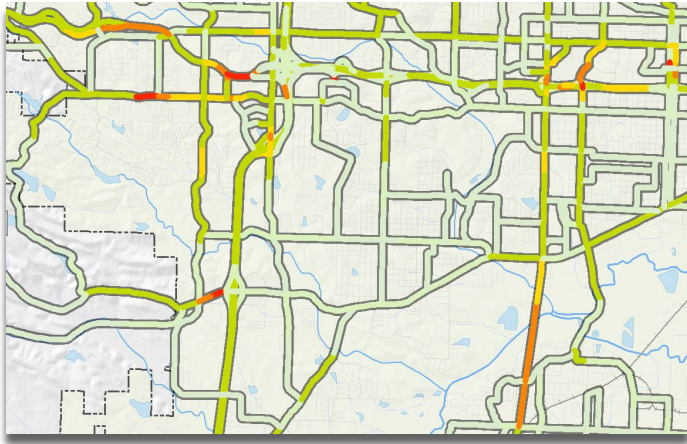


Little Rock Transportation System Report



Prepared by Metroplan

April 18, 2024



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Metroplan evaluated Little Rock’s transportation system to assess the overall performance of the transportation system and how well it serves the residents of Little Rock. Recently acquired data was used to the greatest extent possible to assess existing conditions of the Little Rock transportation system. The elements of Little Rock’s multi-modal transportation system that were evaluated include roadways, freight, transit (including Rock Region Metro’s current and planned future network), and pedestrian and bicycle infrastructure.

1.0 – Roadway - Existing Traffic Conditions

Little Rock roadways were evaluated using a variety of metrics and performance measures to assess overall road system performance and to identify potential issues that may be degrading system performance and roadway safety. The metrics reviewed to assess road system performance include travel speed, average daily traffic, volume to capacity ratio, travel time reliability, the travel time index, and crash rates.

The roadway data contained within this report were obtained from a variety of sources including the National Performance Management Research Dataset (NPMRDS), ArDOT average daily traffic counts (ADT), the CARTS Travel Demand Model (CTDM), and crash data from the Arkansas State Police.

Congestion and poor travel time reliability are transportation system considerations that can impact overall quality of life for Little Rock residents. Metroplan maintains an ongoing Congestion Monitoring Program to assess regional congestion. Congestion monitoring has benefited from an increase in availability of probe data coinciding with increased mobile phone usage in recent years. These sources allow improved temporal availability of data over previous methods of congestion monitoring which required drivers to drive specific segments with GPS sensors. Probe data now allows for a far larger sample of travel data to be analyzed than could be collected by targeted congestion surveys. However, there are still limitations to these data that should be noted. NPMRDS data, derived from INRIX data, allows traffic flow monitoring at a temporal resolution of as little as five minutes. However, the quality of this data can vary depending on data (probe) density. During peak travel periods and on higher volume roadways probe density will be less of a concern. Another limitation of the data is that data is reported for predefined roadway segments or Traffic Message Channels (TMCs). TMCs are direction specific but can vary greatly in length and do not always correspond to natural breaks in traffic flow.¹ For example, a TMC may include a congested interstate segment, but also can extend beyond an interchange where traffic greatly reduces and include an adjacent lower volume segment. The discrepancy

Map	Map Number
ADT Growth 2000-2022	1
ADT Growth 2017-2022	2
NPMRDS AM Speed	3
NPMRDS PM Speed	4
NPMRDS Travel Time Index - AM Peak	5
NPMRDS Travel Time Index -PM Peak	6
NPMRDS 45 MPH Threshold AM	7
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Travel Time Reliability Freight	10
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All maps are in map appendix

between changes in traffic flow and TMC segment breaks can mask higher congestion in some cases. Despite these limitations these data still provide one of the best sources of information to assess traffic flow on area roadways.

NPMRDS data from several time periods was evaluated for this report. The period of February 1 through March 15 was used to calculate travel time indices and assess travel speed on Little Rock roadways. This period was chosen as the most recent time period available with a limited disruption to school calendars and school traffic. Data analyzed for the travel time index and travel speed were limited to an AM peak hour (7:15 AM to 8:15 AM) and a PM peak hour (4:30 PM to 5:30 PM). The NPMRDS Expanded Network covers all area interstates and principal arterials but does not have complete coverage of Little Rock minor arterials and major collectors. In addition to data from Feb-March of 2024, Metroplan also used data from October 2023 in its Congestion Monitoring Program. This time period also represents a time with limited disruption to area school calendars.

Several different metrics can be used to analyze traffic flow. These include average speed (Maps 3,4) amount of time that traffic speed is below defined thresholds (Map 7,8), and the travel time index (Map 5,6). The travel time index is the ratio of observed travel time on a defined road segment to the estimated free flow travel time for that segment.² Estimated free flow travel time typically is calculated using either the posted speed limit or the 85th percentile travel time. For this study, the posted speed limit was used to estimate free flow travel times.

The highest observed freeway travel time indices were observed on I-30 westbound in Southwest Little Rock in the PM, I-530 northbound south of the South Terminal in the AM, on the I-630 ramp to I-30 northbound in the PM, and on I-30 eastbound in Southwest Little Rock in the AM. Multiple other non-freeway segments have travel time indices which indicate a degree of peak hour congestion (Maps 5,6). However, the travel time index cannot be used to distinguish between congestion caused by capacity issues from delay caused by other issues such as construction or school traffic patterns. Additional

study would be needed to identify any potential issues impacting travel time on these road segments. The Tables below show the highest AM and PM peak hour travel time indices. A travel time index of 2 indicates that the observed travel time during the period was twice as long as would be expected with free flow traffic.

Table 1. PM peak hour travel time index

PM Peak Hour Travel Time Index		
Corridor	Location	TTI
I-30 WB	At and west of I-430 interchange	4.2
Baseline	West of Geyer Springs	3.9
Highway 10	EB at I-430 Ramp	3.4
Shackleford	South of Financial Center	3.3
I-630 EB	Ramp to I-30 NB	3.2
Colonel Glen	east of I-430	3.2
Chicot	South of Baseline	3.2
Broadway	630 to Markham	3
Cantrell	East of University	2.8
I-30 WB	East of I-430	2.7
Rodney Parham	N of Hinson	2.7
Rodney Parham	At Mississippi / 630	2.6
University	630 to Markham	2.6
3 rd St	Esat of Broadway	2.5
Chicot	North of Baseline	2.5
6th St	I-30 to Cumberland	2.5
Shackleford	South of Markham	2.5
Shackleford	South of Kanis	2.4
Markham	east of Rodney Parham	2.4
Scott Hamilton	South of 65th	2.4
Markam	Shackleford to Chenal Parkway	2.4
Broadway	Broadway Bridge	2.4
Asher	East of University	2.4
Shackleford	North of Colonel Glen	2.3
Financial Center	East of Autumn	2.3
Cantrell	West of Taylor Loop	2.3
Markham	West of Mississippi	2.3
Barrow	I-630 to Kanis	2.3

Table 2. AM Peak hour travel time index

AM Peak Hour Travel Time Index		
Corridor	Location	TTI
Highway 5	South of Baseline	4.2
Geyer Springs	South of 65th	4.1
65th	West of Arch Street Pike	4.1
I-530	NB South of South Terminal	3.6
Geyer Springs	South of Baseline	3.5
Highway 10	West of ramps from NB I-430	3.1
Old Stagecoach Rd	At I-430	3.1
Broadway	South of I-630	3.1
I-430	Ramp from EB I-30	3.1
Broadway	Markham to I-630	3
3rd	East of Cumberland	2.9
I-30	East of Saline Co line	2.8
Capitol	West of Chester	2.8
Roosevelt	East of Airport	2.8
Martin Luther King	South of I-630	2.7
Highway 5	Baseline to I-430	2.7
Shackleford	South of Financial Center	2.7
Rodney Parham	Mississippi / 630	2.5
Colonel Glen	Shackleford to I-430	2.5
12th	West of Fair Park Blvd	2.4

Freeway and principal arterial segments in Central Arkansas were evaluated for congestion as part of Metroplan’s Congestion Monitoring Program. Freeway segments were analyzed for the percentage of time they operated below defined threshold speeds in the AM and PM Peak periods. Maps 7 and 8 show the percentage of time Little Rock freeway segments operated below the 45 MPH threshold during the AM And PM peak periods, with the AM peak period for this analysis being defined as 7:00 AM-9:00AM and the PM period being from 3:00 PM to 6:00 PM. Segments with significant slowing include the I-30 Bridge in both the AM And PM, I-30 at the I-430 interchange in both the AM and PM, and I-530 northbound south of the South Terminal in the AM. Any operational or capacity improvements for these areas will require additional study and coordination with ARDOT. However, it is likely that the 30 Crossing

project completion will significantly alter the existing pattern of freeway congestion and may require a reassessment of traffic conditions in and around downtown Little Rock.

Roadways classified as principal arterials were also evaluated as part of the Congestion Monitoring Program. The arterials identified with the highest degree of congestion in Little Rock in the AM peak include Highway 5 at I-430, Highway 10 west of Taylor Loop and also west of University Ave, Chenal Parkway west of Bowman, and University Ave between I-630 and Cantrell. In the PM, Cantrell east of University, University north of I-630, Chenal Parkway east of Markham, Highway 5 north of Baseline, and Cantrell west of Taylor Loop showed the most slowing.

NPMRDS data was used to evaluate Travel Time Reliability. Travel Time reliability can be an important consideration for commuters and other travelers needing to arrive at a destination at a set time.³ Poor travel time reliability requires commuters to allot more time than would otherwise be needed for a commute to account for the possibility of a much longer travel time. Travel time reliability is determined by comparing the ratio of a longer travel time (80th percentile) to a normal or average travel time (50th percentile). This ratio is called the Level of Travel Time Reliability (LOTTR). Map 9 shows roadway segments identified to have poor travel time reliability, which is defined as a LOTTR ratio of 1.5 or higher.

The CARTS Travel Demand Model was used to model traffic patterns in Little Rock in future years. The CARTS TDM is a four- step travel demand model with a 2015 base year and forecast years of 2030 and 2050. The model forecasts trips by multiple trip purposes which include:

- Home-based work
- Home-based school
- Home-based other
- Non-Home-based and Non-Home-based Visitor
- Commercial Vehicles (light, medium, and heavy)
- Trips into or leaving the region

Map 11 and 12 show projected future growth from 2015 to 2050. The most significant modeled areas of growth in the city are west of I-430, along Highway 10, Chenal Parkway, Colonel Glenn and Old Stagecoach Road and in east Little Rock around the Little Rock Port and Clinton Airport areas.

A CARTS TDM output which can be used to assess future congestion is the volume to capacity ratio for roadways. The tables below list the highest forecasted V/C Ratios for 2015, 2030, and 2050 by AM and PM peak periods. AM Peak period for this analysis is defined as 7:00 AM to 9:00 AM and PM peak period is 3:00 PM to 6:00 PM. Table 3 lists the anticipated traffic flow conditions at given V/C ratios.

Table 3. V/C RATIO AND EXPECTED TRAFFIC CONDITIONS

LOS	Traffic Condition (Freeways)	V/C Ratio
A	Free Flow	0.00-0.60
B	Stable flow - Speed unimpacted	0.61-0.70
C	Stable Flow - Some Slowing	0.71-0.80
D	High-density - Flow Stable - Slow	0.81-0.90
E	Near Capacity - Low Speed	0.91-1.00
F	Breakdown Flow	> 1.0

Table 4. CARTS TDM modeled AM VOC maximum 2015

Route	Location	2015 Max AM VOC
Fair Park Blvd	North of I-630	1.32
Colonel Glen	At I-430 Interchanges	1.1
Financial Center	West of Hermitage Rd	1.09
Broadway Bridge	North of La Harpe Ramp	1.02
Baptist Hospital Ramp	North of Lile Dr	1.01
Cantrell	West of Pleasant Valley*	1.01
I-30	Arkansas River Bridge SB	1.01
S University	North of I-630	1
Colonel Glen	I-430 to Bowman	1
Markham	Between Cedar and Pine	0.99

Table 5. CARTS TDM modeled AM VOC maximum 2030

Route	Location	2030 Max AM VOC
Fair Park Blvd	N of I-630	1.29
Colonel Glen	At I-40 Interchange	1.25
Colonel Glen	I-430 to Bowman	1.19
S Woodrow	N of I-630	1.15
Financial Center Parkway	West of Hermitage	1.1
Highway 10 Ramp	I-430 SB to Hwy 10	1.06
Baptist Medical Center Ramp	North of Lile Dr	1.04
I-530	I-530 NB S of South Terminal	1.02
S University	N of I-630	1.02
I-30 CD	I 30 SB CD N of 4th	1.01
Kanis	West of Atkins	1

Table 6. CARTS TDM modeled AM VOC maximum 2050

Route	Location	2050 Max AM VOC
Fari Park Blvd	N of I-630	1.39
Highway 5 / Old State Gage	At I-430	1.29
Cantrell	At- I-430	1.18
I-30 Frontage	At I-430 NB Ramp from I-30	1.17
Roosevelt	West of Airport Road	1.16
Baptist Medical Center Ramp	North of Lile Di	1.11
Markham	Between Cedar/Pine	1.1
I-530 Northbound	South of South Terminal	1.09
Chenal Parkway	EB west of Markham	1.09
University	North of I-630	1.05
Financial Center Parkway	West of Hermitage	1.05
Kanis Road	West of Atkins	1.04
S Shackelford	N of I-430 interchange	1.03
Autumn	S of Chenal Parkway	1.01
Hwy 10 Ramp	SB from I-430	1.01
I-430	NB north of I-30	1
Cantrell	WB at I-430	1

Table 7. CARTS TDM modeled PM VOC maximum 2015

Route	Location	2015 Max PM VOC
Fair Park Blvd	North of I-630	1.36
Cantrel	West of Pleasant Valley	1.28
Colonel Glen	West of I-430	1.14
Financial Center	West of Hermitage	1.14
I-430 ramp	I-630 to SB I-430 ramp	1.11
Baptist Hospital Ramp	North of Lile Dr	1.1
I-30	Arkansas River Bridge SB	1.07
Markham	Between Cedar and Pine	1.06
Kanis	East of Autmn	1.03
Cantrell	West of Rodney Parham	1.02
N Rodney Parham	West of I-430	1.01
S University	At I-630	1
Autum Road	South of Financial Center	0.99
Chenal Parkway	West of Markham	0.99
Highway 10 Ramp	I-430 SB to Highway 10	0.99

Table 8. CARTS TDM modeled AM VOC maximum 2030

Route	Location	2030 Max PM VOC
Fair Park Blvd	North of I-630	1.34
Colonel Glen	I-430 to Bowman	1.24
S Woodrow	North of I-630	1.22
Financial Center Pkwy	West of Hermitage	1.17
Highway 10 Ramp	I-430 SB to Hwy 10 Ramp	1.15
Baptist Hospital Ramp	North of Lile Dr	1.14
I-430 Ramp	I-630 to SB I-430 Ramp	1.12
S University	North of I-630	1.11
Kanis	East of Autumn	1.11
I-30 Ramp	I-30 NB ramp from 4th	1.08
N Rodney Parham	East of I-430	1.05
Kanis	West of Atkins Rd	1.03
Financial Center Pkwy	East of Hermitage	1.02
Autumn Dr	S of Financial Center Pkwy	1.02
Chenal Parkway	West of Markham Dr	1.01
I-430	River Bridge	1.01
S Shackelford	North of Hermitage	1
4th St	West of I-30	1

Table 9. CARTS TDM modeled PM VOC maximum 2050

Route	Location	2050 Max PM VOC
Fair Park Blvd	North of I-630	1.42
Woodrow	North of I-630	1.35
Highway 10 Ramp	I-430 SB Ramp to Highway 10	1.3
S University	North of I-630	1.21
Lee Ave	Between Cedar and Pine	1.2
I-30 Ramp	I-30 Ramp from 4th St	1.19
Baptist Hospital Ramp	North of Lile	1.19
430 Ramp	I-630 Ramp to 430 SB	1.18
Roosevelt	West of Airport Rd	1.17
Marshall St	At I-630 Ramps	1.17
Airport Rd	North of I-440	1.12

Fourche Dam Pike	South of I-440	1.12
Autumn Dr	South of Financial Center	1.12
Chenal Parkway	East of Parkway Place	1.1
Kanis Rd	West of Centerview Dr	1.1
W Markham	West of Cedar	1.09
Colonel Glen	West of I-430	1.09
W Markham	East of Fair Park	1.08
W 12 St	Between Cedar and Pine	1.08
Financial Center Pkwy	West of Hermitage	1.08
Highway 5	At I-430 Interchange	1.07
N Rodney Parham	West of I-430	1.07
I-530	I-530 NB south of South Terminal	1.06
Kanis Rd	West of Atkins Rd	1.05
I-630	Chester to MLK WB	1.05
I-30	WB W of Vimy Ridge	1.05
Cantrell Rd	West of Taylor	1.04
I-30 CD	I-30 Collector-Distributor SB	1.04
I-630	I-630 WB west of Fair Park Blvd	1.04
I-30	I-30 WB west of I-430	1.04
S University	North of I-630	1.04
Arch St	North of 3rd	1.03
Roosevelt	West of Woodrow	1.03
Chenal Parkway	Kanis to Kirk	1.02
I-630	West of Battery	1.02
Chenal Pkwy	WB west of Parkway Pl	1.02
S Shackelford	North of I-430	1.02
I-630	West of I-30	1.01
Cedar Hill	Rebsamen Park to Cantrell	1.01
I-30 Frontage	WB Frontage east of Hwy 111	1.01
Cantrell Rd	West of Mississippi	1.01
Broadway	Broadway Bridge	1
S University	North of 65th	1
S University	South of 19th St	1
Bowman Rd	South of Executive Center	1
I-30 Frontage	EB between Otter Creek and 430	1

The validity of traffic volumes derived from travel demand models depends on the accuracy of projections of future population and employment growth and the accuracy of assumptions about future travel behavior. Lasting changes in travel behavior resulting from the COVID pandemic, such as increased work from home rates, are an example of unanticipated changes in travel behavior which can impact the accuracy of modeled data.

In addition to travel demand models, future traffic growth can also be extrapolated from past traffic counts.⁴ However, it should be noted that past growth trends in traffic are not always indicative of future trends. However, an assessment of traffic growth trends in Little Rock over both the long and shorter term does indicate pronounced trends which may be helpful in identifying areas of the city which could have increased or decreased traffic in the future. Map 1 shows the long-term pattern of ADT growth in Little Rock and Map 2 shows a 5-year growth trend. Over the time period of 2017 to 2022, minimal growth occurred in older, more developed portions of the city. Little growth in traffic has occurred over this period in downtown, Mid-town, and in most of the city east of I-430, as well as in most of Southwest Little Rock. There were areas of growth in Southwest Little Rock in the vicinity of the I-430/I-30 interchange, which is an area that has seen significant new commercial development. Traffic growth has also occurred in most areas west of I-430, and in the vicinity of the Little Rock Port and Clinton National Airport.

Roadway functional class identifies roadways eligible for federal aid. Although it is not essential that Little Rock's Master Street Plan's road classifications match Federal Aid functional classification, or even that the same road classes are used, there should be general agreement on the hierarchy of roads and their relative significance. After each decennial census new urbanized census area boundaries are released, subsequent to this release, roadway functional classification should be reviewed. Map 31 identified potential changes that should be considered to the roadway functional classification in Little Rock. Unlike a master street plan the functional classification only includes planned roadways that are programmed. In developing a master street plan, it will be necessary to closely coordinate planned

roadway connections with land use plans and with consideration of developmental constraints.

1.1 – Roadway Safety

Roadway safety is a critical measure of the performance of Little Rock’s Transportation System. The ability of all road users to safely access daily destinations must be assessed to understand how well the transportation system is working for all city residents and visitors. Little Rock has adopted a complete street policy that will help ensure roadways are designed with all road users in mind. However, there are many factors beyond street design that can lead to crashes involving motorists, pedestrians, cyclists, and other road users. To identify potential safety issues Metroplan reviewed Arkansas State Police crash data for Little Rock. Crashes involving non-motorists are discussed in the pedestrian facility section. Table 7 lists the Little Rock intersections with the highest number of crashes from 2019 through 2022, regardless of crash severity and the type of road user. Table 8 ranks Little Rock non-interstate roadway segments by total number of crashes for the period of 2019 through 2022 regardless of crash severity. Table 9 ranks road segments by crash density for this period.

Table 10. Little Rock intersections by number of crashes

Intersection	All Crashes 2019-2022
University / Asher	219
Baseline / Chicot	202
Shackleford / Financial Center	164
Shackleford / Markham	139
University / 65th	123
University / Markham	123
University / 12th	122
University / I-630 WB Ramps	119
Baseline / Geyer Springs	116
University / I-630 EB Ramps	116
Asher / Fair Park	109
Financial Center / Hermitage	107
Rodney Parham / I-430 NB Ramps	101
12th / Fair Park	97
Financial Center / Autumn	95

University / Cantrell	92
Geyer Springs / I-30 EB Frontage	91
Cantrell / Pleasant Ridge	91
Shackleford / Kanis	89
Shackleford / Hermitage	89
University / I-30 EB Frontage	84
Roosevelt / I-30 EB Frontage	84
University / Mabelvale Pike	83
Chenal Parkway / Markham	82
Geyer Springs / 65th	81
12th St / Fair Park	81
Cantrell / Rodney Parham	80
Otter Creek / Bass Pro Pkwy	78
Markham / Bowman	77
Chenal Parkway / Bowman	75
Bowman / Kanis	74
University / Midtown Avenue	71
Geyer Springs / I-30 WB Frontage	69
36th / John Barrow	69
Markham / Fair Park	68
Baseline / Colonel Glen	67
Hinson / Taylor Loop	67
Baseline / I-30 EB Frontage	66
University / 19th	64
Markham / Barrow	64
Cantrell / Taylor Loop	63

Table 11. Little Rock road segments by total number crashes

Segment Crash Rank	Road	Extent	ADT 2023	Potential Contributing Factors
1	Markham St	Shackleford to Bowman	27000	TWLTL, High volume, High Volume Commercial Driveways
2	Colonel Glenn Rd	University to 36th	30000	TWLTL, High volume, High Volume Commercial Driveways
3	Baseline Rd	I-30 to Chicot	22000	TWLTL, High Volume Commercial Driveways
4	Asher Ave	Fair Park to Cedar	23000	No Turn Lanes, Driveways, Cross Streets
5	University Ave	Asher to W 53rd St	37000	High volume, higher speed
6	Markham St	I-430 to Barrow/Brookside	21000	No Turn Lanes, Driveways, Cross Streets
7	Roosevelt Rd	Asher to MLK Jr Dr	12000	No Turn Lanes, cross streets
8	Bowman	Financial Center to Kanis	18000	TWLTL, High volume, High Volume Commercial Driveways
9	Chenal Parkway	Markham to couplet split	41000	High volume, High Volume Commercial Driveways
10	Financial Center	Autumn to Hermitage	40000	High volume, High Volume Commercial Driveways
11	Cantrell Rd	Sam Peck to Pinnacle Valley Rd	41000	TWLTL, High volume, High Speed, Commercial Driveways
12	Chenal Parkway	Markham to Bowman	40000	High Volume, high Volume Commercial Driveways, curves
13	Cantrell Rd	Kavanaugh to Allsopp Park Rd	20000	Cantrell Hill, alignment, cross streets
14	Rodney Parham	Old Forge to Reservoir	22000	Commercial Driveways, alignment
15	Baseline Rd	Geyer Springs to Dreher	21000	TWLTL Commercial Driveways, cross streets
16	Cantrell Rd	Rodney Parham to Southridge	40,000+	Reconfigured
17	University Ave	65th to Mabelvale Pike	32000	High Volume, Higher speed
18	Markham St	University to McKinley	16000	High Volume Driveways (Chick-fil-A, Park Plaza)
19	Reservoir Rd	Old Forge to Markham	7500	Hills, Sight lines, Commercial Driveways
20	Cantrell Rd	University to Kavanaugh	20000	Cross streets, University Ave intersection back-up

Table 12. Little Rock road segments by crash density rank

Crash Density Rank	Street	Location
1	Geyer Springs Rd	Dreher to I-30
2	University Ave	I-630 to Saint Vincent Cir
3	Financial Center	Autumn to Hermitage
4	Colonel Glenn Rd	Bryant to University
5	Marham St	McKinley to University
6	University Ave	12th to I-630
7	Bowman Rd	Financial Center to Kanis
8	University Ave	St Vincent Cir to Markham
9	Cantrell Ave	Southridge to Rodney Parham
10	Geyer Springs Rd	Dreher to Baseline
11	Chicot Rd	Mann to Baseline
12	Markham St	Bowman to Shackelford
13	Rodney Parham	I-430 to Shackelford
14	Chenal Parkway	Markham to couplet split
15	Geyer Springs Rd	I-30 to Forbing

Fatal and serious crashes are a significant public safety concern for the city of Little Rock. Each fatal or serious crash has far more significance to individuals, families, and to the greater community than do the majority of crashes in the city which only involve property damage. As part of Metroplan’s Safe Streets and Roads for All (SS4A) planning grant, a high injury network map was developed identifying the corridors and intersections with the highest number of serious and fatal injury crashes. Serious crashes are defined as those with incapacitating injury. Map 19 shows the road segments and intersections in Little Rock with the highest number of fatal and serious crashes for the period from 2018 through 2022. Two areas that are of particular safety concern with regards to fatal and serious crashes in

Little Rock are the road segments around the University and Asher intersection and the area around the Geyer Springs and Baseline intersection. Both areas deserve additional study to identify potential improvements that might enhance safety. Additional information will be available in the final SS4A report. Additional crash information for non-motorists is discussed in Section 3.1

2.0 Transit

Rock Region Metro is the primary transit provider for the city of Little Rock. Rock Region Metro’s services provide essential transportation to jobs, schools, shopping, and other daily destinations for many Little Rock residents, including the 10% of Little Rock households which have no vehicles available⁵. Rock Region Metro currently provides fixed route service on 15 routes, 11 of which primarily serve Little Rock. In addition to fixed route service, Rock Region Metro also provides on-demand service to 6 micro-transit zones, or Metro Connect zones. Three Metro Connect Zones serve Little Rock: John Barrow, East Little Rock-Riverdale, and the limited-service Hensley zone. Rock Region Metro also provides Links Paratransit service to a service area that includes all areas within ¼ a mile of a Rock Region Metro fixed route. The Links Paratransit service area covers 71% of Little Rock’s population. Additionally, Rock Region Metro provides service on two streetcar routes with service to downtown Little Rock.

Rock Region Metro reduced the number of fixed routes in Little Rock and made additional service changes in 2020 due to a dramatic decrease in ridership associated with the COVID pandemic response. Although the 2020 service reduction was originally intended to be a temporary reduction in service, the reduced network has become Rock Region Metro’s ongoing fixed route network since 2020 (Map 25). The rollout of a subsequently planned network, the Budget Neutral Network (Map 26), which would include significant changes to current fixed routes and to the overall service area, has been delayed due to an ongoing national driver shortage.

Map 28 is a heat map of boarding and alighting for Rock Region Metro’s current Network. This map shows the most utilized Rock Region Metro stops. The highest transit activity areas in Little Rock are:

- All of downtown Little Rock, and in particular the River Cities Travel Center
- The Midtown Transfer location on St Vincent’s Circle between University and McKinley
- The Shackleford Walmart
- The Baseline Walmart
- The Asher corridor
- Baseline and Geyer Springs

Higher transit ridership areas of the city are primarily concentrated in areas of the city with less vehicle availability, while higher income areas tend to show overall lower ridership.

Table 13. Rock Region Metro Service Areas Employment and Population

Rock Region Service Area Metric	Current Network	Future Network (Budget Neutral)
Fixed Route Service Area (A) Population (LR)	82,661	83321
Population Percentage served (A)(LR)	40.8%	41.10%
Fixed Route + METRO Connect Zone Service area (B) Population (LR)	101,695	102,271
LR Population Percentage Served (B) (LR)	50.1%	50.4%
Fixed Route Service Area (A) Employment (LR)	186,829	185,734
Employment Percentage Served (A) (LR)	76.7%	76.2%
Fixed Route + METRO Connect Zone Service area (B) Employment	213,881	213,666
Employment Percentage Served (B) (LR)	87.8%	87.7%

Rock Region Metro’s service area is defined as the area within one quarter mile of a Rock Region Metro fixed route. A quarter mile is the distance most

commonly used to define a pedestrian shed and as such is a logical distance to use in determining the distance one would walk to access transit. Rock Region Metro’s fixed route service area population within Little Rock is approximately 82,661 which amounts to approximately 41% of Little Rock’s total population. Total employment in Rock Region Metro’s fixed route service area within Little Rock is 186,829 or over 76% of Little Rock’s total employment. The estimated combined service area population for both fixed routes and Metro Connect Zones in Little Rock is 101,695 which is over 50% of Little Rock’s total population. Employment in Rock Region Metro’s combined fixed route and Metro Connect service area is 213,881, this covers approximately 88% of all Little Rock employment. Changes planned for the budget neutral network will minimally change these totals for the new service area (Table 13). The planned budget neutral fixed route service area population is 83,321 and service area employment is 185,734. The combined service area population for both fixed routes and Metro Connect Zones for the budget neutral network within Little Rock is 102,271 with a total employment of 213,666, or approximately 87% of Little Rock’s total employment will be served by either fixed routes or Metro Connect Zones when the Budget Neutral Network goes into service.

Although the differences in population and employment totals within the service areas for the current and planned future transit networks are minor, there are significant route changes planned that will impact many transit riders (Map 27). Significant changes which are planned include:

- An extension of service along Chenal Parkway from Markham west to Rahling which will serve significant employment and retail concentrations in West Little Rock
- Rerouting Pulaski Heights service to connect with the Cedar/Pine Corridor rather than traveling to the downtown transit center. This change creates a new north/south service along the Cedar/Pine corridor, but also now requires a transfer to reach downtown from Hillcrest, The Heights, and the Cantrell/Mississippi area.

- Creates a new UAMS Rock Region Metro shuttle service (UAMS currently operates 3 independently managed shuttle routes)
- Rerouting creates new service on 36th St between Colonel Glen and Barrow, and drops service on stretches of Colonel Glen and Barrow south of 36th St
- Drops service on University Ave north of Markham St
- Significantly adjusts routing in the neighborhoods south of Wright/17th which will concentrate service on fewer streets and reduce the overall area served
- Rerouting will remove service on Chicot between Mabelvale Cutoff and Baseline
- Significantly adjusts routing of multiple routes from and to the River Cities Travel Center through downtown

While the planned Rock Region Metro Network does not greatly impact overall service area population and employment totals, several employment centers and population concentrations will be without fixed route service when the planned network changes are implemented. These include the Clinton National Airport, the Little Rock Port, Riverdale, and the Highway 10 corridor west of I-430. Metro Connect service will provide on demand service for the Little Rock-Port, Clinton National Airport, and Riverdale. Advantages to on-demand service include door to door service and low fares paid by riders relative to the service provided, however the long-term viability of large-scale micro transit is not clear due to the inherent inefficiencies of this transit model as compared to higher capacity fixed route service, and due to the overall high expense per micro-transit trip.⁶ However, as funding remains available Micro-transit will allow many Little Rock residents, who otherwise would be unserved, to access transit service.

3.0 Pedestrian and Bicycle

The importance of pedestrian and bicycle facilities to Little Rock's transportation system is greater than the cumulative mode share of pedestrian and bicycle trips might indicate. Most trips begin and end as a pedestrian trip regardless of how they are categorized in CTPP journey to work or other transportation mode datasets. Additionally, an awareness of the

importance of multi-use trails in not only providing transportation choice, but also in enhancing livability and encouraging economic development has been growing in recent years.⁷ With the importance of these facilities in mind, Little Rock's pedestrian and bicycle networks were reviewed for potential gaps that limit multi-modal accessibility to destinations for Little Rock residents and visitors.

Multi-use trails that are separated from vehicular traffic (Class 1 facilities) are an important component of Little Rock's bicycle network. Class 1 facilities are complemented by on-street bicycle lanes (Class 2 facilities) and signed on street routes without separation from motor vehicle traffic (Class 3 facilities). A complete network offering accessibility to all neighborhoods of Little Rock will necessarily be comprised of a network of all 3 bicycle facility types.

Separated multi-use trails make up a crucial backbone to any bicycle network. Separated multi-use trails enhance multi-modal accessibility to the wide segment of the population which is not comfortable riding in a mixed traffic environment. Little Rock has made strides in recent years in developing a true bicycle network through strategic road diets and the striping of new bicycle lanes. However, only relatively modest progress has been made in providing Class 1 facilities and Little Rock's separated facilities remain concentrated in a relatively small area of the city along the Arkansas River. Because of the overall lack of trail mileage and its concentration along the Arkansas River, multi-use trails can be said to enhance accessibility to daily destinations for only a small percentage of Little Rock residents currently. The topography of Little Rock along the Arkansas River corridor limits connections to neighborhoods in central and west Little Rock and limits the Arkansas River Trail's utility as a transportation corridor. This does not negate the existing off-road trail network's importance as a recreational opportunity to many Little Rock residents.

Planned future off-road trails will greatly enhance accessibility to daily destinations for non-motorized transportation system users, However, even if all planned facilities are built the majority of schools, parks, and most other daily destinations will not be in close proximity to a trail facility. To provide access to

these destinations the city will need to continue to improve on-street facilities (Map 23) by adding separated lanes where roadway width will allow and additionally by providing safety features, such as pedestrian hybrid beacons, to allow non-motorists to cross higher volume roadway barriers when non-signalized intersections are not present.

Future planned multi-use trails will offer greater transportation utility to many additional Little Rock residents when completed. One major effort to add additional mileage of multi-use trails in the region is Metroplan’s Regional Greenway initiative. Metroplan’s Board has committed \$55 million over 10 years to go towards this effort to connect Central Arkansas communities with a high-quality off-road trail network. As planned, Little Rock would serve as the hub for a spoke system of regional trails radiating out in 6 corridors to surrounding counties and suburbs. Significant route mileage along several of these corridors will connect a variety of Little Rock destinations (Map 24). These corridors include:

- Central Beltway corridor serving significant employment centers along the I-630 corridor and in west Little Rock, providing multi-modal access for many residents to employment, retail, and schools
- The Southwest Corridor which will eventually connect the Arkansas River Trail to Southwest Little Rock, will provide access to Central High and industrial employment centers along 65th Street and will continue into Saline County providing access to multiple Saline County communities.
- The Southeast Corridor will connect downtown to the airport and Little Rock Port employment centers.

Additional greenways are in various stages of planning, some planned greenways are consistent with alignments identified in the Regional Greenway Study, while others will provide connectivity to that network for large portions of the city but have not been identified as being part of the Regional Greenway Network. The Tri-Creek Greenway, while not an identified Regional Greenway, will connect to the Central Beltway and provide needed connectivity to multiple neighborhoods in the vicinity of Hindman, Boyle and Kanis Parks.

Adequate pedestrian facilities including sidewalks, crosswalks, and pedestrian signals are essential to provide accessibility to destinations throughout the city for all residents. ADA compliant sidewalks, that are adequately buffered and maintained are crucial on all collector, minor arterial, and principal arterial roadways. A roadway that mostly has sidewalks or has sidewalks stretches on alternating sides of a street can be a significant barrier to safely reaching destinations for many residents.

Map 23 shows gaps in the sidewalk network along roadways classified as collector or above. Significant sidewalk gaps in dense activity areas of the city exist on:

- University Ave
- Cantrell Ave
- W 65th St
- S Bowman Rd
- Stagecoach Rd
- Fourche Dam Pike
- Fair Park Blvd
- Airport Rd
- E Roosevelt Rd

In addition to these roadways, many significant roadways have non-continuous sidewalks or stretches with limited access management (e.g. Asher Ave), which lead pedestrians to cross multiple wide driveways in environments with a high volume of turning movements. Poor access management greatly increases potential conflicts between motorists and non-motorists.

3.1 – Non-Motorist Safety

Safety is a primary concern for most when choosing whether to walk or bike to a destination or to take another mode of transportation, this is especially true with families with young children.⁹ When nearby destinations are not safely accessible to pedestrians, cyclists, or other non-motorized road users it negatively impacts the transportation system and the quality of life of residents.

Map 20 shows the location of crashes involving non-motorists. Non-motorist crashes involve a crash between a motor vehicle and either a pedestrian, bicyclist, or some other type of non-motorist (e.g. a person in a wheelchair or in-line skating). These

crashes do not include crashes that do not involve a motor vehicle.

The distribution of non-motorist crashes shows significantly higher concentrations of crashes in both downtown and in lower income areas of Little Rock. Higher rates of pedestrian crashes in and around downtown can be attributed to high rates of pedestrian activity and to increased turning movements by vehicles. Despite its higher non-motorist crash density relative to other areas of the city, downtown is the region of the city with the most complete infrastructure and greatest number of safety measure designed for pedestrians, including a complete sidewalk network, generally wider sidewalk width, a higher percentage of signalized intersections with crosswalks, and some pedestrian lead intervals at high pedestrian volume traffic signals. Downtown is also one of the areas of Little Rock with the slowest traffic speed, which greatly reduces the risk of fatal or serious traffic accidents. Additional measures that would enhance pedestrian safety could include prohibiting right turns on red at high pedestrian volume intersections and adding additional traffic calming measures such as speed tables, raised crosswalks, narrowing travel lanes, curb bulb-outs, etc. Metroplan's CARTS Multimodal Design Guidelines offer multiple examples of safety and walkability mitigations for downtown and other street contexts.

Higher crash rates in lower-income areas of the city are partially attributable to higher rates of pedestrian activity. Additionally, more pedestrian activity may occur in these areas in non-daylight or lower light conditions. Lower income areas of Little rock have less overall vehicle availability per household and a higher percentage of the labor force working at night than do other areas of the city. However, it should also be noted that older areas of Little Rock tend to have sidewalks and gridded streets which help enhance walkability. There are potentially additional factors unrelated to pedestrian volume or any deficiencies in pedestrian infrastructure that may be playing a role in higher crash rates in some areas. Road safety awareness and education will be essential to further reduce pedestrian and non-motorist crashes.

In addition to education that addresses distraction as a cause of crashes, crash mitigation in all areas of the city may include potential infrastructure and operational improvements, such as improved visibility crosswalks, pedestrian refuges, enhanced lighting, new signage, improvements to sidewalks in poor condition, adjustments to signal timing, and changes to speed limits and allowed turning movements in certain high pedestrian traffic locations.

Conclusion

Further study will be needed to determine which capacity, safety, and multi-modal projects would most benefit the Little Rock transportation system. Issues identified with congestion and travel time reliability must be viewed in context of the limited availability of funds to add capacity and an ongoing need to maintain an aging transportation system in a good state of repair. Additionally, changes to travel patterns since 2020, including increased remote working and greater work hour flexibility, have made forecasts of future growth of peak hour traffic volumes less certain. This is particularly relevant to Little Rock's road network which has short windows of peak congestion in the AM and PM.

Focusing on operational improvements and system preservation can provide benefit to Little Rock residents at far lower cost than adding additional roadway capacity. However, some targeted capacity improvements may be warranted in limited growth areas of the city. Review of trends in the growth of average daily traffic reveal that much of the city of Little Rock is experiencing limited growth. Modest growth is limited primarily to West Little Rock. Little Rock freeways do experience some degree congestion, but this congestion is limited temporally to small windows in the AM and PM peak periods. The relatively minimal delay experienced on these facilities should be considered along with the cost and disruption of widening when determining if future capacity improvements to these facilities are warranted. The CARTS (Central Arkansas Regional Transportation Study) Transportation Improvement Program (TIP) continues to emphasize system maintenance over adding capacity to area roadways. The only new capacity project for Little Rock included in the 2023 -2036 TIP is the major widening of

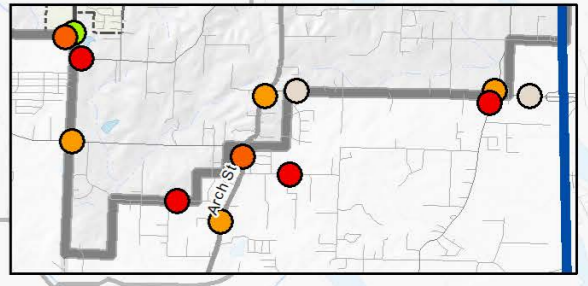
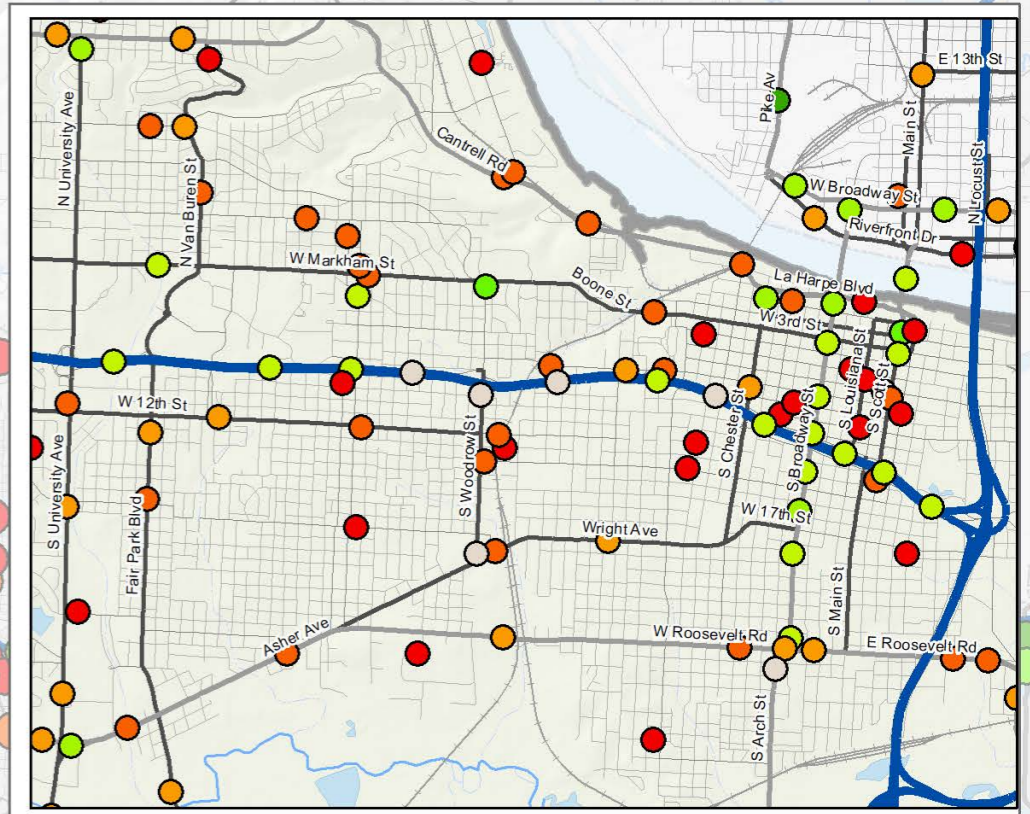
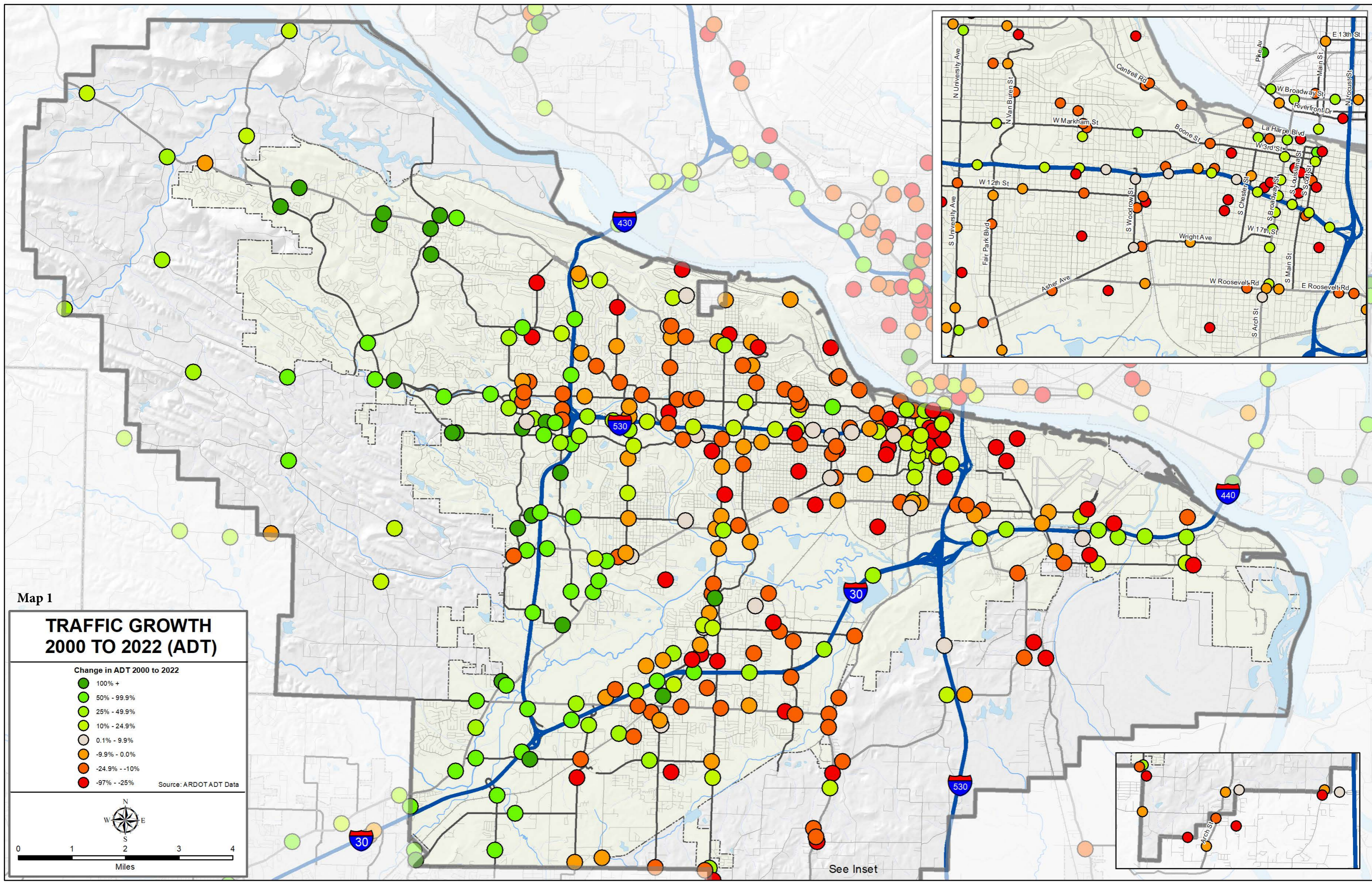
Highway 10 west to Taylor Loop. The completion of largest ongoing project in Little Rock, the 30 Crossing project, will require a review of traffic patterns into and out of downtown Little Rock upon the opening of all ramps and collector-distributor lanes.

A continued focus on multi-modal transportation projects and roadway operational improvements can improve transportation system efficiency and choice at lower cost than capacity improvement. Little Rock's continued emphasis on multi-modal planning should:

- Require adequate pedestrian facilities on all new streets for all road classifications
- Ensure new roadway facilities and any roadway widenings are context sensitive with adequate facilities provided for non-motorists
- Utilize the CARTS Multi-Modal design guidelines to provide guidance on how to make the city more accessible for all users of the transportation system
- Prioritize high pedestrian traffic areas and close identified gaps in the sidewalk network
- Maintain existing pedestrian facilities in a good state of repair, improve sub-standard existing sidewalks which limit utility for all users and accessibility for disabled users
- Integrate land use and transportation planning to reduce auto dependence (Zoning reform that allows denser development, more housing types, and mixed-use development can increase walkability and decrease the number of vehicle trips)
- Plan and make local funding commitment to complete Regional Greenways
- Commit to creating a network of multi-use trails and separated bicycle facilities that serve daily destinations and provide transportation utility in addition to recreational value
- Work with Rock Region Metro to identify funding opportunities that can lengthen service hours and increase service frequency
- Monitor ridership levels subsequent to the implementation of the Rock Region Metro Budget Neutral Network to ensure route

changes are best serving Little Rock residents.

Continuing to focus on providing better multi-modal transportation options for Little Rock residents, will not only provide transportation choice but will also reduce dependence on area roadways and vehicular trips, improve air quality, improve health, encourage economic development, and enhance the quality of life for Little Rock residents.



Map 1

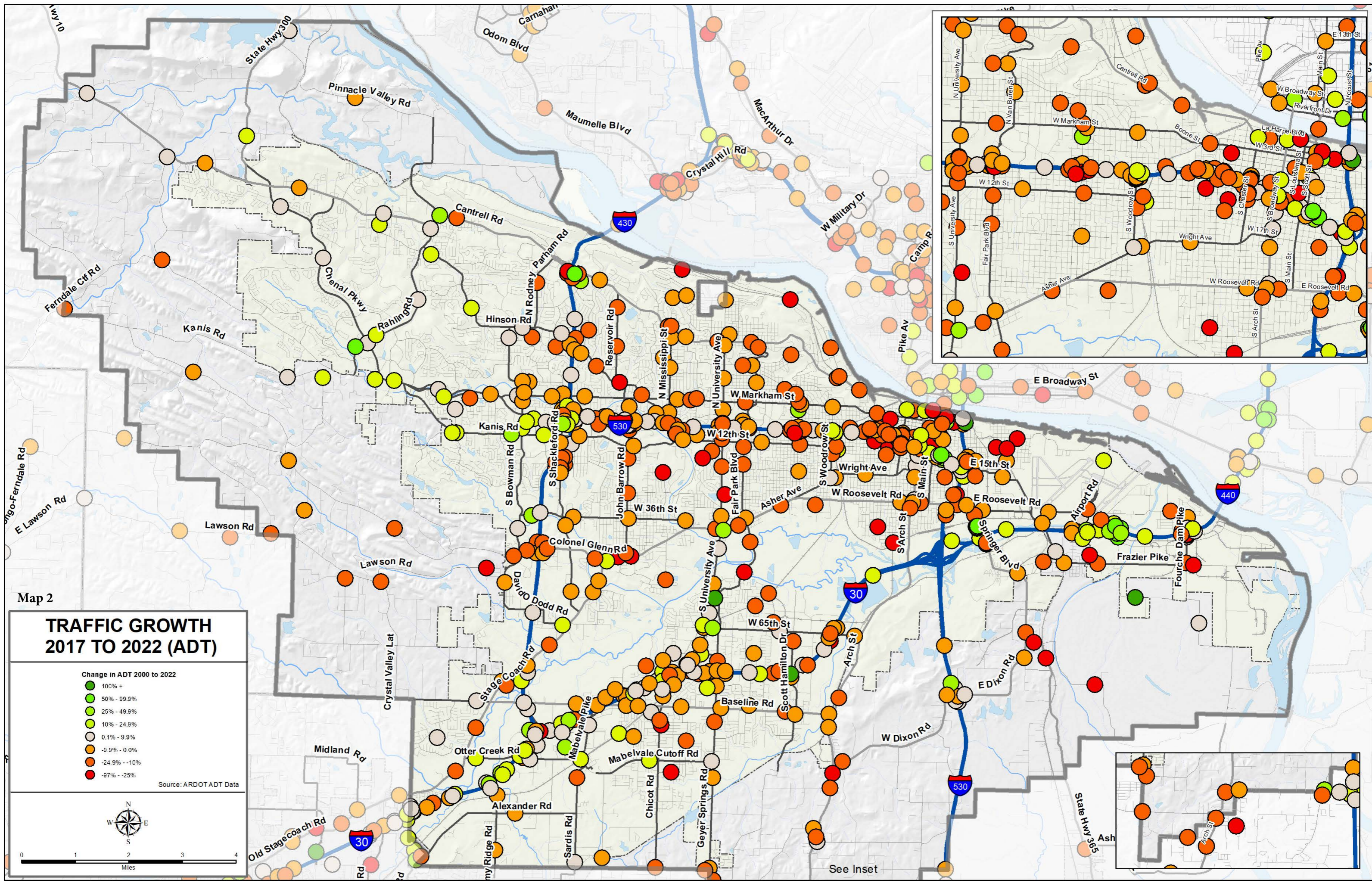
TRAFFIC GROWTH 2000 TO 2022 (ADT)

Change in ADT 2000 to 2022

- 100% +
- 50% - 99.9%
- 25% - 49.9%
- 10% - 24.9%
- 0.1% - 9.9%
- -9.9% - 0.0%
- -24.9% - -10%
- -97% - -25%

Source: ARDOT ADT Data

See Inset



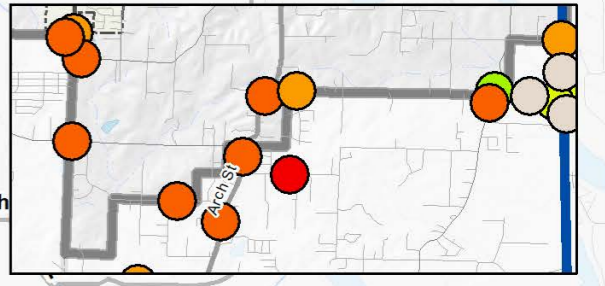
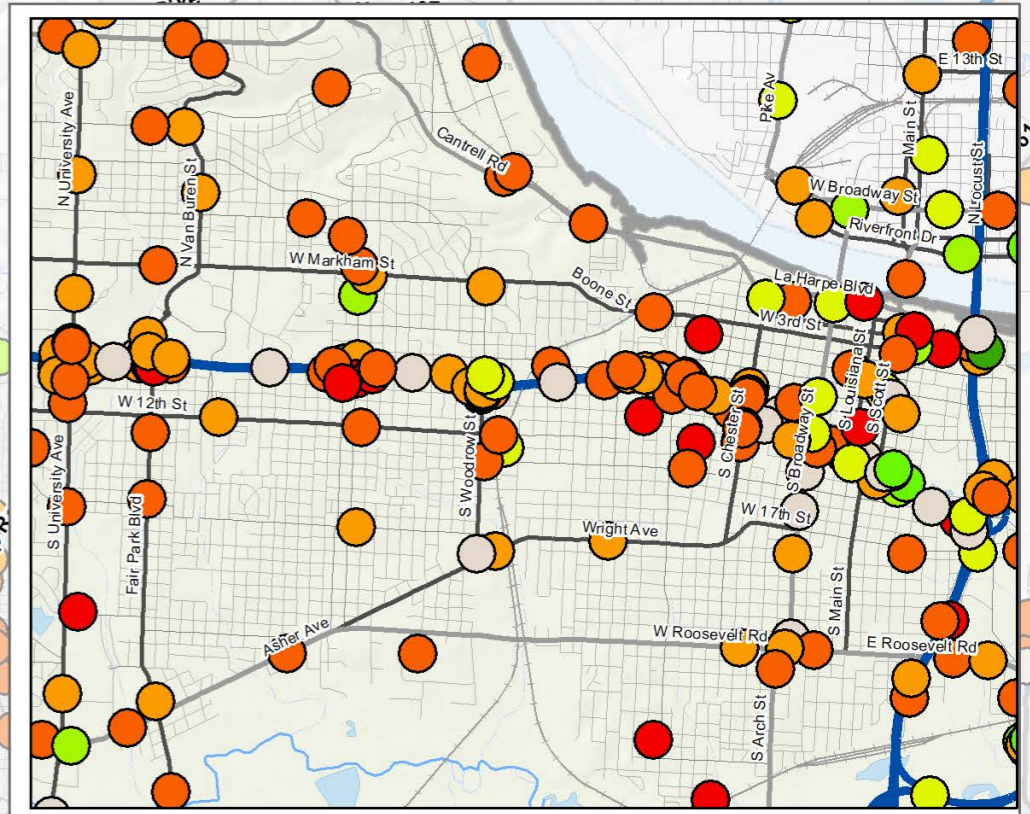
Map 2

TRAFFIC GROWTH 2017 TO 2022 (ADT)

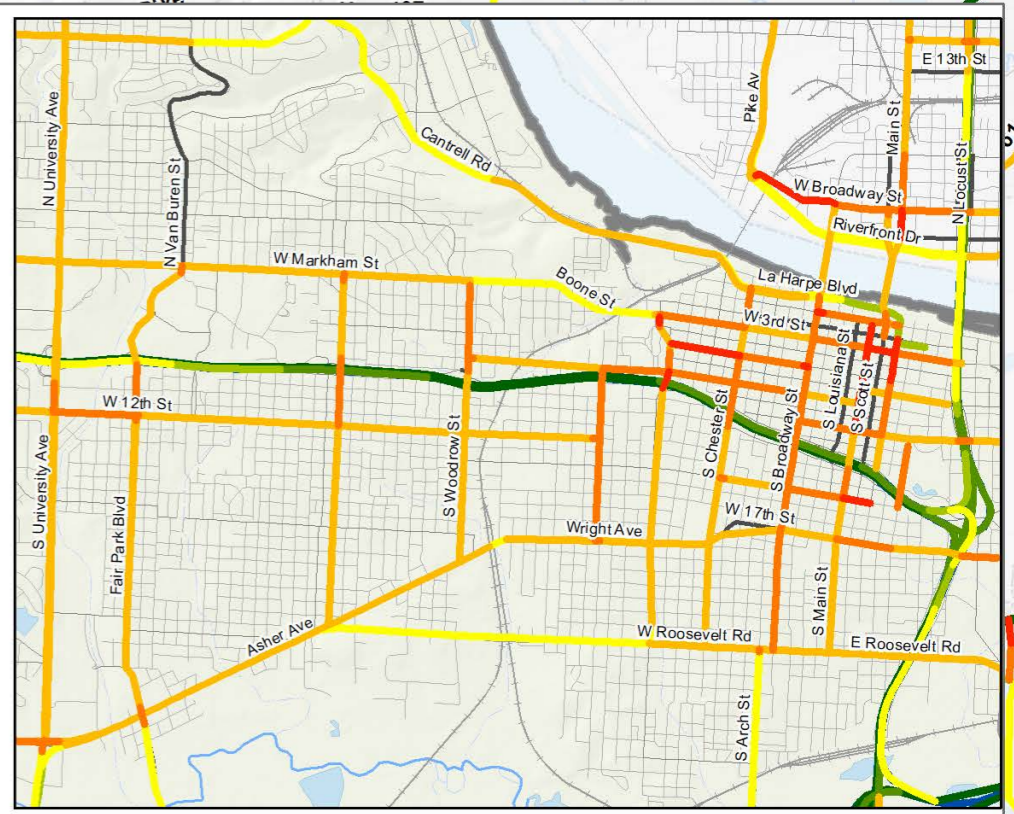
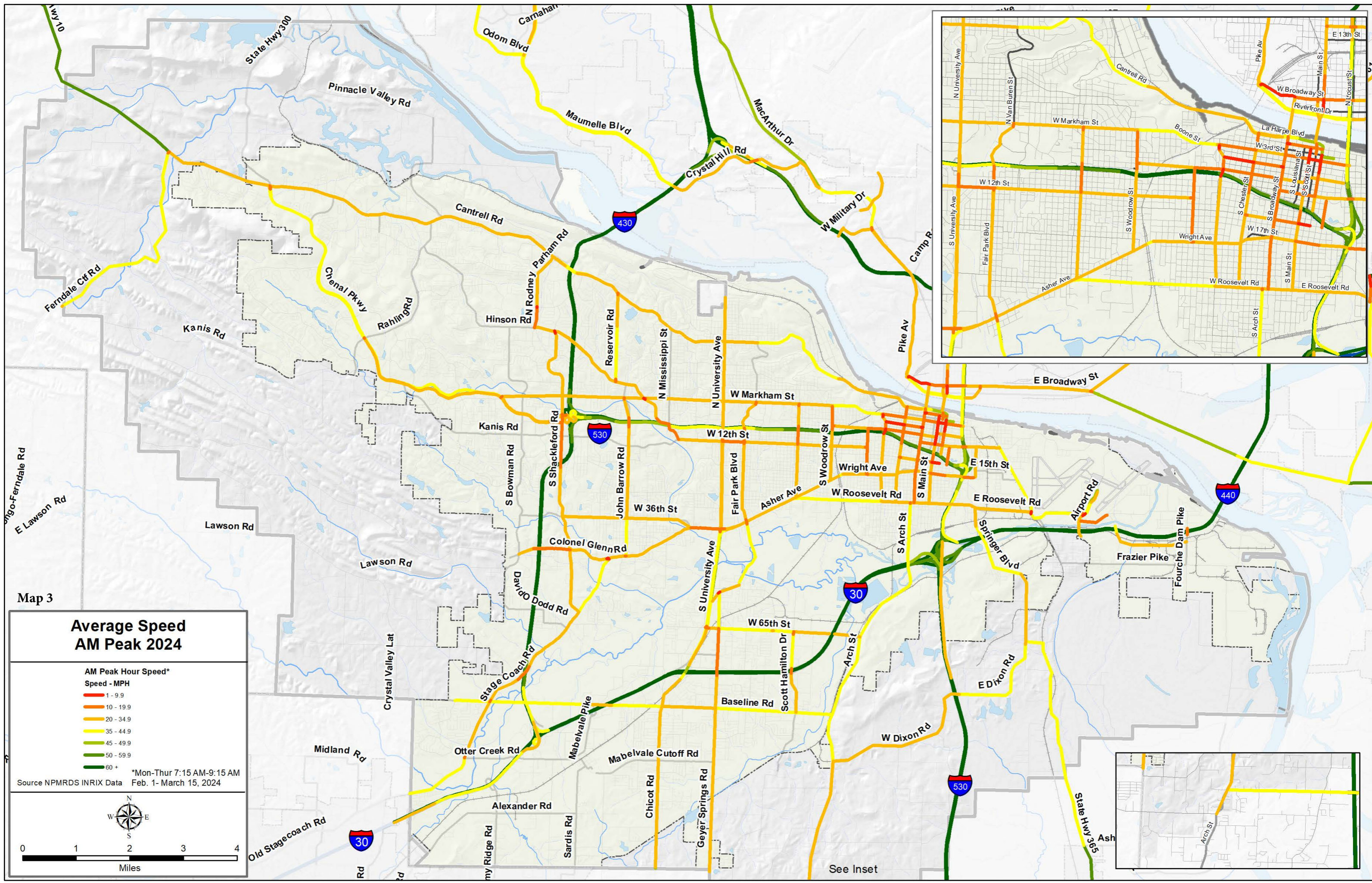
Change in ADT 2000 to 2022

- 100% +
- 50% - 99.9%
- 25% - 49.9%
- 10% - 24.9%
- 0.1% - 9.9%
- 9.9% - 0.0%
- 24.9% - -10%
- 87% - -25%

Source: ARDOT ADT Data



See Inset



Map 3

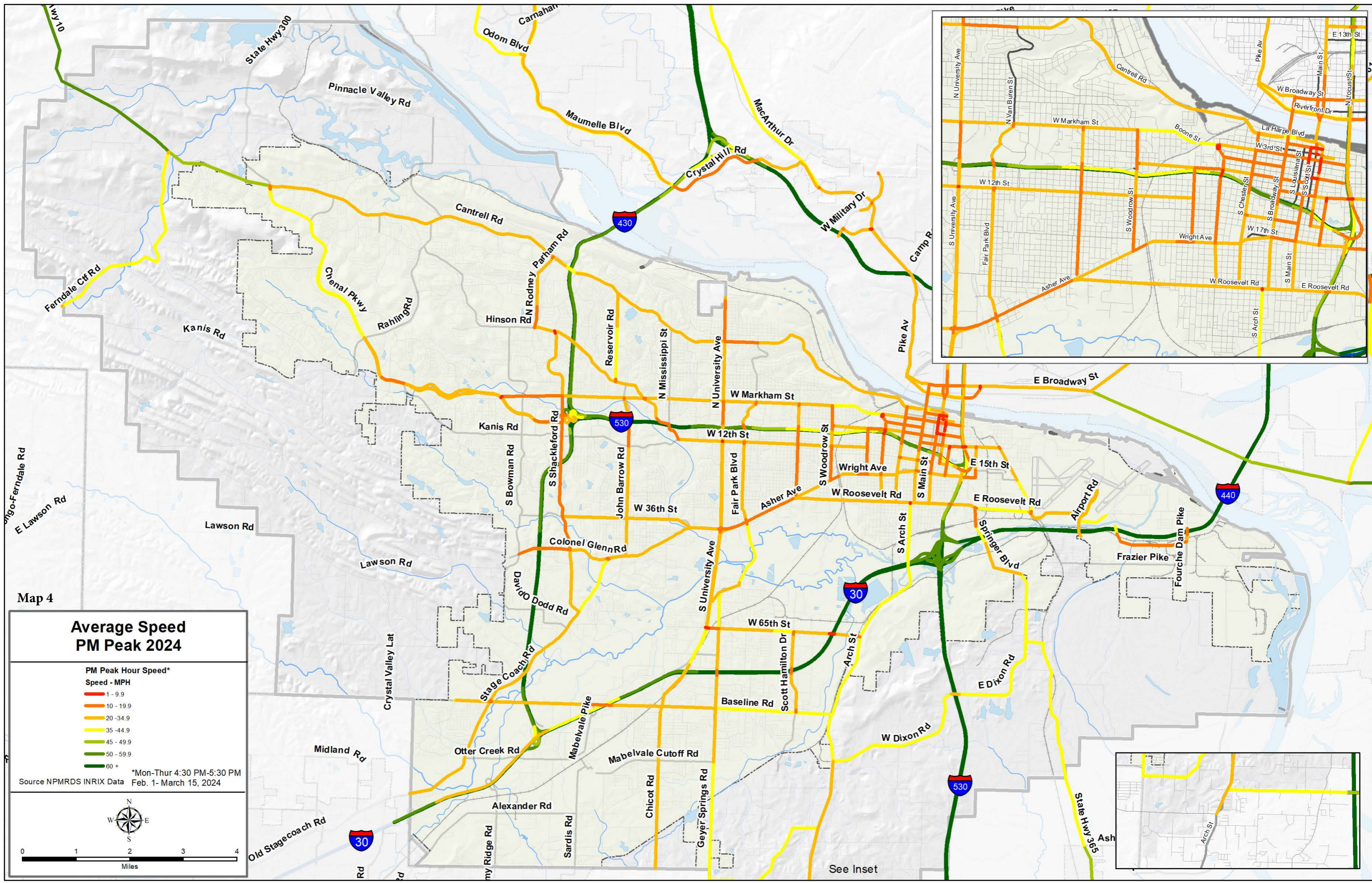
Average Speed AM Peak 2024

AM Peak Hour Speed*
Speed - MPH

- 1 - 9.9
- 10 - 19.9
- 20 - 34.9
- 35 - 44.9
- 45 - 49.9
- 50 - 59.9
- 60 +

*Mon-Thur 7:15 AM-9:15 AM
Source NPMRDS INRIX Data Feb. 1- March 15, 2024

See Inset



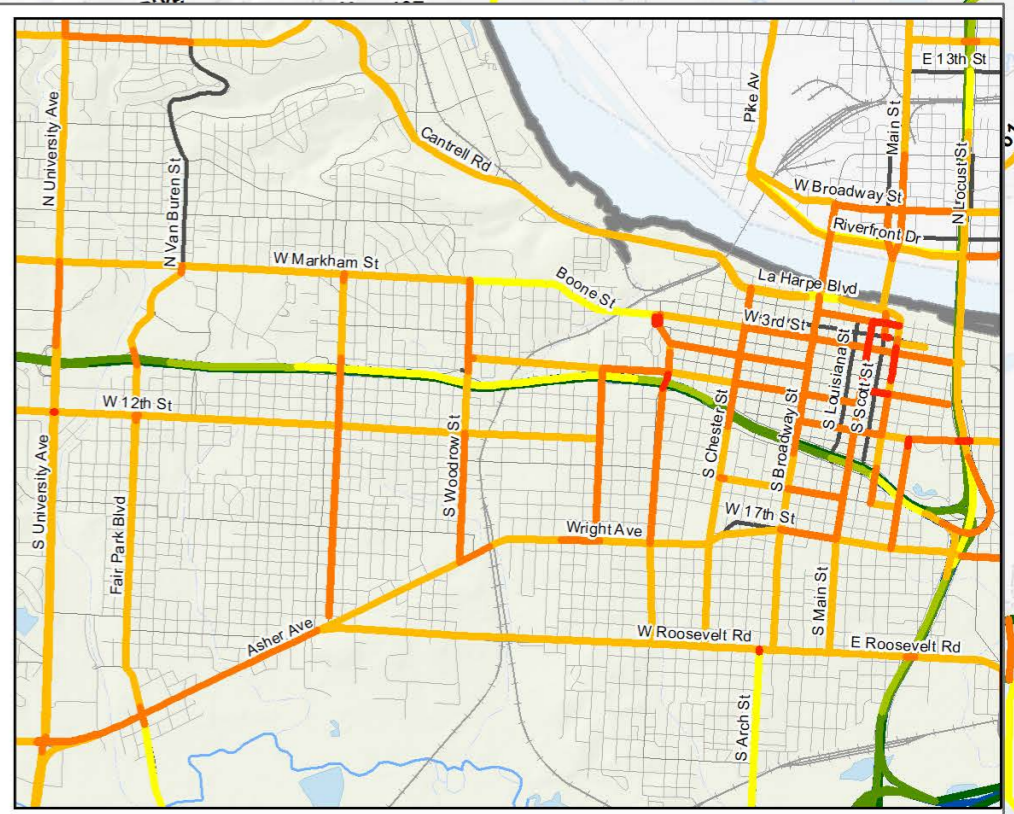
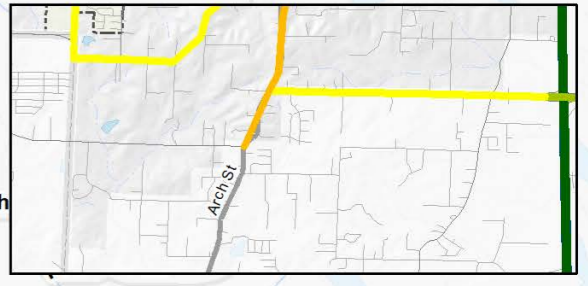
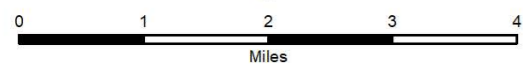
Map 4

Average Speed PM Peak 2024

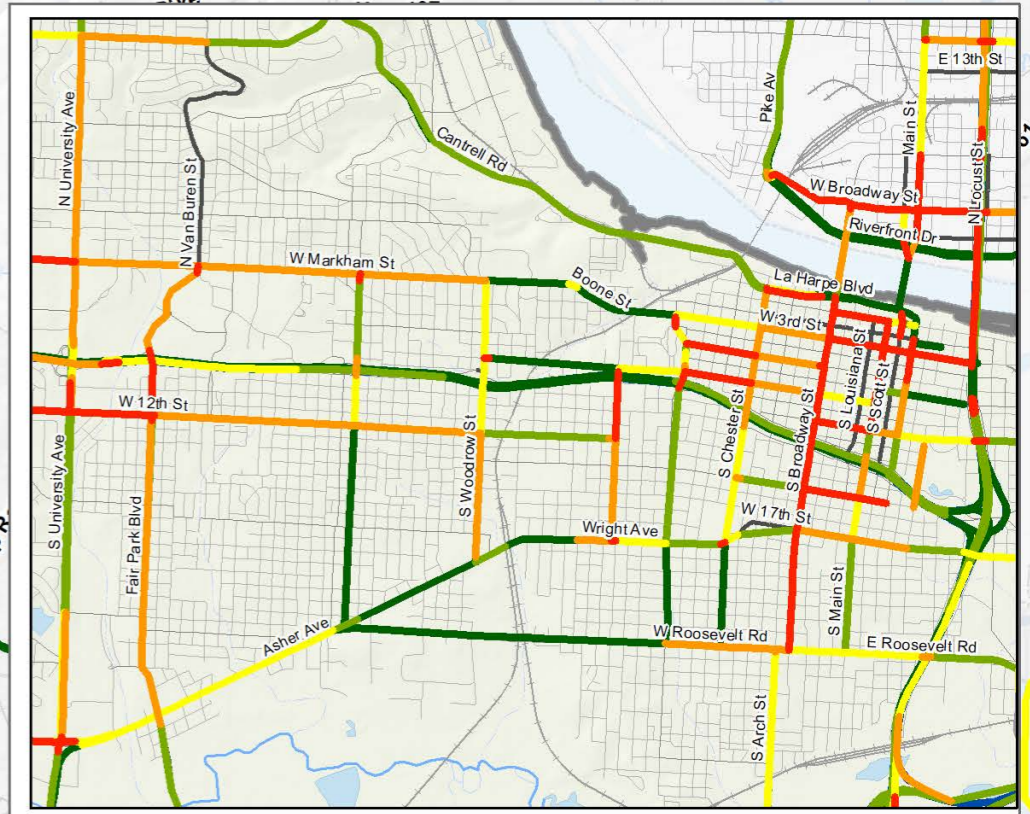
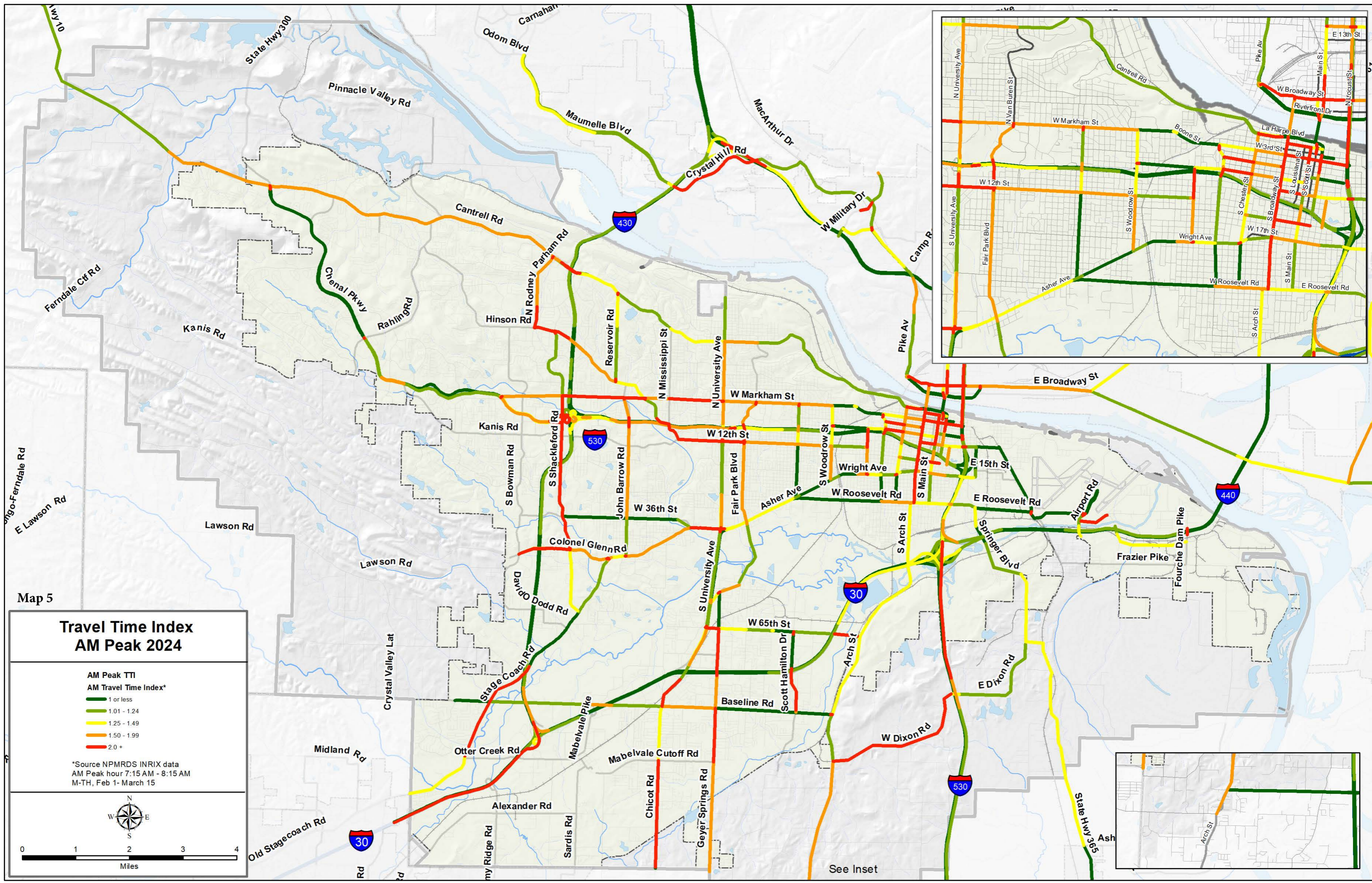
- PM Peak Hour Speed*
Speed - MPH
- 1 - 9.9
 - 10 - 19.9
 - 20 - 34.9
 - 35 - 44.9
 - 45 - 49.9
 - 50 - 59.9
 - 60 +

*Mon-Thur 4:30 PM-5:30 PM
Feb. 1- March 15, 2024

Source NPMRDS INRIX Data



See Inset



Map 5

Travel Time Index AM Peak 2024

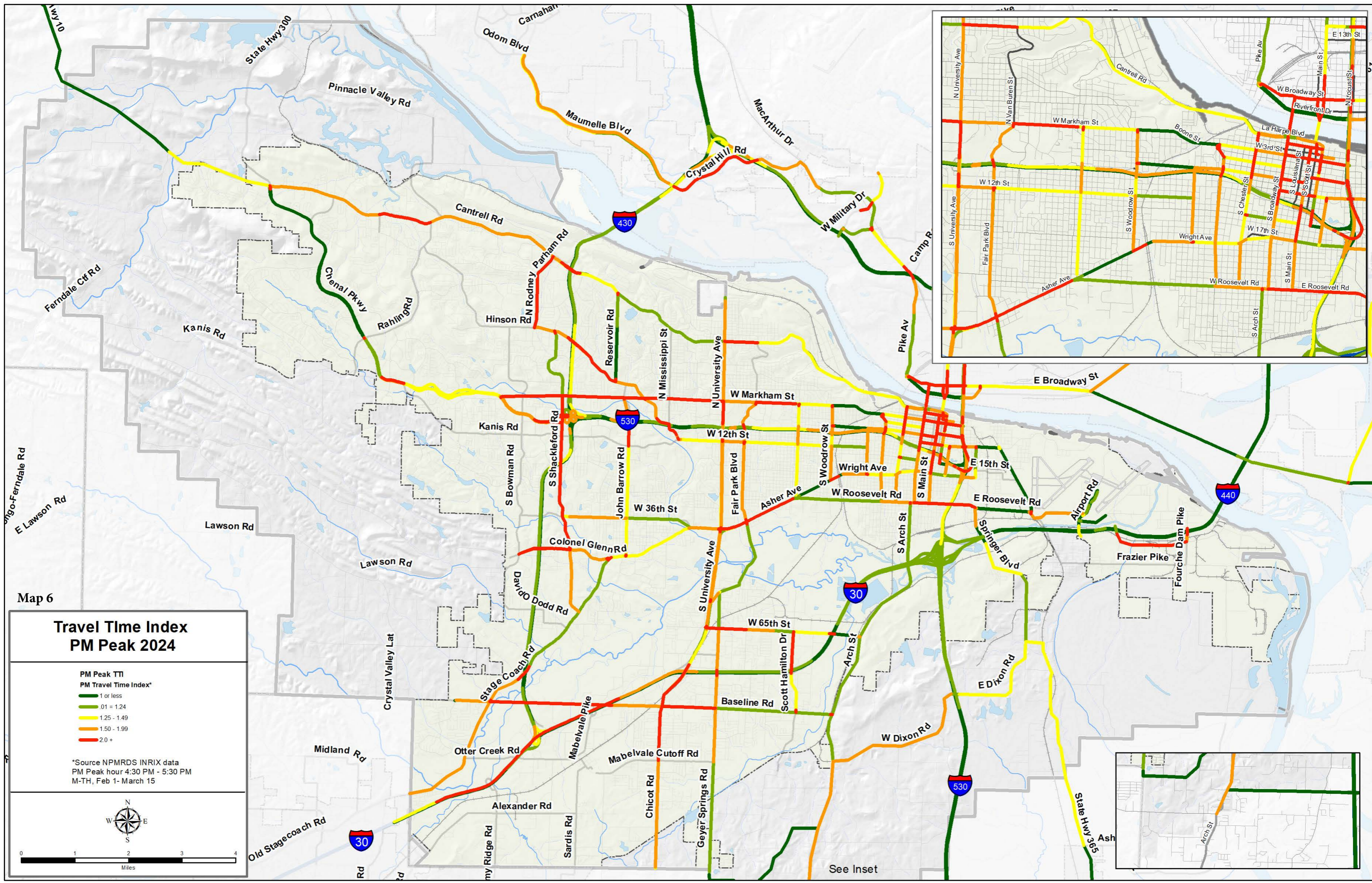
**AM Peak TTI
AM Travel Time Index***

- █ 1 or less
- █ 1.01 - 1.24
- █ 1.25 - 1.49
- █ 1.50 - 1.99
- █ 2.0 +

*Source NPMRDS INRIX data
AM Peak hour 7:15 AM - 8:15 AM
M-TH, Feb 1- March 15

Miles

See Inset



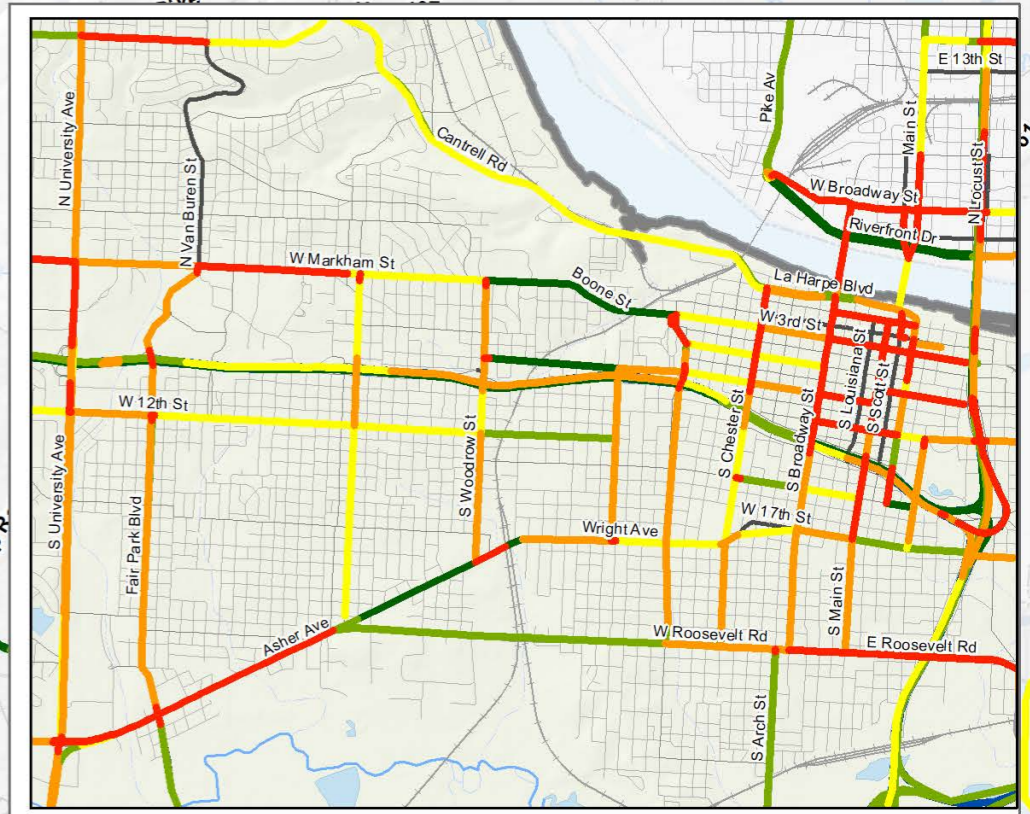
Map 6

Travel Time Index PM Peak 2024

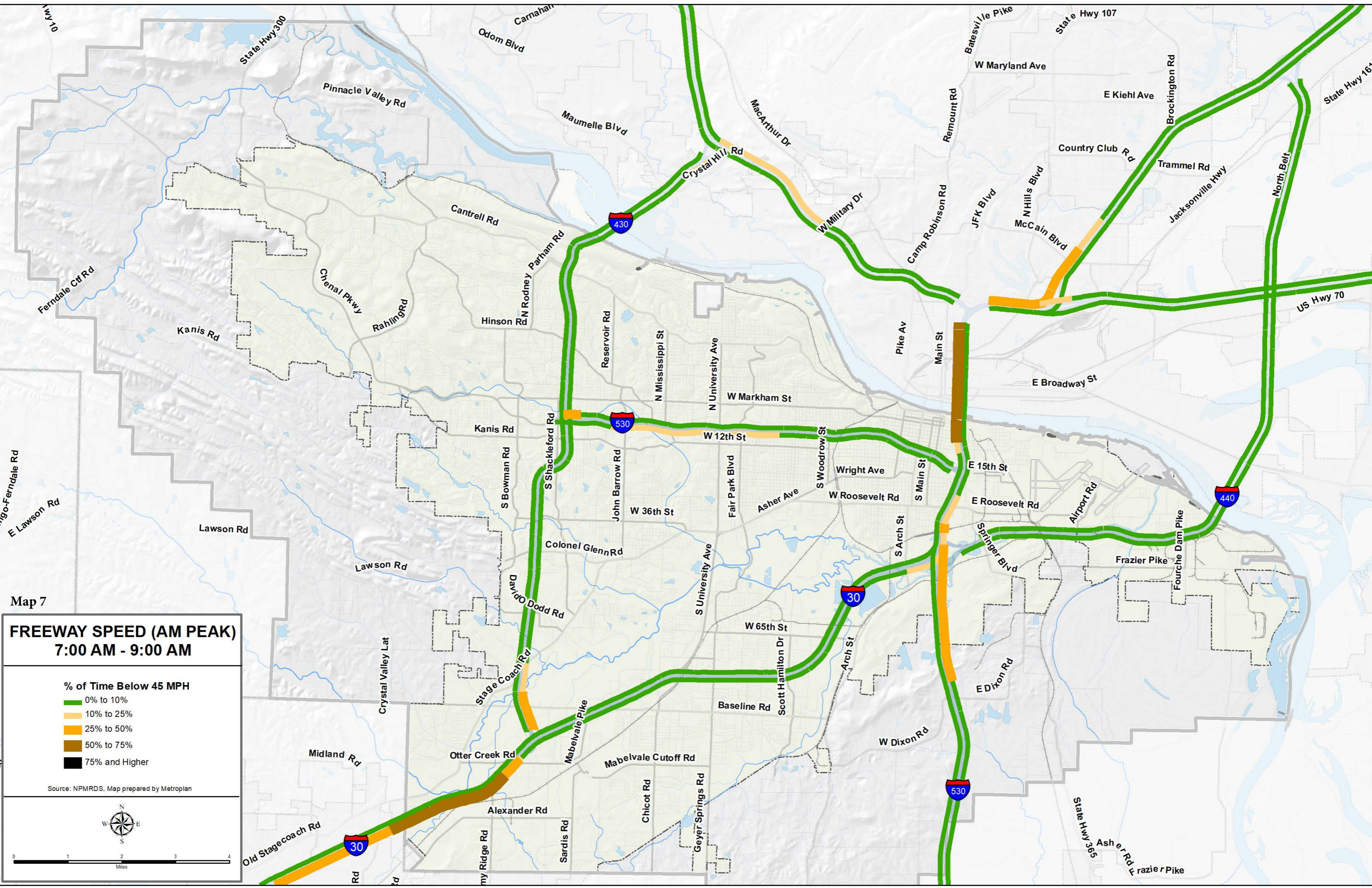
PM Peak TTI
PM Travel Time Index*

- █ 1 or less
- █ .01 - 1.24
- █ 1.25 - 1.49
- █ 1.50 - 1.99
- █ 2.0 +

*Source NPMRDS INRIX data
PM Peak hour 4:30 PM - 5:30 PM
M-TH, Feb 1- March 15



See Inset

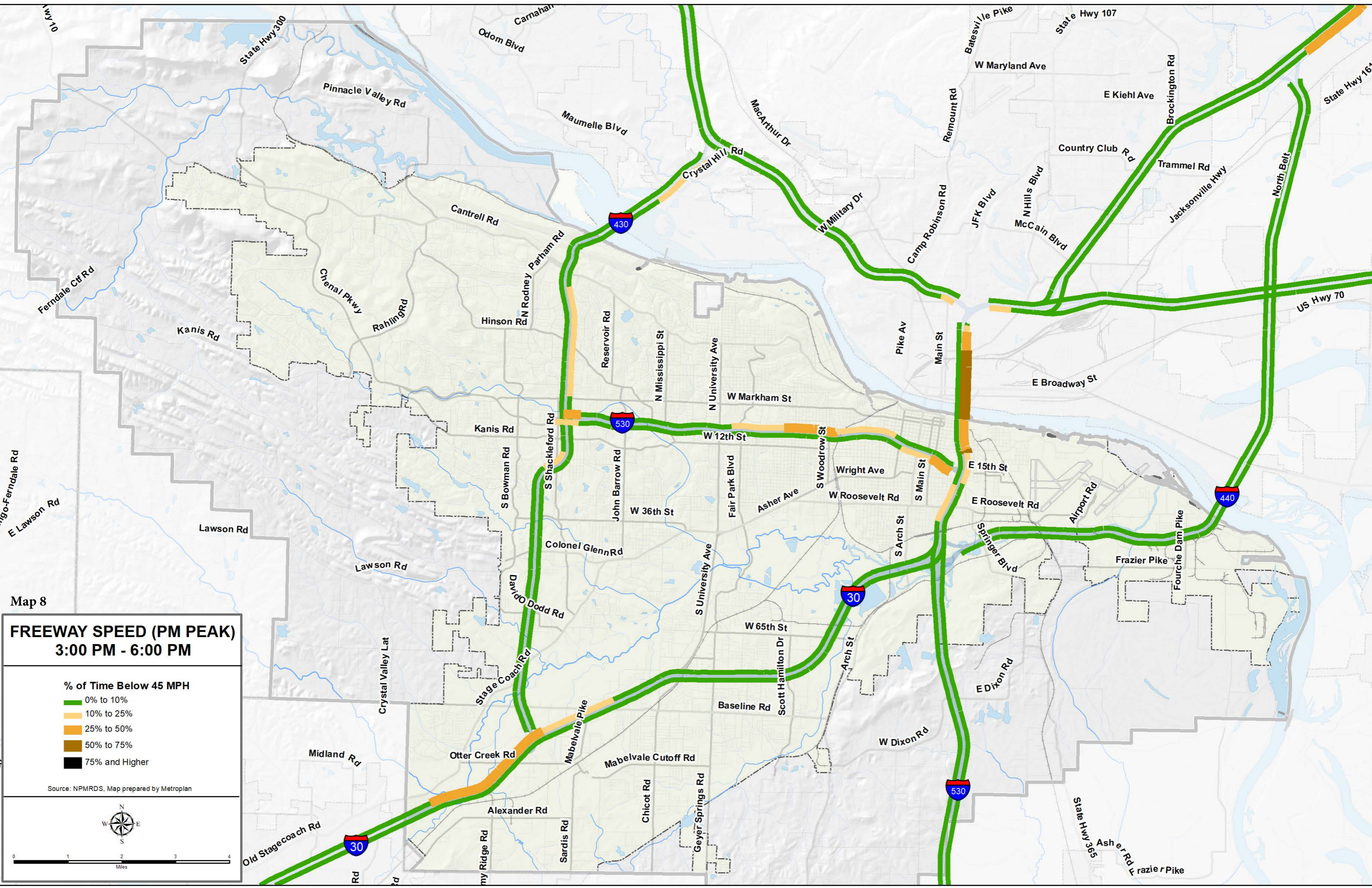


Map 7
FREWAY SPEED (AM PEAK)
7:00 AM - 9:00 AM

- % of Time Below 45 MPH**
- 0% to 10%
 - 10% to 25%
 - 25% to 50%
 - 50% to 75%
 - 75% and Higher

Source: NPMRDS, Map prepared by Metroplan





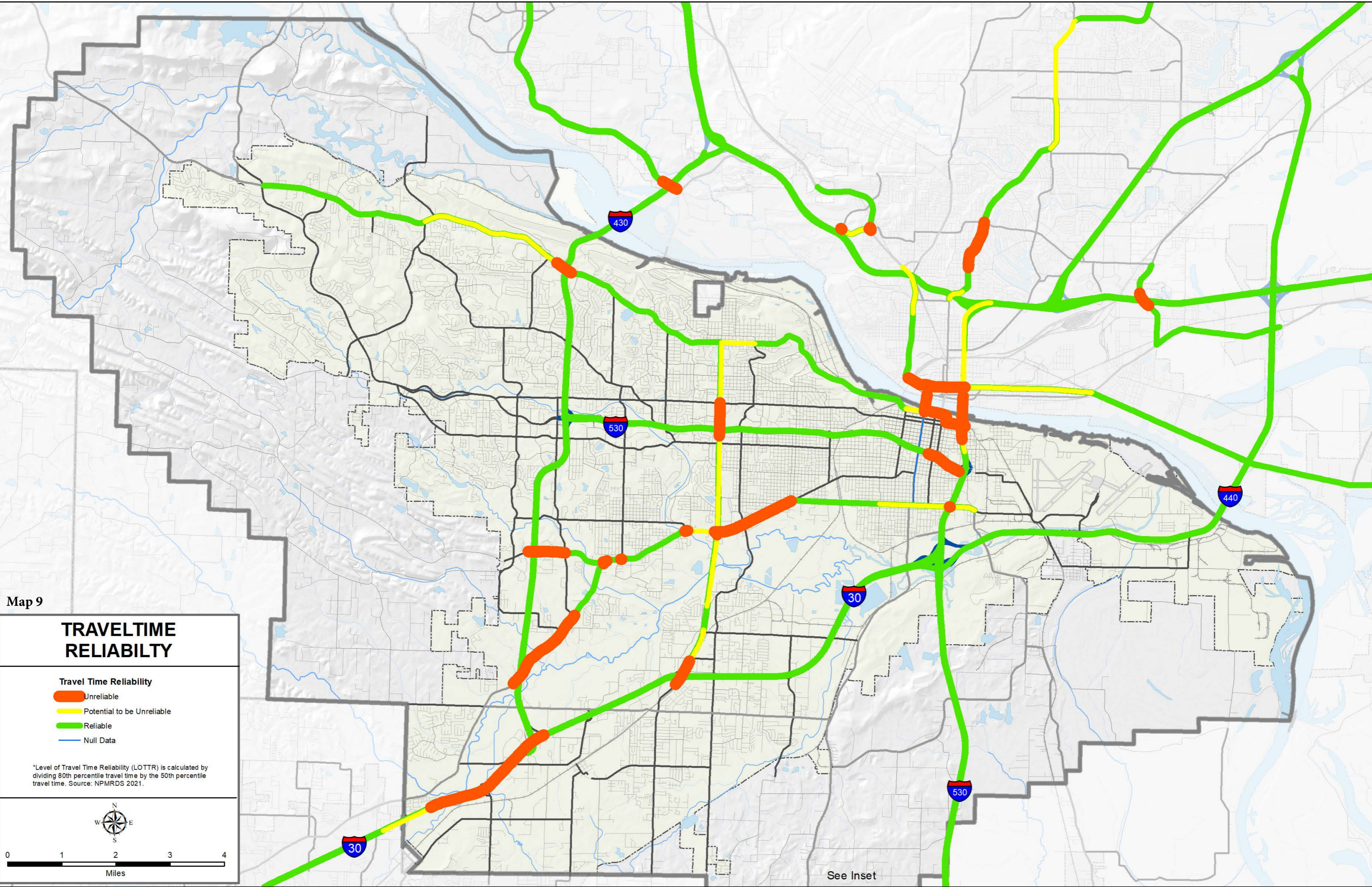
Map 8

FREWAY SPEED (PM PEAK) 3:00 PM - 6:00 PM

- % of Time Below 45 MPH**
- 0% to 10%
 - 10% to 25%
 - 25% to 50%
 - 50% to 75%
 - 75% and Higher

Source: NPMRDS, Map prepared by Metroplan



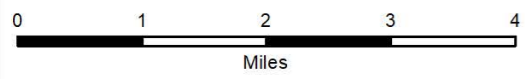


Map 9

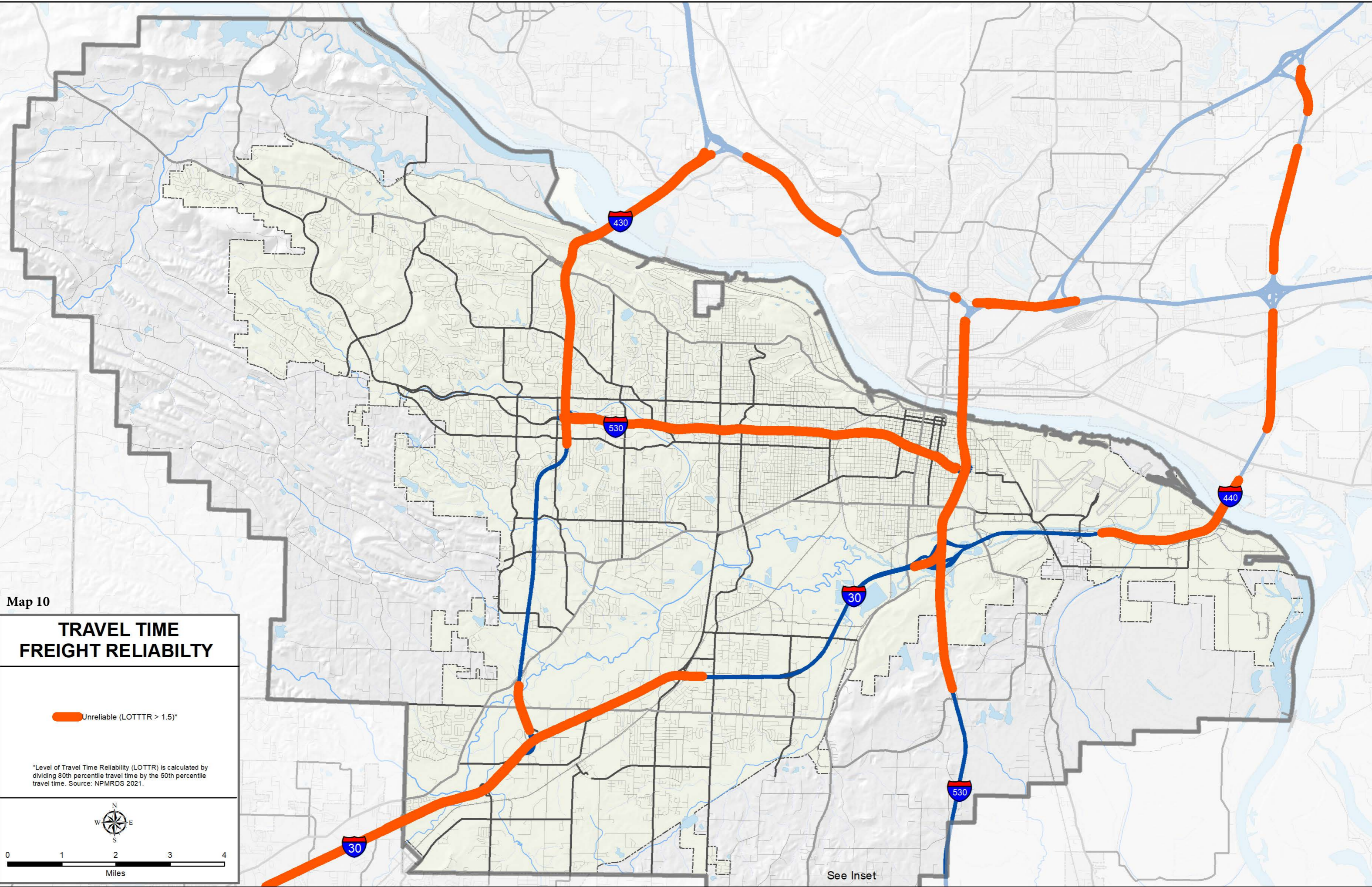
TRAVELTIME RELIABILITY

- Travel Time Reliability**
- █ Unreliable
 - █ Potential to be Unreliable
 - █ Reliable
 - █ Null Data

*Level of Travel Time Reliability (LOTTTR) is calculated by dividing 80th percentile travel time by the 50th percentile travel time. Source: NPMRDS 2021.




See Inset

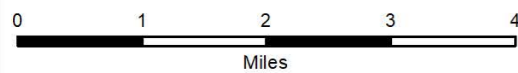


Map 10

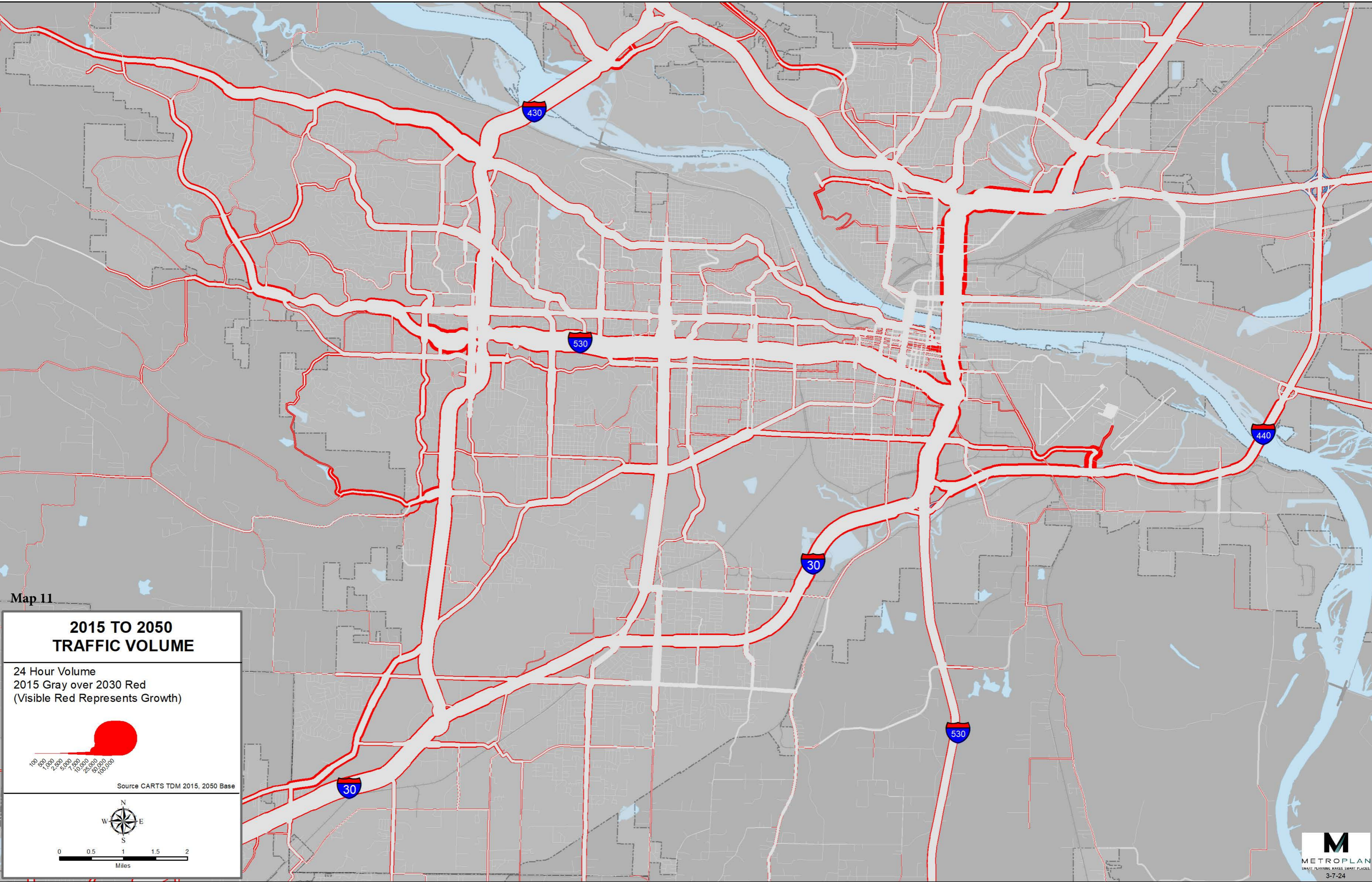
TRAVEL TIME FREIGHT RELIABILITY

 Unreliable (LOTTTR > 1.5)*

*Level of Travel Time Reliability (LOTTTR) is calculated by dividing 80th percentile travel time by the 50th percentile travel time. Source: NPMRDS 2021.



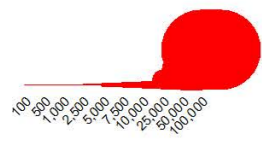
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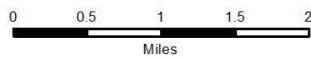
Map 11

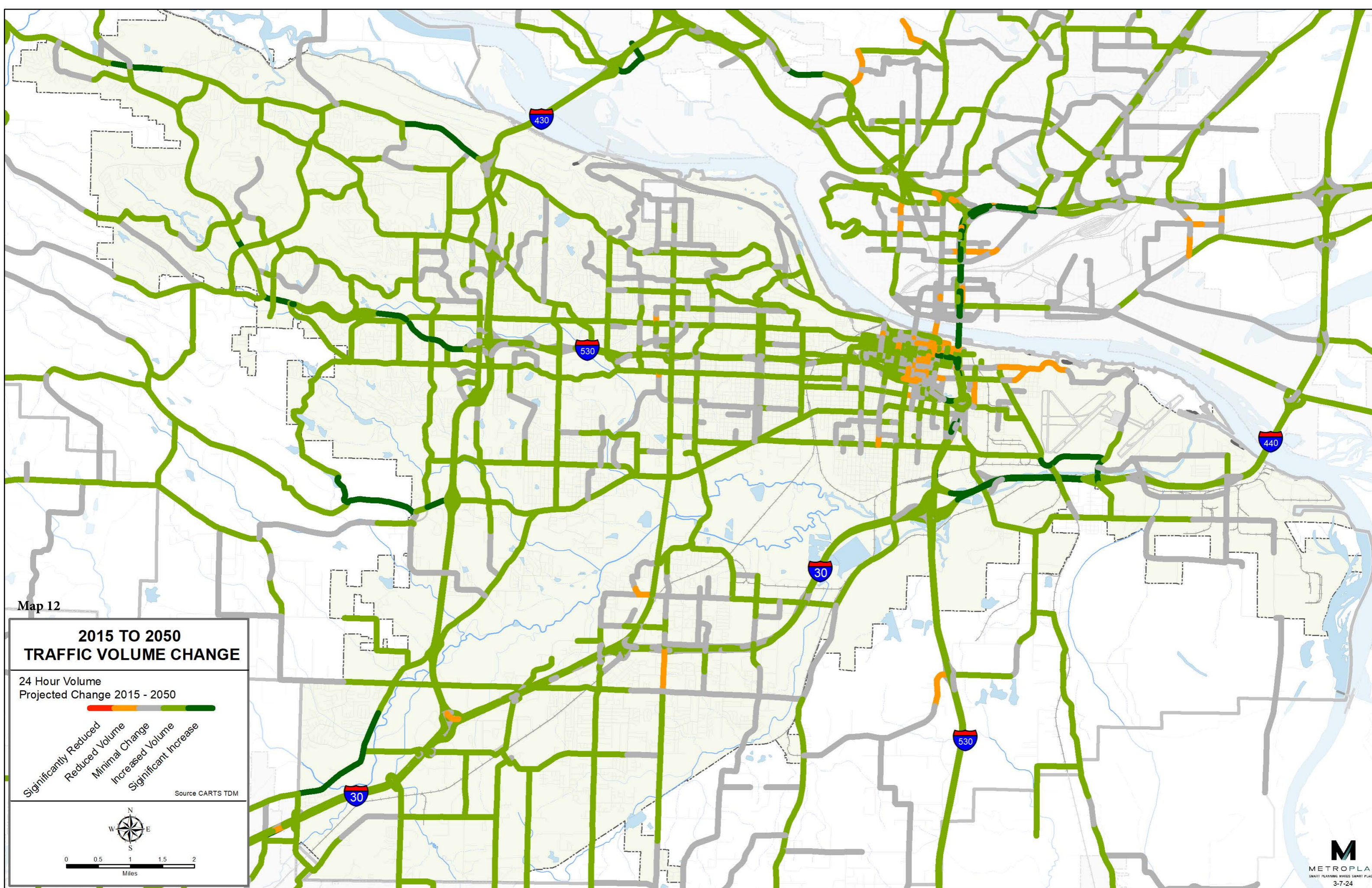
2015 TO 2050 TRAFFIC VOLUME

24 Hour Volume
2015 Gray over 2030 Red
(Visible Red Represents Growth)



Source CARTS TDM 2015, 2050 Base





Map 12

2015 TO 2050 TRAFFIC VOLUME CHANGE

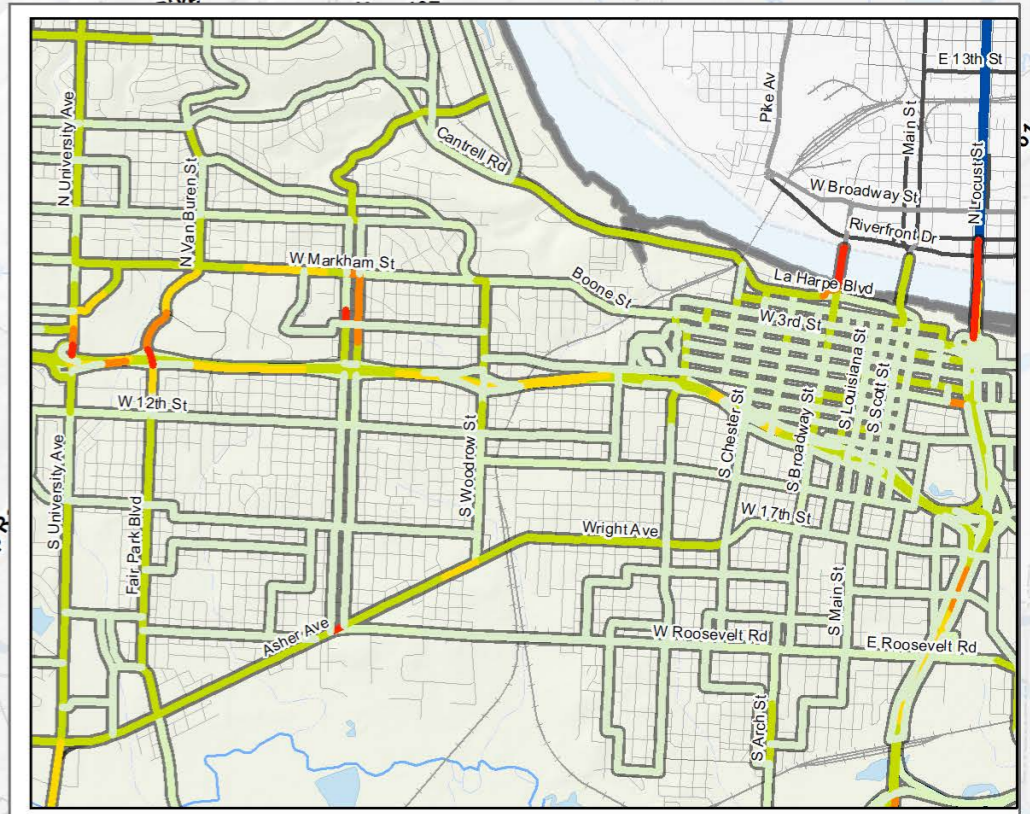
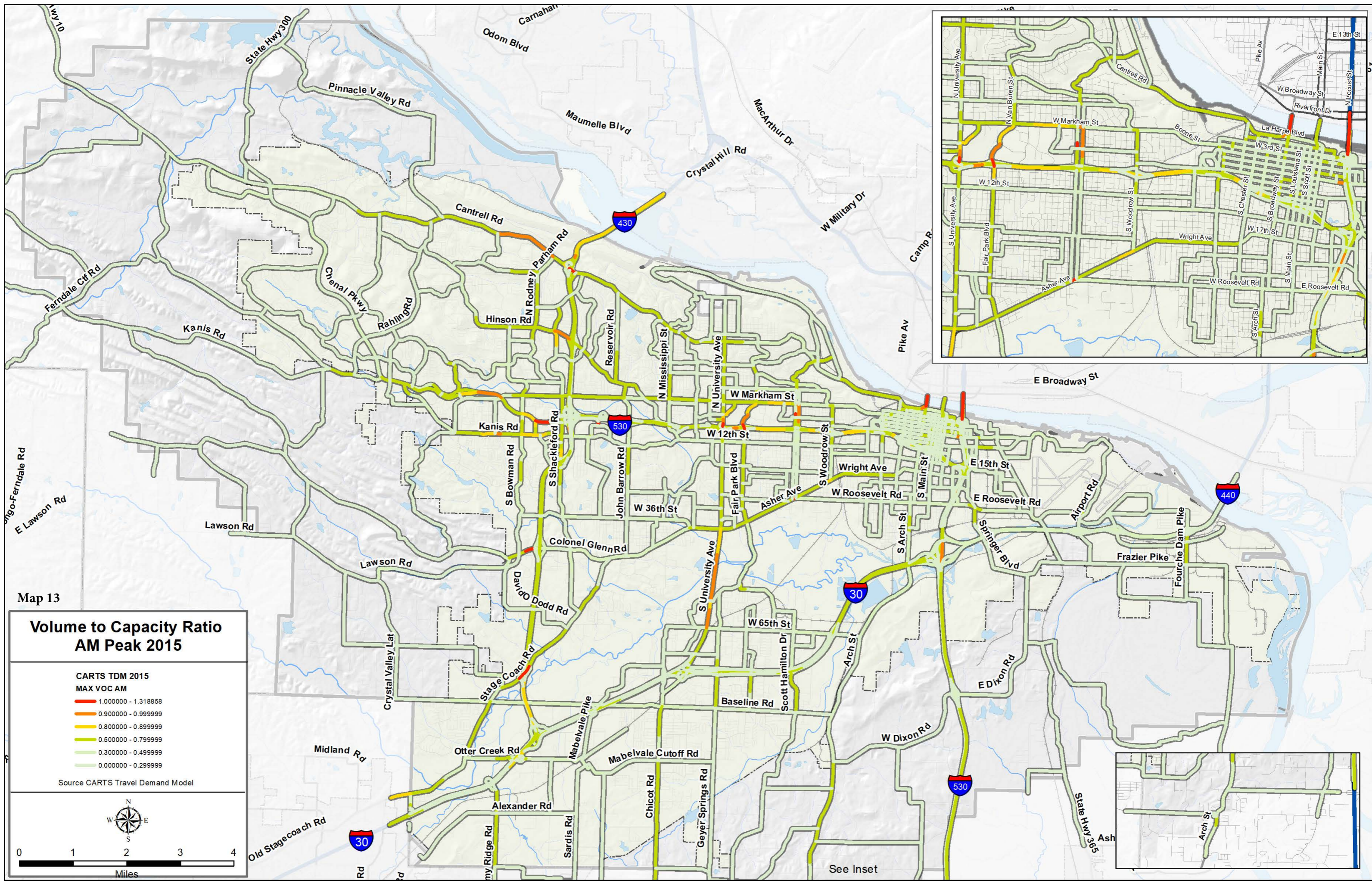
24 Hour Volume
Projected Change 2015 - 2050



- Significantly Reduced
- Reduced Volume
- Minimal Change
- Increased Volume
- Significant Increase

Source CARTS TDM





Map 13

**Volume to Capacity Ratio
AM Peak 2015**

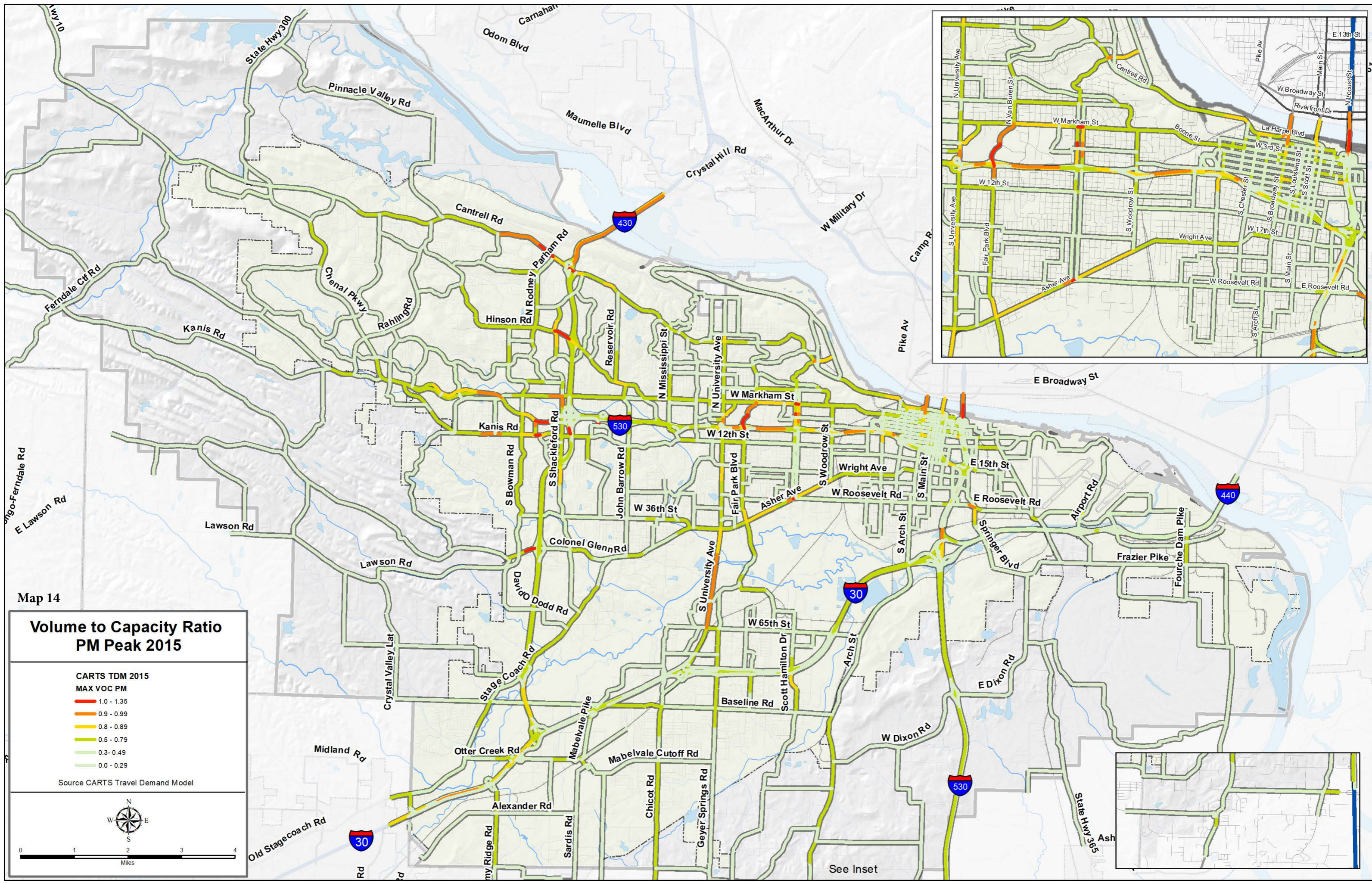
**CARTS TDM 2015
MAX VOC AM**

- █ 1.000000 - 1.318858
- █ 0.900000 - 0.999999
- █ 0.800000 - 0.899999
- █ 0.500000 - 0.799999
- █ 0.300000 - 0.499999
- █ 0.000000 - 0.299999

Source CARTS Travel Demand Model

Miles

See Inset



Map 14

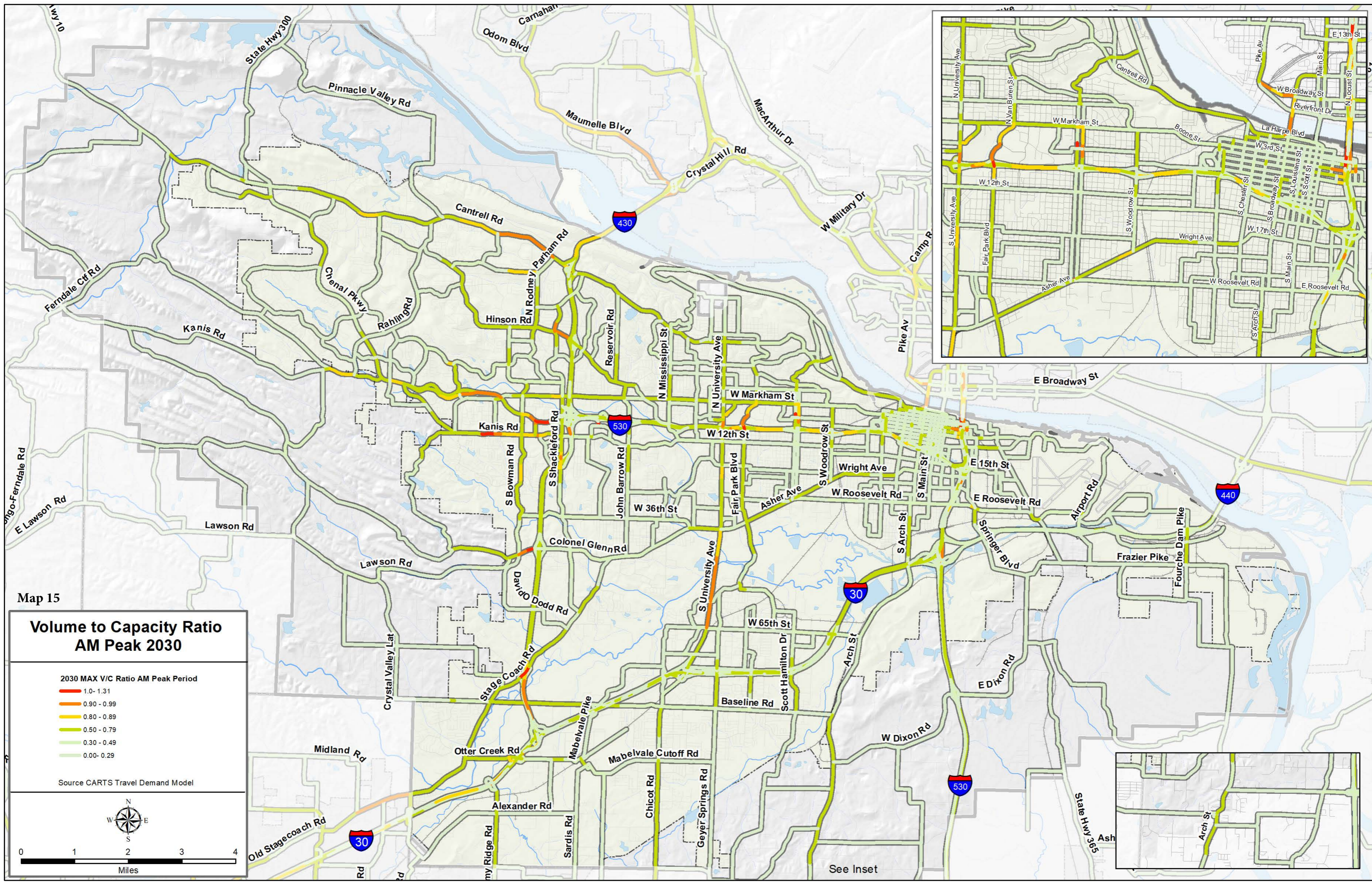
**Volume to Capacity Ratio
PM Peak 2015**

- CARTS TDM 2015
MAX VOC PM
- 1.0 - 1.35
 - 0.9 - 0.99
 - 0.8 - 0.89
 - 0.5 - 0.79
 - 0.3 - 0.49
 - 0.0 - 0.29

Source CARTS Travel Demand Model



See Inset



Map 15

**Volume to Capacity Ratio
AM Peak 2030**

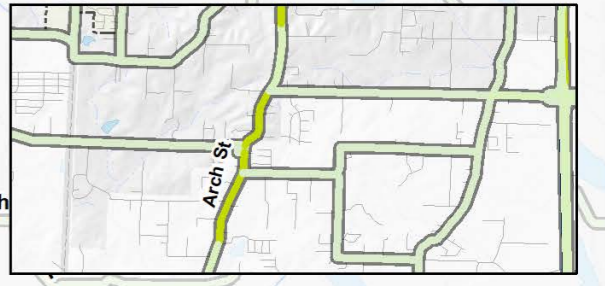
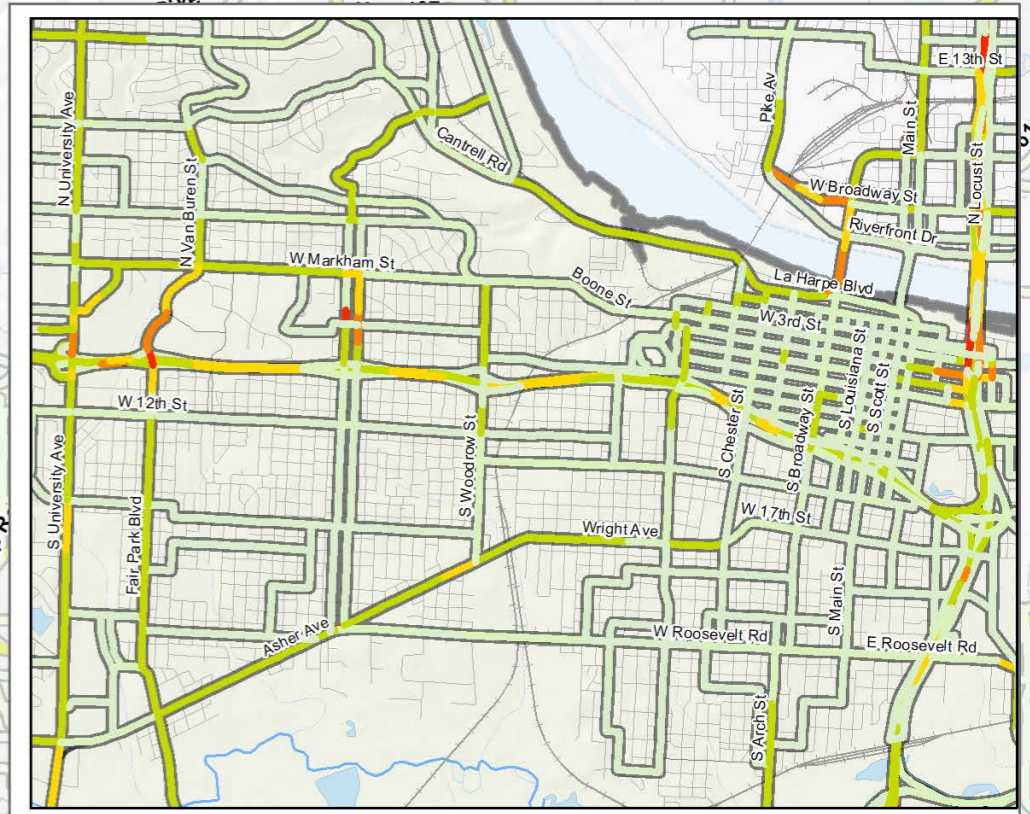
2030 MAX V/C Ratio AM Peak Period

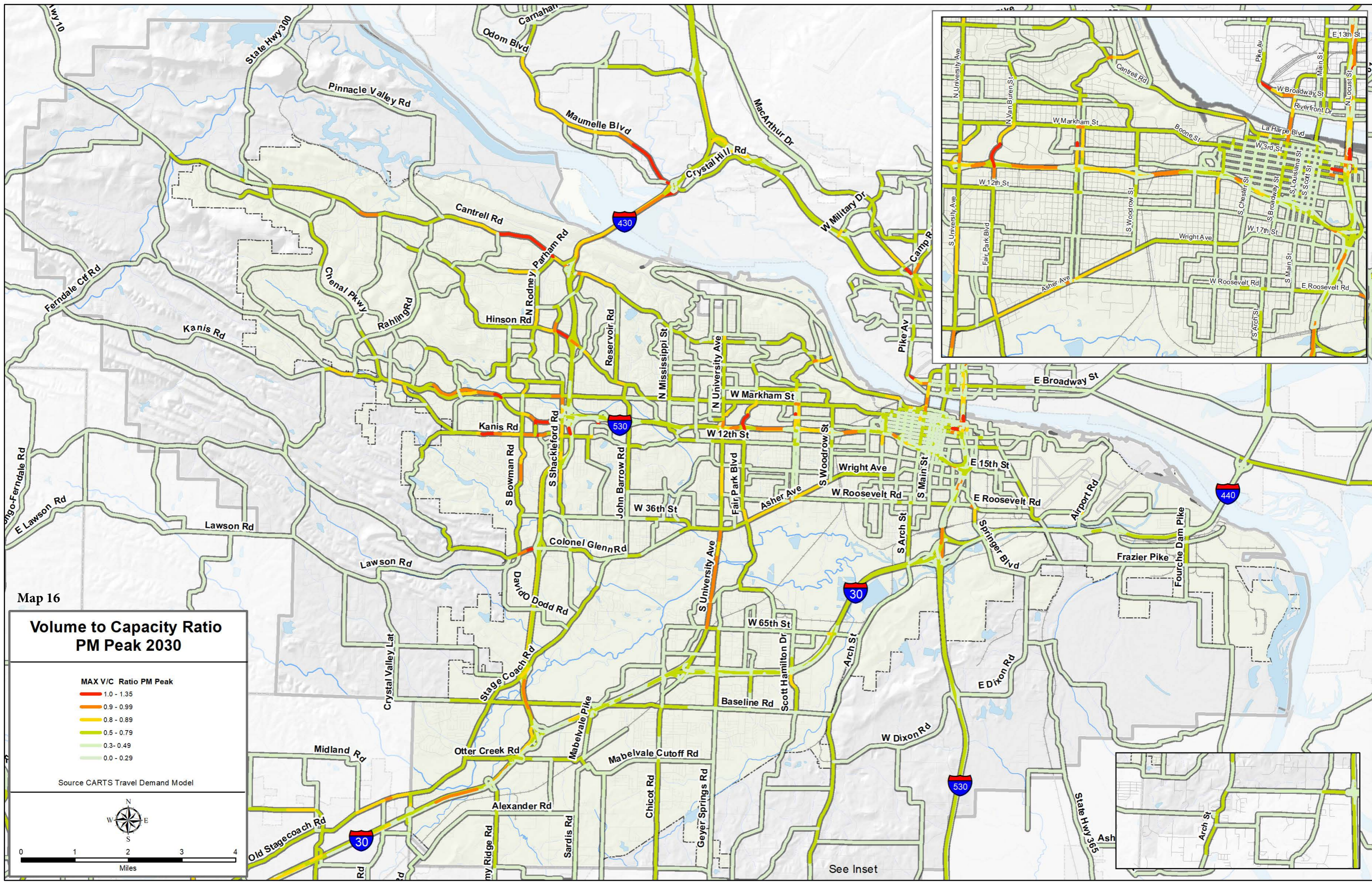
- 1.0- 1.31
- 0.90 - 0.99
- 0.80 - 0.89
- 0.50 - 0.79
- 0.30 - 0.49
- 0.00 - 0.29

Source CARTS Travel Demand Model

0 1 2 3 4
Miles

See Inset





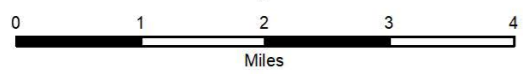
Map 16

**Volume to Capacity Ratio
PM Peak 2030**

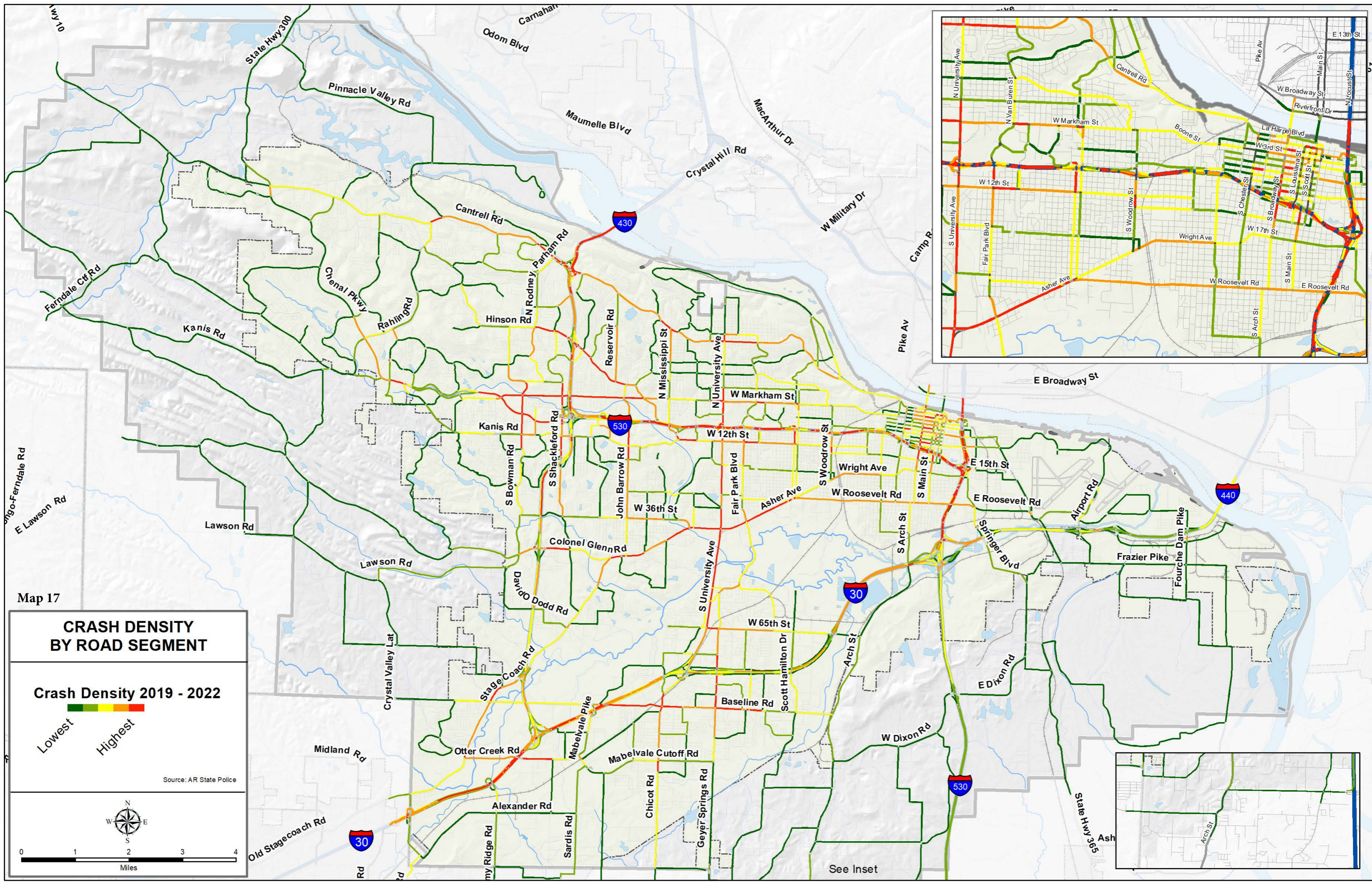
MAX V/C Ratio PM Peak

- █ 1.0 - 1.35
- █ 0.9 - 0.99
- █ 0.8 - 0.89
- █ 0.5 - 0.79
- █ 0.3 - 0.49
- █ 0.0 - 0.29

Source CARTS Travel Demand Model



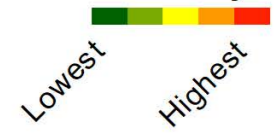
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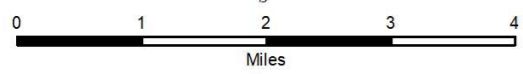
Map 17

CRASH DENSITY BY ROAD SEGMENT

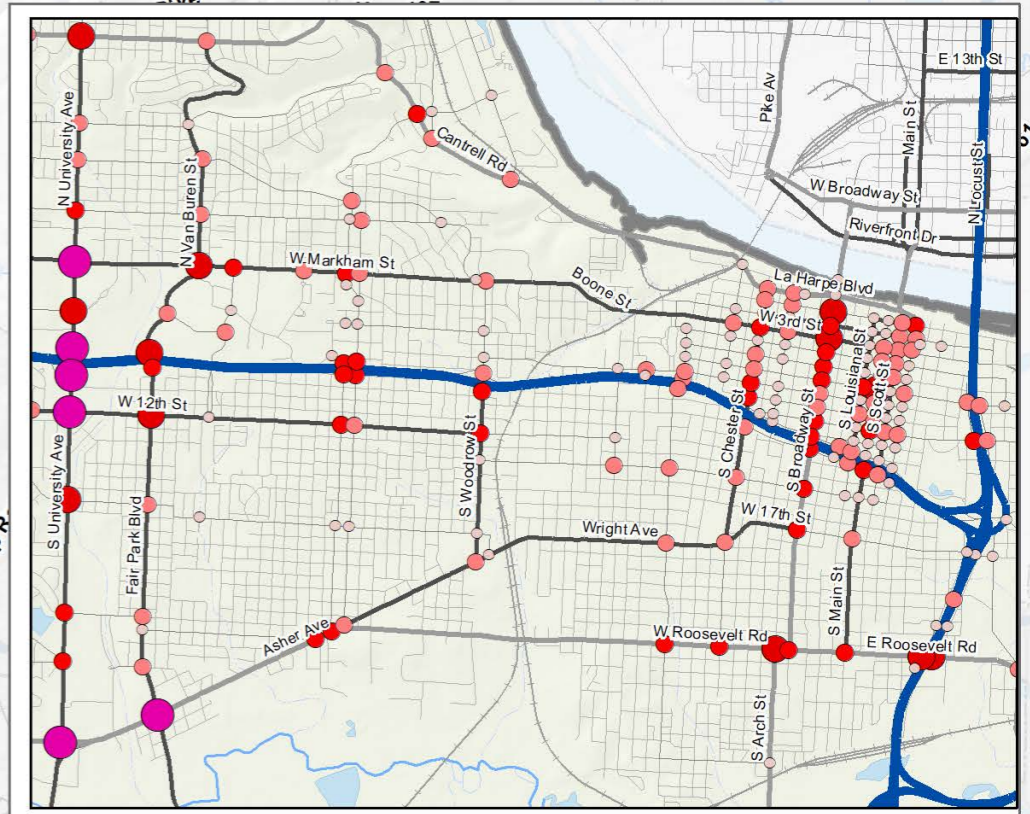
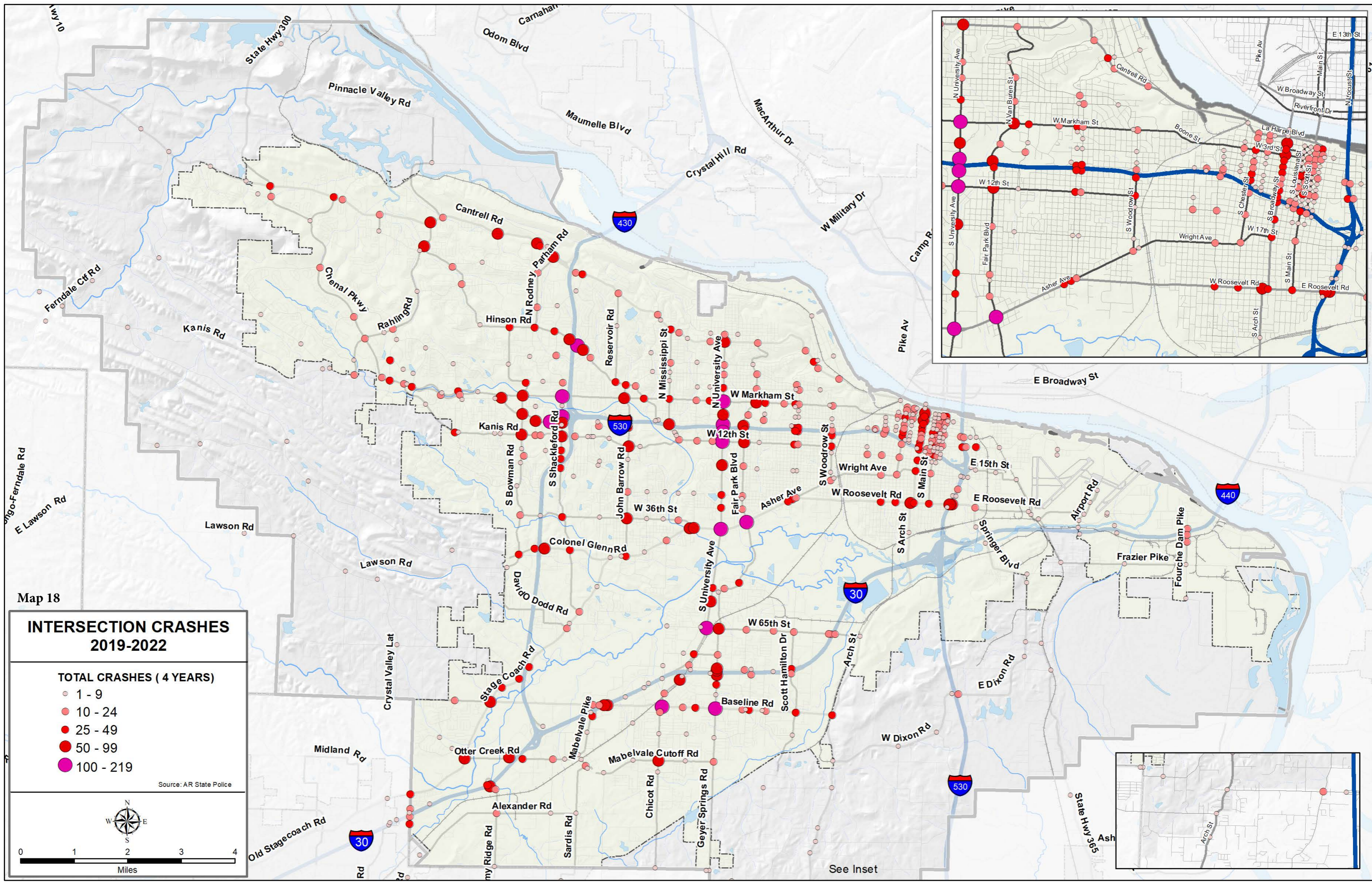
Crash Density 2019 - 2022



Source: AR State Police



See Inset



Map 18

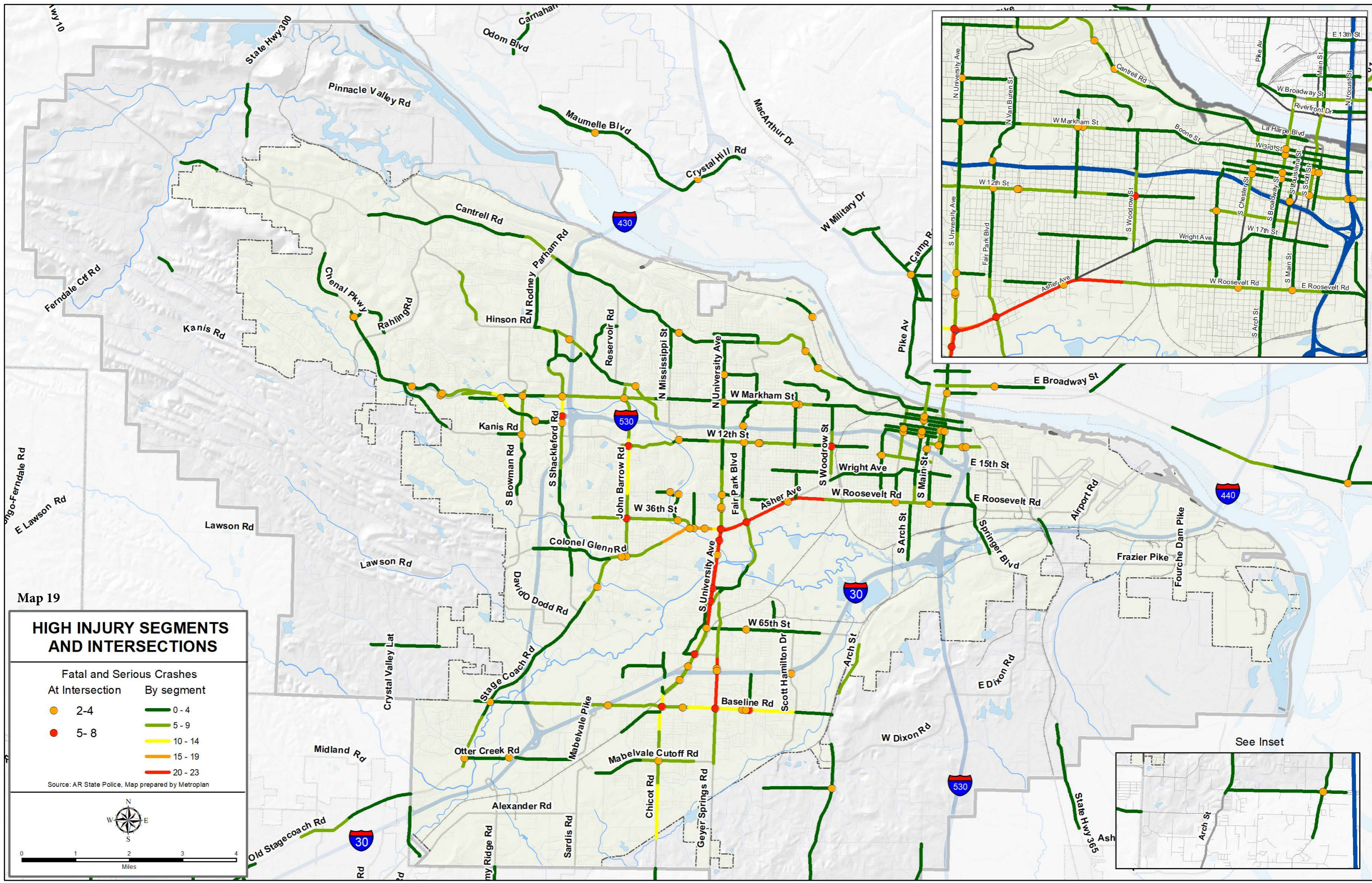
INTERSECTION CRASHES 2019-2022

TOTAL CRASHES (4 YEARS)

- 1 - 9
- 10 - 24
- 25 - 49
- 50 - 99
- 100 - 219

Source: AR State Police

See Inset

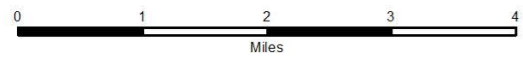


Map 19

HIGH INJURY SEGMENTS AND INTERSECTIONS

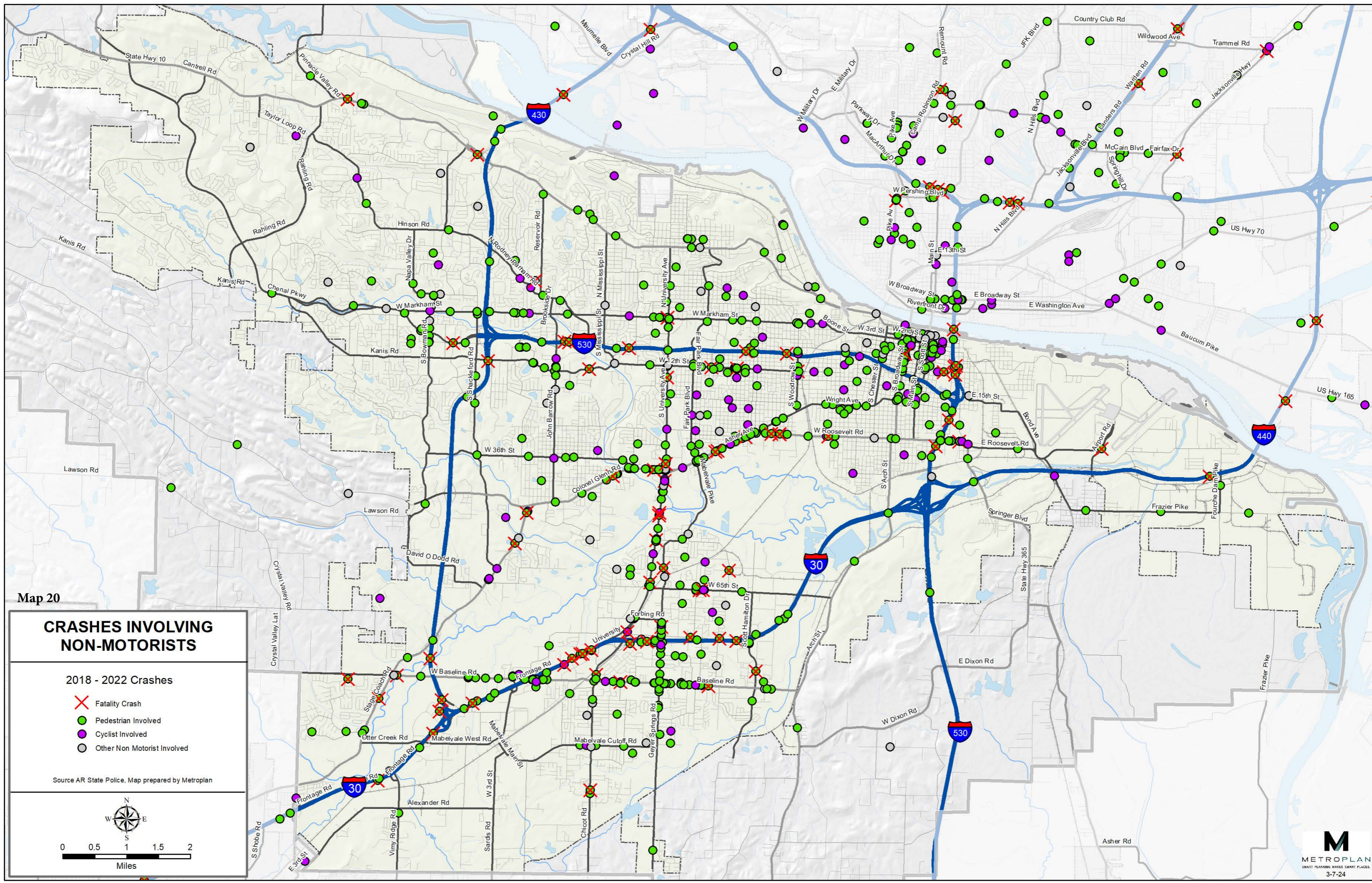
Fatal and Serious Crashes	
At Intersection	By segment
● 2-4	— 0-4
● 5-8	— 5-9
	— 10-14
	— 15-19
	— 20-23

Source: AR State Police, Map prepared by Metroplan



See Inset





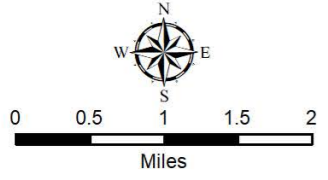
Map 20

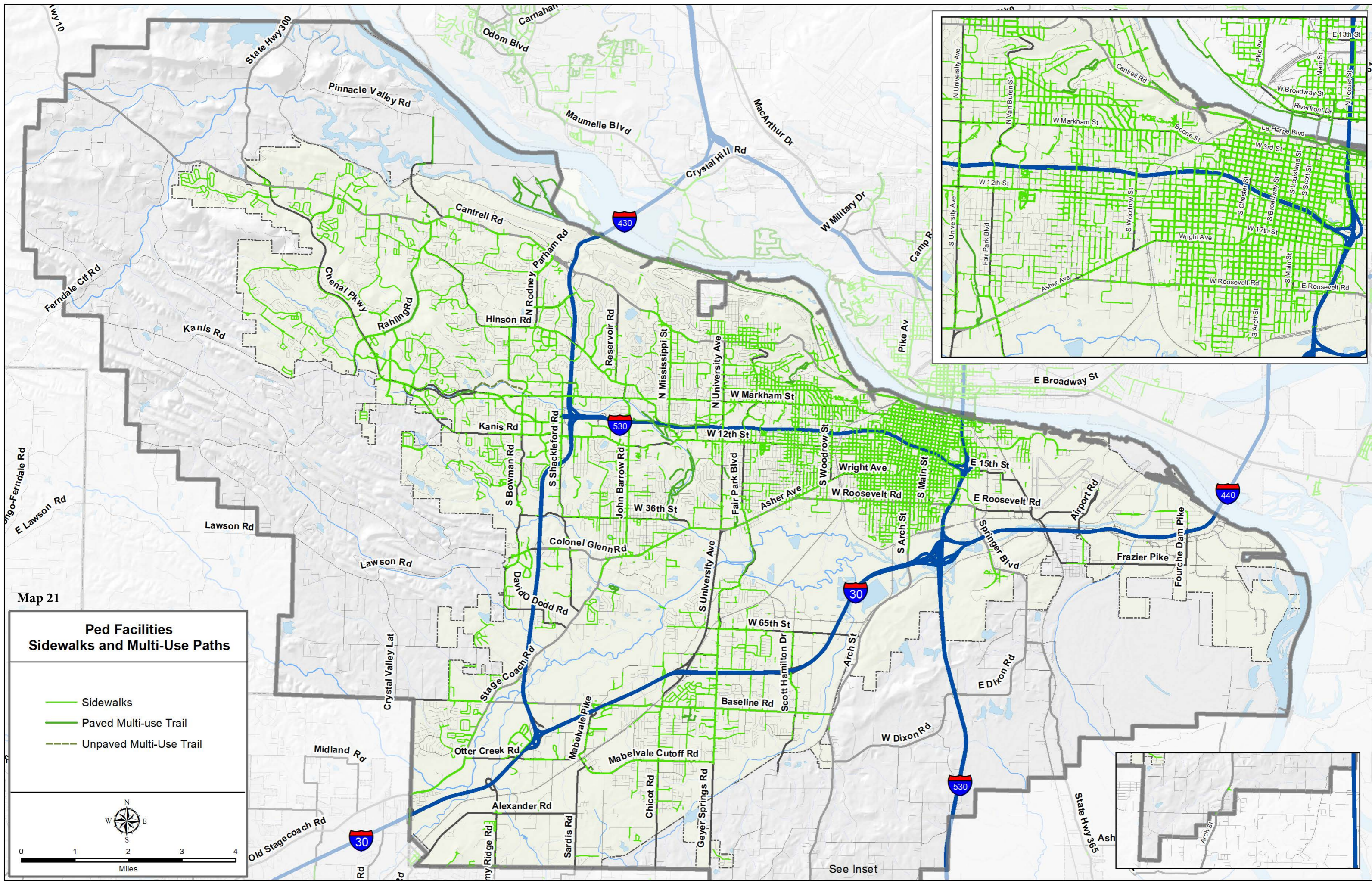
CRASHES INVOLVING NON-MOTORISTS

2018 - 2022 Crashes

- ✕ Fatality Crash
- Pedestrian Involved
- Cyclist Involved
- Other Non Motorist Involved

Source AR State Police. Map prepared by Metroplan

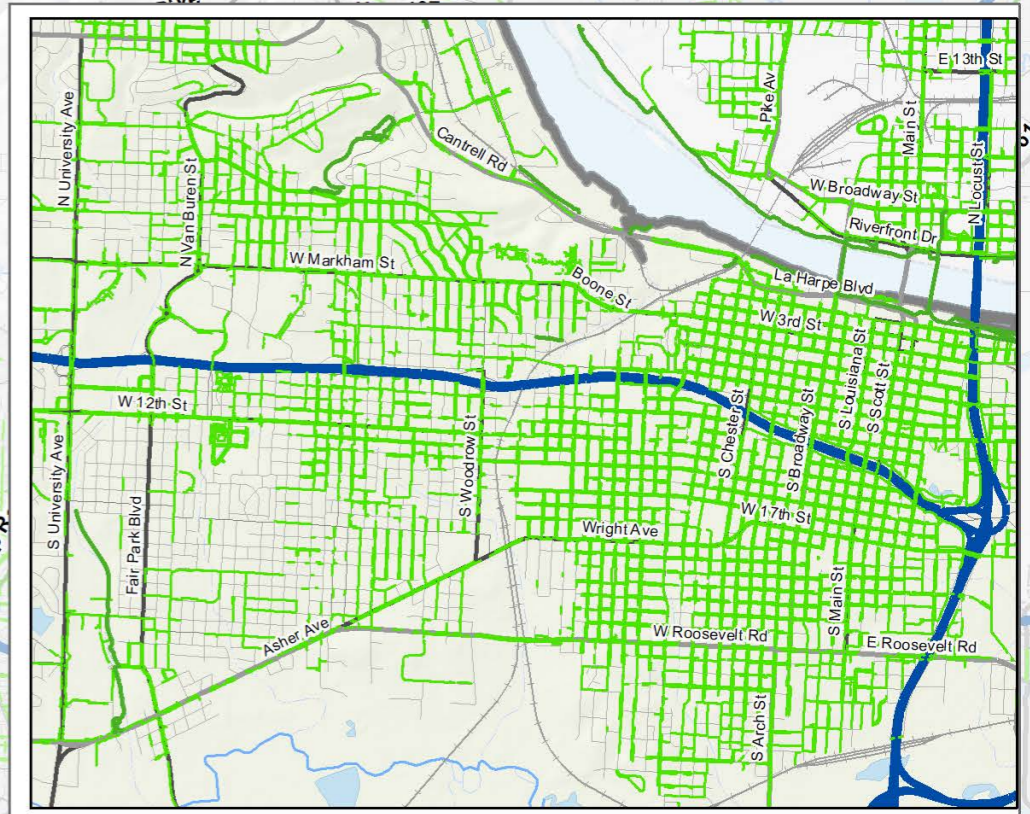
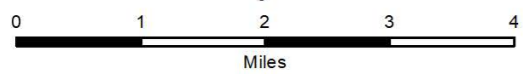




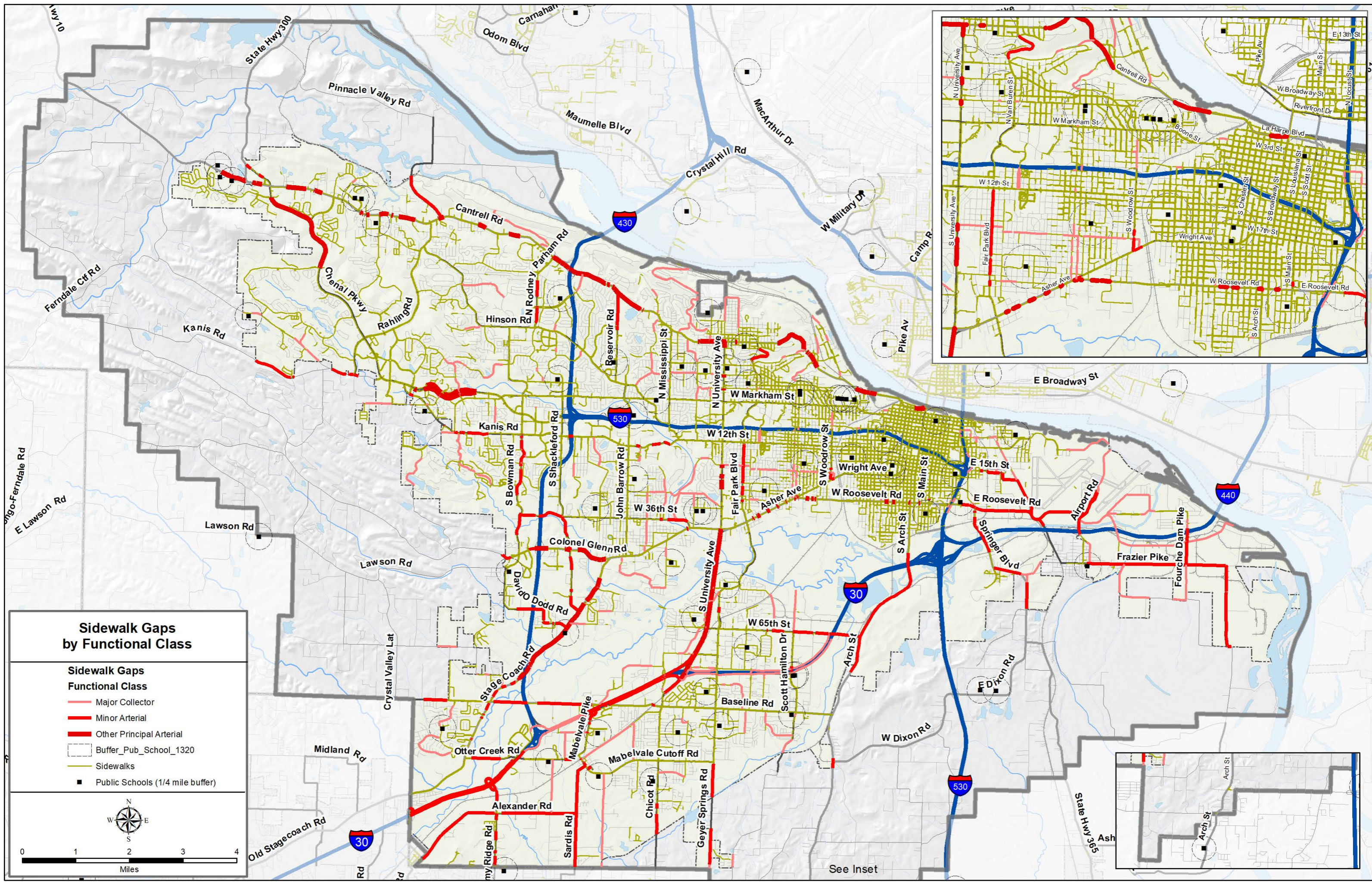
Map 21

**Ped Facilities
Sidewalks and Multi-Use Paths**

- Sidewalks
- Paved Multi-use Trail
- - - Unpaved Multi-Use Trail

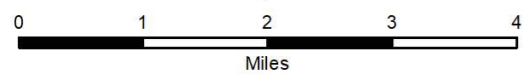


See Inset

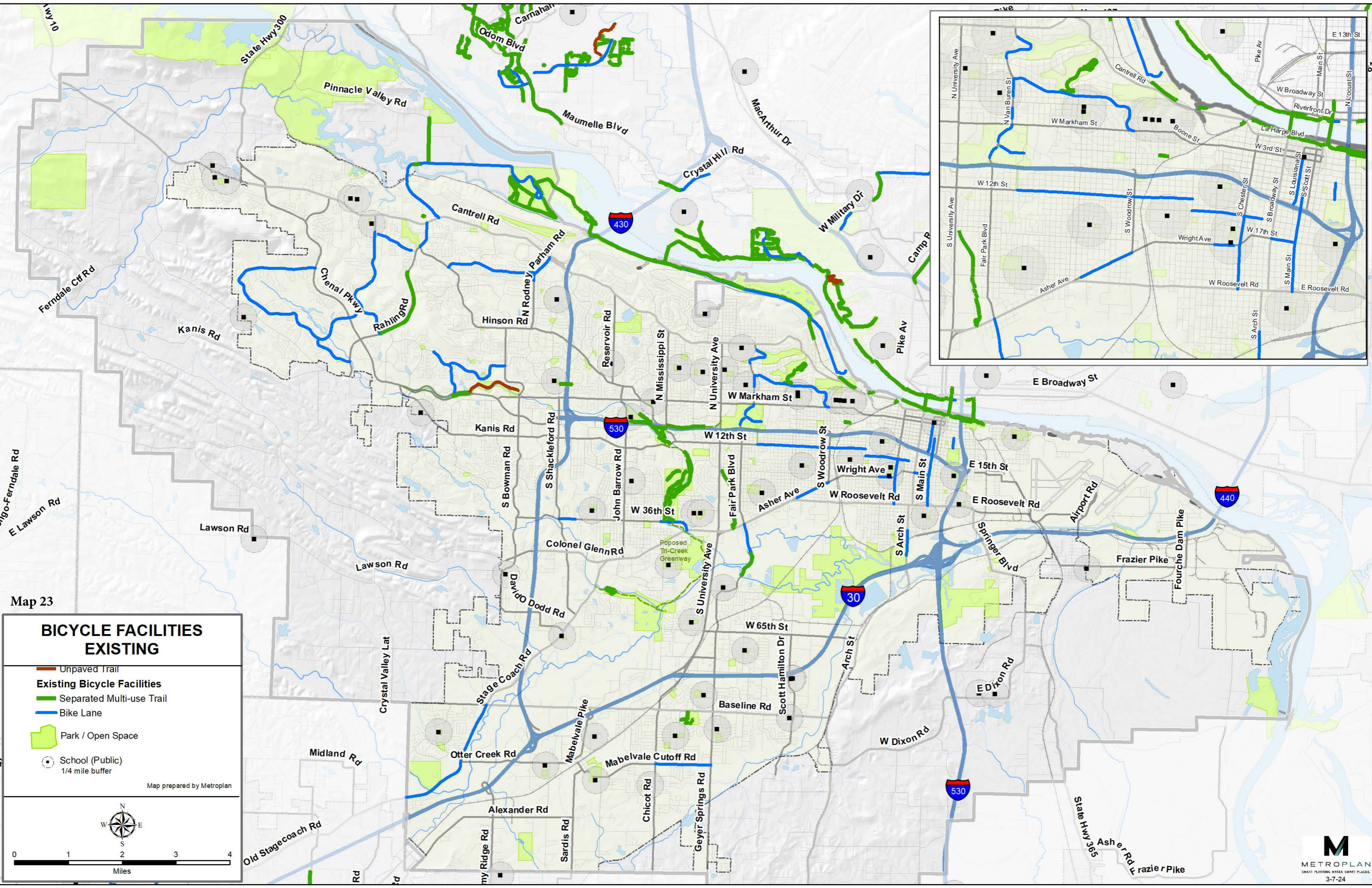


Sidewalk Gaps by Functional Class

- Sidewalk Gaps Functional Class**
- Major Collector
 - Minor Arterial
 - Other Principal Arterial
 - Buffer_Pub_School_1320
 - Sidewalks
 - Public Schools (1/4 mile buffer)



See Inset



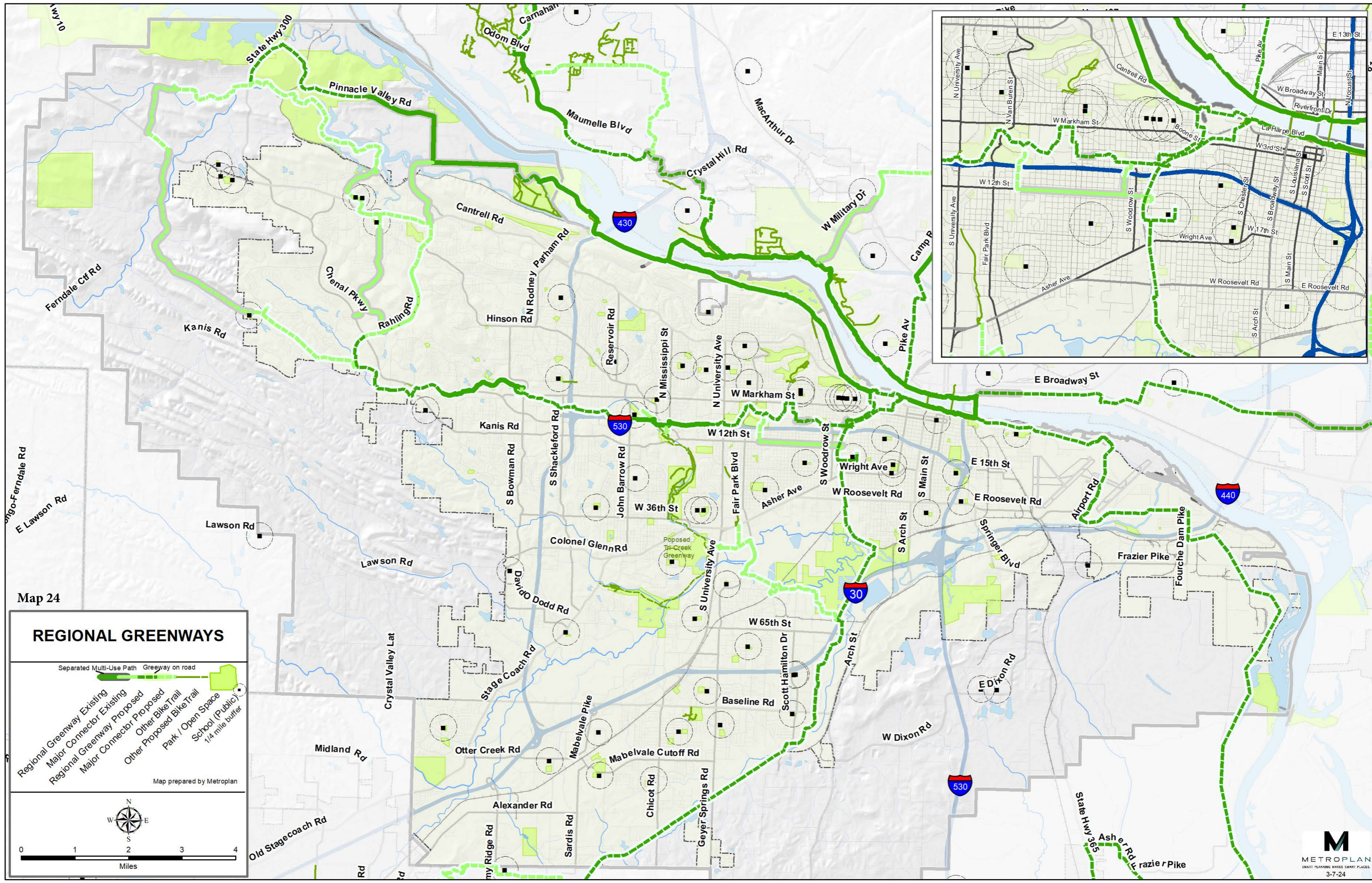
Map 23

BICYCLE FACILITIES EXISTING

- Unpaved Trail
- Existing Bicycle Facilities**
- Separated Multi-use Trail
- Bike Lane
- Park / Open Space
- School (Public)
1/4 mile buffer

Map prepared by Metroplan

0 1 2 3 4
Miles

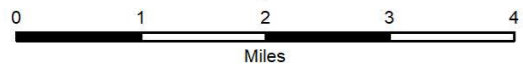


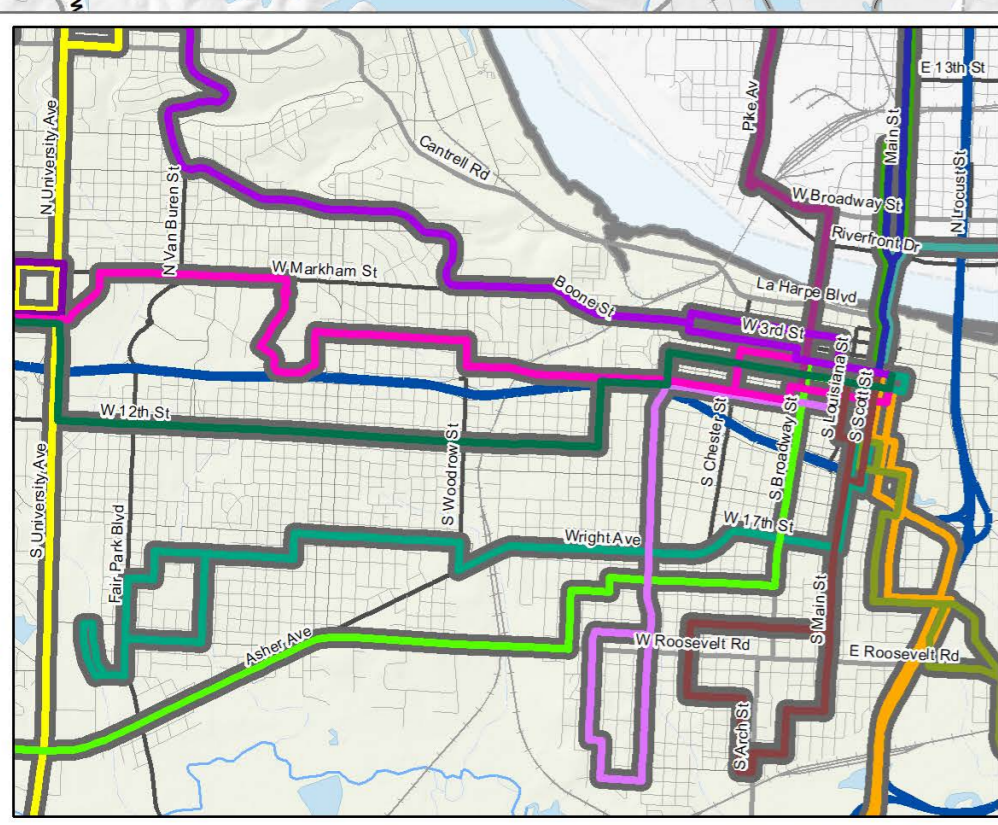
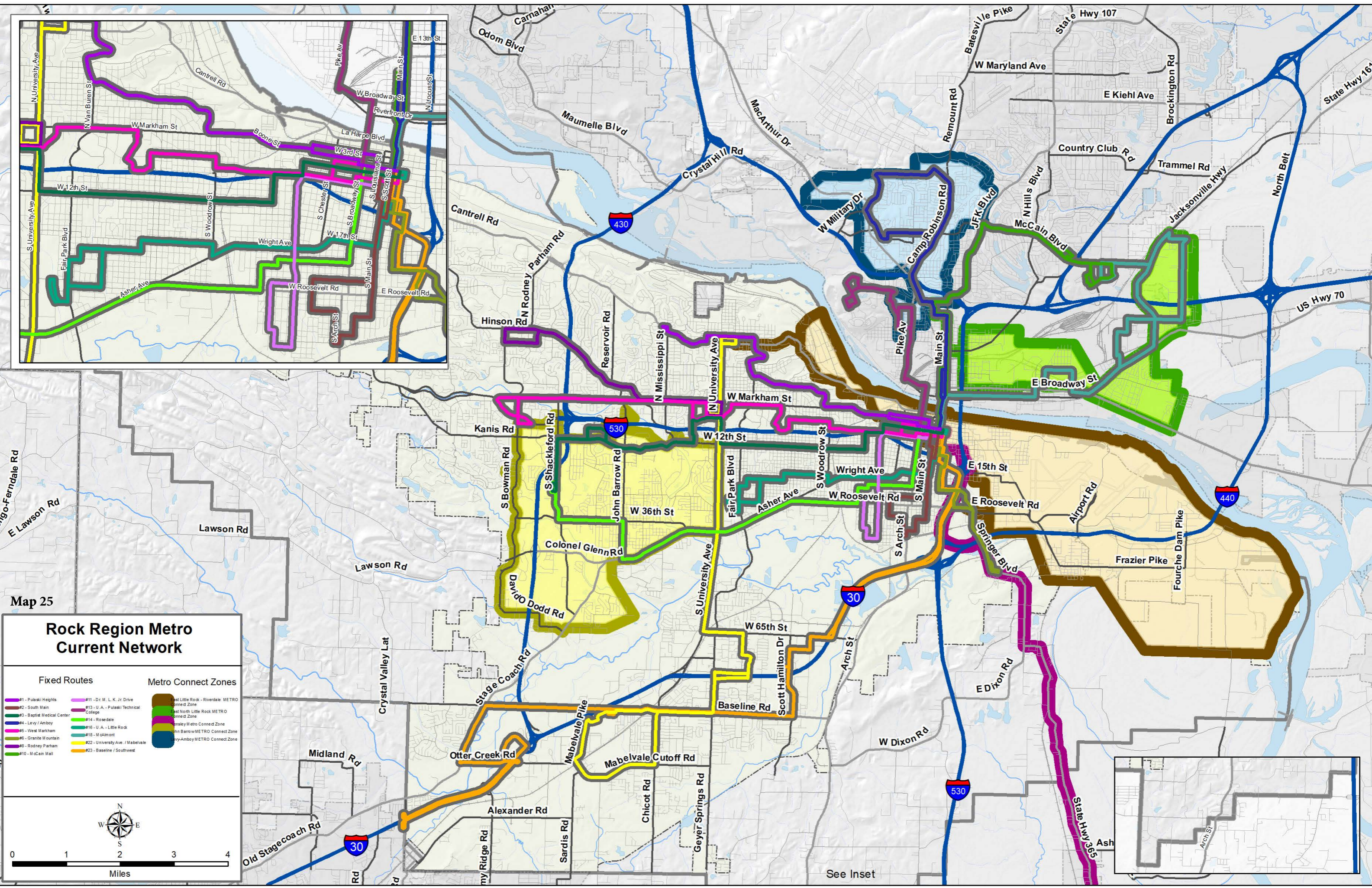
Map 24

REGIONAL GREENWAYS

- Separated Multi-Use Path
- Greenway on road
- Regional Greenway Existing
- Major Connector Existing
- Regional Greenway Proposed
- Major Connector Proposed
- Other Proposed Bike Trail
- Park / Open Space
- School (Public)
- 1/4 mile buffer

Map prepared by Metroplan





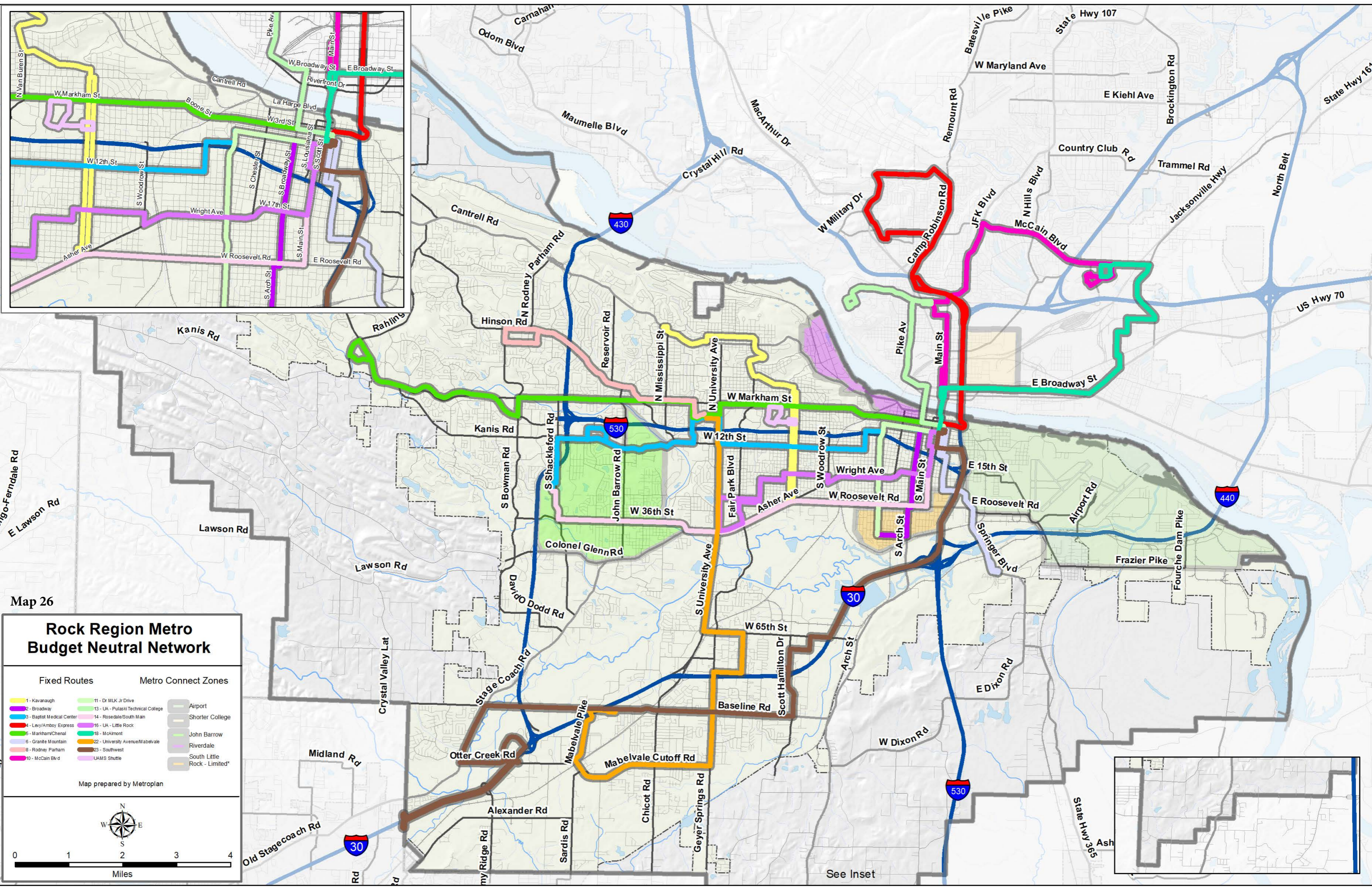
Map 25

Rock Region Metro Current Network

Fixed Routes		Metro Connect Zones	
	#1 - Pulaski Heights		East Little Rock - Riverdale METRO Connect Zone
	#2 - South Main		East North Little Rock METRO Connect Zone
	#3 - Baptist Medical Center		Levy Metro Connect Zone
	#4 - Levy / Amboy		John Barrow METRO Connect Zone
	#5 - West Markham		Levy-Amboy METRO Connect Zone
	#6 - Granite Mountain		
	#8 - Rodney Parham		
	#10 - McCain Mall		
	#11 - Dr. M. L. K. Jr. Drive		
	#13 - U.A. - Pulaski Technical College		
	#14 - Rosedale		
	#16 - U.A. - Little Rock		
	#18 - M. Calmont		
	#22 - University Ave. / Mabelvale		
	#23 - Baseline / Southwest		

0 1 2 3 4 Miles

See Inset



Map 26

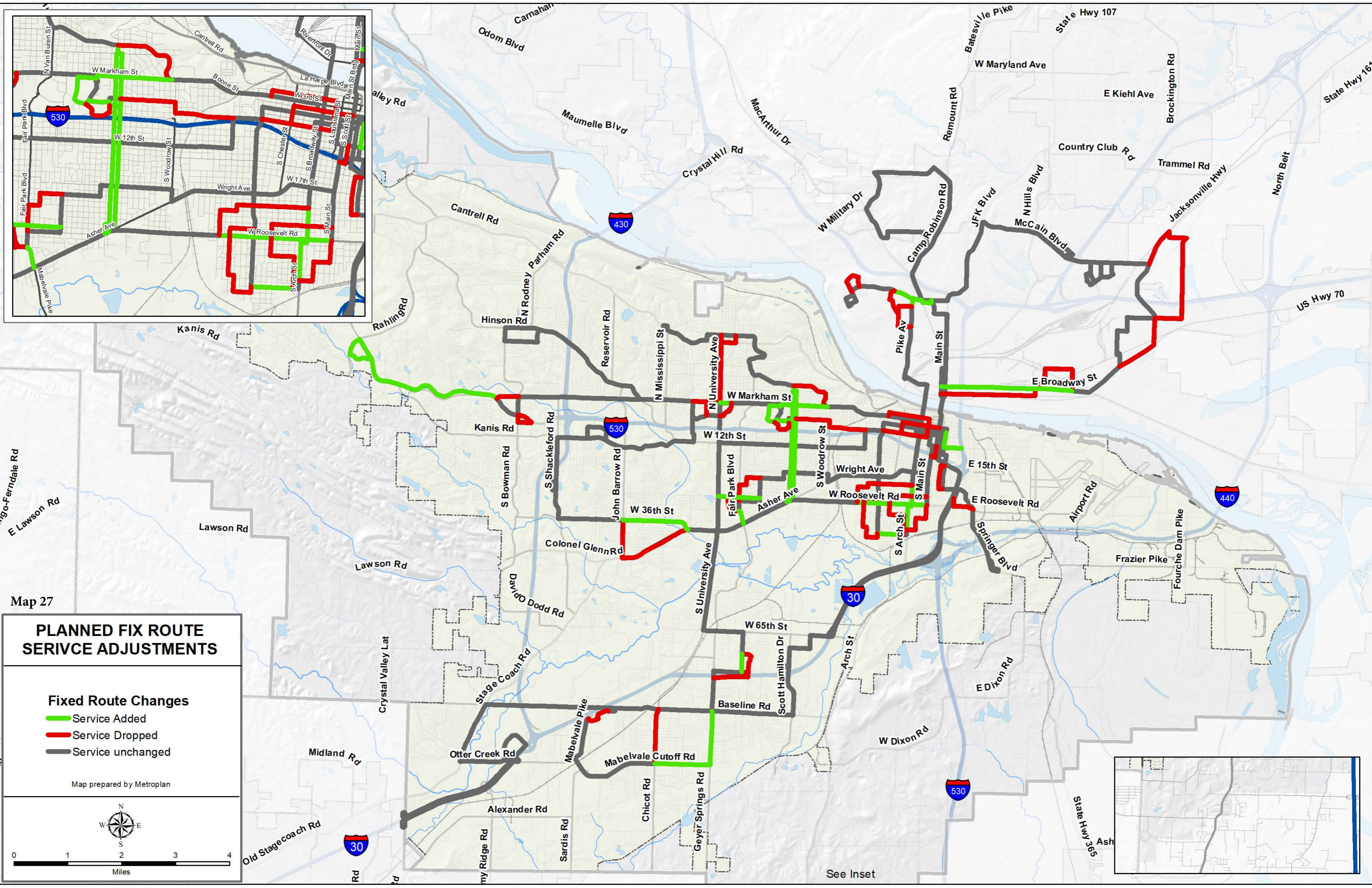
Rock Region Metro Budget Neutral Network

Fixed Routes		Metro Connect Zones	
1 - Kavanaugh	11 - Dr MLK Jr Drive	Airport	Shorter College
2 - Broadway	13 - UA - Pulaski Technical College	John Barrow	Riverdale
3 - Baptist Medical Center	14 - Rosedale/South Main	South Little Rock - Limited*	UAMS Shuttle
4 - Levy/Amboy Express	16 - UA - Little Rock		
5 - Markham/Chenal	18 - McAlmont		
6 - Granite Mountain	22 - University Avenue/Mabelvale		
8 - Rodney Parham	23 - Southwest		
10 - McCain Blvd	UAMS Shuttle		

Map prepared by Metroplan

0 1 2 3 4 Miles

See Inset



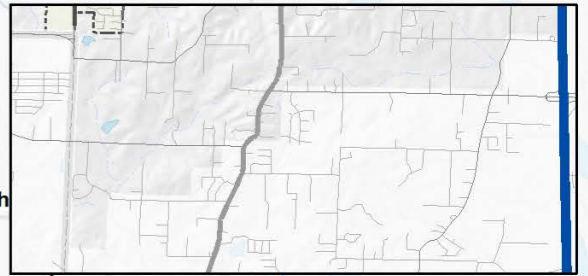
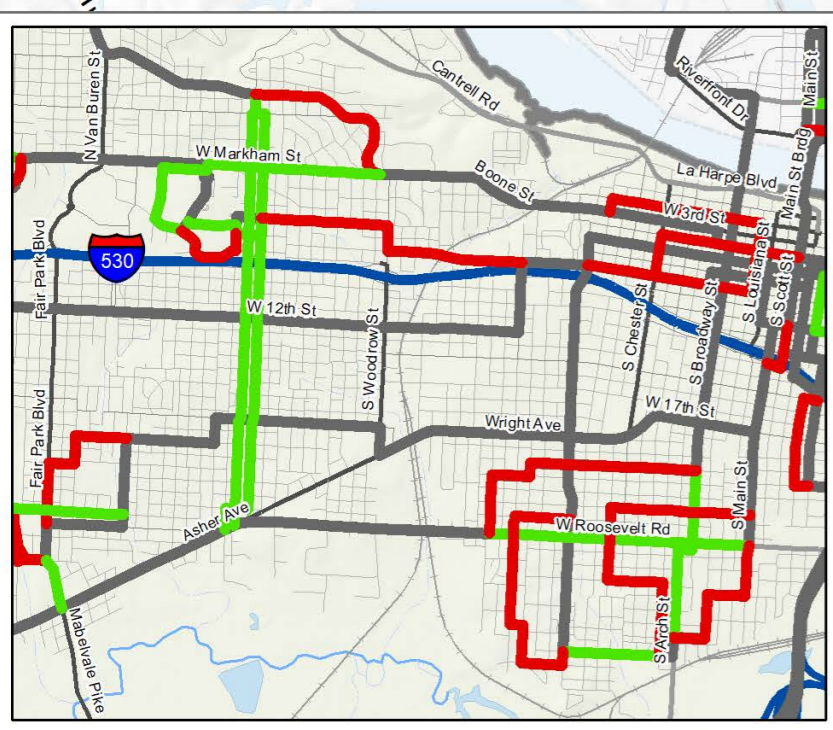
Map 27

PLANNED FIX ROUTE SERVICE ADJUSTMENTS

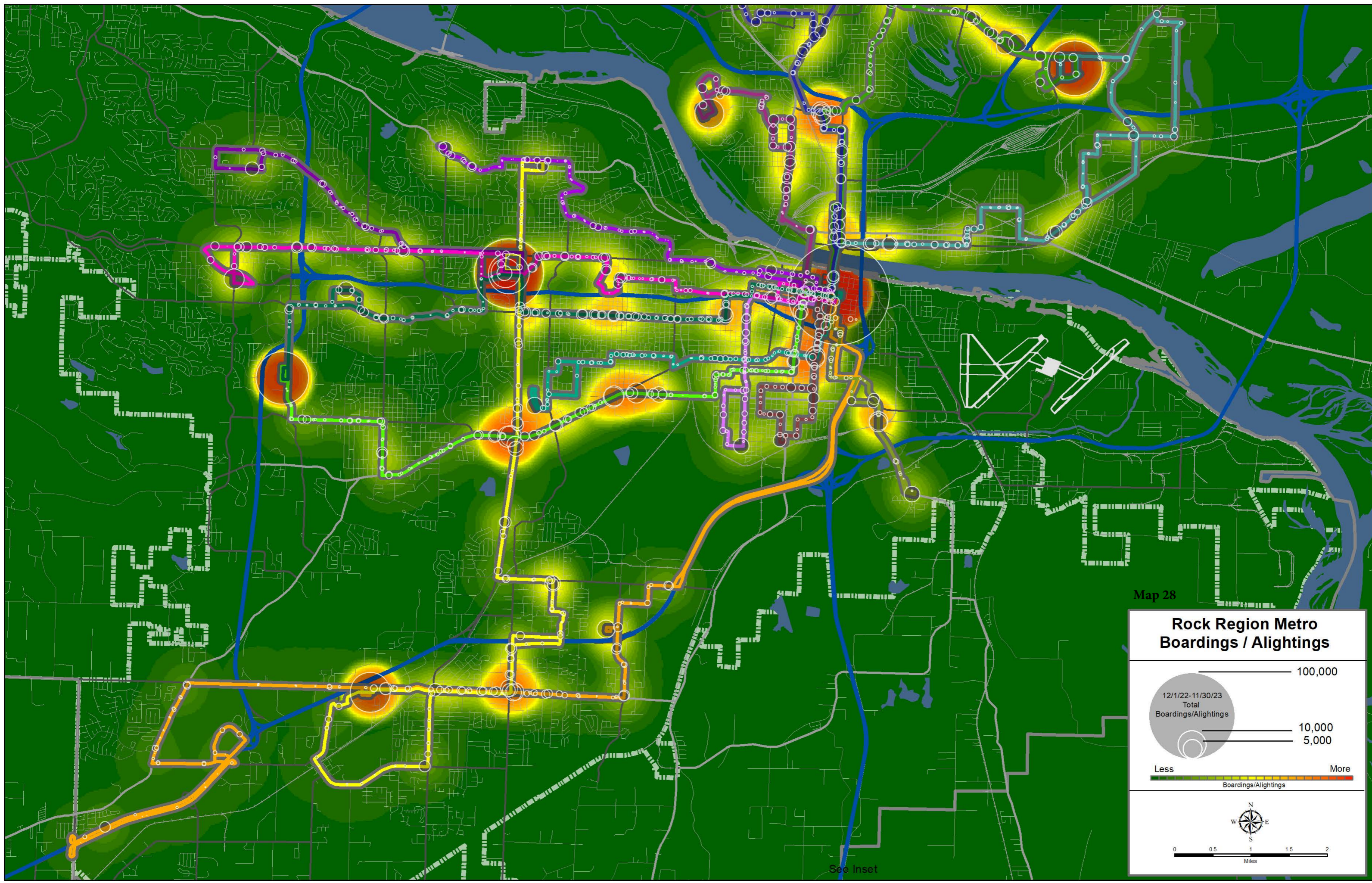
Fixed Route Changes

- Service Added
- Service Dropped
- Service unchanged

Map prepared by Metroplan

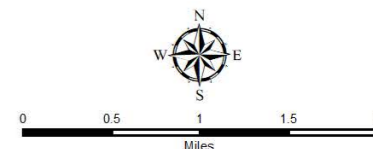
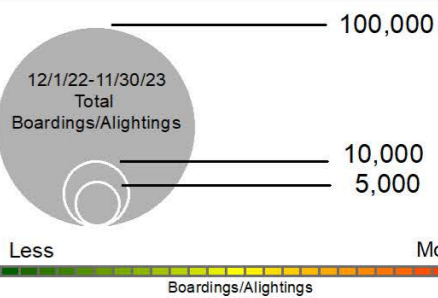


See Inset

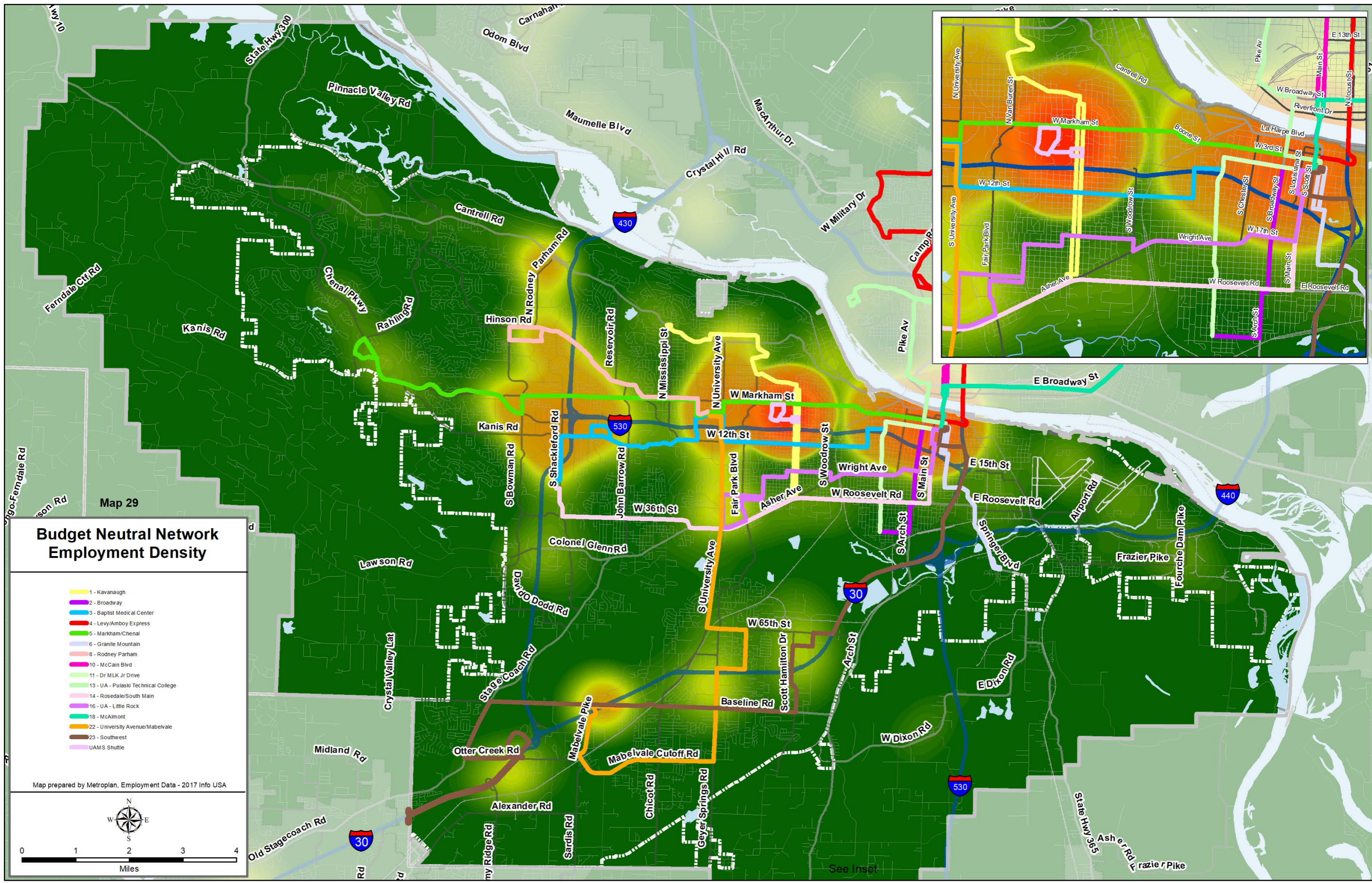


Map 28

Rock Region Metro Boardings / Alightings



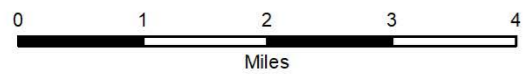
See Inset



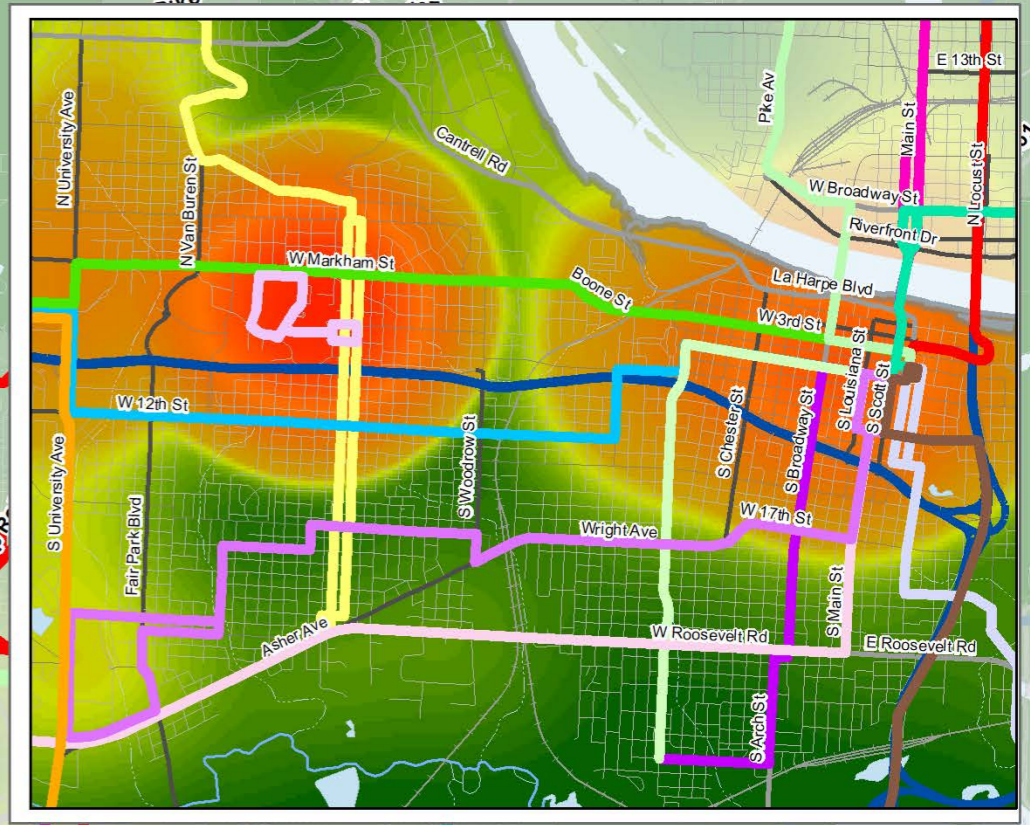
Budget Neutral Network Employment Density

- 1 - Kavanaugh
- 2 - Broadway
- 3 - Baptist Medical Center
- 4 - Levy/Amboy Express
- 5 - Markham/Chenal
- 6 - Granite Mountain
- 8 - Rodney Parham
- 10 - McCain Blvd
- 11 - Dr MLK Jr Drive
- 13 - UA - Pulaski Technical College
- 14 - Rosedale/South Main
- 16 - UA - Little Rock
- 18 - McAlmont
- 22 - University Avenue/Mabelvale
- 23 - Southwest
- UAMS Shuttle

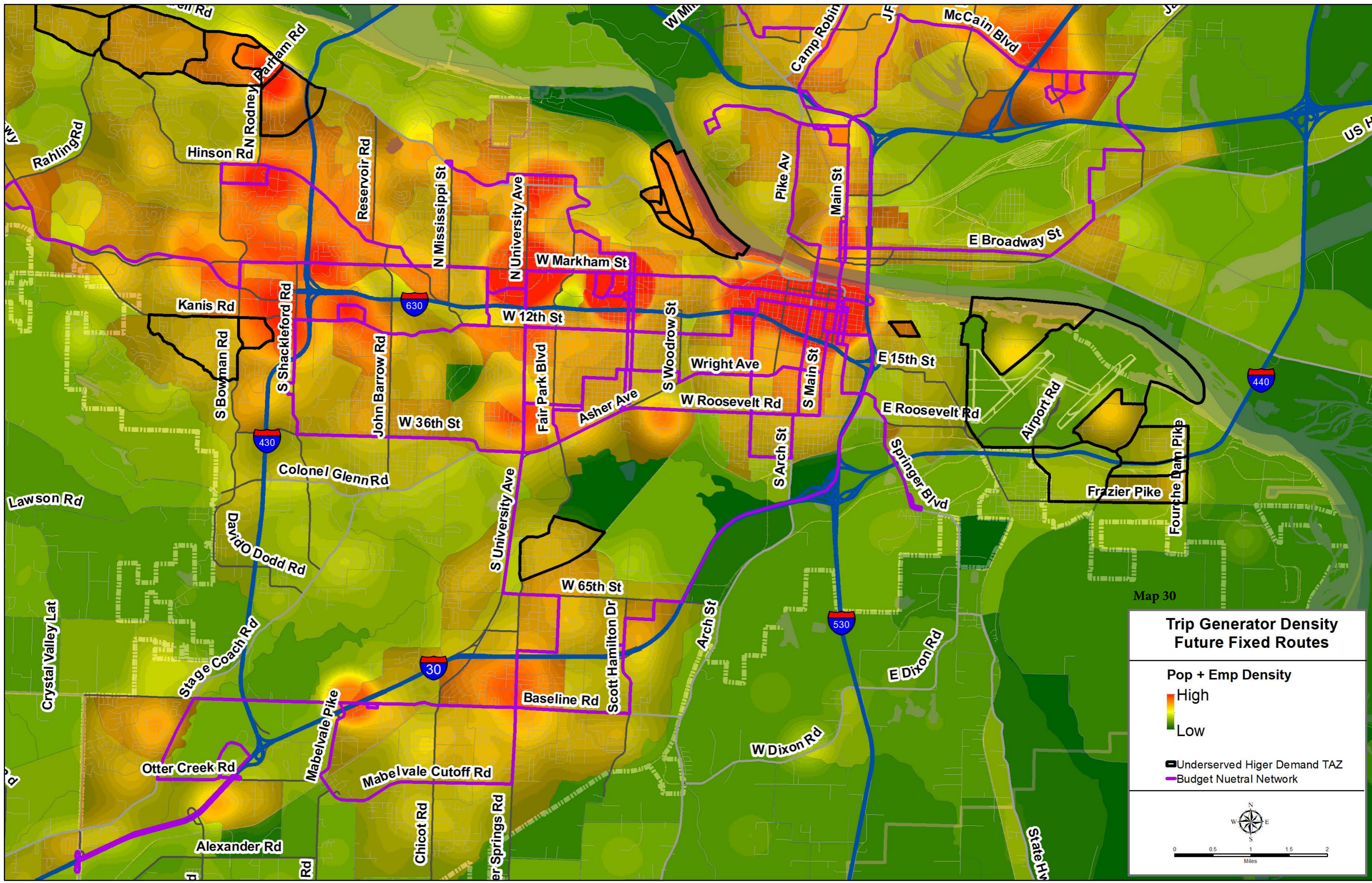
Map prepared by Metroplan, Employment Data - 2017 Info USA



Map 29



See Inset




Map 30

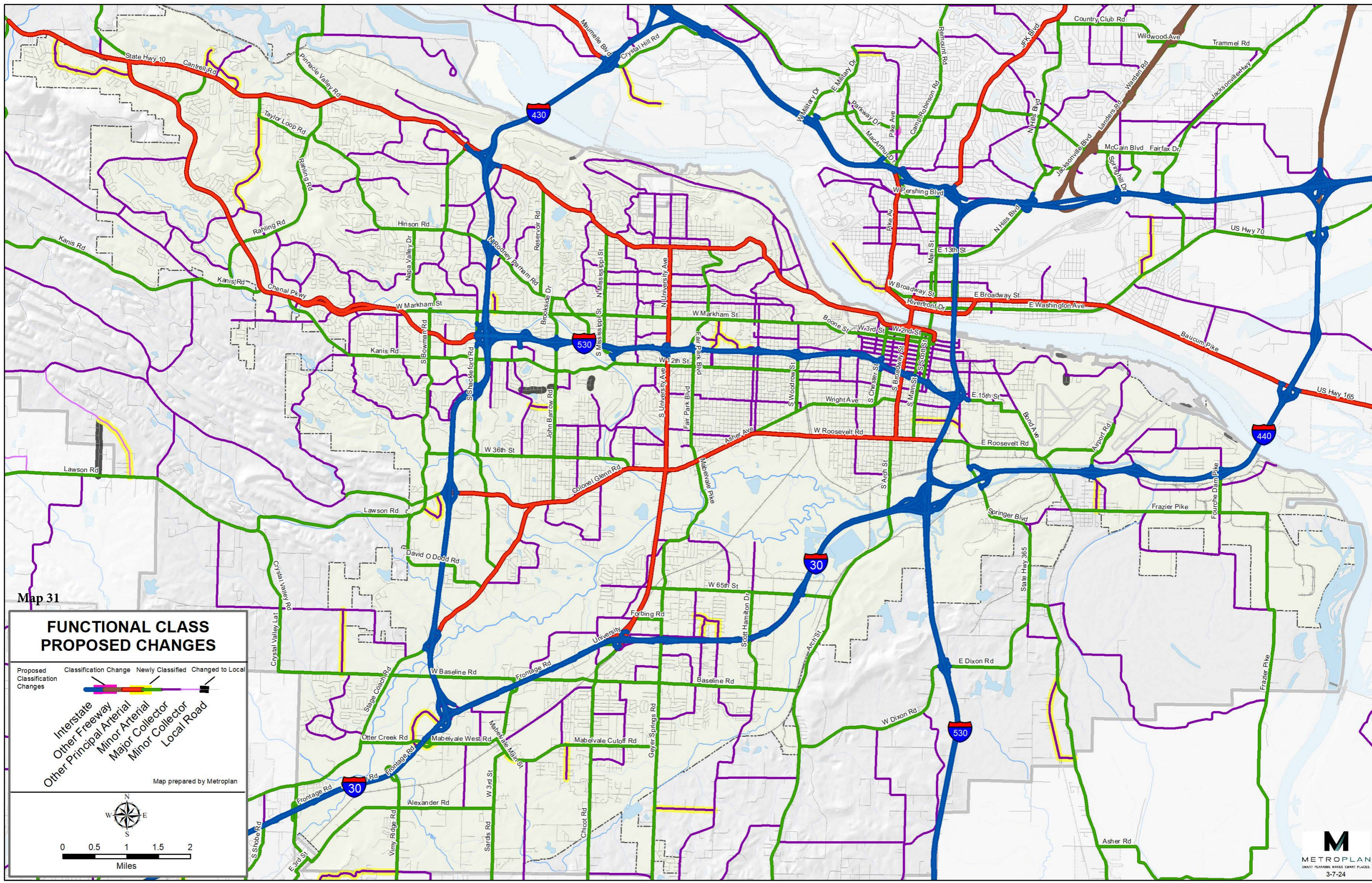
**Trip Generator Density
Future Fixed Routes**

Pop + Emp Density
 High
 Low

Underserved Higer Demand TAZ
 Budget Nuetral Network



0 0.5 1 1.5 2
Miles



Map 31

FUNCTIONAL CLASS PROPOSED CHANGES

Proposed Classification Changes	Classification Change	Newly Classified	Changed to Local
Interstate	Other Freeway	Other Principal Arterial	Minor Arterial
Major Collector	Minor Collector	Local Road	

Map prepared by Metroplan

Endnotes

1. FHWA (November 2020) *The national Performance Management Research Data Set (NPMRDS) and Application for Work Zone Performance Management*.
<https://ops.fhwa.dot.gov/publications/fhwahop20028/index.htm>
2. Bureau of Transportation Statistics. <https://www.bts.gov/content/travel-time-index#:~:text=The%20Travel%20Time%20Index%20is,minutes%20during%20the%20peak%20period.>
3. FHWA. *Does Travel Time Reliability Matter?* (December 2019)
<https://ops.fhwa.dot.gov/publications/fhwahop19062/whatis.htm>
4. ARDOT. *Traffic Handbook*. (November 2013)
https://www.ardot.gov/wp-content/uploads/2020/10/traffic_handbook_2014.pdf
5. US Census Bureau. *American Community Survey 2018-22*.
6. Bray, Jared. *Microtransit Has Broad Appeal, Despite Clear Drawbacks*. Governing.com (November 2023)
<https://www.governing.com/transportation/microtransit-has-broad-appeal-despite-clear-drawbacks>
7. Dartnell, C, Grosso R, Mildner, C. *The Benefits of Shared Use Paths by the Numbers*.
<https://www.kittelsohn.com/ideas/the-benefits-of-shared-use-paths-by-the-numbers/>
8. FHWA. *Safety Benefits of Walkways, Sidewalks, and Paved Shoulders*.
https://safety.fhwa.dot.gov/ped_bike/tools_solve/walkways_brochure/walkways_brochure.pdf

Additional Data Sources

9. Arkansas State Police
10. National Performance Management Research Dataset
11. CARTS Travel Demand Model
12. Info USA
13. ARDOT
14. PAGIS
15. Arkansas Geographic Information Office
16. US Census Bureau (2020 Decennial Census, American Community Survey)
17. Census Transportation Planning Package (2012- 2016)
18. Rock Region Metro