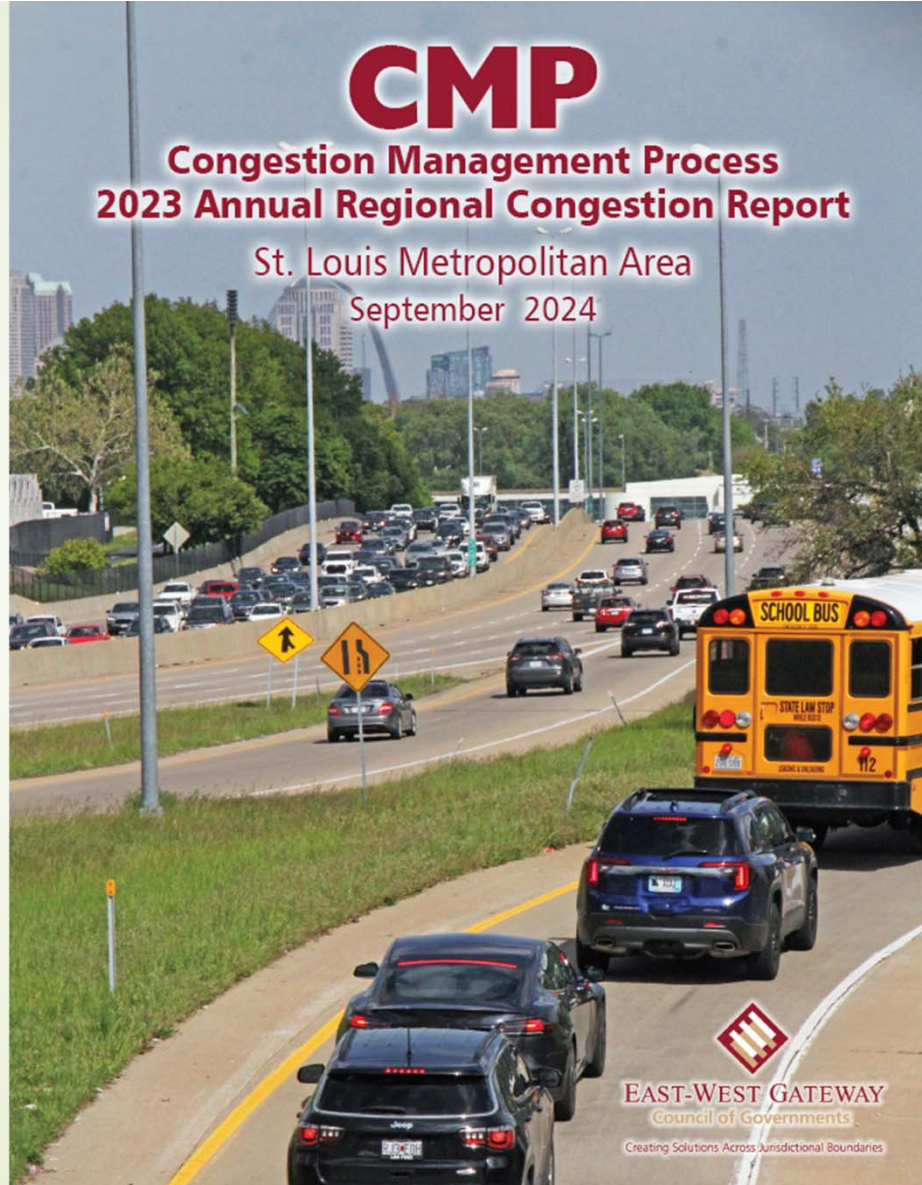


# CMP

## Congestion Management Process 2023 Annual Regional Congestion Report

St. Louis Metropolitan Area  
September 2024



**EAST-WEST GATEWAY**  
Council of Governments

Creating Solutions Across Jurisdictional Boundaries



# Background

- ▶ A Congestion Management Process (CMP) is required in large metropolitan areas.
- ▶ This report identifies and measures regional congestion.
- ▶ Goals:
  - ▶ Identify regional congestion.
  - ▶ Present implemented congestion management strategies.
  - ▶ Engage partners in determining solutions.



# Congestion Metrics

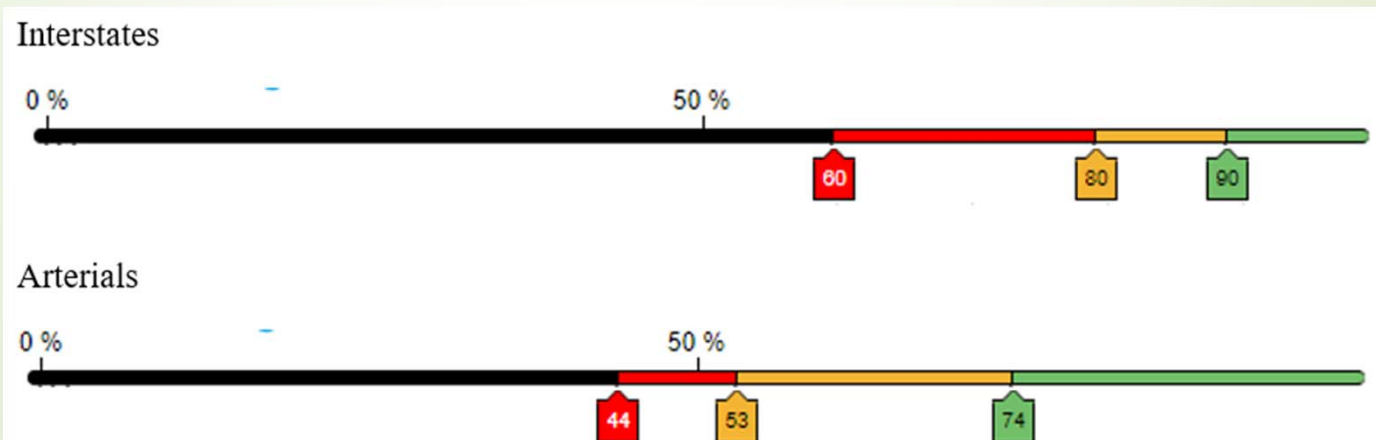
- **Speed Index** – Ideal travel time based on free flow speed
- **Travel Time Index (TTI)** – ratio of ideal travel time 1.2 → 20% longer trip
- **Planning Time Index (PTI)** – ratio of ideal travel time plus buffer time
  - accounts for unexpected issues (weather, accidents, road work)
- **Severity** – Average of TTI and PTI
- **Delay Impact** – Queue Length of congested segment multiplied by TTI

Example

Map ID No.	Route	Limits	State	Area	Direction	Peak	Queue Length (Mi)	PTI	TTI	Severity	Delay Impact
1	I-55	Arsenal to Union Rd	MO	St. Louis City	NB	AM	6.08	3.02	1.45	2.24	8.82
2	I-55	Park Ave to Reavis Barracks	MO	St. Louis City	SB	PM	9.81	3.75	1.76	2.76	17.27

# Selecting Congested Locations

- Examined National Highway System Roads
- Used HERE congestion scans and speed index from 2023
- Analyzed every weekday during the peak times
  - 6-9 AM
  - 3-6 PM
- These Speed Index thresholds used to identify congested locations



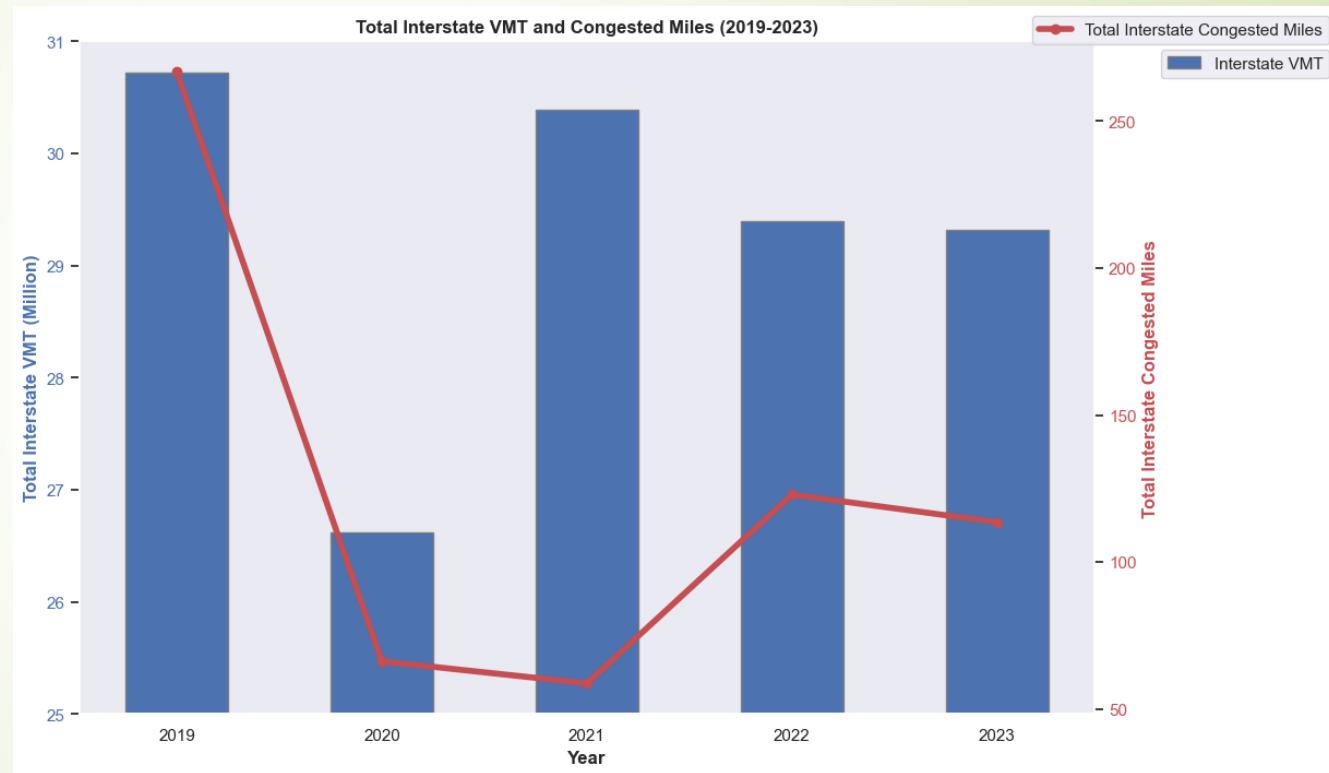
# 2023 Interstate Analysis

## Congested Locations

2022	2023
39	32

## Congested Miles

2022	2023
122.9	113.56

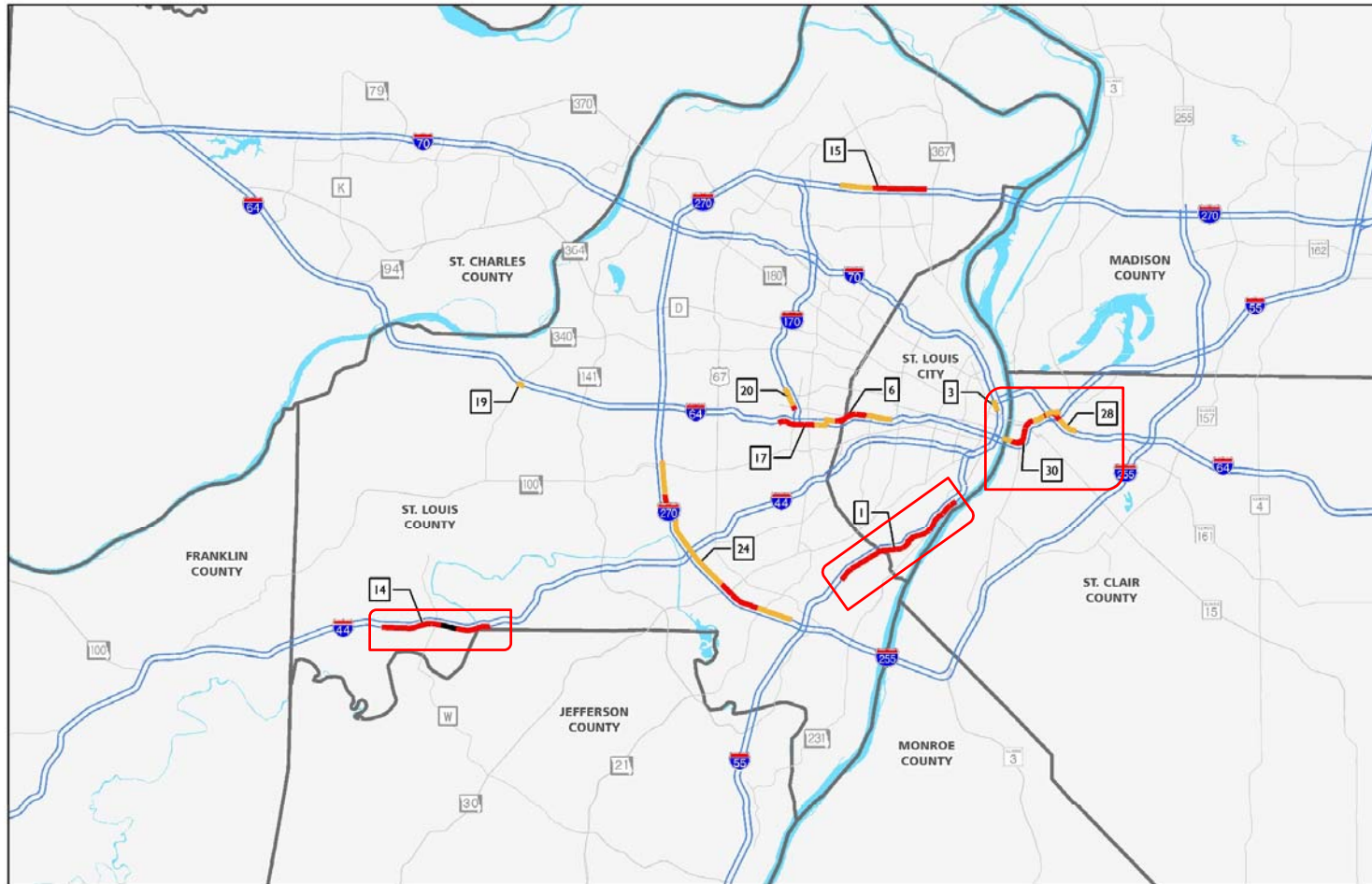


Fewer but more severe locations



# Major Impacts: Work Zones 2023

- ▶ **I-55 Bridge Rehab both directions (I-55/I-44 Split to Bayless Avenue)**  
Rehab of 14 bridges. Regular lane shifts and ramp closures. 2 lanes taken in both directions.
- ▶ **I-44 EB Bridge Rehab (Lewis Rd near Eureka)**  
One lane taken, 3.26-mile average bottleneck.
- ▶ **I-55/I-64 Bridge Rehab (Poplar St Bridge / East St. Louis)**  
Repair and Painting. Regular lane shifts and closures. 2.11-mile average bottleneck.
- ▶ **I-255 Jefferson Barracks Bridge (Into and out of Missouri)**  
Full closure of WB bridge, traffic shifted to east side, narrowed lanes



## 2023 Congested Locations Interstates - AM Peak

*East-West Gateway Region*

### Interstate Congestion

- ↘ Severe
- ↘ Heavy
- ↘ Moderate
- ↘ Uncongested

### Other Map Data

- ~ Arterial
- ▭ County Boundary
- 🌊 River / Lake

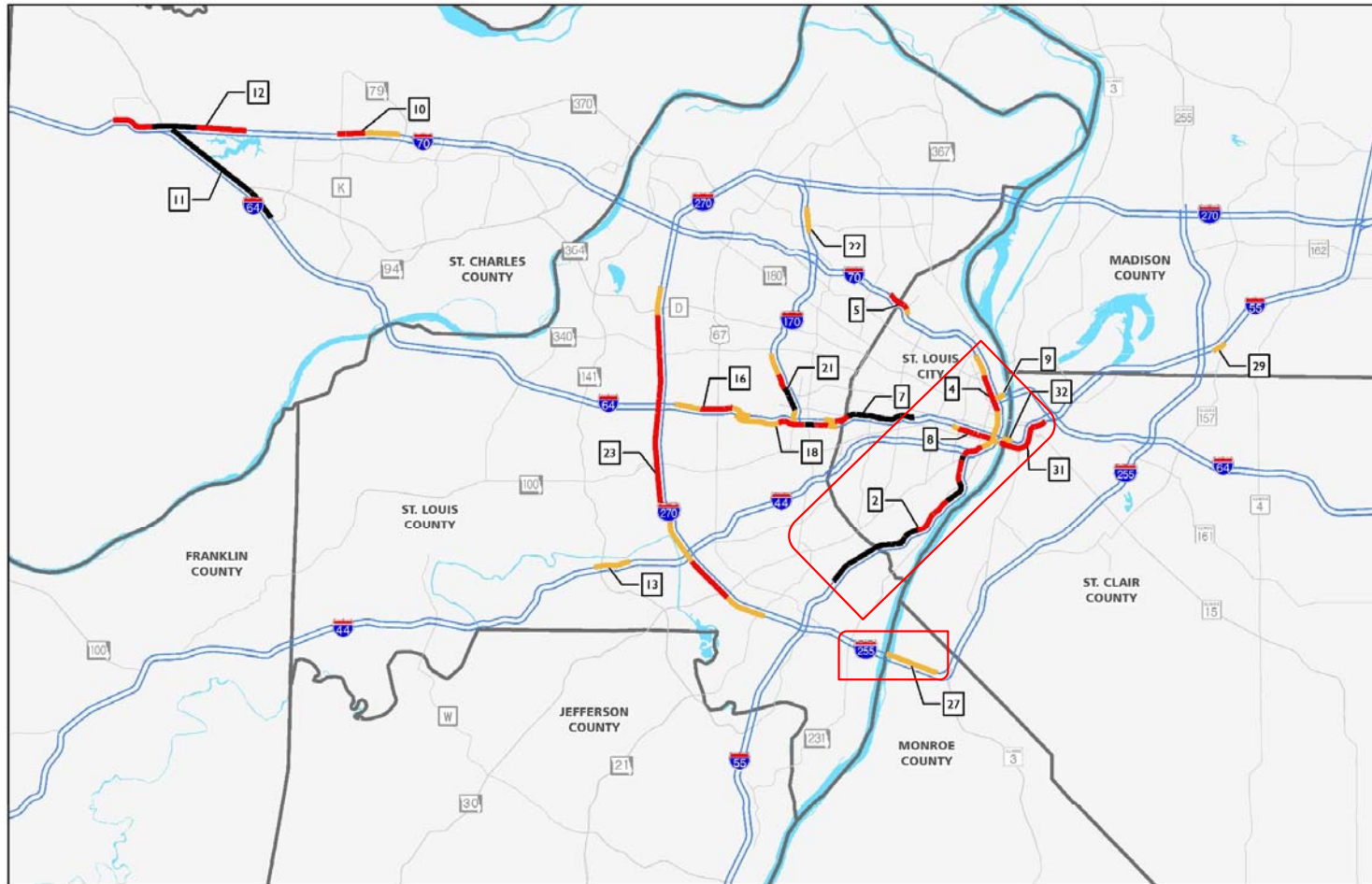


Sources: Federal Highway Administration, Here Data,  
East-West Gateway Council of Governments



August 2024





## 2023 Congested Locations Interstates - PM Peak

*East-West Gateway Region*

### Interstate Congestion

- Severe
- - - Heavy
- - - Moderate
- Uncongested

### Other Map Data

- Arterial
- County Boundary
- River / Lake



Sources: Federal Highway Administration, Here Data,  
East-West Gateway Council of Governments



August 2024

# Recurring Congestion

- I-64 and I-70 St. Charles PM
- I-270 NB AM and SB PM
- I-64 and I-170 AM and PM  
EB and WB, STL city and county



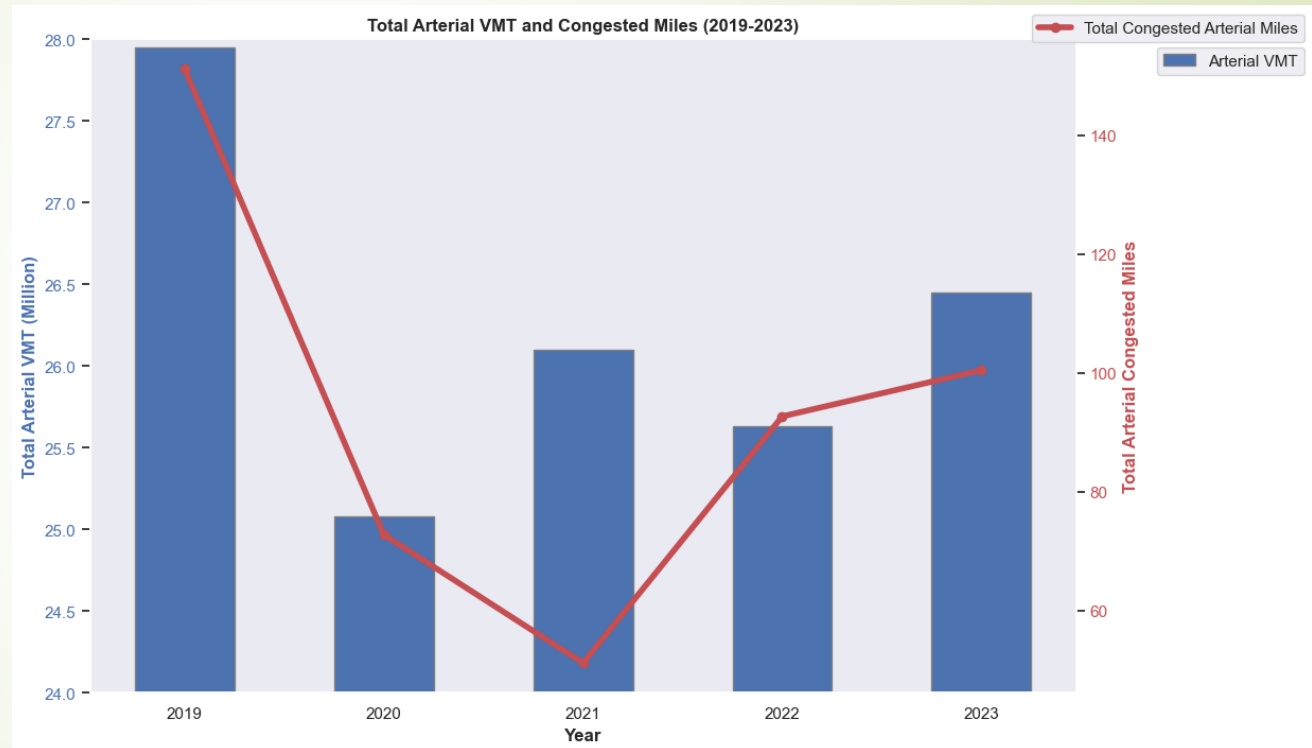
# 2023 Arterial Analysis

## Congested Locations

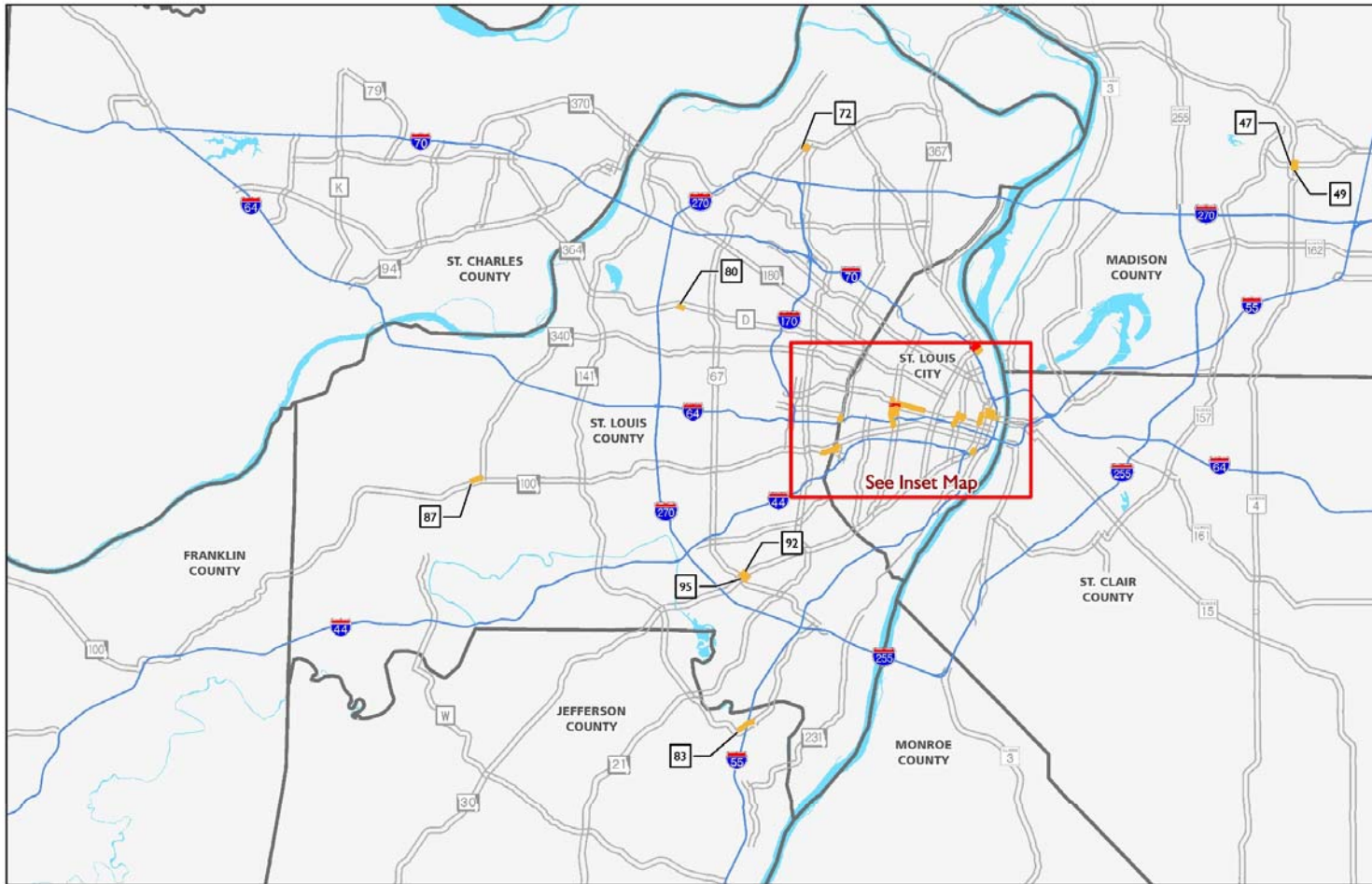
2022	2023
102	109

## Congested Miles

2022	2023
92.71	100.49



Post pandemic arterial congestion is increasing but remains well below 2019 levels.



## 2023 Congested Locations Arterials - AM Peak

*East-West Gateway Region*

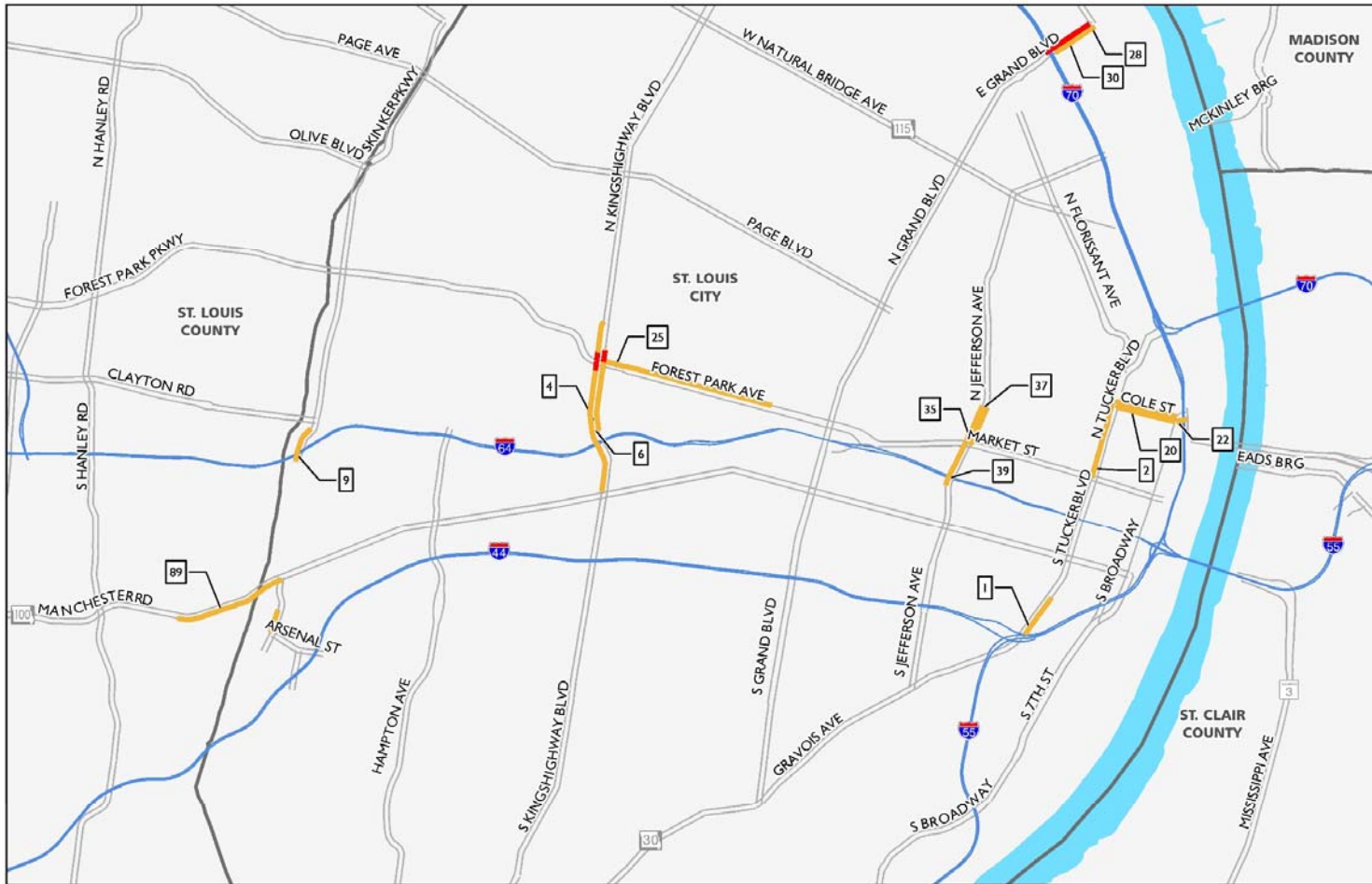
- | Arterial Congestion | Other Map Data  |
|---------------------|-----------------|
| Heavy               | Interstate      |
| Moderate            | County Boundary |
| Uncongested         | River / Lake    |



Sources: Federal Highway Administration, Here Data,  
East-West Gateway Council of Governments



August 2024



## 2023 Congested Locations Arterials - AM Peak Inset

East-West Gateway Region

### Arterial Congestion

- Heavy
- Moderate
- Uncongested

### Other Map Data

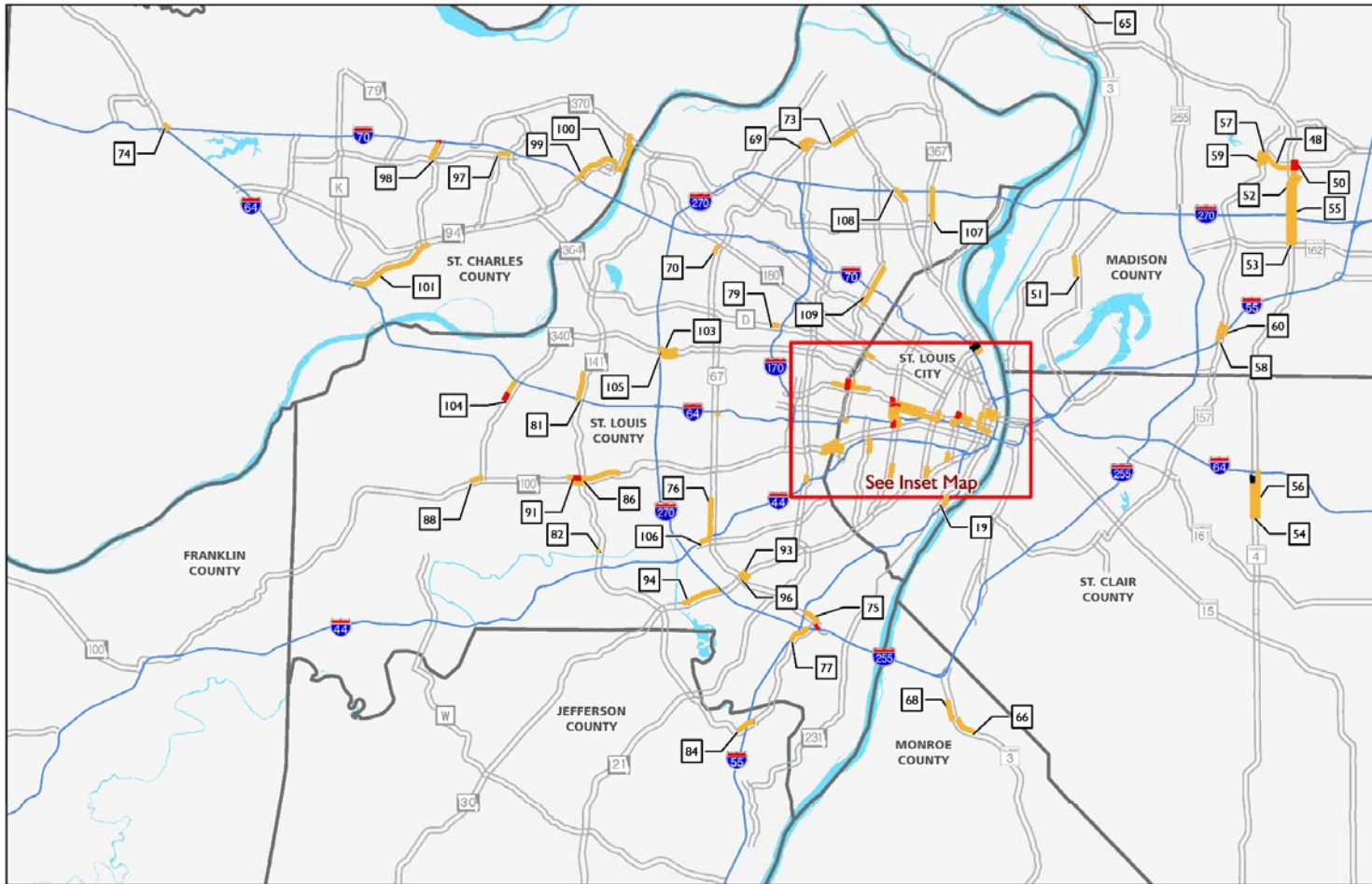
- Interstate
- County Boundary
- River / Lake



Sources: Federal Highway Administration, Here Data,  
East-West Gateway Council of Governments



August 2024



**2023 Congested Locations**  
**Arterials - PM Peak**  
*East-West Gateway Region*

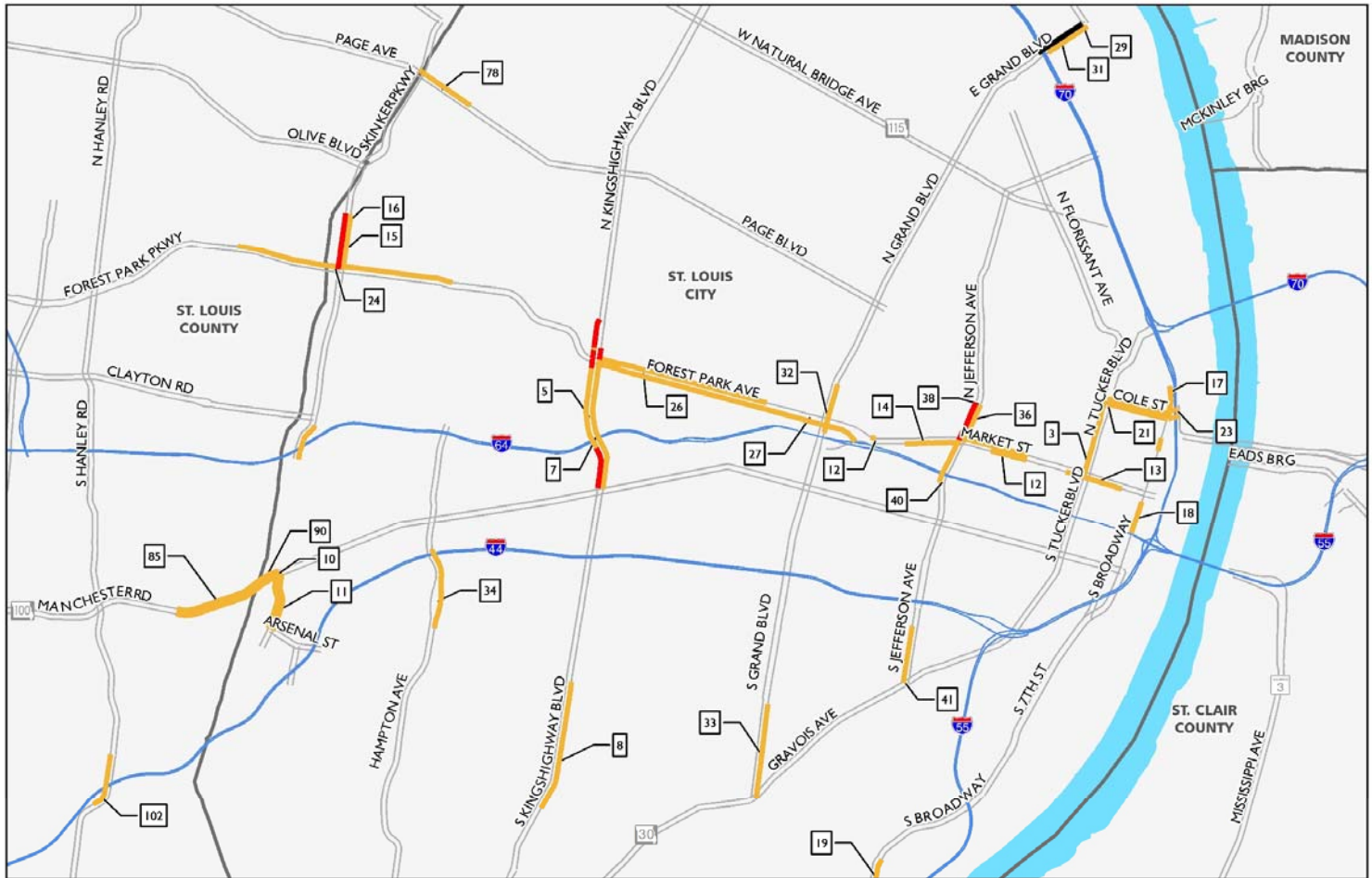
- | Arterial Congestion | Other Map Data    |
|---------------------|-------------------|
| — Severe            | — Interstate      |
| - - - Heavy         | □ County Boundary |
| - - - Moderate      | — River / Lake    |
| - - - Uncongested   |                   |



Sources: Federal Highway Administration, Here Data,  
 East-West Gateway Council of Governments



August 2024



**2023 Congested Locations  
Arterials - PM Peak Inset**  
East-West Gateway Region

- |                            |                       |
|----------------------------|-----------------------|
| <b>Arterial Congestion</b> | <b>Other Map Data</b> |
| ⚫ Severe                   | ⚡ Interstate          |
| ⚫ Heavy                    | ⬜ County Boundary     |
| ⚫ Moderate                 | 🌊 River / Lake        |
| ⚫ Uncongested              |                       |



Sources: Federal Highway Administration, Here Data,  
East-West Gateway Council of Governments



# 10 Most Severe Locations 2023

Rank	Route	Limits	State	Area	Direction	Peak	Severity
1	I-64	MO-N to I-70	MO	St. Charles	WB	PM	2.95
2	I-55	Park Ave to Reavis Barracks	MO	St. Louis City	SB	PM	2.76
3	I-64	S Kingshighway to Big Bend Blvd	MO	St. Louis City	WB	PM	2.60
4	I-44	Lewis Rd to MO-109	MO	St. Louis County	EB	AM	2.51
5	I-270	Old Halls Ferry Rd to N Elizabeth Ave	MO	St. Louis County	WB	AM	2.39
6	I-55	Arsenal to Union Rd	MO	St. Louis City	NB	AM	2.24
7	I-170	Delmar Blvd to I-64	MO	St. Louis County	SB	PM	2.10
8	I-70	MO-A to Pearce Blvd	MO	St. Charles	WB	PM	2.06
9	I-64	Big Bend Blvd to I-170	MO	St. Louis County	EB	AM	2.04
10	I-64	Hampton Ave to Big Bend Blvd	MO	St. Louis City	WB	AM	2.04



Red → also in the 2022 top 10

★ major road work



# 10 Most Delayed Locations 2023

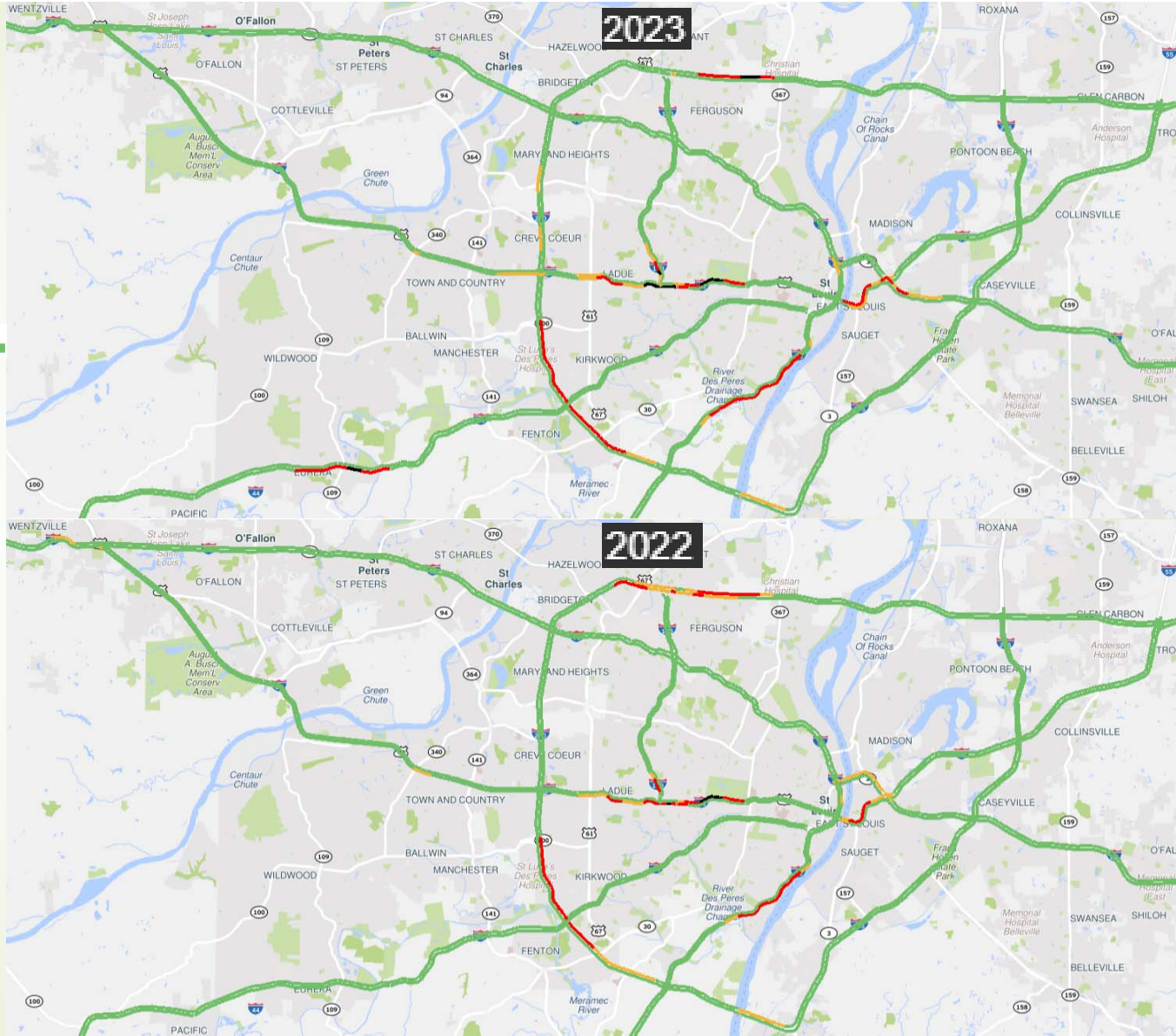
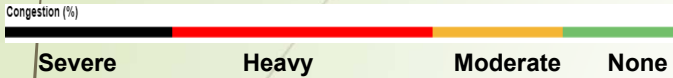
Rank	Route	Limits	State	County	Direction	Peak	Queue Length (Mi)	Delay Impact
1	I-270	Page Ave to Tesson Ferry	MO	St. Louis County	SB	PM	15.75	21.26
2	I-55	Park Ave to Reavis Barracks	MO	St. Louis City	SB	PM	9.81	17.27
3	I-270	Tesson Ferry to Manchester Rd	MO	St. Louis County	NB	AM	9.58	11.88
4	I-64	MO-N to I-70	MO	St. Charles	WB	PM	5.59	10.34
5	I-55	Arsenal to Union Rd	MO	St. Louis City	NB	AM	6.08	8.82
6	I-70	MO-A to Pearce Blvd	MO	St. Charles	WB	PM	5.69	8.36
7	I-55	MO-Z to McNutt St	MO	Jefferson	SB	PM	6.46	7.62
8	I-64	S Kingshighway to Big Bend Blvd	MO	St. Louis City	WB	PM	3.93	7.47
9	I-44	Lewis Rd to MO-109	MO	St. Louis County	EB	AM	4.64	6.77
10	I-64	Bellevue Ave to 40 Dr	MO	St. Louis County	EB	PM	4.34	5.99

Red → also in 2022 top 10

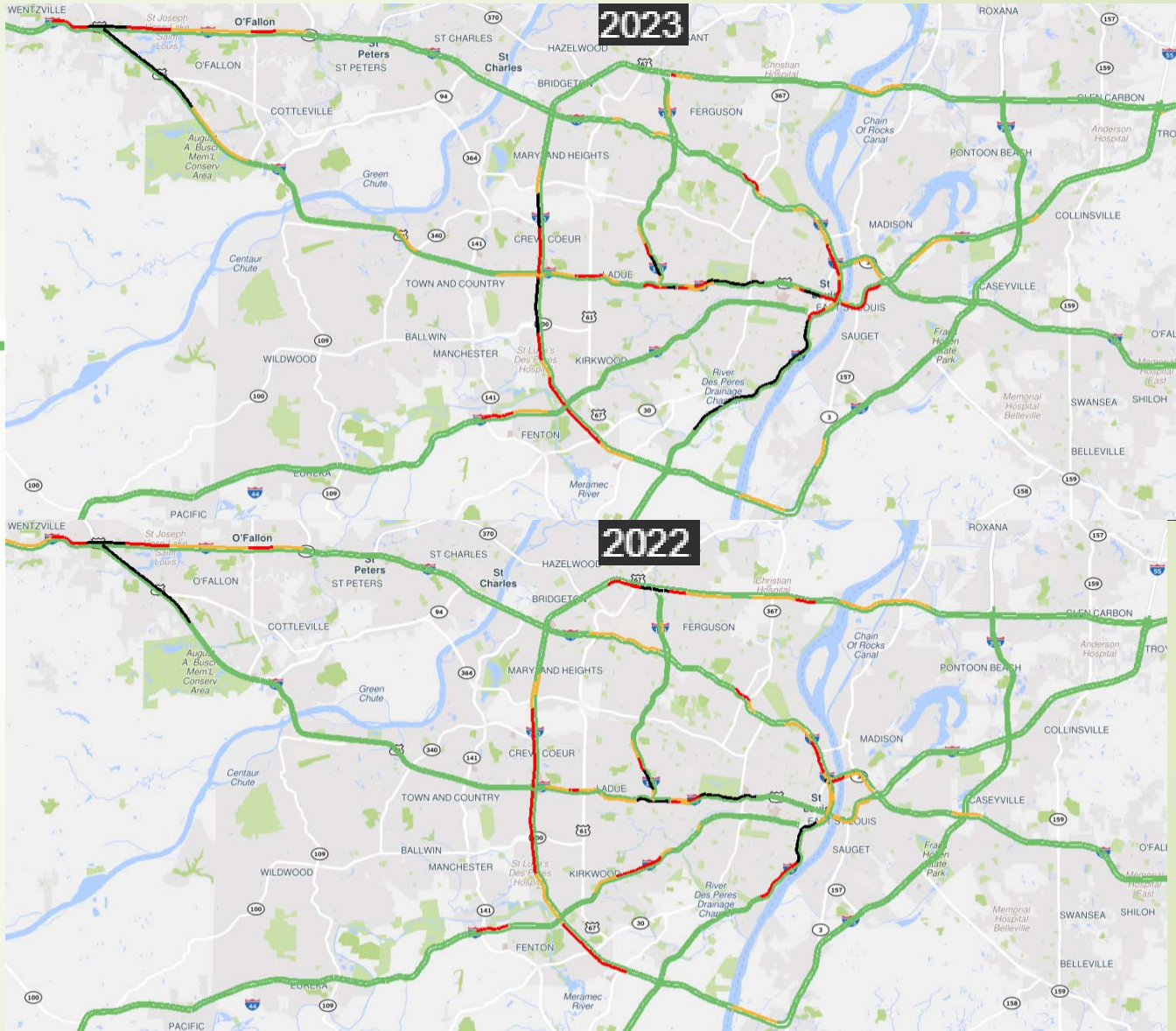
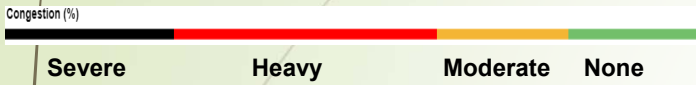
★ major road work



# Congestion Progression 8 AM



# Congestion Progression 4 PM





# Key Takeaways

- ▶ **VMT and congestion remain much lower than 2019 pre-pandemic levels** as the public has adapted with remote work, school, and online shopping.
- ▶ In 2023, interstates had **fewer but more severe and longer delays**.
- ▶ **Arterials experienced more congestion in 2023.**

# Report available

<https://www.ewgateway.org/transportation-planning/transportation-systems-management-operations/congestion-management-process/>

Thanks for your ideas and strategies to reduce congestion in our region.



Any questions?  
cmp@ewgateway.org