Mountain Line

Transit Service Plan

Final Report

January 2025

NELSON NYGAARD

Table of Contents

Appendices

Appendix A: Existing Conditions
Appendix B: Outreach Summary
Appendix C: Phase II Public Engagement Survey Results

Table of Figures

Page

1 EXECUTIVE SUMMARY

INTRODUCTION

The Missoula Urban Transportation District (MUTD), more familiarly known as Mountain Line, has launched the 2024 Transit Service Plan with the goal of developing comprehensive recommendations for Missoula's public transit system to better serve riders, residents, and the broader community. This plan will cover numerous facets of the agency, including service and operations, capital improvements, funding, climate and sustainability goals, equity objectives, and policy issues.

Building on the successes of the 2018 Transit Service Plan and responding to evolving local, national, and global contexts, this new effort will determine MUTD's course for the coming years.

BACKGROUND

Missoulians have a history of supporting transit. Community support enabled Mountain Line to provide additional services and be recognized for its success as the "System of the Year" by the American Public Transportation Association in 2021. Three initiatives have shaped Mountain Line's recent past.

2012 Long Range Transit Plan

This plan provided a blueprint for Missoula expanding its service. Primary service recommendations included higher frequency on key routes (Routes 1 and 2 were branded as "BOLT!") and later span of service. Voters approved funding for service expansion, and improvements starting in 2013.

2015 Zero-Fare Demonstration Project

As part of the Long-Range Transit Plan, the Zero-Fare Demonstration Project explored the possibility of free public transit. A group of public and private entities partnered to fund and make transit accessible to everyone for three years. The demonstration project led to a 70% ridership increase in two years, and that success led to extended partner funding.

2018 Service Plan

This plan built on the previous two efforts to provide a growth plan for improving transit in Missoula. Key recommendations were to improve frequency and span and provide Sunday service. Voters approved funding several key recommendations, including making zero-fare service permanent, running service later in the evening on key routes, and implementing Sunday service for the first time ever.

BENEFITS OF TRANSIT IN MISSOULA

Mountain Line provides safe, sustainable, and innovative transportation solutions. By more than doubling ridership in the past 15 years, Mountain Line has played a major role in accommodating new growth, reducing traffic congestion, and mitigating air quality. Mountain Line has also helped Missoula households reduce transportation costs with the system-wide zero-fare service, representing a hedge against skyrocketing local housing costs.

Growth is projected to continue. Mountain Line is an important way to facilitate Missoula's mobility and provide options for thousands of new residents. Transit will also play a crucial role in helping the city achieve affordability, equity, and sustainability goals.

A robust transit system makes Missoula a better place to live and visit by supporting economic growth and increasing access to opportunity.

STUDY OVERVIEW

In 2024, Mountain Line updated its Transit Service Plan. The objectives of the plan include:

- Assess the existing route network performance and design.
- Actively engage the public and community stakeholders throughout the study.
- Develop a detailed plan to guide service improvements.

The nearly year-long study examined existing transit and market conditions. The study also included robust and dynamic community and stakeholder outreach. The outcome of the study is an implementable near-term and long-term plan to optimize and expand public transit in Missoula.

Project Timeline

EXISTING CONDITIONS

The initial phase of the study was a comprehensive analysis of existing conditions. The goal was to summarize the background conditions in which Mountain Line operates.

Service Analysis

The analysis covered existing route design, schedules, and ridership trends. The service analysis revealed the following key findings:

- **Mountain Line provides extensive coverage**, serving most high-density residential areas, as well as most major employment, education, shopping, and medical destinations.
- Mountain Line has the opportunity to **serve emerging areas of high-density developments**, including Sx̌tpqyen.
- **Sunday service implementation has been successful**. Weekend service productivity on Routes 1 and 2 suggests the need for higher weekend frequency.
- **Ridership has rebounded since early 2020** and is growing back toward pre-pandemic levels. However, certain ridership patterns appear to have changed as result of the pandemic's travel disruptions.
- The **strongest ridership corridors have high-frequency (every 15 min) service**. Some of the high ridership corridors in the system include South Johnson Street, South Avenue, Russell Street, and Broadway Street.

Market Analysis

Local demographic and socio-economic characteristics were examined to identify population groups most likely to use transit and how well they are currently served by transit. This exercise revealed a diverse set of rider types, with unique transit needs and preferences.

Families without a car

Employees without a car

Seniors who do not drive

Students

Commuters

Employment density and commute patterns were also analyzed to highlight corridors that can support transit. Existing conditions were summarized in a report that served as the foundation for the developing service, capital, and policy recommendations.

OUTREACH

Community participation was essential to the development of this plan. Outreach activities were conducted at three stages of the project and consisted of virtual and in-person public meetings, stakeholder discussions, a project website, online surveys, and social media. Input was gathered from a diverse group of residents, employees, and students. Phase I outreach focused on receiving comments about existing transit service and opportunities for improvement. Phase II introduced potential changes to the existing route network. Near- and long-term recommendations were presented during Phase III of community meetings.

Community Feedback

Online outreach activities were extremely successful in obtaining community feedback. Online surveys generated 640 responses. In addition, 16 tabling events, seven Neighborhood Partnership Meetings, two virtual open houses, and one in-person open house allowed us to understand transit priorities. The community expressed the following:

- Support for **additional frequency**
- Support for **additional service**, especially to Sx̌ʷtpqyen
- Request for more **weekend service**

Community feedback was instrumental in developing and refining service recommendations.

Stakeholder Engagement

Representatives of several organizations with an interest in transit were invited to participate in virtual group discussions. Participating stakeholders included:

- Diversity Advisory Council of University of Montana
- Midtown Implementation Committee
- Missoula Neighborhood Councils
- Missoula Infrastructure Coalition
- Missoula City Justice Equity Diversity Inclusion Advisory Board
- Specialized Transportation Advisory Committee
- Community Partner Advisory Groups
- Families in Transition (FIT)
- Hellgate Elementary School District
- Missoula County Public Schools
- Willard High School
- Big Sky High School
- Johnson Street Shelter, Food Not Bombs Service
- Missoula Food Bank
- Young People / Refugee Community Conversations
- Missoula Aging Services Advisory Council

RECOMMENDATIONS

The Service plan's recommendations are organized into two phases: near term and long term. The **near-term plan** focuses on reducing route duplication and meeting emerging ridership trends. The near-term network will serve the same areas as it does today and is cost-neutral, meaning recommendations can be implemented without an increase to Mountain Line's operating budget.

The **long-term plan** calls for an approximate 50% increase in 2025 current service levels. The plan would help meet the travel demands of a rapidly growing region by improving service span (the length of service throughout the day), frequency, and travel speeds, and by providing new service in up-and-coming dense employment centers and housing developments. The plan assumes Mountain Line would develop and implement capital projects that expand service capacity while improving bus speed and reliability.

The goals for the recommendations are described below.

Update and Streamline the Route Network

The recommendations realign bus routes to better serve the needs of existing and potential transit riders by improving access to key destinations and reducing travel times. This includes greater frequency in high-ridership/high-density areas, direct service from Franklin to the Fort to downtown Missoula, and service to Sx̷tpqyen.

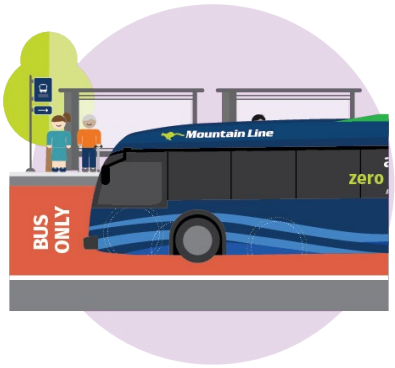
Strategically Expand Bus Service

The recommendations extend routes to serve emerging destinations, offer longer hours, and more frequent service on weekdays and weekends. Four new corridors would deliver frequent service, every 15 minutes or better.

Promote Transit-Supportive Land Uses

Missoula is growing. Redeveloping concentrations of population and employment can support additional transit service and reduce car traffic. The plan recommends new fixed-route service to the Sawmill District and Sx̌tpqyen, as well as improved service to the rapidly redeveloping Midtown.

Invest in Capital Projects That Improve Speed and Reliability



The long-term plan targets improvements such as bus lanes, improved stops, transit centers, and transit signal priority, which can make bus travel times more competitive with private vehicles.

- The new **Brooks Street Bus Rapid Transit (BRT) corridor** would deliver fast, frequent, and reliable service between downtown Missoula and Southgate Mall.
- The new Midtown **transit center at Southgate Mall** would foster better connectivity and transfers between routes, including the new BRT service.
- **Completing** the Maintenance, Operations, and Administration Base (MOAB) by 2029 establishes a much-needed storage/maintenance space for operating a larger fleet that could deliver more peak service.

2 INTRODUCTION

INTRODUCING THE ORGANIZATIONS AND PLANS

Who is MUTD?

The Missoula Urban Transportation District (MUTD) operates Mountain Line, the Missoula region's transit network. MUTD was established in June 1976 by voters who authorized the creation of the district. Service operating under the Mountain Line brand began on December 12, 1977. MUTD operates both fixed-route and paratransit services within its service area. Service has evolved over the years, including the introduction of fare-free service, expanding weekend and evening service, transitioning to an electric fleet, and improving frequencies on the highest-ridership routes. Figure 2-1 outlines MUTD's boundaries.

Mountain Line's Mission Statement: "At Mountain Line, our mission is to connect Missoulians to the community through safe, sustainable, and innovative transportation solutions. We are dedicated to expanding access to reliable public transit, which is crucial for supporting a diverse and active community, fostering Missoula's economic vitality, and playing a pivotal role in combating the climate crisis. Our approach includes frequent measurement and improvement of our services, leveraging the latest technologies and industry best practices to ensure excellence in every journey."

Mountain Line's Vision Statement: "We envision a future where robust and accessible public transit is not just an option, but the preferred choice for transportation in Missoula. Our path to achieving this vision involves leading the industry with groundbreaking initiatives, fostering a workplace culture of engagement and wellness, and forming proactive partnerships with government and community stakeholders. We commit to a future-focused approach, anticipating and addressing Missoula's evolving transportation needs while upholding our promise of service excellence."

Missoula's Transit Service Plan

One of MUTD's planning efforts for 2024 was to update its Transit Service Plan. The last Service plan, adopted in 2018 and updated in 2019, laid out a set of phased short-term network changes along with a longer-term network vision. Three out of the four phases of the short-term network have been implemented. In the meantime, the Covid pandemic and continued development in the community created new travel patterns. Further, there are planned transit projects, like BRT on Brooks Street, that may require adjustments to existing service alignments.

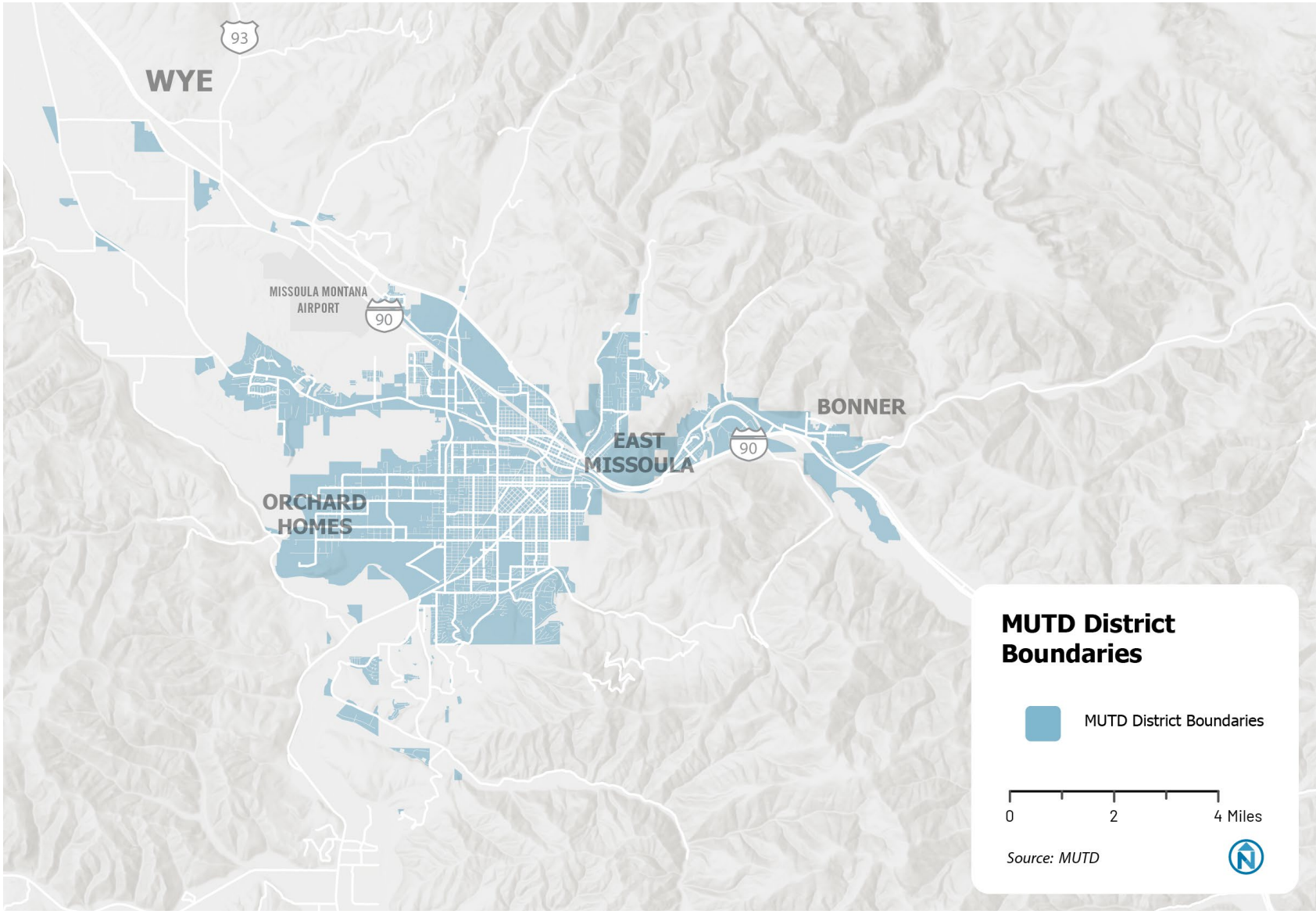
An update to the Service plan would ensure that transit serves these changed travel patterns and destinations in an efficient manner.

MUTD's and MPO's Joint Effort

In January 2024, MUTD and the Missoula Metropolitan Planning Organization (MPO) partnered in engaging the services of Nelson\Nygaard to perform a combined update of MUTD's Transit Service Plan and the MPO's Long-Range Transportation Plan (LRTP). The timing of updating the Transit Service Plan and the LRTP, along with many shared goals, provided a unique opportunity for MUTD and the MPO to collectively identify elements for improving mobility in the region.

The LRTP identified a new traffic signal at the Cregg Lane/South Orange Street intersection that supports the Transit Service Plan's goals for improving accessibility to transit and makes routing changes identified for Route 8 in this Service plan possible. Additional information on the MPO and the LRTP is included in subsequent pages.

Figure 2-1 MUTD District Boundary



Source: MUTD

Who is the Missoula MPO?

The MPO works to plan a safe transportation network for the Missoula area through developing a comprehensive, cooperative, and connected transportation system. The organization was formed more than 40 years ago, after the region surpassed more than 50,000 residents following the 1980 census. Today, the MPO is responsible for long-range planning and programming of federal transportation funds within the Missoula area. Figure 2-2 shows the MPO's boundaries.

MPO Mission Statement: To plan and program a safe and efficient transportation system for the Missoula area that increases access and mobility through multimodal options.

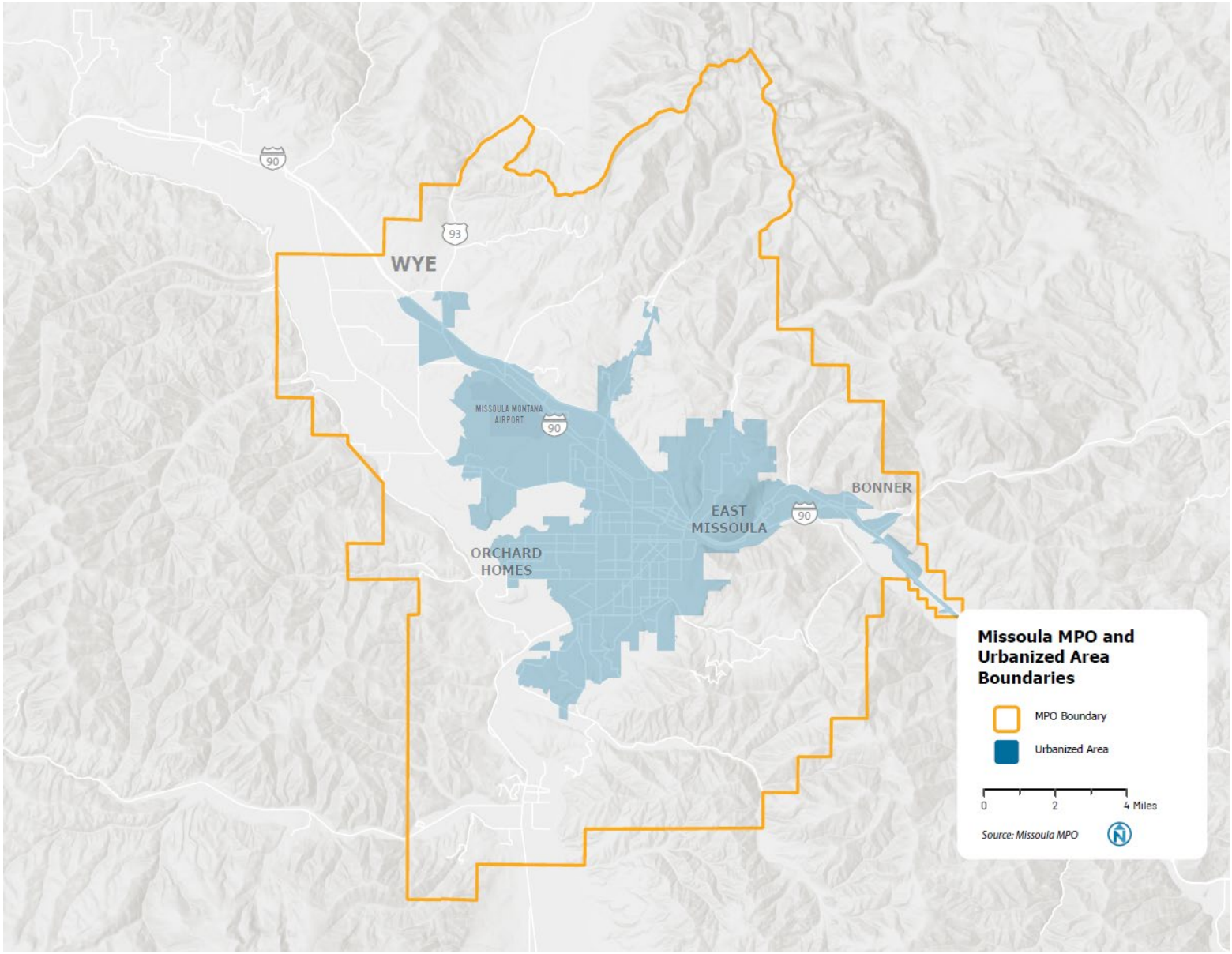
MPO Vision Statement: To provide regional transportation planning services focused on creating a safe, efficient, and sustainable transportation network that will improve the quality of life within Missoula's community.

Missoula's Long-Range Transportation Plan

One of the MPO's primary planning projects in 2024 was to update the LRTP, titled Missoula Connect, a document that reviews all modes of transportation and identifies future priorities for projects and funding.

This action plan will steer the Missoula community toward a healthier, safer, and more sustainable future while preserving and expanding mobility for all residents. Relying on previous planning work and extensive community outreach, Missoula Connect integrates existing plans and projects to create a sustainable transportation future that improves mobility and access across all modes for all Missoula area residents, workers, and visitors. A strong transportation plan is critical to the success of Missoula's growth policy, and Missoula Connect will knit together land use and transportation goals. The Missoula region is on the move, and the MPO needs to not only keep pace but stay ahead.

Figure 2-2 MPO Boundaries



Source: Missoula MPO

PROJECT GOALS

As part of the joint planning process, MUTD and the MPO established shared goals. The Transit Service Plan focuses on transit-specific outcomes in relation to the broader transportation goals established in the LRTP. The goals are as follows:

1. Improve safety and promote health to enhance quality of life
   - Improve transit linkages to active transportation
   - Connect transit to recreational facilities
   - Enhance transit access to lower-income neighborhoods
   - Continue to offer safe and reliable service
2. Maintain assets and invest strategically
   - Continue to improve transit facilities and amenities
   - Target investments that are cost-effective and impactful
   - Provide transit connections to jobs, businesses, and recreation to support the economy
3. Expand mobility choices
   - Provide high-frequency and high-quality transit services
   - Improve access to community resources and services
   - Optimize services to grow transit ridership
   - Pilot new service delivery methods to improve MUTD's service offerings to the community
   - Increase ridership of MUTD and encourage transit as a viable means of local transportation
4. Connect and strengthen communities to create a more equitable region
   - Orient service tailored to land use and transportation infrastructure
   - Reduce household transportation costs
   - Connect people to opportunities
5. Advance sustainability and resilience
   - Continue to shift transit fleet to battery electric buses
   - Reduce emissions by trip-sharing
   - Reduce point-source pollution associated with petroleum
   - Support investment in clean infrastructure and green space

PURPOSE OF THIS DOCUMENT

This document is the final report for updating the Transit Service Plan. It includes information on the existing conditions assessment that was performed, the public outreach that was conducted, and the vision (near- and long-term) for transit in Missoula. Implementation and best practices are also included.

3 EXISTING CONDITIONS

The existing conditions chapter synthesizes key aspects of Missoula's regional planning context, including population and employment patterns, and evaluates the existing transportation network.

- **Missoula Context** examines planning and policy documents to understand previous planning work done in Missoula. It also includes key demographic and employment information.
- **Transit Conditions** document the transit system in Missoula (fixed-route transit and paratransit services), including ridership trends and productivity.

MISSOULA CONTEXT

This section sets the stage for the development of the Transit Service Plan in Missoula. The first half of this section summarizes existing planning and policy documents done in Missoula, including two community surveys administered in the last year. The second half reviews key demographic and employment information, including a discussion of transportation equity and transit propensity for the region. Unless otherwise noted, any demographic and employment data are sourced from the U.S. Census Bureau and is reported at the urbanized area for Missoula.

Overview of Completed and Ongoing Plans

Reviewing current planning and policy documents, and understanding what has been successful in the past, helps set the framework to build on previous momentum. This review summarizes improvements (both funded and unfunded) that have been identified and can be considered as part of the Transit Service Plan. Nine documents, summarized in Appendix A, were reviewed as follows:

- Downtown Safety and Mobility (SAM) Project (2024)
- On-Demand Transit Study (2024)
- Wye Infrastructure Needs Assessment (2023)
- Missoula Annexation Policy (2023)

- Midtown Missoula Master Plan (2023)
- Brooks Street BRT/TOD Planning Study (2021)
- Highway 200 Corridor Plan (2021)
- Reserve Street Community Input Project (2021)
- Our Missoula 2045 Land Use Plan (2024)

Mountain Line 2023 Passenger Survey

Between May 8 and July 5, 2023, MUTD conducted a survey of Mountain Line passengers to gather valuable insights into customer sentiment and identify potential service improvements. This effort was carried out by the University of Montana's Bureau of Business and Economic Research (BBER). Surveyors rode all 12 MUTD bus routes to connect directly with passengers. The BBER collected 456 responses that shed light on how riders feel about MUTD and their experiences. Key findings are as follows.

Passengers Appreciate MUTD Services

Mountain Line riders expressed a high level of satisfaction with the service. A remarkable 76% of passengers said they were very likely to recommend MUTD to others, while an additional 15% reported they would be somewhat likely to do so. Over the past two years, 44% of passengers reported an improved opinion of MUTD, while 51% felt their opinion had stayed the same. Only 5% said their opinion had worsened.

Why Passengers Choose MUTD

Riders highlighted several compelling reasons for using MUTD instead of other transportation options:

- **Environmental benefits**: 83% of respondents cited MUTD's eco-friendly nature as a key factor.
- **Affordability**: 73% said MUTD was more cost-effective than other transportation modes.
- **Relaxation**: 58% preferred the bus because it is more relaxing than driving a car.

Opportunities for Improvement: Increasing Frequency

When asked about ways to enhance service, riders commonly mentioned the need for more frequent buses. On weekdays, 31% of passengers said this would encourage greater ridership. On weekends, the percentage rose to 42%.

Planning Trips with Technology

The **Transit mobile application** was the most popular trip-planning tool, used by 34% of passengers. Among the top three tools (Transit application, route maps and schedules, and Google Maps), **Google Maps** garnered the highest satisfaction, with 74% of users rating it as "extremely" or "very" satisfying.

Why Riders Use MUTD

MUTD services are integral to the daily lives of many passengers. On the day they were surveyed:

- **41%** of passengers were using the bus for personal errands.
- **34%** were commuting to or from work.

This survey highlights the value passengers placed on MUTD services while offering insights into potential growth areas. By understanding these perspectives, MUTD can continue enhancing the experience for riders and make meaningful strides toward a more accessible and sustainable transportation future.

2023 Missoula Area Transportation Survey

The 2023 Missoula Area Transportation Survey presented a comprehensive look at public perceptions and priorities related to the local transportation system. Conducted by the BBER between November 8, 2023, and February 11, 2024, the survey provides a statistically valid analysis of the MPO area. 565 randomly selected respondents participated, sharing valuable insights into their experiences and opinions.

This survey explored several key topics, including perceptions of the transportation system, priorities for future investments, transportation habits, and attitudes toward electric vehicles, e-scooters, and passenger rail services. Below are some of the key findings.

Perceptions of the Transportation System

About 58% of respondents rated the transportation system as "good" or better – a notable 11% decrease compared to the 2019 survey. In addition, traffic congestion emerged as a growing concern, with 48% of the respondents indicating that it had a very large or somewhat large impact on them, reflecting a 12% increase since 2019.

Investment Priorities

The participants designated top investment priorities as road maintenance, passenger rail, and parking.

Commuting and Transit Access

The average commute time for Missoula workers remained steady at 16 minutes, significantly below the 27-minute national average. Most respondents (66%) reported being able to access transit near their homes, with a higher proportion in the City of Missoula (82%) compared to the county (24%).

Barriers to Transit Use

While many respondents recognized the value of public transit, several barriers were noted: the bus not traveling where it is needed (31%), work schedules or family obligations (23%), and limited bus service during needed times (21%).

Active Modes of Transportation

Biking and walking declined slightly: biking decreased from 6% to 3%, while walking decreased from 7% to 6%. Weather was identified as the top barrier for these transportation modes. Support for e-scooters increased, with 44% of participants expressing support in 2023, compared to 33% in 2019.

Interest in Passenger Rail

A significant majority (80%) of respondents expressed support for using passenger rail service in the future, signaling strong public interest in expanded rail options.

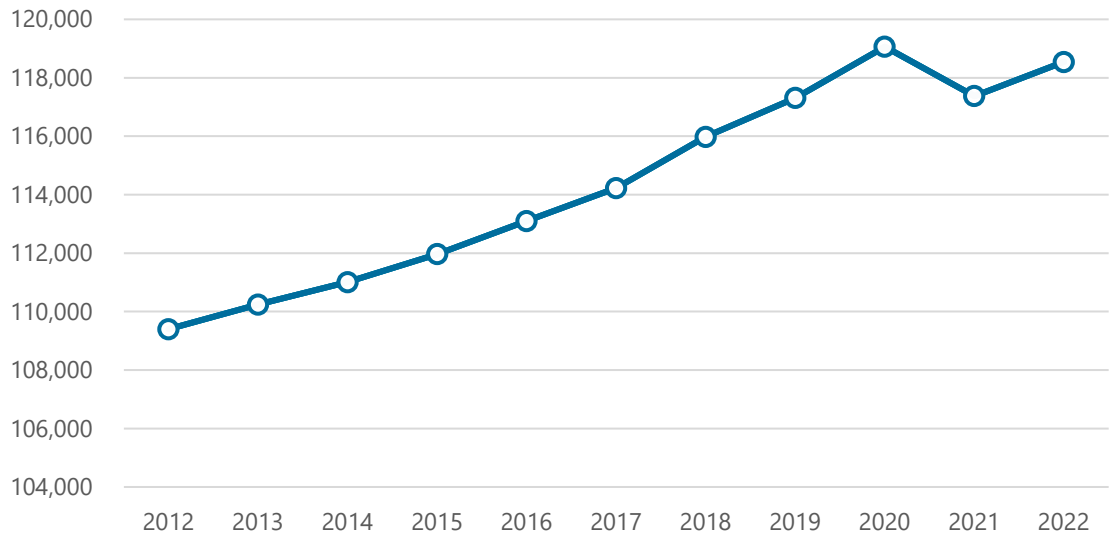
Population and Employment Growth and Trends

The data below represent trends of Missoula's urbanized area, referred to going forward as the Missoula area. The Missoula area has experienced rapid growth over the past decade, with an annual growth rate of 0.81%. As population and employment opportunities continue to grow in the region, high-quality transportation infrastructure and services should be a priority.

Population

Over the past decade, the Missoula area's population increased 8%, from 109,402 residents in 2012 to 118,541 residents in 2022 (Figure 3-1). The Covid pandemic likely caused a dip between 2020 and 2021.

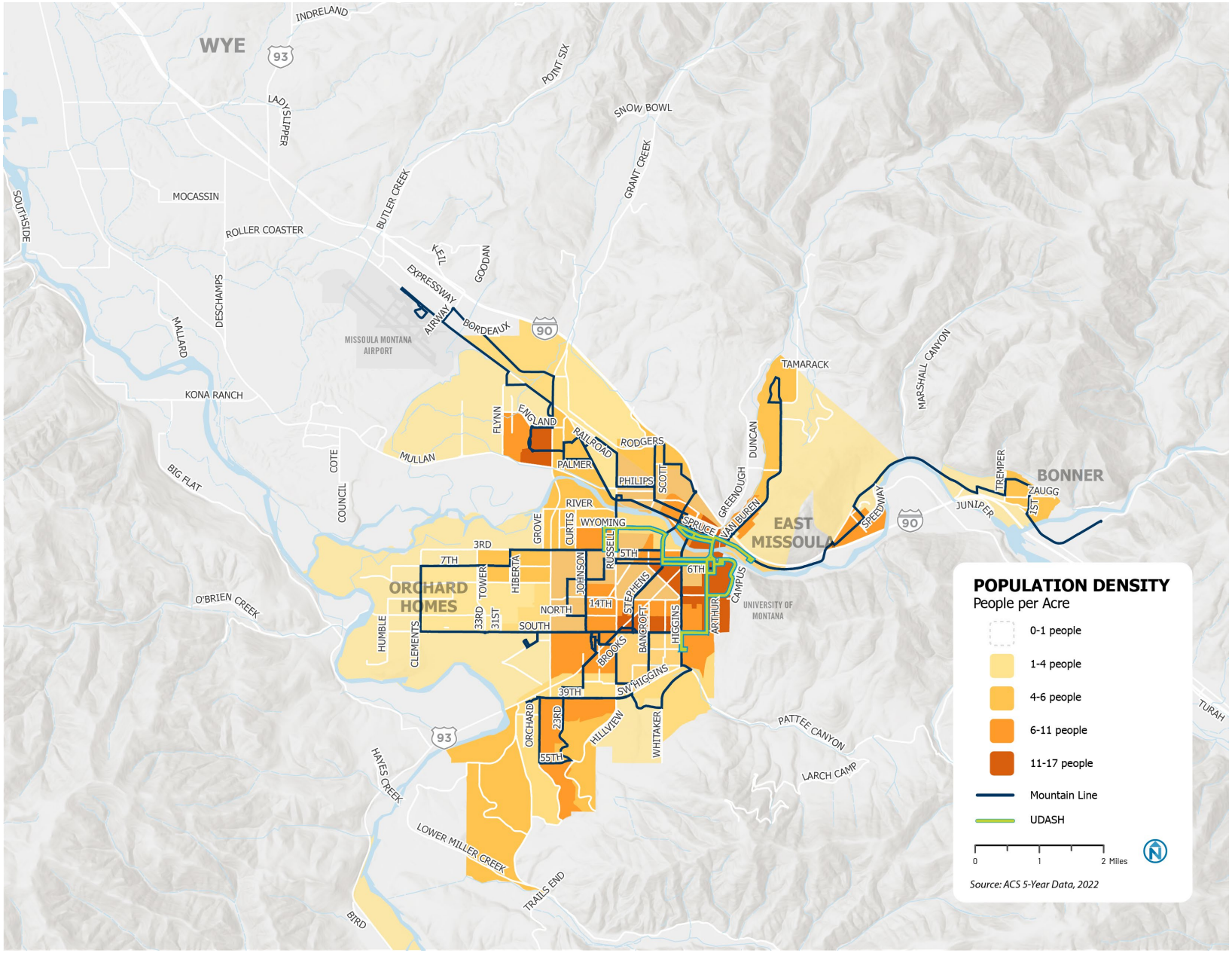
Figure 3-1 Population Growth



Source: American Community Survey (ACS) 5-Year Estimates, 2022

Areas of high population density (about 11 to 17 people per acre) are clustered in downtown Missoula, neighborhoods surrounding the University of Montana, and neighborhoods along Mullan Road. Areas with lower population density are in more rural areas of Orchard Homes and East Missoula, with about one to four people per acre as Figure 3-2 shows. The City of Missoula has set a goal to promote infill growth in the "Our Missoula" City Growth Policy.

Figure 3-2 Population Density

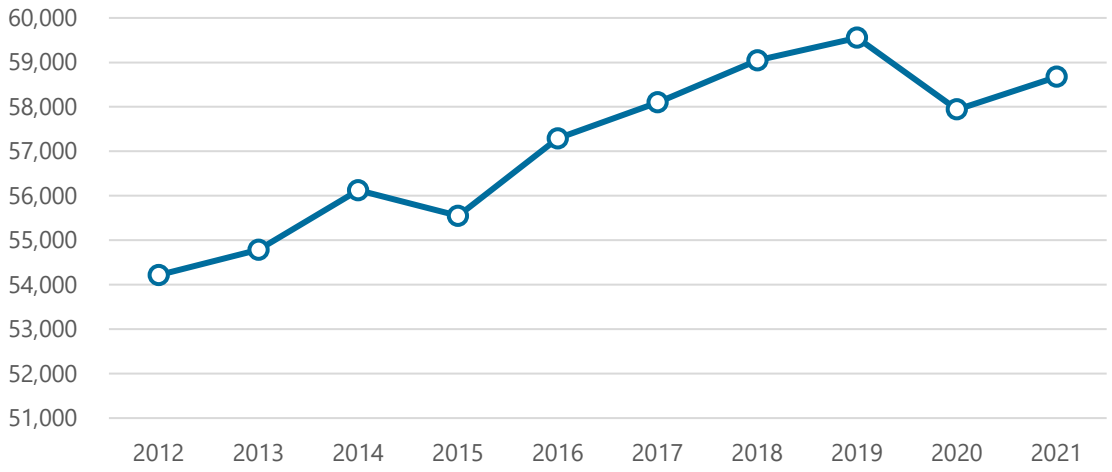


Source: ACS 5-Year Estimates, 2022

Employment

Jobs in the Missoula area increased 8% in the past decade, with a total of 58,675 jobs in 2022. The number of jobs slightly decreased in 2020, likely due to the Covid pandemic (Figure 3-3). A job density map is included in Appendix A. Employment hubs are concentrated in central Missoula. Most of the jobs reside in health care and retail, accounting for about one-third of all jobs in the region. Other jobs (30%) include agriculture, forestry, guiding, public administration, manufacturing, finance and insurance, and wholesale trade (Figure 3-4). As the region continues to grow, transportation options connecting people where they live to jobs in the community need to be considered.

Figure 3-3 Jobs Growth



Source: Longitudinal Employer-Household Dynamics (LEHD), 2022

Figure 3-4 Major Employment Sectors in Missoula

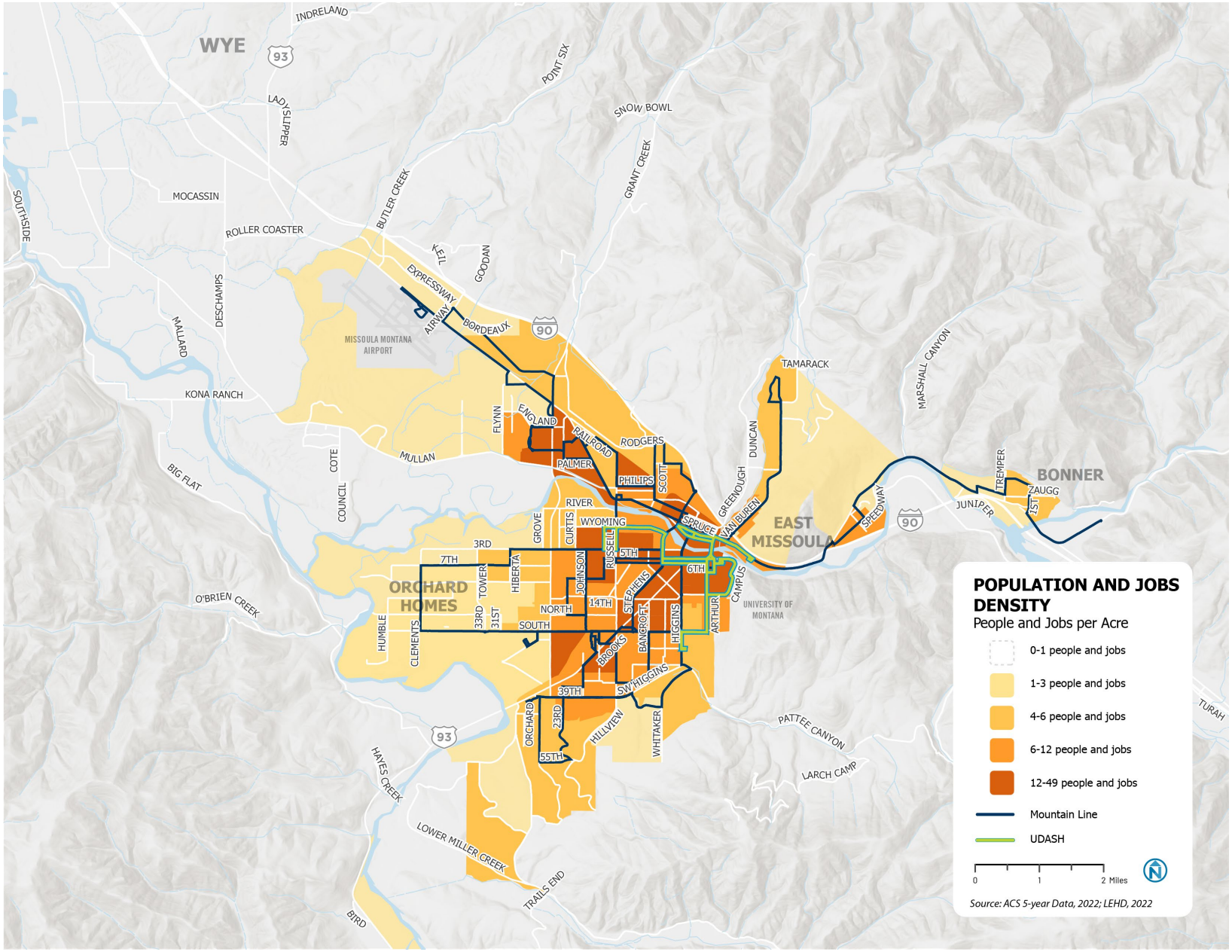
Employment Sector	% of Total Employment Share
Health Care and Social Assistance	18%
Retail Trade	14%
Accommodation and Food Services	9%
Educational Services	9%
Professional, Scientific, and Technical Services	7%
Construction	6%
Public Administration	6%
Other	30%

Source: LEHD, 2022

Population and Employment

Combining population and employment data can better highlight areas where more support for transit service is anticipated. In locations where population and employment densities are higher, transportation investments benefit more people, and transit service is more productive. As shown in Figure 3-5, the areas with the highest combined population and employment density are concentrated in the urban core and already access transit service today.

Figure 3-5 Population and Jobs Density



Source: ACS 5-Year Estimates, 2022 and LEHD, 2022

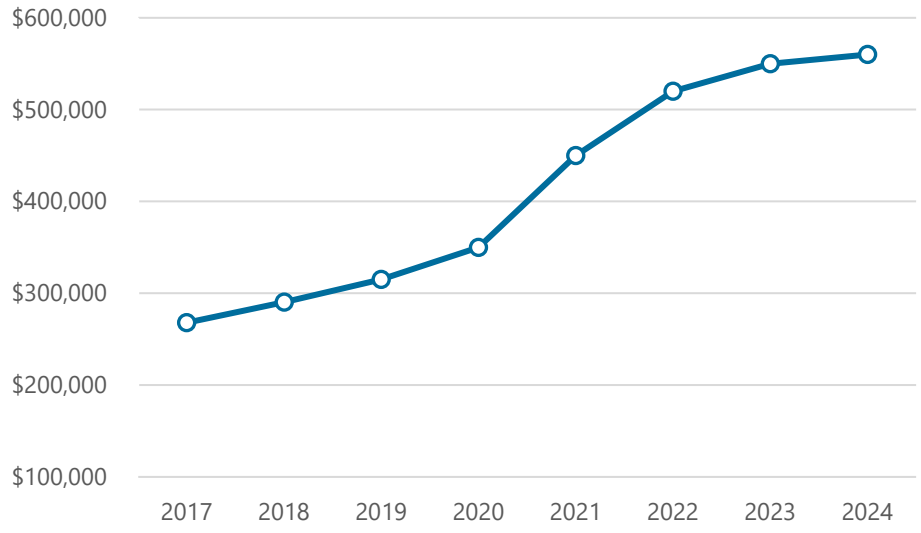
Changes in Affordability and Equity Priority Indicators

As in many regions in the United States, housing costs are rising faster in the Missoula area than wages, making it difficult for many to find housing they can afford. Therefore, affordable transportation options are necessary to connect residents with jobs, schools, various services, and recreational opportunities.

Based on ACS 5-year estimates for 2022, half of workers earn an annual income of less than $40,000. As of 2022, the official poverty rate, as defined by Bureau of Labor Statistics, is $15,225 for an individual, and just over 11% of the United States population reported living below the poverty line in 2022. In the City of Missoula, 14.6% of residents live below the poverty line compared to only 9.2% of Missoula County residents. Additionally, the median home sale price has doubled since 2017, posing a challenge for residents to live comfortably in the Missoula area (Figure 3-6). About 60% of Missoula area residents own and about 40% rent; the percentage of renters and owners has not changed since it was reviewed in the previous LRTP. This percentage may change in the future as housing prices continue to rise and more people rent due to the high price of purchasing a home (Figure 3-7).

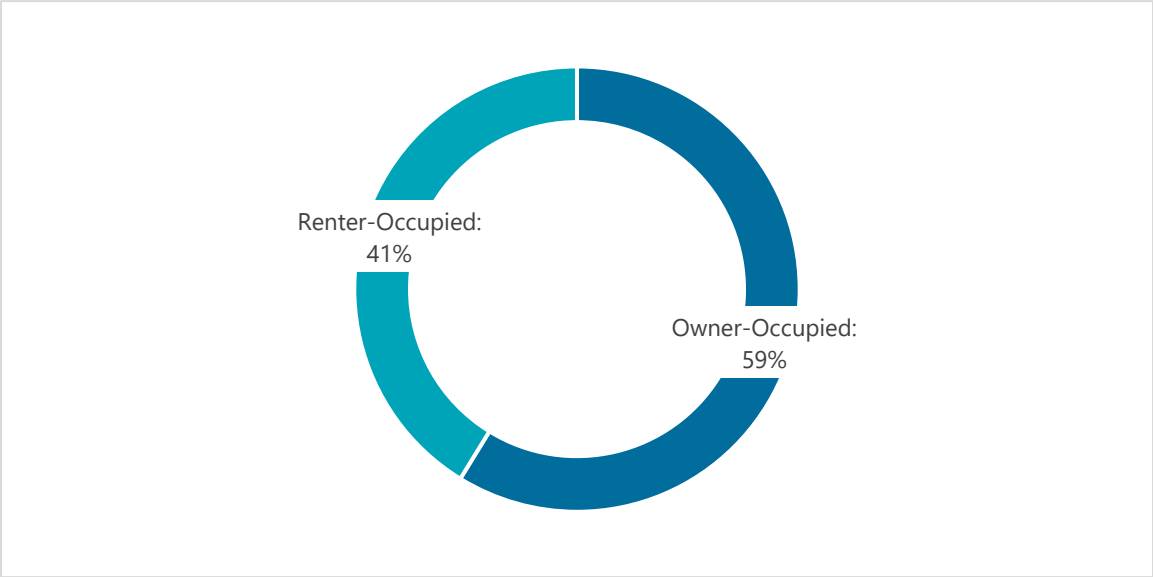
The City of Missoula recently completed an equity in land use report that addresses these affordability issues in greater detail. The project website includes links to the final report and an executive summary.

Figure 3-6 Median Home Sale Price, 2017-2024



Source: Montana Regional MLS, 2024

Figure 3-7 Renter-Occupied vs. Owner-Occupied Housing Units



Source: ACS 5-Year Estimates, 2022

Equity Considerations

In recent years, the topic of transportation equity has been discussed more frequently and with increasing levels of importance. At its core, transportation equity seeks to prioritize resources for those who need them most. Nelson\Nygaard conducted an analysis to identify potential transportation equity areas within the greater Missoula area.

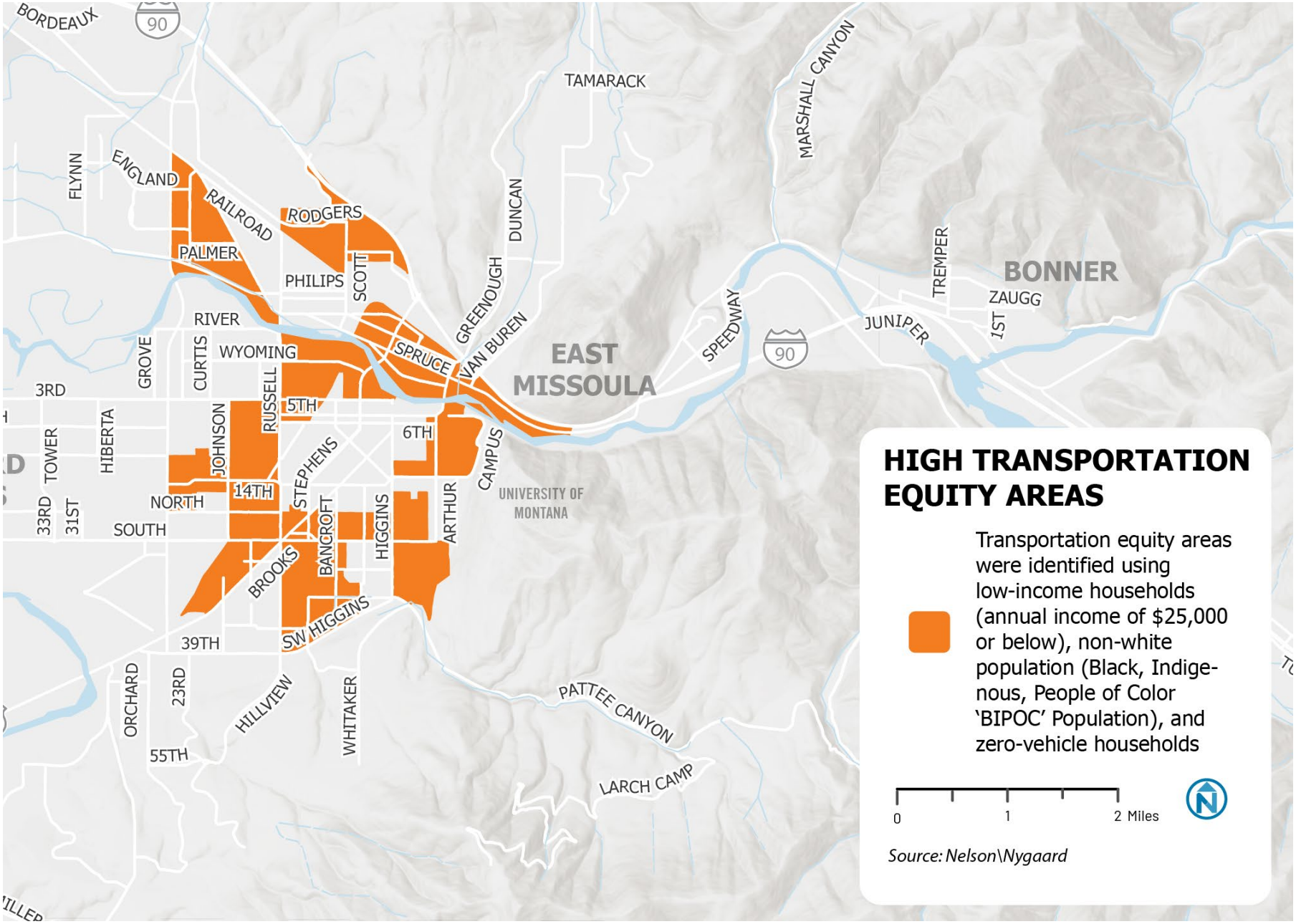
Using the latest census block group data, three variables with strong indicators for high transportation equity needs were examined. These variables were:

- Households with annual income of $25,000 and below (low-income)
- Non-white population (Black, Indigenous, People of Color)
- Zero-vehicle households

Using the three variables, the percentage of households/population in each block group was computed. From there, each variable for each block group was scored from zero to ten based on the distribution of percentages. The three scores were then added together, resulting in a combined equity score. Figure 3-8 shows the results. The darker colors indicate areas with higher equity need.

While older adults (defined as those age 65 and older) were not considered directly in this analysis, the low-income and zero-vehicle household data capture older adults who are on a limited income and/or may not be able to drive. It should be noted that older adults are more likely to take paratransit than fixed-route services.

Figure 3-8 Identified Transportation Equity Areas



Source: Nelson/Nygaard

Transit Propensity

Using select demographic, socioeconomic, and employment data can determine the overall transit need for a given area. Areas of higher propensity, or demand, are more likely to generate ridership and benefit from existing transit services.

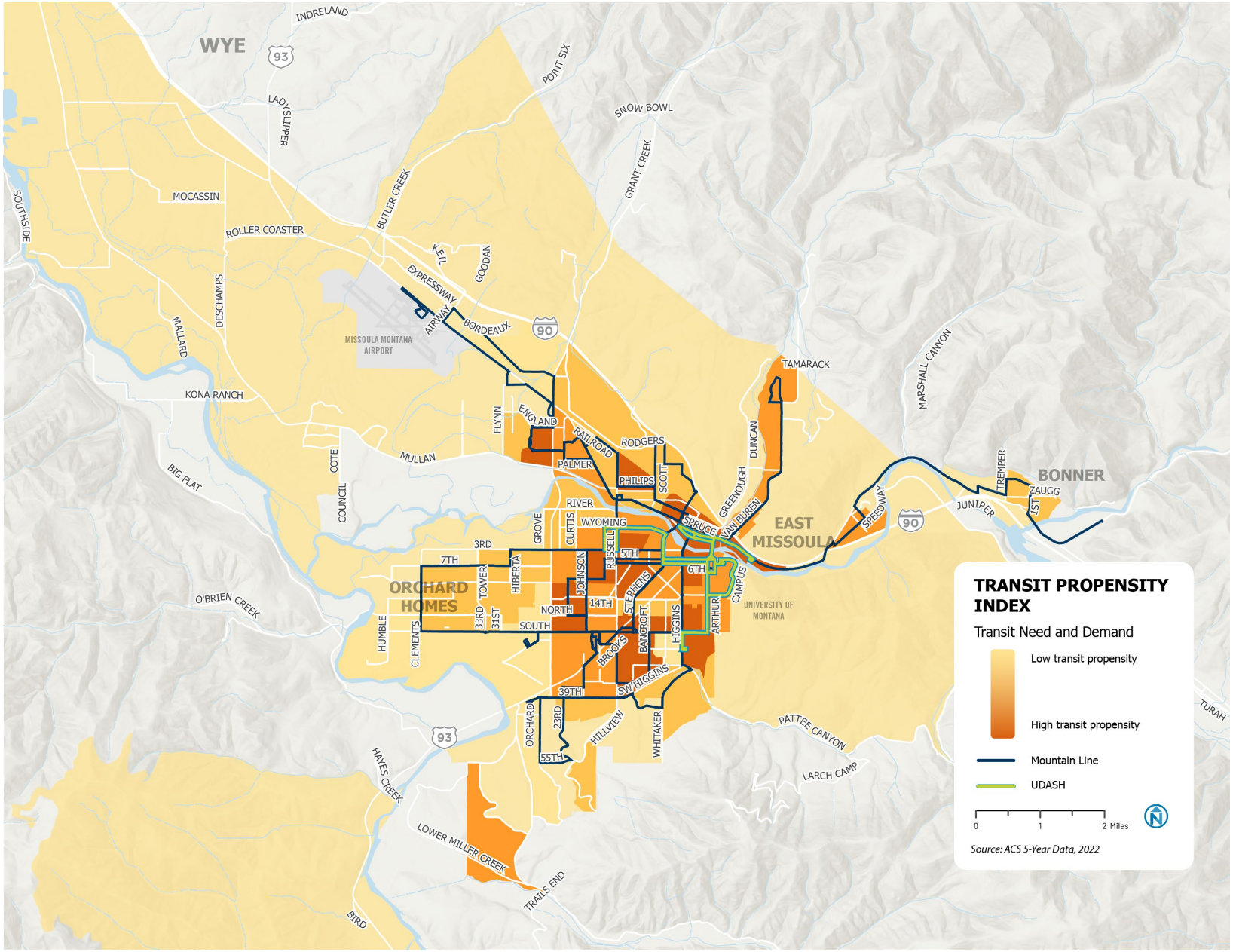
To assess transit propensity, the following demographic and socioeconomic factors were used as individuals from these groups are more likely to use transit:

- Young adults between the ages of 16 to 24
- Non-white individuals
- Individuals born outside the U.S.
- Low-income individuals defined as earning less than 150% of the federal poverty level
- Households without a vehicle
- Households that rent their homes

In the greater Missoula area, using census journey-to-work data, all six variables were associated with a higher correlation of using transit than the overall population. A composite transit propensity score was computed for each block group by totaling the individual percentages of population or households in each block group that met the given criteria. A higher composite score indicates greater transit propensity.

As shown in Figure 3-9, Downtown and northwest Missoula showed the highest propensity to use transit. These areas already have MUTD fixed-route services; however, improving transit service to these areas (e.g. greater frequency, longer service spans) can improve mobility for these residents.

Figure 3-9 Transit Propensity



Source: ACS 5-Year Estimates, 2022

Key Findings

- Population in Missoula **has increased 8%** in the past decade except for a dip in 2020 and 2021, most likely due to the Covid pandemic. Historically, the population grew 0.81% annually.
- Population density is concentrated in Downtown and neighborhoods surrounding the University of Montana and Mullan Road. The City of Missoula is promoting infill growth to meet the growing population needs.
- Jobs **increased 8% in the past decade** except for a dip in 2021, most likely due to the Covid pandemic. Employment is concentrated in central Missoula.
- **MUTD fixed-route services exist in areas with high population density, employment density, and transit propensity**. It is crucial for Missoula's agencies to continuously improve transportation to meet the travel needs of residents in these areas and other areas that are expected to grow in population.
- Most passengers reported that they are **very likely to recommend MUTD** to others, and almost half of passengers said that their opinion of MUTD has **improved over the past two years**.
- Top reasons riders use MUTD over other transportation modes include better for the **environment**, **less expensive**, and more **relaxing**.
- MUTD riders have expressed a desire for more frequent weekday and weekend service.
- Riders use MUTD services for purposes including **medical appointments, work, school, and personal errands.**
- About 60% of survey respondents rated the **transportation system as good or higher**.
- **The top barrier** to riding a bicycle or walking in Missoula is the weather.
- Most survey participants would support future passenger rail service.
- Biking and walking **decreased** in the past six years.[1]
- The average commute time (16 minutes) **has not changed** in Missoula and remains lower than the 27-minute national average.

[1] Note, the two surveys that support this finding were conducted during different times of the year that may have influenced these results (2019 survey was conducted in summer/fall, 2023 survey was conducted in the fall/winter).

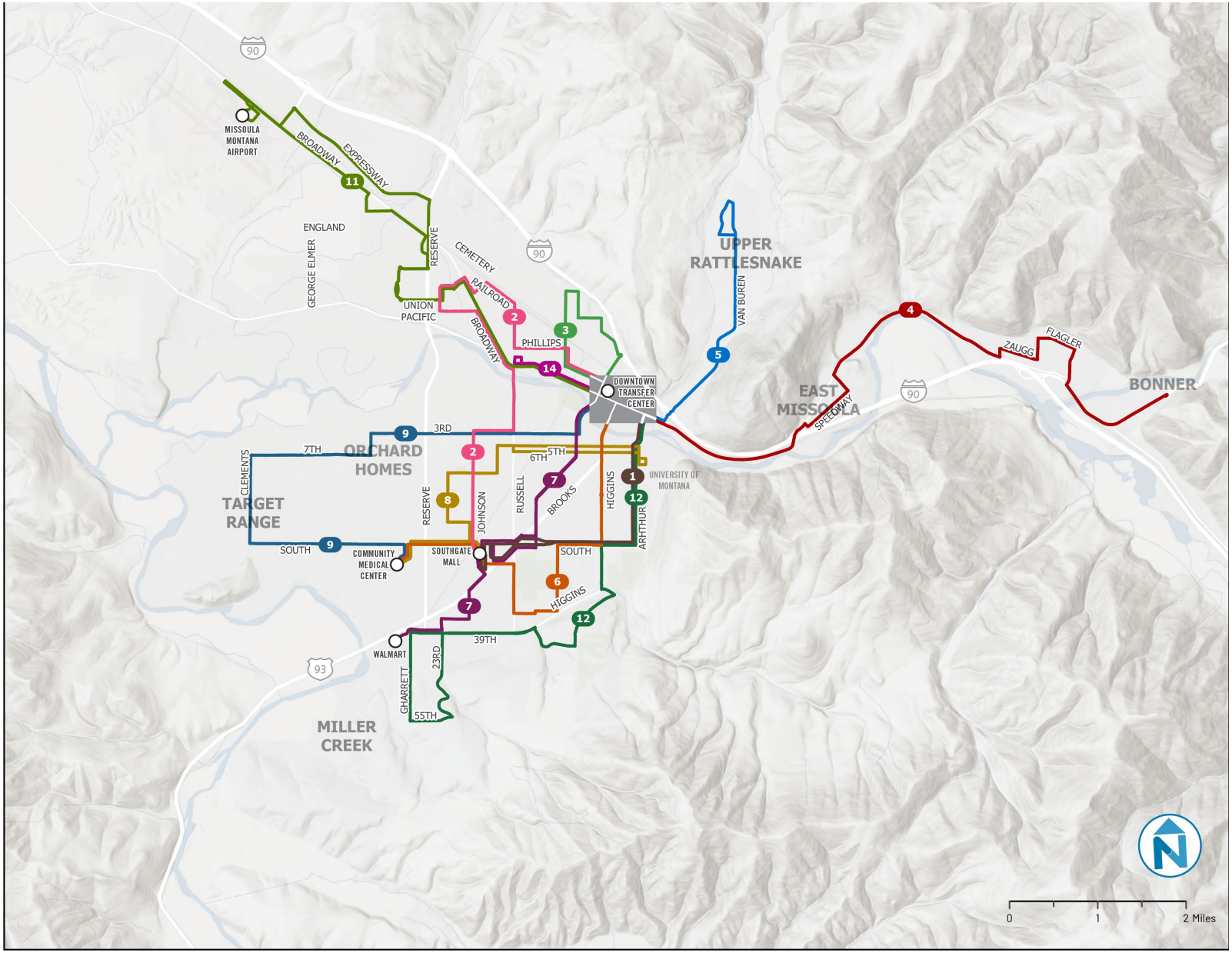
TRANSIT CONDITIONS

This section provides an overview of transit services in Missoula, including those provided by MUTD and the University of Montana's (UM) UDASH.

Mountain Line Current Services

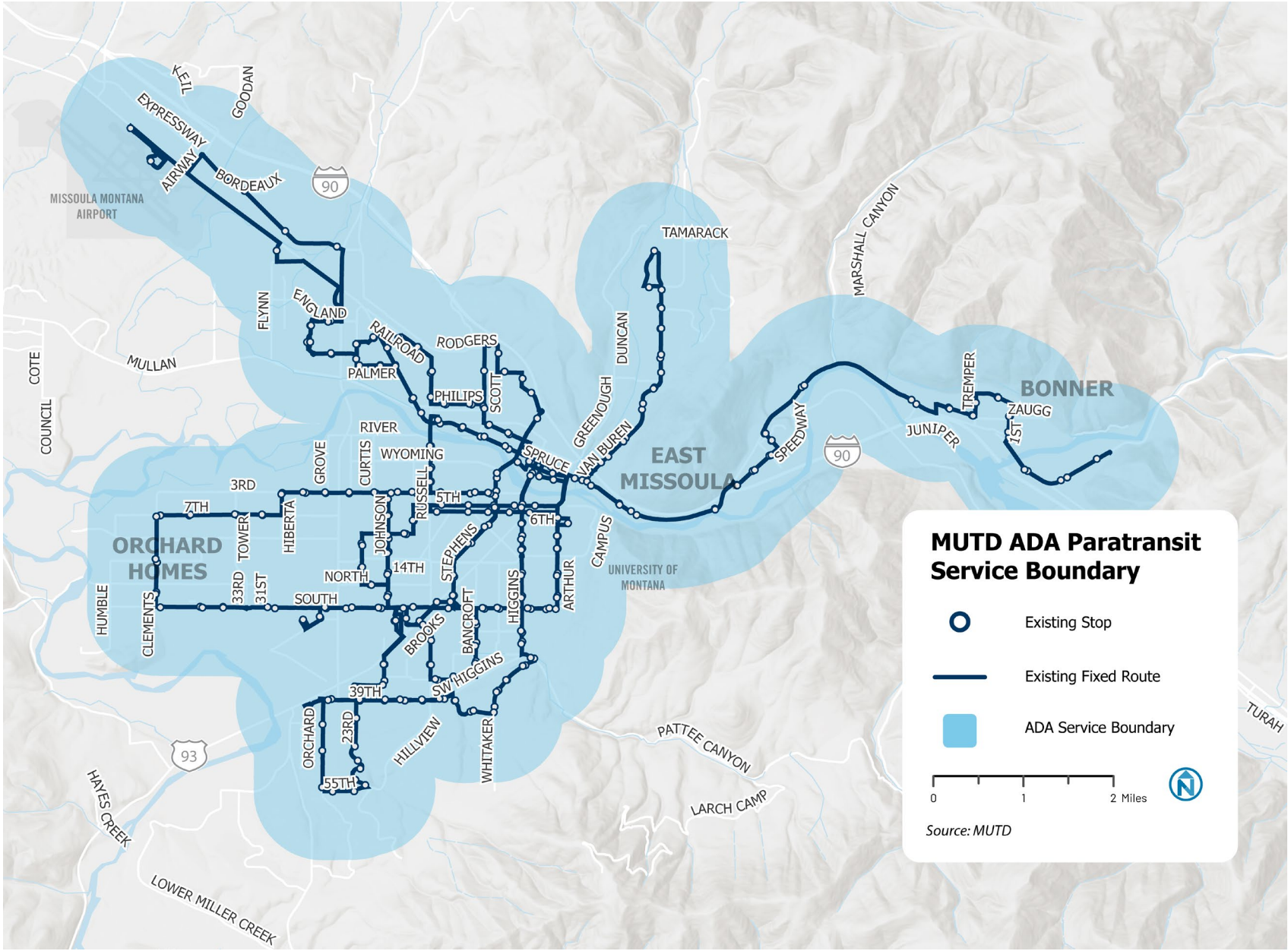
MUTD, also known as Mountain Line, is the primary transit provider in Missoula, operating zero-fare fixed-route bus and paratransit service. Figure 3-10 illustrates the fixed-route network. Figure 3-11 illustrates the paratransit service area, delineated as a three-quarter mile buffer around the fixed-route network.

Figure 3-10 MUTD Fixed-Route



Source: MUTD

Figure 3-11 MUTD Paratransit Service Area



Source: MUTD

Other Regional Providers

UDASH

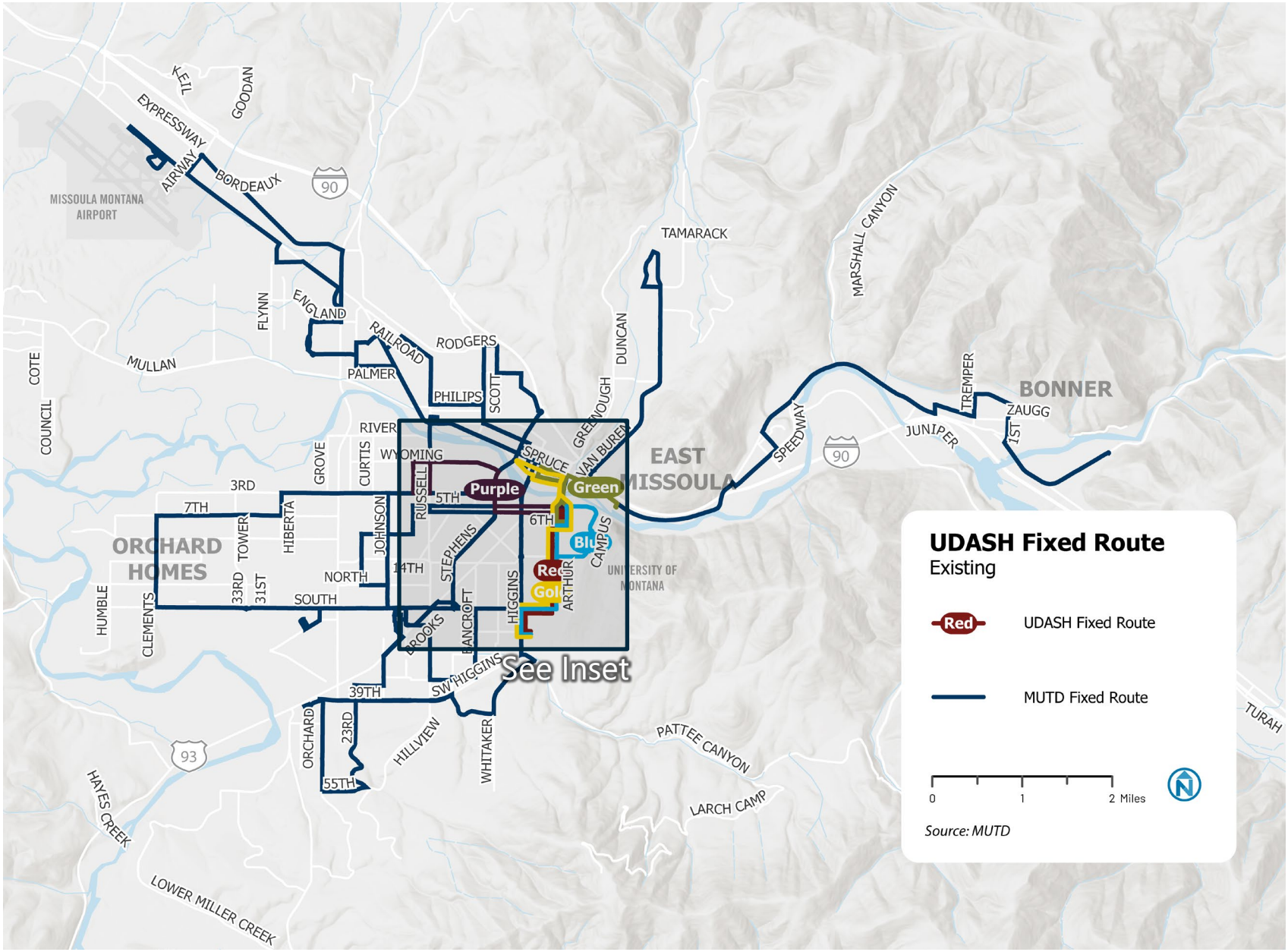
UDASH is the University of Montana's (UM) transportation service.

Figure 3-12 illustrates UDASH fixed-route service. The university operates five bus routes that connect UM's south and main campuses and residential areas. All five routes operate Monday through Friday when UM is in session. The university also operates several special event shuttles for commencement and football games.

The Purple Line operates between the UM Transit Hub and Catlin Street / Wyoming Street via 5th Street, 6th Street, and Cregg Lane. Service operates every 30 minutes from 7:15 a.m. to 6:00 p.m. The Green Line operates between the UM Transit Hub, Missoula College (River Campus), and Downtown near ROAM Student Living via Broadway Street, Main Street, and Front Street. The service operates every 20 minutes from 7:30 a.m. to 6:10 p.m. The Red Line operates between the UM Transit Hub and Lewis and Clark Park and Ride via Arthur Avenue and South Avenue. The service operates every 20 minutes from 7:15 a.m. to 8:30 p.m. The Blue Line operates between the UM Transit Hub and Lewis and Clark Park and Ride via Campus Drive, Arthur Avenue and South Avenue. The service operates every 30 minutes from 7:00 a.m. to 8:50 p.m. The Gold Line operates between the Transit Hub, downtown Missoula, and Lewis & Clark Park and Ride. The service operates every 30 minutes from 8:30 p.m. to 10:18 p.m. from Monday to Thursday and until 12:48 a.m. on Friday nights.

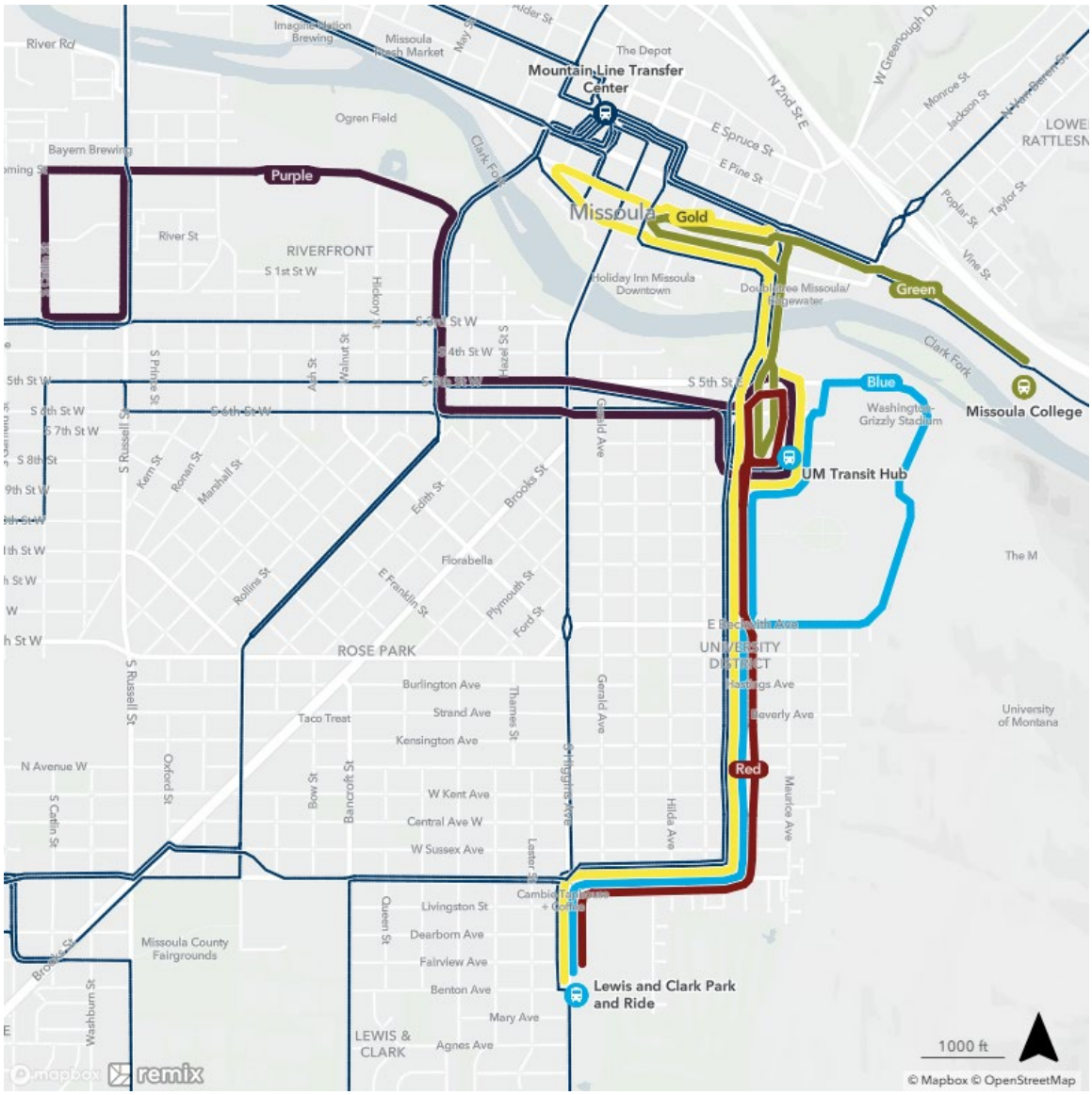
Several UDASH services corridors duplicate MUTD service. The Blue and Red Lines duplicate Routes 1 and 12 on Arthur Avenue. The Green Line duplicates Route 4 on Broadway Street. The Purple Line duplicates Route 8 on 5th and 6th Streets.

Figure 3-12 UDASH Fixed-Route



Source: University of Montana, 2023

Figure 3-13 UDASH Fixed-Route Inset



Source: University of Montana, 2023

Fixed Route

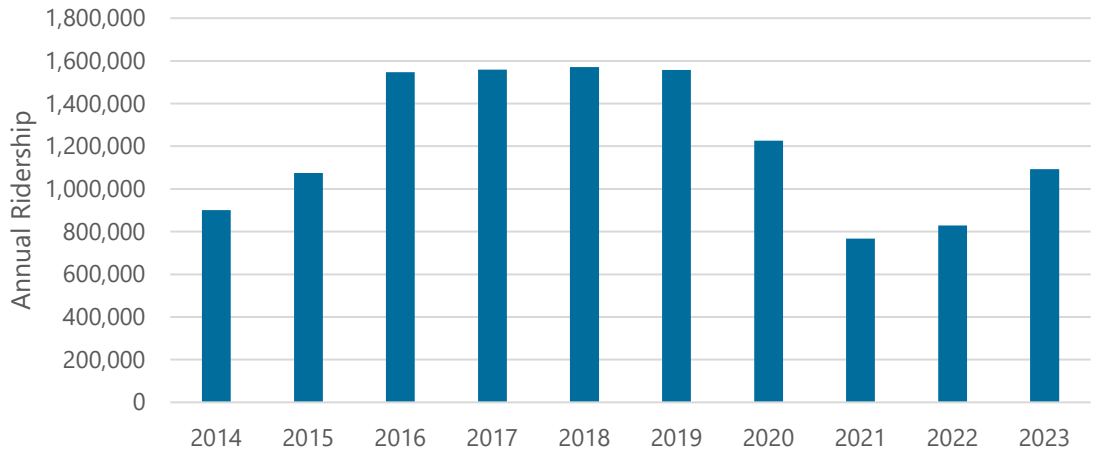
MUTD currently operates 13 fixed routes in its network (including one seasonal historic trolley route). This section describes MUTD's fixed-route service in greater detail, including historical trends and route-level analysis of service span and frequency, ridership, productivity, and on-time performance. It also includes an overview of existing transit facilities, bus stops and amenities, and geographic coverage. The purpose of this analysis is to understand the baseline service level upon which to build future recommendations.

Historical Trends

Providing a historical context of MUTD's fixed-route service is important to set a baseline for where the agency is today.

As seen in Figure 3-14, ridership on MUTD's fixed-route service peaked during 2016 to 2019 at slightly less than 1.6 million trips. Like many agencies, MUTD experienced a drop in ridership due to the Covid pandemic. Ridership has not fully recovered – MUTD's FY 2023 annual ridership is roughly 70% of FY 2019 ridership.

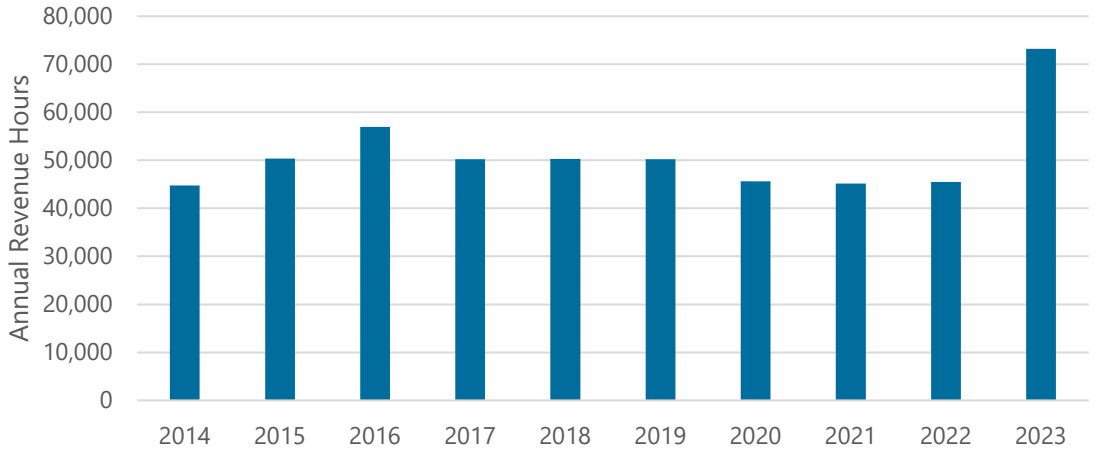
Figure 3-14 Historical Fixed-Route Ridership



Source: MUTD, 2023

Revenue hours are the amount of time buses operate in service, including recovery time and operator breaks at the end of each trip. As seen in Figure 3-15, revenue hours had been generally steady except for a small decrease from 2020 to 2022. Revenue hours in FY 2023 increased through introducing various service improvements in July 2022, including new Sunday service, longer Saturday service, and more weekday service. Weekday service enhancements included earlier and later service as well as all-day service on Routes 4 and 11.

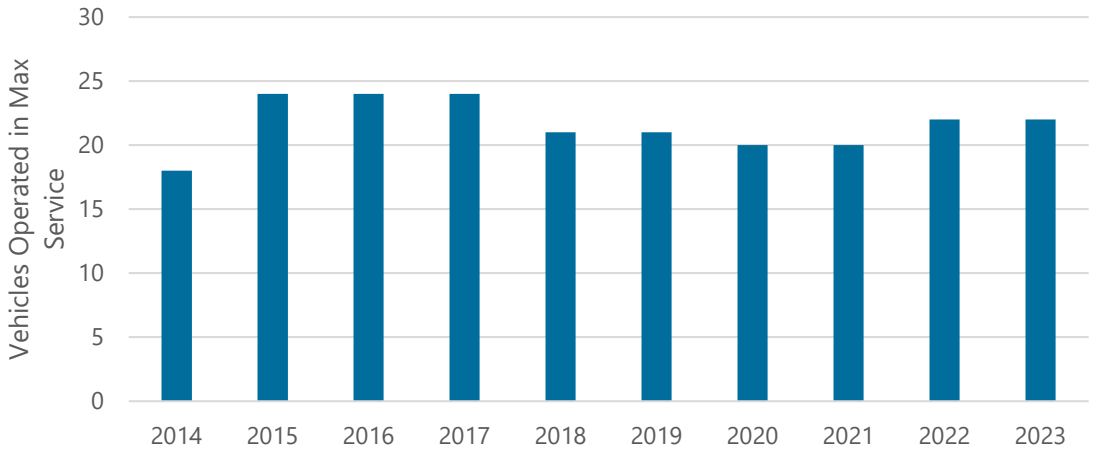
Figure 3-15 Historical Fixed-Route Revenue Hours



Source: MUTD, 2023

Vehicles operating in max service represent the maximum number of vehicles needed at a single time to provide peak service. As seen in Figure 3-16, vehicles operated in max service peaking from 2015 to 2017 at 24 vehicles. Notably, the service increases implemented in July 2022 did not require an increase in the number of vehicles operated in max service in FY 2023.

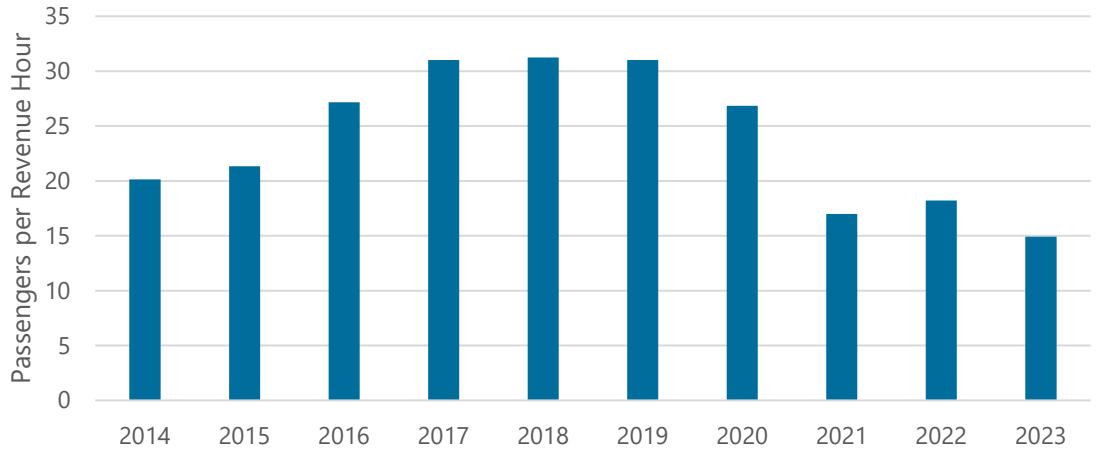
Figure 3-16 Historical Fixed-Route Vehicles Operated in Max Service



Source: MUTD, 2023

The productivity of service is typically measured in number of passengers per revenue hour. Service productivity (Figure 3-17) peaked from FY 2017 to 2019 and is currently at a ten-year low of about 15 passengers per revenue hour. Low productivity in FY 2023 is likely due to the large service expansion, particularly into new time periods (Sunday and early morning/late evening weekday service). While this new service no doubt improves mobility within the community, more time is needed for the ridership count to fully mature.

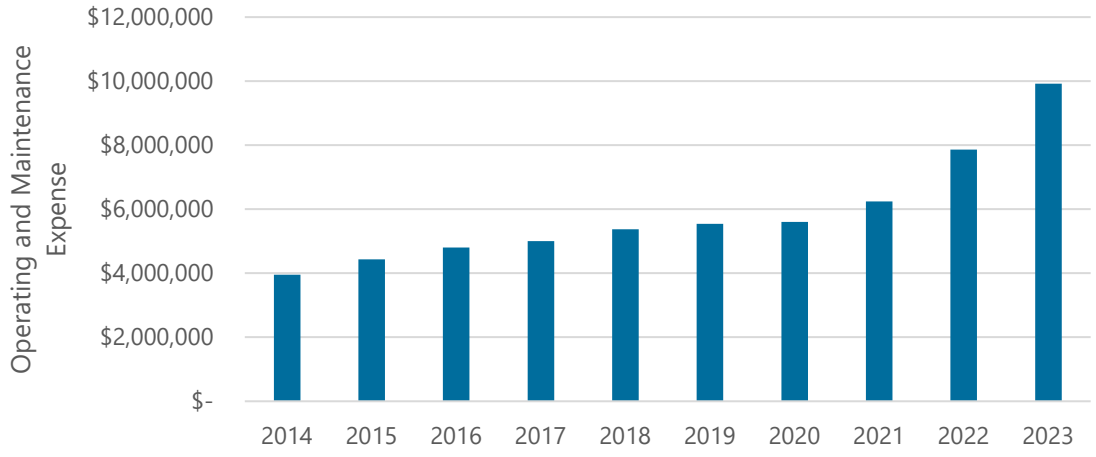
Figure 3-17 Historical Fixed-Route Productivity



Source: MUTD, 2023

Figure 3-18 shows the annual operating and maintenance (O&M) costs for the fixed-route system, not adjusted for inflation. Prior to the pandemic, costs rose an average of 6% per year. Between FY 2021 and 2023, costs increased by an average 20% annually.

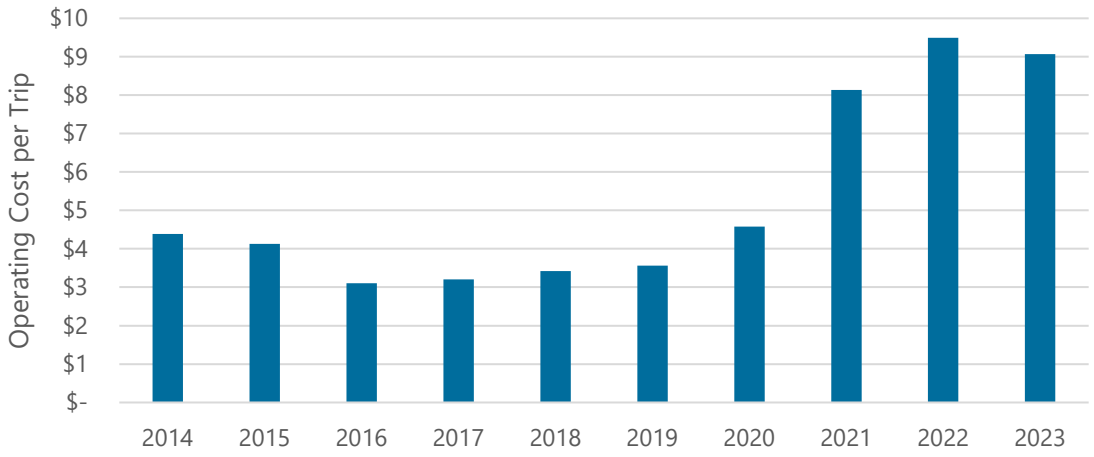
Figure 3-18 Historical Fixed-Route Operating and Maintenance Expense



Source: MUTD, 2023

Figure 3-19 normalizes O&M costs by passenger number, or trips. It shows that the cost per trip hovered around $3.77 between FY 2014 and 2020. Due to Covid-related ridership declines, higher operating costs, and increased revenue service, the cost per trip increased to an average $8.90 between 2021 and 2023, a 136% increase.

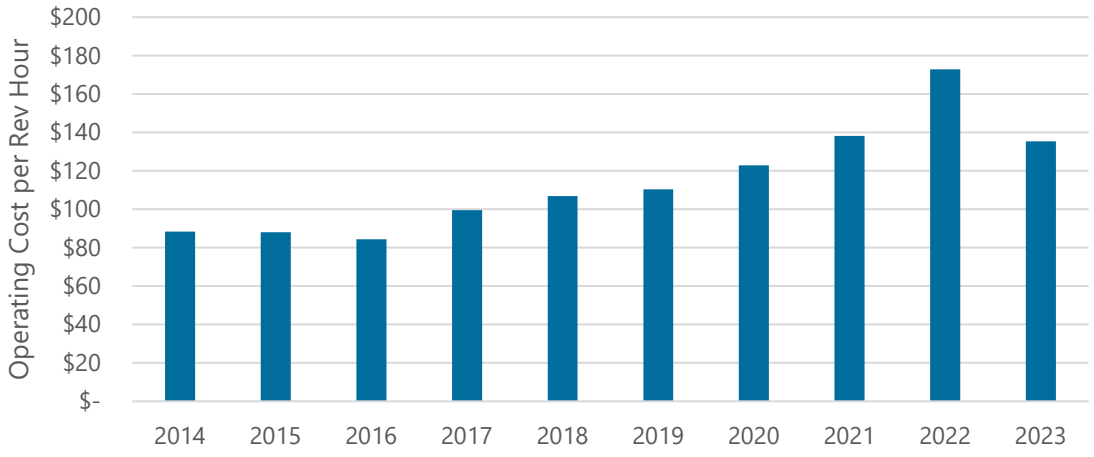
Figure 3-19 Historical Fixed-Route Cost per Trip



Source: MUTD, 2023

Figure 3-20 normalizes O&M costs by revenue hours. Between FY 2014 and 2023, cost per revenue hour increased by an average 6% per year. A significant 25% increase from the previous year occurred in FY 2022, largely. Inflation accounts for year-over-year increases.

Figure 3-20 Historical Fixed-Route Cost per Revenue Hour



Source: MUTD, 2023

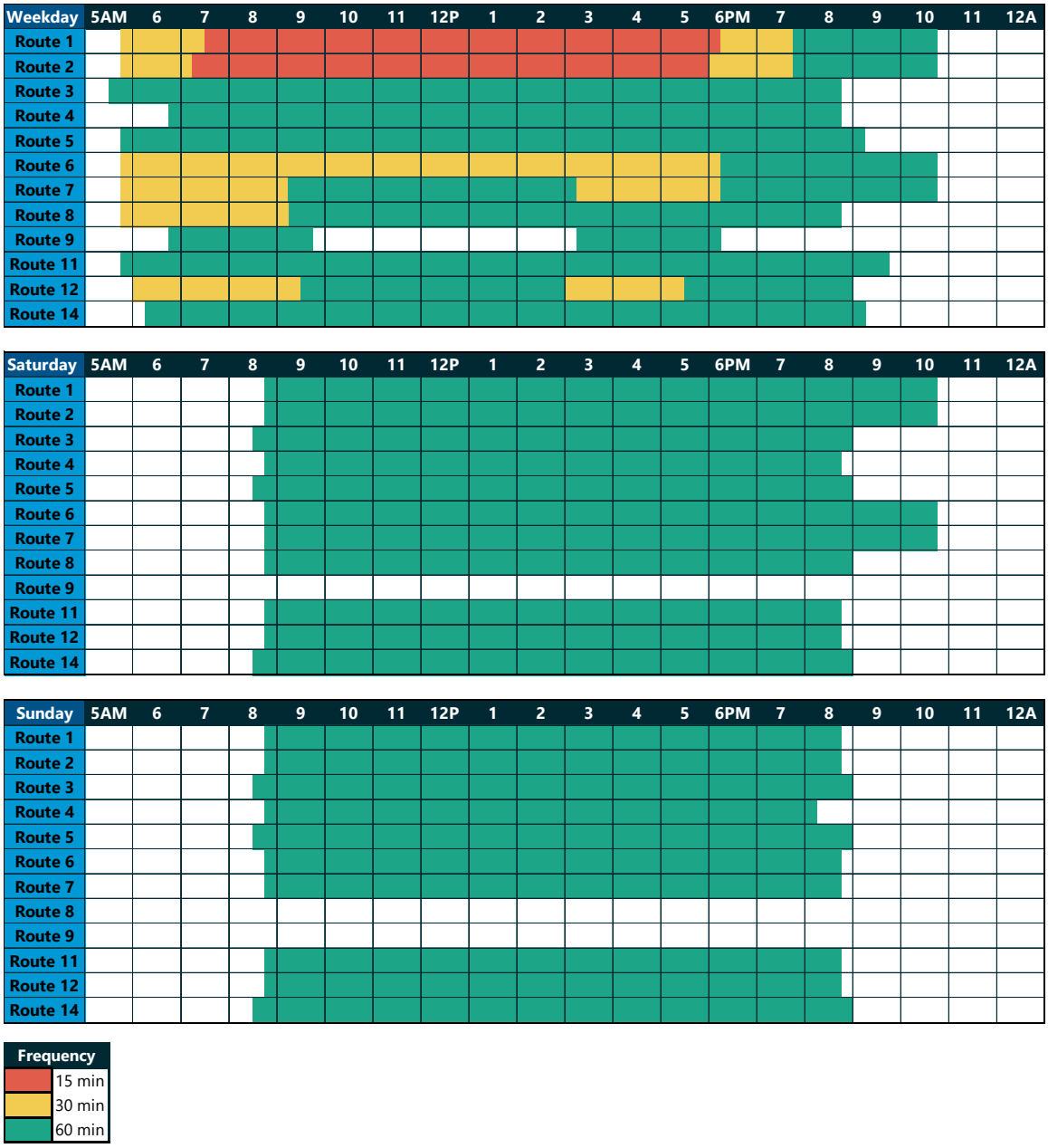
Span of Service and Frequency

Figure 3-21 shows headways and service span for each route. Figure 3-22 shows the spatial distribution of routes by service frequency for weekday daytime (peak). Maps with frequencies on weekday evenings (off-peak), Saturdays, and Sundays are included in Appendix A.

All but two of MUTD's routes operate seven days weekly. On weekdays, routes generally operate between 6 a.m. and 9 p.m., except for Routes 1, 2, 6, 7, and 11, which end around 10 or 11 p.m. On weekends, routes generally run from 9 a.m. to 9 p.m., except for Routes 1, 2, 6, and 7, which operate until 11 p.m. on Saturdays.

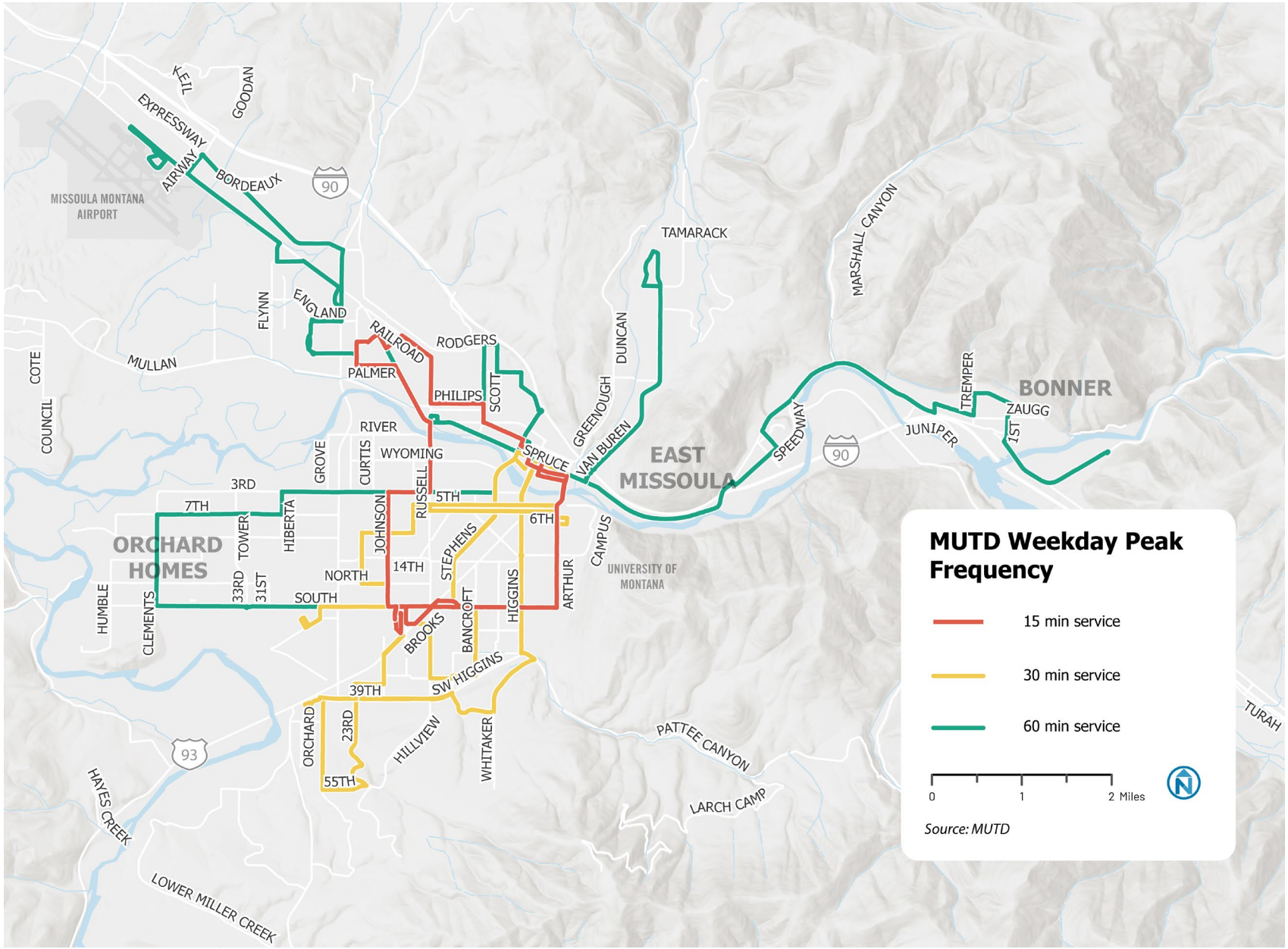
Aside from two routes, most operate on between 30- and 60-minute headways on weekdays. Routes 1 and 2 operate a 15-minute weekday service from 7 a.m. to 6 p.m. On weekends, all routes run on 60-minute headways.

Figure 3-21 Fixed-Route Span and Frequency



Source: MUTD, Effective July 10, 2022

Figure 3-22 Fixed-Route Weekday Peak Frequency



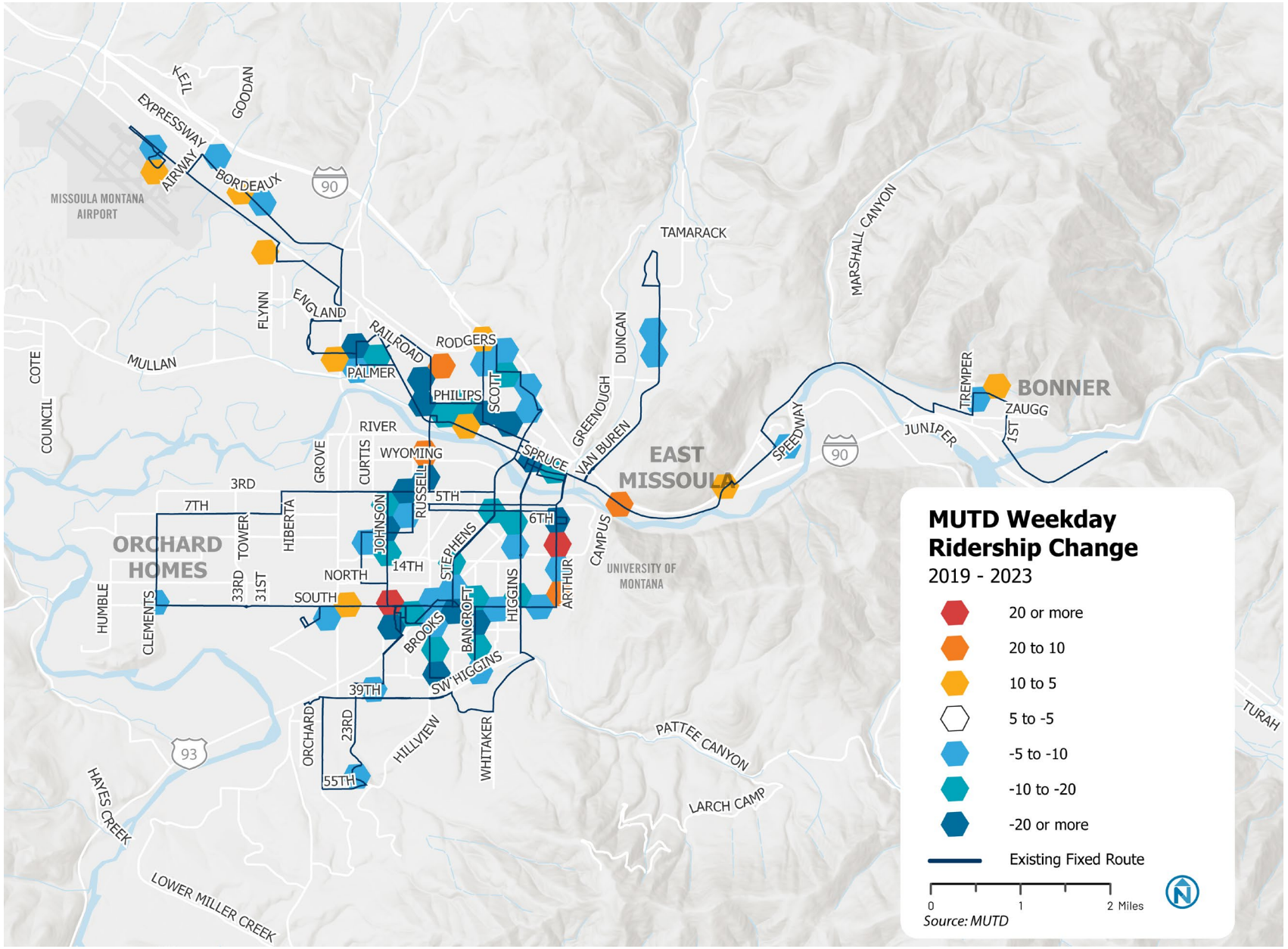
Source: MUTD

System Ridership

In 2019, MUTD's fixed-route network averaged over 5,043 boardings on weekdays. In 2023, the system posted an average of 3,892 weekday boardings. Maps that depict the average weekday ridership throughout the system at the stop level in 2019 and 2023 are included in Appendix A. Some of the high-ridership corridors in the system include south Johnson Street, South Avenue, Russell Street, and Broadway Street.

Figure 3-23 shows the change in ridership between 2019 and 2023. Ridership declined around the intersection of South 3rd Street West and south Johnson Street and around the Westside, Northside, Heart of Missoula, Southgate Triangle, and Lewis and Clark neighborhoods.

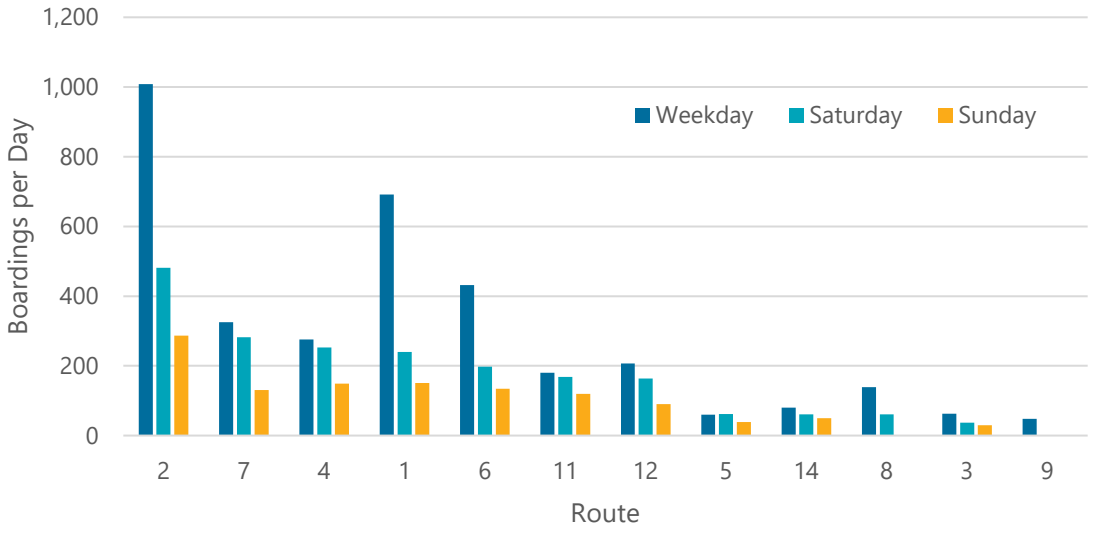
Figure 3-23 Weekday Ridership Change 2019 - 2023



Source: MUTD

Figure 3-24 shows ridership at the route level in September and October 2023. On weekdays, the top three routes are Route 2, Route 1, and Route 6. Combined boardings comprise 61% of daily ridership. On Saturdays, Routes 2, 7, and 4 post the highest ridership numbers. Routes 2, 1, and 4 post the highest ridership numbers on Sundays. On both Saturdays and Sundays, the top three routes together make up 50% of daily boardings.

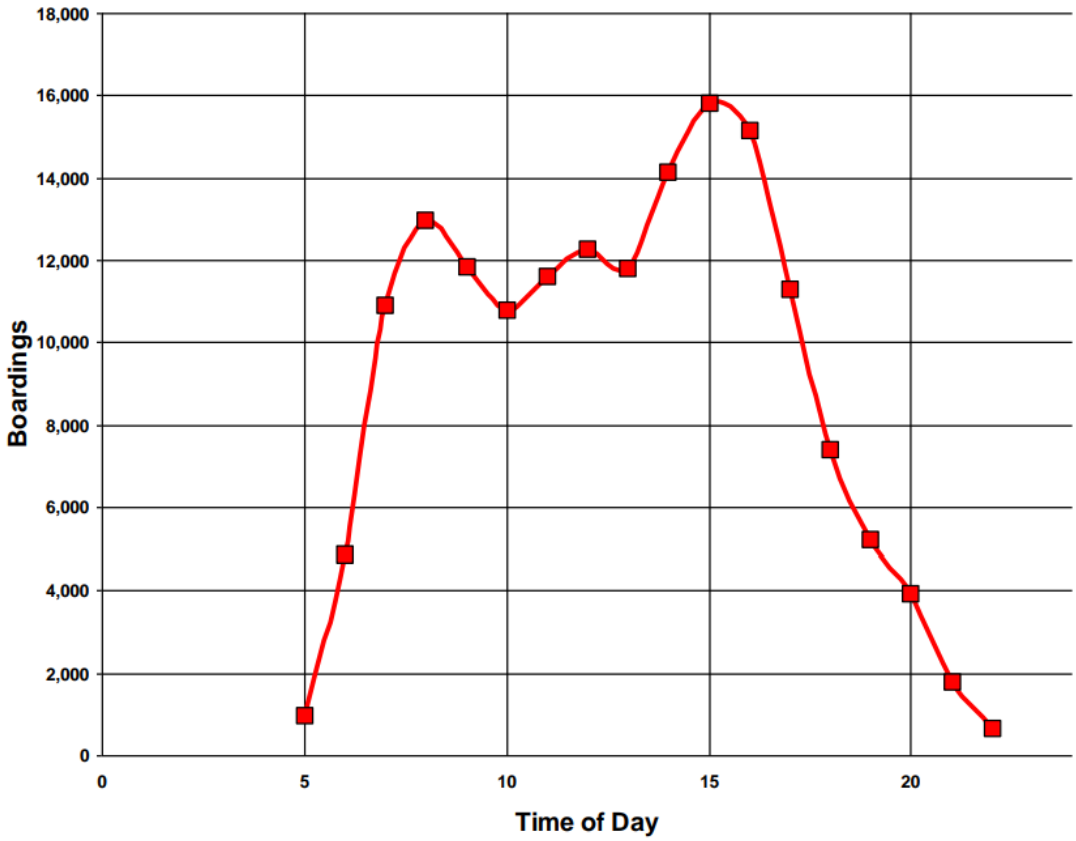
Figure 3-24 Average Weekday Route Ridership 2023



Source: MUTD, September to November 2023

As seen in Figure 3-25, a temporal analysis of ridership was also performed. The results show weekday ridership gradually increases from 5 a.m. before peaking between 7 a.m. and 9 a.m. A second peak occurs between 2 p.m. and 4 p.m. before ridership declines toward the end of service at 10 p.m. Ridership is steady throughout most of the day, aside from the afternoon peak time. The highest ridership periods coincide with the highest service frequencies.

Figure 3-25 Weekday Boardings by Time of Day



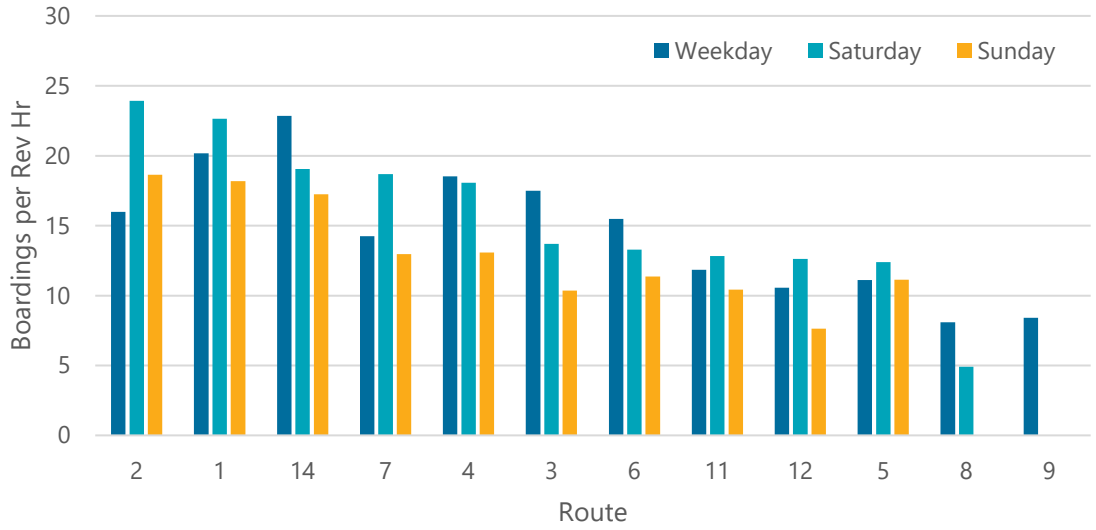
Source: MUTD, September and October 2023

Productivity

Productivity is measured in boardings per vehicle revenue hour. Revenue hours represent the amount of time buses operate in service, including recovery time and operator breaks at the end of each trip.

Figure 3-26 shows the weekday boardings per revenue hour for MUTD fixed-route service. On weekdays, the three most productive routes in the MUTD system are Routes 14, 1, and 4, all of which count 18 or more boardings per revenue hour. The three least productive routes are Routes 12, 9, and 8, all of which count ten or fewer boardings per revenue hour. On Saturdays and Sundays, Routes 1, 2, and 14 count the highest ridership productivity. Routes 8 and 12 post the lowest productivity on Saturdays and Sundays respectively.

Figure 3-26 Route Boardings per Revenue Hour 2023

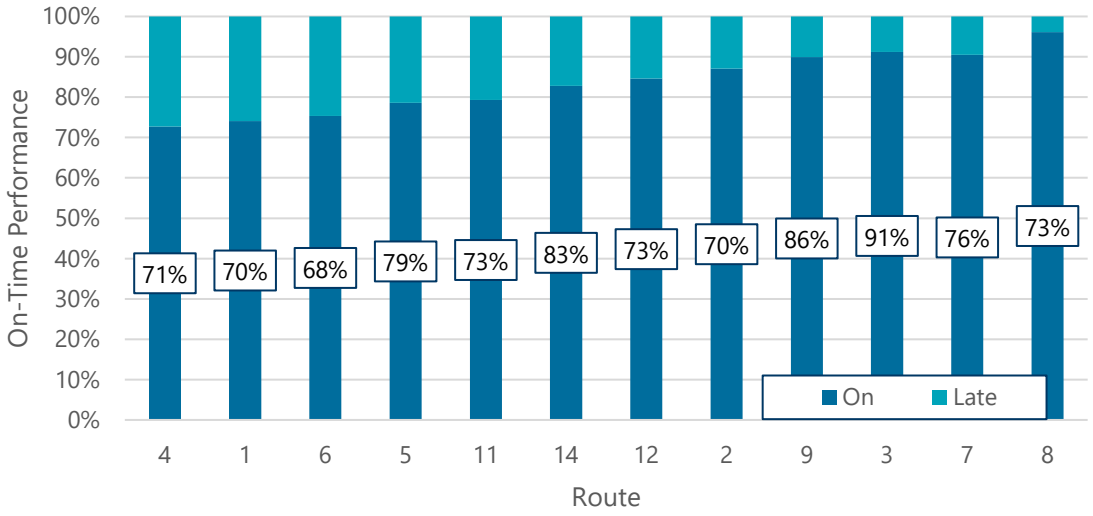


Source: MUTD, 2023

On-Time Performance

MUTD measures on-time performance by comparing the timepoint on the schedule with the actual time the bus arrives. A bus is considered on time if it arrives up to one minute before or five minutes after the scheduled time. Buses that arrive earlier or later than that window are considered early or late. MUTD currently has no on-time performance goal for service. Figure 3-27 illustrates the on-time route performance in September and October 2023. Route 3 posted the highest on-time performance at 91%, while Route 6 posted the lowest at 68%. Route 4 counted the highest rate of late arrivals at 27%.

Figure 3-27 On-Time Performance 2023



Source: MUTD, 2023

Bus Stops and Amenities

There are currently 346 stops in the MUTD system as of December 2023. No stops have been added or removed since this data was collected. Sixty-six stops (19%) have some sort of seating, and 56 additional stops (16%) have shelters. Figure 3-28 shows the number and percentage of stops with various amenities. Improving the passenger waiting experience by investing in more bus stop amenities presents a clear opportunity to raise service quality and attract more riders.

Figure 3-28 Bus Stop Amenities

	Number of Stops	Percent
Seating (Bench or Simme-Seat)	66	19%
Shelter	56	16%
Total	346	100%

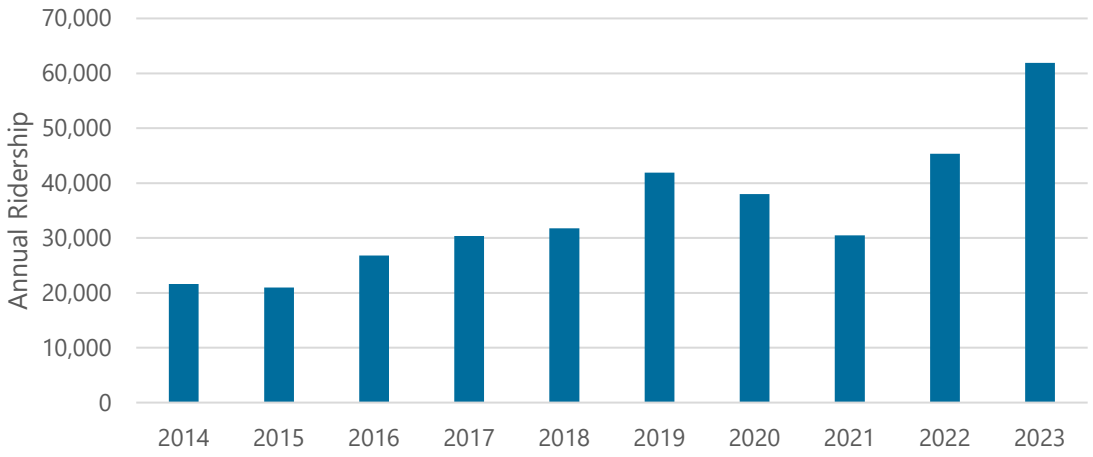
Source: MUTD, December 2023

Paratransit

Historical Trends

Figure 3-29 illustrates historical paratransit ridership. Ridership on MUTD's paratransit service increased by an average of 19% annually. Between 2019 and 2021, the Covid pandemic caused a 27% drop in ridership. However, between 2021 and 2023, paratransit ridership rebounded with a 103% increase. In FY 2023, ridership totaled 61,872, about a 48% increase from pre-pandemic levels.

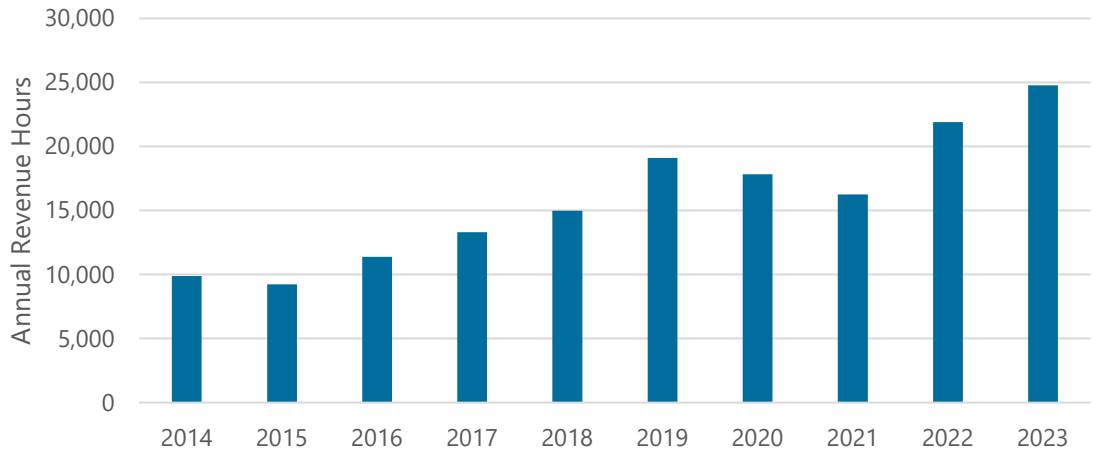
Figure 3-29 Historical Paratransit Ridership



Source: MUTD, 2023

Revenue hours represent the amount of time buses operate in service, including recovery time and operator breaks at the end of each trip. Figure 3-30 illustrates historical paratransit vehicle revenue hours. Between FY 2013 and 2019, revenue hours increased an average of 15% annually. Between FY 2019 and 2021, MUTD experienced a 15% drop in revenue hours due to the Covid pandemic. However, between FY 2021 and 2023, revenue hours rebounded with a 52% increase. In FY 2023, MUTD operated 24,785 revenue hours, an approximate 30% increase from pre-pandemic levels.

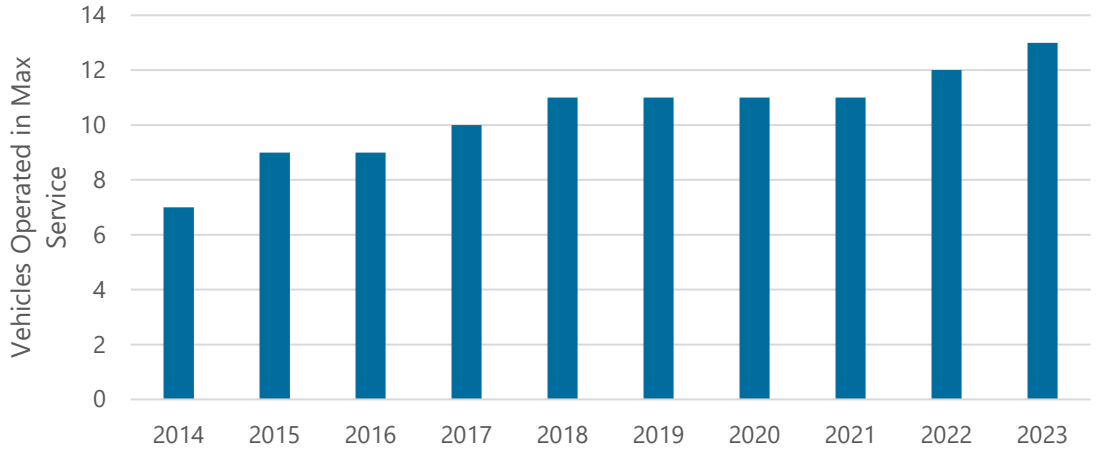
Figure 3-30 Historical Paratransit Vehicle Revenue Hours



Source: MUTD, 2023

Vehicles operating in max service is the maximum number of vehicles needed at a single time to provide peak service. As seen in Figure 3-31, paratransit vehicles operated in max service increased between FY 2013 and 2018 before plateauing for four years. One additional vehicle per year was added to max service in FY 2022 and 2023.

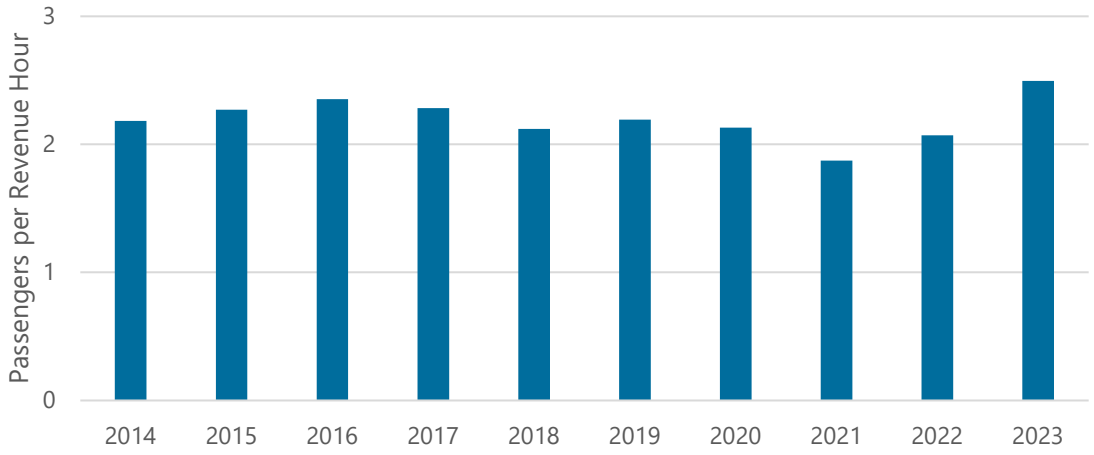
Figure 3-31 Historical Paratransit Vehicles Operated in Max Service



Source: MUTD, 2023

The productivity of service is typically measured in terms of passengers per revenue hour. Service productivity (Figure 3-32) has hovered between 2.1 to 2.3 passengers per revenue hour over the last decade. In FY 2021, ridership fell slightly below 1.9 passengers per revenue hour. In FY 2023, ridership rebounded to 2.5 passengers per revenue hour.

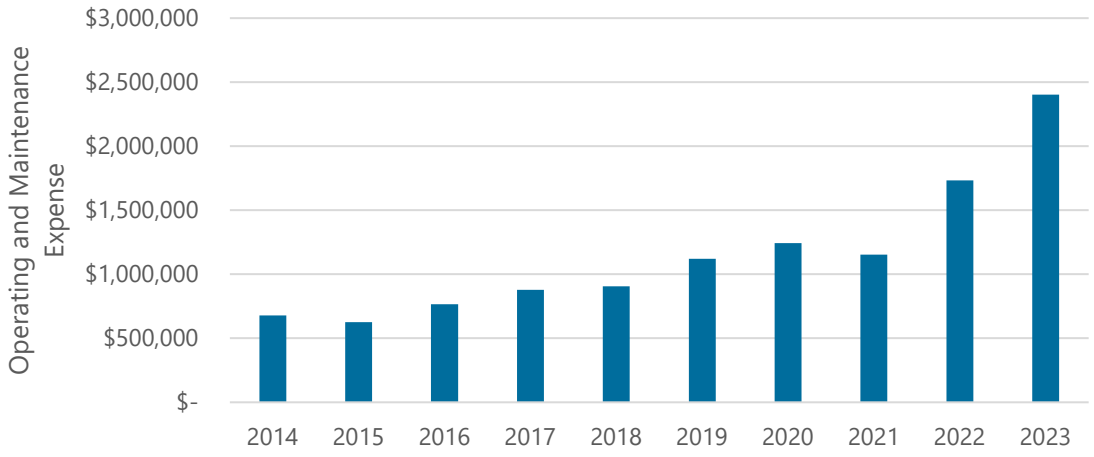
Figure 3-32 Historical Paratransit Productivity



Source: MUTD, 2023

Figure 3-33 shows the annual operating and maintenance (O&M) costs for the paratransit service, not adjusted for inflation. Prior to the pandemic, costs rose an average of 11% per year. A 7% decline occurred in FY 2021, the only year that costs did not increase. In the following two years, expenses increased by an average of 45% per year.

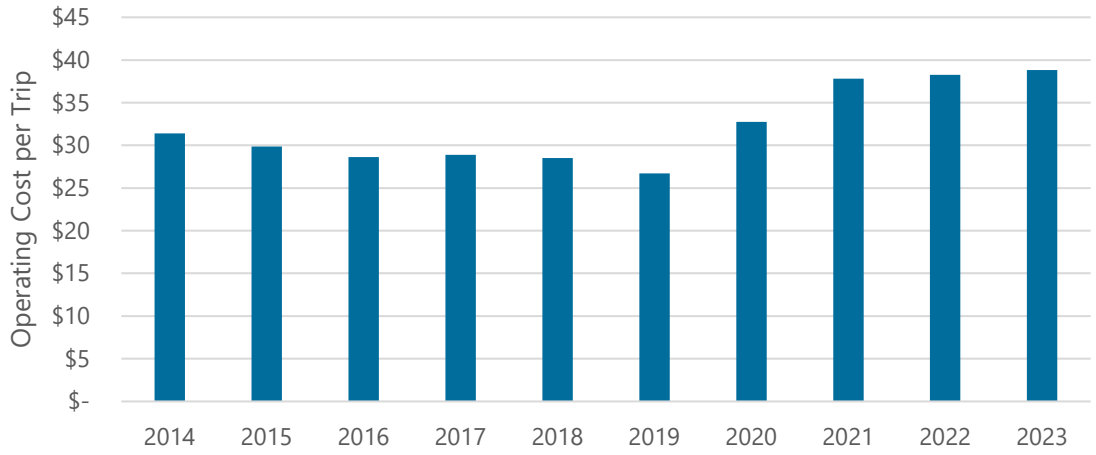
Figure 3-33 Historical Paratransit Operating and Maintenance Expenses



Source: MUTD, 2023

Figure 3-34 normalizes O&M costs by number of passengers, or trips. Between FY 2013 and 2019, cost per trip decreased by an average of $1, or 3% per year, from $31 in FY 2013 to $26 in FY 2019. Cost per trip increased significantly during the pandemic, averaging a $5.50 increase per year from FY 2019 to 2021. Since FY 2021, cost per trip has plateaued at about $39, a 44% increase from pre-pandemic levels.

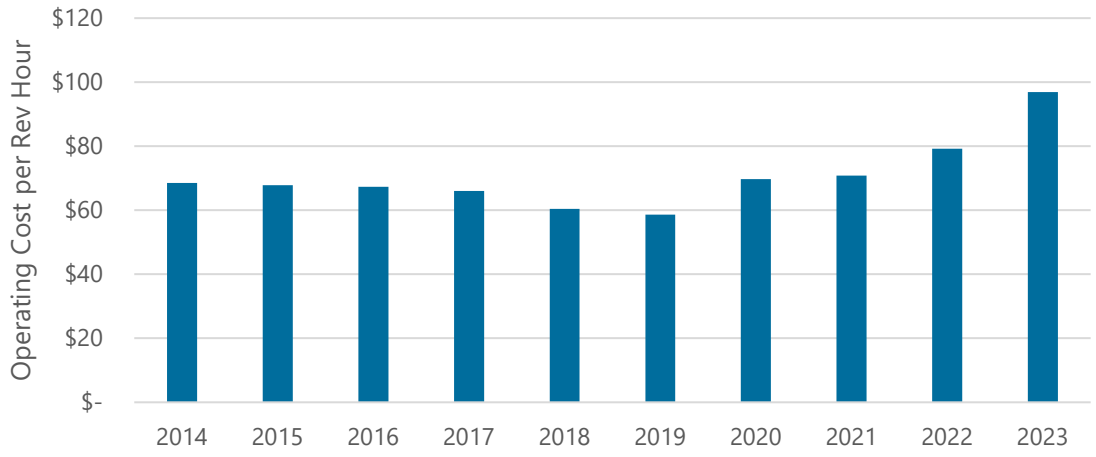
Figure 3-34 Historical Paratransit Cost per Trip



Source: MUTD, 2023

Figure 3-35 normalizes O&M costs by revenue hours. Between FY 2013 and 2019, cost per revenue hour declined by an average 2% annually. Cost per revenue hour since pre-pandemic levels in FY 2019 has increased 64%, an average 16% annually.

Figure 3-35 Historical Paratransit Cost per Revenue Hour



Source: MUTD, 2023

Fleet

MUTD has 30 vehicles in its fixed-route fleet, 12 of which are battery electric. Figure 3-36 lists the complete fleet roster, along with age and replacement year.

Figure 3-36 Fixed-Route Fleet

Number of Vehicles	Year	Make	Replacement FY	Propulsion Type
1	1996	Chance	2024	Diesel
10	2009	Gillig	2025	Diesel
4	2010	Eldorado	2024/2025	Diesel
3	2014	Gillig	2029	Diesel
6	2019	Proterra	2031	Battery Electric
4	2021	Gillig	2033/2034	Battery Electric
2	2021	New Flyer	2034	Battery Electric

Source: MUTD, 2023

MUTD has 16 vehicles in its paratransit fleet. Figure 3-7 lists the complete fleet roster, including age and replacement year.

Figure 3-37 Paratransit Fleet

Number of Vehicles	Year	Make	Replacement Year	Propulsion Type
2	2014	Chevrolet	2022	Diesel
1	2018	Champion	2025	Diesel
3	2018	Dodge	2025	Diesel
4	2019	Dodge	2027	Diesel
4	2021	Elkhart	2027	Diesel
2	2022	Ford	2030	Diesel

Source: MUTD, 2023

Facilities

MUTD operates one major transit hub, where riders can transfer between routes: the Downtown Transfer Center, located at 200 W Pine St. All routes except Route 8 use the Transfer Center as an end-of-line terminus. MUTD also operates an administrative and maintenance facility at 1221 Shakespeare Street.

Key Findings

- Historical trend data portray where MUTD has been and the direction it is heading.
- Fixed Route
  - **Ridership on the fixed-route network was steady before Covid** and is rebounding back to pre-pandemic levels. MUTD's 2023 ridership totaled 1.09 million boardings, approximately 70% of MUTD's 2019 annual ridership. 2024 ridership has recovered further to approximately 80% of 2019's annual ridership.
  - **Due to various service implementations, revenue hours increased in 2023 as follows**:
    - Earlier and later weekday service
    - All-day weekday service on two new routes
    - Longer Saturday service
    - New Sunday service
  - **Productivity has been declining since the Covid pandemic** and in 2023 it counted 15 passengers per revenue hour, less than half of what it was in 2019. The Sunday and longer hours service expansion implemented in 2023 contribute in part to the productivity decrease, though time for ridership numbers to mature is required.
  - **Operations and maintenance costs have been increasing** over the last decade, though the highest increases have occurred during the last three years.
  - **Ridership on MUTD's paratransit service has exceeded pre-pandemic levels**. Despite a ridership drop in 2020 and 2021, ridership rebounded in the following years, increasing 48% increase from pre-pandemic levels in 2023.
  - **Productivity is relatively stable**, with numbers holding steady around two passengers per hour for the last decade, aside from a dip during the Covid pandemic.

  - Without adjusting for inflation, **operating and maintenance expenses have drastically increased**; expenses in 2023 were twice as high as expenses in 2019.
- Based on 2022 average weekday ridership numbers, the **top three ridership routes** in the network are **Routes 1, 2**, **and 6**.
- The weekday systemwide temporal distribution of ridership shows an 8 a.m. peak and a 3 p.m. peak, with ridership generally steady during the middle of the day. This ridership pattern supports the daytime service schedule MUTD currently operates.
- The five **most productive routes** in the MUTD system based on average weekday boardings per revenue hour are **Routes 1, 2, 3, 4 and 14.**
- The high-frequency (15-minute) service occurs on the **strongest ridership corridors.** Some of the high ridership corridors in the system include south Johnson Street, South Avenue, Russell Street, and Broadway Street.
- **Ridership patterns suggest latent demand for more weekend service.** Routes 1, 2, 7, and 12 run hourly service on weekends but experience higher productivity levels than on weekdays when service operates at 30-minute headways or better during peak hours.
- Out of the 346 stops in the system, 16% have shelters, and 19% have either Simme-Seats or benches. Investing in shelters and seating presents an opportunity to improve rider experience.

4 PUBLIC OUTREACH

MUTD engaged in continuous outreach with the community throughout this project to ensure the Transit Service Plan reflects the region's priorities and is supported by the community. MUTD worked with the MPO to conduct outreach jointly, gathering input from Missoula area residents, employees, students, and visitors for inclusion in both the Transit Service Plan and the LRTP. There were three main phases of community outreach:

- **Phase I: Listen and Learn** about the community's challenges, hopes, and dreams for transit (April to July 2024)
- **Phase II: Create and Apply** potential transit concepts and garner feedback (August to September 2024)
- **Phase III: Integrate and Refine** the plan based on Phase II feedback and present how it was incorporated into the plan (December 2024)

STAKEHOLDERS

MUTD and the MPO collaborated on gathering input from key stakeholders for inclusion in both the Transit Service Plan and the LRTP. A diverse set of stakeholders, consisting of four established advisory groups (committees established by MUTD and the MPO) and 25 community organizations were engaged throughout the project. The list of stakeholders is included in Appendix B.

PHASE I OUTREACH

Phase I outreach spanned from April to June 2024 and focused on listening to the community's transportation concerns and hopes for the future. This phase aimed at creating awareness of the Transit Service Plan and LRTP planning efforts as well as gathering information on transportation needs/challenges and desired improvements. A variety of engagement activities were executed in Phase I, including:

- Establishing two project webpages to serve as central information hubs, one for the Transit Service Plan, and one for the LRTP.
- Conducting discussion group meetings with organizations like the Diversity Advisory Council and the Midtown Implementation Committee. The project team conducted five advisory group meetings and six community partnership meetings.
- Tabling during events at UM and the farmers market.

The feedback gathered from Phase I was used in the development of potential transit improvements that were presented to the public in Phase II.

Additional detail on Phase I outreach is included in the Outreach Summary as Appendix B.

PHASE II OUTREACH

Phase II outreach was conducted from July to September 2024 and focused on soliciting feedback from the community on the proposed recommendations and potential projects. Outreach activities in this phase included:

- Attending seven general and neighborhood meetings, such as the Bonner Milltown Community Council and River Road Neighborhood Council.
- Holding a virtual stakeholder workshop with community organizations in September to discuss potential transportation improvements.
- Conducting one-on-one meetings with eleven community groups like Missoula County Public Schools, Partnership Health Center, and Missoula Aging Services.
- Tabling at 16 local schools and community events.

- Holding a public open house in September where approximately 48 attendees engaged with interactive stations, comment cards, and one-on-one discussions with planners.
- Conducting an online public survey allowing the community to provide feedback on the proposed recommendations and potential projects. Altogether, 640 people participated. Survey results are included in Appendix C.

Additional detail on Phase II outreach is included in the Outreach Summary as Appendix B.

Key Takeaways from Phase II Outreach

- There was strong support for targeted frequency improvements on:
  - Route 3 in Northside
  - Route 4 to East Missoula
  - Routes 1 and 2 on weekends
- Route 15 to Sxʷtpqyen was repeatedly pointed out as a great new service.
- On-demand service received a lukewarm response because:
  - People were uneasy about using a new type of service.
  - People worried about increased travel times, since it was portrayed as a replacement for Routes 9 and 12.
- Route 12 South Hills riders did not support replacing the route with on-demand service or using Route 7.

Feedback received during this outreach phase was used to refine the recommendations for developing a final transit network.

PHASE III OUTREACH

Phase III outreach, summarizing feedback gathered from the community during Phase II and presenting the final near- and long-term plan recommendations, was conducted in December 2024.

Outreach activities in this phase included:

- A virtual stakeholder workshop with community organizations to preview the presentation content for presenting at the virtual public meeting.
- A virtual public meeting to share the feedback gathered from the community during Phase II and present the final near- and long-term transit recommendations. A video of the presentation was uploaded to the Engage web page for individuals who could not attend the meeting.

Additional detail on Phase III outreach is included in the Outreach Summary as Appendix B.

5 TRANSIT SERVICE PLAN

The Transit Service Plan's recommendations are organized into two phases: near term and long term. The **near-term plan** focuses on reducing route duplication and meeting emerging ridership trends. The near-term network will serve the same areas as it does today, and is cost-neutral, meaning recommendations can be implemented without increasing Mountain Line's operating budget.

The **long-term plan** calls for an approximate 50% increase in 2025 current service levels. The plan would help meet the travel demands of a rapidly growing region by improving service span (the length of service throughout the day), frequency, and travel speeds, and by providing new service in up-and-coming dense employment centers and housing developments. The plan assumes Mountain Line would develop and implement capital projects to expand capacity for providing service and improve speed and bus reliability.

Recommended goals are described below.

Update and Streamline the Route Network

The recommendations realign bus routes to better serve the needs of existing and potential transit riders by improving access to key destinations and reducing travel times. This includes greater frequency in high-ridership/high-density areas and direct service from Franklin to the Fort to downtown Missoula, and service to Sx̌tpqyen.

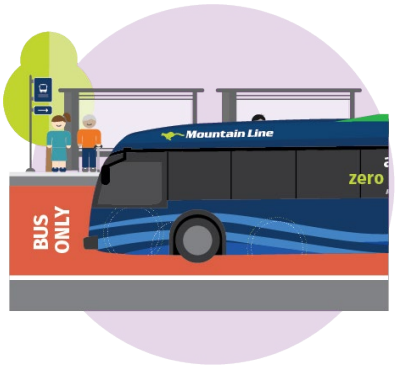
Strategically Expand Bus Service

The recommendations extend routes to serve emerging destinations, offer longer hours, and more frequent service on weekdays and weekends. Four new corridors feature frequent service, every 15 minutes or better.

Promote Transit-Supportive Land Uses

Missoula is growing. Redeveloping concentrations of population and employment can support additional transit service and reduce car traffic. The plan recommends new fixed-route service to the Sawmill District and Sx̌tpqyen, as well as improved service to the rapidly redeveloping Midtown.

Invest in Capital Projects That Improve Speed and Reliability



The long-term recommendations target improvements such as bus lanes, improved stops, transit centers, and transit signal priority to make bus travel times more competitive with private vehicles. Improvements include:

- The new **Brooks Street BRT corridor**, offering fast, frequent, and reliable service between Downtown and Southgate Mall.
- The new **transit center near Southgate Mall** would create better connectivity and transfers between routes, including the new BRT service.
- **Completing the MOAB by 2029 establishes a storage/maintenance facility that supports a larger fleet** delivering more peak service.

This chapter includes the following sections:

- **Guiding Principles for Improvements** summarizes the guiding principles for the near- and long-term plans as well as the two preliminary scenarios that were developed as a starting point for discussion and public input.
- **Near-Term Plan** documents the near-term redesigned network for improving service based on travel patterns and community feedback while maintaining existing network coverage, costs, and capacity.
- **Long-Term Plan** documents the long-term redesigned network, guided by community needs and service opportunities, and bolstered by capital improvements.
- **Community Partnership Opportunities** documents a list of transit services established through strategic partnerships with various public and private partnerships. Though these services are tangentially aligned with MUTD's primary services, they require partnerships to justify implementation.

GUIDING PRINCIPLES FOR IMPROVEMENTS

The goals of the Transit Service Plan are multi-fold. In the near term, changes are designed to maximize mobility within today's budget – adjusting service to match today's travel patterns. In the long term, recommendations are designed to help MUTD keep pace with regional growth, and set a vision for a transformative mobility future.

This section describes the service design considerations for each timeframe.

The **near-term** plan seeks to improve service based on travel patterns and community feedback while maintaining existing network coverage, costs, and capacity. The recommendations should:

- **Remain cost-neutral**, since increased funding in the near future is unlikely
- Ensure that there is **no loss in coverage**
- **Not increase service during peak times**, because MUTD's current facility cannot accommodate any more buses

The **long-term** plan's service improvements will continue to provide access for mobility challenged populations, and focus on improvements that can attract a greater market share. The plan includes an expansion of new local fixed-route and on-demand transit to serve areas that do not currently have access to MUTD service; additional frequency on existing bus routes to make transit a more competitive option for travel; capital investments to support additional service; and some restructuring to reduce service duplication.

Key components of the long-term plan include:

- BRT service from Downtown to Southgate
- More frequent weekday service:
    - 15-minute service on key corridors, including West Broadway Street, Brooks Street, Arthur Avenue, South Avenue, Higgins Avenue, and Johnson Street
- Three new routes:
    - New Northside to the airport route
    - New service on Russell Street
    - New connection from Franklin to the Fort to Southgate Mall and Walmart
- On-demand service expansion if the pilot proves successful
- More frequent weekend service:
    - Weekday 15-minute headway routes should travel on 30-minute headways during the weekend.
    - **A larger fleet capacity**, through completing the MOAB by 2029. MUTD would then have the capacity to store/maintain more vehicles and subsequently deliver more peak service.
    - **More funding** than the agency is currently receiving
    - **A new Midtown transit center at Southgate Mall** would improve connectivity and transfers between routes, including a new BRT service
    - Other key considerations include prioritizing improvements, supporting smart growth, and serving people with mobility challenges.

Development of Recommendations Process

Two near-term, cost-neutral scenarios were developed as a starting point for discussion and public input. The networks incorporated different strategies for improving service. The first scenario focused on introducing new on-demand transit to replace fixed-route service in neighborhoods with low ridership. The second scenario focused on improving weekend and off-peak frequencies for the core, high ridership routes.

Based on public and feedback from the board members, the final near- and long-term networks were combined into a hybrid of these two initial scenarios, integrating the most popular elements of each scenario into the final recommendations.

BENEFITS OF TRANSIT IN MISSOULA

Mountain Line provides safe, sustainable, and innovative transportation solutions. By more than doubling ridership in the past 15 years, Mountain Line has played a major role in accommodating new growth, reducing traffic congestion, and mitigating air quality. Mountain Line has also helped Missoula households reduce transportation costs by introducing a system-wide zero-fare service as a hedge against skyrocketing local housing costs.

Growth is projected to continue. Mountain Line is an important way to facilitate Missoula's mobility and provide options for the thousands of new residents. Transit will also play a crucial role in helping the city achieve affordability, equity, and sustainability goals.

A robust transit system makes Missoula a better place to live and visit by supporting economic growth and increasing access to opportunity.

NEAR-TERM PLAN

Overview

The near-term plan seeks to improve service based on travel patterns and community feedback while maintaining existing network coverage, costs, and capacity. In other words, the plan seeks to improve service levels in neighborhoods and corridors experiencing or expecting high transit ridership and demand. The near-term plan describes service changes that can be built on with additional improvements in the long-term plan. Figure 5-1 briefly describes the changes.

Figure 5-1 Near-Term Network Changes

Route	Cost-Constrained Near-Term Changes
1	No Change
2	No Change
3	Improve weekday frequency to 30 minutes for 6 hours.
4	Improve weekday frequency to 30 minutes for 6 hours from Downtown to East Missoula.
5	No Change
6	No Change
7	Make small route adjustments to improve speed and reliability.
8	Restructure to directly connect Downtown with the Sawmill District and north Franklin to the Fort. Operate every 30 minutes on weekdays. Implement new hourly Sunday service. Rename to Route 10.
9	No Change
11	Make small route adjustments along the North Reserve route to improve reliability.
12	Operate hourly seven days a week.
14	No Change

Figure 5-2 illustrates the cost-constrained, near-term plan network.

Figure 5-2 Near-Term Plan Network

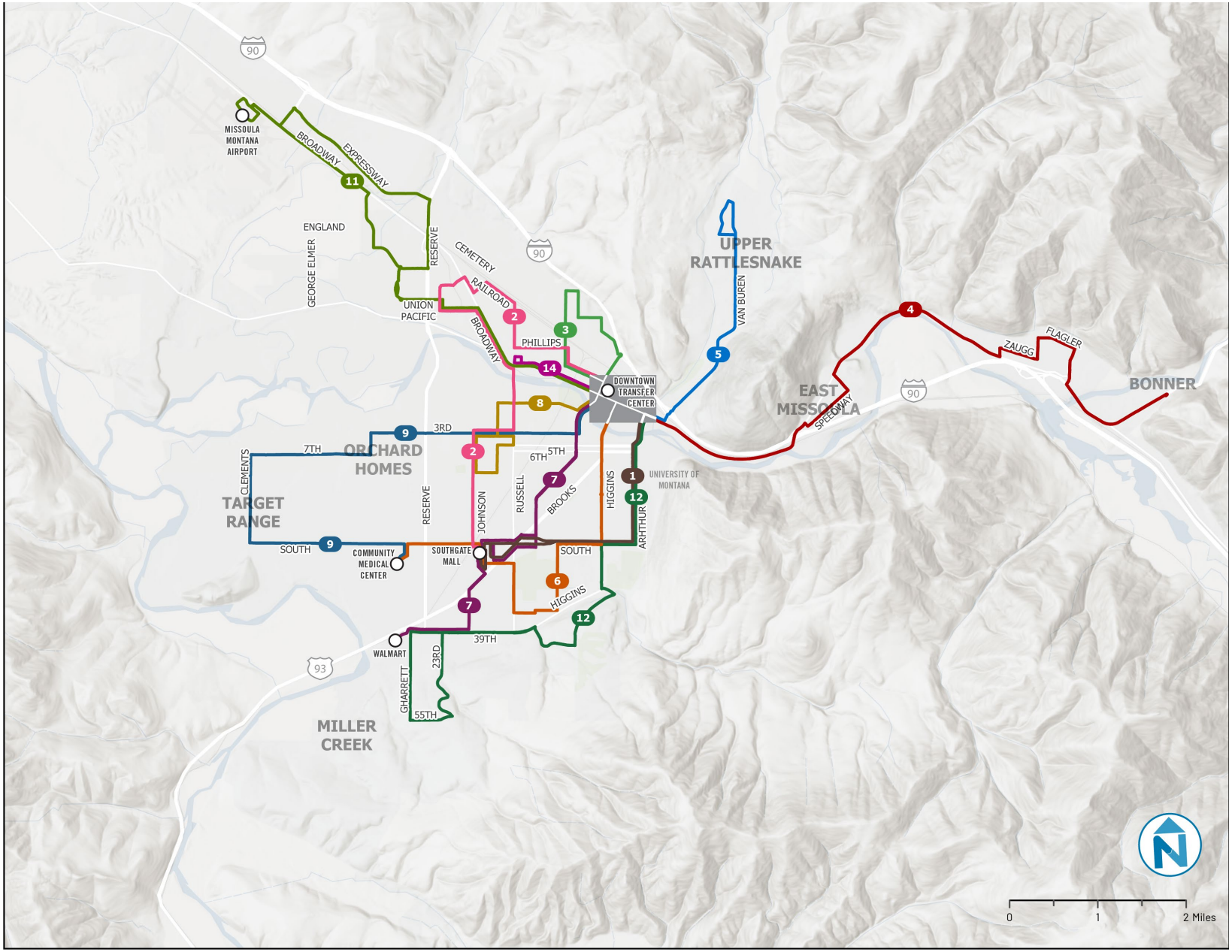
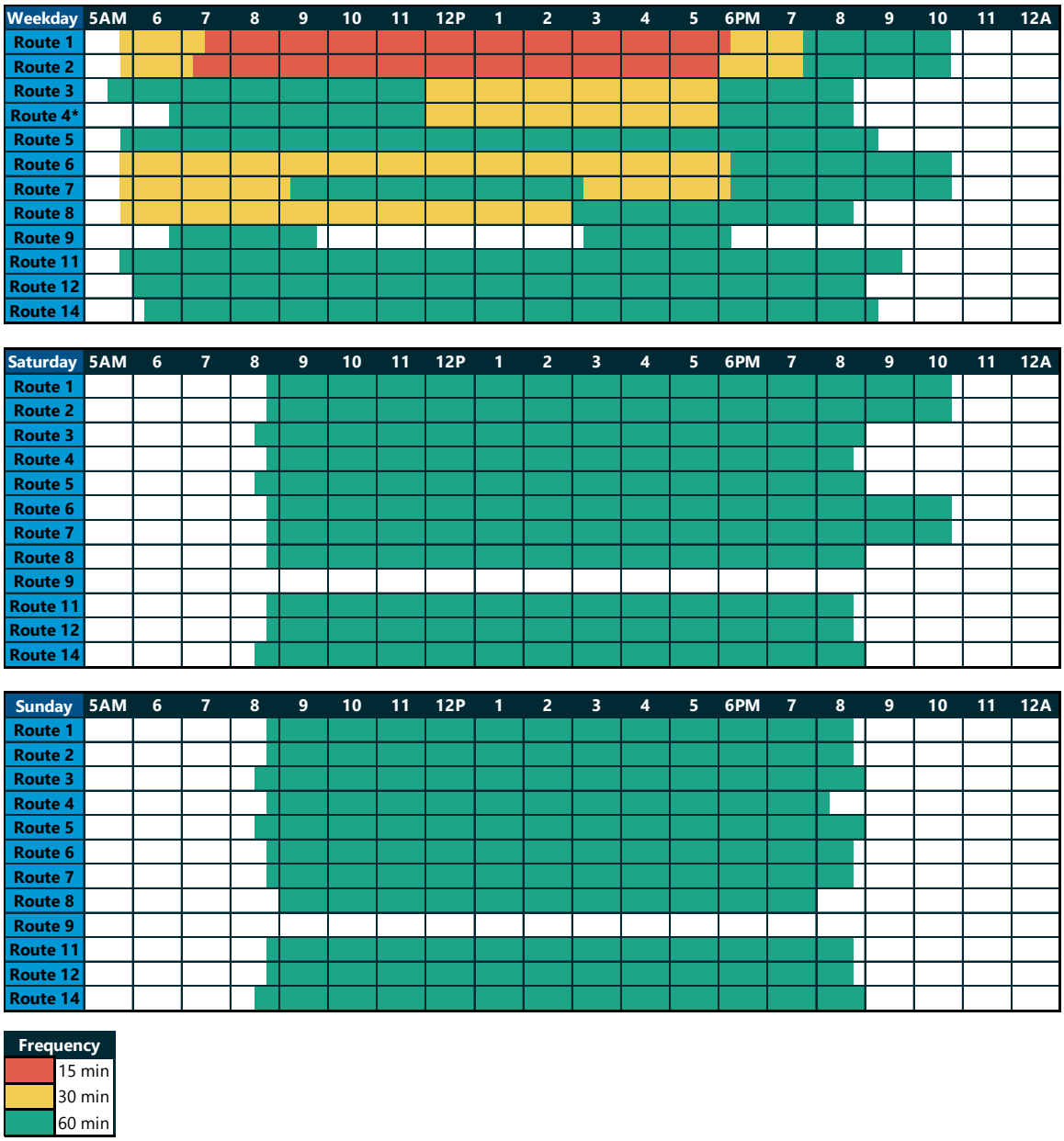


Figure 5-3 illustrates the frequencies and spans of the near-term plan network.

Figure 5-3 Near-Term Network Service Span and Frequency



Note: *On weekdays, Route 4 operates on a 30-minute frequency only to East Missoula. Service to Bonner remains hourly.

The cost-constrained, near-term plan does not require any additional operating dollars, new fixed-route vehicles, or increased bus capacity. Figure 5-4 lists the operating requirements for the near-term network by fixed-route service.

Figure 5-4 Near-Term Network Fixed-Route Operating Requirements

	Existing		Near-Term		Change	
Route	Annual Revenue Hours	Peak Vehicles	Annual Revenue Hours	Peak Vehicles	Annual Revenue Hours	Peak Vehicles
1	11,800	8	11,800	8	0	0
2	17,400	0* (Interline 1 & 2)	17,400	0* (Interline 1 & 2)	0	0
3	1,400	1*	2,100	2**	+700	+1
4	5,000	1	5,800	1** (Interline 3 & 4)	+800	0
5	2,700	0* (Interline 3, 5, & 14)	2,700	0* (Interline 3, 5, & 14)	0	0
6	8,900	2	8,900	2	0	0
7	7,300	2	7,300	2	0	0
8	5,200	2	4,800	1	-400	-1
9	1,500	1	1,500	1	0	0
11	5,400	1	5,400	1	0	0
12	6,200	2	5,100	1	-1,100	-1
14	1,300	0* (Interline 3, 5, & 14)	1,300	0* (Interline 3, 5, & 14)	0	0
Total	74,100	20	74,100	19	0	-1

Note: *Interlining is a practice that combines two or more independent routes into one operational schedule, eliminating extended periods of down time. This requires vehicles to be shared between routes. In the existing and Near-Term networks, a vehicle operating on Route 1 is interlined with Route 2, and a vehicle operating on Route 3 is interlined with Routes 5 and 14.

Note: **In the Near-Term network, a vehicle operating on Route 3 will be interlined with Route 4 and provide increased service frequency to East Missoula.

The following sections describe the near-term plan's minor and major routing changes, service frequency and span changes, four additional different low-cost improvements, and implications for paratransit service.

Near-Term Plan Route Changes

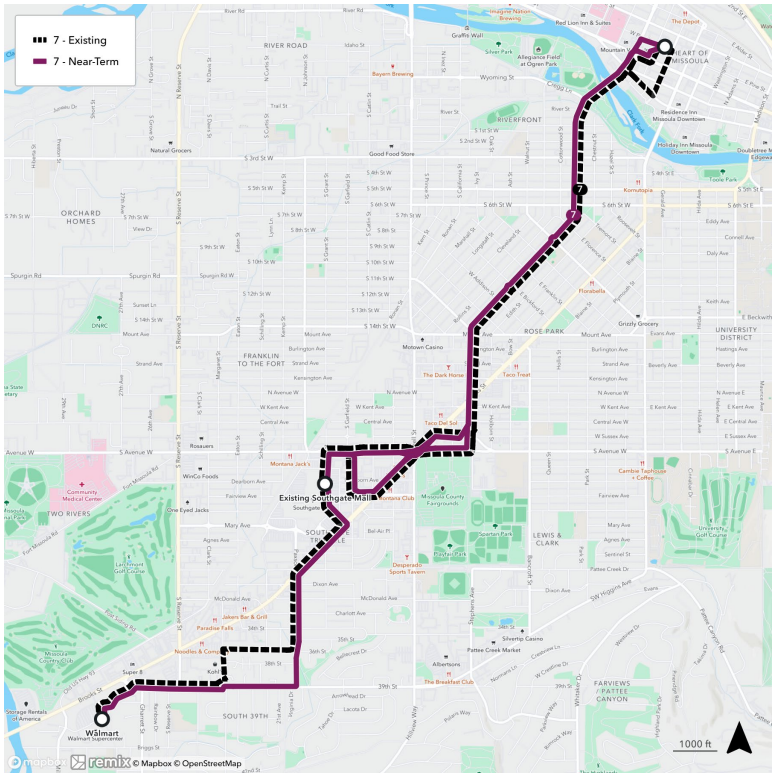
The near-term plan recommends three route alignment changes. Recommended changes to Routes 7 and 11 are designed to improve speed and reliability. Recommended changes to Route 8 respond to shifted travel patterns and new development.

Route 7 – Streamline Alignment

The near-term plan recommends two route adjustments for Route 7 to improve speed and reliability. The recommended Route 7 alignment is shown in Figure 5-5.

- **Streamline alignment between Southgate Mall and Walmart**. The first change realigns service on 36th Street, a neighborhood street with no bus stops. Route 7 could directly serve Walmart by using 39th Street between Dore Lane and Paxon Street. All existing riders would remain within walking distance of a stop.
- **Minimize turns near Downtown Transfer Center**. The second recommendation is for Route 7 to directly serve the Downtown Transfer Center without deviating onto Front Street. This impacts approximately two daily riders but improves directness and reliability for all inbound riders.

Figure 5-5 Near-Term Network Route 7

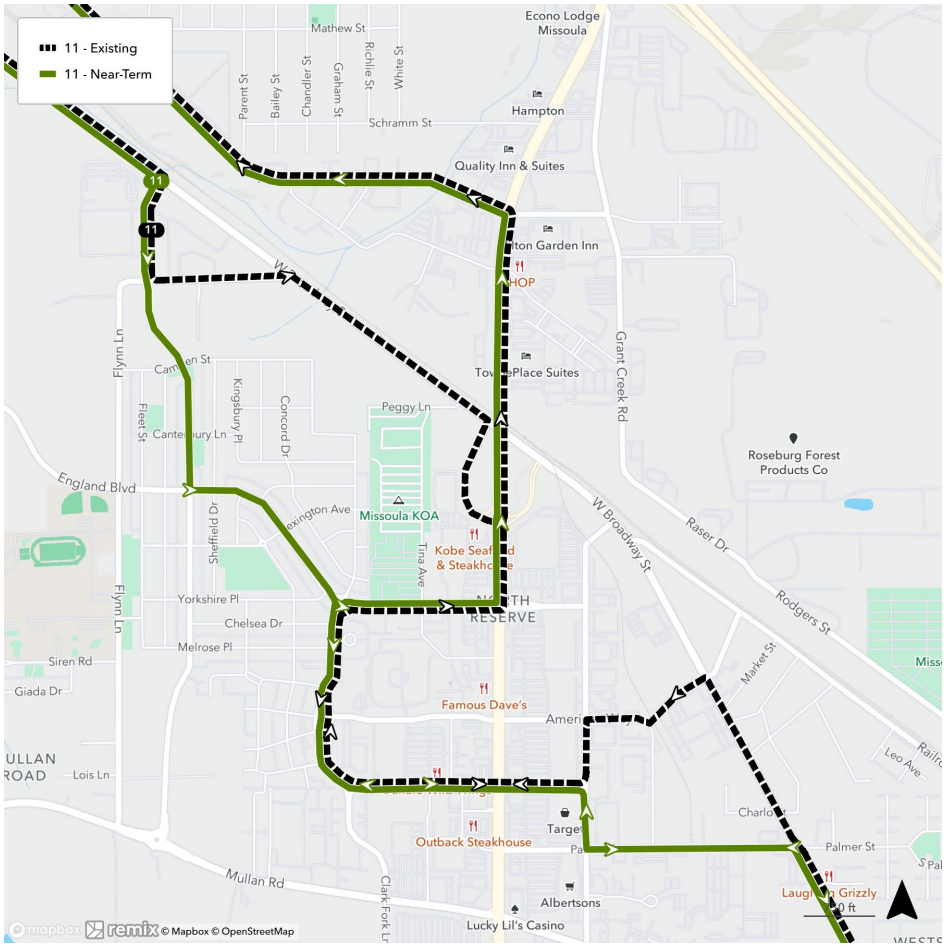


Route 11 – Streamline Alignment

Route 11 is one of MUTD's longest routes, so it is difficult to operate a round trip reliably. Two recommendations are designed to improve route directness and reliability. Figure 5-6 depicts the recommended Route 11 alignment.

- **Minimize left turns in North Reserve**. Route 11 currently operates via West Broadway Street, Latimer Street, American Way, and Great Northern Avenue, performing several unprotected left turns that result in delays. Route 11 should be streamlined to operate via Palmer Street and Great Northern Avenue.
- **Avoid heavily trafficked streets**. The second involves operation in the southbound direction. Currently, Route 11 returns to West Broadway Street after serving the VA Clinic. This exposes it to North Reserve Street traffic. The recommendation is for inbound Route 11 trips to remain on Mary Jane Boulevard after serving the VA Clinic and serve England Boulevard. This change would also provide greater coverage in the Sx̌tpqyen neighborhood.

Figure 5-6 Near-Term Network Route 11

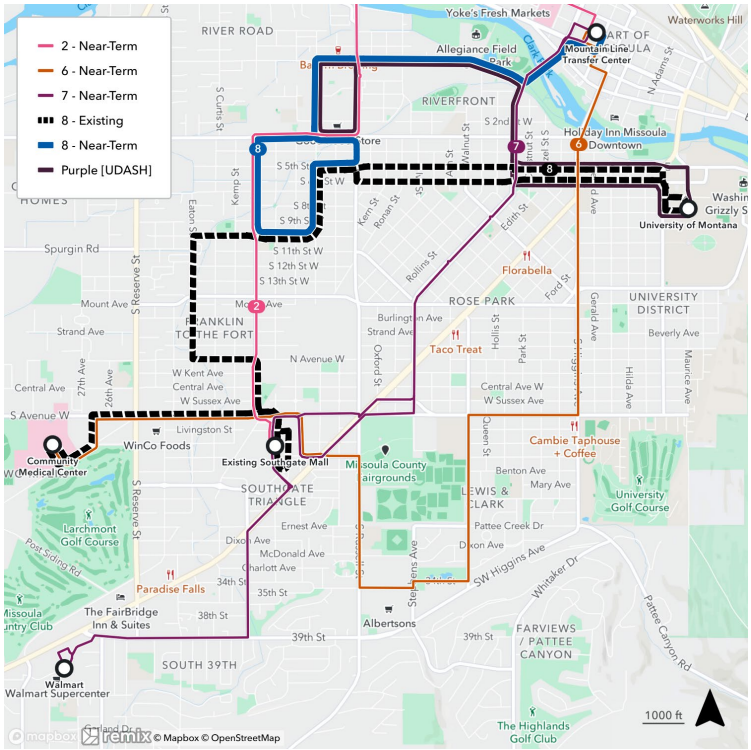


Route 8 – Restructure Route 8 (Re-name Route 10)

Route 8 has been one of the least productive routes for years because its alignment duplicates the existing UDASH campus shuttle service, and Routes 2, 6, and 9. Route 8, in its current form, does not meet major travel patterns in Missoula. In addition, planned infrastructure improvements are opening new opportunities for fixed-route service on corridors previously too hazardous or impractical to access with transit buses.

- **Route 8 should be redesigned to better serve Missoula's development patterns**. The revised Route 8 should connect downtown Missoula to the Sawmill District and the northern part of the Franklin to the Fort neighborhood. Route 8 should also operate every 30 minutes all day, which is more convenient for existing and projected customers. This recommendation would also address a major gap in the current network: all-day direct service from parts of Franklin to the Fort and the Sawmill District's high-density housing to downtown Missoula. This assumes a planned signal at Cregg Lane/South Orange Street is operational.
- **Most existing Route 8 riders would have an alternative**. Between Community Hospital and Southgate Mall, current Route 8 riders can use Route 6. Between Southgate Mall and Wyoming, current Route 8 riders can walk to Route 2. On South 5th/6th Streets, current riders can walk to stops for Routes 6 and 7. Figure 5-7 shows these alternatives.

Figure 5-7 Near-Term Network Route 8



Service Frequency Changes

Public outreach surveys revealed that frequency additions were one of the most highly demanded improvements.

The near-term plan recommends frequency changes on three routes: improved frequency on Routes 3 and 4 and reduced frequency on Route 12.

Route 3 Northside – Improve Frequency

Route 3 is currently one of MUTD's more productive routes. Missoula's Northside is adding hundreds of new multi-family housing units, including below market rate units. This will increase demand for frequent service in this area. To meet this current and projected demand, Route 3's frequency should be upgraded from 60-minute service to 30-minute, all-day service. However, to account for fiscal constraints, the near-term recommendations are to add frequency to a six-hour span between noon and 6 p.m.

Route 4 – Improve Frequency between Downtown and East Missoula

Route 4 is one of MUTD's most productive routes, and experiences capacity issues on certain trips. Currently, Route 4 operates hourly. East Missoula is adding additional high-density housing and is often seen as a lower-cost alternative to living in Missoula.

Route 4 service between East Missoula and downtown Missoula should be upgraded to 30-minute service. The frequency improvement is warranted all day on weekdays, but the fiscally constrained, near-term recommendations are to run it for a six-hour span, between noon and 6 p.m. Existing Route 4 service to Bonner will remain as is, but "short-turn" trips will be added every half hour between today's Route 4 hourly trips, on an alignment that only travels to East Missoula. These "short-turn" trips could be called the Route 4S to reduce customer confusion about where the route terminates.

Route 12 – Reduce Frequency due to Lower Ridership

Today, Route 12 operates on a 30-minute peak frequency between South Hills and Downtown. The highest ridership segment on Route 12's alignment is duplicated by UDASH service, and Routes 1 and 6. Additionally, ridership on the unique South Hills segment has declined from previous years. In response to lower ridership, Route 12's peak frequencies should be reduced from 30-minute service to hourly service.

Mid-Term Additional Improvements

The mid-term plan includes four options for additional improvements. Implementation is contingent upon funding availability. Each improvement is a unique, minimal-expense opportunity to increase ridership, span of service, or geographic coverage. The proposals can be implemented independently from each other and without additional base capacity. The recommendations and their estimated annual revenue hours are listed in Figure 5-8. The options are listed in order of priority, based on public outreach. More information on each option is available after the table.

Figure 5-8 Mid-Term Network Additional Improvements

Mid-Term Additional Improvement Recommendation	Estimated Annual Revenue Hours
Operate Route 4 between East Missoula and Downtown and Route 3 every 30 minutes on weekdays all day Complements near-term frequency improvements on these routes by extending 30-minute service to a 12-hour span	1,400
Operate Routes 1 and 2 every 30 minutes on weekends Improves frequency on most utilized weekend routes and improves transfers to all routes on weekends	1,300
Serve the growing Sx^{w}tpqyen neighborhood with a new Route 15 Add regularly scheduled transit service to connect a growing, dense development to downtown Missoula	4,600
Implement the Linda Vista/Target Range On-Demand Zone as a pilot program Test viability of on-demand service to areas that have been traditionally difficult to serve with regular bus service	3,700

Routes 3 and 4 – Increase Frequency on Weekdays

The first priority is to increase frequencies on Routes 3 in Northside and 4 to East Missoula (service to Bonner would remain hourly) on weekdays. The near-term, cost-constrained changes add six hours of 30-minute service on these routes, extending the service window another five hours, making 30-minute service available between 7 a.m. and 6 p.m.

This recommendation would require approximately 1,400 extra annual hours in addition to the near-term, cost-constrained changes. If the changes are implemented, ridership on Route 3 and Route 4 between Downtown and East Missoula is likely to double.

Routes 1 and 2 – Increase Frequency on Weekends

The second priority is to increase frequencies on Routes 1 and 2 on weekends. The highest ridership routes are Routes 1 and 2 and experience the highest number of transfers in the network. On weekends during the day, hourly service is insufficient to accommodate many of the transfer patterns. Improving weekend frequency on Routes 1 and 2 to 30 minutes between 9 a.m. and 5 p.m. will also improve ridership on other routes by creating better connections.

The increased frequency would require 1,300 additional annual revenue hours. If the improvements are implemented, weekend ridership on Routes 1 and 2 is likely to double.

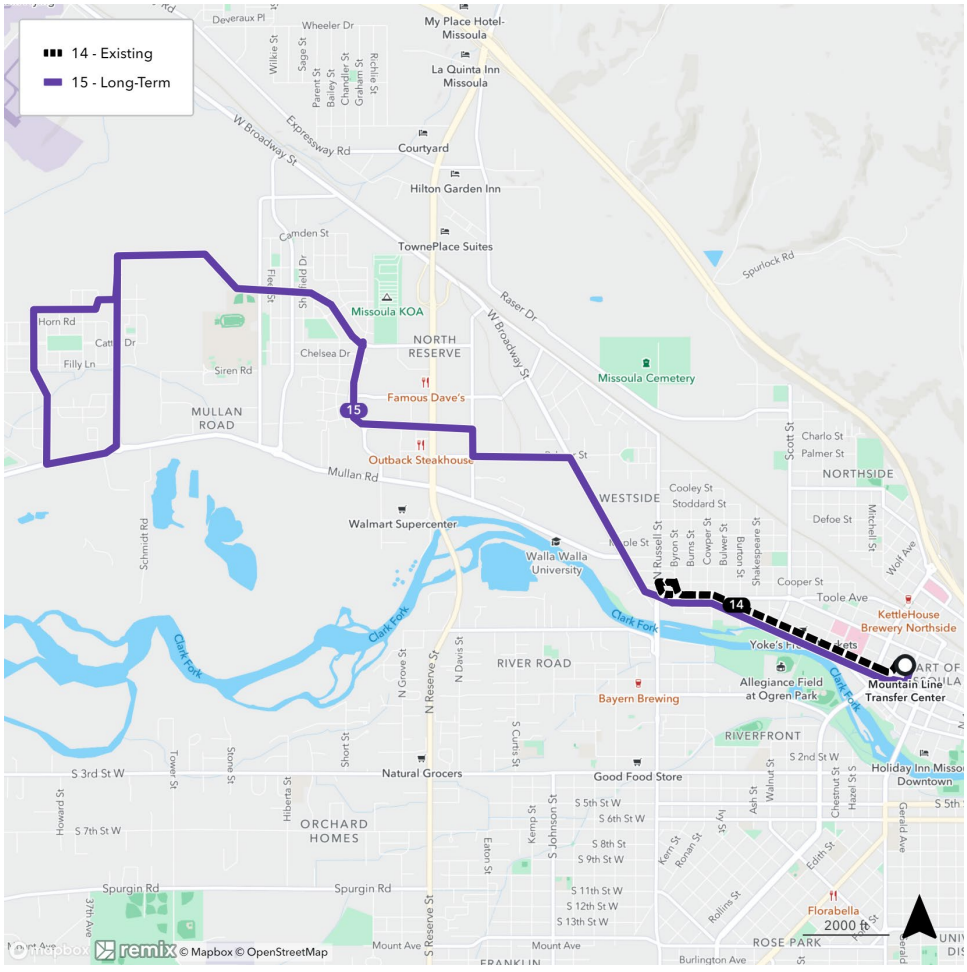
Route 15 - Serve the growing Sxʷtpqyen neighborhood

The third priority is to implement Route 15 – Sxʷtpqyen. Development in the Sxʷtpqyen neighborhood is anticipated, adding thousands of housing units to the region. Moreover, housing will be in higher density clusters that can support transit service. Route 15, as seen in Figure 5-9, is a new route to directly serve this growing area.

Route 15 would operate via Route 11's alignment from downtown Missoula to the intersection of Connery Way and Chelsea Drive and then use England Boulevard to serve Sxʷtpqyen. Route 15 would replace the existing Route 14 operating on Broadway Street between the Downtown Transfer Center and Russell Street.

The new Route 15 would require approximately 4,600 annual revenue hours.

Figure 5-9 Mid-Term Network Route 15



Note: The street network in Sxʷtpqyen is still not complete, so the western alignment is subject to change based on street construction.

On-Demand Pilot Program - Linda Vista/Target Range On-Demand Zone

The fourth priority is to implement on-demand transit in Miller Creek and Target Range. On-demand is a ride-share service, where riders can schedule a trip within a pre-defined area (zone) via a call-in number or mobile application. The vehicles, usually consisting of accessible vans, can take riders directly from curb to curb, or pick up and drop off riders at pre-defined virtual "stops." The service may be directly operated by the agency or contracted in partnership with transportation network companies like Uber or LYFT.

On-demand service is the most appropriate type of service for Miller Creek and Target Range. Miller Creek, Two Rivers, Target Range, and Orchard Homes have low population density and difficult-to-navigate road networks, making them expensive and inefficient to serve with fixed-route transit. On-demand transit service may be necessary to provide residents with access to jobs and essential services until the neighborhoods experience sufficient population growth to support fixed-route transit. Additionally, smaller, more flexible vehicles can navigate winding road networks more efficiently. Ultimately, on-demand transit can provide a lower cost per trip compared to fixed-route services in low-density service areas.

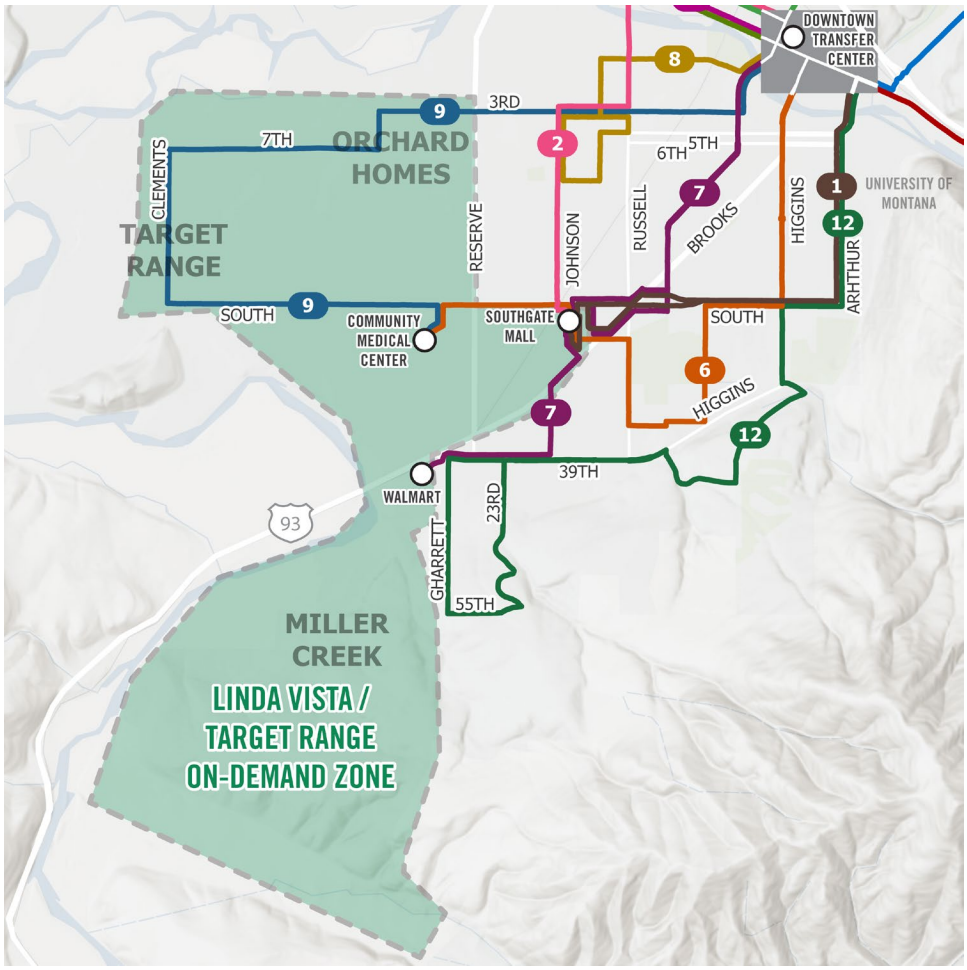
On-demand transit can help MUTD reach existing and new residents and expand the geographic area MUTD serves.

The new service will be a one-year pilot. A pilot program for testing the service and gathering public feedback before committing to a permanent service is recommended. At the end of a year, MUTD can evaluate how the service met expanded geographic coverage goals, balanced by the costs and additional ridership. MUTD should set measurable goals for determining program success before the pilot begins.

The recommended on-demand zone would connect Miller Creek, Two Rivers, Target Range, and Orchard Homes with Southgate Mall and Walmart, as seen in Figure 5-10. One vehicle would be designated for the service and response times would be 30 minutes or less. The zone is 8.9 square miles and would operate Monday to Friday from 6 a.m. to 8 p.m.

The service would require about 3,600 annual revenue hours. Ridership is projected to be about 21 weekday riders.

Figure 5-10 Near-Term Network Linda Vista / Target Range On-Demand Pilot Service Area



Paratransit Impacts

Paratransit is complementary to fixed-route service and is required by the ADA. Individuals must have a qualifying disability to use paratransit service. The senior van is available for individuals aged 60 and older who do not qualify for paratransit service. Paratransit and senior van services are vital for people for whom public transportation is less of a choice and more a critical lifeline to healthcare, daily living and social/community engagement.

The paratransit service area is defined as a three-quarter mile buffer around the fixed-route network. Today, the service area includes a total population of 75,700, including 9,800 (13%) residents living with a disability. The near-term plan does not remove or expand fixed-route service coverage, so the paratransit service area would not be altered. If the Linda Vista / Target Range on-demand zone is implemented, there is no obligation to provide paratransit because on-demand service provides a wheelchair accessible vehicle that can serve both ambulatory and non-ambulatory riders.

LONG-TERM PLAN

Overview

Missoula has experienced steady growth in population and employment over the last decade and that trend is expected to continue. With the city's desire to prioritize smart growth, MUTD could gain a potentially large market of additional riders. Feedback from stakeholders and the community has emphasized the need to expand transit service to these growing areas, while also making existing transit service more frequent. ***The recommendations serve new areas and make existing routes more convenient, improve mobility for existing riders, and support future land use plans for a sustainable Missoula that will increase ridership, access, and support continued economic development.***

The long-term plan presented in this section outlines the transit improvements necessary to implement this long-term vision for transit. The plan expands new local fixed-route and on-demand transit to areas that do not currently have access to MUTD service, adds frequency on existing bus routes to make transit a more competitive option for travel, specifies capital investments to support additional service, and restructures some routes to reduce service duplication.

The improvements included in the long-term plan require increased operations and maintenance (O&M) costs as phased implementation becomes feasible over this Service plan's duration. The long-term planned improvements build off the investments proposed in the near-term plan and account for capital investments like the proposed MOAB, Brooks Street BRT, and the new Midtown transit center. The MOAB is especially vital for accommodating peak service delivery because the current facility is at capacity.

Figure 5-11 provides a summary of changes for the long-term plan by route. However, given the significant increase in hours, buses, and employees, the long-term plan also identifies four major priority areas for phased implementation.

- **Priority 1:** Implement Near-Term Additional Improvements. Adding frequency and serving Sx̌ʷtpqyen were the most frequently requested improvements and can be accomplished at a relatively low cost while adding modest ridership.
- **Priority 2:** Complete MOAB, Implement Brooks BRT / Enhanced Bus Corridor. The MOAB is already underway and must be completed to add the necessary vehicles for implementing BRT and supporting route improvements
- **Priority 3:** Restructure Northside, Westside, and North Reserve Service. These recommendations improve frequency and reduce circuitous routing, but require significant funding.

- **Priority 4:** Expand on-demand service to serve lower density, difficult-to-reach areas. On-demand service costs more per rider, so the long-term plan recommends improving fixed-route service first.

Figure 5-11 Long-Term Network Proposed Route Changes

Route	Cost Unconstrained Long-Term Changes
1	Minor alignment changes at Southgate Mall and increase to 30-minute frequency from 9 a.m. to 5 p.m. on weekend
2	Replaced by Routes 8, 15, 16, and 17
3	Extend to the airport via North Reserve. Make the route bi-directional. Improve weekday frequency to 30 minutes all day.
4	Operate every 30 minutes between Downtown and East Missoula from 6 a.m. to 6 p.m. on weekdays.
5	No Change.
6	Make minor alignment changes at Southgate Mall. Improve weekday frequency to 15-minutes.
7	Convert to BRT between Southgate and downtown Missoula, with associated frequency improvements.
8	Extend from north Franklin to the Fort to Southgate Mall and Walmart, replacing parts of existing Route 2 and 7. Operate every 30 minutes.
9	No Change.
11	Route 11 would be replaced by Routes 3 and 16. Route 3 would replace the North Reserve and Expressway segments while Route 16 would replace the Downtown, North Reserve, VA Clinic, and airport segments.
12	No Change.
14	Replaced by Route 15.
15	New route between Downtown, North Reserve, and Sx^{w}tpqyen.
16	New route between Downtown, North Reserve, VA Clinic, and the airport.
17	New route between the Downtown Transfer Center and Southgate Mall, replacing segments of Route 2 on Phillips and Russell Streets.
On-Demand	Implement Sx^{w}tpqyen and expand Linda Vista / Target Range zones.

Figure 5-12 illustrates the new long-term network.

Figure 5-12 Long-Term Network

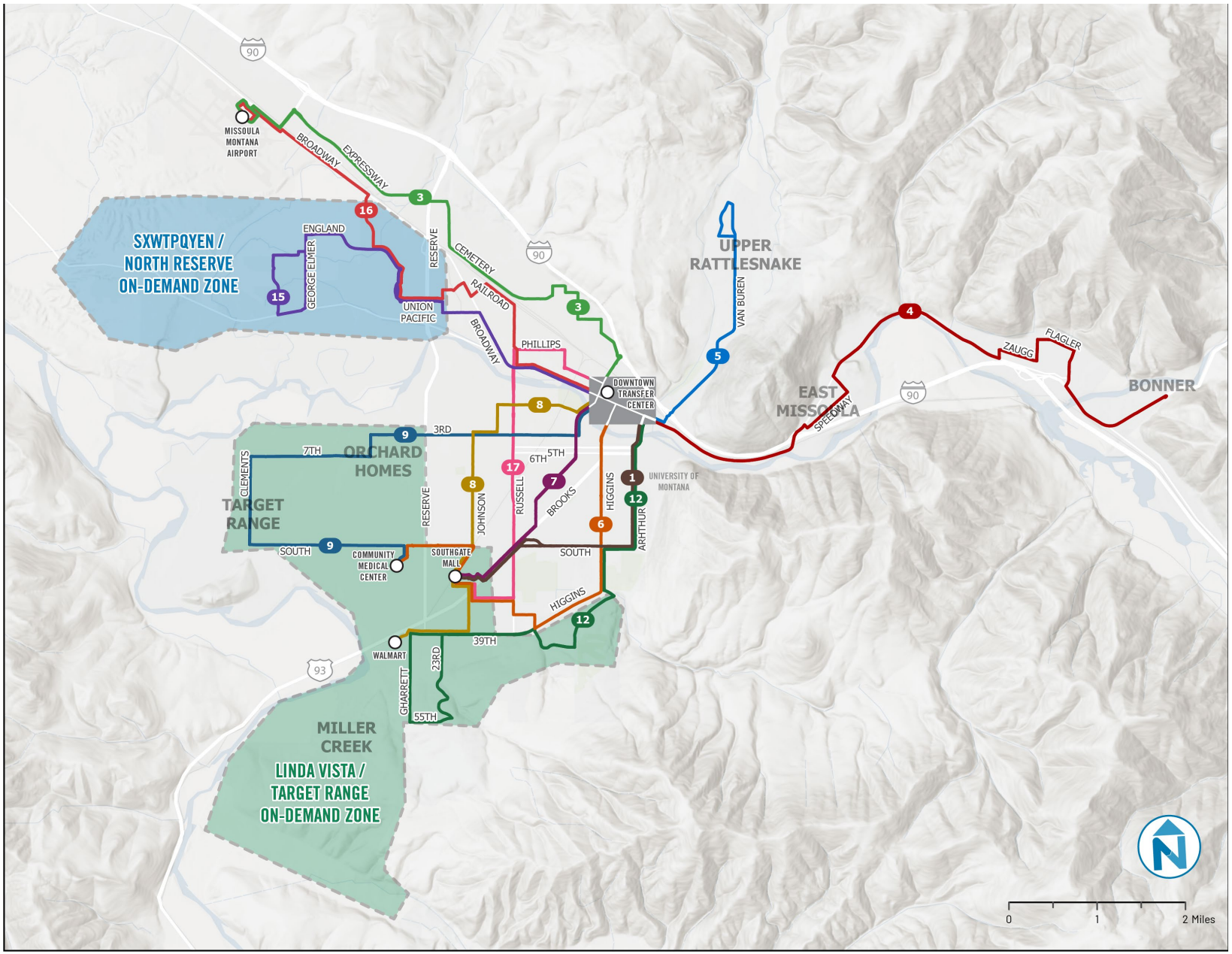
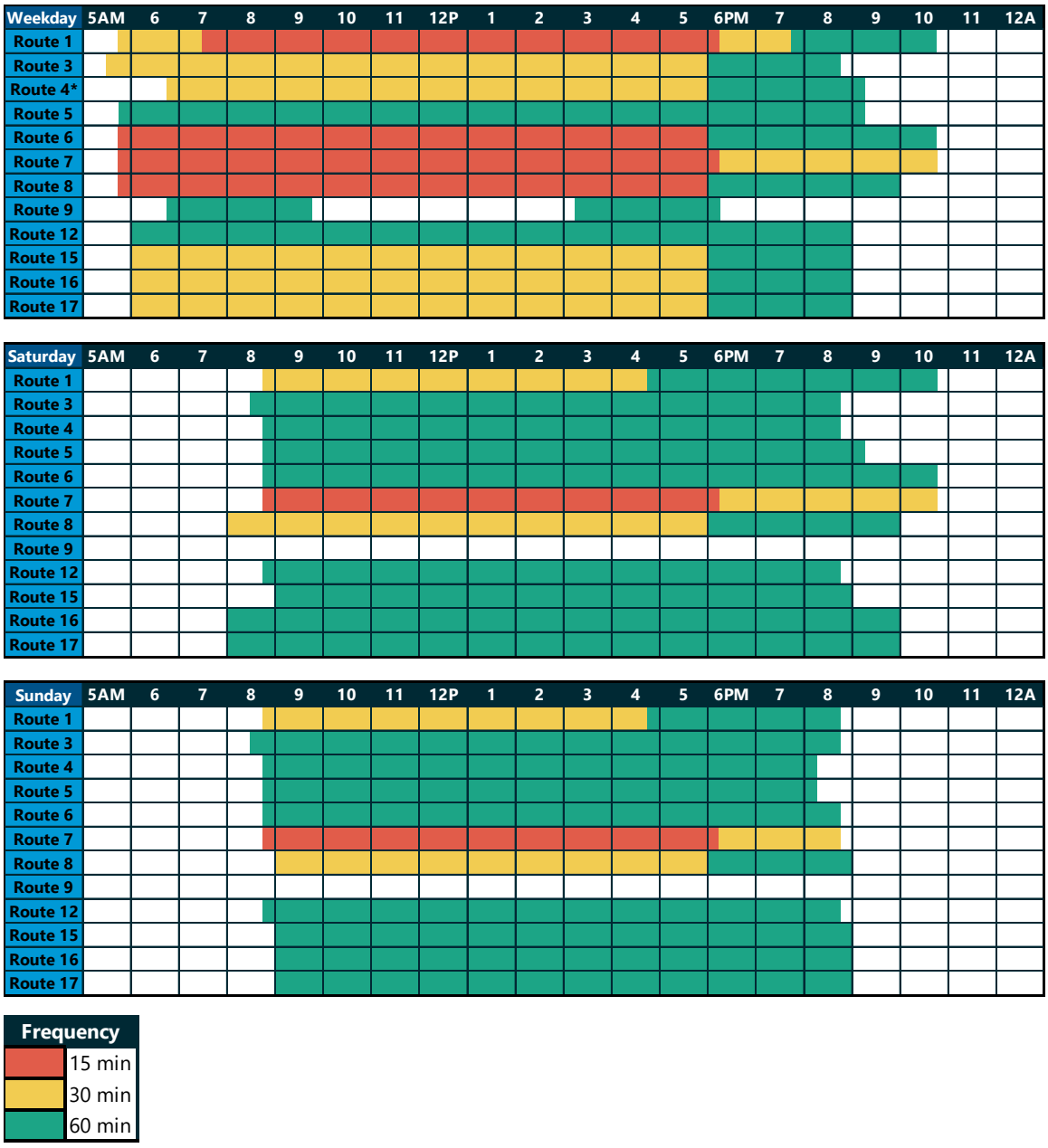


Figure 5-13 illustrates the frequencies and spans of the Long-Term network.

Figure 5-13 Long-Term Network Service Span and Frequency



Note: *On weekdays, Route 4 operates on a 30-minute frequency only to East Missoula. Service to Bonner remains hourly.

The long-term plan requires a 40,500 (+55%) annual revenue hours increase on the existing fixed-route network. In addition, 15,300 annual revenue hours for on-demand service are anticipated. Figure 5-14 and Figure 5-15 list the operating requirements for the long-term, fixed-route and on-demand networks, respectively.

The long-term plan increases operating hours by about 55,800 annual hours, equating to about 40 full-time employee (FTE) operators, using a more conservative 1,400 hours per FTE. The peak bus pull would increase by seven buses and three smaller vehicles.

Figure 5-14 Long-Term Network Fixed-Route Operating Requirements

	Existing		Long-Term		Change	
Route	Annual Revenue Hours	Peak Vehicles	Annual Revenue Hours	Route	Annual Revenue Hours	Peak Vehicles
1	11,800	8	12,500	3	+700	-5
2	17,400	0* (Interline 1 & 2)*	Replace with 8, 15, 16, & 17		-17,400	0
3	1,400	-	8,400	2	+7,000	+2
4	5,000	1	7,700	2	+2,700	+1
5	2,700	0* (Interline 3, 5, & 14)	2,700	0* (Interline 4 & 5)	0	0
6	8,900	2	15,000	4	+6,100	+2
7	7,300	2	15,700	3	+8,400	+1
8	5,200	2	21,200	5	+16,000	+3
9	1,500	1	1,500	1	0	0
11	5,400	1	Replaced with 3 and 16		-5,400	-1
12	6,200	2	5,100	1	-1,100	-1
14	1,300	0* (Interline 3, 5, & 14)	Replace with 15		-1,300	0
15	-		8,200	2	+8,200	+2
16	-		8,300	2	+8,300	+2
17	-		8,300	2	+8,300	+2
Total	74,100	20	114,600	27	+40,500	+7

Note: *Interlining is a practice that combines two or more independent routes into one operational schedule, eliminating extended periods of down time. This requires vehicles to be shared between routes. In the existing network, a vehicle operating on Route 1 is interlined with Route 2, and a vehicle operating on Route 3 is interlined with Routes 5 and 14. In the long-term network, a vehicle operating on Route 5 will be interlined with Route 4 and deliver increased service frequency to East Missoula.

Figure 5-15 Long-Term Network On-Demand Operating Requirements

On-Demand Zone	Long-Term Revenue Hours	Long-Term Peak Vehicles
Linda Vista / Target Range	10,200	2
Sxʷtpqyen / North Reserve	5,100	1
Total	15,300	3

The following sections describe the long-term plan's recommendations by priority, suggestions for additional improvements, and implications for paratransit service.

First Priority: Implement Near-Term Additional Improvements (Improve Frequencies and Serve Sxʷtpqyen)

The first priority is to apply the near-term plan's additional improvements where implementation was contingent on increased operations funding. These improvements represent a relatively low-cost opportunity to increase ridership, improve geographic coverage, and add frequency that do not require additional capital projects or base capacity. Details are included in the near-term plan section of this chapter.

Second Priority: Complete MOAB, Implement Brooks BRT / New Southgate Transit Center

The second priority is related to the completion of the Brooks BRT project and the relocation of the Southgate transit center. The Brooks BRT project is anticipated to restructure Route 7 to operate more quickly, directly, and reliably between the Southgate Mall and downtown Missoula. While the exact alignment still has not been finalized, the southern terminus, a new Southgate transit center, is almost certain. Relocating a transit center at Southgate Mall and completing the Brooks BRT project will restructure service at Southgate Mall that will improve connections, reduce out-of-direction travel, and mitigate existing reliability issues. Further, completing the MOAB by 2029 allows MUTD to store/maintain more vehicles and deliver more peak service. Improvements to high-frequency service will begin with Route 7. Alignment changes to Routes 1, 6, 7, and 8 in the vicinity of the Midtown transit center are recommended. Figure 5-16 summarizes the recommendations.

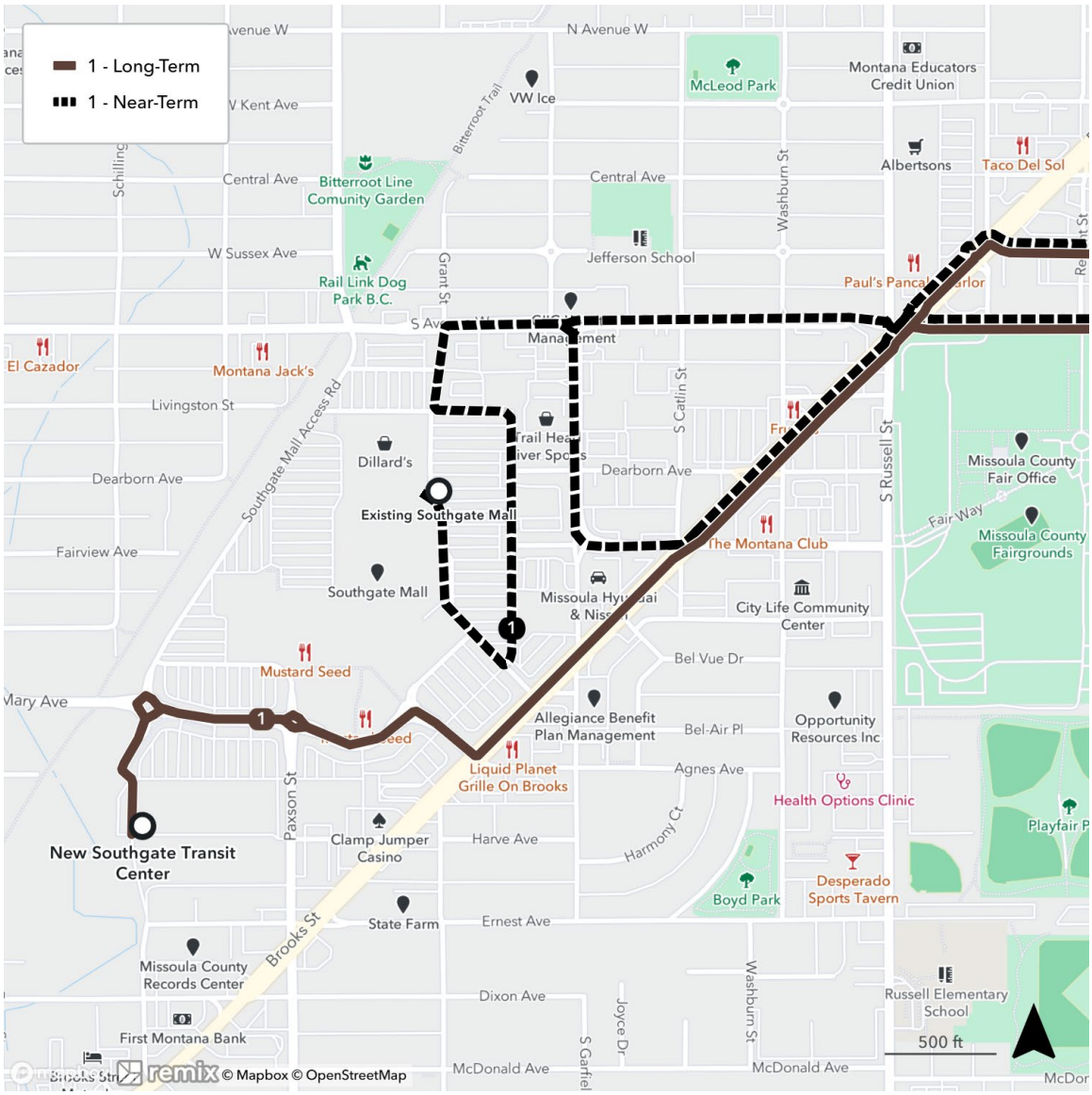
Figure 5-16 Second Priority: Implement Brooks BRT / New Midtown Transit Center

Long-Term Recommendation	Estimated Annual Revenue Hours
Extend Route 8 to Southgate Mall and Walmart. Extend Route south to Walmart via Russell Street and maintain 30-minute service. This is an interim solution prior to the Route 2 restructure.	5,200
Improve Route 7 Frequency to BRT Levels. Operate Route 7 every 15 minutes on weekdays and weekends.	8,400
Adjust Route 6 to serve the new Midtown transit center.	0
Extend Route 1 to the new Midtown transit center.	0

Route 1 – Realign to New Midtown Transit Center

To more directly serve the new Midtown transit center, Route 1 should use Brooks Street and Mary Avenue south of Sussex Avenue and South Avenue. This alignment change would eliminate out-of-direction-travel. The proposed revisions to Route 1 in the Southgate Mall area can be seen in Figure 5-17.

Figure 5-17 Long-Term Network Route 1

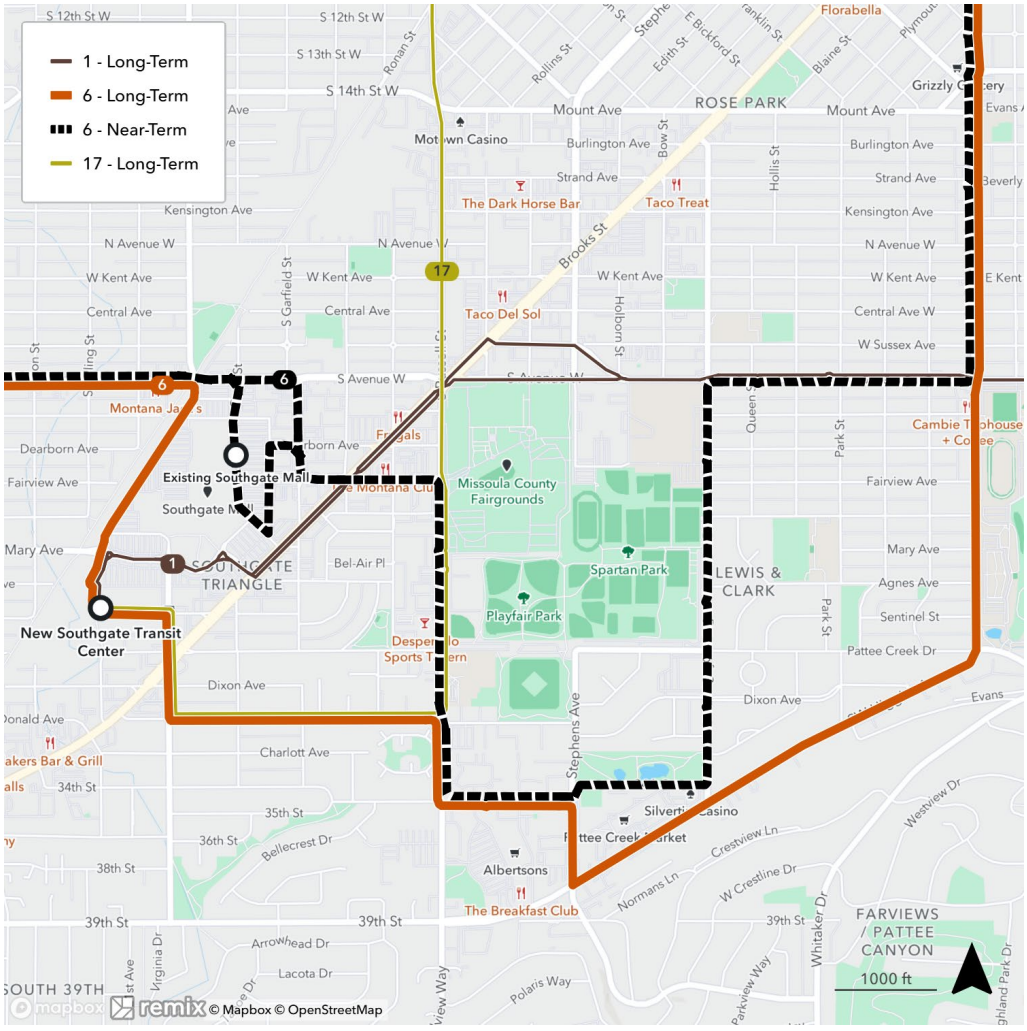


Route 6 – Realign to New Midtown Transit Center

The long-term plan proposes two changes for Route 6. The proposed revisions to Route 6 in the Southgate Mall area can be seen in Figure 5-18.

- **Streamline alignment near the new Midtown Transit Center**. Route 6 should operate on McDonald Avenue, Paxson Street, and Southgate Mall Access Road instead of Fairview Avenue and Garfield Street. A new Route 17 replaces service on Russell Street north of McDonald Avenue.
- **Serve Higgins Avenue**. In addition, Route 6 should also be rerouted from South Avenue, Bancroft Street, and 34th Street to remain on Higgins Avenue and turn north onto Stephens Avenue. This new alignment avoids duplication with Route 1, provides direct service on Higgins Avenue, and more frequent service to the Lewis & Clark housing area.

Figure 5-18 Long-Term Network Route 6

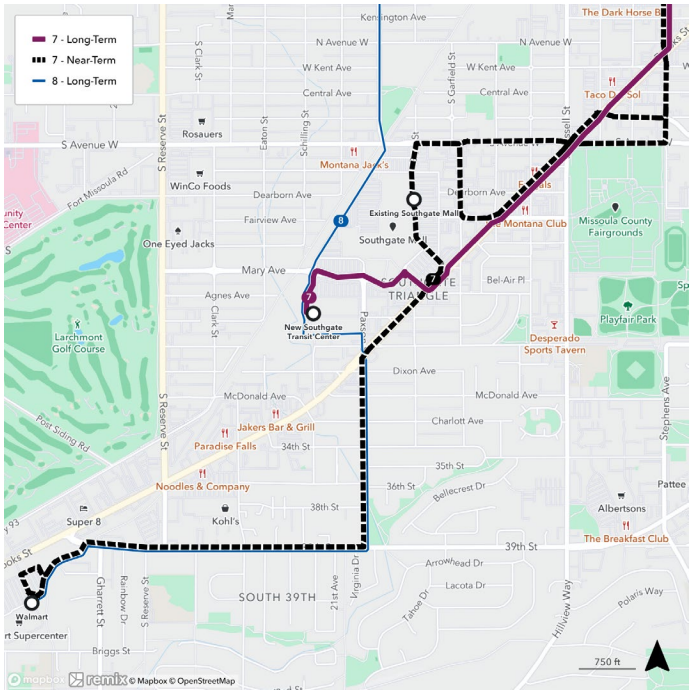


Route 7 – Upgrade to Bus Rapid Transit Standards

Route 7's operation between downtown Missoula and Southgate Mall is anticipated to be upgraded to BRT standards, with higher frequency and associated capital improvements that improve speed, reliability, and customer experience. Figure 5-19 depicts the new Route 7 alignment in the Southgate Mall area.

- **Improve Frequencies**. Route 7 currently operates every 30 minutes during weekday peak times and hourly at all other times. The Brooks BRT should operate every 15 minutes, from 6 a.m. to 6 p.m. on weekdays, and from 9 a.m. to 6 p.m. on weekends. Service after 6 p.m. should operate every 30 minutes.
- **Streamline Alignment in Southgate Mall**. Route 7 would be replaced by the new BRT alignment between Southgate Mall and downtown Missoula. In addition, the new Midtown transit center can reduce some of the out-of-direction travel patterns most MUTD routes serving the existing Southgate Mall stop experience. The new Midtown transit center will also reduce the number of buses driving through parking lots that are an ongoing safety concern.. It is industry best practice to not run buses through parking lots due to the potential for pedestrian and vehicular conflicts.
- **Discontinue Service to Walmart**. Route 7 will be truncated to terminate at Midtown transit center instead of Walmart. However, service from Southgate Mall to Walmart will be continue on an extended Route 8.

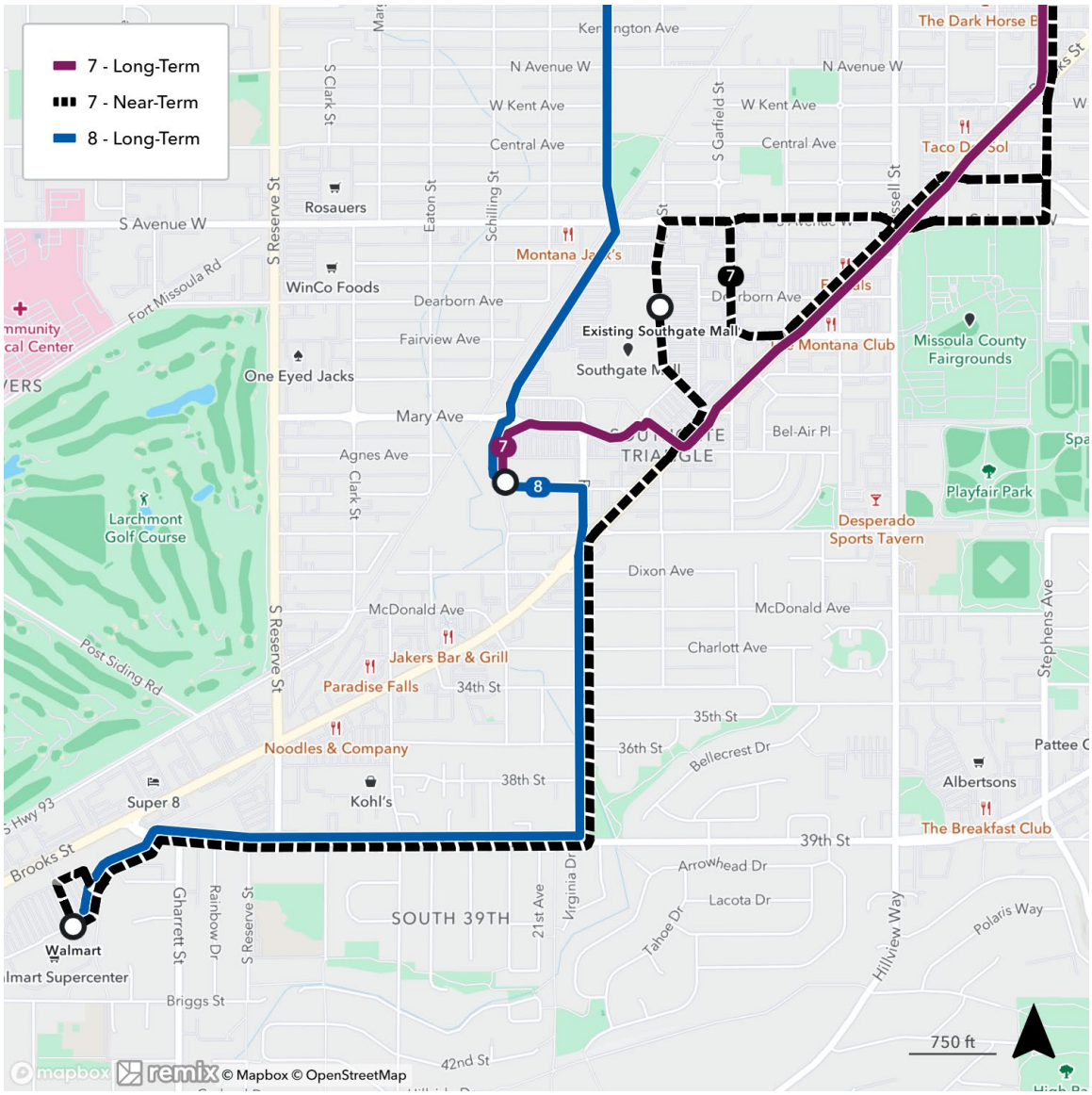
Figure 5-19 Long-Term Network Route 7



Route 8 – Extend to New Midtown Transit Center and Walmart

In conjunction with cutting Route 7 from Walmart to Southgate Mall, Route 8 should be extended to access the new Midtown transit center and Walmart, using Johnson Street, Paxson Street, and 39th Street. Figure 5-20 shows the proposed alignment for the southern end of Route 8.

Figure 5-20 Long-Term Network Route 8



Third Priority: Restructure Northside, Westside, and North Reserve Service

The third area of priority is to restructure and improve service in the Northside, Westside, and North Reserve areas. Today, Route 2 follows a circuitous routing, causing riders to travel out-of-direction to go to/from Downtown. Routes 8, 15, 16, and 17 will replace various segments along Route 2, and provide more direct connections from North Reserve and the Westside to Southgate Mall, Walmart, Sx̌tpqyen, and the airport. Routes 3 and 11 also travel circuitous routing, so a modified Route 3 and a new Route 16 will provide bi-directional service to the Northside, North Reserve, and the airport.

Figure 5-21 summarizes the recommendations and provides estimated costs and ridership.

Figure 5-21 Third Priority: Restructure North Reserve Service and Replace Route 2

Long-Term Recommendation	Estimated Annual Revenue Hours
Consolidate Route 2 service with new routes. Route 2 would be replaced by portions of Routes 8, 15, 16, & 17.	(16,700)
Improve Route 11 frequency (rebranded as Route 16)/. Operate Route 11 (as new Route 16) every 30 minutes on weekdays.	2,900
Increase frequency on Route 15. Improve frequency over near-term recommendations.	8,200
Service Russell Street with a new Route 17. Create a new north-south route on Russell Street to directly serve this redeveloping corridor	8,300
Increase frequency on Route 8 to every 15 minutes. This replaces Route 2 service.	6,100
Extend Route 3 to North Reserve and the airport. Connect Route 3 to North Reserve and the airport via Roseburg and Expressway. This replaces Route 11 service.	6,300
Improve Route 6 frequency to 15-minute headways on weekdays and every 30 minutes on weekends.	6,100

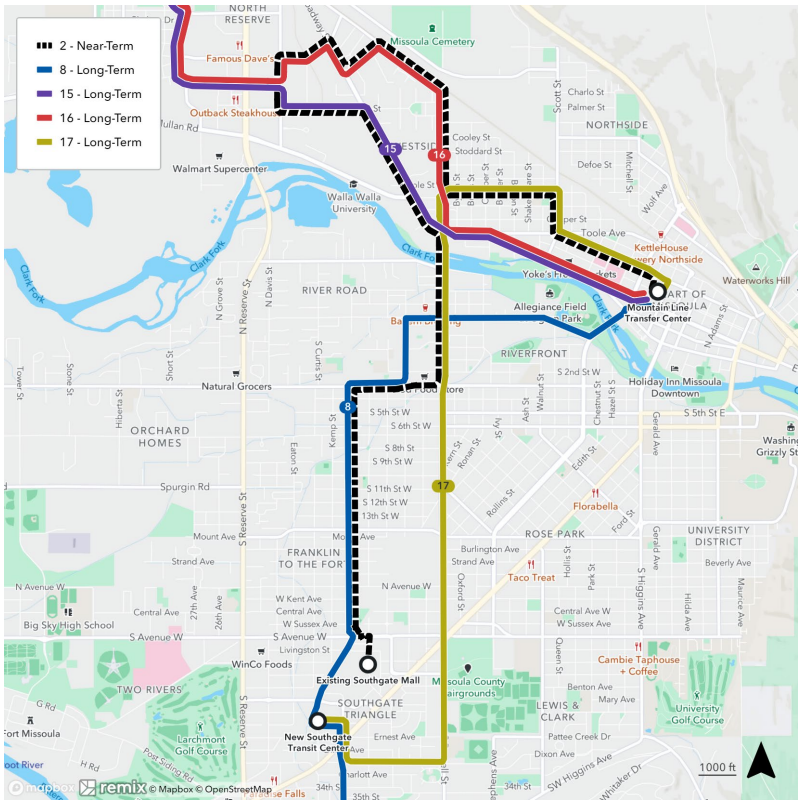
Route 2 – Replace Service on North Reserve and Russell Streets.

Route 2 will be discontinued along North Reserve Street and on the Westside, and segments of Routes 8,15, 16, and 17 will replace that service.

- **Route 8 from 3rd Street to Southgate Mall**. Route 8 will replace Route 2 from 3rd Street and Johnson Street to Southgate Mall and provide a new connection to Walmart.
- **Route 15 from North Reserve to Broadway Street**. Route 15 will replace Route 2 on Great Northern Avenue, Palmer Street, and Broadway Street.
- **Route 16 from Russell Street to North Reserve**. Route 16 will replace Route 2 on Russell Street, Railroad Street, Commerce Street, Broadway Street, Latimer Street, American Way, and Great Northern Avenue.
- **Route 17 from the Downtown Transfer Center to Russell Street**. Route 17 will replace Route 2 on Spruce Street, Scott Street, Philips Street, and Russell Street (south of Phillips Street).

  Riders in the Westside will be required to transfer at the Downtown Transfer Center or walk to Route 17 to connect to Southgate Mall. Figure 5-22 shows the services replacing Route 2.

Figure 5-22 Long-Term Network Route 2 Service Replacement

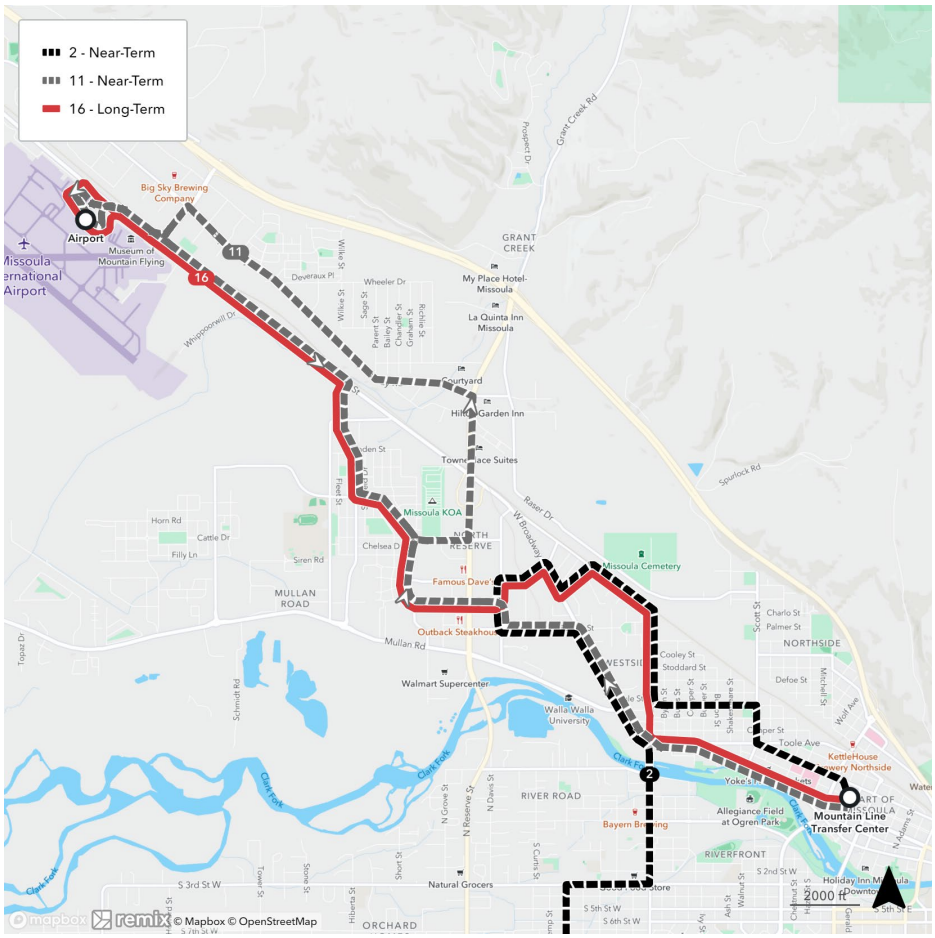


Route 16 – New Route to Replace Routes 11 and 2

The new Route 16 provides a bi-directional connection between the Downtown Transfer Center and the airport, replacing segments of Routes 2 and 11. Figure 5-23 depicts the new Route 16.

- **Replace Route 2 from Russell Street to North Reserve**. Route 16 will replace Route 2 on Russell Street, Railroad Street, Commerce Street, Broadway Street, Latimer Street, American Way, and Great Northern Avenue.
- **Replace Route 11 Service to Airport**. Currently, Route 11 serves the airport with a one-way loop travelling on Expressway Road toward the airport and Broadway Street toward Downtown. This results in out-of-direction travel for anyone boarding or alighting in the loop. In the long-term plan, Route 16 would replace Route 11 with bi-directional service via North Reserve. Service would mostly follow the existing Route 11` alignment and continue to Broadway Street via Mary Jane Boulevard.

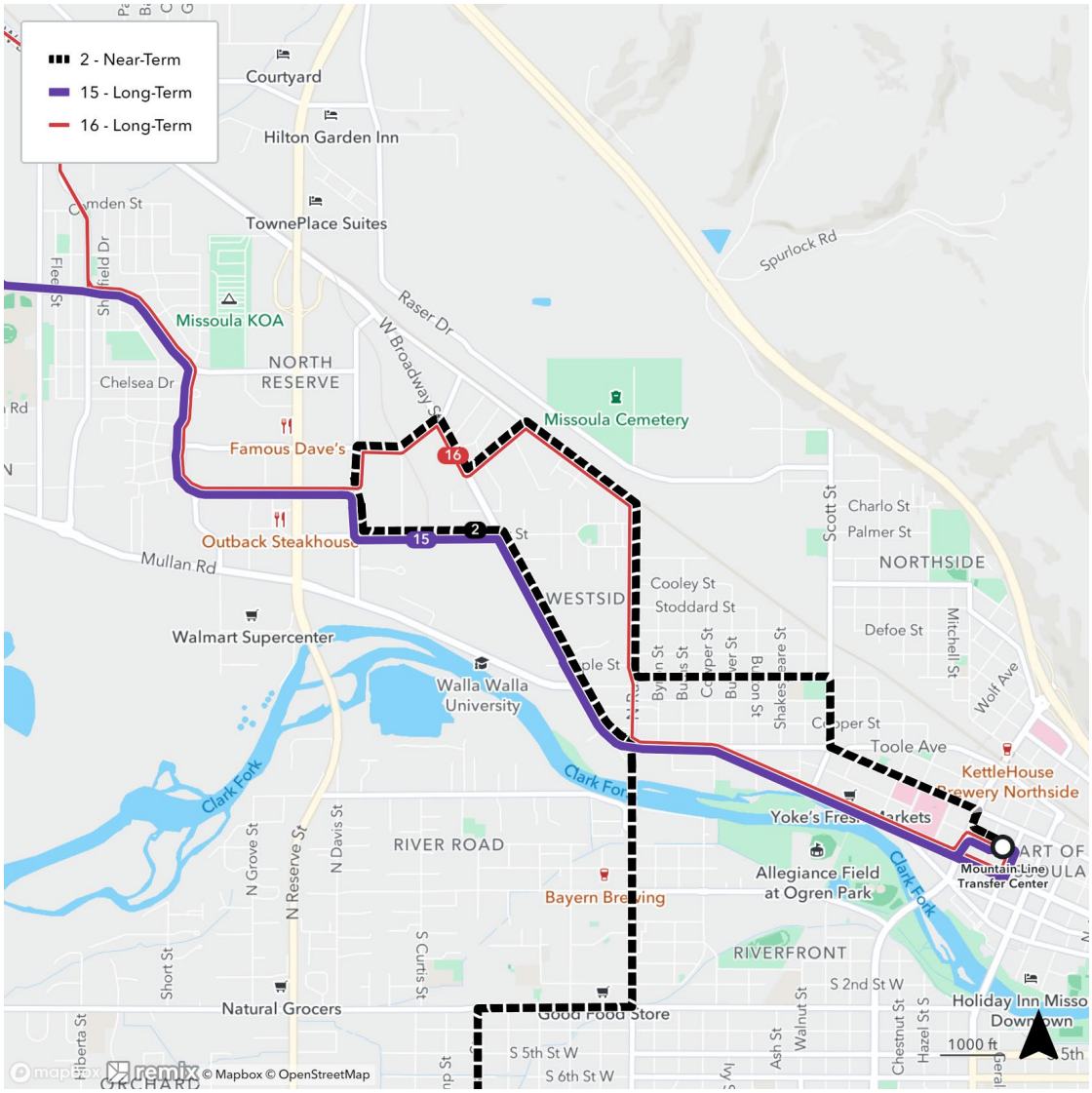
Figure 5-23 Long-Term Network Route 16



Route 15 – Increase Frequency

When launched, either as an additional improvement in the near-term plan or as the first priority in the long-term plan, operating Route 15 hourly, is proposed. However, as Route 2 is discontinued, Route 15 must increase its frequency to operate every 30 minutes as a replacement to Route 2 service on Broadway Street and Palmer Street. In addition, Route 16 will also operate every 30 minutes, allowing for offsetting arrivals and departures on Routes 15 and 16 at the Downtown Transfer Center. This frequency provides effective 15-minute service between Downtown and the North Reserve area. On weekends, each route should operate hourly, creating an effective 30-minute frequency in that segment. Figure 5-24 shows Routes 15 and 16 in this scenario.

Figure 5-24 Long-Term Network Routes 15 and 16

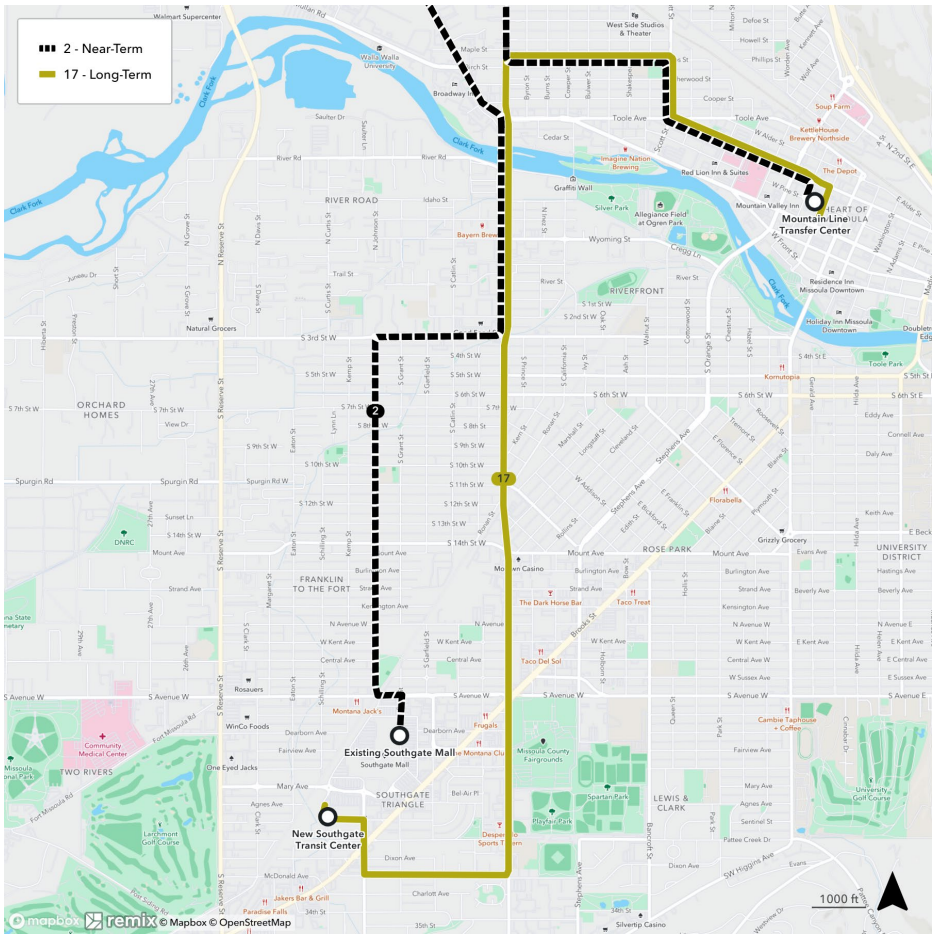


Route 17 – New Route on Russell Street

Route 17 will replace Route 2 with a more direct connection between the Downtown Transfer Center and Southgate Mall via Russell Street. Figure 5-25 shows the new Route 17.

- **Replace Route 2 between Downtown and Southgate Mall**. Today, Route 2 travels out of direction through the Westside and on North Reserve before connecting Downtown to Southgate Mall. The new Route 17, replacing Route 2, creates a more direct connection between Downtown and Southgate Mall via Spruce Street, Phillips Street, and Russell Street.
- **Launch New Service on Russell Street**. Currently, there is no fixed-route service on Russell Street between South 3rd Street and South Avenue West. As a result, some riders are forced to walk over a quarter mile to reach fixed-route service. Significant infill development on Russell Street that should support future transit service is expected.

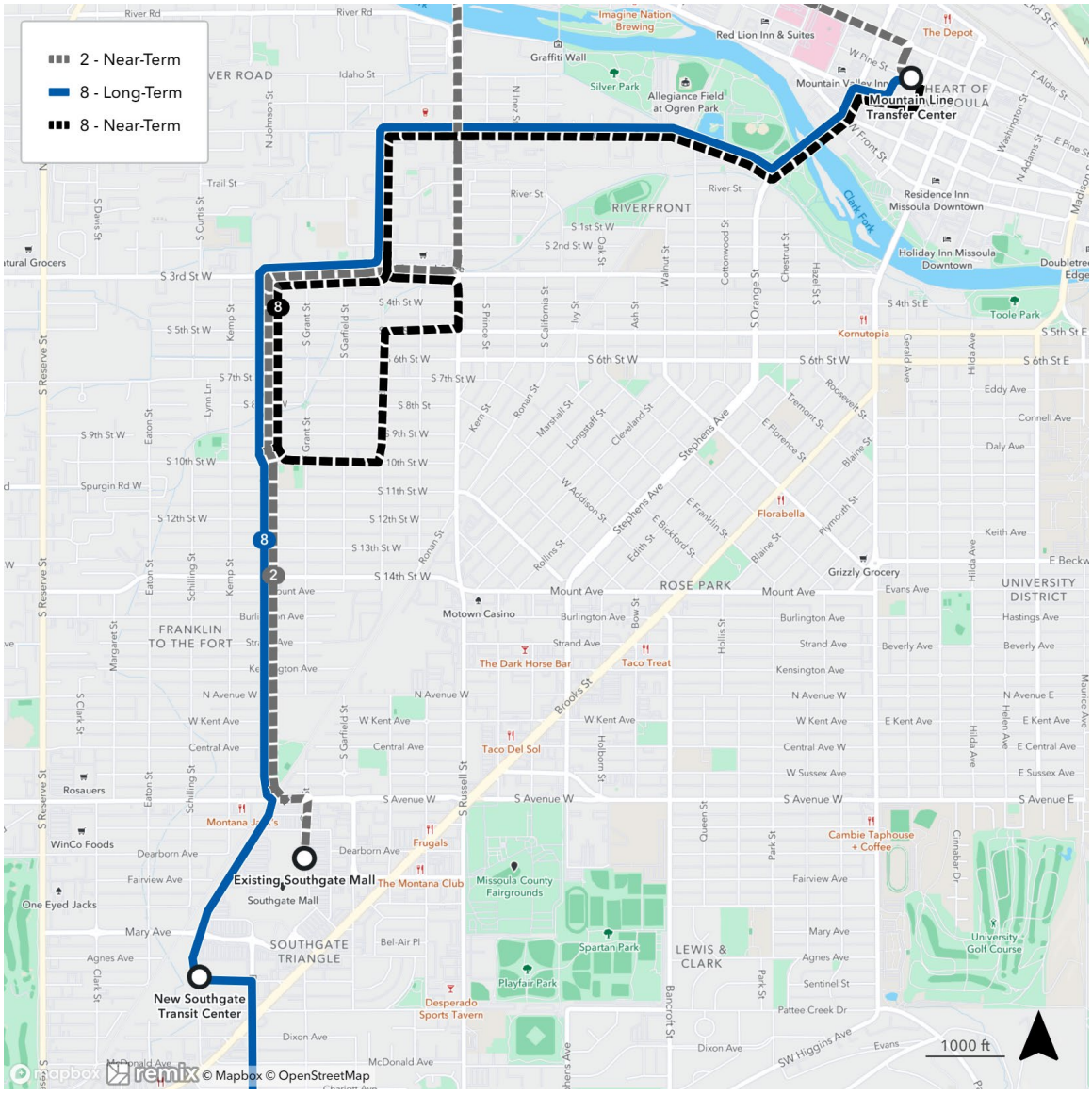
Figure 5-25 Long-Term Network Route 17



Route 8 – Increase Frequency

The near-term plan recommends restructuring Route 8 to connect downtown Missoula, the Sawmill District and the north Franklin to the Fort area with 30-minute service. The long-term plan's second priority (complete MOAB, implement Brooks BRT / build the new Midtown Transit Center) replaces Route 7 by extending Route 8 to Southgate Mall and Walmart. When Route 2 is discontinued, frequency on Route 8 should be upgraded to every 15minutes on weekdays and every 30minutes on weekends as depicted in Figure 5-26.

Figure 5-26 Long-Term Network Route 8

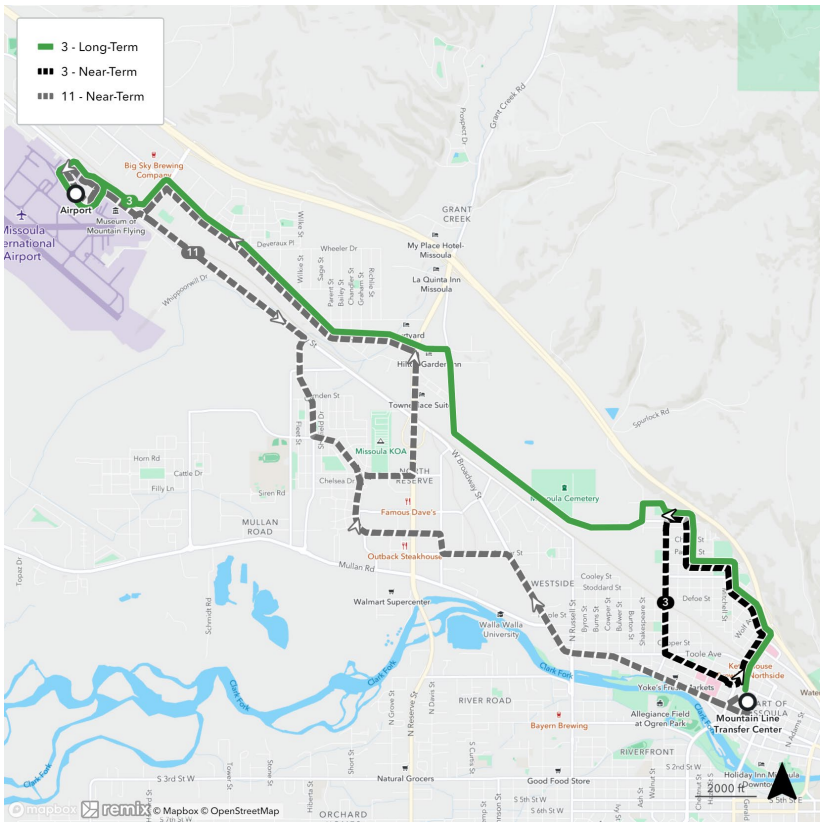


Route 3 – Extend to Airport

Route 3 should also be extended to the airport to serve new development and frequency should be increased. Figure 5-27 show the new Route 3.

- **Extend Route 3 Service to North Reserve and the Airport.** Today, residents in Northside, a rapidly growing neighborhood, must ride Route 3, travel out of direction, and transfer at the Downtown Transfer Center before being able to access key areas like North Reserve and the airport. Route 3 should be extended from Northside, past the proposed Roseburg site, to North Reserve, and then to the airport via Expressway to serve those expanding areas. Northside residents would then connect more directly to job opportunities and amenities.
- **Introduce Bi-Directional Service**. Today, Route 3 travels in a large one-way loop, forcing riders to travel the length of the loop when travelling to and from home/work. The new Routes 3 and 17 would provide bi-directional service to all stops within a 5-minute walk from today's Route 3, reducing commuter inbound and outbound travel times.

Figure 5-27 Long-Term Network Route 3



Note: If the new proposed road north of the cemetery is completed, the Route 3 alignment may be modified to serve that new roadway.

Route 6 – Increase Weekday and Weekend Frequency

Route 6 currently operates every 30minutes on weekdays and posts MUTD's third highest ridership. On weekdays, Route 6 can support 15-minute service, improving the connection between the high-density housing along 34th Street to Downtown and Southgate Mall. Correspondingly, weekend service should also be increased from hourly service to 30-minute service.

Fourth Priority: Expand On-Demand Service

If the near-term, on-demand pilot is implemented, the public responds positively to the service, and the on-demand service meets MUTD's goals, the long-term plan would improve on-demand service by expanding the Linda Vista / Target Range Zone and introduce the new Sx̌tpqyen / North Reserve Zone.

Figure 5-28 summarizes the recommendations and provides estimated costs and ridership.

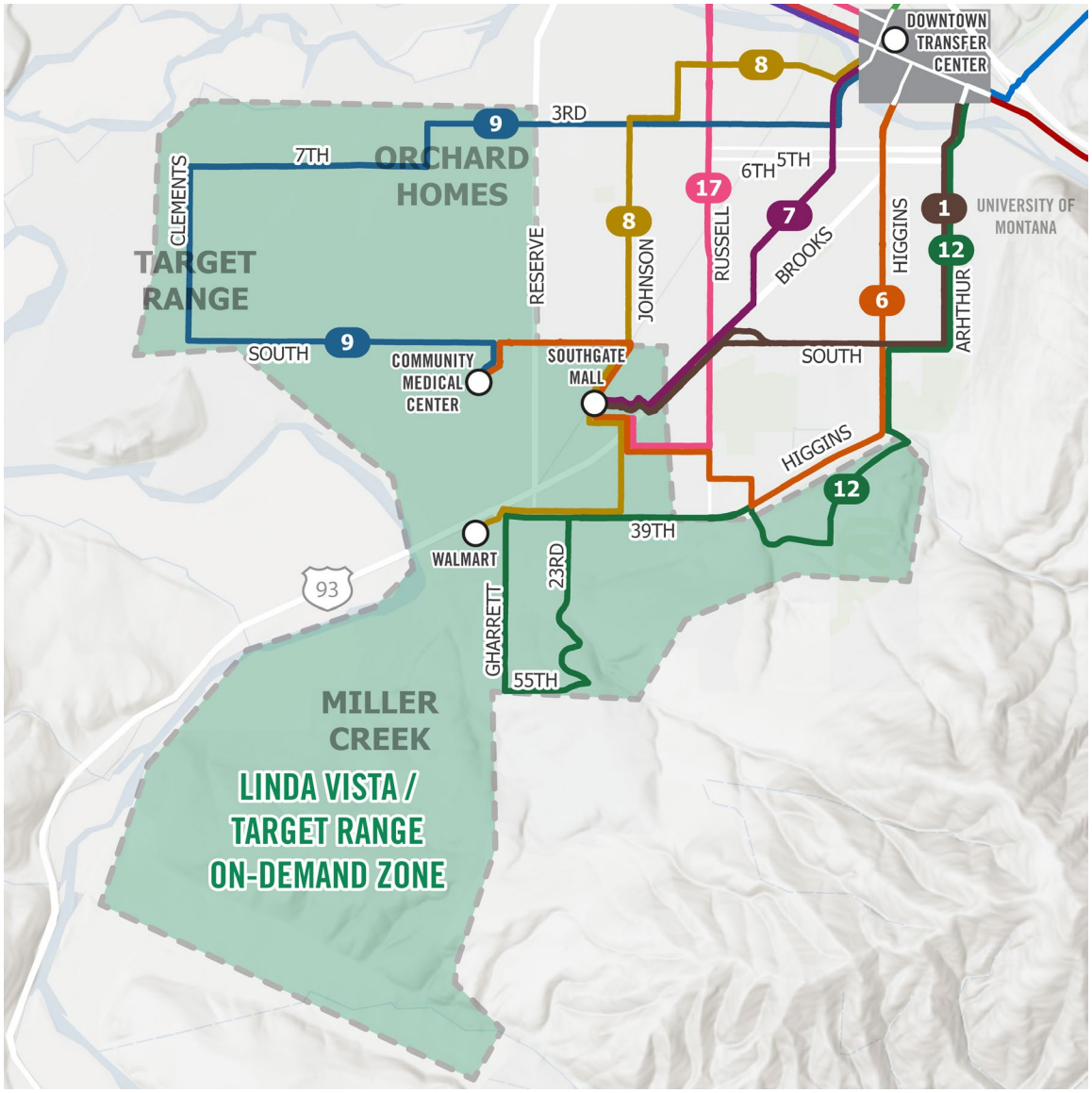
Figure 5-28 Fourth Priority: On-Demand Service

Long-Term Recommendation	Estimated Annual Revenue Hours
Implement Sx̌tpqyen / North Reserve On-Demand Expand on pilot service and increase service area to include South Hills and Whitaker. Operate 7 days a week.	5,100
Expand Linda Vista On-Demand Zone Create a new on-demand zone that operates 7 days a week.	6,500

Linda Vista / Target Range

The Linda Vista – Target Range zone would be expanded to include Moose Can Gully and Whitaker / Pattee Canyon. The expanded zone is 11.2 square miles and would operate from Monday to Sunday from 6 a.m. to 8 p.m. Figure 5-29 illustrates the expanded zone.

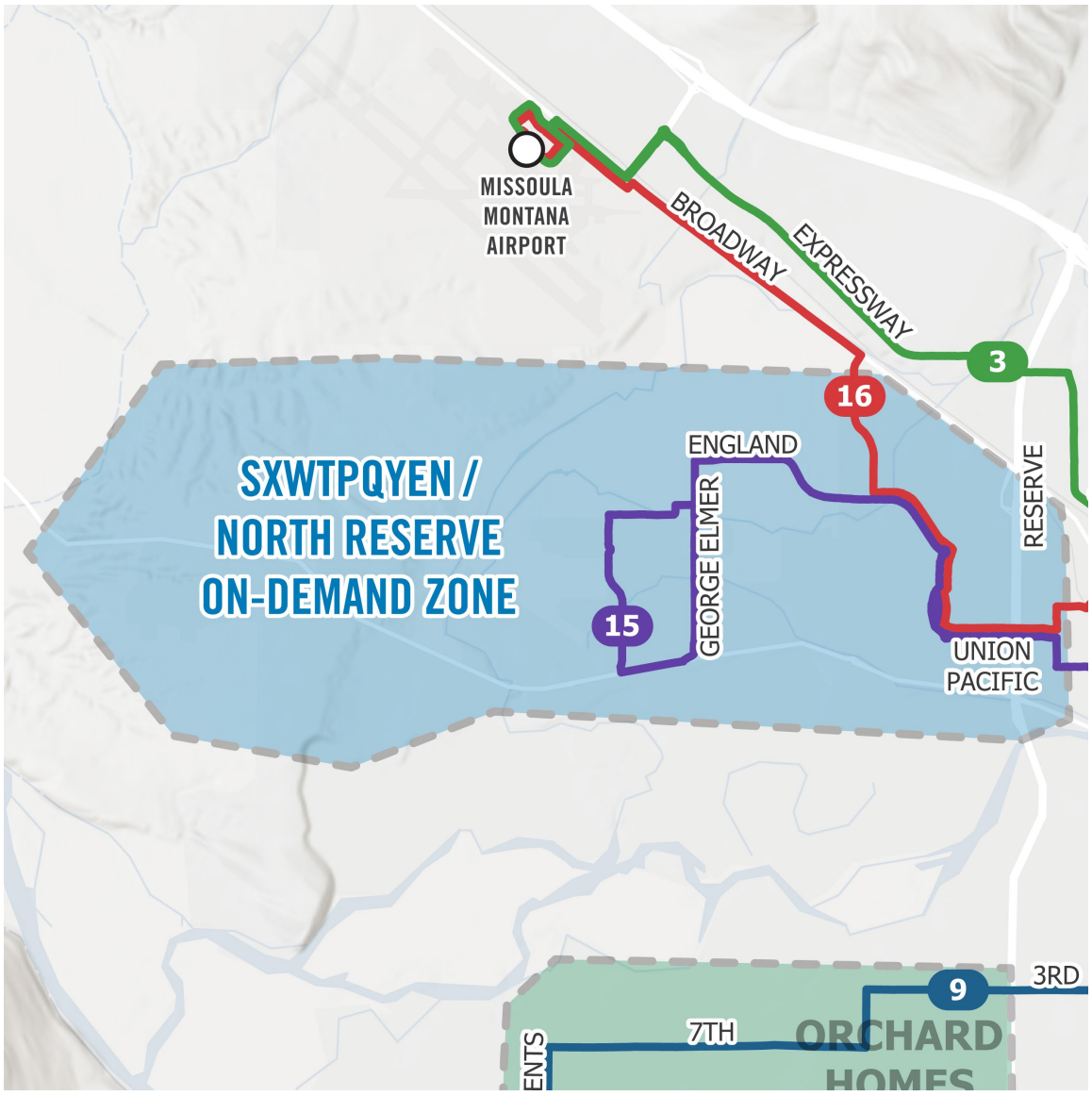
Figure 5-29 Long-Term Network Linda Vista / Target Range On-Demand Zone



Sxʷtpqyen / North Reserve

A new zone would also be implemented to connect Elmar Estates, Mullan Road, Sxʷtpqyen, and North Reserve. Riders would be able to connect Routes 15 and 16 at Target. The new zone would be 6.2 square miles and would operate Monday to Sunday from 6 a.m. to 8 p.m. Figure 5-30 illustrates the new zone.

Figure 5-30 Long-Term Network Sxʷtpqyen / North Reserve On-Demand Zone



Paratransit Impacts

The long-term plan would add 1,400 additional residents – mostly in Sx̱tpqyen, including 200 people living with a disability, to the paratransit service area. As Sx̱tpqyen grows and other potential expansion areas such as the Roseburg site are developed, the additional population and geographic coverage will increase demand on paratransit. If the on-demand zones are implemented, there is no obligation to provide paratransit, because on-demand service provides a wheelchair accessible vehicle that can serve both ambulatory and non-ambulatory riders.

COMMUNITY PARTNERSHIP OPPORTUNITIES

MUTD has dedicated most of its resources to improving bus transit and paratransit. There are various modes and service types that do not fit within the conventional mass transit framework. The services may relate to broader, shared community goals and/or maximizing/expanding current rolling stock. Through the Service plan drafting process and within various other planning discussions, community partners have discussed the partnerships listed below and MUTD plans to explore them further in the context of supporting partnerships.

Recreation Shuttle

Other transit agencies have leaned into the opportunity to use transit to connect with recreational opportunities that benefit both the transit agency and the community. The transit agency generates ridership, builds brand awareness, and fosters goodwill in the community by showing it can adapt to providing non-traditional trips. The community gains new opportunities to recreate (particularly for those who may not drive or do not have a car), provides an alternative to the limited parking at sites, and contributes to achieving community sustainability goals.

Below are a few examples of recreational shuttle services currently in operation. Many of these services are sponsored by community partners covering partial costs.

- Ski shuttles – LINK Transit (Wenatchee, Washington) and Cascades East Transit (Bend, Oregon)
- Summer float shuttles – Cascades East Transit (Bend, Oregon)
- Hiking trailhead shuttles – King County Metro (King County, Washington)

Local examples include: the University of Montana operating a summer Clark Fork River Shuttle Service (now discontinued). Snowbowl operates a weekend shuttle service from Grant Creek and the University of Montana Campus Recreation Center for skiers.

MUTD has begun exploring potential partnership opportunities that would provide access to recreation opportunities. Preliminary interest is centered around providing access to trailheads within the area including but not limited to: Blue Mountain, Pattee Creek, Marshall Mountain, and the Rattlesnake trailheads.

Downtown Trolley

MUTD's diesel trolley currently operates during the farmers market and special events. An electric trolley will replace the diesel model in spring 2026. Stakeholders have expressed interest in using this vehicle on weekdays as a Downtown parking circulator connecting parking structures and hotels with Downtown destinations and the broader transit network. MUTD should be open to discussions with Downtown groups, local businesses, and tourism organizations to develop a partnership for operating this expanded service. Typically, downtown trolleys require partner funding to help cover operating costs.

Micromobility Support

Micromobility refers to lightweight vehicles, most often scooters, and bikes meant for short distances. Shared micromobility systems are shared-use fleets of micromobility devices – typically non-electric pedal bikes, pedal-assist electric bikes (e-bikes), and e-scooters – rented for short, point-to-point trips that start and end within the public right-of-way. Most systems utilize one of two primary strategies for where people can start and end trips: station-based or dockless. Community members have discussed introducing shared micromobility services in Missoula. The MPO has conducted background research, but the future of micromobility in the area remains uncertain. If implemented, micromobility stations should be considered in relationship to transit service as a connection to the broader transit system. Transit stops located near micromobility facilities would support first mile and last mile trips and provide additional mobility options. Intersection with high frequency routes (1 &2), future BRT service, and university service would be primary candidates for consideration.

6 IMPLEMENTATION AND BEST PRACTICES

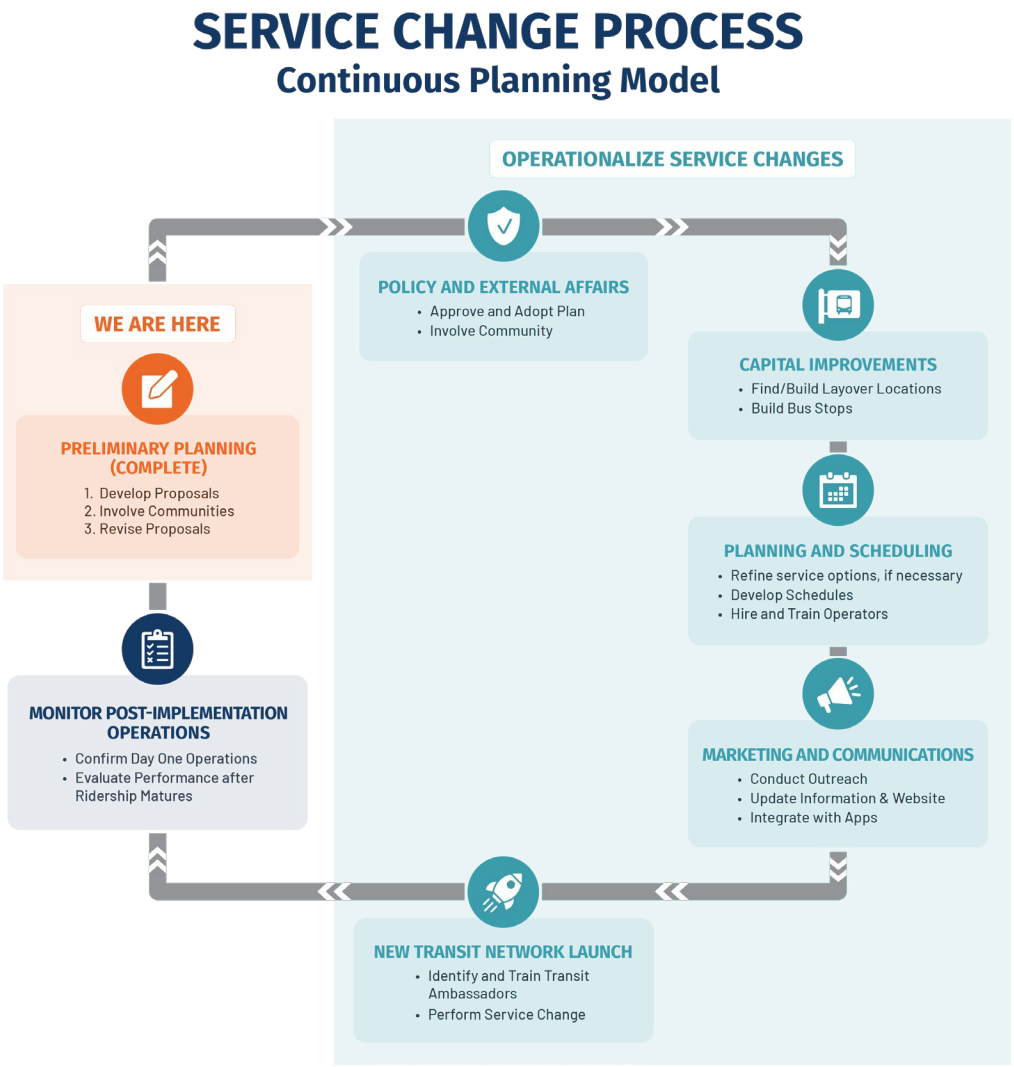
This chapter describes the implementation plan for realizing the Near- and long-term plan visions. The following sections describe the framework and tasks required for implementation.

- **Adopt a Continuous Planning Model**: This section describes how MUTD should continue to be flexible in facing Missoula's ever-changing mobility needs.
- **Operationalize Service Changes**: This section provides a high-level overview of the tasks by functional area MUTD will need to accomplish for launching the new network.
- **Monitor Post-Implementation Operations**: This section describes the steps for ensuring that operations were successfully implemented on the day of the service change, and how to inform future service changes by evaluating ridership maturity post-implementation.
- **Paratransit Study**: This section highlights the increasing demand for paratransit and proposes a follow-up study to better understand and plan for its future.
- **Integrate Existing and Planned Policy Documentation**: This section describes how the Bus Stop Master Plan and Communications Plan should incorporate elements adjacent to implementation of the near- and long-term plan visions.

ADOPT A CONTINUOUS PLANNING MODEL

Currently, MUTD typically conducts a service plan that documents immediate opportunities and outlines future steps every five years. The pandemic, among other things, has shown that travel patterns can shift with little or no notice. Rather than setting plans every five years, MUTD should consider adopting a continuous planning model to better match service planning priorities with current and projected conditions. In a continuous planning model, as seen in Figure 6-1, Near- and long-term plans would become living documents that could be updated on a regular basis.

Figure 6-1 Service Change Process



OPERATIONALIZE SERVICE CHANGES

Launching new or expanded transit service is a complex endeavor that typically requires the following: coordinating closely with multiple agencies and private businesses; adhering to a detailed schedule; maximizing and securing funding commitments; procuring multiple capital items and services, and hiring and training staff. Once the decision to implement a major service change/expansion is made, MUTD and key stakeholders should develop a detailed work plan. In addition, executing an implementation plan requires effort and funding outside the staff. This section provides a high-level overview of the tasks by functional area in preparation for launching a revised network.

Stage One: Policy & External Affairs

- **Plan Adoption**: MUTD will need to approve the proposed service changes prior to implementation.
- **Community Involvement**: MUTD should coordinate with key stakeholders to conduct outreach and public meetings for communicating the proposed service changes. MUTD should then document the community's involvement and feedback to identify and mitigate potential issues.

Stage Two: Capital Improvements

- **Identify Layover Locations**: MUTD should identify suitable bus staging locations and engage property owners to negotiate site access and use agreements, as necessary.
- **Bus Stop Planning**: Bus stop changes involve replacing sign placards at existing stops and installing new poles and placards at new/relocated stops. After installation, new signs should be bagged until the new network is officially launched.

Stage Three: Planning & Scheduling

- **Identify On-Demand Service Delivery Method and Service Contractors**: If MUTD decides to launch an a pilot on-demand service, the agency must decide how it will deliver the service. Will the agency operate it directly? Will it be contracted out? Will it be delivered through a transportation network company such as Uber or Lyft?

  If the service is contracted, MUTD will need to develop materials for an RFP and devote staff time to review the proposals, negotiate a contract, assist the contractor in commencing operations, and monitor service.

  If the service is operated in-house, MUTD must plan on hiring additional staff and obtaining capital to purchase new vehicles. Finally, MUTD will need to decide the hours of service, fares, and other relevant service parameters.
- **Service Plan Refinement**: Conditions can change between adopting the Service plan and implementing the planned improvements. For example, as the Sx̱tpqyen roadway network is built out, MUTD may want to engage with the public on the final alignment for the route serving the area. If significant changes occur, MUTD should update its Title VI equity analysis to ensure there are no adverse impacts.
- **Scheduling**: When service plans are ready for implementation, MUTD should conduct test runs of each route to validate running time assumptions. Using this

information, final bus schedules should be developed to determine manpower requirements. Several months prior to the service launch date, operator paddles should be developed to facilitate training and ultimately revenue service.

- **Hiring & Training**: Based on manpower needs, MUTD may need to hire additional operators. If so, MUTD should conduct new personnel recruitment and training. In the weeks leading to the service launch, MUTD should conduct a new bid based on the final work assignments and train all operators on the new routes and service polices.

Stage Four: Marketing and Communications

- **Marketing & Public Outreach**: Marketing and public outreach are essential to ensure a safe and smooth new network rollout. Each time service changes are rolled out, MUTD should develop and execute a marketing and outreach plan for informing the public. The marketing plan should cover branding, messaging, and media strategies that engage both current riders and the public.
- **Passenger Information & Website**: The new network will require an overhaul of MUTD's public-facing passenger information materials, including print and digital timetables and system maps. The website will also need updating several months prior that will provide riders with an opportunity for reviewing how their trips will change.
- **Technology Integration**: To support integration with third-party map services and trip planning apps, MUTD will need to update and publish its GTFS prior to the network launch.

Stage Five: New Transit Network Launch

- **Identify & Train Transit Ambassadors**: Many transit agencies that have implemented network redesigns enlisted volunteer "transit ambassadors" to pass out information and assist customers during the initial launch period. MUTD should identify internal staff or external volunteers to help perform this function.
- **Service Changeover**: Updating and changing routes is a highly choreographed effort that will occur in the days immediately prior to the grand opening. Tasks include updating the MUTD website, posting new information and maps at the Downtown Transfer Center and key stops, unbagging new bus stop signs and removing or bagging old signs in preparation for removal.

MONITOR POST-IMPLEMENTATION OPERATIONS

After day one launch, MUTD should ensure that transit services are operating according to plan. Further, MUTD should allow ridership to mature before evaluating ridership and making further adjustments to the network. The network must be flexible in its growth to meet Missoula's ever-changing travel demands.

- **Ensure Day One Operations Go According to Plan**. MUTD staff should make sure the service change was deployed correctly by using the transit services and talking to riders. Any rider complaints should be addressed immediately.
- **Allow Ridership to Mature**. MUTD should allow ridership to mature for 12 to 18 months before evaluating ridership and proposing more service changes (provided there are no operational safety hazards). Riders require time to become familiar with service changes, especially with new on-demand services. After the first year, MUTD can evaluate boardings at a stop level, and customer complaints normalized by ridership on routes, to inform future service changes.

PARATRANSIT STUDY

Paratransit ridership has increased, though the contributing factors remain unclear. The number of individuals eligible for paratransit has grown and is expected to continue rising as the population ages. Zero fares may also be driving demand by lowering the barrier to taking more trips. Additionally, some of the increase in ridership may result from individuals requesting more trips. A detailed study on paratransit service is recommended to analyze the factors influencing demand, project future needs, assess the implications for MUTD, and explore potential service options.

INTEGRATING EXISTING AND PLANNED POLICY DOCUMENTATION

Mountain Line has endeavored to improve its operations support by investing in various planning projects, including the bus stop master plan and marketing and communications plan.

The Bus Stop Master Plan, adopted in 2015 and amended as recently as February 2020, is MUTD's blueprint for improving signage and amenities at bus stops. MUTD recently undertook an updated inventory of all bus stops in summer of 2024.

The service changes proposed as part of the Transit Service Plan would require MUTD to establish new stops on new roadways being served, as well as removing existing bus stops from streets that would no longer be served. New stops should be established in accordance with the guidelines outlined in the Bus Stop Master Plan.

MUTD has also sought to strengthen the public's understanding and ease of use of Mountain Line services through better agency communication. In Spring 2024, MUTD conducted a marketing and communications audit with a design consultant. The ensuing marketing and communications planning effort identifies opportunities to improve signage, instructional rider communication, wayfinding infrastructure, maps, targeted messaging, and online rider resources for greater clarity, accessibility, and consistency. This supports agency efforts to increase ridership by improving the transit experience for passengers and identifying new potential transit users in the region. Increased strategic partnership efforts also allow MUTD to invest in continuous outreach and engagement with stakeholder groups to better serve the wider community.