MISSOURI STATEWIDE TRANSIT NEEDS ASSESSMENT STUDY

PROJECT OVERVIEW & BRIEFING

SEPTEMBER 28, 2022

Project Overview

- ~ Year Long (July 2021 – June 2022)
- Collaborative Effort
  - MoDOT
  - MPTA
  - Agencies
  - Consultant
- First of Its Kind Study
- Companion Piece to Economic Impact Study
- Focus on Big Picture Needs of Transit In Missouri

Project Scope

1. Meetings & Engagement

2. Demographic Profile & Mobility Needs Index

3. Existing Conditions Snapshot (Transit service focused)

4. Mobility Needs Assessment

5. State of Good Repair (SGR) Analysis

6. Policy & Program Recommendations

7. Documentation & Reporting
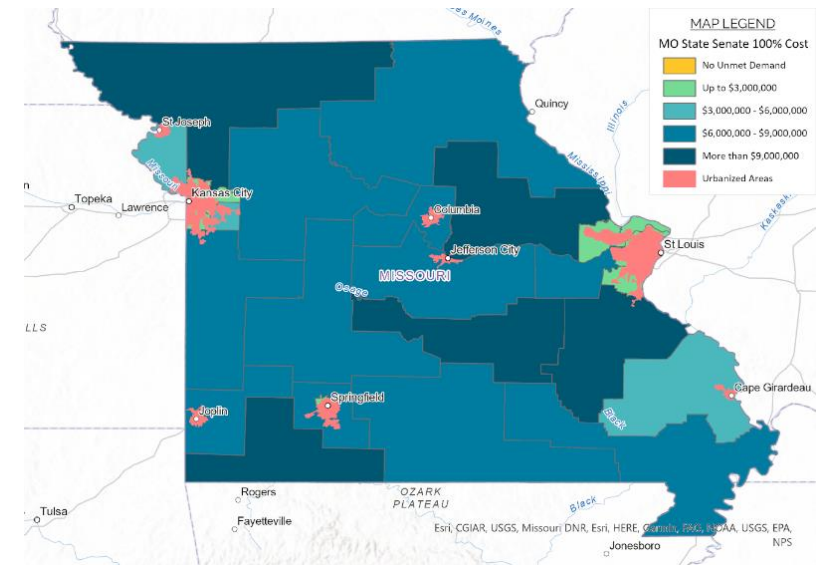
Project Guides

- Statewide in scope & data driven
- Assist local & regional agencies with planning
- Identify gaps (service area(s), service quantity, assets & funding)
- Develop a guide for future mobility enhancements
- Prioritize investments
- Elevate the discussion of transit
- Better deliver services to customers & communities

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Key Findings

- Each day 2,000 vehicles, administered, planned and operated by 4,500 workers transports 156,000 riders

- The direct and indirect impact of transit in Missouri is $3.6 billion equally a ~ 7 to 1 ROI

- Transit spending per capita, even with recent money is well below the peer average of $7.34

- There is an acute labor shortage for operators, mechanics and vehicle maintainers

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Key Findings (continued)

- Unmet transit trip needs are in virtually every corner of the state and estimated at 39 million rides which would need $341 million in additional operating dollars to meet (2022)

- Especially needed in nonurban and for non programmed trips

- Vehicle needs are acute and exacerbated by COVID due to chip shortages, supply chain issues and labor issues

- Currently there are more than $240 million in unmet vehicles needs when using the FTA useful life benchmark (ULB) (2022)
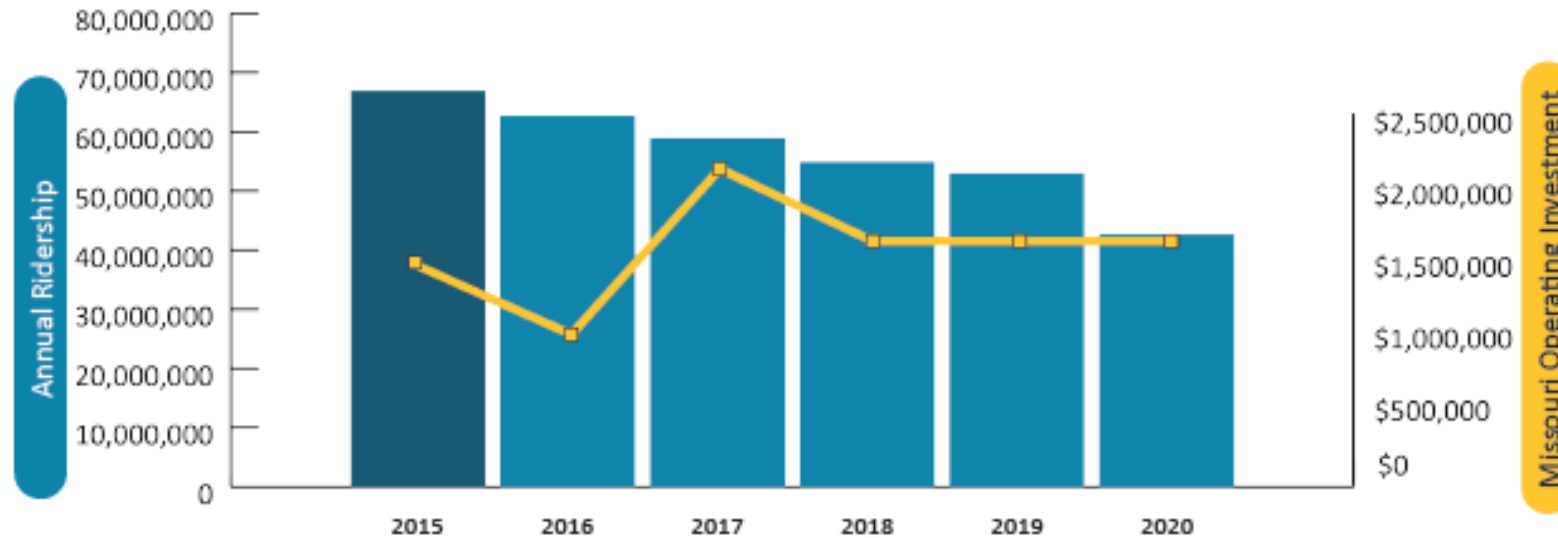
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Transit Funding per Capita
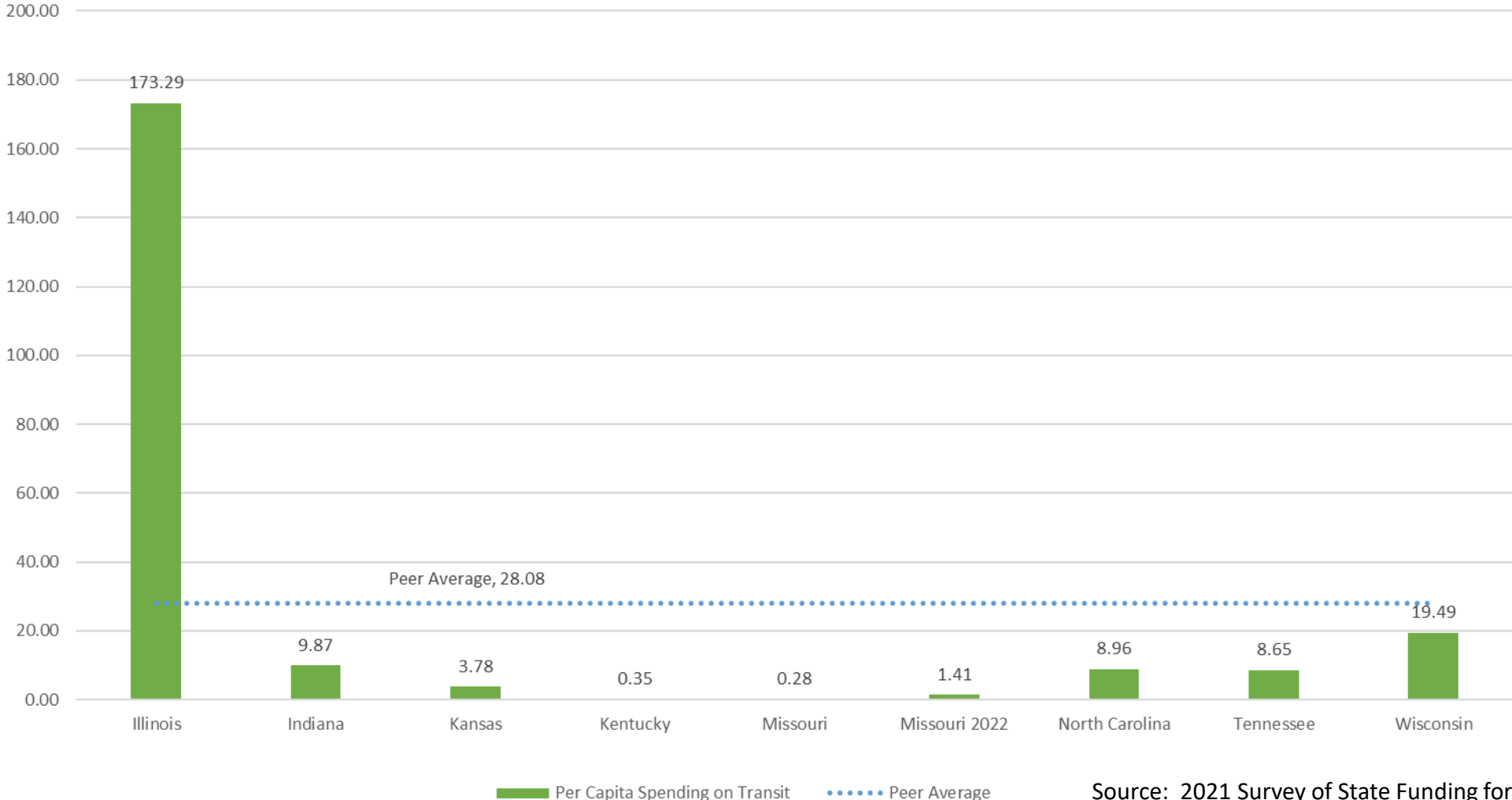
Source: 2021 Survey of State Funding for Public Transportation, AASHTO

Recent Trends (Ridership vs. Funding)

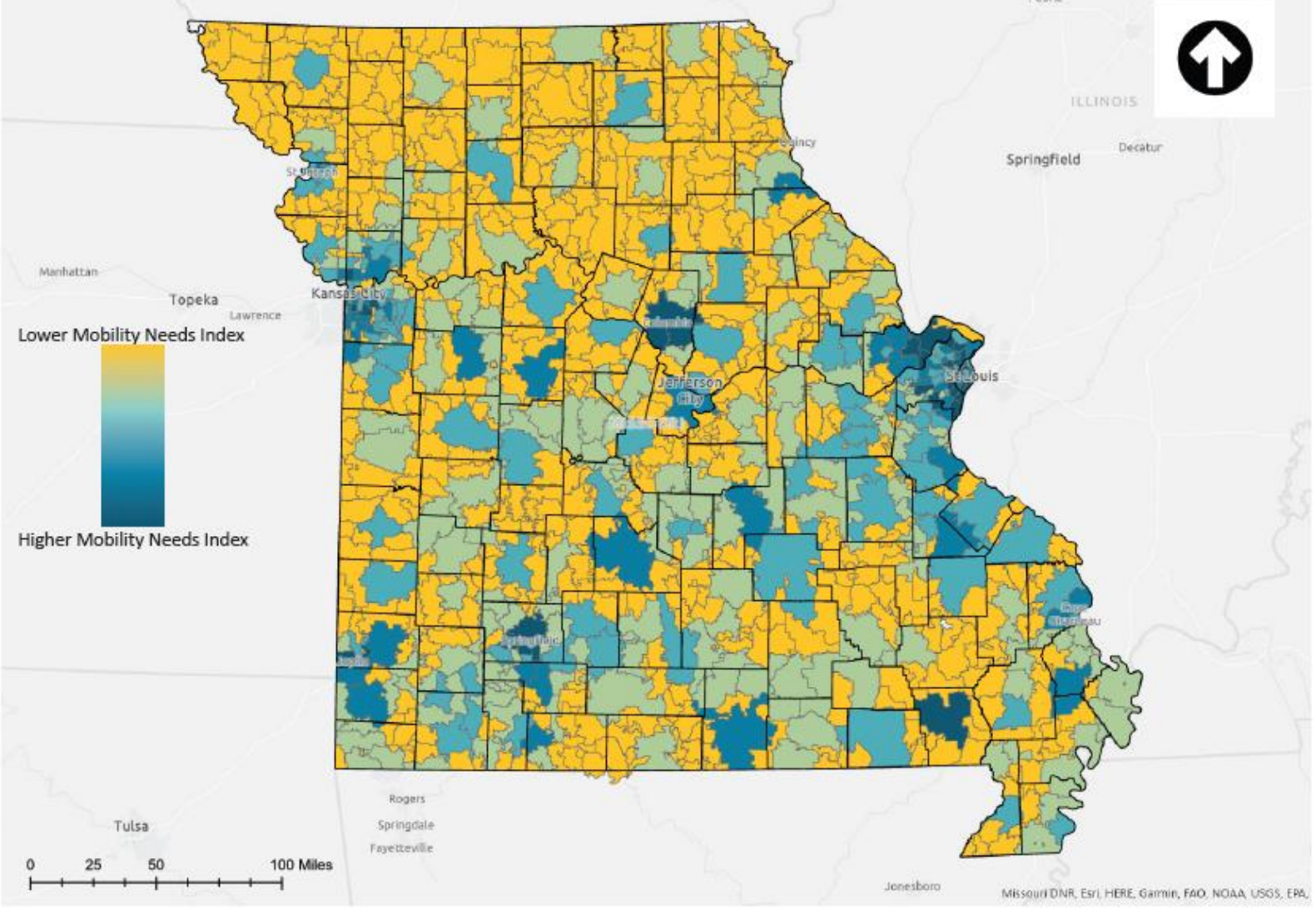FIGURE 2. MISSOURI RIDERSHIP & FUNDING TRENDS

Agencies

- 32 Agencies Across the State

FIGURE 3. MISSOURI TRANSIT SERVICE PROVIDERS

Mobility Needs Determination - What Data Did We Use?

- Population Density

- Population age 65 and over

- Population age 18 and under

- Population with a disability

- Population in poverty

- Workers without access to a vehicle

Composite Transit Needs Index

Determining Mobility Needs Potential

- Large Urban Systems
  - Based on a comparative analysis of similar peer systems in US
  - Examines potential demand for service based on hours, coverage, etc., of the peer systems
- Small Urban Systems
  - Formula based approach
  - Examines service characteristics, population, and major transit trip generators
- Rural Systems
  - Formula based approach
  - Examines demographics like mobility needs index

- Not derived from a travel demand forecasting model
- Potential demand indicated in number of transit trips compared to existing ridership
- Relative benchmark and not absolute numbers

Unmet Demand

- Statewide Needs
  - Large Urban
  - Small City
  - Rural, General
  - Rural, Program
- Total of 39M+ trips
- Costs of ~$171 - $342M (20022)
- Broken down by urban
  - KC and St. Louis
  - State House & Senate geographies

System Type	Unmet Demand (trips/year)	100% Unmet Demand Cost	50% Unmet Demand Cost
Large Urban	22,571,080	$141M	$71M
Small City	167,340	$1.3M	$630,000
Rural, General	8,619,076	$157M	$79M
Rural, Program	7,643,767	$42M	$21M
TOTAL	39,001,263	$342M	$171M

Rural (General) Unmet Demand
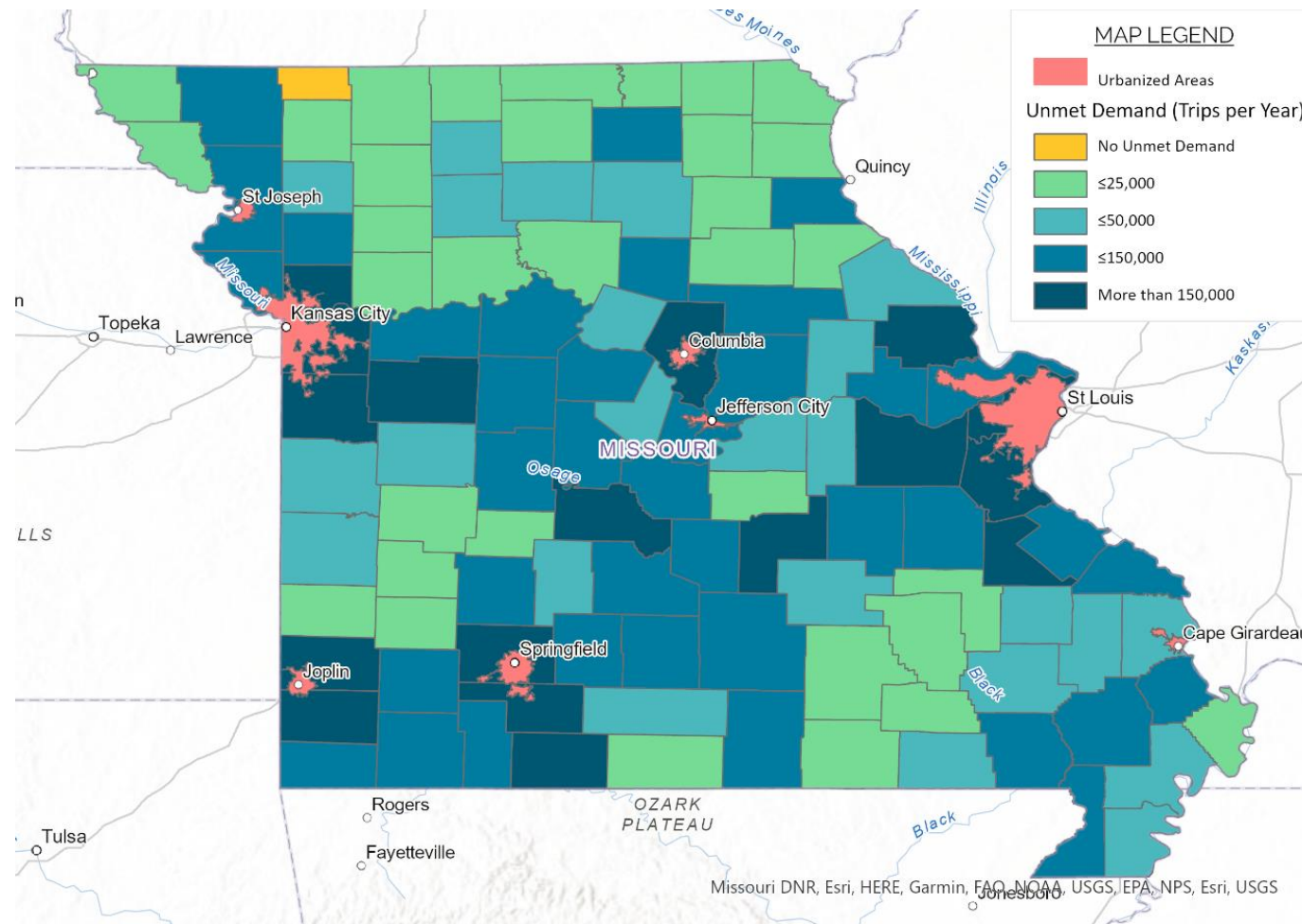
Unmet Rural Demand by Political District
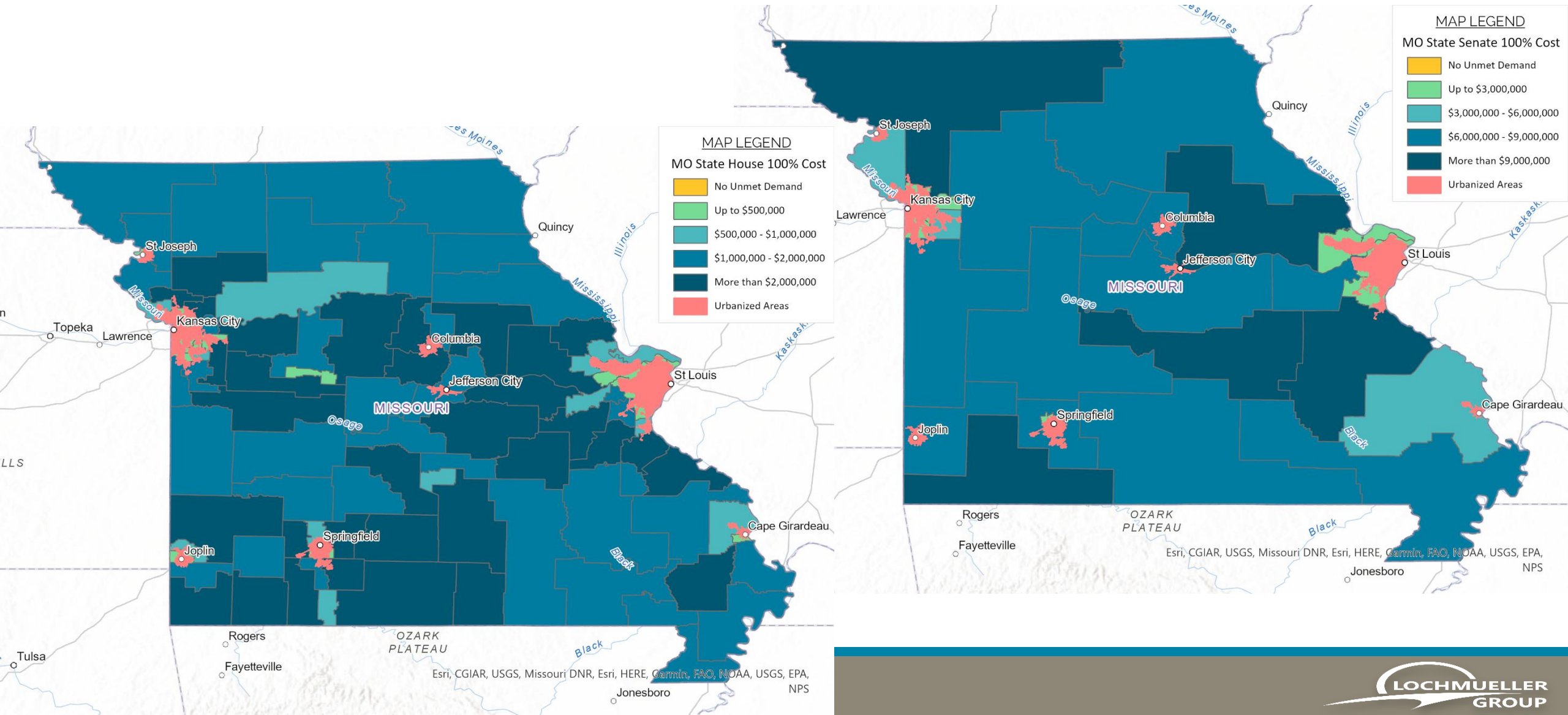
State of Good Repair (SGR)

- Good adherence to TAM Plans

- MoDOT Performance Standard less than 45% of Vehicles Beyond Useful Life Benchmark (ULB)

- No major issues with vehicles as reported
  - 46% of Cutaway Vehicles are beyond ULB

- FTA wants 100% not beyond ULB

- Replacement for years / miles of service is on track

- Estimated cost of current backlog is $582k (MoDOT) or $220M (FTA) (2022)

- Estimated anticipated annual replacement costs of $35M/year in 2022 current dollars assuming a smooth 12-year replacement schedule for all vehicle needs (total)

	Vehicle Type	Default ULB (in years)
AB	Articulated bus	14
AG	Automated guideway vehicle	31
AO	Automobile	8
BR	Over-the-road bus	14
BU	Bus	14
CC	Cable car	112
CU	Cutaway bus	10
DB	Double decked bus	14
FB	Ferryboat	42
HR	Heavy rail passenger car	31
IP	Inclined plane vehicle	56
LR	Light rail vehicle	31
MO	Monorail vehicle	31
MV	Minivan	8
RL	Commuter rail locomotive	39
RP	Commuter rail passenger coach	39
RS	Commuter rail self-propelled passenger car	39
SB	School bus	14
	Steel wheel vehicles	25
SR	Streetcar	31
SV	Sport utility vehicle	8
TB	Trolleybus	13
	Trucks and other rubber tire vehicles	14
TR	Aerial tramway	12
VN	Van	8
VT	Vintage trolley	58

Goals & Recommendations

- Data Driven

- Collaboratively Developed

- Balance Aspirations with Achievement

- Four Categories
  - Funding
  - Policy & Research
  - Data & Data Collection
  - Service Delivery, Operations & Assets

Goals & Recommendations

- **Funding**
  - Return state levels to 2002 benchmarks - Short
  - Secure 0% matching for immediate vehicle needs (MoDOT or FTA money) - Short
  - Increase funding to be more in line with neighboring states (focused on operations) - Mid
  - Increase state matching funds for capital / 5% - 10% local match - Mid
  - Rework / reexamine FTA 5311 Reimbursement Regulations and 5310 eligibility criteria - Long

- **Research & Policy**
  - Rescope or expand the RTAP program - Short
  - On-line virtual best practices / data clearinghouse - Short
  - Expand virtual education opportunities - Short
  - MO Transit Summit (solely focused on technical issues & exchange) - Mid
  - Research best practices for service delivery and apply to MO - Mid

Goals & Recommendations

- **Data / Data Collection**
  - Statewide GTFS data set - Short
  - Statewide TAM data set - Short
  - Statewide Provider data set - Short
  - Statewide planning tool (TBEST) - Mid

- **Service Delivery, Operations & Assets**
  - Increase # revenue miles & revenue hours (non programmed rural) – Mid
  - Increase # of passengers per revenue hour (efficiency) - Mid
  - Replace vehicles so none are beyond useful life recommendations - Mid
  - Seek to fill 5% of unmet needs within 5 years, then 7.5% of same within 10 years and 10% in 15 years - Long

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Questions?