MEMO

To: Kim Cella, MPTA

From: Lochmueller Group

Date: April 28, 2025

Subject: MPTA Transit Service Evaluation – 2025 Update

Introduction

This report is an update to a portion of the MPTA Statewide Transit Needs Assessment study completed by Lochmueller Group in 2022. The 2022 MPTA Statewide Transit Needs Assessment included various elements designed to educate the public and stakeholders, to identify transit service gaps and unmet needs, and to develop goals and recommendations for transit across the state of Missouri. Elements of the 2022 study include:

- Transit agency profiles
- Statewide demographic analysis and a Mobility Needs Index
- Transit Service Evaluation (Needs Assessment)
- State of Good Repair Analysis
- Goals & Recommendations

This 2025 update report refreshes the Transit Service Evaluation (Needs Assessment) found in Appendix B of the original 2022 study. The evaluation was originally performed with data from the years of 2015 through 2019. This update (2025) to that initial analysis uses data from the years 2019 through 2023. This service evaluation identifies potential transit trip demand in different geographies throughout the state and compares the demand to the corresponding ridership levels to determine what extent, if any, of potential unmet demand. Any potential unmet demand is then illustrated by the anticipated cost of additional service to meet the demand in order to quantify funding gaps.

The methodologies described in this report closely mirror those found in the Service Needs and Gaps Report of the Illinois Statewide Public Transportation Plan (2017). Multiple approaches were used to estimate potential demand depending on the transit agency and service area characteristics. Service areas were classified in three groups:

- Large Urban Systems
- Small City Systems
- Rural Systems

Unless otherwise noted, transit agency information was collected from the Federal Transit Administration (FTA) National Transit Database (NTD) reports from 2019-2023 and presented as a 5-year average. For data collected from the Census Bureau, 2023 American Community Survey (ACS) 5-year average data was used.

Large Urban Systems

Systems classified as "large urban" correspond to not only urban areas with large populations (around 100,000 and above), but with a NTD reporting type status of full reporter. In the 2022 study, large urban systems were evaluated based on a peer agency comparison. However, with ridership being the primary benchmark for this study and all systems throughout the U.S. experiencing diminished ridership since the Covid-19 pandemic, a more formulaic approach was identified to better assess total transit needs. In order to compare the results of the updated analysis, the new formula-based methodology was applied with current 2019-2023 data as well as the previous studies data timeframe of 2015-2019.

The large urban methodology is based on TCRP Report 161 but modified by the Minnesota Department of Transportation to account for higher transit trip demand in urbanized areas[1]. The modified formula is based on a regression equation developed for statewide transit demand in Minnesota. The Minnesota model incorporates additional variables for urbanized areas that are part of Metropolitan Planning Organizations and for cities with large college campuses. A summary of each large urban area's unmet demand and cost to meet 100% and 50% of unmet demand is shown below in Table 1 and Table 2.

TABLE 1: LARGE URBAN SYSTEM SUMMARY (2015-2019)

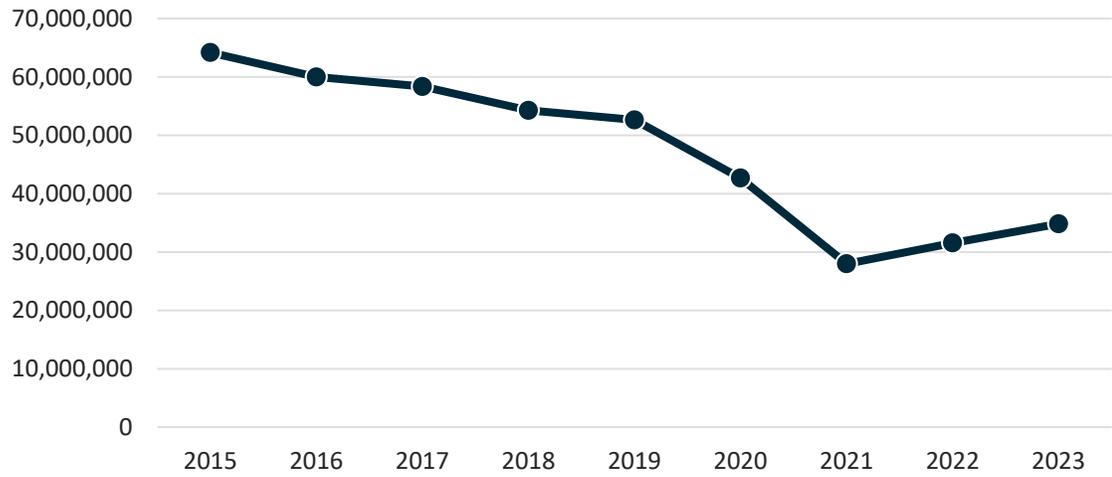| Urban Area	Percent of Demand Met	Unmet Demand (trips/year)	100% Unmet Demand Cost	50% Unmet Demand Cost
St. Louis	80%	10,008,721	$62,554,505	$31,277,253
Kansas City	60%	10,116,395	$61,912,338	$30,956,169
Springfield	20%	5,524,440	$32,616,296	$16,308,148
Columbia	42%	1,961,489	$8,599,167	$4,299,583
TOTAL	**65%**	**27,611,045**	**$165,682,306**	**$82,841,153**

TABLE 2: LARGE URBAN SYSTEM SUMMARY (2019-2023)

Urban Area	Percent of Demand Met	Unmet Demand (trips/year)	100% Unmet Demand Cost	50% Unmet Demand Cost
St. Louis	48%	27,037,251	$299,789,042	$149,894,521
Kansas City	47%	14,160,490	$114,020,266	$57,010,133
Springfield	14%	6,197,485	$60,561,828	$30,280,914
Columbia	22%	2,873,240	$18,538,148	$9,269,074
TOTAL	**42%**	**50,268,467**	**$492,909,283**	**$246,454,642**

As shown in Figure 1, ridership in large urban systems has increased since 2021 after decreasing each year since 2015. Despite these recent increases, 2023 ridership is still just 55% of ridership from 2015. The total amount of unmet trips across large urban systems has increased by over 80%, largely due to decreased ridership. However, due to inflation and rising costs per trip, the estimate cost of additional service to meet the unmet trip needs has increased by almost 200%.

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[1] https://www.minnesotago.org/final-plans/gmtip-draft-plan/chapter-6#service-plan-link

FIGURE 1: LARGE URBAN RIDERSHIP PER YEAR (2015-2023)

Small City Systems

For systems within urbanized areas with less than 100,000 people, the large urban formula approach is not necessary. TCRP Report 161 details a formula-based approach to estimate transit trip demand for small city systems and is shown below.

$$Unlinked\ Passenger\ Trips$$
$$= (5.77 \times Revenue\ hours\ of\ Service) + (1.07 \times Total\ Population)$$
$$+ (7.12 \times University\ Enrollment\ or\ other\ Major\ Trip\ Generator)$$

The estimated potential demand is compared to actual ridership to determine the unmet demand. Based on each agency's reported cost per trip, a total cost is calculated to meet demand. Table 3 and Table 4 show each small city agency's unmet demand and predicted cost to meet 100% and 50% of unmet potential demand for 2022 and 2025 respectively.

TABLE 3: SMALL CITY SUMMARY (2015-2019)

| Agency	Ridership	Percent of Demand Met	Unmet Demand (trips/year)	100% Unmet Demand Cost	50% Unmet Demand Cost
Cape Girardeau Transit Authority	45,739	49%	47,356	$222,097	$111,049
JEFFTRAN	237,539	147%	0	n/a	n/a
City of Joplin	97,890	66%	51,321	$202,203	$101,102
St. Joseph Transit	419,790	86%	68,664	$835,642	$417,821
SEMO	316,412	209%	0	n/a	n/a
TOTAL			**167,340**	**$1,259,943**	**$629,972**

TABLE 4: SMALL CITY SUMMARY (2019-2023)

Agency	Ridership	Percent of Demand Met	Unmet Demand (trips/year)	100% Unmet Demand Cost	50% Unmet Demand Cost
Cape Girardeau Transit Authority	29,024	35%	52,785	$462,926	$231,463
JEFFTRAN	110,064	71%	44,000	$448,799	$224,400
City of Joplin	58,411	45%	70,509	$516,829	$258,415
St. Joseph Transit	302,358	63%	179,037	$3,629,070	$1,814,535
SEMO	174,872	131%	0	n/a	n/a
TOTAL			**346,330**	**$5,057,625**	**$2,528,813**

IndeBus (City of Independence) is included as part of the Kansas City urbanized area and the large urban system analysis in 2025.

As shown in Figure 2, small city ridership declined significantly in 2020 and 2021 and continued to decrease in 2023. Although the magnitude of total trips is less than large urban systems or rural systems, unmet trips increased for every small city system (by over 100% in total) since the previous study. The estimated cost of additional services to meet the unmet transit trip needs has increased by 300% due to inflation and a significant increase in cost per trip for every agency.

FIGURE 2: SMALL CITY RIDERSHIP PER YEAR (2015-2023)
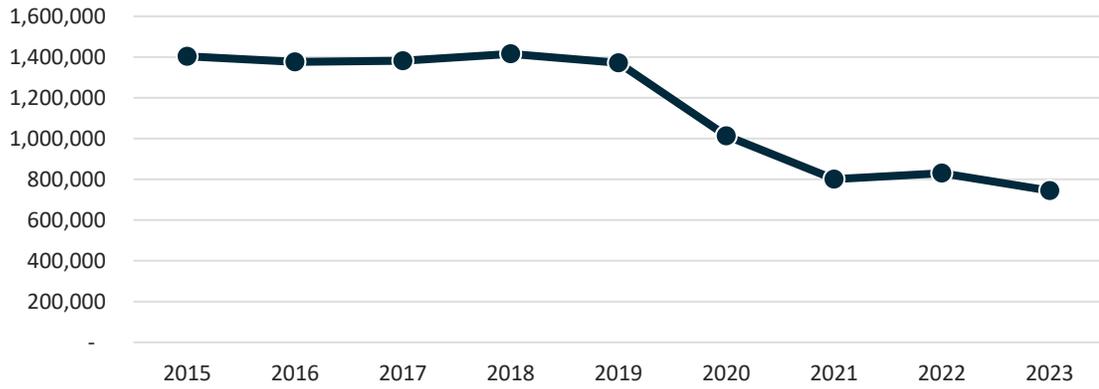
Rural Systems

There has been a significant amount of research into forecasting transit trip demand in rural and/or low-density areas. In these areas, traditional fixed route service is not cost-effective, and demand response type services are more suitable. Following the guidance outlined in TCRP Report 161, a formula-based approach was also used to estimate potential transit trip demand in these areas. Within the category of rural systems, two separate demand estimation methodologies were utilized for program and non-program demand. Program trips are those made because of a specific social service program and are associated with 5310[2] and 5311[3] FTA programming, respectively. Non-program trips are those made by the public for a broad range of trip purposes.

Non-Program (General Public) Demand

The formula to estimate potential public rural transit demand, as presented in TCRP Report 161, is shown below.

$$\begin{aligned} General\ Public\ Demand\ &(trips\ per\ year) \\ &= (2.2 \times Population\ age\ 60\ and\ up) \\ &+ (5.21 \times Mobility\ Limited\ Population\ age\ 18\ to\ 64) \\ &+ (1.52\ \times Residents\ of\ Households\ with\ no\ Vehicles) \end{aligned}$$

General public potential demand was calculated at the census tract level and then aggregated to the county level minus the urbanized areas. Figure 3 shows the different geographies used in this analysis.

The eight urbanized areas in the state evaluated in the previous analyses (large urban systems and small city systems) were removed from the rural analysis. In addition to local demand response services, two additional service providers were included in the analysis: OATS Transit, which serves eighty-six (86) counties, and Southeast Missouri Transportation Service (SMTS), which serves twenty-one (21) counties. The aggregated potential demand estimations were then compared to demand responsive actual ridership to determine the unmet demand. The non-program unmet demand is illustrated in Figure 4.

Since the operating cost per trip varies among the various service providers and because some counties are served by multiple providers, a ridership weighted average of cost per trip was calculated and used to determine the cost to meet 100% and 50% of potential unmet demand for rural areas. Table 5 and Table 6 show the rural general public summary for 2022 and 2025 respectively.

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[2] https://www.transit.dot.gov/funding/grants/enhanced-mobility-seniors-individuals-disabilities-section-5310

[3] https://www.transit.dot.gov/rural-formula-grants-5311

TABLE 5: RURAL, GENERAL PUBLIC SUMMARY (2015-2019)

Estimated Demand	Ridership	Percent of Demand Met	Unmet Demand (trips/year)	100% Unmet Demand Cost*	50% Unmet Demand Cost*
10,882,578	2,263,504	21%	8,619,076	$157,078,617	$78,539,309

*Ridership weighted average cost per trip is $18.22 per trip

TABLE 6: RURAL, GENERAL PUBLIC SUMMARY (2019-2023)

Estimated Demand	Ridership	Percent of Demand Met	Unmet Demand (trips/year)	100% Unmet Demand Cost*	50% Unmet Demand Cost*
10,793,385	1,886,325	17%	8,907,060	$218,846,464	$109,423,232

*Ridership weighted average cost per trip is $24.57 per trip

Rural ridership from 2015-2023 is shown in Figure 5 and indicates declines in non-program ridership in 2020 and 2021 and slight increases in 2022 and 2023. While the estimated demand is similar to the previous study, average ridership is down 20% (2.3MM trips/year to 1.9MM trips/year). Overall, unmet non-program transit trips are up by 3% but the estimated cost of additional services to meet the unmet transit trip need is up by 40%.

FIGURE 3: CENSUS TRACTS, URBANIZED AREAS, COUNTIES

FIGURE 4: GENERAL PUBLIC UNMET DEMAND

Program Demand

TCRP Report 161 recommends estimating program demand based on program-specific information. Lacking such detailed information at this point in the study, this analysis relied on guidance provided by TCRP Report 3 which outlines a formula-based approach. The formula-based approach estimates potential demand based on the number of estimated participants of various social service programs, including adult development services, Head Start programs, job training, mental health services, and others. Like the other evaluations, the estimated potential demand for this category of service was then compared to actual ridership. In this case, we combined reported 5310 and 5311 program actual ridership to determine potential unmet demand. Table 7 and Table 8 show the rural program demand summary for 2022 and 2025 respectively.

TABLE 7: RURAL, PROGRAM DEMAND SUMMARY (2022)

Estimated Demand	Ridership	Percent of Demand Met	Unmet Demand (trips/year)	100% Unmet Demand Cost*	50% Unmet Demand Cost*
14,275,416	6,631,649	46%	7,643,767	$41,658,530	$20,829,265

*Average cost per trip based on 2019 FTA program allocation and 80/20 split and Missouri MEHTAP funding is $5.45
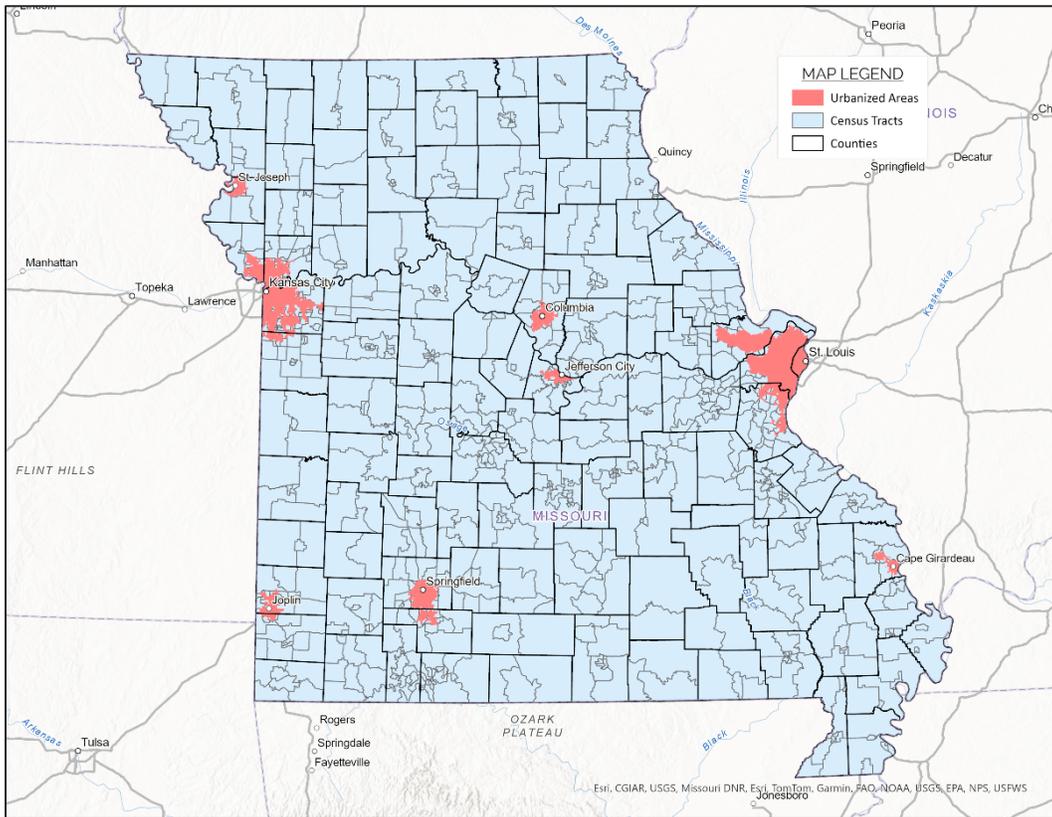
TABLE 8: RURAL, PROGRAM DEMAND SUMMARY (2025)

Estimated Demand	Ridership	Percent of Demand Met	Unmet Demand (trips/year)	100% Unmet Demand Cost*	50% Unmet Demand Cost*
13,977,597	5,023,923	36%	8,953,674	$83,895,925	$41,947,963

*Average cost per trip based on 2019 FTA program allocation and 80/20 split and Missouri MEHTAP funding is $9.37

Figure 5 shows rural program ridership from 2015-2023. Ridership significantly decreased in 2020 and 2021 but has improved since then in 2022 and 2023. While the demand for rural program transit trips has actually decreased since the previous study, average ridership is also down leading to an overall increase in unmet trips of 17%. The estimated cost of additional services has increased by 100%, outpacing the increase in transit trip need just like for all other system types.

FIGURE 5: RURAL RIDERSHIP PER YEAR (2015-2023)
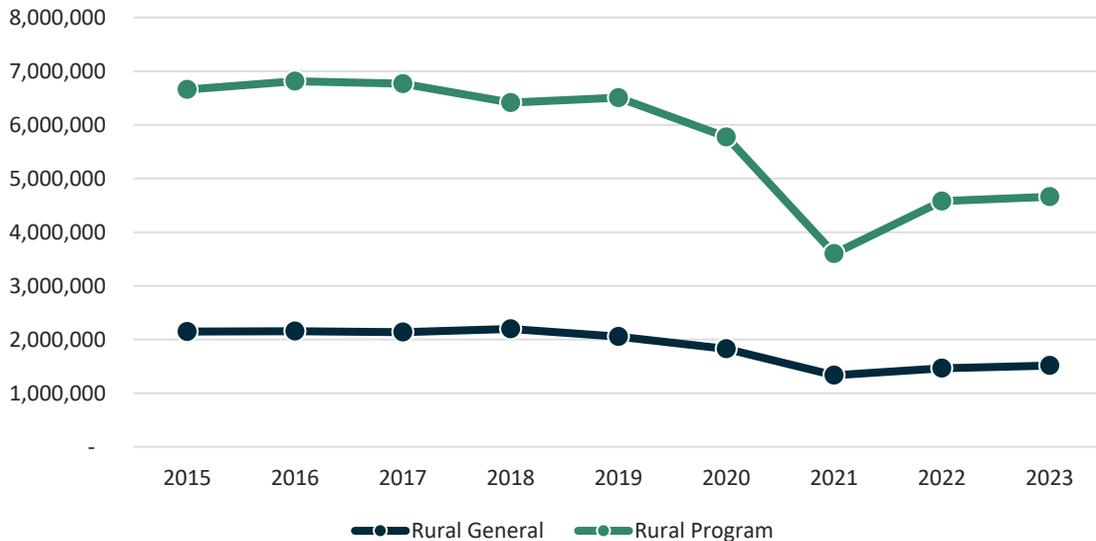
System Type Summary

A total transit need breakdown by system category for both 2022 and 2025 is shown in Table 9. Unmet demand has increased for all system types; however, the costs to provide transit services have increased at a higher rate, reflecting the increased cost per trip and significant inflation experienced since 2022. Across the state, unmet transit trip demand is up by 55% with estimated cost for additional service up 119%.

TABLE 9: 2025 STATEWIDE SUMMARY

System Type	Unmet Demand (2022)	Unmet Demand (2025)	Percent Change	Cost (2022)	Cost (2025)	Percent Change
Large Urban	27,611,045	50,268,467	+82.1	$166MM	$492MM	+197.5%
Small City	167,340	346,330	+107.0%	$1.3MM	$5MM	+301.4%
Rural, General	8,619,076	8,907,060	+3.3%	$157MM	$219MM	+39.3%
Rural, Program	7,643,767	8,953,674	+17.1%	$42MM	84MM	+101.4%
TOTAL	**44,041,228**	**68,475,531**	**+55.5%**	**$367MM**	**$800MM**	**+119.0%**

Conclusions

- Transit ridership across the state increased in 2022 and 2023 but 5-year average ridership has decreased by 33% since the previous study and is still well below 2015 levels.
- Demand for transit has increased leading to an increase in unmet demand for all system types.
- Inflation has significantly increased the cost of service and, consequently, the cost to meet unmet demand.
- Unmet demand is up 55% while estimated cost for additional service is up 119%.

Political Summary

Table 10, Table 11, Figure 6, and Figure 7 summarize the rural general unmet transit demand by Missouri State House and State Senate districts. Both 2022 and 2025 results are included in the political summary.

TABLE 10: RURAL NEED BY STATE HOUSE DISTRICT

State House District	Unmet Demand (2022)	Unmet Demand (2025)	Cost (2022)	Cost (2025)
State House District 1	94,109	108,123	$1,715,092	$2,656,593
State House District 2	78,949	93,878	$1,438,808	$2,306,576
State House District 3	63,756	91,666	$1,161,923	$2,252,245
State House District 4	88,392	89,472	$1,610,903	$2,198,337
State House District 5	99,461	119,401	$1,812,630	$2,933,687
State House District 6	86,639	88,801	$1,578,955	$2,181,848
State House District 7	95,146	107,368	$1,733,991	$2,638,021
State House District 8	130,198	160,737	$2,372,797	$3,949,319
State House District 9	75,884	121,904	$1,382,950	$2,995,172
State House District 10	1,751	1,629	$31,911	$40,016
State House District 11	91,512	10,789	$1,667,763	$265,083
State House District 12	111,064	3,575	$2,024,089	$87,839
State House District 13	32,532	162,395	$592,880	$3,990,043
State House District 14	545	3,766	$9,932	$92,534
State House District 15	0	0	$0	$0
State House District 16	8,359	5,533	$152,339	$135,952
State House District 17	17,279	12,795	$314,902	$314,375
State House District 18	25	24	$456	$585
State House District 19	225	164	$4,101	$4,019
State House District 20	89,083	36,807	$1,623,496	$904,345
State House District 21	2	26	$36	$649
State House District 22	0	0	$0	$0
State House District 23	0	0	$0	$0
State House District 24	0	0	$0	$0
State House District 25	0	0	$0	$0
State House District 26	0	2,606	$0	$64,023
State House District 27	4,811	2,442	$87,678	$60,008
State House District 28	0	0	$0	$0
State House District 29	7,870	0	$143,427	$0
State House District 30	14,071	8,018	$256,437	$197,000
State House District 31	13,417	156	$244,519	$3,829
State House District 32	19,817	119,556	$361,156	$2,937,489
State House District 33	129,919	94,087	$2,367,713	$2,311,728
State House District 34	28,699	9,371	$523,026	$230,252
State House District 35	5,921	22,200	$107,907	$545,465
State House District 36	28	15,616	$510	$383,679
State House District 37	15,866	804	$289,150	$19,757
State House District 38	121,493	15,801	$2,214,153	$388,231
State House District 39	32,722	102,414	$596,343	$2,516,307
State House District 40	103,429	198,790	$1,884,945	$4,884,275
State House District 41	147,248	60,382	$2,683,526	$1,483,575

State House District	Unmet Demand (2022)	Unmet Demand (2025)	Cost (2022)	Cost (2025)
State House District 42	141,684	133,292	$2,582,124	$3,274,988
State House District 43	143,595	137,679	$2,616,952	$3,382,765
State House District 44	107,404	164,161	$1,957,388	$4,033,424
State House District 45	114	0	$2,078	$0
State House District 46	343	3,541	$6,251	$87,005
State House District 47	115,739	114,708	$2,109,289	$2,818,387
State House District 48	136,126	114,884	$2,480,832	$2,822,692
State House District 49	57,639	84,884	$1,050,444	$2,085,608
State House District 50	143,909	5,013	$2,622,674	$123,169
State House District 51	94,821	135,023	$1,728,068	$3,317,526
State House District 52	26,609	97,608	$484,937	$2,398,238
State House District 53	144,266	60,521	$2,629,180	$1,486,992
State House District 54	163,696	90,263	$2,983,283	$2,217,767
State House District 55	74,756	91,613	$1,362,393	$2,250,934
State House District 56	76,334	3,224	$1,391,151	$79,210
State House District 57	120,358	172,635	$2,193,468	$4,241,654
State House District 58	96,175	116,133	$1,752,744	$2,853,390
State House District 59	103,691	91,359	$1,889,720	$2,244,698
State House District 60	998	1,542	$18,188	$37,875
State House District 61	128,243	123,614	$2,337,169	$3,037,192
State House District 62	134,003	184,236	$2,442,142	$4,526,688
State House District 63	28,916	603	$526,981	$14,822
State House District 64	42,653	25,337	$777,331	$622,540
State House District 65	39,767	50,477	$724,735	$1,240,214
State House District 66	25,504	15,591	$464,798	$383,064
State House District 67	10,220	10,373	$186,255	$254,855
State House District 68	0	0	$0	$0
State House District 69	4,451	4,213	$81,117	$103,516
State House District 70	24,110	10,386	$439,393	$255,196
State House District 71	0	0	$0	$0
State House District 72	0	0	$0	$0
State House District 73	0	0	$0	$0
State House District 74	0	0	$0	$0
State House District 75	0	1,132	$0	$27,803
State House District 76	3,093	21,971	$56,368	$539,817
State House District 77	2,890	0	$52,669	$0
State House District 78	7,133	0	$129,996	$0
State House District 79	0	0	$0	$0
State House District 80	0	0	$0	$0
State House District 81	5,479	3,937	$99,852	$96,739
State House District 82	0	0	$0	$0
State House District 83	0	0	$0	$0
State House District 84	0	0	$0	$0
State House District 85	0	0	$0	$0
State House District 86	0	0	$0	$0
State House District 87	0	13,102	$0	$321,914
State House District 88	0	40,105	$0	$985,375
State House District 89	0	0	$0	$0

State House District	Unmet Demand (2022)	Unmet Demand (2025)	Cost (2022)	Cost (2025)
State House District 90	0	0	$0	$0
State House District 91	0	0	$0	$0
State House District 92	0	0	$0	$0
State House District 93	1,661	521	$30,271	$12,812
State House District 94	636	1,198	$11,591	$29,443
State House District 95	4,429	3,756	$80,716	$92,284
State House District 96	0	244	$0	$5,997
State House District 97	0	5,372	$0	$131,999
State House District 98	19,724	658	$359,461	$16,167
State House District 99	861	0	$15,691	$0
State House District 100	0	0	$0	$0
State House District 101	20,004	6,688	$364,564	$164,332
State House District 102	16,822	58,108	$306,573	$1,427,718
State House District 103	151	0	$2,752	$0
State House District 104	0	0	$0	$0
State House District 105	0	144	$0	$3,545
State House District 106	33	841	$601	$20,664
State House District 107	311	52	$5,668	$1,280
State House District 108	797	227	$14,525	$5,578
State House District 109	54,566	95,667	$994,440	$2,350,541
State House District 110	67,457	54,185	$1,229,372	$1,331,328
State House District 111	81,832	85,825	$1,491,350	$2,108,716
State House District 112	19,007	16,798	$346,394	$412,727
State House District 113	1,190	3,568	$21,687	$87,675
State House District 114	27,877	29,351	$508,045	$721,156
State House District 115	159,132	187,391	$2,900,106	$4,604,202
State House District 116	117,672	117,561	$2,144,517	$2,888,483
State House District 117	96,596	113,902	$1,760,417	$2,798,576
State House District 118	113,714	178,921	$2,072,384	$4,396,095
State House District 119	136,695	40,261	$2,491,202	$989,215
State House District 120	121,607	106,614	$2,216,231	$2,619,504
State House District 121	95,053	57,390	$1,732,296	$1,410,080
State House District 122	41,745	78,423	$760,783	$1,926,851
State House District 123	179,767	115,842	$3,276,169	$2,846,248
State House District 124	106,452	150,476	$1,940,038	$3,697,185
State House District 125	56,744	88,774	$1,034,133	$2,181,171
State House District 126	75,303	85,541	$1,372,362	$2,101,731
State House District 127	167,399	136,249	$3,050,768	$3,347,637
State House District 128	109,581	111,871	$1,997,062	$2,748,660
State House District 129	91,068	124,239	$1,659,672	$3,052,557
State House District 130	123,704	18,505	$2,254,447	$454,678
State House District 131	50,150	184,707	$913,960	$4,538,244
State House District 132	0	86	$0	$2,112
State House District 133	3,084	0	$56,204	$0
State House District 134	87	881	$1,586	$21,655
State House District 135	0	1,125	$0	$27,643
State House District 136	6,481	112	$118,113	$2,743
State House District 137	123,985	77,094	$2,259,568	$1,894,199

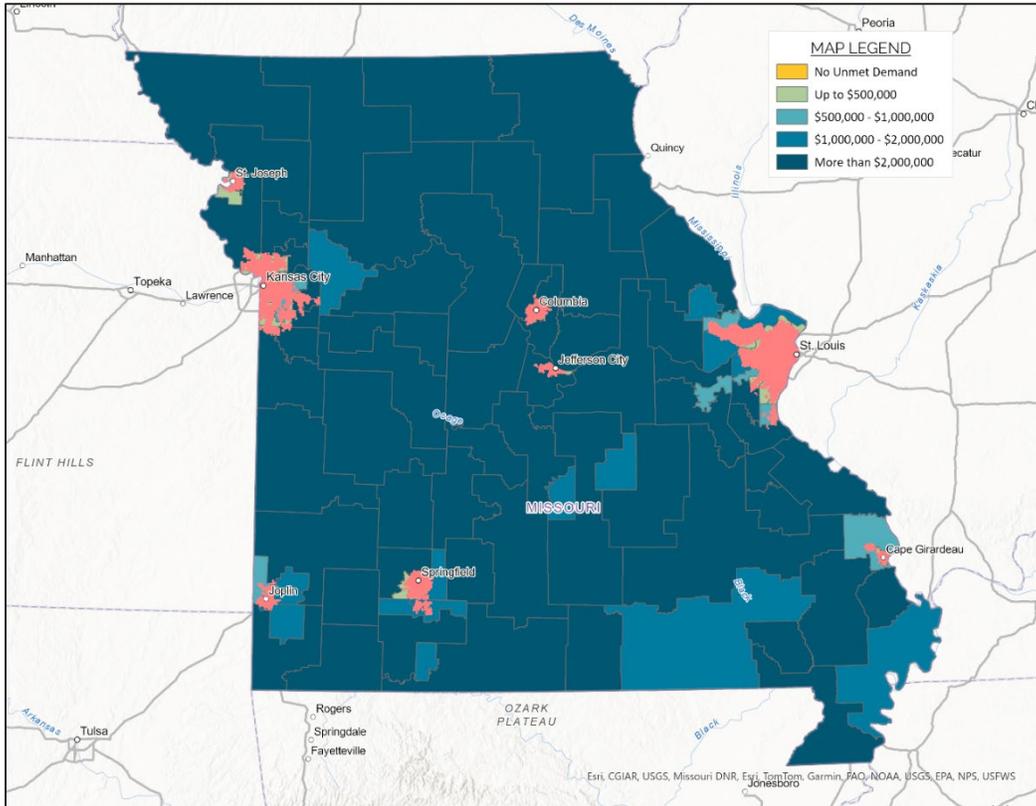| State House District	Unmet Demand (2022)	Unmet Demand (2025)	Cost (2022)	Cost (2025)
State House District 138	123,756	203,526	$2,255,395	$5,000,622
State House District 139	55,588	49,419	$1,013,065	$1,214,237
State House District 140	134,502	53,330	$2,451,236	$1,310,316
State House District 141	129,677	174,965	$2,363,302	$4,298,884
State House District 142	137,371	101,201	$2,503,522	$2,486,502
State House District 143	82,305	161,191	$1,499,970	$3,960,458
State House District 144	84,211	121,758	$1,534,706	$2,991,595
State House District 145	98,230	107,017	$1,790,196	$2,629,401
State House District 146	34,475	39,136	$628,291	$961,563
State House District 147	2,117	811	$38,581	$19,933
State House District 148	100,838	116,356	$1,837,725	$2,858,876
State House District 149	78,612	72,730	$1,432,667	$1,786,981
State House District 150	71,916	143,124	$1,310,635	$3,516,555
State House District 151	110,534	111,425	$2,014,430	$2,737,720
State House District 152	95,111	92,986	$1,733,353	$2,284,677
State House District 153	102,434	71,883	$1,866,812	$1,766,168
State House District 154	110,600	116,443	$2,015,633	$2,860,998
State House District 155	182,366	211,028	$3,323,535	$5,184,950
State House District 156	53,326	41,507	$971,841	$1,019,828
State House District 157	102,603	109,233	$1,869,892	$2,683,854
State House District 158	119,211	133,501	$2,172,565	$3,280,121
State House District 159	149,537	167,037	$2,725,242	$4,104,098
State House District 160	98,211	70,710	$1,789,849	$1,737,341
State House District 161	559	0	$10,188	$0
State House District 162	11,617	40,168	$211,714	$986,927
State House District 163	40,359	62,524	$735,524	$1,536,216

FIGURE 6: RURAL NEED BY STATE HOUSE DISTRICT

TABLE 11: RURAL NEED BY STATE SENATE DISTRICT

State House District	Unmet Demand (2022)	Unmet Demand (2025)	Cost (2022)	Cost (2025)
State Senate District 1	5,598	5,476	$102,021	$134,539
State Senate District 2	70,396	73,455	$1,282,934	$1,804,801
State Senate District 3	559,078	612,236	$10,188,934	$15,042,629
State Senate District 4	9,559	-	$174,208	$-
State Senate District 5	19,722	25,908	$359,424	$636,556
State Senate District 6	444,439	444,464	$8,099,692	$10,920,468
State Senate District 7	27,013	15,616	$492,299	$383,679
State Senate District 8	170,042	136,718	$3,098,936	$3,359,157
State Senate District 9	14,149	19,766	$257,859	$485,650
State Senate District 10	547,562	422,779	$9,979,061	$10,387,679
State Senate District 11	101,808	139,873	$1,855,403	$3,436,672
State Senate District 12	576,251	506,725	$10,501,904	$12,450,224
State Senate District 13	27,652	27,095	$503,945	$665,722
State Senate District 14	10,619	10,386	$193,526	$255,196
State Senate District 15	22,739	82,480	$414,408	$2,026,527
State Senate District 16	558,948	531,265	$10,186,565	$13,053,189
State Senate District 17	42,248	32,441	$769,950	$797,087
State Senate District 18	444,425	494,714	$8,099,437	$12,155,111
State Senate District 19	347,235	287,423	$6,328,195	$7,061,985
State Senate District 20	466,491	429,709	$8,501,580	$10,557,946
State Senate District 21	453,090	526,104	$8,257,353	$12,926,376
State Senate District 22	115,531	124,914	$2,105,498	$3,069,144
State Senate District 23	35,744	57,747	$651,418	$1,418,841
State Senate District 24	10,775	11,428	$196,369	$280,785
State Senate District 25	423,968	463,268	$7,726,618	$11,382,506
State Senate District 26	349,535	532,274	$6,370,111	$13,077,974
State Senate District 27	303,377	307,310	$5,528,904	$7,550,606
State Senate District 28	492,693	505,023	$8,979,099	$12,408,406
State Senate District 29	576,516	514,374	$10,506,734	$12,638,170
State Senate District 30	11,696	7,906	$213,154	$194,247
State Senate District 31	371,684	480,353	$6,773,767	$11,802,278
State Senate District 32	391,250	386,170	$7,130,348	$9,488,196
State Senate District 33	444,125	540,355	$8,093,970	$13,276,528
State Senate District 34	172,428	150,684	$3,142,419	$3,702,295

FIGURE 7: RURAL NEED BY STATE SENATE DISTRICT