



Vision, Goals, & Objectives

Working Paper 2 provides an overview of the Bullhead Area Transit System (BATS) Short and Long Range Transit Plan purpose, current socioeconomic trends, and user trends of BATS riders. This paper then outlines the previous BATS goals and objectives, overviews the development process, and presents a proposed vision, goals and objectives that will guide the development of this plan and the future of transit service in Bullhead City.

Purpose of the Plan

The Short and Long Range Transit Plan will guide the development of transit service today and tomorrow. Ultimately, the Plan will be a blueprint that will guide transit planning, service operations, capital investment, and policy decisions. To create a blueprint for a sustainable, safe, innovative, and efficient transit service that improves the quality of life of residents, supports economic growth, and provides necessary local and regional transportation options, the Plan aims to:

- Evaluate existing transit service and identify opportunities to improve service and efficiency
- Understand the desires and expectations of residents and transit users
- Identify solutions and partnerships to support long-lasting, sustainable public transit service
- Develop a plan for short- and long-term public transportation improvements.

Current Socioeconomic & BATS Rider Trends

Bullhead City Socioeconomic Key Findings

Socioeconomic data is utilized to understand current and future transit demand within the study area. This information was used to identify areas with the greatest transit needs. The US Census Bureau estimates that Bullhead City has a population of 41,348 as of the 2020 Decennial Census.¹ This is a 3.4% increase over the 2010 population of 39,540. Employment density information shown below is from the Mohave Association of Governments employment database. As 2020 Decennial Census data is not yet available for more granulated socioeconomic analysis, the population density and socioeconomic sections present American Community Survey 2015-2019 5-Year Estimates.

Population & Employment Density

Population density is one of the most important factors when determining the success of a public transportation system, as the majority of trips (transit and non-transit) originate or end at the home.

Figure 1 illustrates the distribution and density of population in the study area. Bullhead's population is most densely concentrated in the Riveria area that's bordered by the Colorado River. Other pockets of density include the McCormick Boulevard corridor and stretches along Mohave Valley Highway. These areas are surrounded by comparatively less dense areas that nonetheless have significant populations.

Figure 2 illustrates the distribution of jobs in Bullhead City. Employment densities generally track population densities, with the Riveria area featuring comparatively high employment densities. Existing BATS services provide great access to these employment opportunities.

¹ <https://www.census.gov/quickfacts/fact/table/bullheadcitycityarizona,US/PST045219>



Figure 1 Population Density

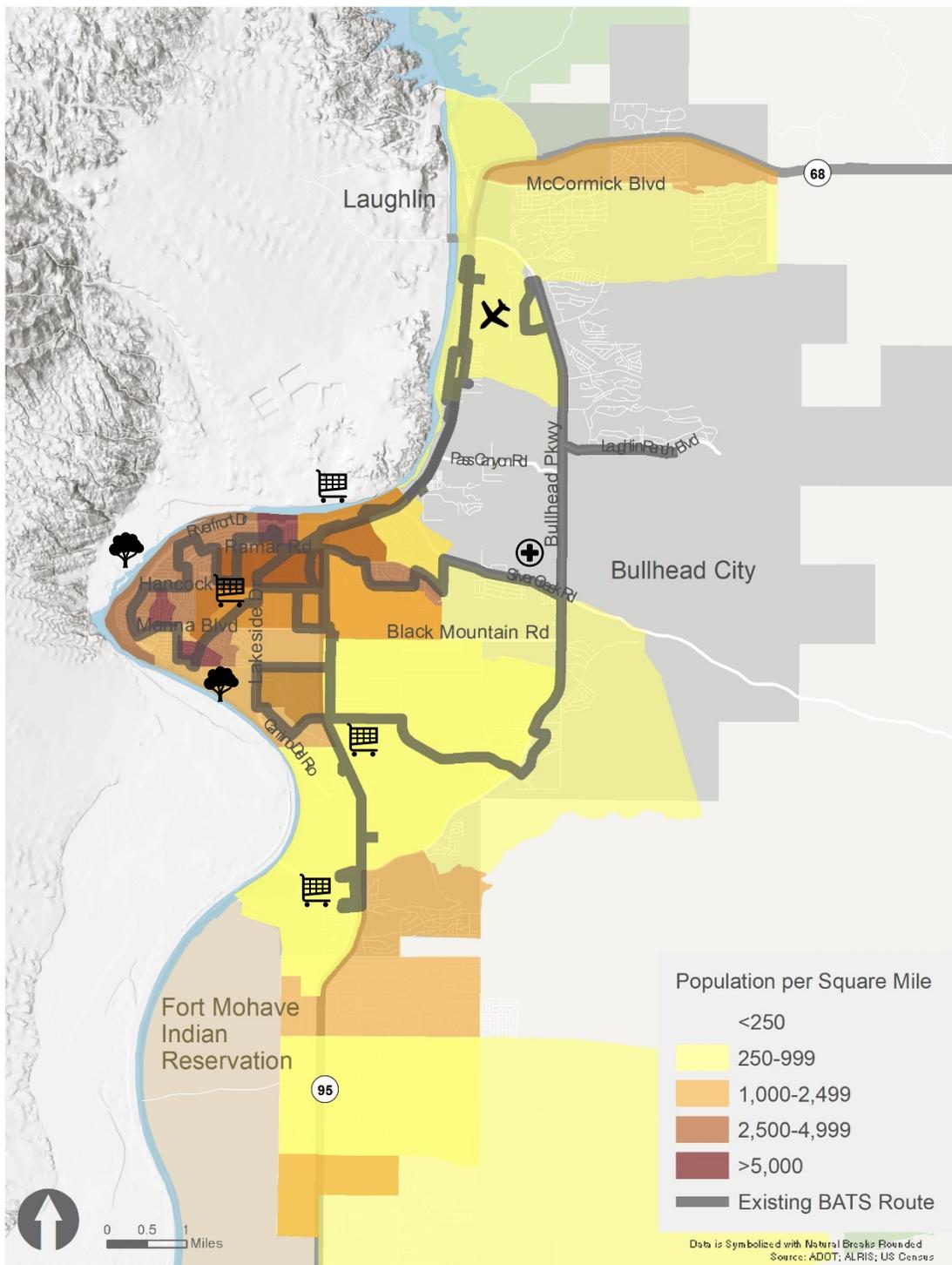
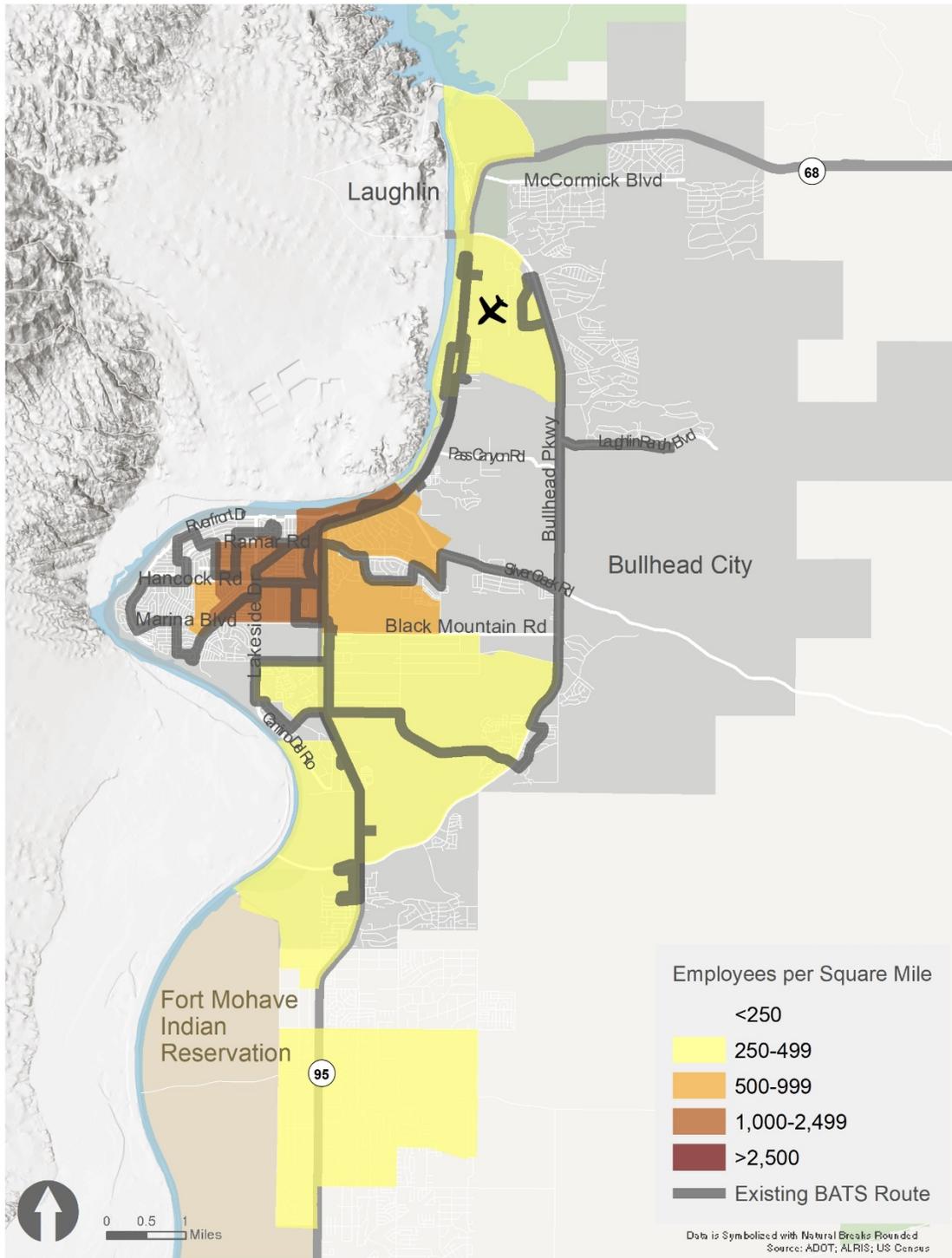




Figure 2 Employment Density





Transit Dependent Populations

In addition to considering the overall population characteristics of an area, understanding specific demographic distributions and needs is vital to evaluating the quality of a transit system. Transit riders are typically generalized into two categories:

- **Choice riders** have adequate resources and abilities to own, operate, and maintain a vehicle but choose to use transit. Choice riders are more likely to use public transportation for commuting or when transit offers an advantage over driving (i.e., roads are congested, convenience, high parking fees, passenger amenities, etc.)
- **Captive riders**, also referred to as transit dependent riders, use public transportation because they lack access or resources to own or operate a vehicle. These riders use public transportation for most of their trips, including to get to work, medical appointments, shops, and social activities.

Choice riders can be located anywhere in a community, with the strongest market areas typically being areas with high population or employment density. Market areas for captive riders, however, is more complex, as an understanding of population distributions and considerations for special concerns is needed. For example, older adults tend to travel during the daytime and require shorter walks to/from a bus stop. The following outlines seven demographic groups typically associated with higher use of transit:

- **Youth** – individuals under 18 years old likely have limited access or ability to drive a vehicle.
- **Elderly Adults** – individuals aged 65 and older may become less comfortable driving as they age or are no longer physically able to drive.
- **People of a Racial Minority** – often live in neighborhoods that have suffered systemic disinvestment and other barriers to transportation.
- **People Experiencing Poverty** – individuals who live within a set of income thresholds established by the US Census Bureau, which vary by family size and composition. Low-income households tend to rely on public transportation as it is less expensive than owning and operating a vehicle.
- **People with Disabilities** – people with a disability often have difficulty operating a vehicle and require access to public transportation.
- **Low English Proficiency Households** – low English proficiency can be a barrier for interacting with the transportation system, particularly in terms of owning and operating a vehicle. Typically, households with low English proficiency rely on other modes to meet their mobility needs.
- **Female-Headed Households** – households led by a single female-identifying person with children under 18 years tend to have a fixed income and limited personal vehicle availability.
- **Zero Vehicle Households** – persons residing in households without access to a vehicle typically rely on walking, biking, public transportation, or carpooling to meet their mobility needs.

Title VI of the Civil Rights Act of 1964 prohibits discrimination in the provision of federally supported benefits and services, including public transportation service. In addition to Title VI populations, this analysis presents information about the study area population's transit reliant populations, including poverty status, age, racial/ethnic composition, and English proficiency, and proportion of people with



disabilities. Table 1 breaks down these metrics for Bullhead City and key census-designated places (CDPs) and provides the state’s average, and Mohave County’s, for comparison. This analysis provides information regarding populations who are typically more reliant on transit or have been historically underrepresented in planning processes. Values higher than the state average are **bolded**. As shown, Bullhead City and surrounding communities tend to have a higher percentage of people below the federal poverty line, older adults, zero vehicle households, and people with disabilities.

Table 1 Title VI and Underrepresented Populations

	Arizona	Mohave County	Bullhead City	Fort Mohave Reservation	Katherine CDP	Mesquite Creek CDP	Laughlin CDP, NV	Golden Valley CDP	Kingman
Total Population	6,891,224	207,695	39,993	15,545	66	458	7,965	9,067	42,241
Total Households	2,571,268	86,889	17,138	6,507	59	233	4,094	3,925	17,445
Young People	23.3%	17.5%	17.3%	11.4%	0.0%	5.9%	7.7%	11.4%	21.2%
Senior People	17.3%	29.6%	29.4%	31.7%	90.9%	62.5%	42.9%	37.7%	24.2%
People of a Racial Minority	45.1%	9.8%	29.2%	29.0%	0.0%	4.6%	15.8%	12.9%	19.8%
People Experiencing Poverty	15.1%	10.6%	18.4%	12.4%	0.0%	3.1%	7.1%	17.8%	18.5%
People with Disabilities	13.0%	21.4%	23.0%	-	-	-	-	-	21.0%
Low English Proficiency Households	4.0%	0.9%	2.6%	-	-	-	-	-	0.5%
Zero Vehicle Households	6.2%	5.4%	7.6%	2.7%	0.0%	0.9%	10.5%	1.8%	7.5%

Source: American Community Survey 2014–2019 5-Year Estimates; Tables S1602, S1701, S1810, B25044.

Youth & Seniors

Analyzing an area’s age composition helps decision-makers understand the potential need for increased transit options. As people age, they typically begin to drive less and requires alternative modes of transportation for medical appointments, shopping, and visiting family and friends. Children are unable to operate a vehicle and must rely on family, friends, walking, biking, or public transportation to travel. **Figure 3** and **Figure 4** illustrate areas with concentrations of youth and older adults, respectively. As illustrated in the figures, both populations generally follow the pattern outlined earlier, with emphasis on the neighborhoods that border the Colorado River. Additionally, a cluster of elderly adults live along the Ramar Road corridor.

People of a Racial Minority

People of a racial minority, defined by the US Census Bureau as non-white and/or Hispanic populations, typically live in neighborhoods that have suffered systemic disinvestment and other barriers to transportation. Understanding where people of color live can be a step towards equitable implementing



transit service that serves their needs. **Figure 5** illustrates areas with high percentages of people of color. Densities of people of color exist along the Clearwater Drive, Riveria Boulevard, and Rio Grande Road corridors.

People Experiencing Poverty

Low-income populations are individuals that live within a set of income thresholds established by the US Census Bureau, which vary by family size and composition. Historically, people experiencing poverty may rely on active and public transportation more than the general population; therefore, recognition of this group's concentration centers is needed to determine transportation needs. **Figure 6** illustrates areas with high percentages of people living below the poverty level. Densities of individuals residing below the poverty level exist along the Clearwater Drive, Colorado Boulevard, and Ramar Road corridors.

People with Disabilities

Low English proficiency can be a barrier for interacting with the transportation system, particularly in terms of owning and operating a vehicle. Typically, households with low English proficiency rely on other modes to meet their mobility needs. **Figure 7** illustrates areas with high percentages of households with low English proficiency. Densities of households with low English proficiency exist along the Clearwater Drive, Colorado Boulevard, and Ramar Road corridors.

Low English Proficiency Households

Low English proficiency can be a barrier for interacting with the transportation system, particularly in terms of owning and operating a vehicle. Typically, households with low English proficiency rely on other modes to meet their mobility needs. **Figure 8** illustrates areas with high percentages of households with low English proficiency. Densities of households with low English proficiency exist along the Clearwater Drive, Colorado Boulevard, and Ramar Road corridors.

Female-Headed Households

Female-headed households are identified as females with no spouse present, with children younger than 18 years of age present in the household. Households led by females are especially sensitive in the framework of planning for public transit services. Historically, this population group is particularly vulnerable to poverty. Households that have low incomes generally have limited vehicle availability, spend a higher proportion of income on transportation expenses, and have a higher usage of public transportation or carpooling. **Figure 9** illustrates areas with high percentages of households with female heads of houses. Female led households are primarily concentrated along the Clearwater Drive, Riverview Drive, and Ramar Road corridors.

Zero Vehicle Households

Vehicle availability may limit a person's ability to commute to work or get to an activity center. Depending on the number of people living in each household, a certain number of vehicles may not be able to provide everyone with a means of transportation. **Figure 10** illustrates areas with concentrations of households with no vehicles available. The highest densities of zero car households occur in the area bounded by Ramar Road to the north and Hancock Road to the south, as well as along Riveria Boulevard.



Figure 3 Senior Population Density

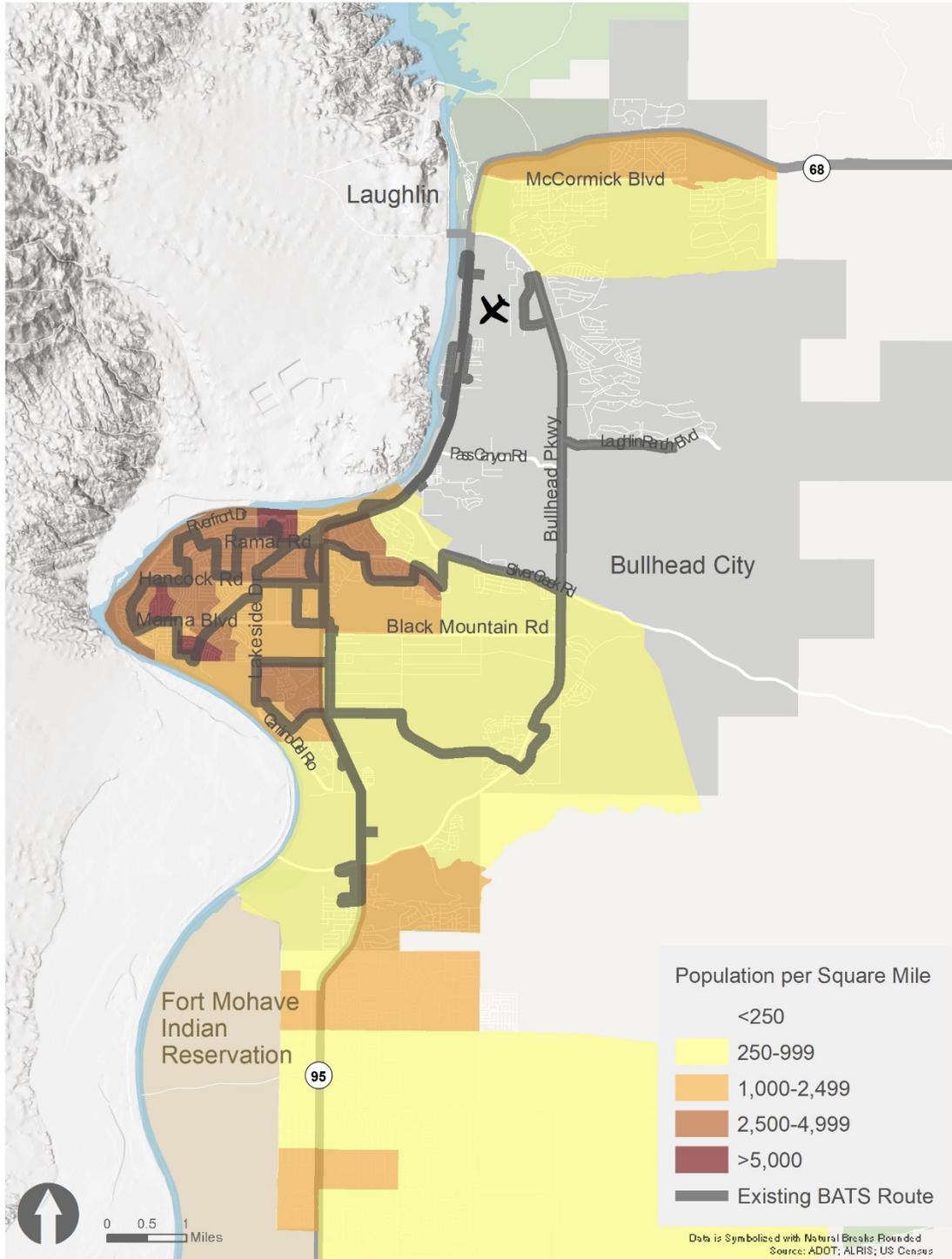




Figure 4 Youth Population Density

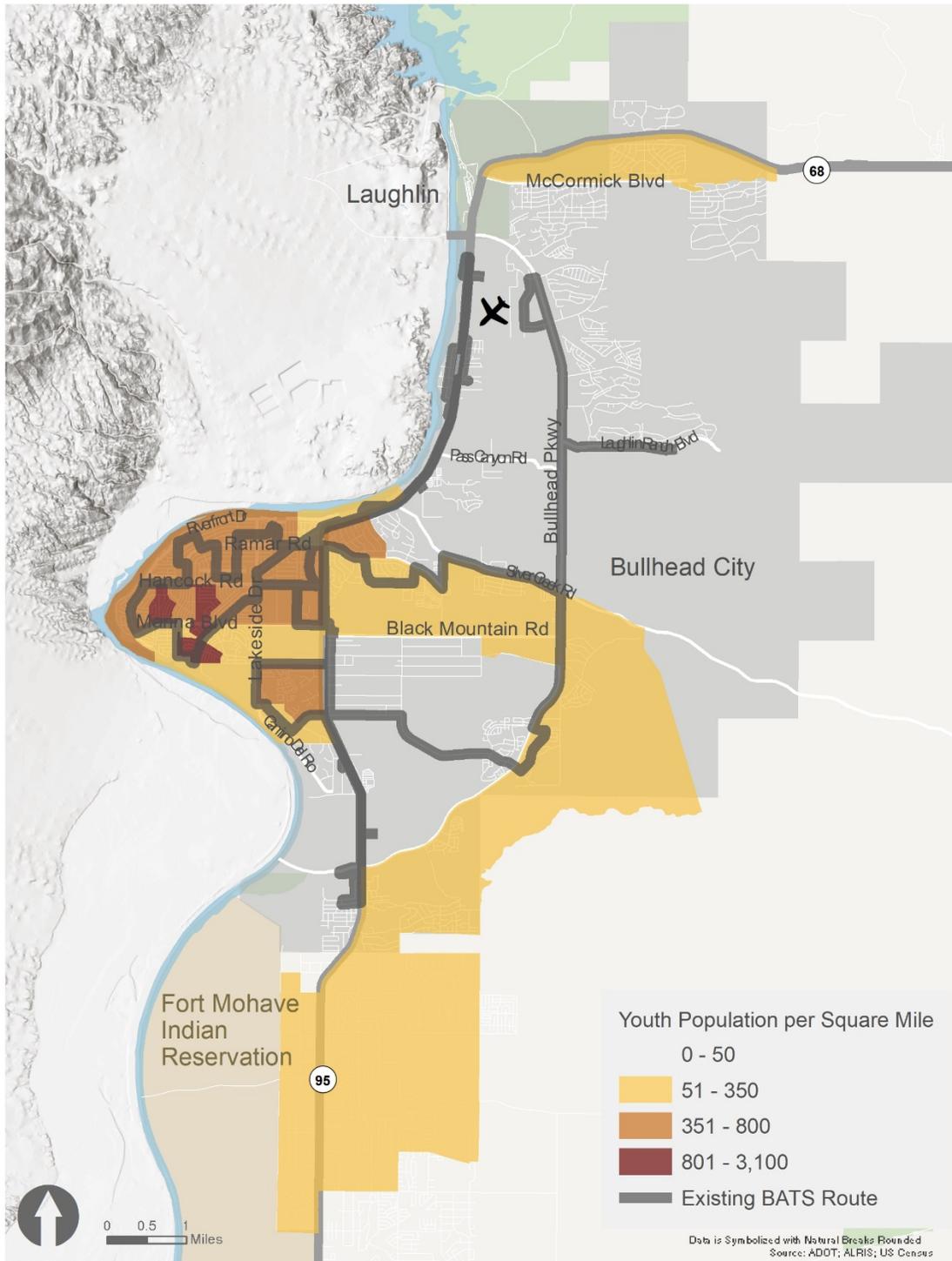




Figure 5 People of a Racial Minority (Density)

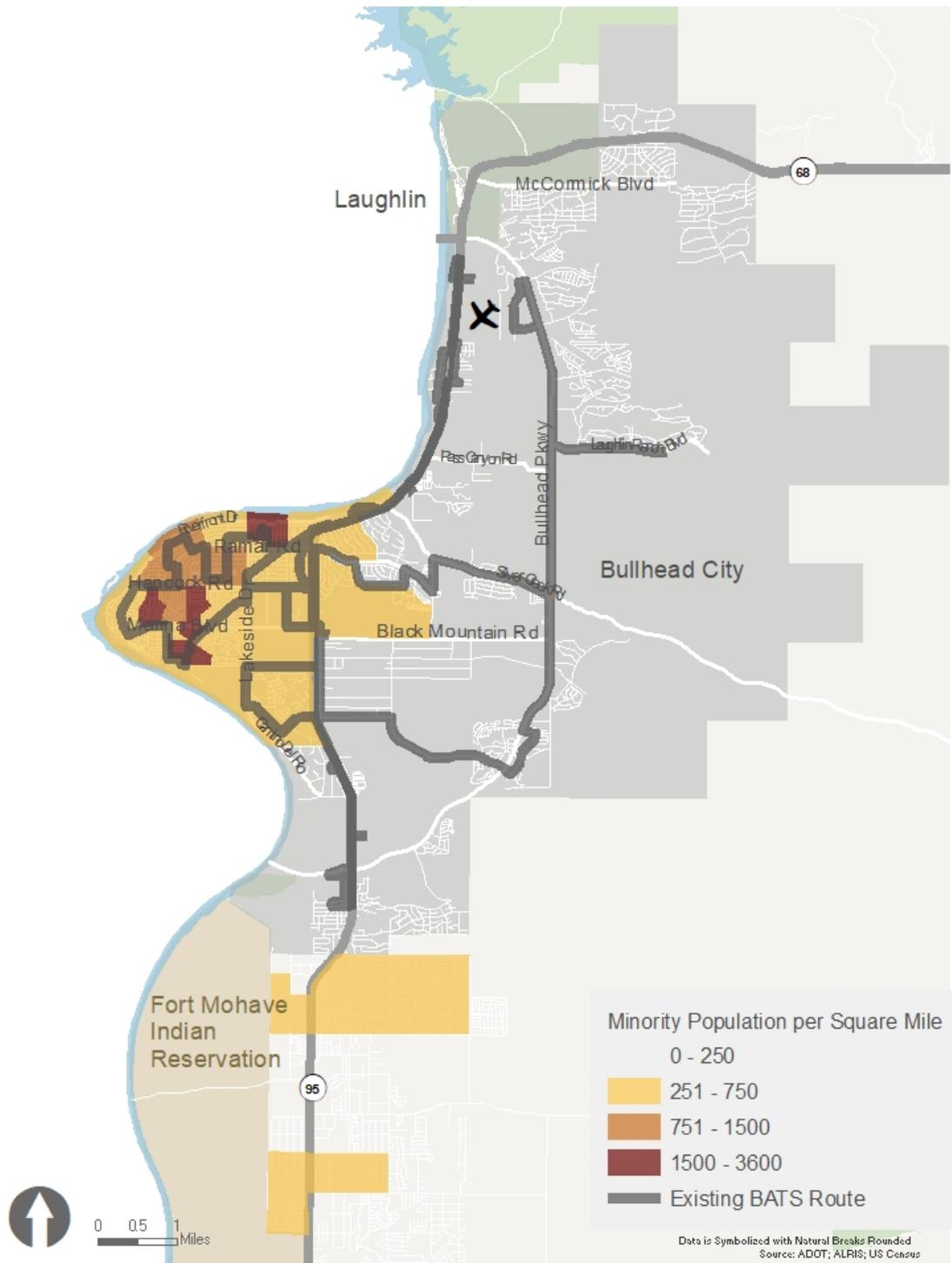




Figure 6 People Experiencing Poverty (Density)

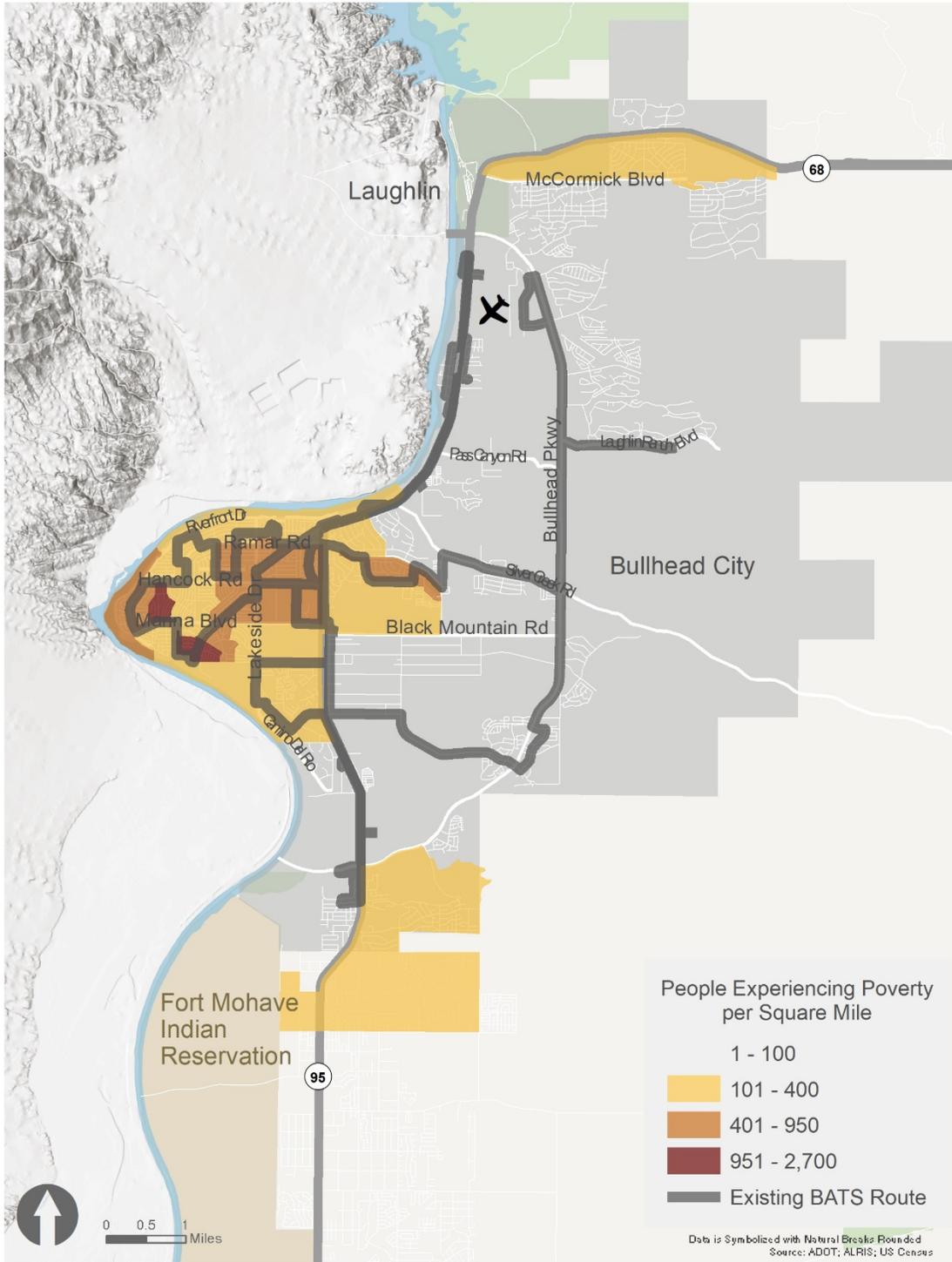




Figure 7 People with Disabilities (Density)

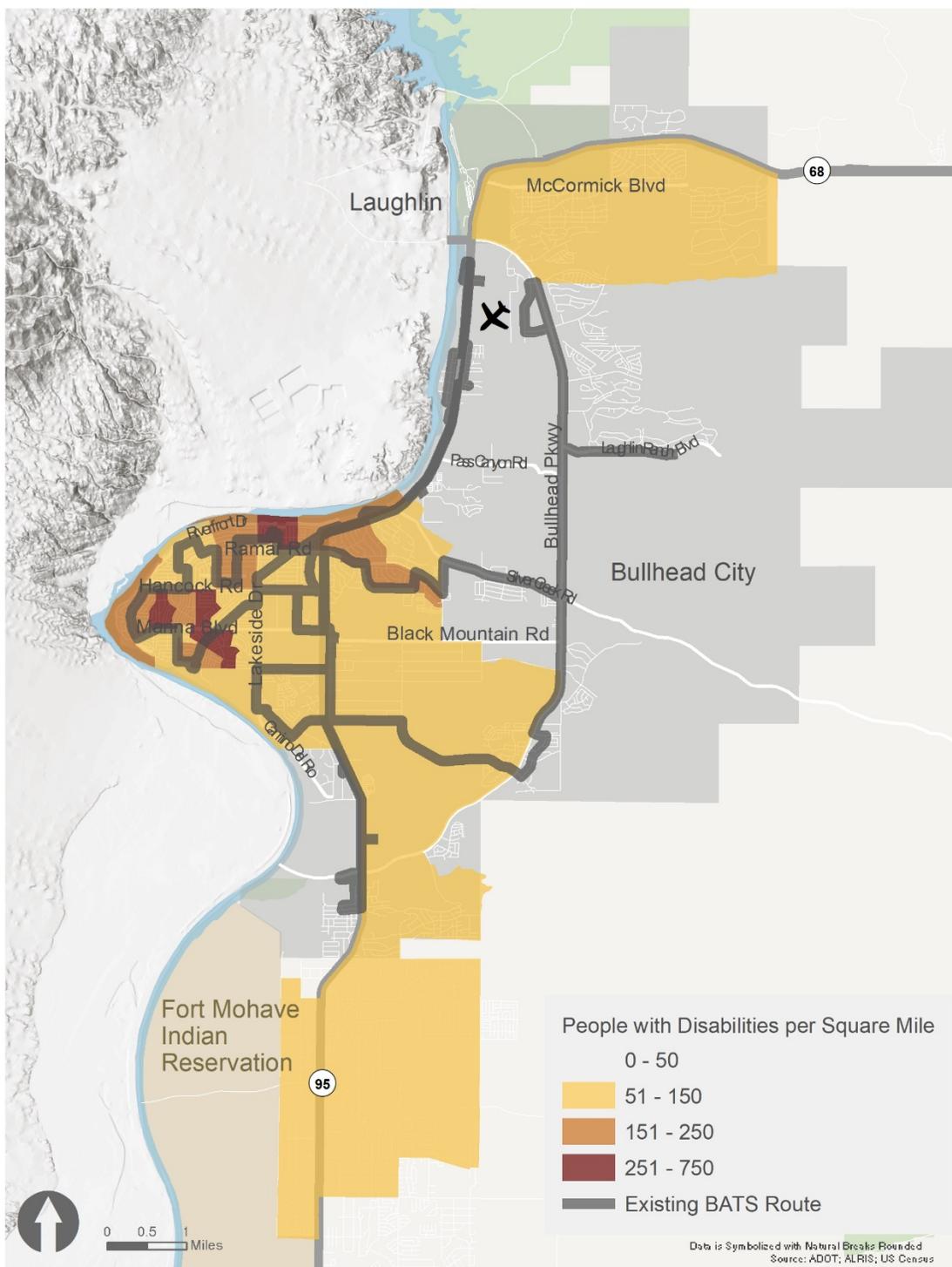




Figure 8 Low English Proficiency Households (Density)

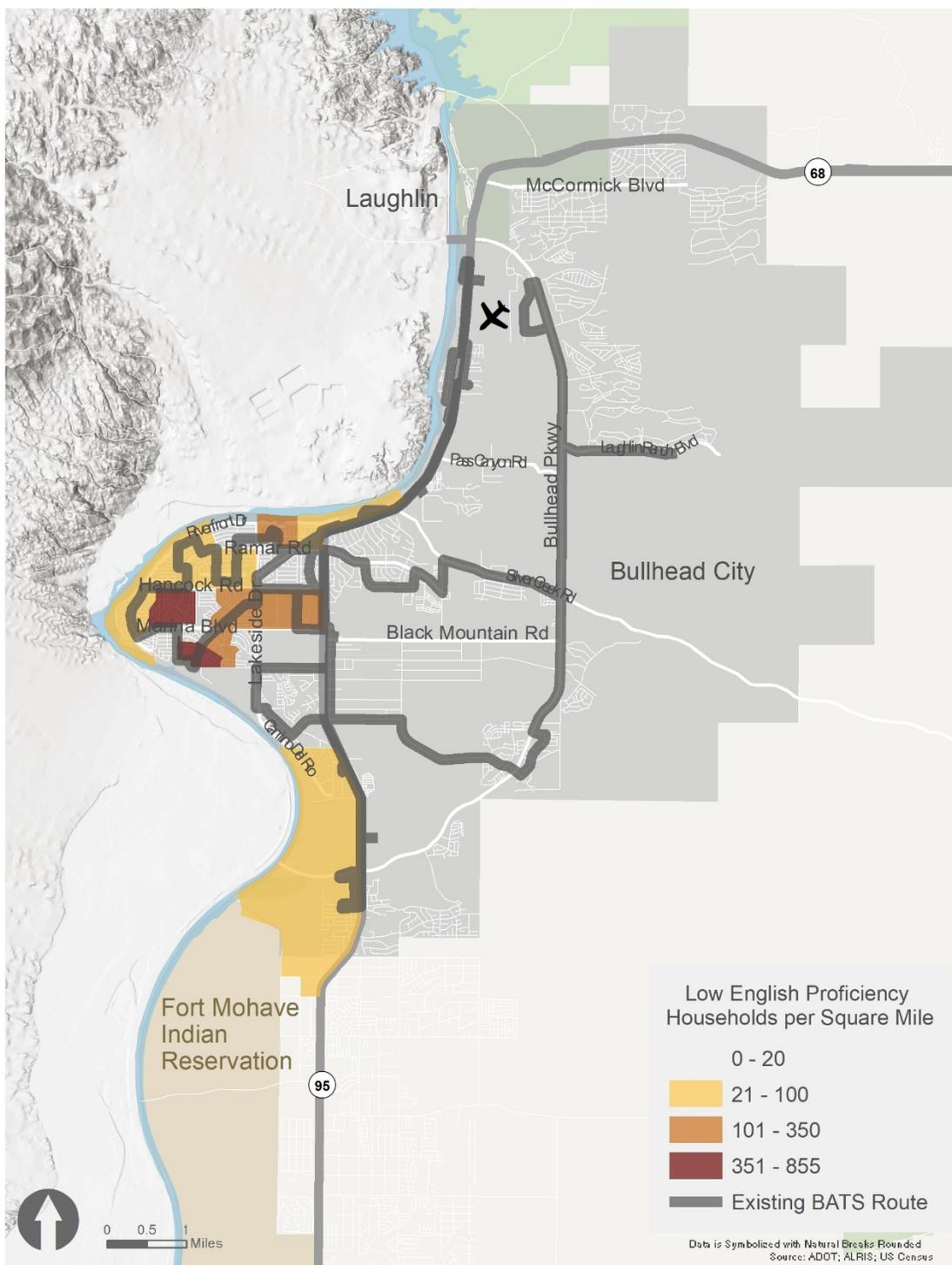




Figure 9 Female Headed Households (Density)

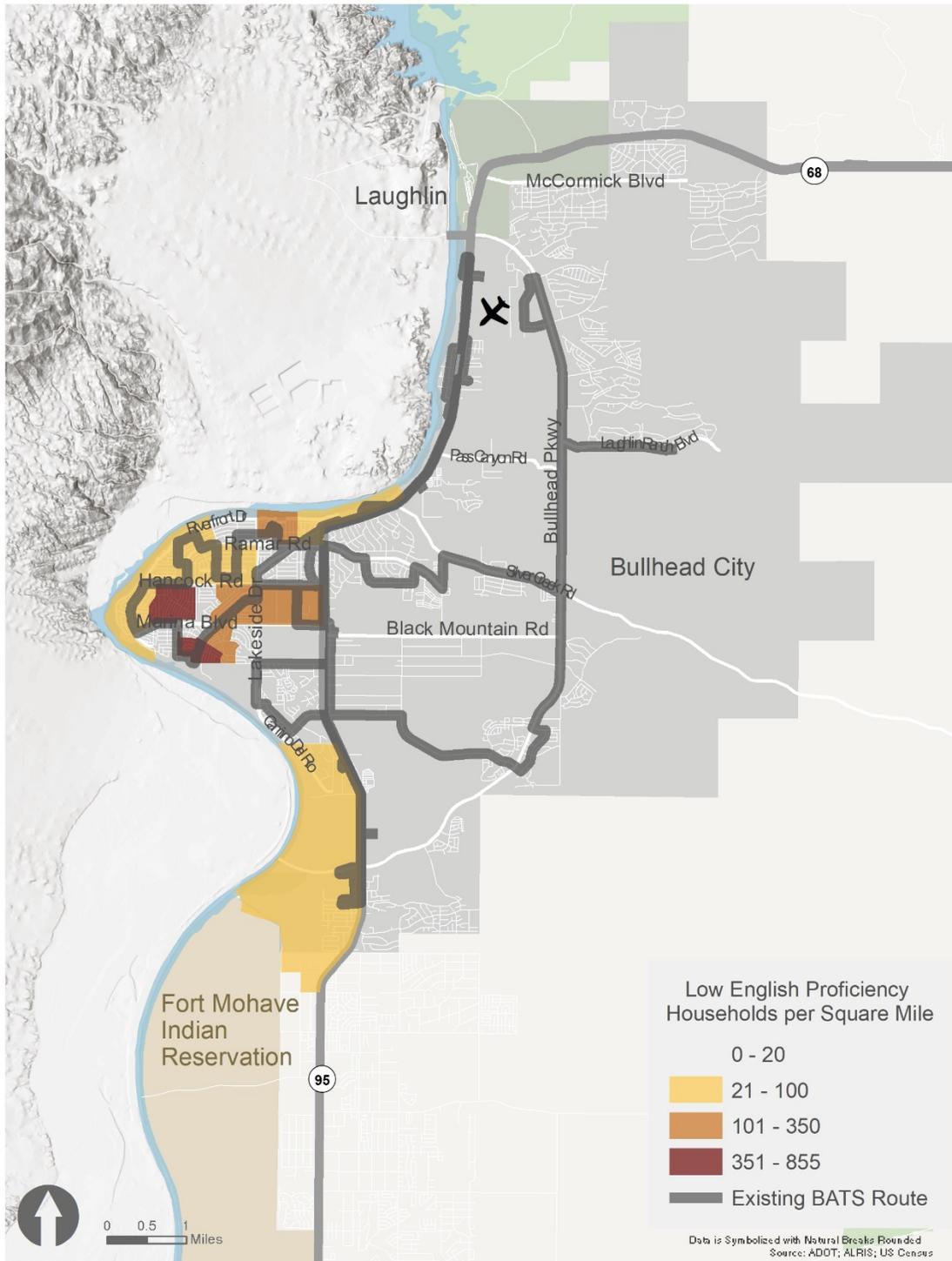
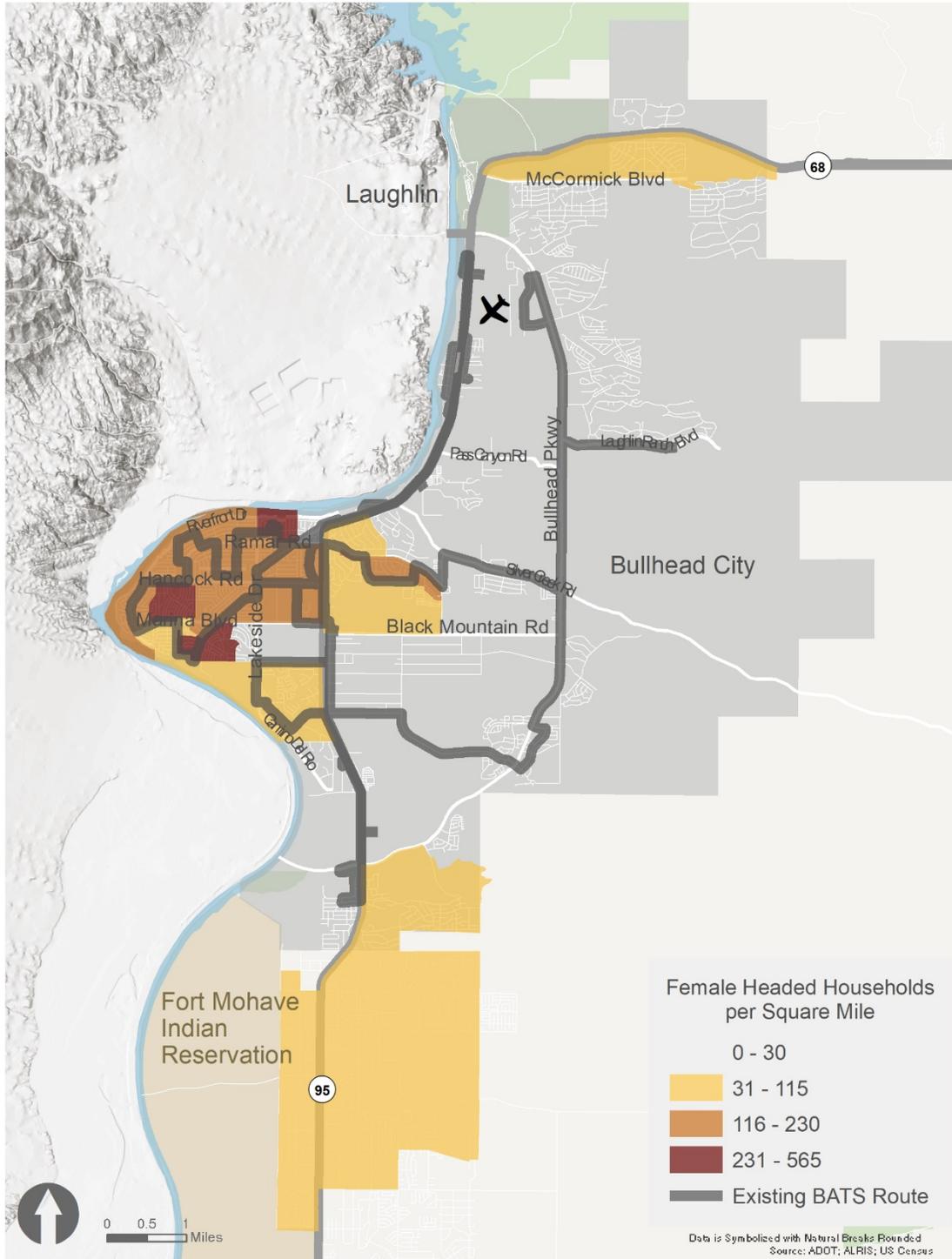




Figure 10 Zero Vehicle Households (Density)





Composite Transit Reliance Index

Transit reliance combines key socioeconomic characteristics of transit dependent population groups into a single measure to estimate areas that might have a greater tendency to use public transportation as their primary method of transport. To understand areas within Bullhead City that may have the highest need for public transportation services, a transit reliance index was developed and mapped. Even though some areas are highlighted through this analysis, it does not indicate that any particular area does not have demand or need for transit services.

To create the index score, each Census block group was assigned a score between 1 to 4 based on the level of density of each transit dependent population group. For example, a block group with a high density of older adults will receive a score of 4, whereas, if the block group has a low density of youth, it would receive a score of 1. After assigning each block group a score, the score for each characteristic is summed, resulting in a number from 8 to 32, called the “Transit Reliance Index.” **Table 2** outlines the index scoring system and each group’s breakpoint.

Table 2 Transit Reliance Scoring System

Score	1	2	3	4
Young People	<50	51 – 350	351 – 800	801 – 3,100
Elderly People	1 – 125	126 – 350	351 – 750	751 – 1,200
People of a Racial Minority	<230	231 – 700	701 – 1,700	1,701 – 3,610
People Experiencing Poverty	1 – 100	101 – 400	401 – 950	951 – 2,700
People with Disabilities	0 – 50	51 – 150	151 – 250	251 – 750
Low English Proficiency Households	<20	21 – 100	101 – 350	351 – 855
Female-Headed Households	<30	31 – 115	116 – 230	231 – 565
Zero Vehicle Households	<15	16 – 65	66 - 130	131 – 200

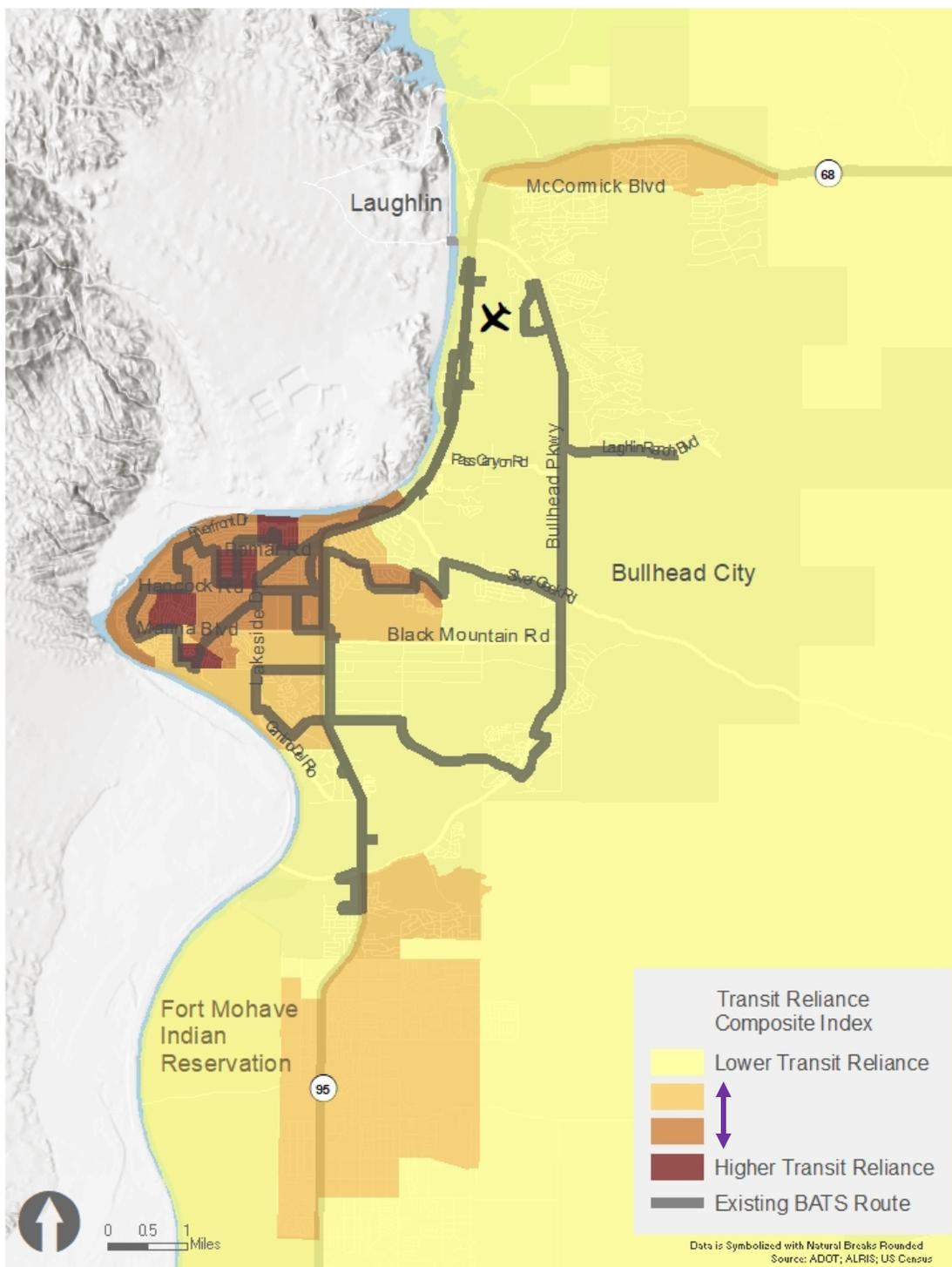
Scores for each factor are computed by sorting the values into natural breaks. For example, Census block groups receiving a Young People score of 4 represent the highest density of young people in the study area.

Figure 11 illustrates the composite Transit Reliance Index for Bullhead City. Several trends illustrated in the figure include:

- Transit reliance tends to decrease moving outward from central Bullhead City.
- The Riviera Boulevard, Ramar Road, and Hancock Road corridors all have high concentrations of transit reliant populations, as does the Riverfront Drive corridor.
- The area surrounding US-95 south of Bullhead has larger swaths of moderately transit reliant populations.



Figure 11 Transit Reliance Composite Index Scores

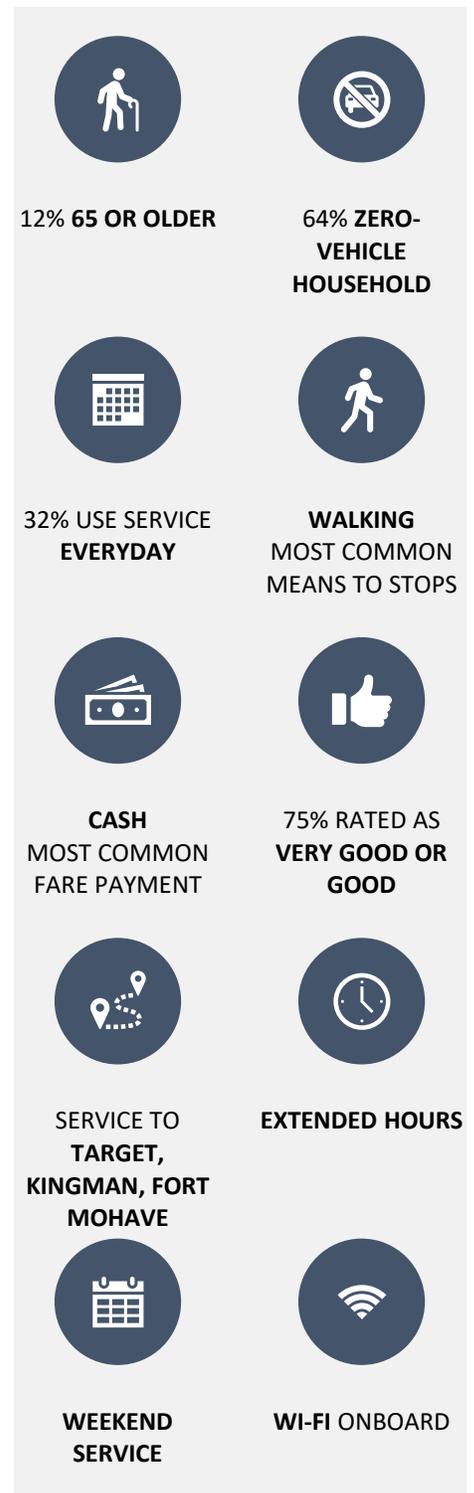




On-Board BATS Rider Survey Summary

On November 1st, 2021, onboard surveys were conducted between 11am – 4pm on all BATS routes. Key findings from the BATS rider survey include:

- Of the 25 respondents, 15 indicated home as Bullhead City, 4 as Laughlin, 1 as Elko, and the remainder did not respond.
- Of the 9 who indicated they were employed, 4 were at Riverside Mall. No other employment was noted more than once.
- No respondents were under 18 and **12% of respondents were 65 or older**. The most common age group was 35-49, with 32% of respondents.
- **64% of respondents did not have access to a car**, 24% preferred not to answer this question.
- Of those who answered on their trip frequency, 58% use BATS several times per week, **32% every day**, and 11% occasionally.
- The most common use for services were shopping, followed by medical, then commuting.
- 64% of riders indicated they transfer between multiple BATS routes.
- Common stops that respondents indicate they start/stop their trips from include Walmart, Boat Docks, The Hub, and the hospital.
- **Walking** is the most common way to get to and from stops.
- **Cash** is the most common fare payment type.
- If riders don't use BATS for a trip, it's most often because the services don't run on the times or dates riders need.
- **75% of respondents rated service "Very Good" or "Good"**, with the remaining responding "Fair".
- Riders indicated the most important improvements to be Sunday service, extended hours, and improved bus stops/transit centers.
- When asked where riders would add service to, service to Needles, McCormick, and **Target** were the most common answers. When asked specifically about service to other communities, riders were interested in **Kingman, Fort Mohave**, Mohave Valley, Needles, and Vegas.
- Respondents asked for **extended hours, weekend service, Wi-Fi onboard**, and other amenities to improve their experience.





Goals & Objectives

Previous BATS Goals & Objectives

The 2014 Bullhead City Short Range Transit Plan outlined four goals, each supported by several objectives. These goals and objectives were formulated based on public outreach, discussions with the City Transit Commission, and the Arizona Department of Transportation (ADOT). The previous goals and associated objectives include:

- **Goal 1:** Provide a safe, effective, efficient, and accessible transportation option for residents of and visitors to Bullhead City.
 - Objective: Meet or exceed established standards of performance.
 - Objective: Maintain a level of service that is sustainable.
 - Objective: Ensure the safety of the community with regard to transit service.
 - Objective: Ensure the transit system is accessible to everyone regardless of disability.
- **Goal 2:** Address the mobility needs of the Bullhead City community.
 - Objective: Improve access to employment, healthcare, shopping, etc.
 - Objective: Promote regional connectivity
- **Goal 3:** Promote the widespread use of Bullhead Area Transit within Bullhead City.
 - Objective: Raise awareness of the service and where it travels.
 - Objective: Improve accessibility of service information.
- **Goal 4:** Maximize the efficiency of transit administration and operations.
 - Objective: Implement new technology for data collection.
 - Objective: Develop a dedicated facility to support transit operations and fleet maintenance.
 - Objective: Implement new technology for fleet maintenance.
 - Objective: Streamline administrative activities.

Development of Vision, Goals, & Objectives

In October 2021, members of the BATS Technical Advisory Committee met to discuss the Short and Long Range Transit Plan, set a vision for the planning process, and identify goals and objectives for the Plan. The project team evaluated the previous goals and objectives, incorporated TAC and public feedback, and considered national trends in transit planning to establish a set of proposed vision, goals, and objectives. These will be presented and refined by the Project Management Team, TAC, the public, and stakeholders throughout the project process.

Proposed BATS Vision, Goals, & Objectives

This section outlines the proposed BATS vision, goals, and objectives.

Vision

Bullhead Area Transit System will guide transportation investments toward a full range of options for all Bullhead City residents to create and strengthen community connections, foster independent and productive lives, and striving for continual improvement of services through coordination, innovation, and community involvement.



Goals & Objectives

- **Goal 1: Maintain High Quality of Service that is Safe, Effective, Efficient, and Accessible for Residents of and Visitors to Bullhead City**
 - Objective A: Ensure Accessibility – Provide services and facilities that are comfortable for users of all ages and abilities.
 - Objective B: Connect with Essential Destinations – Provide access for riders to community centers, schools, government services, grocery stores, medical facilities, and shopping centers.
 - Objective C: Enhance Design for Efficient Outcomes – Thoughtfully plan and implement safety and service improvements; passenger amenities; and transit routes that minimize vehicle wear.
 - Objective D: Hire & Retain Quality Staff by engaging a staff needs assessment for existing and future operations and investigate methods for improving bus driver job satisfaction.
- **Goal 2: Increase Connectivity & Mobility in the Greater Bullhead Area**
 - Objective A: Provide Connections to Essential Destinations – Provide direct connections to employment, healthcare, social services, shopping, and more essential locations the community needs, and wants, to access.
 - Objective B: Facilitate for Regional Connection – Through partnerships with Transit Providers such as Kingman, Lake Havasu, and others.
 - Objective C: Connect with Private Transit – Increase local, regional, and inter-state mobility by facilitating connections with private transit such as Greyhound, TNC's (e.g., Uber, Lyft), taxis, bikeshare, and other programs and services.
- **Goal 3: Expand Service Offerings**
 - Objective A: Effectively Market Services – Grow and fund transit use through innovative and collaborative outreach.
 - Objective B: Form Great Partnerships – Actively engage with community businesses, transportation technology companies, and other key stakeholders to progress Bullhead City's transit vision.
 - Objective C: Improve Existing Services – Coordinate transfer locations, provide clear customer information, increase service frequency, and implement other innovative modifications.
 - Objective D: Expand the span of service to provide evening service complimenting 24 hour a day employment opportunities.
 - Objective E: Implement 7 day a week service providing much desired service on Sunday.
- **Goal 4: Maximize the Efficiency of Transit Administration & Operations**
 - Objective A: Develop a Dedicated Transit Center – This facility will support transit operations and maintenance, including bus wash and repairs, data collection, and administration.
 - Objective B: Explore updated marketing, branding and communication methods for the transit system.
 - Objective C: Implement Automated Data and Fare Collection methodologies – Utilizing available technologies such as Automated Vehicle Locator and mobile phone fare payment, and other technologies to enhance service quality through data analytics and direct service access.
 - Objective D: Sustainable Fleet Transition – Investigate alternative, sustainable fuel and vehicle options, and plan to transition the BATS fleet to low- or zero-carbon options.