ANNUAL REGIONAL CONGESTION REPORT (2016)

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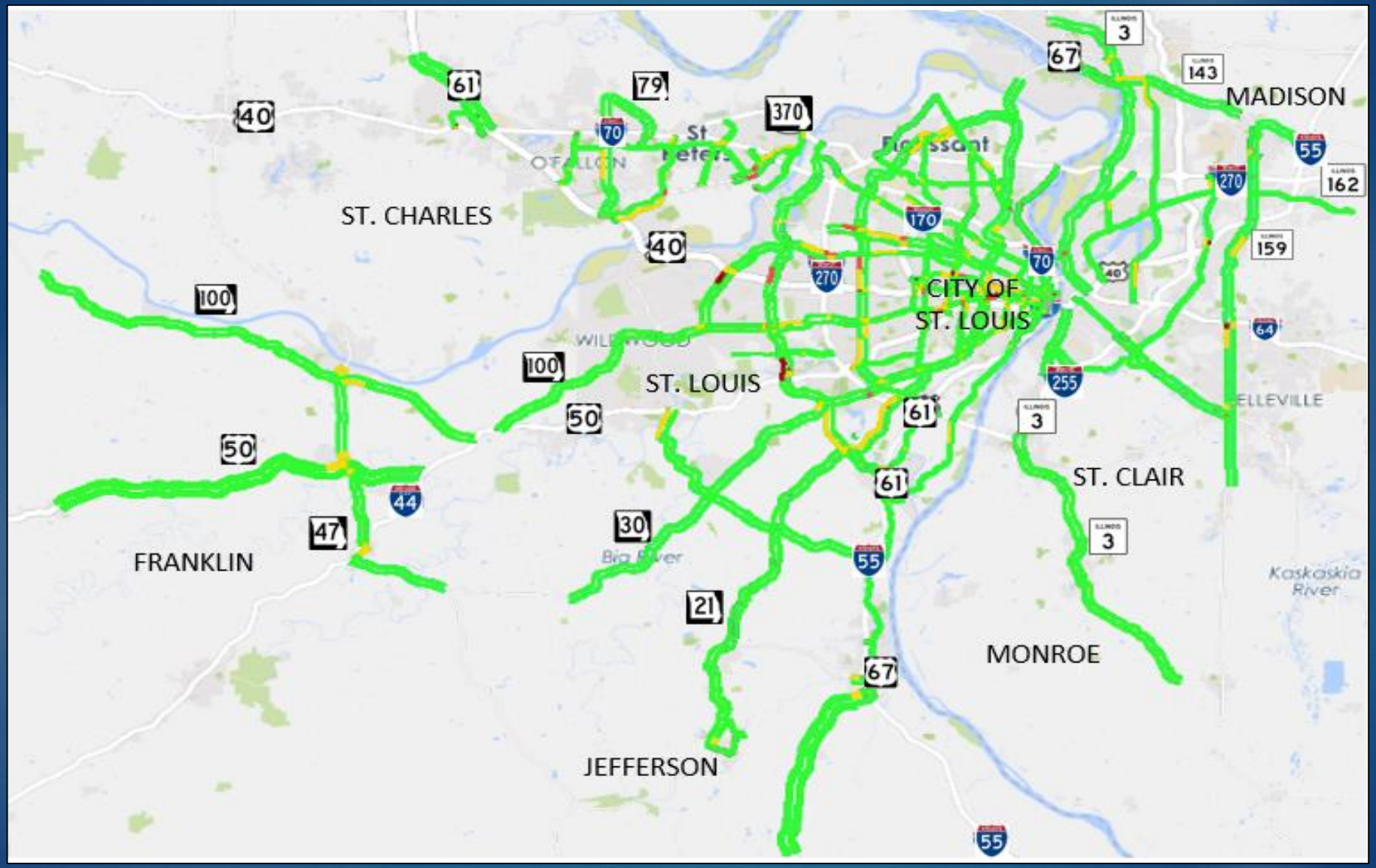
Background

A Congestion Management Process (CMP) is required in metropolitan areas classified as Transportation Management Areas (TMAs).

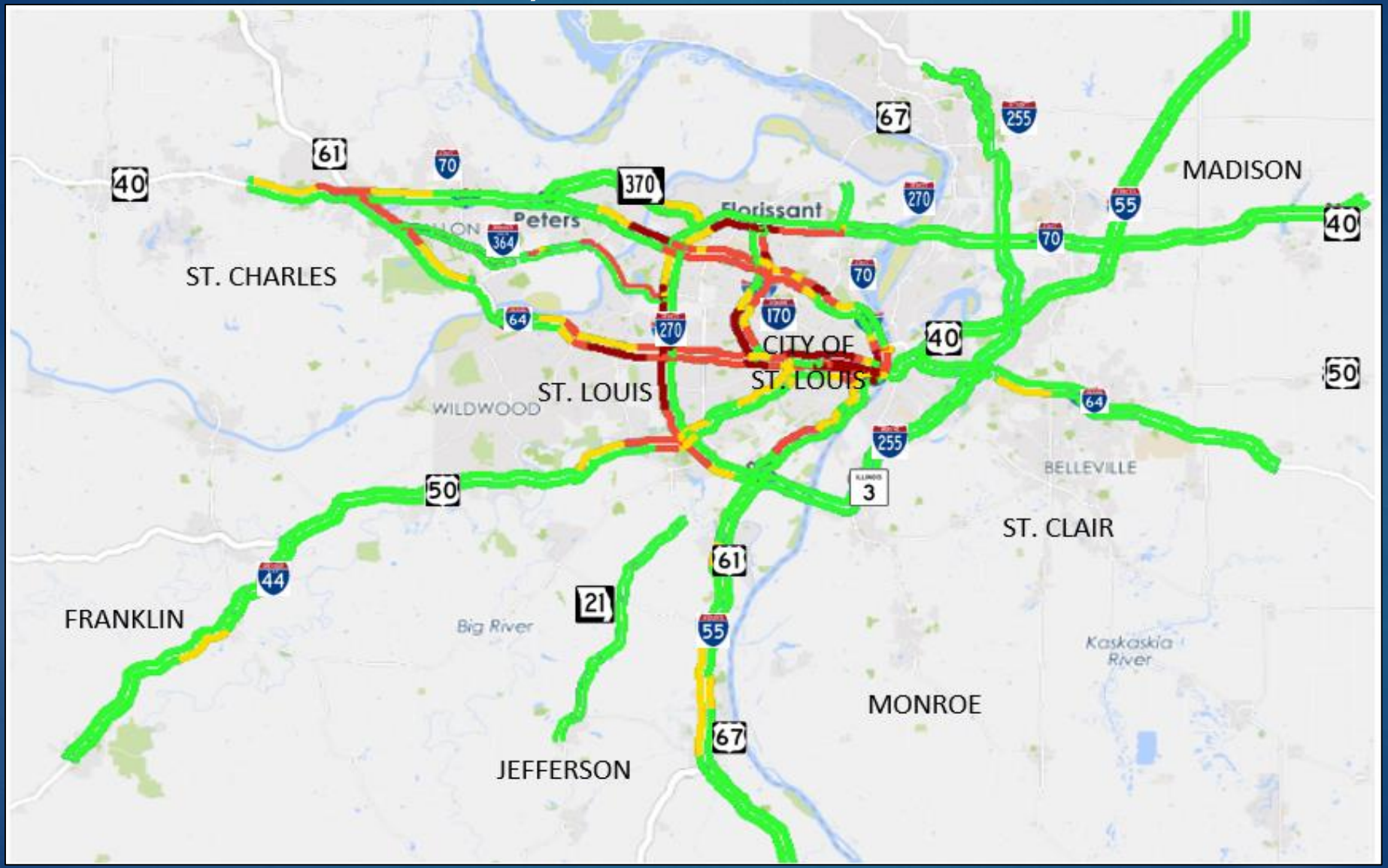
The CMP is an ongoing process to identify & quantify regional congestion, and to develop and implement strategies to reduce congestion.

Our CMP specifies that we develop an annual report on regional congestion, mitigation efforts and evaluation results.

CMP Network - Arterials



CMP Network - Freeways



Primary Performance Measures

1. **Travel Time Index (TTI)**: Measure of level of congestion; compares actual average travel time to what travel time would be during free-flow traffic conditions.
2. **Planning Time Index (PTI)**: Measure of reliability of travel times; compares the near longest travel times in congested conditions to free-flow travel times.
3. **Speed Index**: Measure of level of congestion; compares actual average speed to speed during free flow conditions. Used to establish congestion thresholds for congested locations in this report.

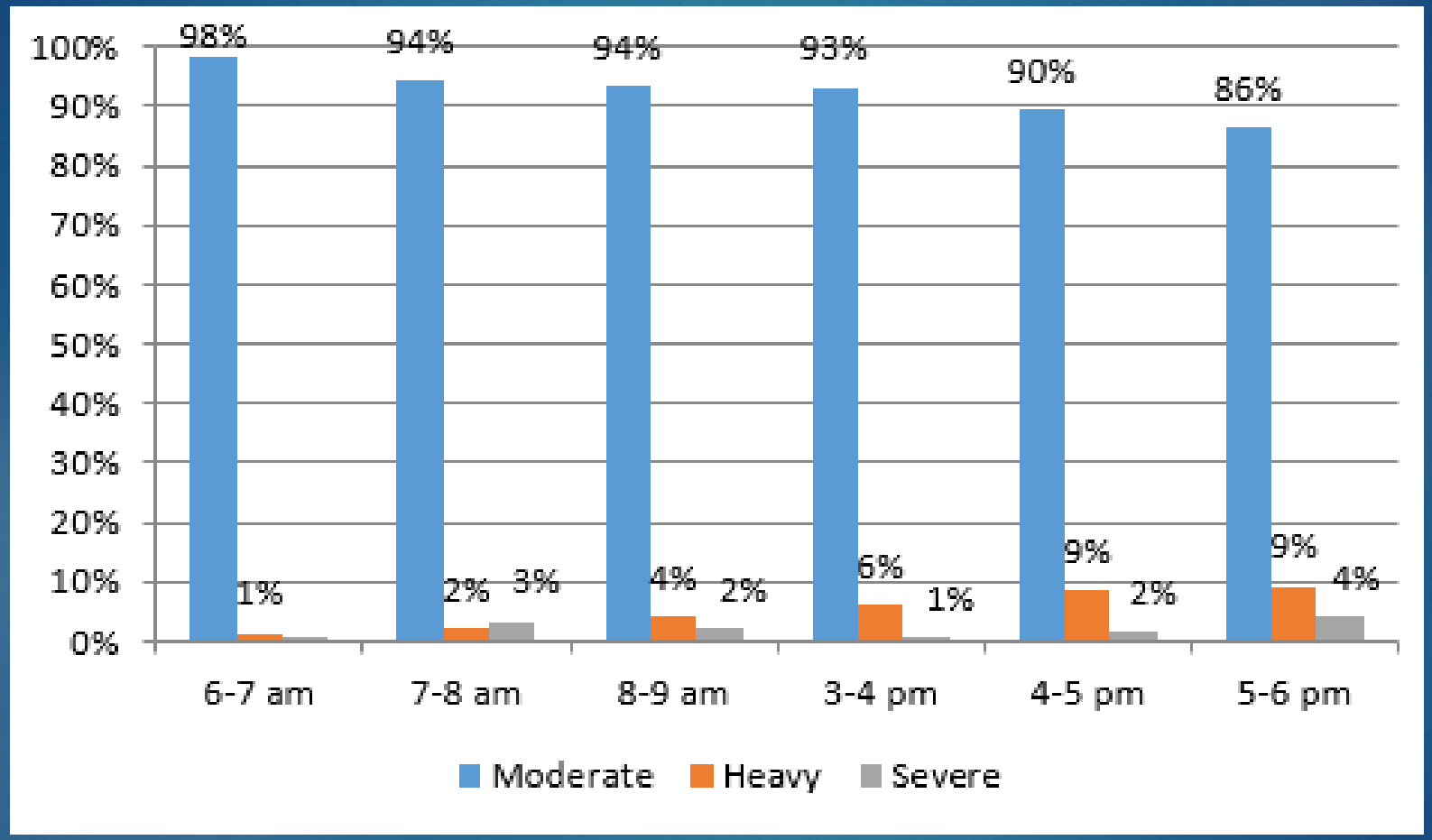
Selecting Congested Locations

- Compilation of data for the entire year
- Analyzed AM and PM Peak Periods
  - 6-9 AM Every Weekday
  - 3-6 PM Every Weekday
- Applied “Speed Index” thresholds
- Identified Segments that exceeded congestion thresholds

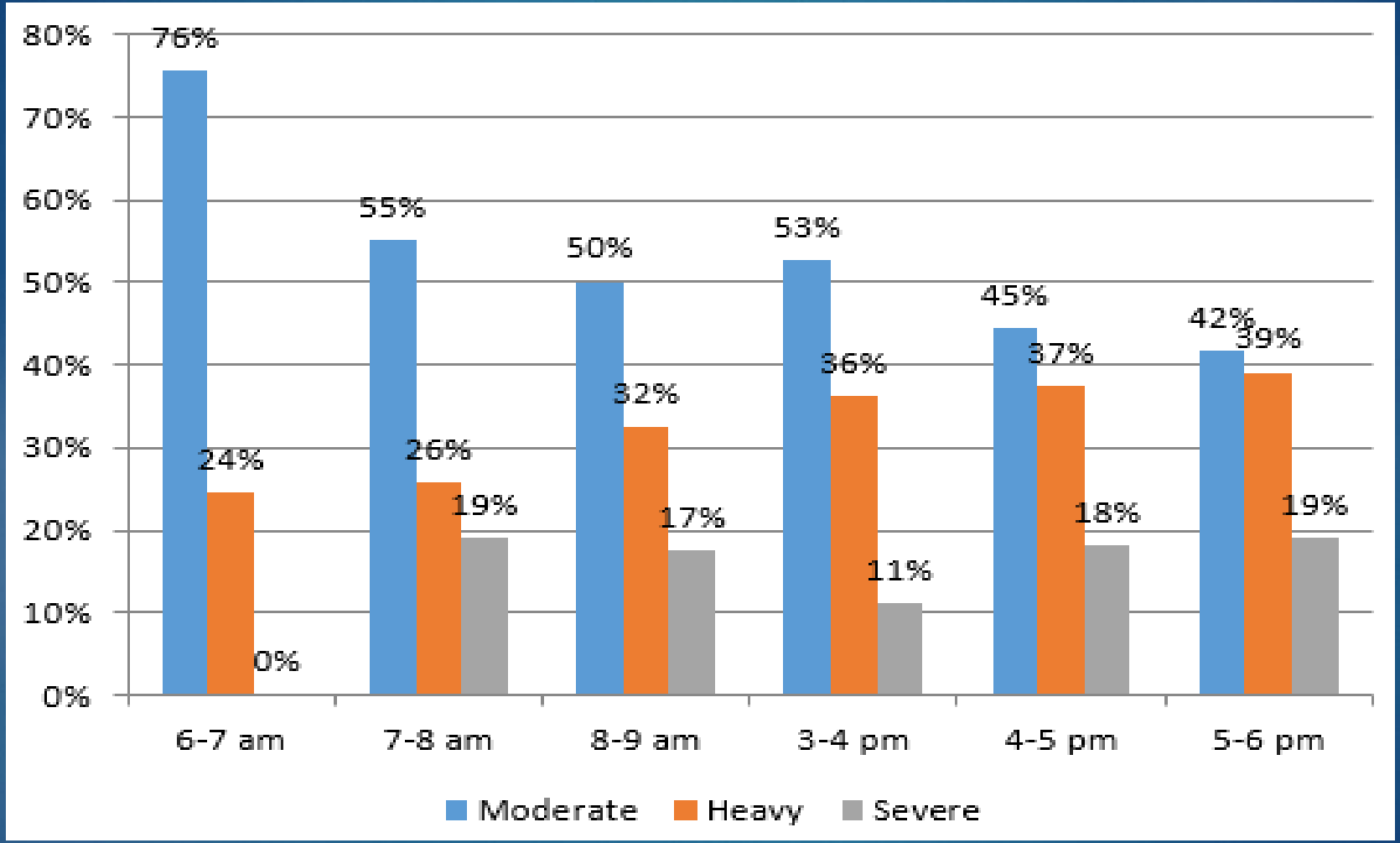
Congested Locations Found:

- Arterials
  - 38 Segments
  - 81 Total Miles
- Freeways
  - 37 Segments
  - 285 Total Miles

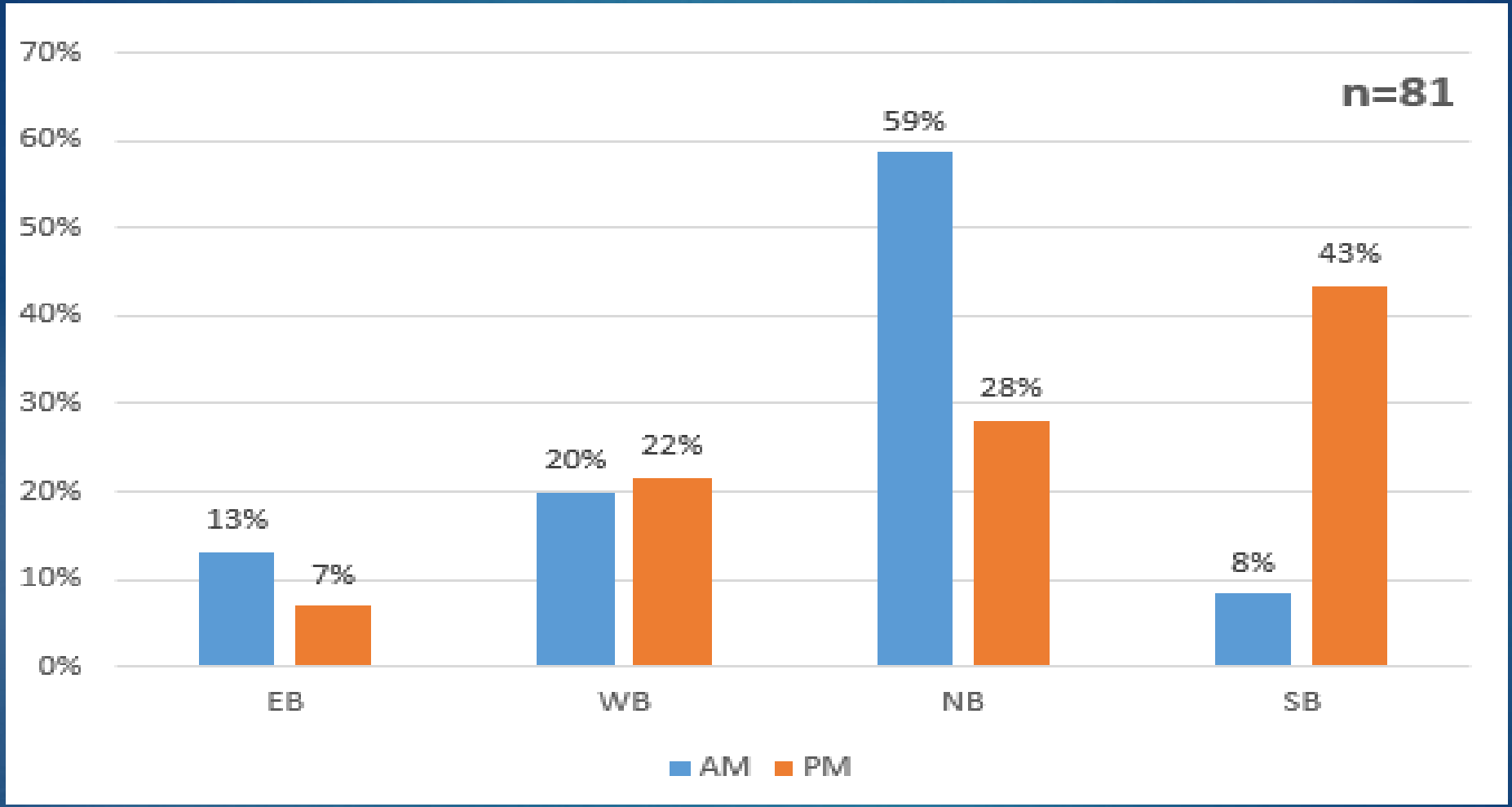
Congestion Level Distribution Over Time: All Arterial Congested Locations



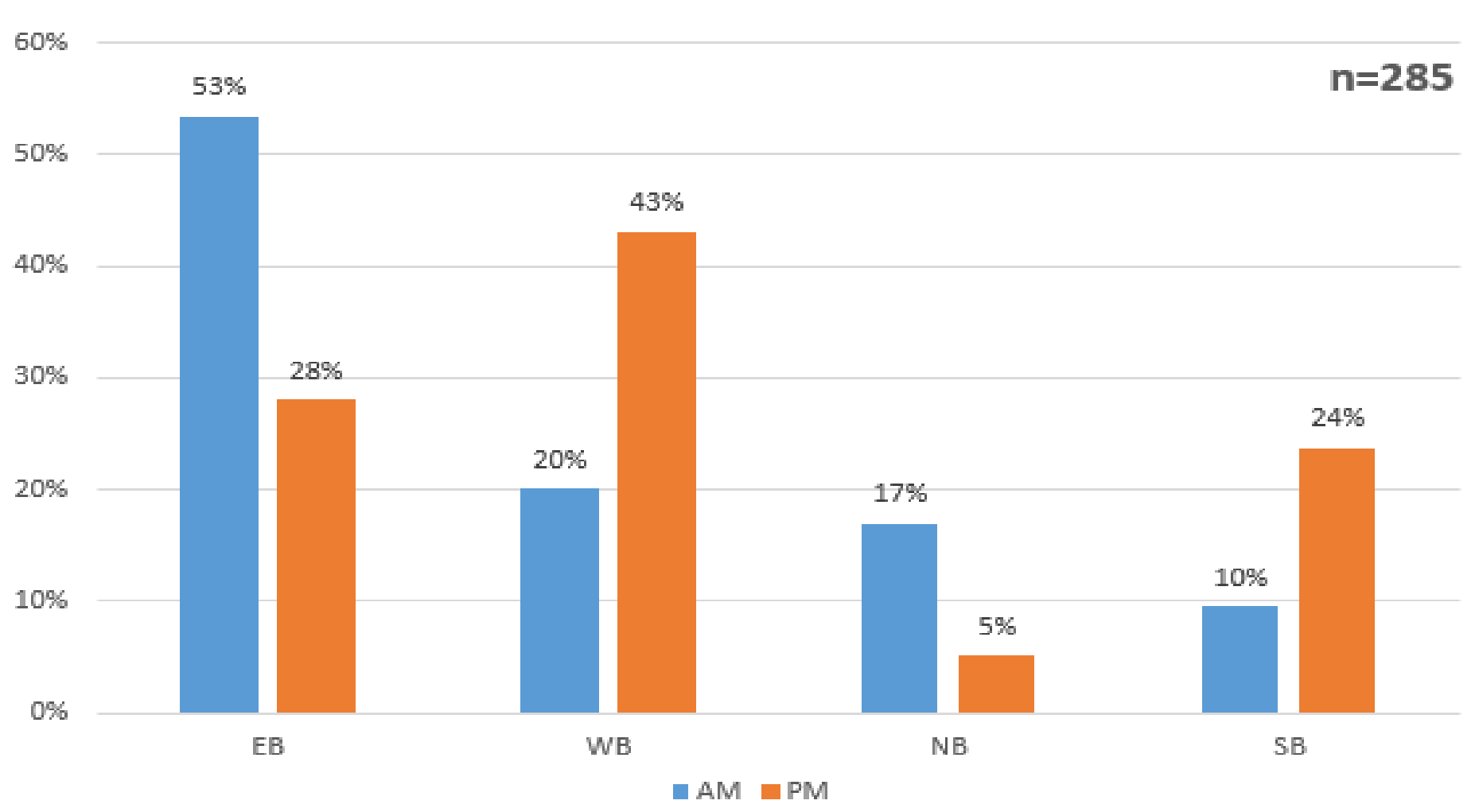
Congestion Level Distribution Over Time: All Freeway Congested Locations



Directional Congestion Level Distribution – All Arterial Congested Locations



Directional Congestion Level Distribution – All Freeway Congested Locations



Ranking Congested Locations

- Severity of Congestion = Avg. of PTI and TTI
- Total Impact = Congested Miles x TTI
- Variability = PTI/TTI

Arterial Rankings (Top 10)

Route	Severity
IL-157	3
MO-141	2
MO-D	1
HANLEY	1
FOREST PARK AVE	1
JEFFERSON	1
HAMPTON AVE	1

Route	Total Impact
MO-141	3
MO-94	3
MO-340	1
MO-D	1
MO-K	1
US-67	1

Route	Variability
MO-141	3
KINGSHIGHWAY	2
HANLEY	1
HAMPTON AVE	1
JEFFERSON	1
MO-340	1
MO-D	1

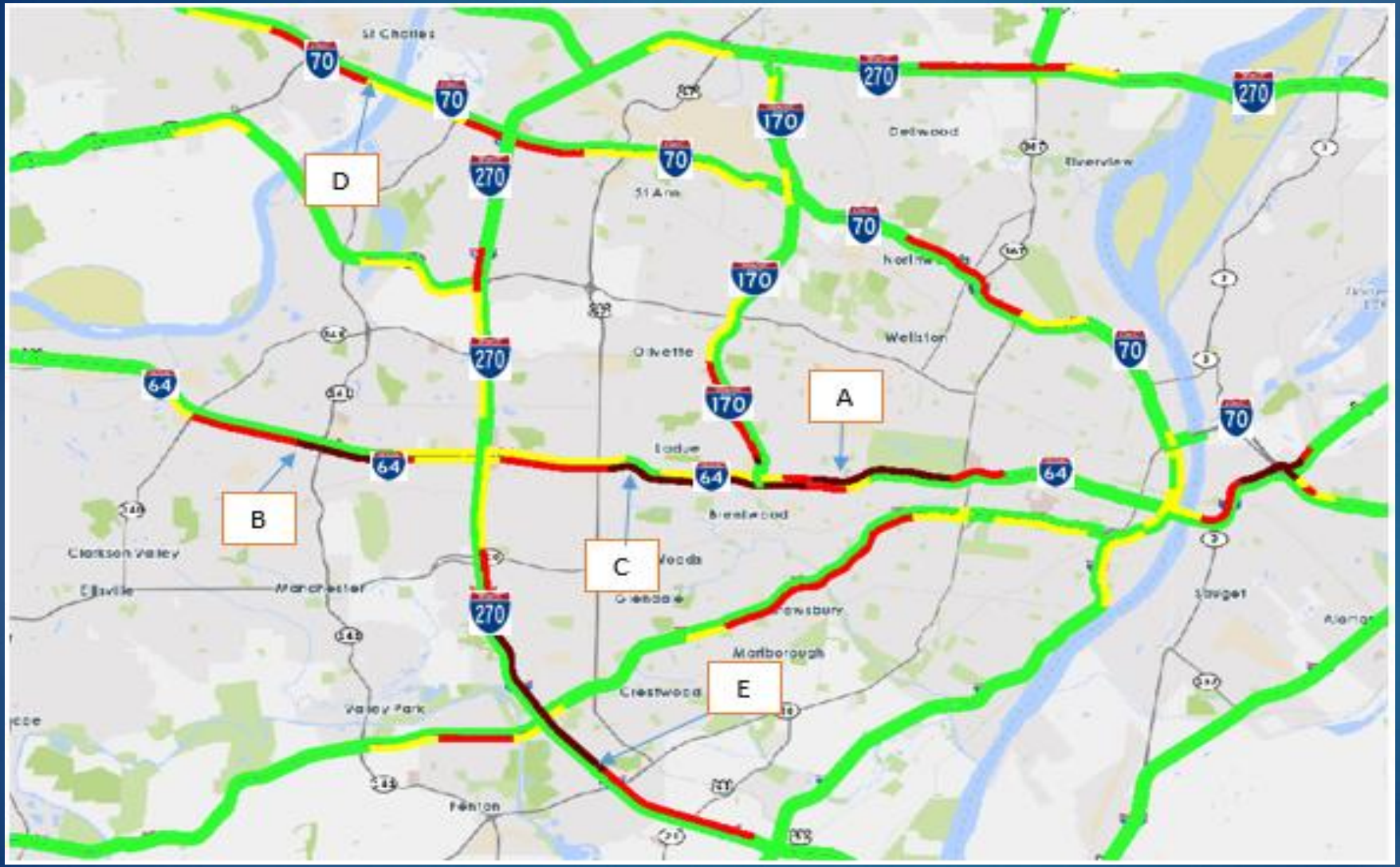
Freeway Rankings (Top 10)

Route	Severity
I-64	3
I-270	3
I-70	1
I-170	1
I-55	1
I-44	1

Route	Total Impact
I-64	3
I-270	3
I-70	3
I-44	1

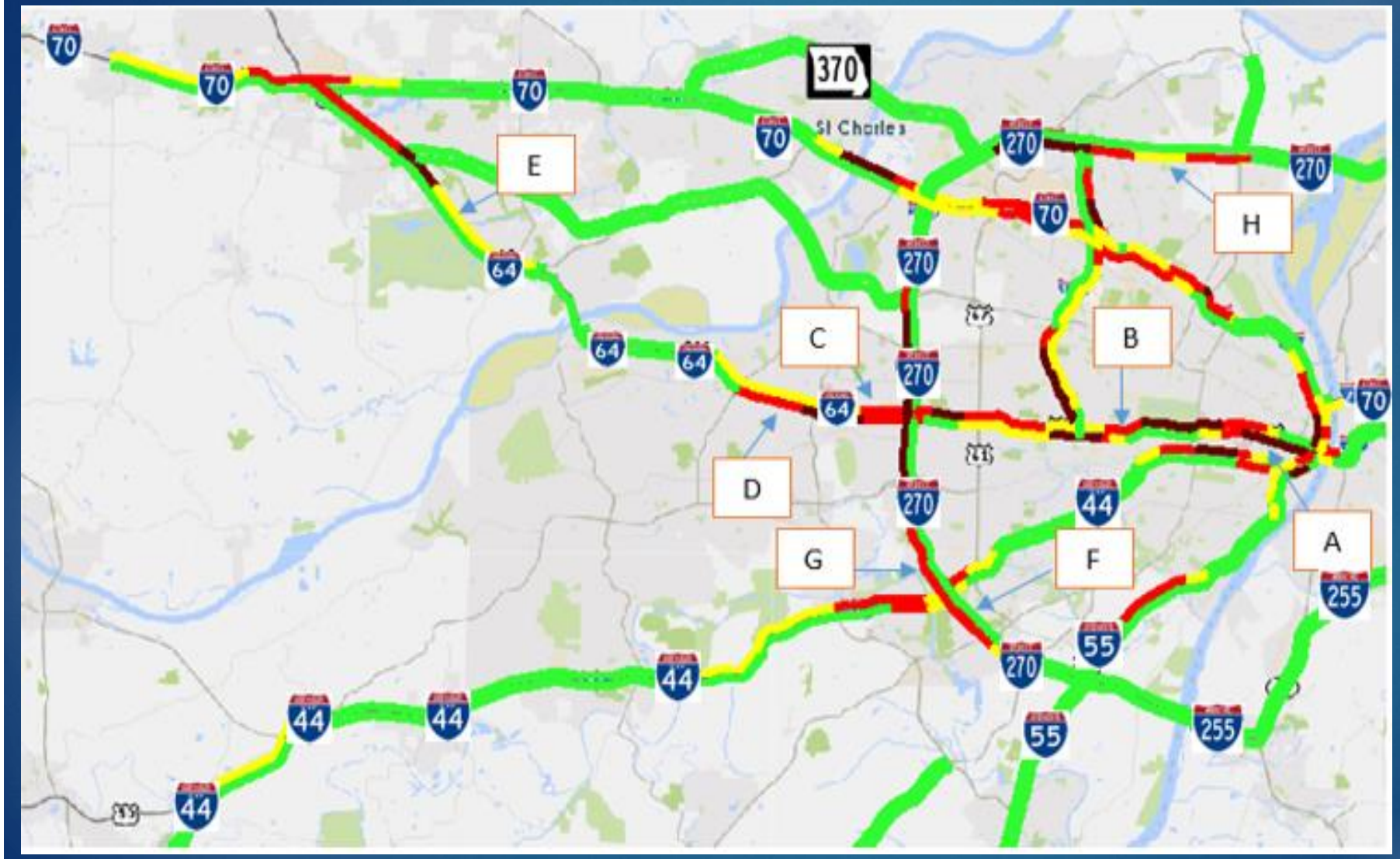
Route	Variability
I-64	5
I-70	2
I-55	1
I-270	1
I-44	1

Freeway Rankings: Top AM Locations



A. I-64, WB, Kingshighway to I-170
B. I-64, EB, Baxter to I-270
C. I-64, EB, I-270 to McCausland
D. I-70, EB, Cave Springs to Natural Bridge
E. I-270, NB, I-55 to I-64

Freeway Rankings: Top PM Locations



A. I-64 EB, Kingshighway to I-55
B. I-64 WB, Kingshighway to I-170
C. I-64 WB, I-170 to Chesterfield Pkwy
D. I-64 EB, Chesterfield Pkwy to McCausland
E. I-64 WB, MO-K to I-70
F. I-270 NB, I-55 to I-64
G. I-270 SB, I-70 to I-55
H. I-270 EB, McDonnell Blvd to MO-367

Congested Locations Trend Analysis

PTI and TTI Trends

What happens next?

- 2016 Report finalized and distributed
- Expectation that it be used as an input into regional planning processes

The CMP is an ongoing process to identify & quantify regional congestion, and *to develop and implement strategies to reduce congestion*

Thank You!

Questions

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