming						2024		2025		
Funds Available					\$	21.445	\$	21.711		
Projected AMP Needs					\$	13.750	\$	15.121	Uninflated	
Funds Remaining for System Imp	prover	nent			\$	7.70	\$	6.59		

# 2021-2024 STIP Priority Projects Priority Route

Priority	Route	Description
1	ITS	Fiber Signal Interconnect Improvements in Springfield and Ozark
2	13 (Kansas)	Capacity, Safety and Operational Improvements JRF to North of 44
3	US 60	Capacity and Safety Improvements- JRF to Main St
4	60	JRF- Capacity and Operational Improvements National to Kansas
5	60/MM	Intersection/ RR Crossing Improvements
6	1-44	Capacity Improvements in OTO area
7	14	Capacity/Safety/Operational Improvements 6th to 14th
8	CC	Widening US 65 to Fremont including intersection at 22nd
9	14	Route W/Salers Ln control upgrade
10	I-44/160	Ramp improvements
11	65	Interchange Improvements at Kearney
12	160/ FR146	Intersection Improvements
13	CC	Extension from Main to 160, Main Intersection
14	LP 44	Chestnut Expwy from Kansas to National
15	BU 65	Chestnut Expwy from Glenstone to Patterson
16	BU 65	Chestnut Expwy from Patterson to US 65
17	BU 65	Chestnut Expwy from Glenstone to Patterson
18	BU 65	Chestnut Expwy from Patterson to US 65
19	60/65	Interchange Improvements
20	US 160	West Bypass & College control upgrade
21	65	Capacity and Operational Improvements 14 to F
22	160	Safety and Operational Improvements from CC to 14
23	RT B	I-44 WB Ramp
24	160	Chestnut to I-44
25	1-44	Capacity and Operational Improvements from Chestnut to 360
26	160	Six-Lane from AA to CC
27	14	Operational and Safety Improvements Tiffany to Cheyenne
28	160	Safety and Operational Improvements 44 to Division
29	CC	Operational and Safety Improvements Main to Cheyenne
30	LP 44	Chestnut Expwy from National to Glenstone
31	FF	Operational and Safety Improvements
32	160	Intersection Improvements at FR 123
33	US 60	Safety and Operational Improvements- JRF to M
34	1-44	Operational Improvements from West Bypass to Chestnut
35	J	Widening US 65 to NN
36	60/P	Intersection Improvements at P Highway Widen P Highway to Miller including Miller Intersection
37	ZZ	Roundabout at FR 182
38	14	Operational and Safety Improvements Cheyenne to 32nd
39	14	OTC Campus Entrance control upgrade
40	I-44/125	Ramp Extension
41	160	Six-Lane from Plainview to AA
42	174	Operational Improvements Main to 60
43	60	Interchange with Kansas Expressway
44	I-44/ 125	Interchange signalization
45	60	JRF- Operational Improvements Kansas to West Bypass
46	MM	Operational and Safety Improvements 1-44 to 360
47	125	Safety Improvements 125 to OTO North Boundary
48	60	Intersection Improvements at FR 103
49	14	Intersection Improvements at W
50	FF	Operational Improvments through Battlefield
51	14	Majestic Oak Dr right turn lane
52	14	Hwy 14 & 15th Street control upgrade
53	160	Safety and Operations 14 to OTO Southern Boundary
54	60	Capacity, Operational and Safety Improvements west of Republic

21-202	24 STIP F	Priority Projects
Priority	Route	Description
55	RT H	RT AA/FR 80 control upgrade
56	65	Operational Improvements CC to 14
57	65	Longview Interchange
58	NN	Operational and Safety Improvements J to Pheasant
59	125/00	Intersection Improvements
60	14	Hwy 14 & Church control upgrade
61	CC	Intersection Improvements at Main Street in Nixa
62	M	Operational Improvements ZZ to FF
63	174	Intersection Improvements at Main Street
64	NN	Operational and Safety Improvements
65	65/ FR 94	Intersection Improvements
66	14	Intersection Improvements at 3rd and Oak
67	US 160	West Bypass & Grand control upgrade
68	65/AA	Intersection Improvements
69	MM	Intersection Improvements at Sawyer
70	14	Intersection at Combs Rd left turn lane
71	FF/ Weaver	Intersection Improvements
72	14	Operational and Safety Imprrovements W to JJ
73	125/ FR 84	Intersection Improvements
74	ZZ	Intersection Improvements at Hines
75	ZZ	Intersection Improvements at FR 174
76	00	Intersection Improvements at Washington
77	125/YY	Intersection Improvements
78	125/ FR 132	Intersection Improvements
79	14	Intersection at Fremont Rd right turn lane
80	LP 44	Chestnut Expwy & Orchard Crest control upgrade
81	174	Intersection Improvements at Boston
82	NN	Intersection at Melton right turn lane
83	RT H	FR 94 left turn lane
84	US 65	US Hwy 65 & FR 68 right turn lane
85	NN	Intersection at Sunset
86	14	Capacity/Safety/Operational 14th Street to W
87	I-244	Interstate Loop

# TAB 7

### TECHNICAL PLANNING COMMITTEE AGENDA 3/18/2020; ITEM II.E.

**Destination 2045 Visioning Summary** 

## Ozarks Transportation Organization (Springfield, MO Area MPO)

### **AGENDA DESCRIPTION:**

OTO has developed a summary of input received during the Board of Directors and Technical Planning Committee Visioning Workshops. This input was used to help develop a survey, which is now available to the public through May 4, 2020.

### **TECHNICAL PLANNING COMMITTEE ACTION REQUESTED:**

INFORMATIONAL ONLY. NO ACTION REQUIRED.

# OTO Board of Directors and Technical Planning Committee Visioning Results

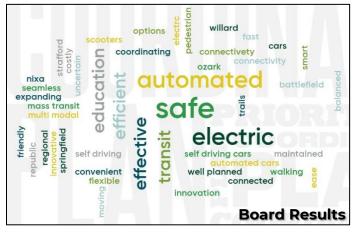
Are we there yet? This is the question the Ozarks Transportation Organization has asked its Board and Technical Planning Committee members at recent visioning workshops. The OTO kicked off a long range transportation planning process, dubbed *Destination 2045*, on January 30<sup>th</sup> by asking Board members to envision the future of transportation in the Ozarks. The Technical Planning Committee considered these same questions on February 24<sup>th</sup>.

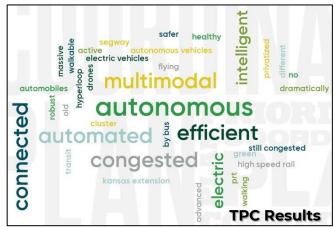
Destination 2045 will outline actions for the next 25 years which make sure the region develops the robust transportation system needed to support growth, while effectively moving people and freight in diverse ways. OTO will build on the public input and significant effort already captured with Springfield's Forward SGF, Republic's SOAR 2045, Ozark's Comprehensive Plan 2019, Willard 2019 Comprehensive Plan, and Imagine Nixa, as well as other planning activities from around the region.

The Plan will identify needed improvements to the transportation system and will prioritize federal and state funds allocated for these projects. Federal law requires metropolitan planning organizations, like the OTO, to update the metropolitan transportation plan every five years in order to continue receiving federal transportation dollars.

## Visioning Workshops

Both the Board and TPC workshops followed the same format. Each workshop started by asking members to participate in a word cloud answering the question, "Using one word, what will the transportation system look like in 2045?" The larger the word, the more often it was submitted by members. Words that stand out relate to automated and electric vehicles.





Here are the results when the results from both workshops are combined:

Rank	Category
1	Autonomous
2	Connected/Intelligent
3	Electric
3	Efficient
5	Walkable/Active
5	Multimodal
7	Transit
7	Safe
9	Congested

There was also a variety of alternative/forward looking transportation suggestions, including personal rapid transit, drones, flying, hyperloop, and micro-mobility options such as scooters and Segways.

The word cloud exercise was followed by a presentation on current and future conditions around the region, and then the attendees were asked a series of questions to help inform *Destination 2045's* vision. Each person was given the opportunity to share their answers to the questions and then the group voted to identify a most common or important theme among the answers.

### Results

Below are the questions and answers provided by workshop attendees. All topics which received votes are highlighted. These topics also informed the survey which is available through May 4, 2020.

## Board of Directors - January 30, 2020

Where are we? What makes moving around the Ozarks great? What are the region's transportation strengths?

Flow of traffic on highways	7
Partnerships/collaboration	6
Airport growth	1
Roads are well maintained	1
Springfield's grid layout	1

Airport

Alternate routes

Collaboration between communities and agencies

Complete streets

Diverging diamonds

Forward thinking

Good, buildable transportation system

Keeping up with growth

OTO

Planning

Regional ease of movement

Scenery

Smooth roads

Trails

Variety of destinations

Well connected with rural areas

Why can't we get there? What are the challenges facing the region today? What is the hardest part about getting around?

Limited funding		11
Civic knowledge/education/	<sup>/</sup> driver's ed	4
Infrastructure waning		3
Lack of innovation and inclu	ısiveness	1

Access management – lack of

Automated vehicles

Bridges

Capacity

CAVE people

Center city freeway

Congestion

Corridor preservation

Culture – risk adverse

Density

Drivers

Electric vehicles and supporting infrastructure

Increased traffic

Lack of EV charging stations

Lack of sidewalks and crosswalks

Loud vehicles

Modernize

Narrow ROW in built up areas

No law for hands free driving

Not pedestrian friendly/ADA

Parking

Politics

Speed limits on highways

Speeding/reckless driving and pedestrians/distracted

Where are we going? If there were no obstacles, what would you like us to accomplish by 2045? What will the region be like in 20 years? What will help the region attract new residents, entrepreneurs, businesses, and development?

Regional Transit System	8
Proactive decision making (now)	4
Diverging diamonds and roundabouts	2
Growing population and jobs	1
Innovative and inclusive culture	1
Leverage technology	1

Additional lanes (auxiliary)

Additional North/South/East/West primary/secondary arterials

Enhanced transit (air and rail)

Increase capacity

Increase transit

Increased density

Maintain maintenance levels

Maintain quality of life

Maximize technology

Mixed use neighborhoods

More complete streets

North/south express

Perpetual pavements

Quit playing catch-up

Rail

Seamless multimodal system

Smart/Regionally coordinated landscape planning

Transportation for the aging

How can we get there? What opportunities should we use to our advantage? What actions are needed to ensure the region is strong and viable in the future?

Education/Analysis/Forecasting	7
Increased funding	5
Collaboration/cost shares	1
Plan ahead for projects	1
Regional planning/branding	1

Corridor preservation

Focus on access management

Maximize exiting systems

Strategic decision making

## Technical Planning Committee - February 24, 2020

Where are we? What makes moving around the Ozarks great? What are the region's transportation strengths?

Connectivity	5
Growing trail system	5
Alternative routes	4
Engaged communities	2
Low travel times	2
Regional cooperation	2
Space to see and explore	2
Regional ITS	1
Suburban connection	1

Accessible

Airport

Auxiliary lanes

Connection to I-44

Continually striving to improve

Good roadway conditions

Grid system

Independent mobility

Innovation

Local trust

Low gas prices

Natural environment

Passionate planning

Rail

Safe travels

Strong growth

Strong MPO

Uncrowded highways

Walkable downtown

Why can't we get there? What are the challenges facing the region today? What is the hardest part about getting around?

Funding	21
Development	1
Gaps in connectivity	1
Land use patterns	1

Access management

Bike/ped connectivity

Distracted driving

Driver education

Environmental constraints

Forcing change Growth of area

Inconsistent local regulations

Increased cost

Insufficient ROW

Lack of alternate routes

Lack of construction competition

Lack of state funding

Lack of TOD (transit-oriented development)

Lack of voice for under-resourced

Legislative regulatory issues

Maintain assets

More involvement

Poor interstate reliability

Public buy-in

Public education

Public support

Public understanding

Railroad

Regional transit

Short public attention span

Transportation for disadvantaged

Where are we going? If there were no obstacles, what would you like us to accomplish by 2045? What will the region be like in 20 years? What will help the region attract new residents, entrepreneurs, businesses, and development?

Capacity improvements equaling growth	3
Increased drone deliveries	3
Multimodal connection to the rest of the nation	3
Additional lanes on freeways and expressways	2
Connected vehicle network/early adoption	2
Increased public-buy-in	2
Lowering drive times	2
Sustainable transportation funding sources	2
Connected modes	1
Connected trail system	1
Enhanced landscaping	1
Fully accessible sidewalk system	1

Access management

Aesthetics in design in infrastructure

Alternative transportation modes for the aging

Better N/S connection between Springfield and Christian County

Decreased motor vehicle use

Ease of access

Hovercrafts
Impact fees in development
Less time behind the wheel
Little to no fossil fuel in use
Lower fatality rates
Maintaining highway speeds
Mixed-use development
No deficient bridges
Non-essential transportation options (e.g. a trolley)
Regional transit
Transit frequency

How can we get there? What opportunities should we use to our advantage? What actions are needed to ensure the region is strong and viable in the future?

Sustainable long-term funding	4
Traffic impact fees and gas tax	4
Future looking laws and regulations	3
Aligned policies	2
Public education strategies	2
Use fees for all modes	2
Better land use planning for density	1
Continued regional collaboration	1
Expansion of trail system	1
Reduce regulatory constraints	1
Strong city identity	1
Utilizing funds efficiently	1

Additional regional transportation funding advocacy in state capital

Aggressively progressive transportation system

Clear priorities

Community engagement

Construction workforce development

Decision-maker buy-in

Incentives for smart development

Increased connectivity

Planning for life cycle costs

Proactive research in innovative transportation opportunities

Public private partnerships

Rails to trails

Relationship between EVs and CU

Stronger regional partnerships

Voter education on transportation issues

# TAB 8



POLICY (/policy)

# Missouri Lawmakers Working on Autonomous Delivery Rules

A proposed law could help companies begin rolling out the small, cooler-sized delivery units to drop off late-night snacks, packages or other sundry items in St. Louis and other Missouri municipalities.

BY KURT ERICKSON, ST. LOUIS POST-DISPATCH / MARCH 3, 2020



SHUTTERSTOCK















(https://www.govtech.com/policy/Missouri-Lawmakers-Working-on-Autonomous-Delivery-Rules.pdf) (TNS) — Robots delivering food and other consumer items could be coming to a St. Louis sidewalk near you.

Following the lead of a handful of other states, Missouri lawmakers are considering new guidelines that would regulate autonomous delivery devices.

The proposed law could help companies begin rolling out the small, cooler-sized delivery units to drop off late-night snacks, packages or other sundry items in St. Louis and other Missouri municipalities. And, the rules could help pedestrians and motorists who will be sharing city streets and sidewalks with the robots.

"The marketplace is changing very swiftly and we just want to make sure our policies are up to date," said Rep. Travis Fitzwater (https://house.mo.gov/MemberDetails.aspx? year=2019&code=R&district=049), R-Holts Summit, who is sponsoring the legislation.

Other states, including Washington, Idaho and Wisconsin, already have put similar laws on their books as robots perform more and more jobs once done by humans.

Fitzwater's plan would limit the robots' weight to 200 pounds, excluding the cargo.

The machine also must be capable of navigating a sidewalk without the intervention of a person.

The measure would allow a device to operate on sidewalks, but also on roads as long as it does not interfere with a motor vehicle. The maximum speed would be 10 mph.

The proposal also requires operators to maintain insurance policies of at least \$100,000 for damages.

The proposed rules in Missouri are less stringent than those in some other states. In Washington, for example, the top speed is 6 mph and the top weight is 120 pounds.

Fitzwater said he expects his proposal to be altered as it moves through the legislative process.

"It's just a first step," he said.

Amazon, which already employs robots in its warehouses, has tested a device called "Scout" that has been compared to a cooler with wheels.

Other companies, such as Starship Technologies

(https://www.stltoday.com/business/local/droids-not-drones-are-the-future-of-e-commerce-deliveries/article\_adb58d74-2c6c-534f-984a-e183dddcfabo.html), have operated pilot projects, primarily on university campuses.

In 2019, the company deployed two dozen robots on the campus of George Mason University in Virginia to cart food to hungry students at a cost of \$1.99 per delivery.

Supporters say robots will reduce congestion and pollution by removing cars, trucks and vans from the delivery process.

The legislation marks the second futuristic bill sponsored by Fitzwater this year.

Earlier this month, he successfully shepherded a plan through the House aimed at convincing developers to build a high-speed transportation system test track in Missouri.

"This is an opportunity for our state to be innovative and forward-thinking on transportation," Fitzwater said at the time.

The measure adds tube transport systems, a concept developed by the company Virgin Hyperloop One, to the list of projects that could be financed through public-private partnerships.

Although the long-term goal is to connect St. Louis and Kansas City with a pneumatic tube that could transport passengers across the state in 30 minutes, a recent study recommends the state first should build a 15-mile track to test the feasibility of the concept.

The delivery device legislation is House Bill 2290. (https://www.house.mo.gov/billtracking/bills201/hlrbillspdf/5088H.01I.pdf)

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Driverless Cars, Delivery Drones May Ease Traffic Gridlock (https://www.govtech.com/transportation/Driverless-Cars-Delivery-Drones-May-Ease-Traffic-Gridlock.html)

#### **OUTDOORS**

# Partnership formed to make roads safer for cyclist and drivers in Northwest Arkansas

BikeNWA has partnered with George Nunnally Chevrolet to increase awareness about how drivers and cyclists can safely share roads.



Credit: Nunnally Chevrolet

Author: 5NEWS Web Staff

Published: **5:29 PM CST March 4, 2020** Updated: **5:29 PM CST March 4, 2020** 

BENTONVILLE, Ark. — BikeNWA and Nunnally Chevrolet Announce Exclusive Partnership.

Local cycling non-profit group, BikeNWA has partnered with George Nunnally Chevrolet of Bentonville to create greater awareness of the rules that make sharing the road safer for people on bikes and in cars.

In support of the educational initiative, the partnership has created, printed, and will be distributing "rules of the road" information, which provide requirements and courtesies for

drivers and cyclists to safely and respectfully share the roads.

BikeNWA's mission is to educate, inspire, and activate the Northwest Arkansas community to ride bicycles and support the creation of a world-class network of bicycle infrastructure for all ages and abilities.

"Our team is excited to partner with Nunnally Chevrolet; it's a great opportunity for us to reach a new audience. We think it is important to educate people in cars and people on bikes on the rules of the road. With this relationship, the goal is to build empathy amongst all users of the road," said Paxton Roberts, Executive Director of BikeNWA.

Nunnally Chevrolet has created branded Oz Trails Editions of select 2020 vehicles for cyclists and outdoor enthusiasts, and a portion of each sale will be donated to BikeNWA.

Oz Trails is BikeNWA's licensed brand to promote increased awareness of the many "offroad" biking and outdoor activities in Arkansas.

Each branded vehicle will include Oz Trails branding on the exterior and interior of each vehicle as well as specialized equipment to make biking and outdoor activities more convenient.

Special features include a bike rack, bike repair kit, first-aid kit, electrical outlets on some models, as well as branded Oz Trails merchandise.

These custom Oz Trails branded vehicles will be available only at George Nunnally Chevrolet in Bentonville on a first-come, first-served basis or by special order through 2020.



Credit: Nunnally Chevrolet

"We are proud of this new partnership with BikeNWA and Oz Trails," said Gan Nunnally, Executive Manager. "As the only family-owned Chevrolet dealership in Northwest Arkansas, our family and employees have always been actively engaged in supporting our community to make Northwest Arkansas a better place to live, work and play."

### **RELATED: BikeNWA Toolkit Boosts Bike-Friendly Businesses**

Nunnally will also participate as a sponsor in other BikeNWA community programs such as the Strider Bike Education program for elementary students in area schools.

To learn more about BikeNWA's mission and service, visit bikenwa.org.

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The Senate Committee on Banking, Housing, and Urban Affairs hearing on surface transportation funding issues focused on the fiscal needs of transit systems across the United States and also how those systems help buttress the nation's economy.

[Above photo via the Senate Banking Committee.]

"State departments of transportation remain committed to assisting Congress in the development of strategies to ensure long-term economic growth and enhanced quality of life through robust investments in public transportation programs and projects," explained Patrick McKenna (*seen above*) – director of the Missouri Department of Transportation and American Association of State Highway

and Transportation Officials 2019-2020 president – in his remarks (https://www.banking.senate.gov/imo/media/doc/McKennaTestimony%202-25-20.pdf) at the February 25 hearing.

"We cannot streamline our way into providing a safe and sound transportation system," McKenna stressed. "We cannot cut our way to buying steel, concrete, asphalt, equipment and labor. We must work together to move transportation policy in the direction of providing safety, service and stability for all."

Part of that policy prescriptive involves taking a broader strategic look at how transit systems serve the general public, he said.



Patrick McKenna

"We're trying to be more dynamic in meeting the needs of our citizens," McKenna noted during the question and answer portion of the hearing.



"For example, access to transit in rural areas helps people age-in-place in our communities," he pointed out. "Also, in many cases we find in some of our communities – particularly those ringing the outer edge of our major metropolitan areas, like St. Louis and Kansas City – that housing affordability is a difficult issue and access to vehicles is a difficult issue. So it is

critical to keep in mind the time and the cost of connecting housing with where people are working, seeking medical treatment, and where they are grocery shopping. That is a critical part of what we are incorporating into our transportation planning."

Paying for that broader transit scope is the difficult part, noted Sen. Mike Crapo, R-Idaho, the banking committee's chairman, in his remarks

(https://www.banking.senate.gov/imo/media/doc/Crapo%20Statement%202-25-20.pdf).

He pointed out that, due to falling diesel and gasoline tax revenues, Congress has chosen to transfer general fund money into the Highway Trust Fund to pay for the last several reauthorization bills – with the highway account requiring a \$52.8 billion transfer to pay for the 2015 Fixing America's Surface

Transportation or FAST Act, with the transit portion of that legislation requiring an \$18.1 billion general fund infusion.

"A long-term reauthorization bill is critical to providing the certainty and stability that transit agencies, cities, and states across the country need to make responsible transportation planning decisions," Sen. Crapo added.



"However, we find ourselves at yet another surface transportation reauthorization where the solvency of the Highway Trust Fund is the most significant issue that needs to be addressed in order to advance a comprehensive, long-term reauthorization bill."

Sen. Sherrod Brown, D-Ohio, the committee's ranking member, echoed those points in his comments (https://www.banking.senate.gov/imo/media/doc/Brown%20Statement%202-25-20.pdf) at the hearing.



"The FAST Act provided record level of federal investment in public transportation, but it expires at the end of September, and the amount of backlogged repairs at the nation's transit systems [has] peaked at \$99 billion, according to the most recent U.S. Department of Transportation estimate," Sen. Brown said. "What do those backlogs mean? More delays when rail cars and buses break down, longer commutes, and more crowded highways."

He added that a "more balanced transportation system" with "high-quality transit service" can give users a quicker and more affordable trip to and from work, or school or a medical appointment.

"It's pretty simple – when you have better, faster transit service, more people use it," Sen. Brown said. "In addition to connecting more workers to jobs, transit reduces highway congestion. Again, it's pretty simple: when there are fewer people on the roads, those that do have to drive get to work faster. When we build better public transportation, everyone wins."

Paul Skoutelas, president and CEO of the American Public Transportation Association, added that the stress on the nation's transportation system as a whole will only become more acute in the near future.

"With more than 16 million additional commuters expected by 2030, U.S. roads will become even more congested," he explained in his remarks



Photo via the Senate Banking Committee.

(https://www.banking.senate.gov/imo/media/doc/Skoutelas%20Testimony%202-25-20.pdf). "Public transit provides a high-capacity mobility alternative. And it saves riders money. APTA estimates that a person who switches his or her daily commute from driving to taking public transportation can save \$10,000 a year. Yet, we still have more work to do to provide these benefits and access to opportunities to more communities [as] 45 percent of Americans do not have access to public transportation."

That's why public transit advocates, such as Scott Bogren, executive director of the Community Transportation Association of America, believe new funding mechanisms to meet the mobility needs of Americans need to be explored.



"We believe that the wisest path forward is to raise the federal gas tax in a responsible, incremental way while also beginning the transition to more sustainable funding mechanisms like vehicle miles traveled concepts," he said in his remarks

(https://www.banking.senate.gov/imo/media/doc/Bogren%20Testimony%202-25-20.pdf). "VMT concepts must be launched ... to take into account electric vehicle usage. [But] these concepts must not disproportionately impact rural parts of the nation where residents must travel further to access work, education, health care and other vital activities."

"America's transportation network is a vast and complex system ... comprised of roads, bridges, public transit, airports, railroads, seaports, and interchanges affecting thousands of communities, multiple industries, and virtually all job sectors," added Ed Mortimer, vice president for transportation and infrastructure at the U.S. Chamber of Commerce, in his remarks (https://www.banking.senate.gov/imo/media/doc/Mortimer%20Testimony%202-25-20.pdf).

In particular, he noted that "changing travel patterns" underscores the role of public transportation as a critical component of what Mortimer described as the "new mobility landscape" of America.

"Even with the availability of new transportation providers, public transit ridership increased by 21 percent from 1997 to 2017, compared to a 19 percent growth in population over the same period," he pointed out.



Ed Mortimer

"Without question, this system serves as the backbone of the economy," Mortimer said. "But America's surface transportation infrastructure is at a crisis point; much of it was built 60 to 100 years ago. That's why new mobility options are required – not to just maintain our public transportation system, but to modernize it."

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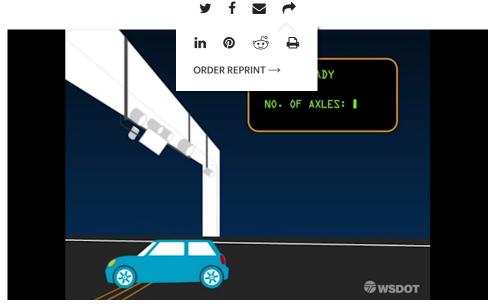


BUSINESS

# Should Washington stop building roads? Some think so

BY MIKE LINDBLOM THE SEATTLE TIMES

FEBRUARY 09, 2020 07:02 AM



In this 2012 file video produced by the Washington State Department of Transportation, animation gives you a better idea how their video toll system works. BY WSDOT

#### SEATTLE

Washington state legislators are considering whether to remove "congestion relief" and "improved freight mobility" from their transportation goals, a departure from the American passion to expand highways.

House Bill 2688 would adopt seven goals: accessibility; safety; environment and climate; health and resilience; equity and environmental justice; preservation; and functionality. The Washington State Department of Transportation (WSDOT) supports the proposal.

"Instead of continuing to build our roads where individual members come up with projects because there's a congestion in their district, what we need to be doing is we need to be looking at this more holistically," sponsor Rep. Sharon Shewmake, D-Bellingham, testified in committee. "Accessibility is really what we want to get at."



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Her bill defines accessibility as "affordable access to the places and goods Washington residents, organizations and businesses need to live, work, study, play and pray," by all modes of transportation. A Senate version of the bill was introduced by Rebecca Saldaña, D-Seattle.

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Driver advocates say ditching "congestion relief" and "improved freight mobility," which now appear under a "mobility" goal, might hamper road building.

"We can't afford to minimize the importance of freight mobility for our roadways," Washington Trucking Association Executive Vice President Sheri Call told a Senate committee recently. "Washington must continue to deliver projects that provide quality of life benefits for all users of the highways in Washington, and keep our economy moving forward."

WSDOT Secretary Roger Millar hopes to bring more attention to worn-out roads and bridges. Currently, just 8 cents of the 49.4-center-per-gallong state gasoline tax goes toward maintenance and preservation, he said.

The state borrows so heavily for big projects such as the Highway 99 tunnel, Highway 520 floating bridge and the widening of I-90 at Snoqualmie Pass East, that bond debt is forecast to consume three-quarters of gasoline taxes by 2028.

The declining condition of state highways is "a glide path to failure," Millar told lawmakers in mid-January.

"That is going to result in some kind of intervention by the federal government," Millar continued. "We have 4,000 lane miles of pavement that are due for preservation this year, we have another 3,600 miles that are past due, and 1,600 miles in the system that are rated as poor. Our budget currently provides for repaving 750 lane miles a year."

Only four of 100 steel bridges are being repainted on time, he said.

A few other states are questioning whether they should keep adding freeways.

Texas Gov. Greg Abbott declared in January that his state is probably experiencing "its last major build-out of roads we'll have in the state of Texas, even considering the fact that Texas is the fastest-growing state in America," D Magazine reported.

The Pennsylvania DOT adopted what it called a holistic view in 2017, adding safety and environmental criteria.

Millar told a highway-officials convention in Spokane in 2018, "simply put, we cannot build our way out of congestion."

He's talking about the phenomenon known as induced demand. Freeway lanes eventually clog because people drive more or developers add housing and retail near interchanges. Lanes typically fill within two years, restoring a kind of traffic-delay equilibrium, said Todd Litman, founder of the Victoria Transportation Policy Institute in British Columbia.

As of yet, no state has frozen or canceled highway construction for the sake of reducing car dependency or greenhouse gases, according to Patrick McKenna, Missouri Department of Transportation director and president of the American Association of State Highway and Transportation Officials.

Environmental aims do limit highways in some communities, McKenna said, but money is a greater constraint. Missouri voters, for instance, have rejected measures to boost their 17-cent gas tax.

"At the practical level, the ability to fund these things is constricted," he said. "We've had multiple decades of a public unwillingness to maintain the system in its current state, never mind expansions."

Americans drove 3.3 trillion miles in 2018. Gasoline consumption rose for the seventh straight year, to 147 billion gallons, Federal Highway Administration data says.

Seattle-area traffic remains fifth-worst in the nation, causing an average yearly delay of 138 hours per commuter, said new rankings by the TomTom navigation company.

Do goals matter?

The Washington state Legislature already committed \$3 billion this biennium to highway improvements. Contractors are widening I-5 through Joint Base Lewis-McChord, and will toll lanes to I-405 between Bellevue and Renton. Work resumes this spring to complete the North Spokane Freeway, proposed in the 1940s.

"We are not against adding capacity. There are places where adding capacity makes perfectly good sense," Millar said in an interview last week. He praised the Puget Sound Gateway program that will extend both Highway 509 in SeaTac and freight-laden Highway 167 from Tacoma to the Green River Valley.

Mariya Frost, analyst for the Washington Policy Center, said despite robust construction now, more goals could detract from a future wave of needed road building, when lawmakers write a possible \$16 billion transportation package in 2021.

"WSDOT is fundamentally a road and bridge agency and should not veer into areas of public health or social engineering, while rejecting its responsibility for improving mobility for all Washingtonians," she wrote last week.

The legislation goes beyond listing seven goals.

WSDOT would write metrics for each goal, and consult with the departments of health, ecology and commerce to evaluate projects. Some standards are subjective, like "alignment with land-use goals that bring the things people need closer together."

But other provisions would add teeth to numeric standards already in state law: to reduce statewide carbon emissions by 25% by 2030 from 1990 levels, and redice vehicle miles traveled 30% by 2035

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Washington is currently off track to achieve these three standards.

"More than 10 people a week die on our highways," Millar emphasized.

Rep. Jesse Young, R-Gig Harbor, objected to ceding legislators' power by giving Democratic Gov. Jay Inslee's agency appointees a say in whether projects qualify for money.

Shewmake told Young at a hearing, "I would argue that your constituents probably care about accessibility as their number one goal in looking at a transportation network."

"No," Young replied. "My constituents fundamentally care about being able to afford the tolls on the (Narrows) bridge and be able to make their payments, to put gas in their cars, so they can feed their families."

In the Senate committee hearing, ranking member Curtis King, R-Yakima, declared, "To me, we are introducing things that are totally not transportation."

King speculated that an environmental-justice goal could hinder repaving to preserve I-82, from Union Gap to Yakima, on grounds that Latino residents nearby have been exposed to exhaust particulate, a health issue flagged by bill proponents.

Money for the new goals might be harder to find.

The state Constitution requires state gasoline taxes be spent on state and local roads. The more flexible car-tab taxes, which can be spent on transit, passenger rail, walking and bicycling, will be slashed if courts uphold Tim Eyman's Initiative 976.

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