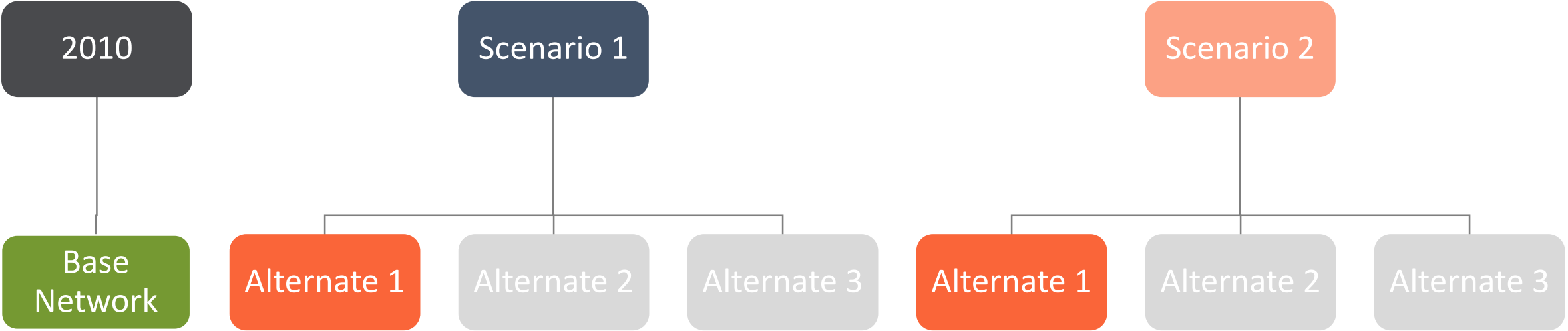
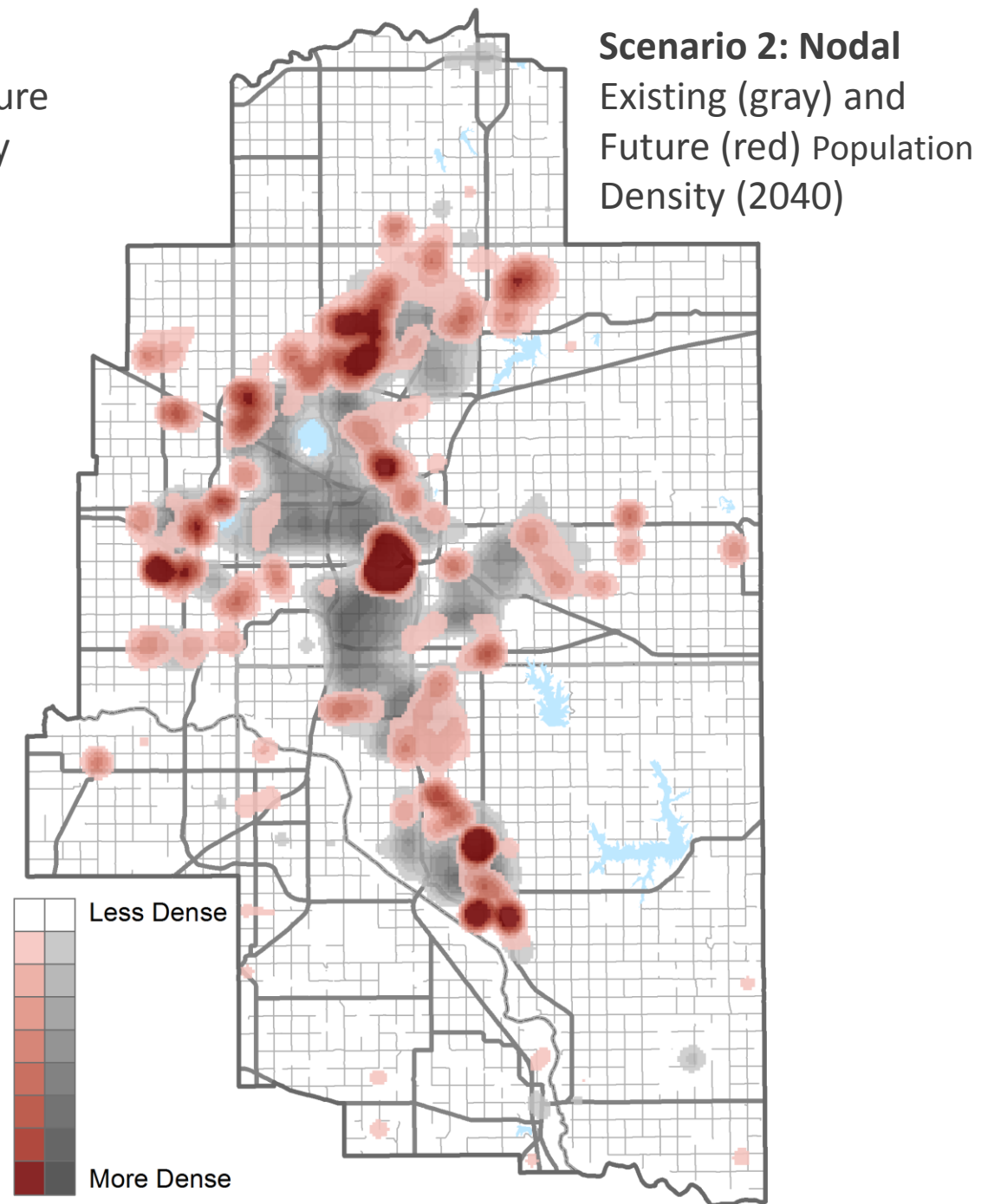
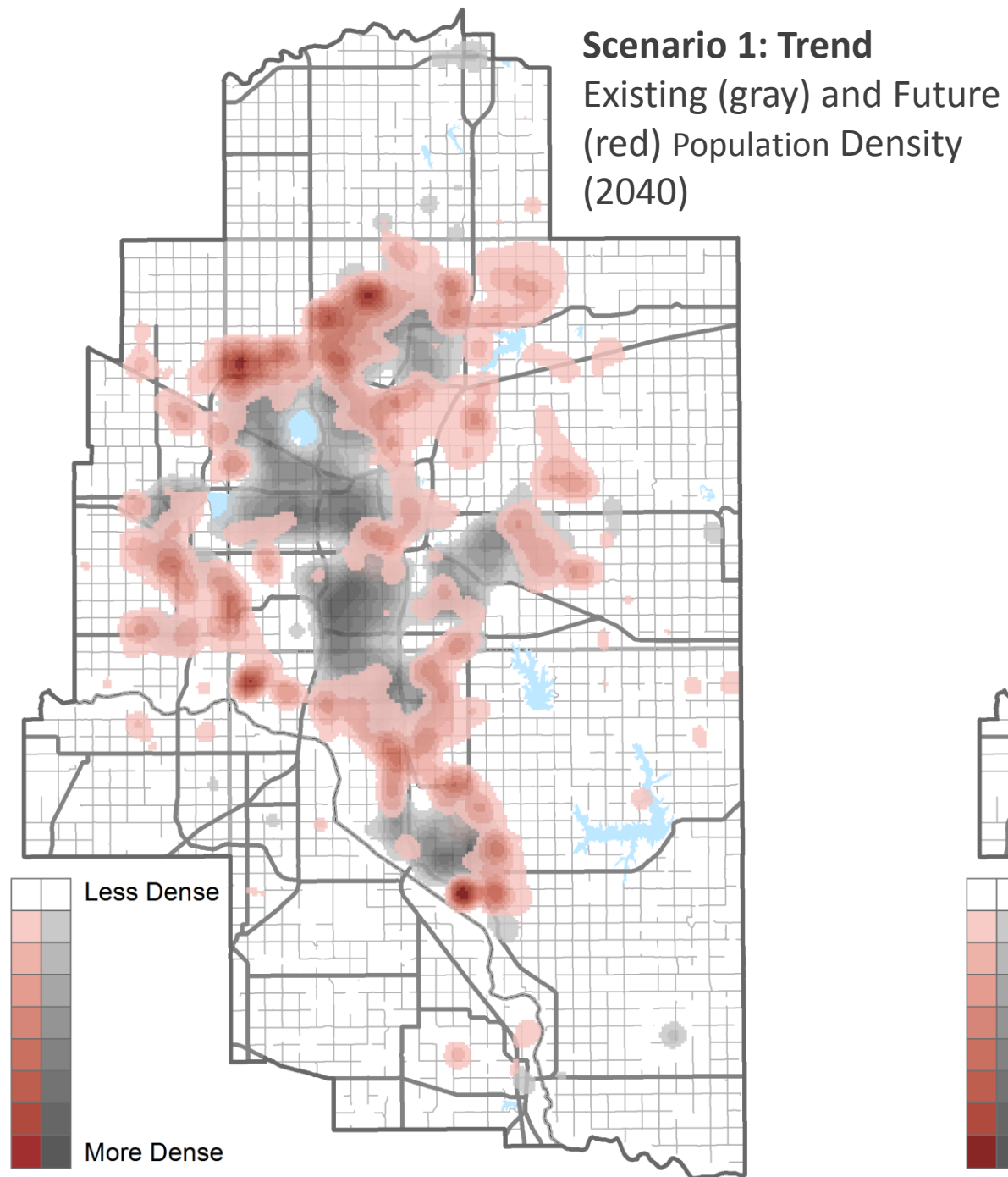


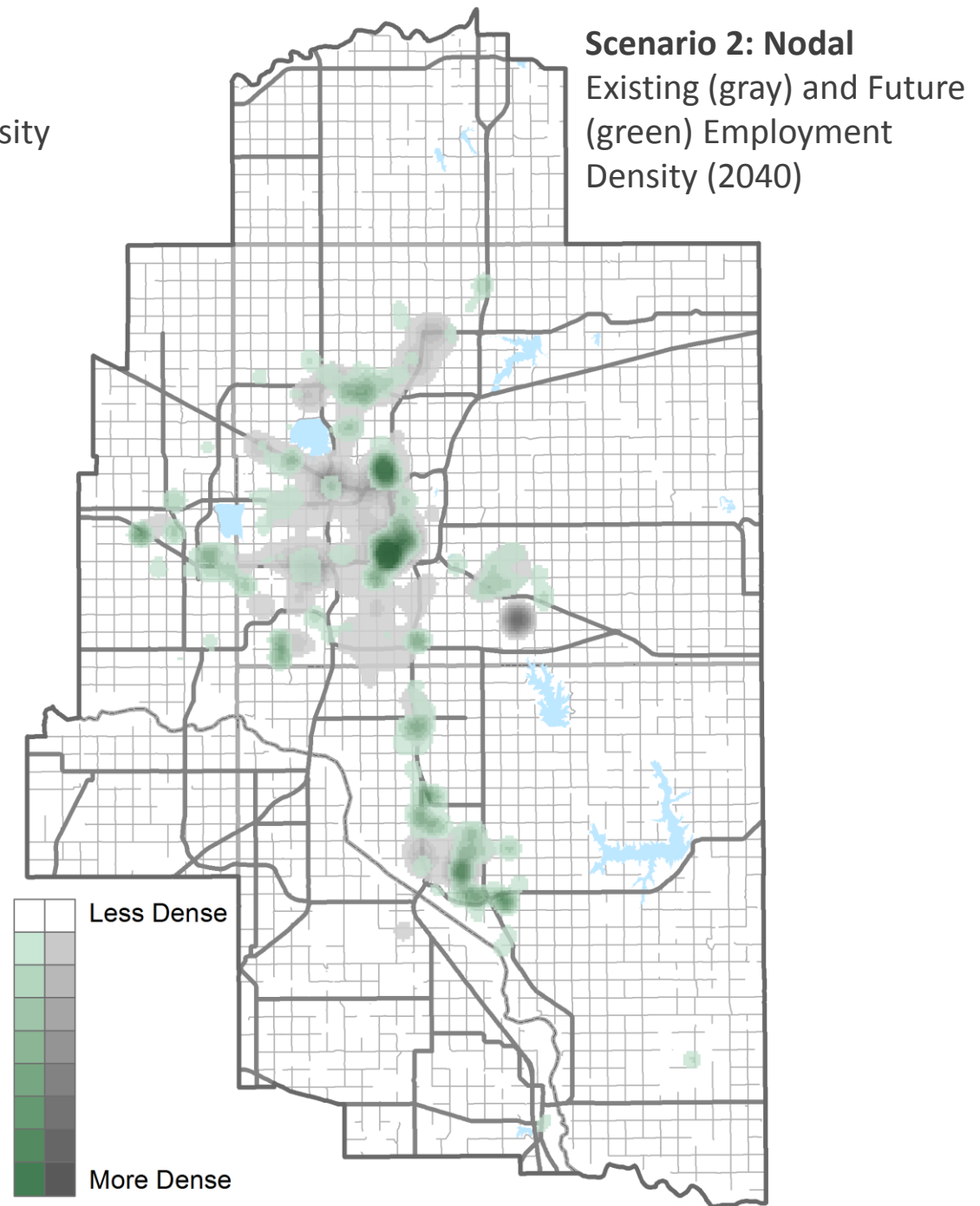
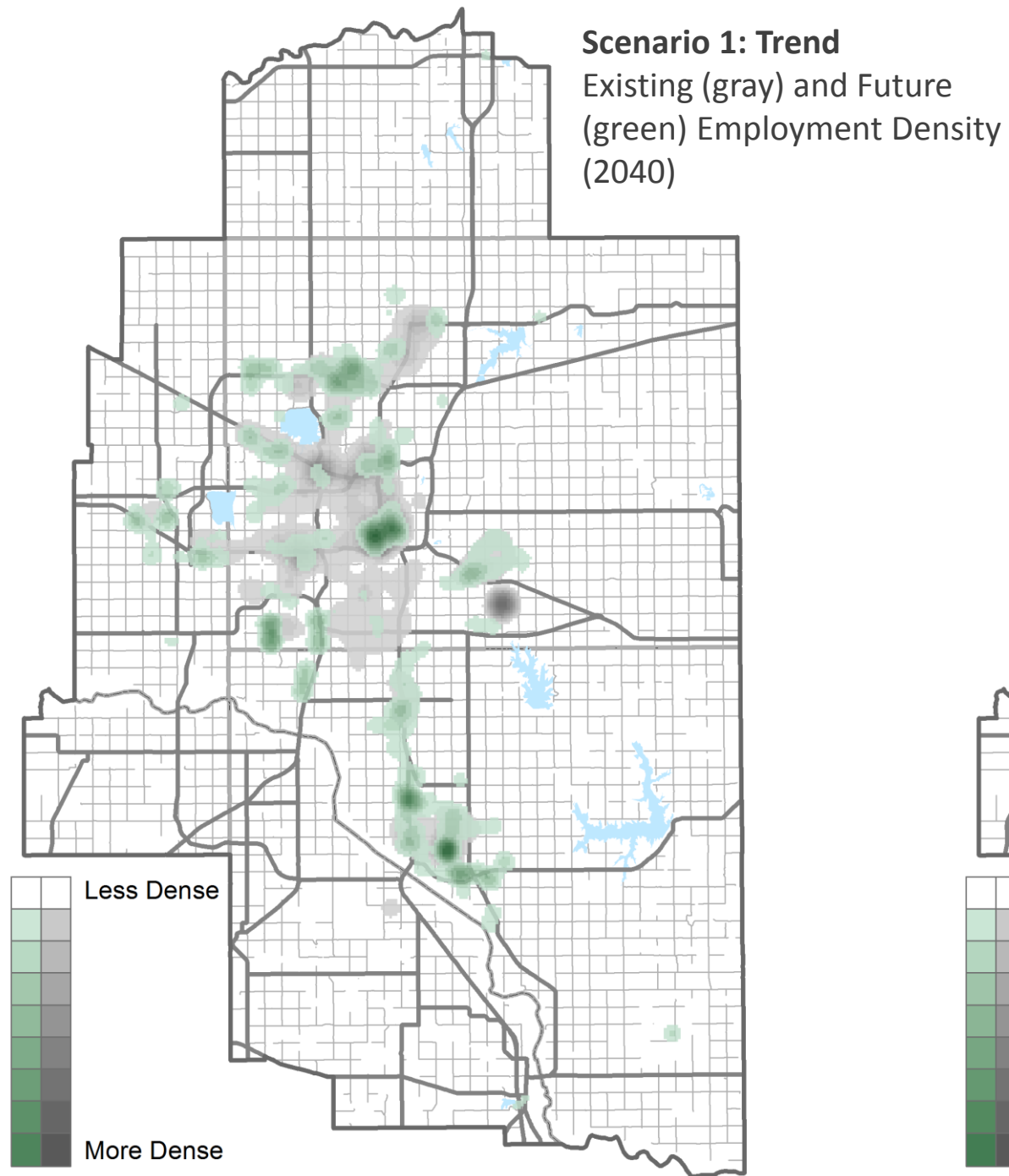


Transportation Alternate Networks

April 14, 2016



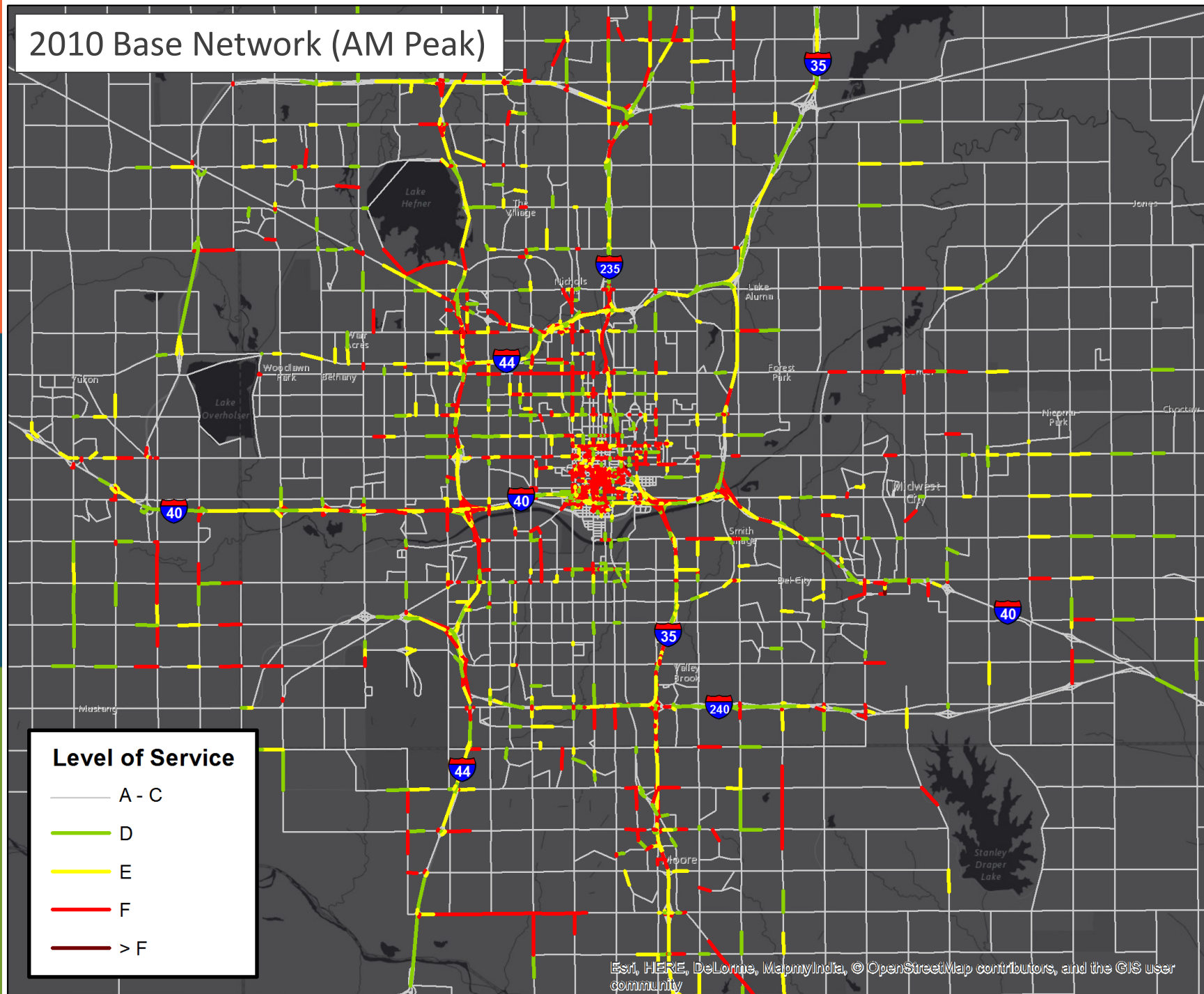




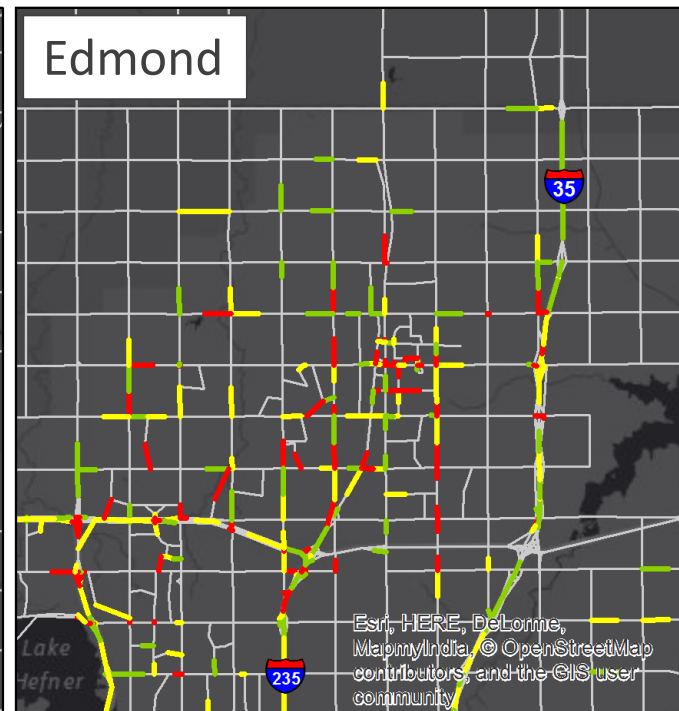
Model Output: Level of Service

Level of Service	Traffic Characteristics	Interpretation	Delay (seconds/vehicle)	Map Color Key
A	Free flow	No congestion	0 – 10	
B	Reasonably free flow	Light congestion	11 – 20	
C	Stable flow	Mild congestion	21 – 35	
D	Approaching unstable flow	Moderate congestion	36 – 55	
E	Unstable flow	Severe congestion	56 – 80	
F	Forced or breakdown flow	Extreme congestion	>80	
>F	Demand significantly exceeds roadway capacity			

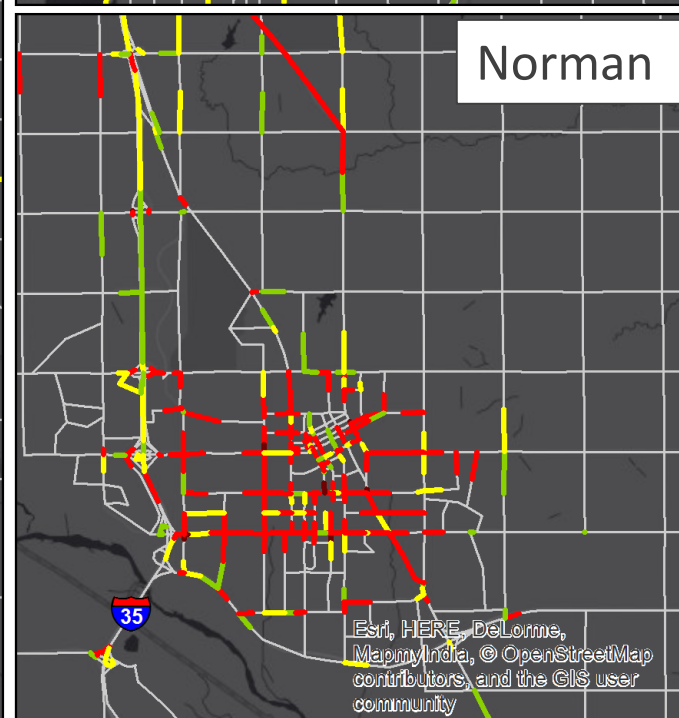
2010 Base Network (AM Peak)



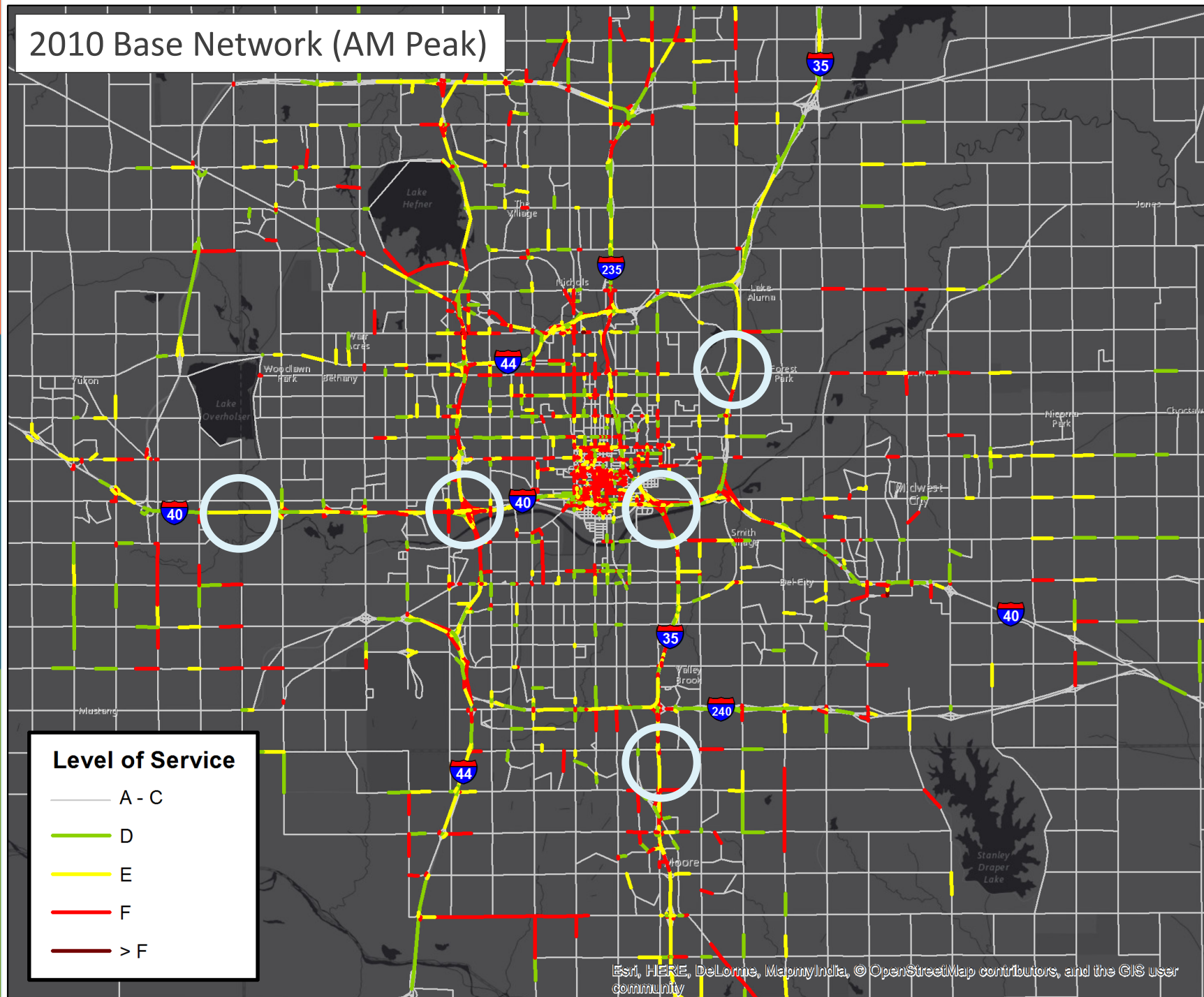
Edmond



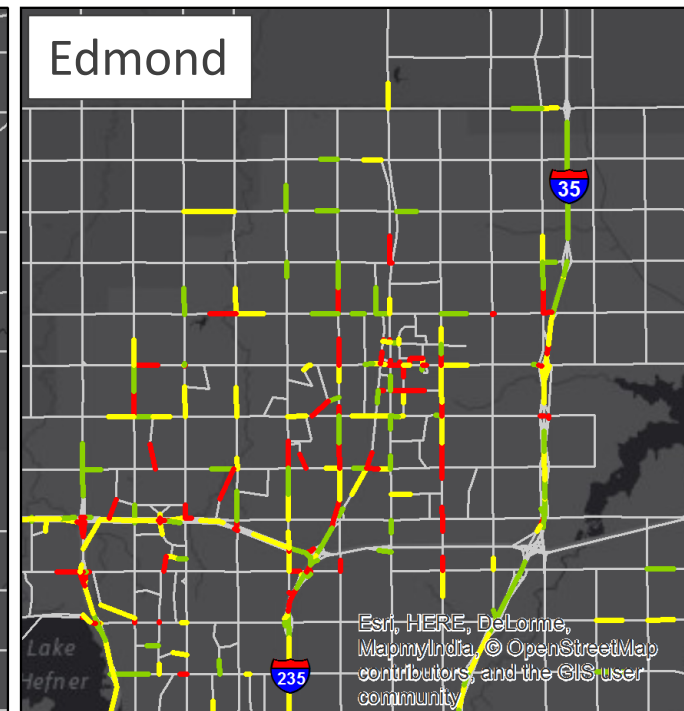
Norman



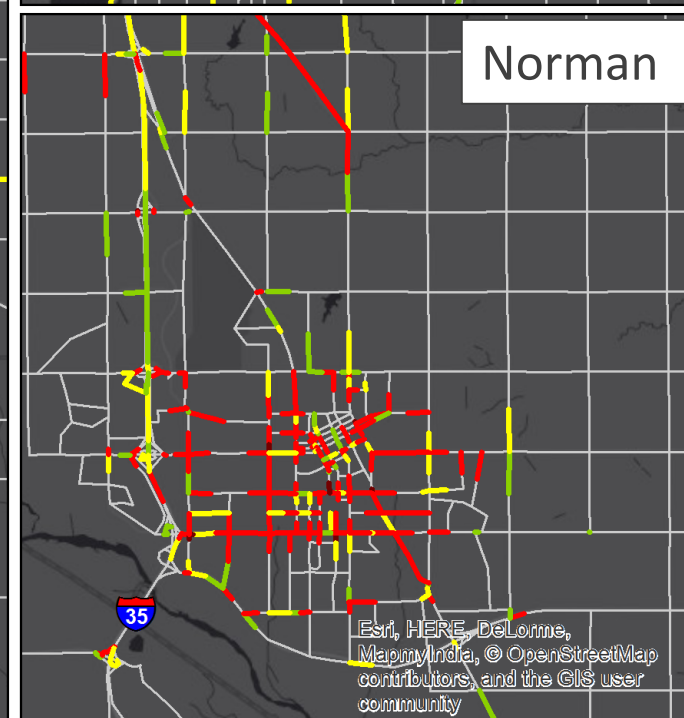
2010 Base Network (AM Peak)



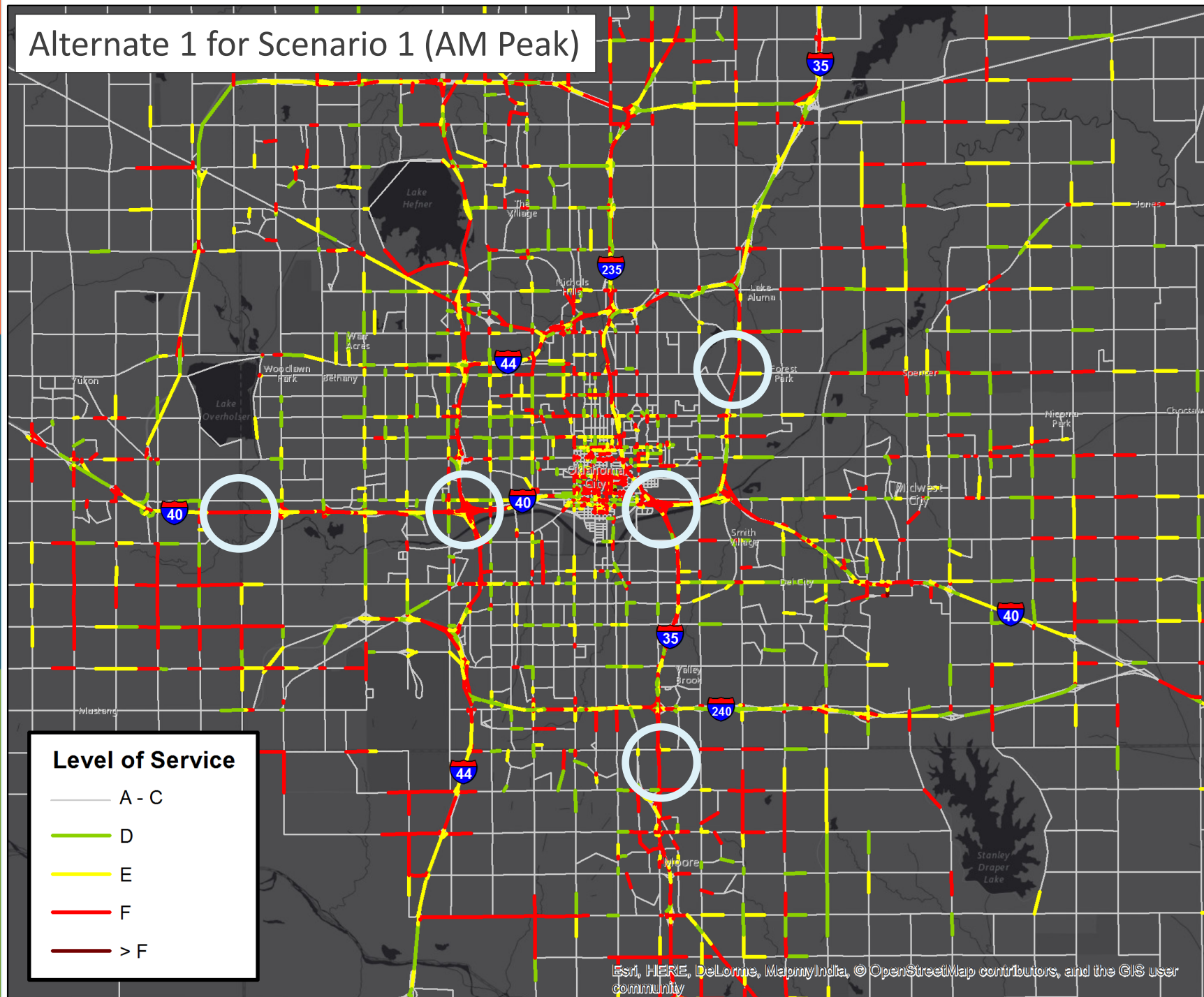
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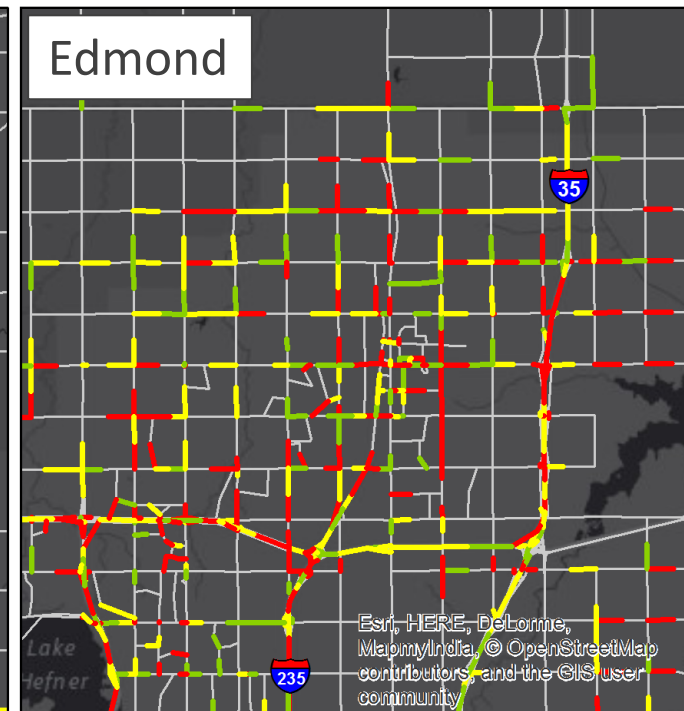
Norman



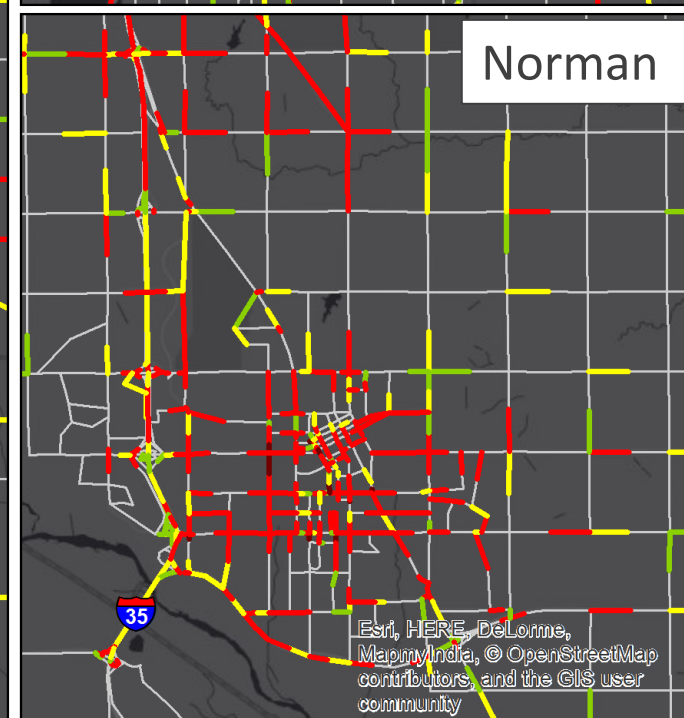
Alternate 1 for Scenario 1 (AM Peak)



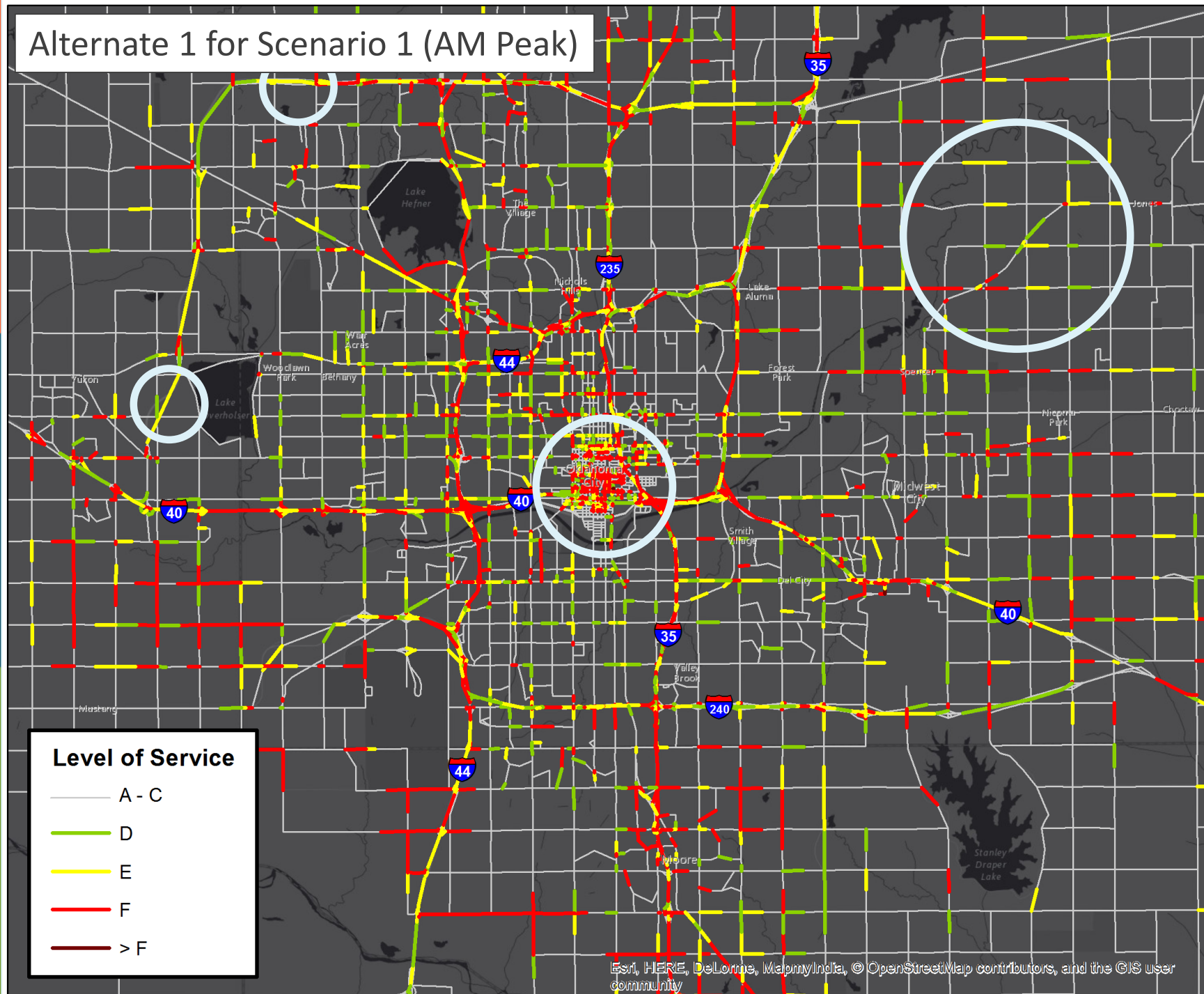
Edmond



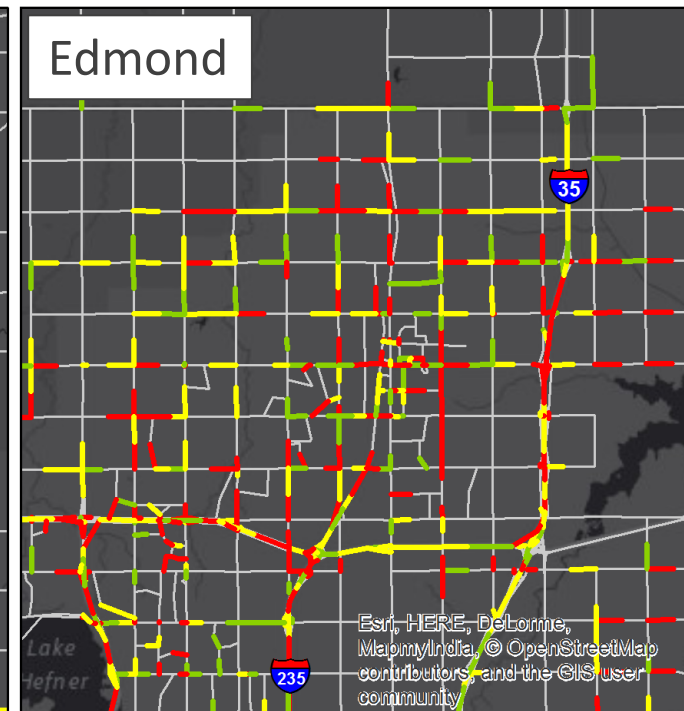
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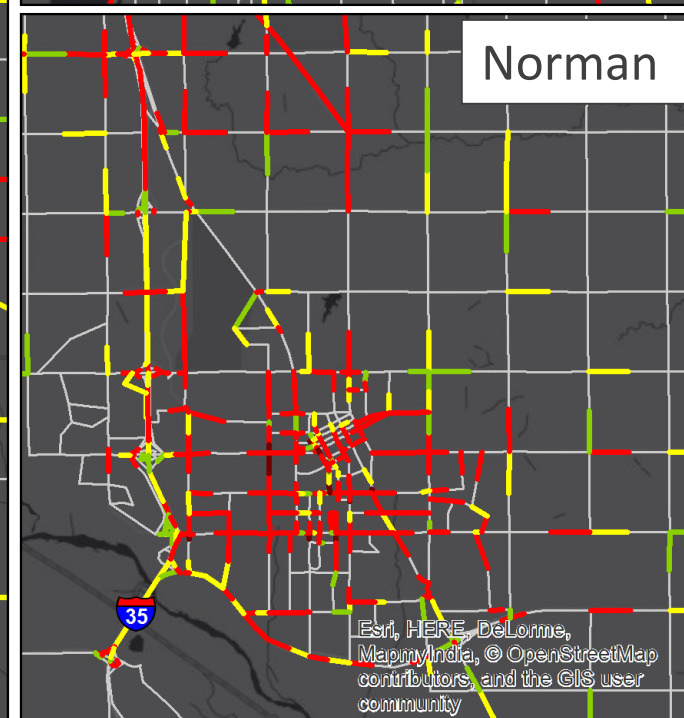
Alternate 1 for Scenario 1 (AM Peak)



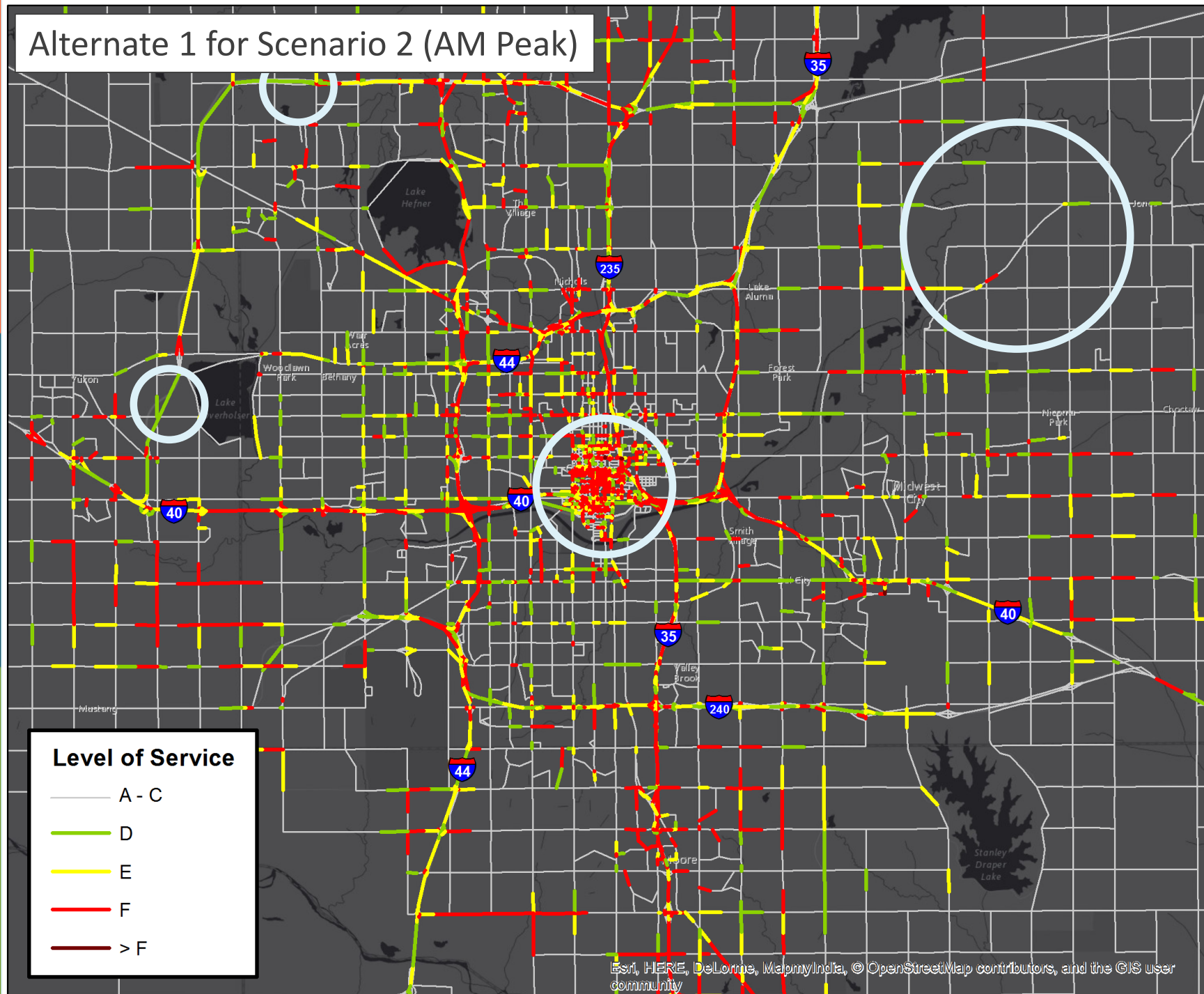
Edmond



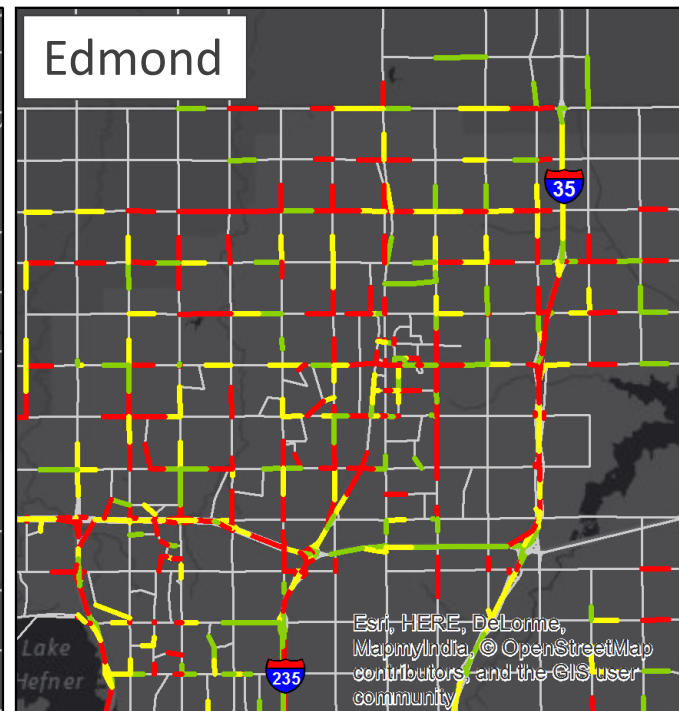
Norman



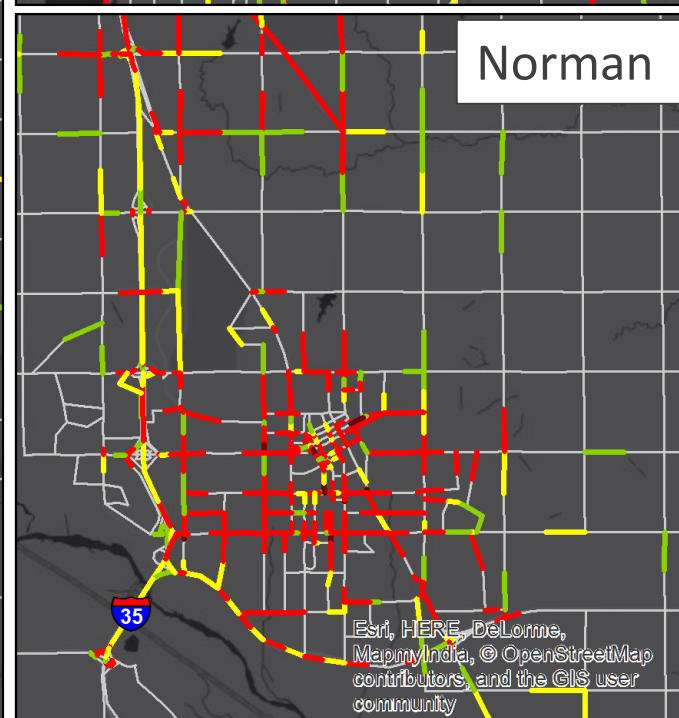
Alternate 1 for Scenario 2 (AM Peak)



Edmond



Norman



TDM Network Evaluation	2010 Base Network	Alternate 1	
		Scenario 1	Scenario 2
Demographic Data			
Population	1,142,338	1,595,168	1,595,168
Employment	601,839	875,402	875,402
Daily Transportation Demand			
Vehicle Miles of Travel	30,266,000	45,299,000	44,321,000
Vehicle Hours of Travel	853,000	1,503,000	1,474,000
Vehicle Trips	4,165,000	5,973,000	5,996,000
Transit Ridership	15,700	22,800	26,200
System Performance			
Congested Road Miles	289	647	626
Average Overall Speed (mph)	35	30	30
Average Freeway Speed (mph)	45	40	40
Average Arterial Speed (mph)	35	25	25
Average Trip Length (miles)	7.27	7.58	7.39
Average Trip Length (minutes)	12.29	15.1	14.75
Daily Hours of Delay	138,000	454,000	425,000
Delay per Trip (minutes)	1.99	4.56	4.25

TDM Network Evaluation: Percent Change	2010 Base Network	Alternate 1	
		Scenario 1	Scenario 2
Demographic Data			
Population	1,142,338	40%	40%
Employment	601,839	45%	45%
Daily Transportation Demand			
Vehicle Miles of Travel	30,266,000	50%	46%
Vehicle Hours of Travel	853,000	76%	73%
Vehicle Trips	4,165,000	43%	44%
Transit Ridership	15,700	45%	67%
System Performance			
Congested Road Miles	289	124%	117%
Average Overall Speed (mph)	35	-14%	-14%
Average Freeway Speed (mph)	45	-11%	-11%
Average Arterial Speed (mph)	35	-29%	-29%
Average Trip Length (miles)	7.27	4%	2%
Average Trip Length (minutes)	12.29	23%	20%
Daily Hours of Delay	138,000	229%	208%
Delay per Trip (minutes)	1.99	129%	114%

Alternate 1 Comparison	Scenario 1	Scenario 2	Percent Change
Demographic Data			
Population	1,595,168	1,595,168	0%
Employment	875,402	875,402	0%
Daily Transportation Demand			
Vehicle Miles of Travel	45,299,000	44,321,000	-2%
Vehicle Hours of Travel	1,503,000	1,474,000	-2%
Vehicle Trips	5,973,000	5,996,000	0%
Transit Ridership	22,800	26,200	15%
System Performance			
Congested Road Miles	647	626	-3%
Average Overall Speed (mph)	30	30	0%
Average Freeway Speed (mph)	40	40	0%
Average Arterial Speed (mph)	25	25	0%
Average Trip Length (miles)	7.58	7.39	-3%
Average Trip Length (minutes)	15.1	14.75	-2%
Daily Hours of Delay	454,000	425,000	-6%
Delay per Trip (minutes)	4.56	4.25	-7%

Conclusions

- No Build option (Alternate 1):
 - Significant increase in congestion and delay
- More compact regional footprint:
 - More transit ridership
 - Shorter trips
 - Less delay
- Next Steps:
 - Alternates 2 and 3
 - Future roadway and transit projects

QUESTIONS?

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