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MEMORANDUM

DATE: March 29, 2021
TO: Kent Rogers
CC: Chris Petro
FROM: JD Allen

RE: NLCOG 2045 MTP Update; Transit Analysis Memorandum

In support of the development of the Northwest Louisiana Council of Governments (NLCOG) Metropolitan Transportation Plan (MTP) update, ATG and BKI have conducted a transit analysis of the fixed route system in the NLCOG Metropolitan Planning Area (MPA). This analysis reviews key performance indicators used to help identify transit network performance in order to provide additional resources and support in the long-range multimodal transportation planning process by providing a benchmark of current conditions.

The transit analysis encompasses a review of demographics and statistical indicators for transit need, major attractors and generators of transit dependent activity and includes an overview of barriers and gaps creating restrictions to the mobility of transit in the NLCOG MPA.

The research and analysis represented in this memo have been conducted as a subcomponent of scope *Task 7 Transit Element*. The ATG/BKI team appreciates your review and looks forward to any inputs and comments you might have. If possible, please provide your feedback within two weeks (10 business days).

NLCOG 2045 METROPOLITAN TRANSPORTATION PLAN

Metropolitan Transportation Plan for Caddo, Bossier, DeSoto, and Webster Parishes - State Project No. H.972357 - Federal Project No. H972357





Transit Analysis Memorandum

March 2021

Developed for the Metropolitan Transportation Plan Upate on behalf







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TRANSIT NEEDS ASSESSMENT

This document presents an analysis of existing transit service within the NLCOG Metropolitan Planning Area (MPA). To better understand the state of transit in the Northwest Louisiana region, the transit needs assessment includes evaluations of the following:

- **Transit Supply**: The location and type of existing transit systems in the region. This section includes a review of existing plans and proposed improvements for transit.
- **Transit Potential**: Areas that have the potential to support transit in the region based on concentrations of people and jobs, and a review of destinations for transit riders including schools, healthcare facilities, grocery stores, government and public services, retail, and restaurants.
- Transit Need: Represented by groups of people that have a higher need for transit such as non-driving
 populations, population with limited English proficiency, minority populations, populations with
 disabilities, those in poverty, and populations without access to a personal automobile.
- **Transit Service Gaps**: Areas with high transit potential or need compared to the transit supply available to those areas.

TRANSIT SUPPLY

In order to identify system strengths and weaknesses, it is important to create an inventory of existing transit services in the NLCOG planning area. This inventory helps inform the process used to create locally sensitive solutions which address existing gaps in service. Transit supply in the four-parish area served by NLCOG (Bossier, Caddo, DeSoto, and Webster) includes one fixed route provider serving the general population, one fixed route provider serving the elderly, and several demand response providers serving the elderly or those with disabilities.

Fixed Route Public Transportation Provider

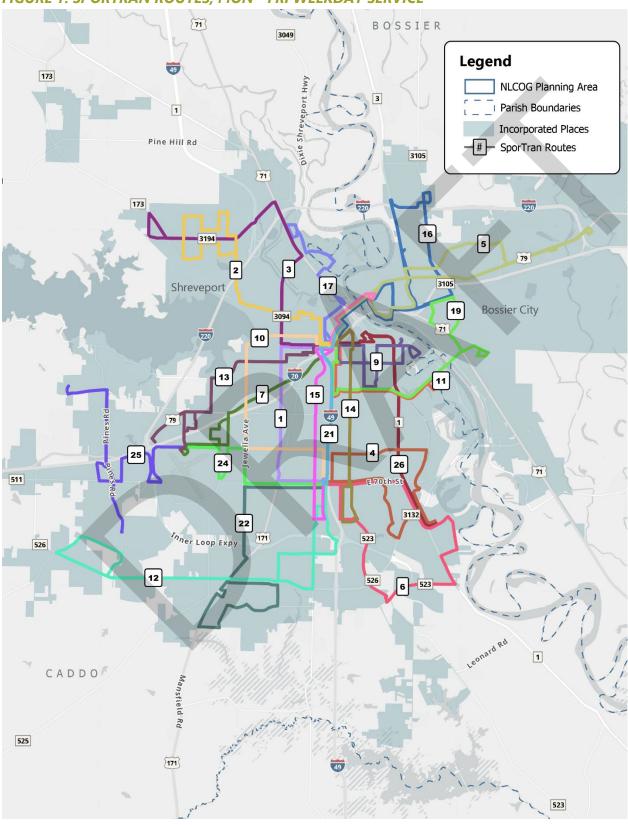
The Shreveport-Bossier Area Transit System (SporTran) serves the general public as well as pre-approved paratransit customers who can schedule demand response service at least 24 hours in advance. SporTran also has a new OnDemand service that is described as "an opportunity to build rural connectivity. For citizens in outlying areas without access to a standard bus line, OnDemand can get you to another OnDemand stop or connect you to one of our hubs." SporTran's fixed route network serves the densest parts of the four-parish NLCOG planning area. Running in and around Shreveport and Bossier City, the transit system operates 22 bus routes with service from around 5am until just after 1am Monday through Friday, shown in **Figure 1**. Service after 5pm on weekdays and on weekends is limited to 8 routes and covers part of Shreveport and only a small portion of Bossier City, as in **Figure 2**. All schedules and services included in this report are based on services as of September 2020, which reflect some COVID-19 restrictions. Weekday services have returned to normal service levels, however, weeknight and weekend service is somewhat reduced under COVID-19 restrictions. The analysis of SporTran focuses on the fixed route service, although they also provide paratransit and on-demand services.

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FIGURE 1: SPORTRAN ROUTES, MON - FRI WEEKDAY SERVICE

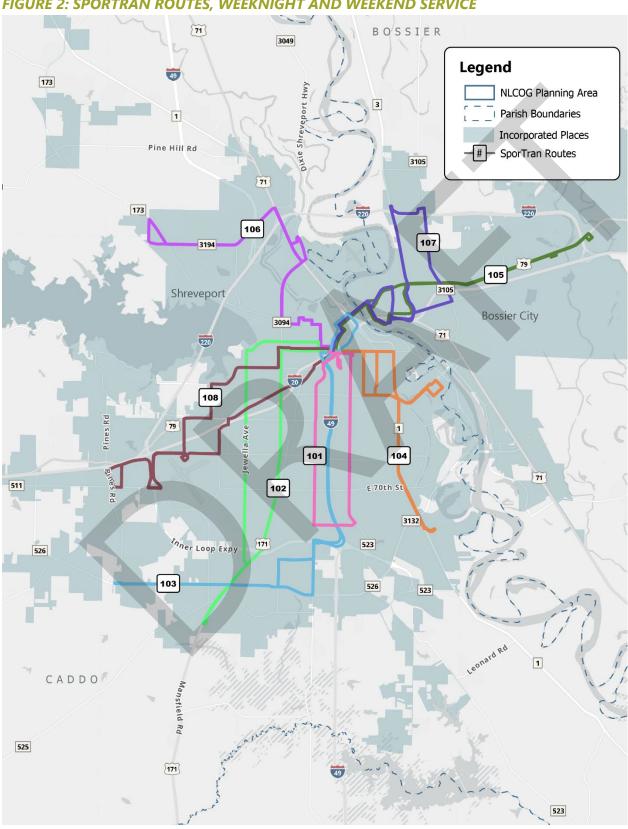


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FIGURE 2: SPORTRAN ROUTES, WEEKNIGHT AND WEEKEND SERVICE



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SporTran fixed routes, service days, and headways are displayed in **Table 1**. Peak headway refers to the route's most frequent service (i.e. a route might have more buses running in the morning and evening to meet a large demand of commuters). Off peak headway refers to any other time of day if the service runs at a reduced rate.

TABLE 1: SPORTRAN ROUTES, SERVICE DAYS, AND HEADWAYS

ROUTE NUMBER	ROUTE NAME	SERVICE PERIOD	PEAK HEADWAY	OFF PEAK HEADWAY*
1	Hearne	Monday - Friday	30 mins	60 mins
2	Russell Rd	Monday - Friday	60 mins	-
3	Dr. Martin Luther King Jr.	Monday - Friday	30 mins	-
4	East 70th	Monday - Friday	50 mins	-
5	East Bossier	Monday - Friday	60 mins	-
6	Ellerbe Road	Monday - Friday	50 mins	-
7	Fairgrounds	Monday - Friday	30 mins	
9	Highland	Monday - Friday	45 mins	-
10	Jewella Avenue	Monday - Friday	35 mins	
11	Kings Highway	Monday - Friday	30 mins	
12	Kingston Loop	Monday - Friday	60 mins	
13	Lakeshore	Monday - Friday	30 mins	-
14	Line Avenue	Monday - Friday	30 mins	
15	Linwood	Monday - Friday	30 mins	
16	North Bossier	Monday - Friday	60 mins	
17	North Market	Monday - Friday	45 mins	-
19	Shreveport-Barksdale	Monday - Friday	15 mins	
20	Downtown/Bossier Connector	Monday - Friday	15 mins	-
21	Southwest Connector	Monday - Friday	10 mins	-
22	Southern Hills	Monday - Friday	30 mins	-
24	West 70th	Monday - Friday	60 mins	-
25	West Shreveport	Monday - Friday	60 mins	-
26	Youree	Monday - Friday	30 mins	-
101	Line/Linwood	Weekend/Weeknight	35 mins	70 mins
102	Hearne/Jewella	Weekend/Weeknight	35 mins	70 mins
103	S. Linwood/W. Bert Kouns	Weekend/Weeknight	35 mins	70 mins
104	Youree/S'port Barksdale	Weekend/Weeknight	35 mins	70 mins
105	Texas/Shed	Weekend/Weeknight	35 mins	70 mins
106	N. Market/MLK	Weekend/Weeknight	35 mins	70 mins
107	Airline/Benton	Weekend/Weeknight	70 mins	140 mins
108	Greenwood/Pines	Weekend/Weeknight	35 mins	70 mins

^{*}Off Peak Headways are included if the route has varying headways throughout the service period.

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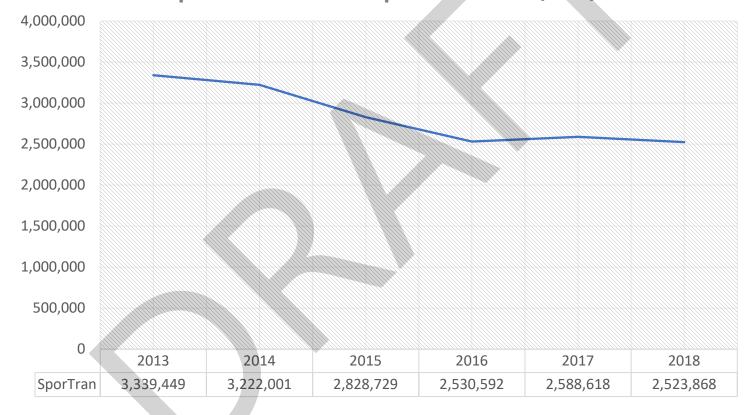


RIDERSHIP

SporTran experienced passenger volumes of about 9,056 average weekday trips, 4,358 average Saturday trips, and 1,296 average Sunday trips in 2018, the most recent year reported by the National Transit Database (NTD), a Federal Transit Authority (FTA) service. Annual unlinked passenger trips for the previous five years where data is available are presented in **Figure 3**. LA DOTD shows estimated ridership of 2,530,592 for 2020.

FIGURE 3: SPORTRAN RIDERSHIP 2013 - 2018





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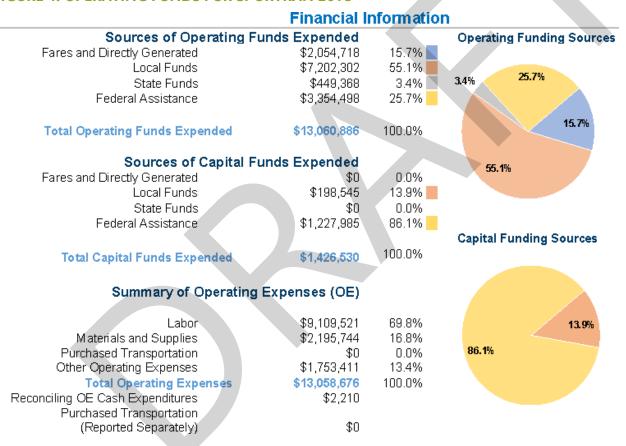
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FINANCIAL

Operating funds for SporTran are mostly local and Federal, followed closely by fare collections as shown below in **Figure 4**. In 2020, an additional \$11.3 million was allocated to SporTran by the FTA through the CARES Act. In fiscal year 2020, the SporTran budget shows that local funds came from four sources: State of Louisiana (6%), City of Shreveport (82%), City of Bossier City (11%), and the Caddo Parish Port of Caddo-Bossier (.9%). Funds allocated for operations total \$13.8 million and funds for capital projects total \$42.5 million, based on the adopted 2020 SporTran Budget and 2020 Shreveport Capital Improvements Budget.

FIGURE 4: OPERATING FUNDS FOR SPORTRAN 2018



Other Public Transportation Providers

Several of the providers in the study area serve limited portions of the population. The ARC Caddo-Bossier serves qualified clients with disabilities. The Bossier Parish Council on Aging (COA), ARC, Socialization Services, Volunteers of America, and Webster Council on Aging serve the elderly and those with disabilities. Socialization Services also limits services to seniors over 60 years old who qualify as low-income. DeSoto Habilitation Services provides demand response service for clients of the habilitation program.

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New Horizons Independent Living Center serves high school students and adults with disabilities. A summary of these public transportation services can be found in **Table 2**.

TABLE 2: OTHER PUBLIC TRANSPORTATION PROVIDERS

Provider	Service Area	Services	Service Hours	Fare
ARC Bossier	Bossier Parish	Demand Response	8:00am – 5:00pm, M-F Weekends as needed	N/A
ARC Caddo-Bossier	Bossier Parish Caddo Parish	Demand Response	N/A	N/A
Bossier Parish Council on Aging	Bossier Parish	Demand Response	4:00am – 4:30pm, M-F	\$5
Bossier Parish Office of Community Services	Bossier Parish	Demand Response	N/A	\$5 one way in town
De Soto Habilitation Services	De Soto Parish	Demand Response	5:30am – 5:00pm, M-F	N/A
DeSoto Parish Council on Aging	De Soto Parish	Demand Response	3:30am – 6:00pm, M-F	\$6 - \$15
Holy Angels Residential Facility	Bossier Parish	Demand Response	N/A	N/A
Minden ARC	Webster Parish	Fixed Route	8:00am – 4:00pm, 7 days	N/A
New Horizons Independent Living Center	Bossier Parish Caddo Parish	Demand Response	N/A	N/A
Socialized Services, Inc.	Shreveport Council District D	Fixed Route Demand Response	8:30am – 3:30pm, M-F	N/A
Volunteers of America	Caddo Parish	Demand Response	N/A	N/A
Webster Parish Office of Community Services	Webster Parish	Demand Response	6:00am – 6:00pm, M-F	\$2 local \$5 in parish \$15 out of parish
Webster Council on Aging	Webster Parish	Demand Response	8:00am – 4:00pm, M-F	\$3 voluntary

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Planned and Implemented Improvements

The 2017 Coordinated Human Services Transportation Plan (CHSTP) discusses several aspects of transit service in the NLCOG MPA that could be improved. The identified items are listed below:

- Inadequate rural transit service
- Inadequate service to destinations outside of major activity centers for transit need populations
- Lack of direct service between medical facilities
- Inadequate transportation options outside of peak hours
- No same-day services on paratransit systems
- Poor coordination among providers

Several gaps in infrastructure were also noted in the CHSTP. Bus stops and transit facilities were largely without accessible walkways, safe crossings, ramps (those that had ramps were often too steep or not level), benches, shelters, and information resources. Crossing times at signalized intersections were noted to be too short in the CHSTP and a lack of lift-equipped vehicles for people who do not qualify for ADA services was also listed as a gap in the system.

SporTran produced a strategic plan in 2019, titled "Move Northwest Louisiana Forward 2030". The plan, covering a planning horizon spanning 2010 to 2030, guides transit service, lays out a vision, and sets goals, objectives, and strategies toward that vision. The plan also includes performance measures for reporting progress. In the last four years since the NLCOG Long Range Transportation Plan (LRTP), SporTran has made the following investments:

- Increased peak hour buses
- Increased daytime service routes
- Increased nighttime service buses
- Increased nighttime service routes
- Replaced all bus stop signs

As part of the "2019-2021 Innovations for Public Transit" component of the strategic plan, SporTran also deployed the state's first fleet of autonomous shuttles and began investments in a new multimodal resource center at the Sun Furniture Building.

According to the Shreveport capital improvements budget, SporTran capital improvements planned for fiscal year 2020 include preventive maintenance, planning, ADA operations and administrative costs, bus stop improvements, 2-way radio improvements, purchase of fuel-efficient vehicles, and scheduling/dispatch software. A new intermodal facility at the intersection of I-20 and I-49 was recently completed and the SporTran mobile ticketing/smartcard project was completed in 2018.

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Transit Supply Score

Because SporTran provides the only fixed route transit service that serves the general public in the region, each route was analyzed for the level of supply provided. Individual routes were assumed to serve a 0.25 mile service coverage area (i.e. 0.25 mile route buffer) and given a score based on the level of supply or service provided. This score allowed the project team to quantify the quality of service being provided along each corridor in the service coverage area. The weekday supply made up as many as 4 points of the total supply score based on the following criteria:

- Peak Headway of 10 15 minutes was scored as 4.
- Peak Headway of 30 35 minutes was scored as 3.
- Peak Headway of 45 50 minutes was scored as 2.
- Peak Headway of 60 minutes was scored as 1.

The weeknight and weekend supply received a max score of 1 point based on the following criteria:

- Peak Headway of 35 minutes received a score of 1.
- Peak Headway of 70 minutes received a score of 0.5.

The total supply score of the service coverage ranged from 0-5. Each corridor (0.25 mile coverage) was scored based on the highest level of service provided by the routes servicing that corridor. This initial buffer analysis supply score can be found in **Figure 5**.

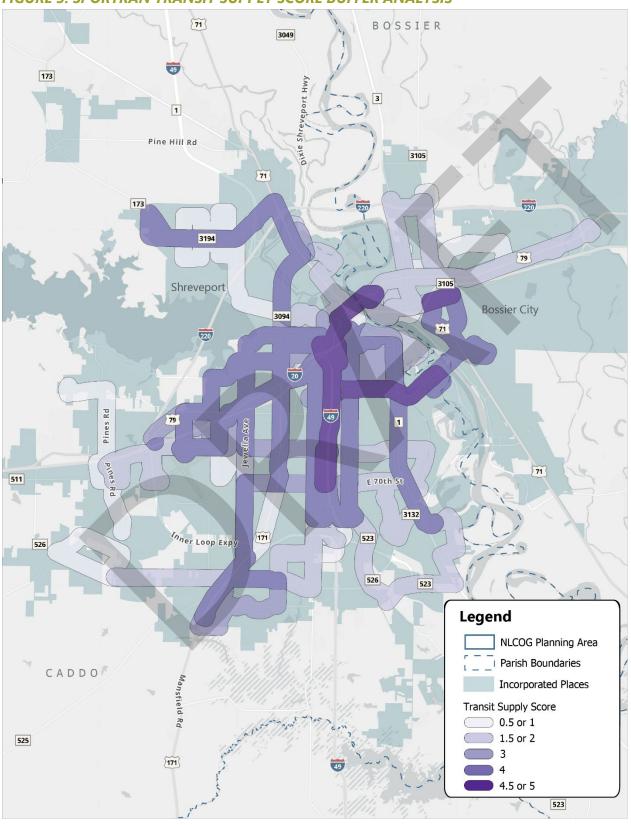
Next, these scores were translated to the block group level based on the percentage of transit coverage in each block group and the level of service or supply score of that transit service. Finally, the supply scores were dispersed from 0 - 5. The resulting transit supply scores mapped by block group can be found in **Figure 6**.

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FIGURE 5: SPORTRAN TRANSIT SUPPLY SCORE BUFFER ANALYSIS

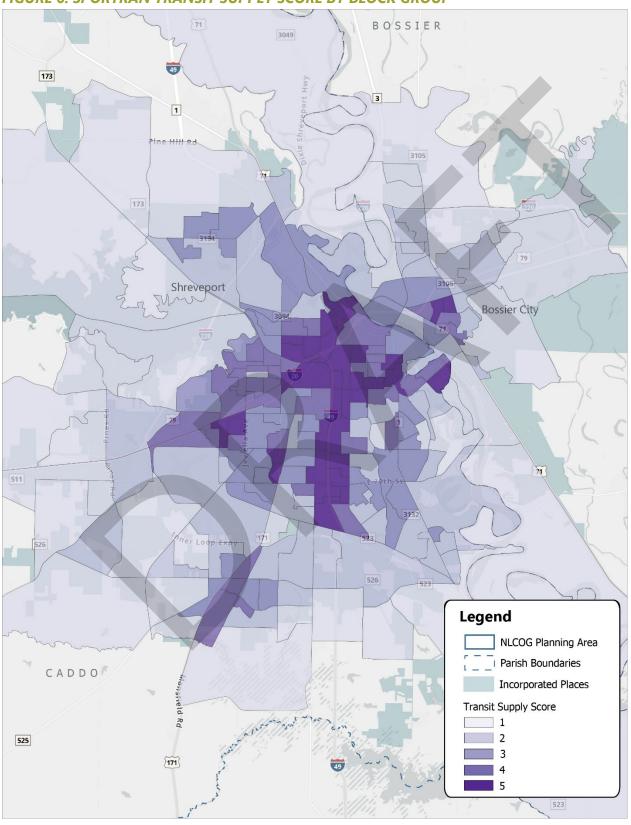


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FIGURE 6: SPORTRAN TRANSIT SUPPLY SCORE BY BLOCK GROUP



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TRANSIT POTENTIAL

Development and land use that has a mix of jobs, retail, and housing indicate areas with high activity and potential for supporting transit. The method used to identify locations in the NLCOG MPA that support transit involved evaluating the measurements of population density, employment density, and potential destinations to calculate transit propensity scores.

The population and employment data are displayed at the Census block group (BG) level using a per square mile measurement. American Community Survey (ACS) 5-Year Estimates for 2018 for population and employment were analyzed to represent current transit potential in the study area. The concentration of potential trip destinations accessible by fixed route service was also summarized at the BG level. Several types of business are considered "key destinations" for transit riders because they are more likely to draw people to use fixed route service. These locations include (but is not limited to) major employers, shopping centers, civic institutions, recreation areas and community centers, nursing and ambulatory care centers, schools of all types, and religious institutions. A total of 1,876 destinations in the NLCOG MPA were identified by North American Industry Classification System (NAICS) code from the InfoUSA dataset.

Of the total NLCOG MPA population, approximately 57% live in a BG with transit coverage, and approximately 81% of the total employment is located in a BG with transit coverage. Of the regional destinations, 48% (895 of 1,876) are located within SporTran transit coverage. These findings are displayed in **Table 3**.

TABLE 3: POPULATION, EMPLOYMENT, AND DESTINATIONS ESTIMATES

Measure	NLCOG Total	Within SporTran Service (0.25 mile)	% Covered by Transit
Population	441,339	252,928	57%
Employment	175,549	141,608	81%
Destinations	1,876	895	48%

Most of the population and employment in the NLCOG MPA are concentrated in Shreveport and Bossier City. There are also concentrations of population located in smaller urban areas such as Benton, Mansfield, Minden, and Springhill. The location and concentrations of the population and employment densities can be found in **Figure 7** and **Figure 8**.

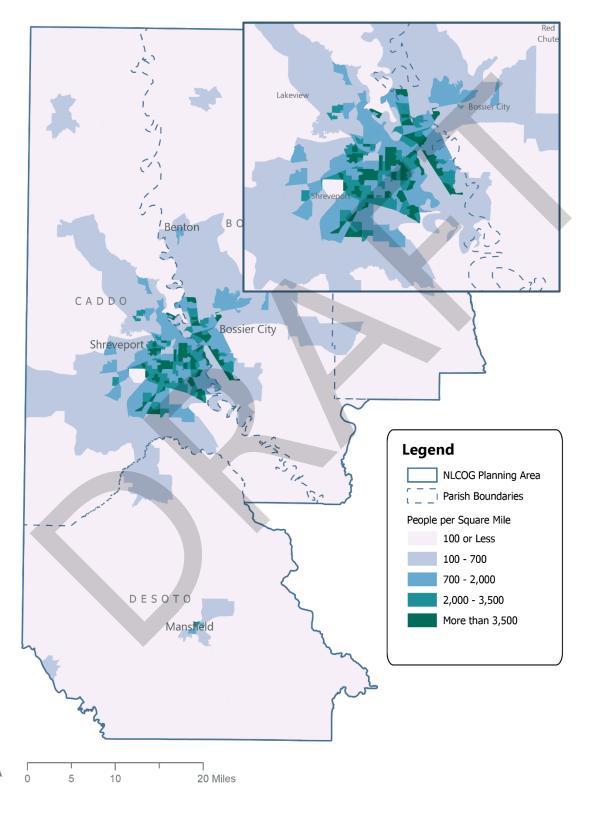
The destinations for transit are dispersed throughout the region, with concentrations in urban areas, especially on the major corridors and in the city center of Shreveport. Destinations have been visualized using a heat map to illustrate the concentrations of these important points in the region (**Figure 9**).

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FIGURE 7: POPULATION DENSITY

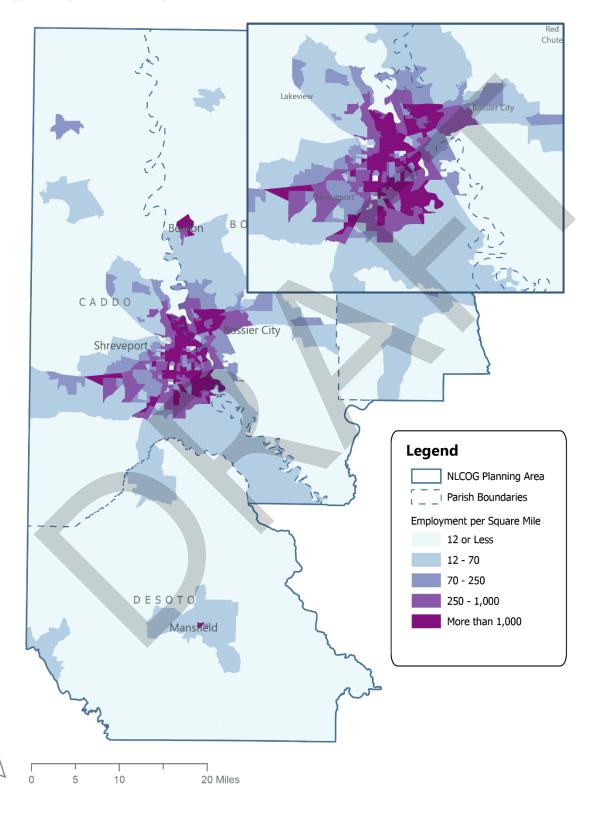


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FIGURE 8: EMPLOYMENT DENSITY

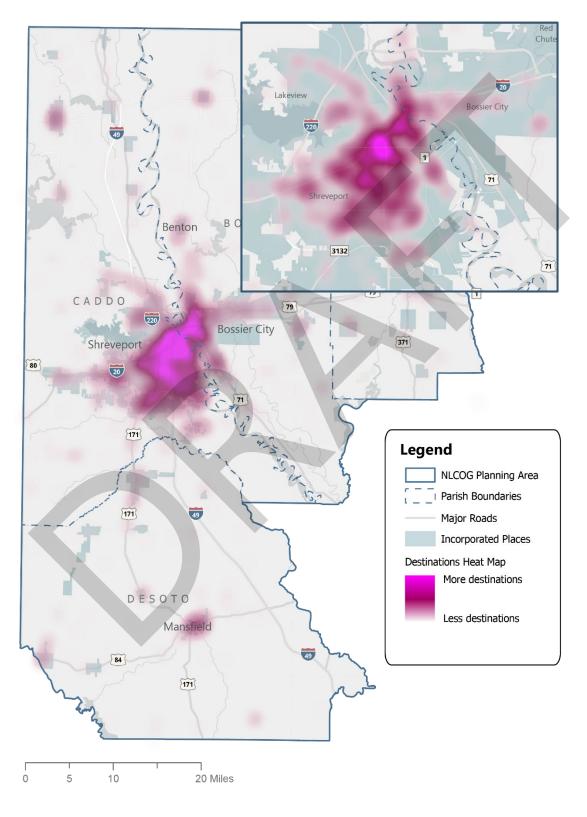


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FIGURE 9: TRANSIT DESTINATIONS



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Transit Propensity Score

In order to gain a detailed understanding of the areas with higher transit propensity, the population, employment, and destinations were aggregated at the BG level and scored. A BG received scores from 0-5 based on each of these factors:

- If population density was higher than the regional average it received a score of 2.
- If employment density was higher than the regional average it received a score of 2.
- If number of destinations was higher than the regional average it received a score of 1.

BGs with high scores can be indicative of development and land uses that support transit use, and can assist in the identification of service gaps. The results of this scoring process can be found in **Figure 10**. Most of the highest scores can be found within the more urban areas, especially Shreveport and Bossier City.

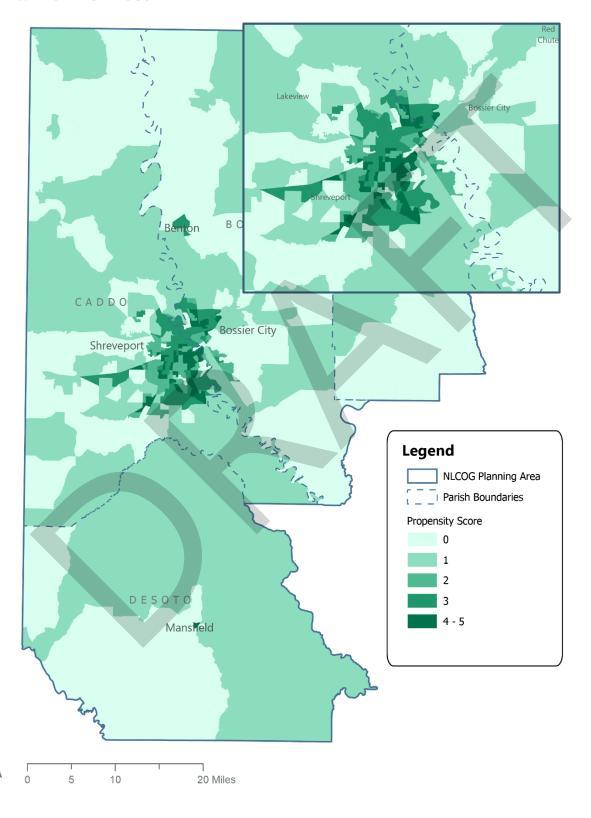


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FIGURE 10: PROPENSITY SCORE



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TRANSIT NEED

Identifying the locations that have a higher need for transit service can help to prioritize transit improvements to better support the community. An analysis of transit need includes the following demographic groups:

- Non-driving population (Youth under 18 and Elderly over 65)
- Population with limited English proficiency (LEP)
- Minority populations
- Households with at least one person with a disability
- Households living in poverty
- Population without access to a personal automobile

The BG data were collected from the ACS 5-Year Estimates for 2018. It is generally understood that individuals in these populations are more likely to rely on public transportation for their mobility needs. Locating the areas in which these groups are concentrated can help ensure that the people with the highest need for public transportation services have access to reliable and effective transit. Each of these demographic groups are considered as categories of transit need for this analysis, and are individually mapped in **Figure 11** through **Figure 12**.

Of the populations with high need for transit, a large proportion live in large rural block groups along parish peripheries. The existing fixed route network operating in Shreveport and Bossier City serves about 57% (or 99,786 out of 175,727) of non-driving populations in Bossier, Caddo, DeSoto, and Webster Parishes (**Table 4**). As populations age in place, quality-of-life can be greatly impacted by being connected to transit services. If these households are not well-connected, the ability to live independently can be negatively affected. Similarly, many households with people under 18 are reliant on transit or getting a ride if a family member is able to drive them. Of households with no access to a vehicle, about 74% are served by SporTran fixed route service.

The four-parish NLCOG MPA has a relatively high number of households where at least one person has a disability. Nationwide, about 25% of the population have a disability, according to the Center for Disease Control (CDC), versus over 27% of households in the NLCOG MPA. While all these households are served by demand response service, only 56% are served by fixed route transit. Further, approximately 72% of minority populations, 62% of households in poverty, and 79% of LEP populations are served by transit.

TABLE 4: TRANSIT NEED ESTIMATES

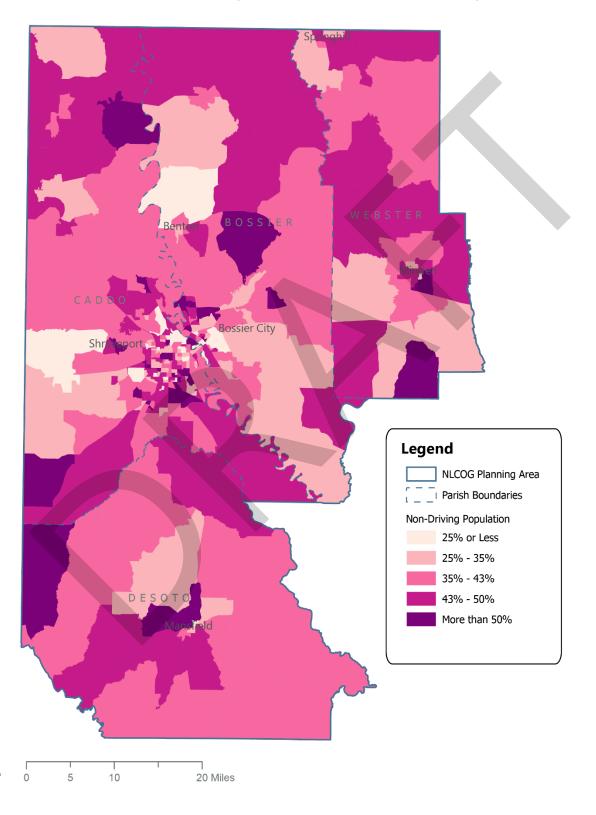
Measure	NLCOG	Within SporTran Service (0.25 mile)	% Covered by Transit
Non-Driving Population	175,727	99,786	57%
LEP Population	2,188	1,727	79%
Minority Population	203,955	146,003	72%
Households with Disabilities	47,295	26,380	56%
Households Living in Poverty	18,231	11,250	62%
No Vehicle Households	14,526	10,769	74%

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FIGURE 11: NON-DRIVING POPULATION (AGES 65 AND OVER OR UNDER 18)

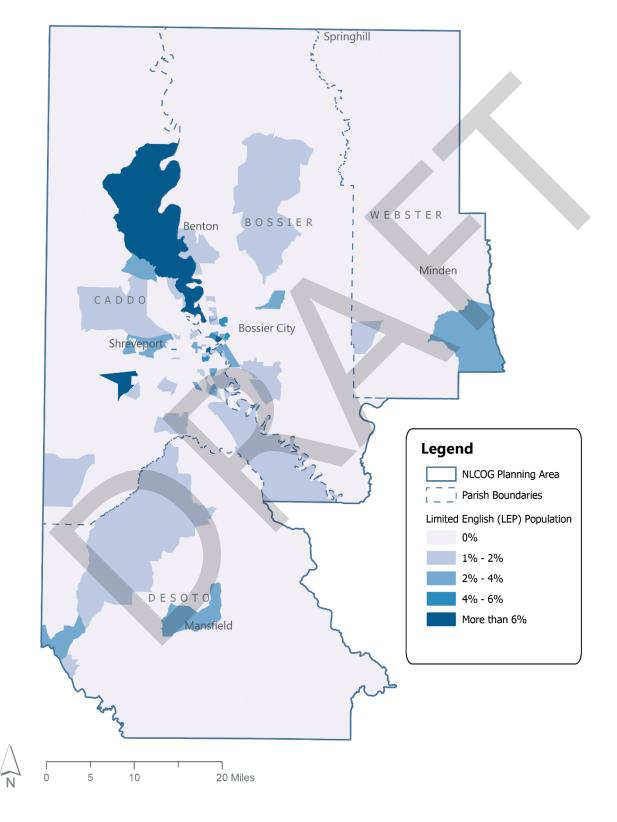


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FIGURE 12: LIMITED ENGLISH PROFICIENCY POPULATION

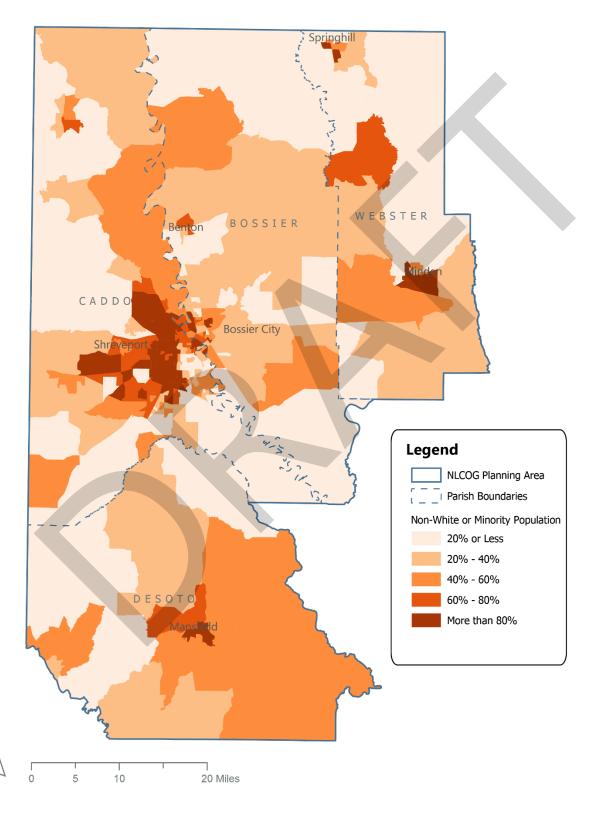


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FIGURE 13: NON-WHITE OR MINORITY POPULATION

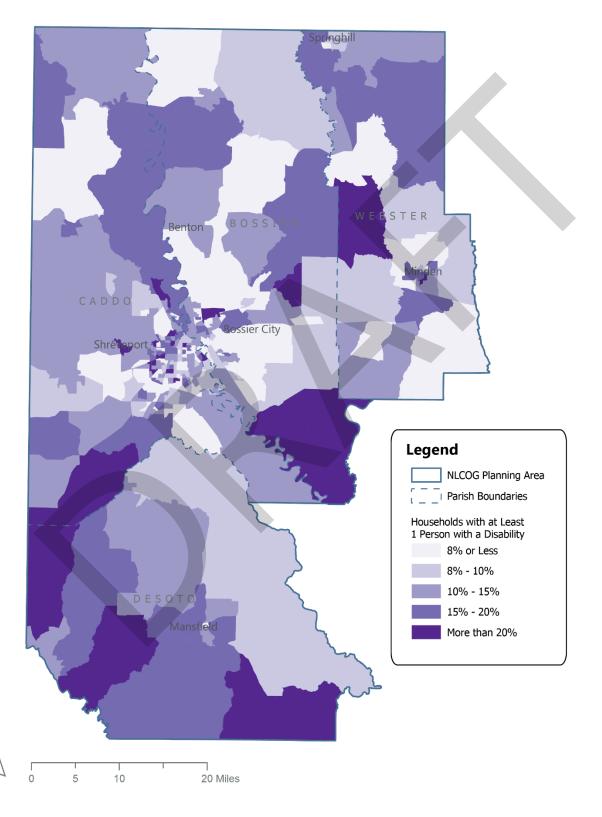


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FIGURE 14: HOUSEHOLDS WITH AT LEAST 1 PERSON WITH A DISABILITY

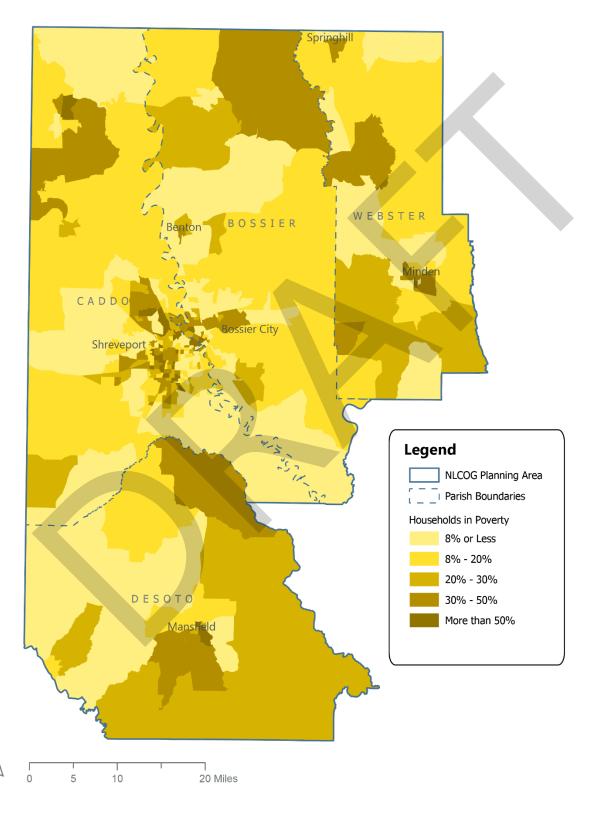


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FIGURE 15: HOUSEHOLDS IN POVERTY

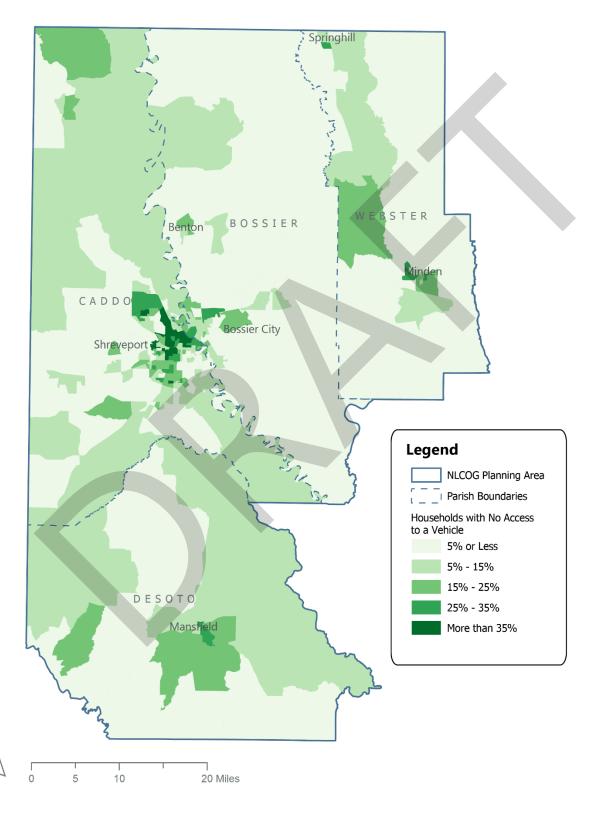


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FIGURE 16: HOUSEHOLDS WITH NO ACCESS TO A VEHICLE



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Transit Need Score

Each of these demographic groups has been aggregated into a transit need score to represent the areas of greatest comparable need in the NLCOG MPA. It should be noted that a person might be counted in more than one of the categories of transit need. For example, someone who is 16 years of age, speaks limited English, and lives in a household without a vehicle would register in three of the demographic groups. This inclusion of individuals in multiple categories benefits the analysis because it ensures that locations with people who have multiple needs (or a higher index of transit need) are highlighted prominently in the analysis.

Similar to the scoring of transit propensity, each BG was compared to the NLCOG regional averages to provide an understanding of the comparative need in the local context. The following criteria were used to calculate a transit need score out of 6 total points:

- Non-driving population greater than the regional average is a score of 1
- LEP population greater than the regional average is a score of 1
- Minority populations greater than the regional average is a score of 1
- Households with at least one person with a disability greater than the regional average is a score of 1
- Households living in poverty greater than the regional average is a score of 1
- Population without access to a personal automobile greater than the regional average is a score of 1

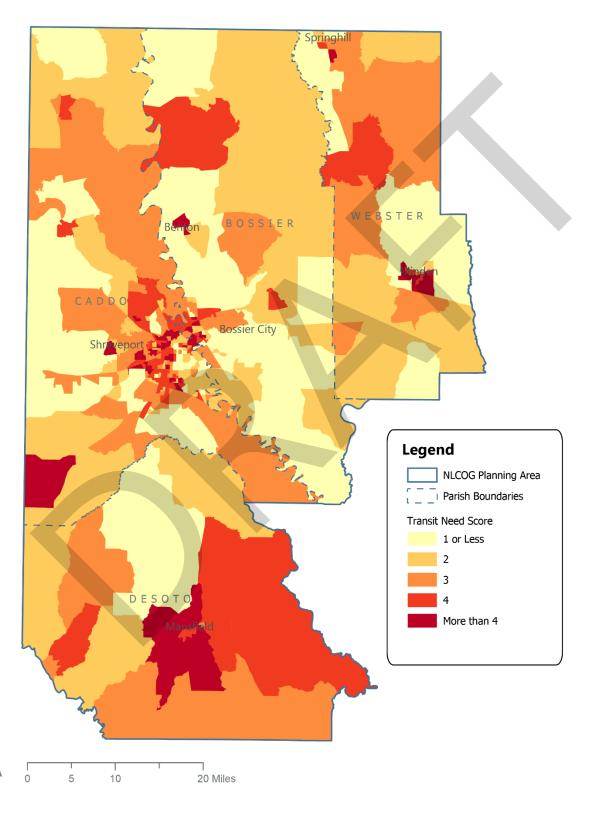
The results of this transit need scoring process can be seen in **Figure 17**. In contrast to the propensity score, the populations which show evidence of high transit need are distributed throughout the NLCOG MPA and not simply concentrated in the urban areas. Although some areas that are more rural may not warrant fixed route transit, they should be considered in the coordination of on-demand services to ensure that these groups have access to mobility options.

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FIGURE 17: TRANSIT NEED SCORE



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TRANSIT SERVICE GAPS

"Service gaps" are areas where transit supply is inadequate or could be improved to meet the expected demand. Identifying locations that have high potential demand and inadequate transit supply can assist in the prioritization of future transit investments. Assigning a cumulative score of transit demand that is on the same scale and geography as the transit supply score can create a useful comparison for identifying unmet areas of demand for transit.

Transit Demand Score

Locations of people, employment, and destinations that have the potential to support transit, and populations in need of transit contribute to the demand for transit in the region. For this part of the analysis, criteria from the previous sections were selected, standardized, and scored to provide a cumulative look at transit demand. The criteria selected from the transit needs assessment are presented in **Table 5**. The resulting transit demand score was standardized onto a scale of 0-5 and can be seen in **Figure 18**.

TABLE 5: TRANSIT DEMAND SCORE CRITERIA

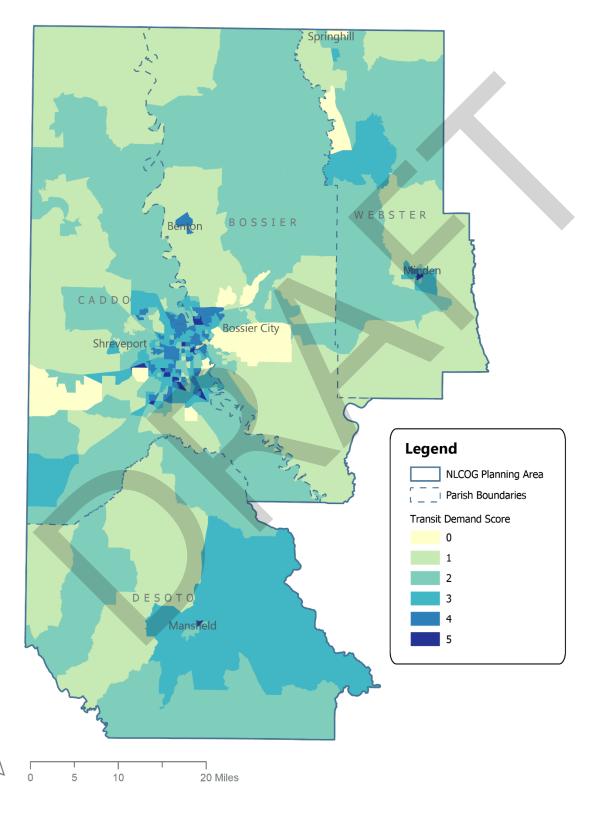
	Description	Criteria	Max Score
Transit Above average density or	Population Density	2	
Propensity		Employment Density	2
Score compared to NLCOG	Destinations	1	
Transit Need	3 1	Non-Driving Population	1
Score		LEP Population	1
		Minority Population	1
	Households with at least 1 Person with a Disability	1	
	Households Living in Poverty	1	
	No Vehicle Households	1	

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FIGURE 18: TRANSIT DEMAND SCORE



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Identification of Service Gaps

The transit demand score (0-5) and the transit supply score (0-5) presented earlier in this memo were subtracted (Demand – Supply) to gain an understanding of the locations of potential gaps, or areas where there is not enough transit supply to meet the apparent demand. As mentioned, this comparison can assist in the prioritization of future transit investments, however, a more comprehensive analysis of transit ridership patterns, travel patterns, comprehensive public engagement, and more should be considered when adjusting transit service. The resulting analysis of potential gaps in service and the transit supply area are shown in **Figure 19**.

The SporTran supply is meeting or exceeding current transit demand in much of the Shreveport and Bossier City area. A few gaps which have demand for more service or supply are evident from the map of the SporTran Supply area, including:

- North Bossier City: Between Airline Dr, I-220, and Shed Rd
- North Bossier City: Near the Pierre Bossier Mall
- Southeast Shreveport: Between LA-1, Flournoy Lucas Rd, and E Bert Kouns Industrial Loop

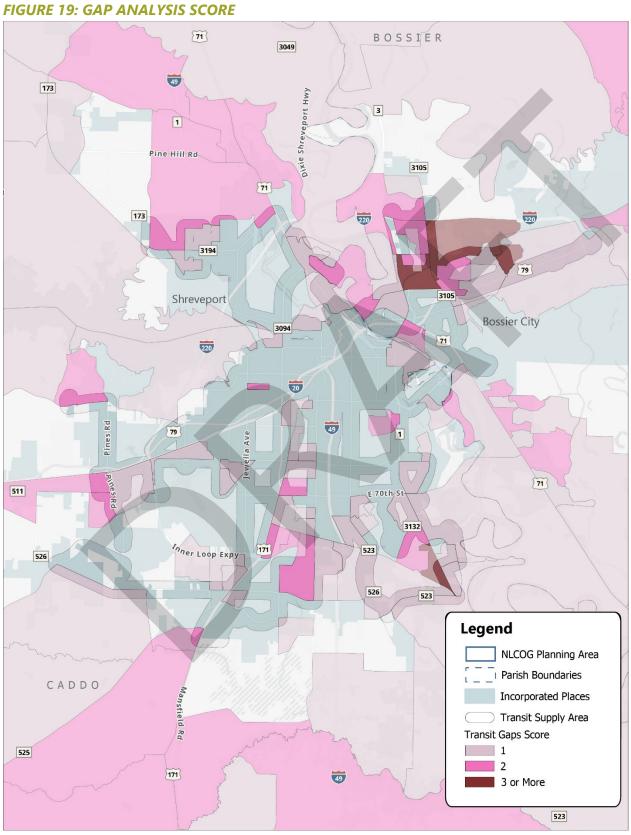
Other suburban and rural areas also show transit demand that is not met by the SporTran service as they are outside the service area. Demand response service is also operated throughout the area by special application and approval. Because of the region's large, rural block groups, it is a challenge to pinpoint specific places where transit may be in higher demand within these areas. In addition, denser block groups near Benton in Bossier Parish, Minden in Webster Parish, and Mansfield in DeSoto Parish are home to higher transit demand that may be more likely to be transit dependent compared with the rest of the NLCOG MPA. According to the CHSTP, demand response transit service reaches the entirety of the four-parish planning area, however, many of the demand response service providers only serve disabled or aging segments of the population. Further review of the transit demand in relation to these demand-response services should be conducted to understand service effectiveness.

To better meet the demand identified in this analysis, service provided by the City of Shreveport via SporTran's fixed route network could be expanded in collaboration with other municipalities or with political support as appropriate within the planning area. Given known service and funding constraints, the best means for meeting unmet demand will be dependent on the agency's ability to engage with stakeholders to identify more detailed areas for investment and to garner the necessary support in those regions. At present, SporTran is scheduled to begin some expansion into rural parts of Caddo Parish via increased demand-response service under a new paratransit contract. Further, the upcoming SporTran strategic plan is expected to consider other public transportation alternatives. Additional strategies could include the creation of a Rural Transportation Planning Organization (RTPO) adjacent to NLCOG, increased collaboration via existing municipal plans, or a public-private partnership with rideshare services such as Uber and Lyft to close service gaps.

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CONCLUSION

This regional analysis of transit supply, potential, need, and service gaps for the NLCOG MPA can assist in the prioritization of future transit investments. However, a more comprehensive analysis of both the on-demand and fixed route services, which includes an understanding of transit ridership, travel patterns, and the needs of the public, should be considered before adjusting transit services in the NLCOG MPA. The analysis of transit supply identified the location and prevalence of existing SporTran services in Shreveport and Bossier City and provided a general understanding of the other transit providers in the region. The areas in the NLCOG MPA with the strongest potential for transit are in Shreveport and Bossier City, as well as smaller municipalities in the region (e.g., Benton and Mansfield).

The review of transit-need populations revealed a dispersed distribution and variety of needs that might not be conducive for fixed route transit service alone. Coordination between SporTran and other NLCOG public transportation providers will be critical in ensuring that these populations have access to important regional services. Finally, the comparison of transit supply and a cumulative score of transit demand provided some insights into potential service gaps, or areas where there is not enough transit supply to meet the apparent demand, including:

- North Bossier City: Between Airline Dr, I-220, and Shed Rd
- North Bossier City: Near the Pierre Bossier Mall
- Southeast Shreveport: Between LA-1, Flournoy Lucas Rd, and E Bert Kouns Industrial Loop

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