Cheyenne Transit Program
2023 Transit Development Plan

Final Report

January 31, 2023

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Prepared for:

CTP CHEYENNE TRANSIT PROGRAM

CHEYENNE MPO

WYOMING TRANSPORTATION DEPARTMENT

Federal Transit Administration

Cheyenne Transit Program
2023 Transit Development Plan

Final Report

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INTRODUCTION

INTRODUCTION

The City of Cheyenne and the Cheyenne Metropolitan Planning Organization (MPO) contracted with the team of LSC Transportation Consultants, Inc. (LSC) and Fehr & Peers to prepare an update to the Transit Development Plan (TDP) for the Cheyenne Transit Program (CTP). CTP's last TDP was completed in 2013 and was intended to be a five-year plan. This TDP provides an opportunity to examine changes that have happened in the community, including the impacts of the COVID-19 pandemic, and find ways to better serve the community's transit needs. The TDP will emphasize efficient use of available resources, recognize funding limitations and potential new funding sources, incorporate new concepts for transit service delivery, and provide flexibility for implementation.

HISTORY OF CTP

CTP provides transit services in Cheyenne, Wyoming, and the service area encompasses approximately 65,000 residents. In 2019, before the COVID-19 pandemic, CTP provided 161,000 transit rides, most of which were on fixed-route services. Prior to the COVID-19 pandemic, CTP offered fixed-route service and an ADA paratransit service available to riders with disabilities who are not able to use the fixed-route service. Beginning in March 2020, CTP stopped operating its fixed-route service in favor of an on-demand model, better suited to transit needs during the pandemic.

GOALS OF THE STUDY

The main goals in this update to the TDP were:

- Develop a renewed vision that creates new enthusiasm for public transportation.
- Engage the entire community, including underrepresented populations, in the planning process.
- Improve speed of service delivery.
- Build upon existing microtransit service successes.
- Deliver near-term, short-term, and long-term recommendations with an eye towards practical, flexible, and implementable solutions.
- Grow ridership and improve overall efficiency and cost-effectiveness of CTP.
- Detail infrastructure and capital needs.

STUDY ISSUES

An initial kick-off meeting was held with the Project Management Team (PMT) on October 14, 2021. This group includes representatives from CTP, the Cheyenne MPO, and the consultant team. The PMT met to discuss the scope of work, finalize the project schedule, establish deliverable dates and meeting dates, and identify transit needs and issues. Issues and goals for the study were discussed during the initial meeting, including:

- The COVID-19 pandemic has presented many challenges, especially regarding the hiring and retention of drivers. The absence of employees if they are out for 10-14 days due to COVID-19 is detrimental to operations. Currently, CTP does not have enough employees to start running fixed-route service again. With this study, it will be important to address staffing shortages and what CTP can do to attract new employees. Should the full-time equivalent (FTE) vs. part-time equivalent (PTE) ratio be changed moving forward?
- This study is important to determine how CTP can provide the best possible service with the resources that are available now.
- Pre-pandemic service operated on hour headways and, moving forward, need to be more efficient with existing resources.
- Are there other funding sources out there?
- The on-demand service has meant more than 100 new bus stops across the service area.
- Transit should be attractive to choice riders, and not just for those who have no other mode of transportation.
- There are areas in the county fixed-route transit was not able to reach, like new annexed areas, industrial job sites, Driver's License office, etc.
- With the on-demand service, CTP has been able to provide new service in areas of Cheyenne where fixed-route transit was unable to serve. This new on-demand service may be well-suited for lower-density, more remote areas moving forward.
- Ridership is low so it is important to resume fixed-route service as soon as possible. The on-demand service has a limited number of seats and is not capable of the same ridership as fixed-route service.
- The pandemic has been challenging, but it is important to plan beyond COVID-19. Cheyenne is a growing community with lots of new development and with that comes an expectation for efficient and easy-to-use transit.
- There is big community interest in transit. CTP is starting to move more people and riders are wanting the freedom to go out and about again and interact with their neighbors and community.

STUDY APPROACH

Three Interim Reports were prepared as part of the planning process. The information from the three Interim Reports was integrated into the Draft Transit Development Plan for review and approval. The first Interim Report presented information about existing community conditions and transportation needs. This included the results of a transit user survey and a community-wide survey. The second Interim Report explored a range of service options. After review of the service options including input from the community, the service options were refined into a preliminary recommendation presented

in Interim Report #3. The service plan was then developed in more detail including a capital investment plan and ten-year financial plan.

An Advisory Committee was formed to provide input and feedback as the Plan was developed. Members of the PMT and the Advisory Committee reviewed each of the Interim Reports and provided feedback and direction for the development of the plan.

Opportunities were provided for public participation in development of the plan. A community-wide survey questionnaire was created and promoted along with a community meeting early in the process. A second community meeting was held to present the preliminary service plan and obtain feedback from the community. The service options were posted on the MPO website with an online comment form. Direct contact was made with CTP users to ensure they were aware of the opportunities to participate and provide input for the plan. Email addresses were compiled and used to notify interested individuals of plan development and opportunities to participate.

The final Transit Development Plan reflects priorities of the community with realistic and achievable levels of service.

REPORT CONTENTS

The Transit Development consists of seven chapters

- Chapter 1 is this introduction to the report.
- Chapter 2 includes a review of existing planning documents. The previous TDP is reviewed along with other transportation planning documents which may have provided input for this update.
- Chapter 3 provides a summary of the public involvement efforts to the TDP update. This includes the results of a community transportation survey and an onboard survey of CTP riders. Other public outreach efforts included two community meetings and posting of information on the MPO website with opportunities for comments.
- Chapter 4 presents demographics of the study area, including descriptions of population density and population groups typically considered more likely to be dependent on public transit for mobility; local travel patterns; and relevant economic data.
- Chapter 5 provides an overview of CTP's recent and current transportation services, including history, organization, operations, vehicle fleet, ridership, financial analysis, and system performance. CTP operated fixed-route and complementary paratransit prior to March 2020. At that point, the service was changed to on-demand microtransit service to reflect demand

conditions during the pandemic. Both service models are described and evaluated in this chapter.

- Chapter 6 presents the evaluation of needed changes or expansion in service and amenities, including a transit needs and demand analysis, as well as a first- and last-mile gap analysis.
- The recommended implementation plan is presented in Chapter 7. This includes phased implementation for services including restoring fixed-route service in some areas of the community. Recommendations are provided for capital improvements, including fleet replacement and facilities. A ten-year financial plan and performance monitoring program are included in the implementation plan.
- Detailed supporting information is provided in separate appendices.

Chapter 2

REVIEW OF EXISTING DOCUMENTS

INTRODUCTION

This chapter summarizes previously completed plans and studies by the Cheyenne Transit Program (CTP) and Cheyenne Metropolitan Planning Organization. The descriptions of these existing documents also include relevant findings and recommendations that were considered in development of the 2022 Transit Development Plan.

SUMMARY OF EXISTING DOCUMENTS

CTP Transit Development Plan and Coordination Study (2008)

The Cheyenne Transit Program's Transit Development Plan (TDP) in 2008 examined community conditions, existing transportation resources, onboard survey findings, and the agency's goals and objectives. The TDP conducted a transit need assessment that found the areas with the greatest transit propensity included those around the United Medical Center East, the Wyoming State Government offices, the Yellowstone Surgery Center, Walmart, and south of I-80. These areas had the greatest share of zero-vehicle households, elderly individuals, people with disabilities, and low-income households. Service alternatives in the TDP included maintaining the status quo; adding deviation routes, jump routes, regional routes, or demand-response service; expanding hours; or expanding levels of service. It also posed possible organizational and financial changes for the agency.

Cheyenne Metropolitan Area Pedestrian Plan (2010)

The Snapshot section of the Pedestrian Plan reviewed the importance and benefits of walking, examined background data and previous plans, described Cheyenne's existing pedestrian environment, and discussed system strengths and weaknesses (shown in Table 1). It found that while Cheyenne's downtown and older neighborhoods featured comfortable sidewalks with pedestrian amenities like pedestrian scale lighting, other areas of the city provided a less comfortable experience for pedestrians. Areas like the industrial and commercial east side of the city had fewer sidewalks and protected crossings, less lighting, and heavier vehicle traffic. At the time, many intersections lacked ADA-compliant curb ramps, but the city was beginning to install and replace them. This plan also describes the status of the Greater Cheyenne Greenway, which has continued to expand since 2008.

Table 1: Strengths and Weaknesses Identified in the Pedestrian Plan	
Strengths	Weaknesses
• Flat topography • The built environment in west central, downtown, and central Cheyenne • Parks and open space; pedestrian-friendly residential streets • The Greenway system • Continual pedestrian infrastructure improvements • Warning signage on streets crossing paths • Grade-separated trail crossings • Pedestrian countdown signals	• Uncomfortable sidewalks along high-volume roadways • Difficult street crossings • Lack of wayfinding • Discontinuity in the Greenway system and sidewalk network • Lack of sidewalks and shelter at transit stops • Poor pedestrian infrastructure maintenance • Driver behavior • Desire lines indicating demand for pedestrian facilities

The Structure section of the document reviewed existing plans and recommended pedestrian design guidelines. These guidelines covered elements such as accessibility, adequate width, safety, continuity and directness, landscaping, social space, and quality of place. The Shape section of the plan took a closer look at pedestrian trip generators, pedestrian trip attractors, pedestrian barriers, and pedestrian level of service (PLOS). Finally, the Build section proposed a future pedestrian network and improvements, prioritized projects, and set forth implementation strategies.

Cheyenne Metropolitan Area Safe Routes to School Master Plan (2010)

This document investigated existing conditions and transportation barriers to students using active transportation to travel to school, developed solutions to address these barriers, and outlined an action plan for next steps for Cheyenne. According to a travel survey at the time, roughly half of K-8 students in the school district were driven to school, a quarter took the bus, 16 percent walked, and the rest biked, carpooled, or found another means of transportation. Barriers to walking and biking to school included unsafe conditions in Cheyenne's built environment, parental concerns, time limitations, traffic conditions, and more. Table 2 shows suggested solutions and street design changes from this plan. The plan identified where each of these changes should be implemented at each school and provided preliminary cost estimates for each facility.

Table 2: Suggested Solutions and Street Design Changes	
Solutions	Street Design Changes
• Educational programs • Traffic safety campaigns • Safe walking routes • Dedicated bus zones	• Pedestrian refuge islands • Speed bumps • Chicanes (extra road curves designed to slow traffic) • Traffic circles/roundabouts • Intersection tightening • Pedestrian signage and markings • Completion of the sidewalk network • Curb extensions • Leading pedestrian intervals

Cheyenne Area On-Street Bicycle Plan and Greenway Plan Update (2012)

Volume I

This section of the plan discussed the project methodology for development of the on-street bicycle and greenway system, the proposed network, and implementation considerations. Many of the plan recommendations related to improving connectivity of the overall bikeway network, but also integrating the network with the transit network. Other plan goals related to education and encouragement to improve public awareness of active transportation in Cheyenne. The document included a list of specific bicycle infrastructure projects including greenways, bike lanes, buffered bike lanes, shared lanes, bicycle boulevards, and shoulder bikeways. The report included maps of existing bikeway quality, the proposed bikeway network, and the prioritized bikeway network (by near term, medium term, and long term).

Volume II

Volume II is the Design Guidelines and Policy Handbook, which covers standards for on-street facilities, crossings and intersections, off-street facilities, and wayfinding.

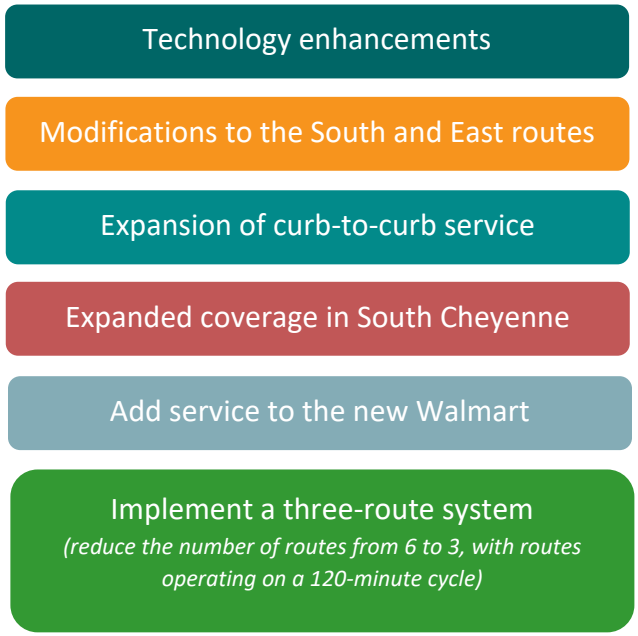
Volume III

Volume III includes project memoranda and other supporting plan documentation.

CTP 5-Year Transit Development Plan (2013)

The Cheyenne Transit Program's Transit Development Plan in 2013 profiled the Cheyenne community, examined the existing transit system, proposed a service plan, and outlined safety and performance standards. The community profile included information on population density by overall and transit-dependent populations. In 2012, the most popular routes by average daily boardings were the Northeast, Northwest, South, and Downtown routes. These routes also had the greatest projected transit demand. Figure 1 shows suggested implementations in order of importance. The report also included new and revised performance standards for the agency.

Figure 1: Recommendations from CTP's 2013 TDP



Cheyenne Transportation Safety Management Plan (2015)

The Cheyenne Transportation Safety Management Plan examined safety conditions on roadways in the metropolitan area and developed a strategy for addressing concerns. The planning process involved reviewing crash data, developing a vision and goals, identifying Emphasis Areas, examining existing programs and supplementing these with additional tactics, and outlining an implementation plan. Cheyenne's eventual goal is for zero fatalities to occur on roadways in the metropolitan area, but the plan set a fatality target of no more than six fatalities per year by 2020. Emphasis Areas the plan identified are intersections, vulnerable users, distracted driving, and safe driving policies. As part of this effort, Cheyenne established a Transportation Safety Advisory Committee (TSAC) to facilitate the implementation of strategies from the plan.

WYDOT Transit Asset Management Plan (2018)

The Federal Transit Administration (FTA) requires transit agencies to develop transit asset management plans if they own, operate, or manage capital assets to provide public transportation and receive federal assistance. The Cheyenne Transit Program coordinates with the WYDOT Transit Office on transit asset management. WYDOT's 2018 Transit Asset Management Plan discussed state of good repair criteria and policies set by the agency, inventoried the state's equipment, and assessed the condition of this equipment. It then prioritized a list of investments and set annual performance targets and measures for state of good repair. The purpose of this plan was for WYDOT to identify risks of using assets not in a state of good repair and decide how to balance financial considerations of improving asset condition with achieving sufficient transit performance.

CTP Public Transportation Agency Safety Plan (2020)

The Federal Transit Administration (FTA) also requires transit agencies to develop public transportation agency safety plans (PTASP) if they receive federal assistance under the Urbanized Area Formula Program. The Cheyenne Transit Program developed this plan in 2020. The purpose of CTP's PTASP is to show the agency has safe systems in place throughout all aspects of their operations, administration, procurement, and maintenance. The plan included processes and procedures to implement Safety Management Systems (SMS) and performance targets. Through the plan, CTP stated that the agency will identify safety hazards continually by collecting and analyzing safety related data, conduct risk assessments of these identified hazards, and mitigate these risks.

Connect 2045 Long-Range Transportation Plan (2020)

Connect 2045 comprehensively evaluated the current active transportation, transit, and roadway networks in Cheyenne and set recommendations for improving these transportation systems to serve the needs of the city as its population and employment grows over time. The planning process included collecting community input through an online map and a community open house. Table 3 shows geographic areas with the most requests for transit service according to a MetroQuest survey.

Table 3: Geographic Areas with Most Requests for Transit Service

- Downtown Cheyenne
- Laramie County Community College
- Shopping area at Dell Range Boulevard and Ridge Road
- Area including the Cheyenne Country Club, Cheyenne Aquatic Center, and Cheyenne Botanic Gardens.

The plan also included a section on the regional transit system, which encompassed a system performance overview and recommendations. It found that ridership was greatest on the Northwest, South, Northeast, and West routes in 2019. It also found that CTP's paratransit system is significantly more expensive than peer agency systems and that the CTP should explore ways to improve paratransit efficiency. Recommendations included offering express service to the most frequently used stops and highest ridership routes and expanding route coverage in areas with significant forecasted population and employment growth such as Southwest, Southeast, and East Cheyenne.

Noted service gaps include the northwest corner of the city, which has a high concentration of older adults (a growing share of the city's residents), and lack of connection to major employers (Walmart Distribution Center, Crete Carrier Corporation, Sierra Trading Post, Echostar, and Magpul Industries) that could be served by CTP and/or employer shuttles. As suggested in the 2013 TDP, the plan noted the possibility of joining pairs of routes to make them longer loops to reduce the need for transfers downtown. Finally, the plan suggested an interregional transit route that would circle the periphery of the city to connect riders to current routes without needing to travel downtown to transfer. Figure 2 shows the SWOT Analysis completed in this plan. Note that since completion of this plan, CTP introduced a mobile app and electronic payment.

Figure 2: Transit SWOT Analysis *(Source: Connect 2045)*

S Strengths	W Weaknesses	O Opportunities	T Threats
• Modern, clean, affordable	• Lack of awareness – people do not know about the transit services, hours of operation, routes, stops, cost, etc. • Limited frequency of service (1-hour headways) • Limited and inefficient routes • Cash only, no mobile app or passes	• Educate people about the transit system as a transportation option • Make people feel safe on public transit • Expand the service area and extend hours of operation • A growing population will support additional transit service • Make transit more accessible for all users	• Poor accessibility for the aging population, mobility impaired users, and those who are visually impaired • Weather as it relates to people waiting at transit stops and walking to/from destinations from transit stops

CONCLUSION

Previously performed plans and studies by the Cheyenne Transit Program and Cheyenne Metropolitan Planning Organization (particularly *Connect 2045*, the *Cheyenne Metropolitan Area Pedestrian Plan*, and the *Cheyenne Area On-Street Bicycle Plan and Greenway Plan*) include recommendations and guidance to incorporate within the new Transit Development Plan. The TDP can build upon these efforts to improve the Cheyenne Transit Program and connectivity of the active transportation network to the transit system.

Chapter 3
PUBLIC OUTREACH

INTRODUCTION

This chapter provides an overview and summary of public outreach efforts. These efforts include a community survey, an onboard survey, in-person outreach efforts, and online opportunities.

COMMUNITY SURVEY

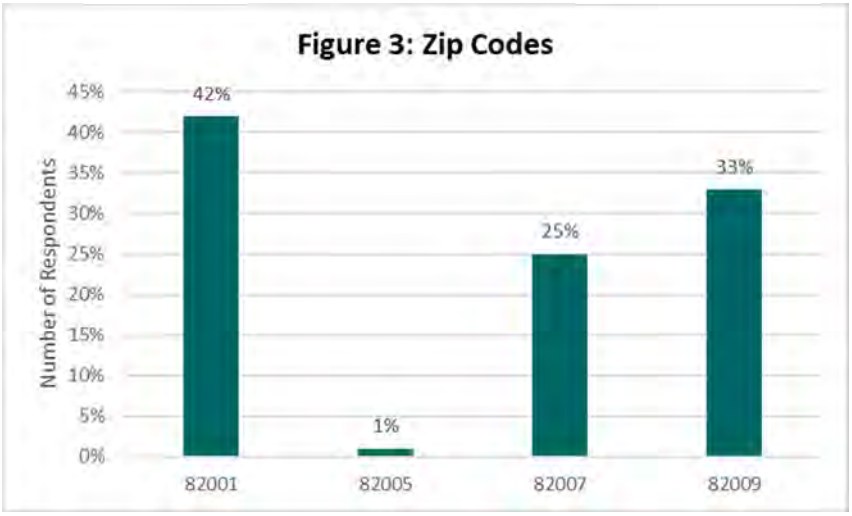
Community input about transit usage and preferences is important information that will be used to improve CTP routes and services. A survey designed to obtain this information was available online in both English and Spanish from January 12, 2022, to February 17, 2022. The survey asked respondents about their demographics, current transportation patterns, public transit usage and opinions, and unmet transportation needs. A total of 120 responses were received. The survey instrument is included in Appendix A.

The survey was publicized and distributed through the following means:

- Project website (hosted by the Cheyenne Metropolitan Planning Organization)
- City of Cheyenne press release and posts on social media
- Posters hung on CTP buses
- Flyers distributed to stakeholders and local businesses
- Local news (Wyoming Tribune Eagle)

Residence Location

Respondents were asked in which zip code they lived. Zip code 82001 covers most of Cheyenne and accounts for 40 percent of survey respondents (see Figure 3). Zip code 82009 represents the northern part of Cheyenne and the rural areas to the north of Cheyenne and had 33 percent of respondents. Zip code 82007 represents rural areas to the south of Cheyenne and accounts for 25 percent of survey respondents. One percent of respondents live in zip code 82005, which covers the F.E. Warren Air Force Base to the west of Cheyenne.

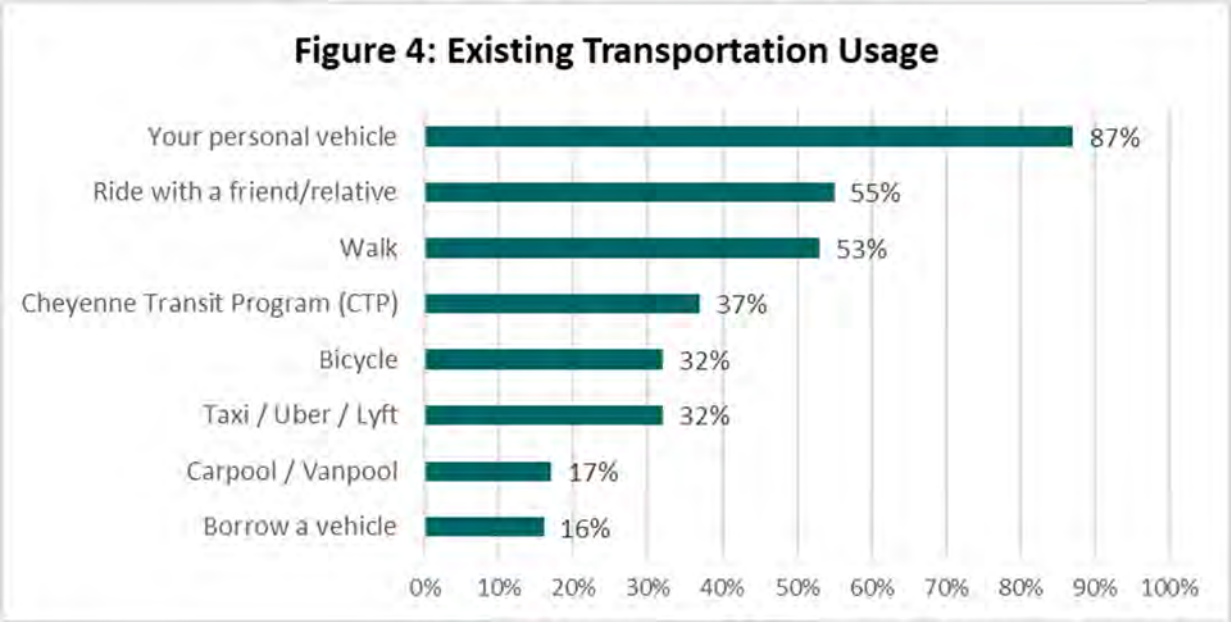


When compared to the demographic data presented in Chapter 4, these results are similar to the actual population living in each zip code. About 93,000 people live in these four zip codes; 39 percent live in 82001, one percent live in 82005, 24 percent live in 82007, and 37 percent live in 82009.[1]

Existing Transportation

Modes Used

Respondents were asked which transportation modes they and others in their household currently use and how often. Figure 4 shows the percent of respondents who use each mode at least occasionally. Driving a personal vehicle was the most common mode used, with 87 percent of respondents driving a personal vehicle. Getting a ride and walking were next, with just over half of respondents using those modes. Just over one-third of respondents use CTP services. About one-third of respondents use a taxi/Uber/Lyft or bicycle. Carpool, vanpool, and borrowing a vehicle were the least likely modes to be used by respondents.

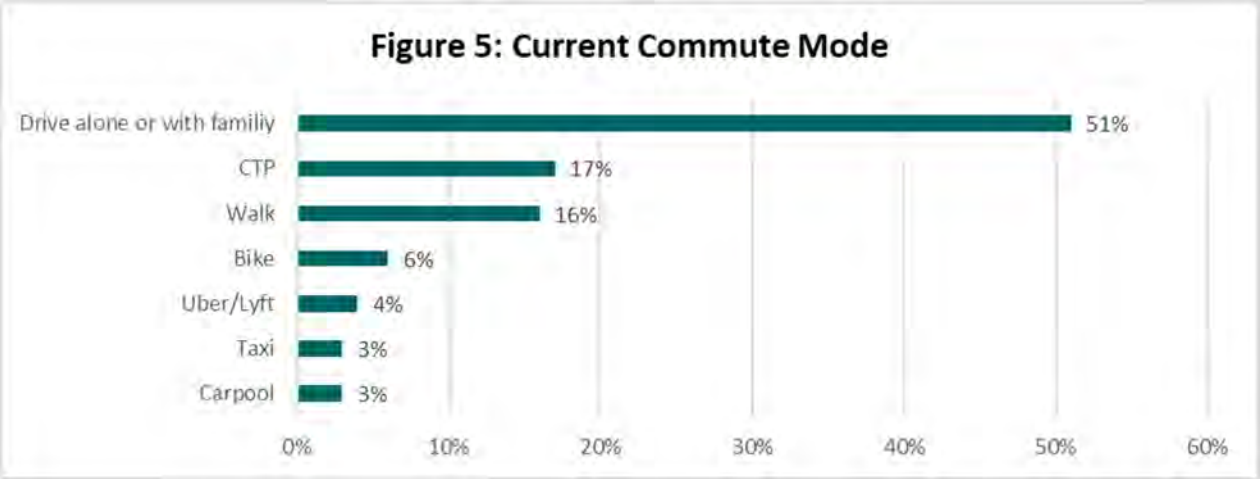


Commute Mode

Respondents were also asked how they regularly commute to work. Half of respondents commute by driving (either alone or with family), while 17 percent use transit and 16 percent walk to work (Figure 5).

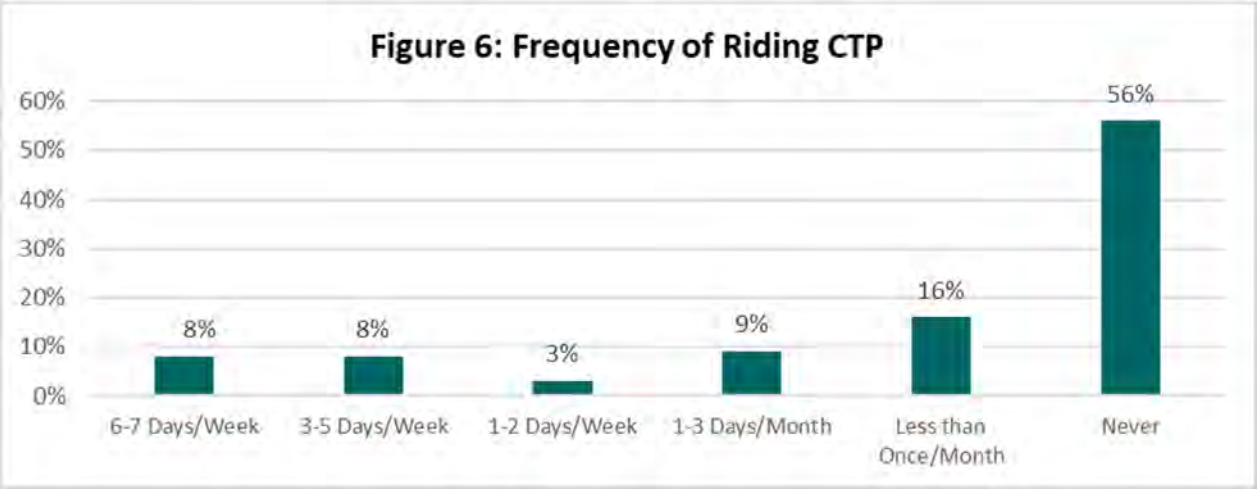
General population data from the U.S. Census illustrates that most people in Cheyenne (86 percent) drive alone to work, while 10 percent carpool. Less than one percent of Cheyenne residents take public transportation to work, while just over one percent use other means or walk.

[1] U.S. Census Bureau, ACS 2019 Five-Year Estimates



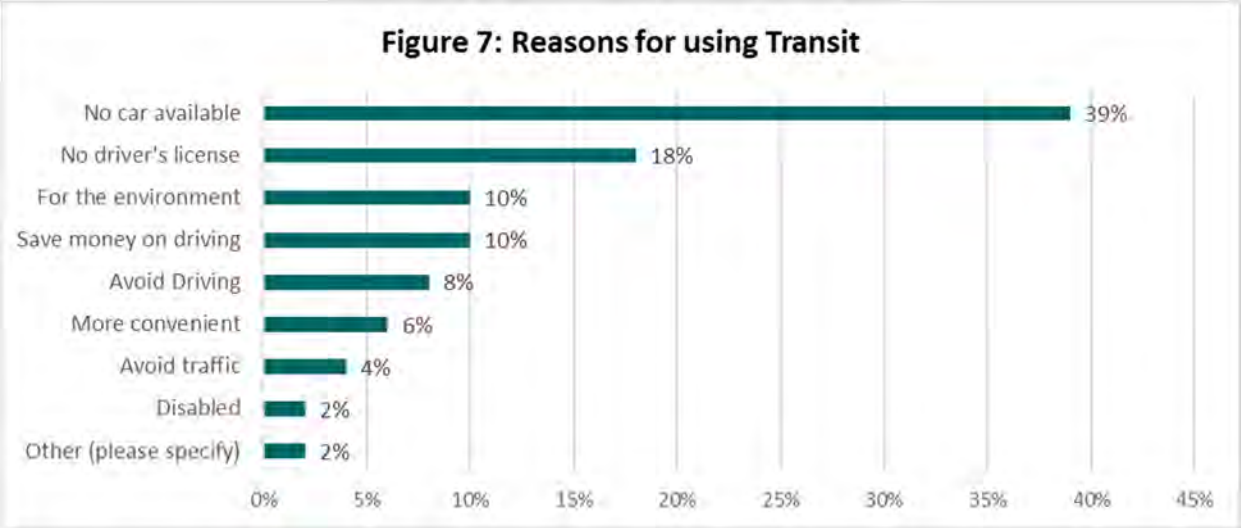
Public Transit Usage

Respondents were asked how frequently they ride CTP. Over half of respondents indicated that they never ride transit, while 19 percent are regular riders, riding at least once per week (see Figure 6). One-quarter of respondents said they ride transit infrequently, only a few times per month.



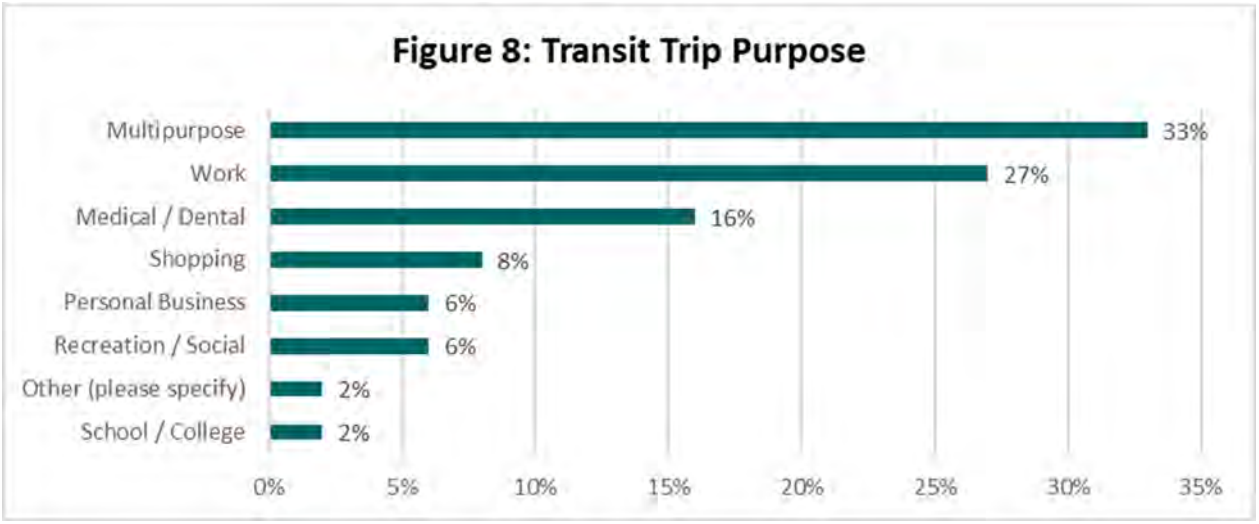
Reasons for Riding Transit

Respondents were asked to provide the top reason for why they use public transit. Lack of personal transportation was the biggest reason; about 40 percent of respondents use transit because they do not have a car, and nearly 20 percent of respondents ride transit because they do not have a driver's license (see Figure 7). Some respondents indicated they use transit to save money (10 percent) or to protect the environment (10 percent).



Trip Purpose

When asked the top trip purpose when they use transit, most respondents (33 percent) said their trips were multi-purpose (see Figure 8). This means that they are "trip-chaining," or combining multiple tasks into a single trip. Traveling to work was the next most common response (27 percent), followed by medical or dental trips (16 percent).

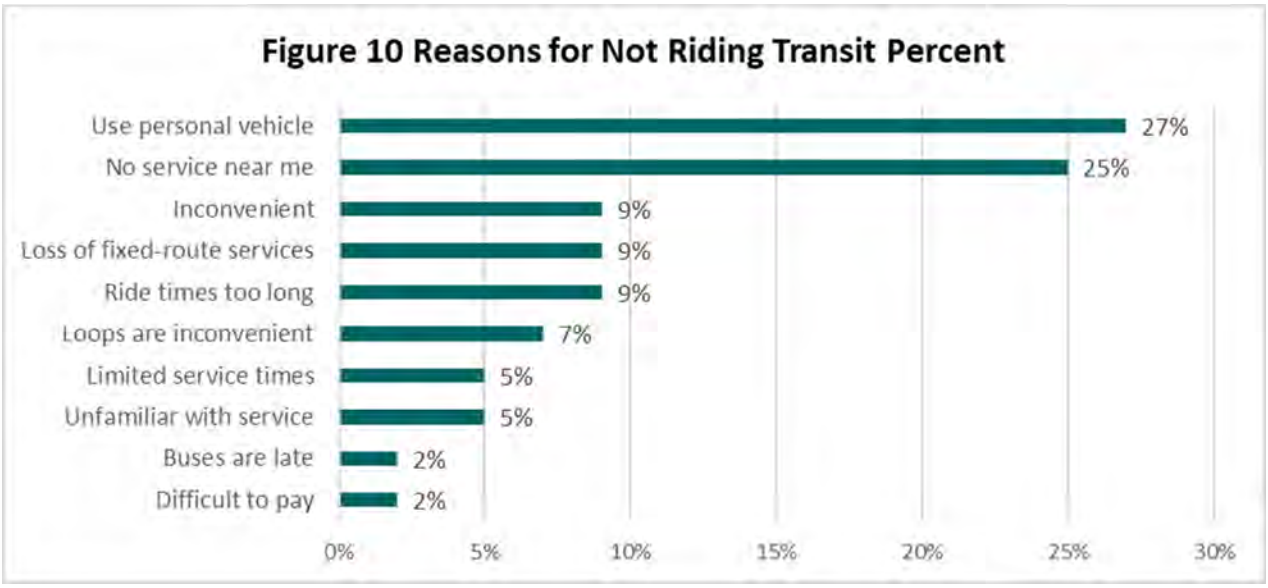


Satisfaction with Existing CTP Services

Transit riders were asked to rate a variety of statements about CTP's existing services on a scale of one to five, with a score of one indicating poor performance and a score of five indicating excellent performance. Figure 9 shows these results. Driver courtesy and safety were the attributes that respondents were happiest with. Start and end time of service as well as service frequency were the lowest-ranked attributes.

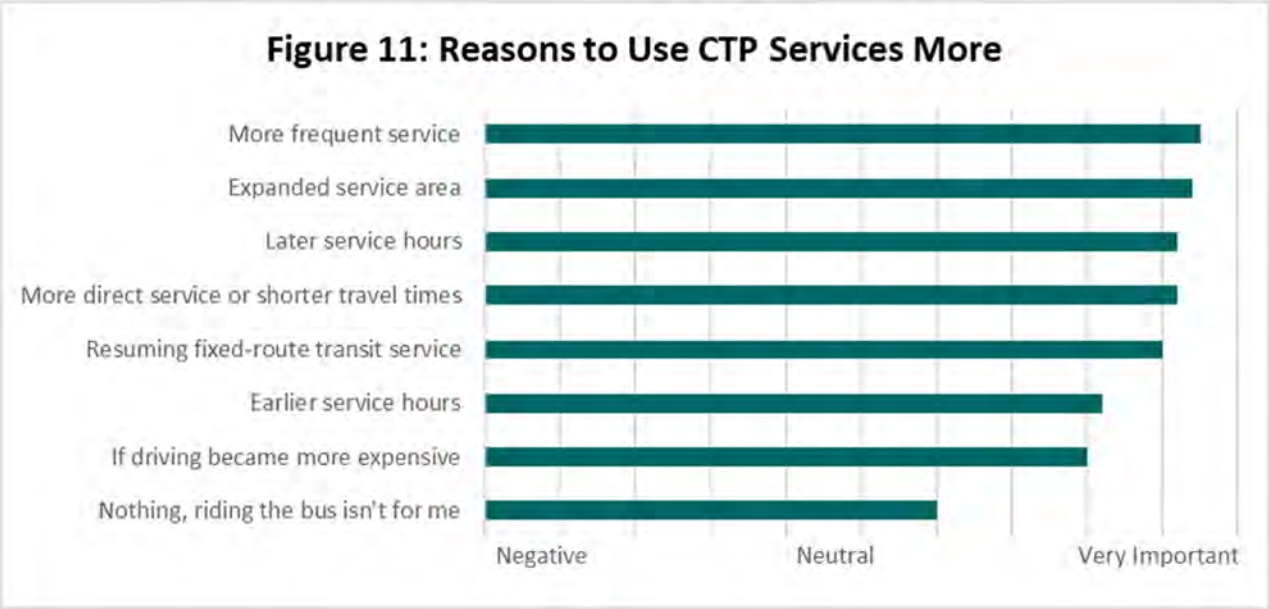
Reasons for Not Riding Transit

Respondents who do not ride transit were asked to explain the top reasons that they do not use transit. Figure 10 shows the summary of responses. Using a personal vehicle instead of riding transit was the top-cited reason (27 percent), closely followed by respondents who indicated that there is no transit service available near them (25 percent). Other listed reasons included ride times that are too long, loss of fixed-route services, and inconvenience (9 percent respectively).



Factors for Using Transit More Often

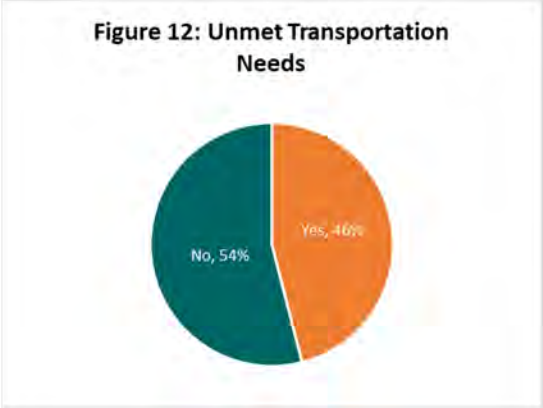
Similarly, respondents were asked to rate factors that would make them use transit more often on a scale of one to five, with a score of one indicating low importance and a score of five indicating high importance (see Figure 11). Factors that respondents rated most highly were more frequent service, expanded service area, more direct service or shorter travel times, and later service hours. Overall, all factors listed scored highly.



Transportation Needs

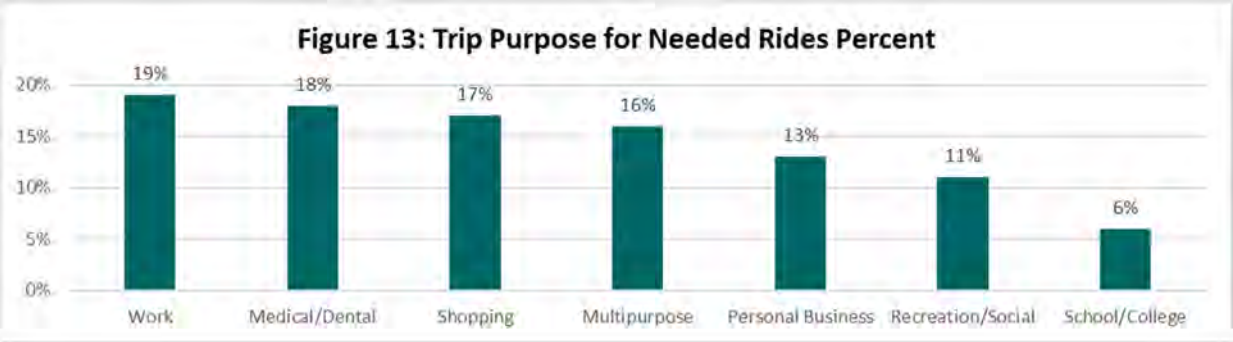
Unmet Transportation Needs

Respondents were asked a series of questions about unmet transportation needs that they might have. Just under half (46 percent) of respondents said that there are times when they need a ride but do not have one (see Figure 12).



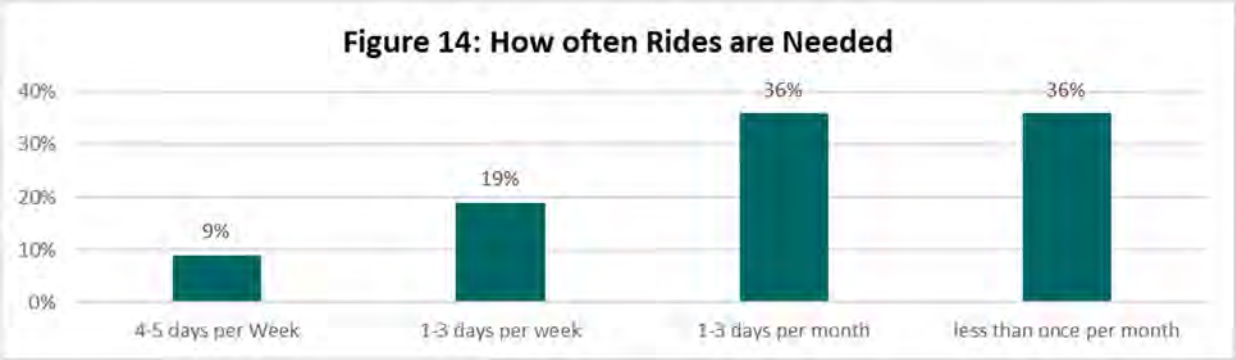
Trip Purpose for Needed Rides

For respondents who said they needed a ride but did not have one, work was the most common destination (19 percent), followed closely by medical or dental appointments (18 percent) and shopping trips (17 percent), as shown in Figure 13.



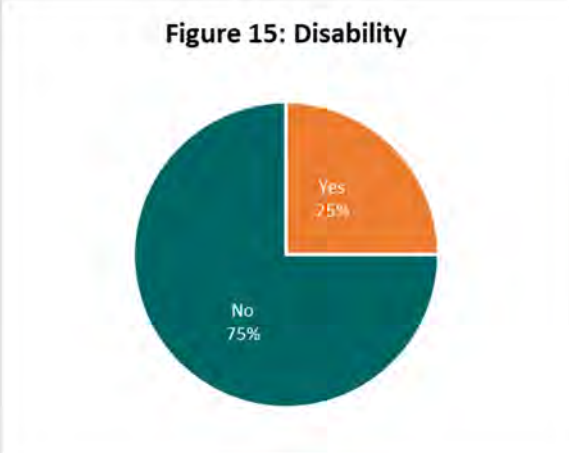
Frequency of Unmet Transportation Needs

For most respondents who need a ride but do not have one, this happens on a monthly basis or less frequently (Figure 14). Nine percent of respondents reported an almost daily need for a ride, while 19 percent reported needing a ride one to three times a week.



Disability

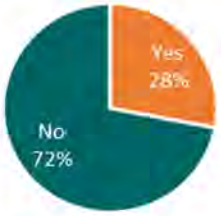
Twenty-five percent of respondents who need a ride but do not have one also have a disability, health concern, or other issue that makes traveling difficult (see Figure 15).



On-Demand Service Area

Respondents were also asked if there are areas outside of the current on-demand service area that they would like to reach using public transportation. Most respondents (72 percent) said that there are not additional areas they would like to reach (Figure 16). Twenty-eight percent indicated a desire for transportation outside of the current on-demand service area.

Figure 16: Desire for On Demand Services Outside of Service Area



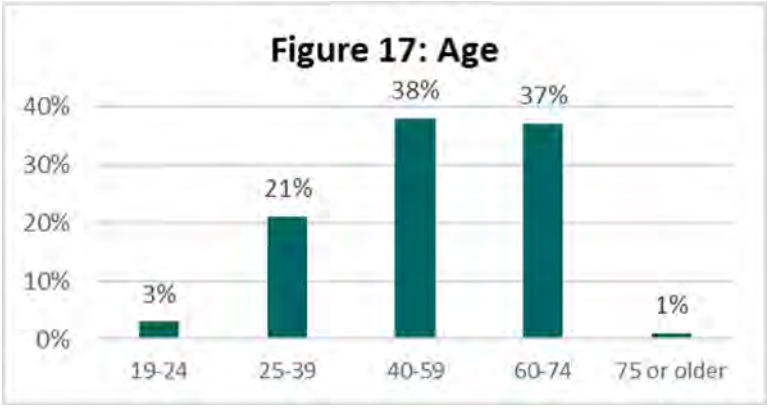
Demographics

Age

The survey asked respondents to indicate their age, with three quarters of respondents being between 40 and 74 years old (see Figure 17). About twenty percent are 25-39 years old, while few respondents are 19-24 (3 percent) or older than 75 (1 percent).

According to the 2020 U.S. Census, of the total population of Cheyenne, about 8 percent are between the ages of 19 and 24, 21 percent are between the ages of 25 and 39, 24 percent are between the ages of 40 and 59, 17 percent are between the ages of 60 and 74, and seven percent are age 75 or older.

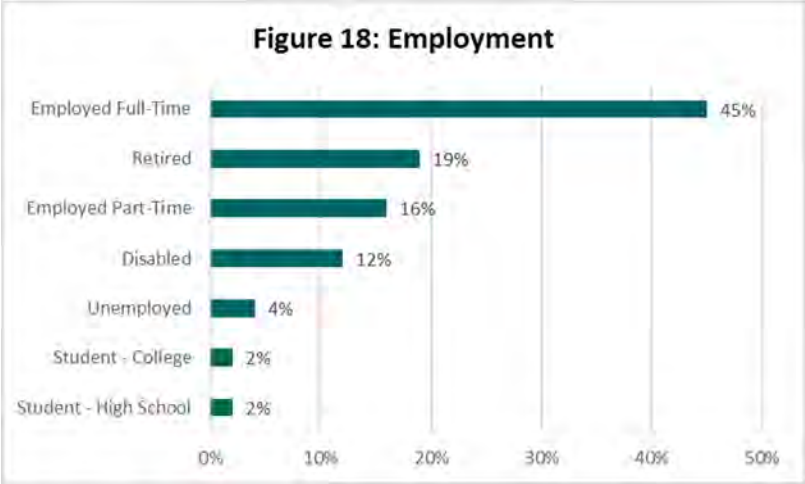
Figure 17: Age



Employment

Nearly half of survey respondents are employed full-time (see Figure 18). Approximately 19 percent of respondents are retirees. Few survey respondents are high school or college students (2 percent respectively).

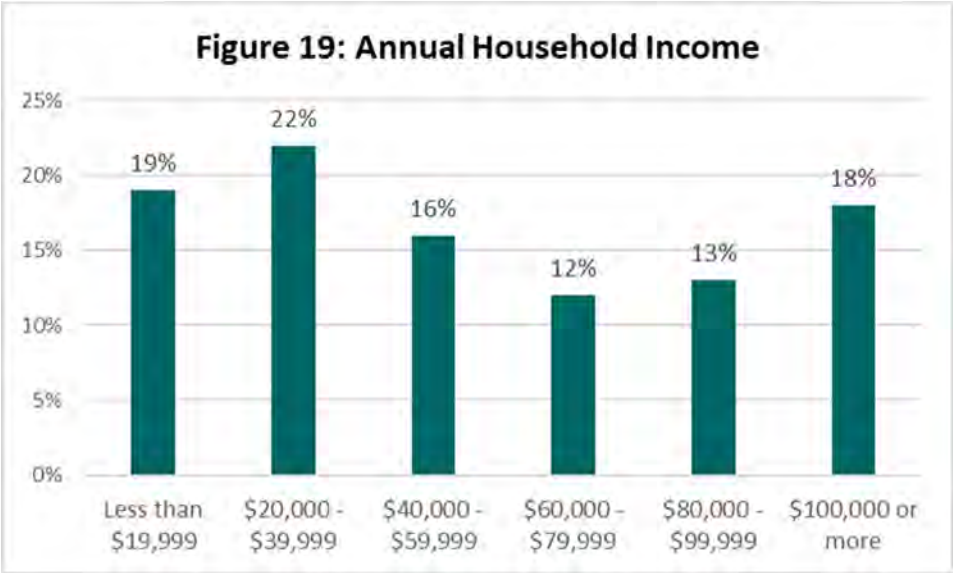
According to the U.S. Census, in Cheyenne, about 3 percent of residents are unemployed. About 13 percent of Cheyenne residents have at least one disability.



Household Income

Figure 19 shows annual household income levels for survey respondents. About one-fifth of respondents earn less than $20,000, one-fifth earn $20,000 to $39,999, and one-fifth earn $100,000 or more.

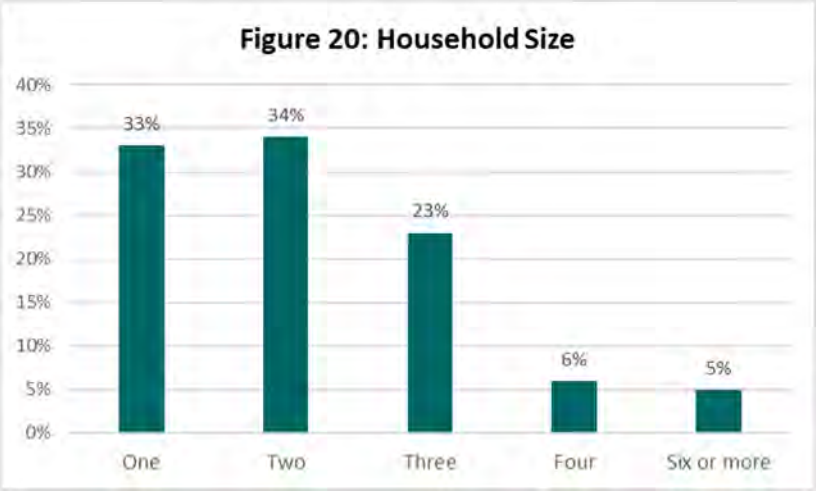
Survey respondents tend to be lower-income than the average Cheyenne resident, according to data from the U.S. Census. In Cheyenne, about 11 percent of households earn less than $15,000 per year; seven percent earn between $15,000 and $25,000; six percent earn between $25,000 and $35,000; 10 percent earn between $35,000 and $50,000; 21 precent earn between $50,000 and $75,000; and 29 percent earn over $100,000.



Household Size

Survey respondents were most likely to live in one or two-person households (see Figure 20). The small household size may indicate fewer responses from families with children.

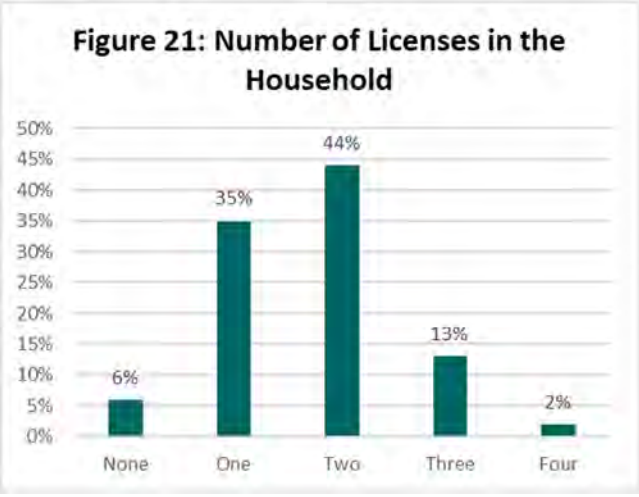
According to the U.S. Census, in Cheyenne, about 30 percent of households have one person; 33 percent are households with two people; 16 percent are households with three people; and 20 percent are households with four or more people.

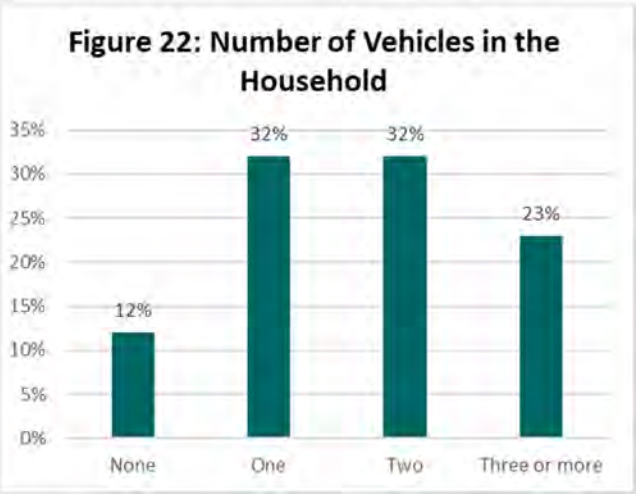


Operating Vehicles and Licensed Drivers

Lack of a private vehicle and a driver's license influences people to use public transportation. This comparison provides an indication of the number of potential choice riders compared to those who are transit dependent. Potential choice riders refer to those respondents that live in households with an operating vehicle and a driver's license, who may choose to use transit.

Most survey respondents live in a household with at least one driver's license (Figure 21). Only six percent of respondents lived in a household with no driver's licenses. One-third of respondents lived in a one-car household, with another one-third living in households with two vehicles (Figure 22). Twelve percent of respondents live in a household with zero vehicles. According to the U.S. Census, in Cheyenne, about seven percent of residents live in a household without a vehicle; 26 percent live in a household with one vehicle; 37 percent live in a household with two vehicles; and 31 precent live in a household with three or more vehicles.





Additional Comments

The survey concluded with an open comments section. Many respondents took the time to write down their thoughts. Some of these are reproduced here.

One common theme was using transit to get to work. One person pointed out the need to get to Lowe's and Walmart distribution centers, while another requested earlier transit start times to get to work for an early shift:

"There are people who live in Cheyenne who need rides to the Lowe's distribution center and Walmart distribution center for work. Right now, these trips are not served by transit."

"I would like to see earlier start and later stop times. Some people start working at 6am, including on the weekend."

Some people commented on specific requests for transit services in particular areas, such as Dell Range and Western Hills:

"Please add stops in Western Hills. I used CTP more often when buses went up Evers Blvd, years ago."

"When the fixed routes were running, the bus to and from Dell Range was often overcrowded. All the downtown bus stops have arrival and departure times that are about the same, so if I missed the bus, I had to wait an hour for the next one."

Finally, one person requested expanded routes, even if it costs more, because having the option to use public transit is worth it:

"Please expand the routes. Even if it would cost me more to hitch a ride on public transit, at least I would have the option."

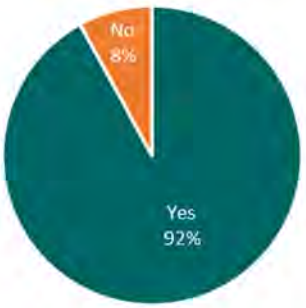
ONBOARD SURVEY

An onboard survey of passengers was conducted between February 11, 2022 through March 2, 2022. During that time period, the link to the survey was sent to all riders at the end of their trip. When booking a trip, CTP riders provide a phone number and upon completion of the trip they are sent a post-trip evaluation. The link to the onboard survey was added to that post-trip message. The survey was available in English and Spanish. Information about the survey was also shared on the project website and through the city's social media accounts. The onboard survey asked current riders to answer questions about their most recent transit trip, their opinions about CTP services, and some basic demographic information. A total of 110 responses were received and this section summarizes the responses. The survey instrument is included in Appendix B.

CTP Ridership

Respondents were asked whether or not they rode CTP in the past two weeks. Since the survey link was sent out directly to current riders following their transit trip, it was predominantly targeted at current transit riders. Therefore, 92 percent of respondents said that they rode transit within the past two weeks (see Figure 23). It was also available to the community, to allow former riders the opportunity to provide feedback on why they no longer ride CTP. Only eight percent had not used CTP services in the past two weeks.

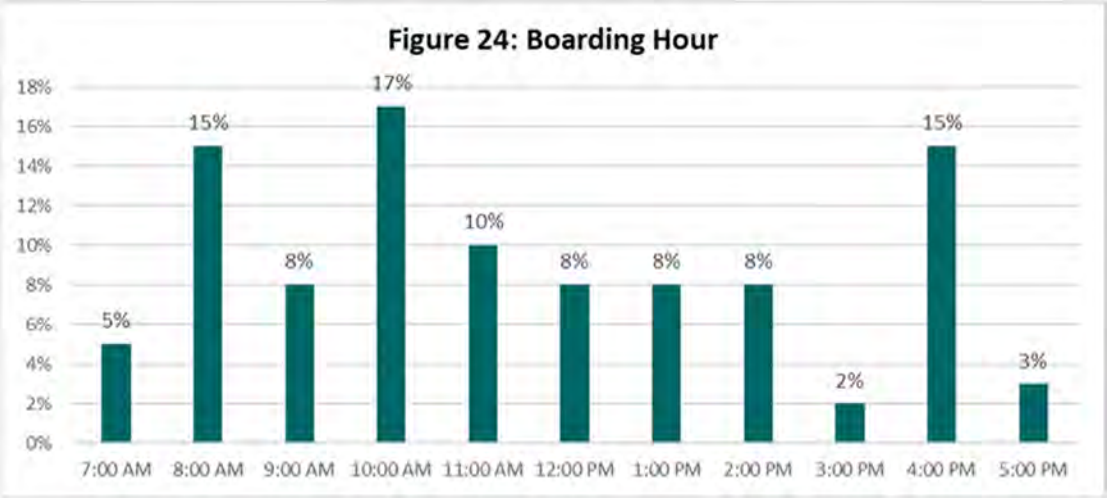
Figure 23: Respondents who had ridden CTP in the Past 2 Weeks



Most Recent CTP Trip

Boarding Hour

Respondents were asked what time they boarded the transit vehicle. Figure 24 shows the responses by hour of the day. Respondents were most likely to board from 8:00 a.m. to 9:00 a.m., from 10:00 a.m. to 11:00 a.m., and from 4:00 p.m. to 5:00 p.m. According to data from the U.S. Census, this differs from Cheyenne's general commuting pattern: work trips in Cheyenne are more likely to start in the 7:00 a.m. hour (30 percent), with only nine percent beginning in the 8:00 a.m. hour.



Boarding Location

Respondents were asked where they boarded the vehicle. Figure 25 shows the locations where respondents boarded.

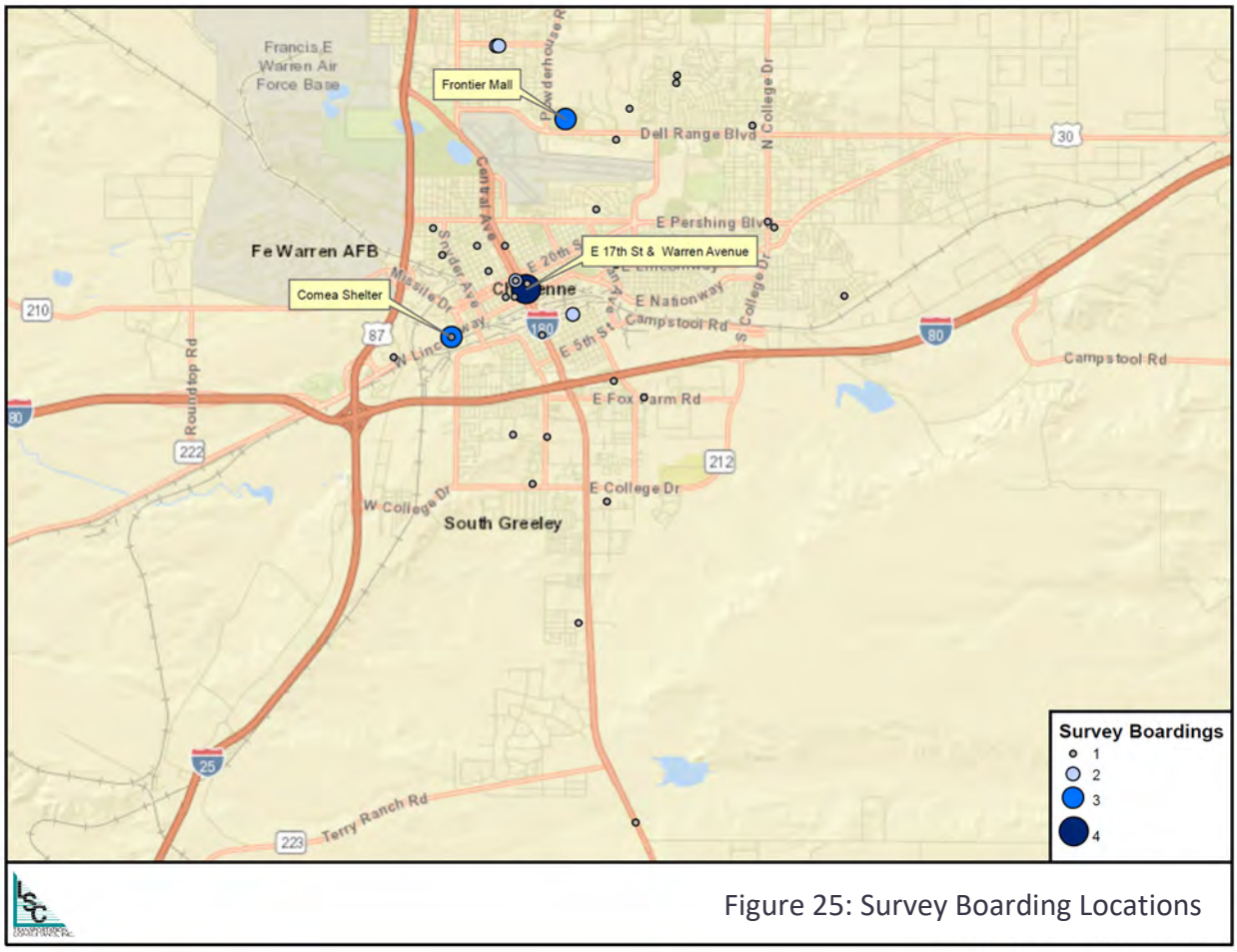


Figure 25: Survey Boarding Locations

Destination

Respondents were asked where they disembarked from the vehicle. Figure 26 shows the locations where respondents disembarked.

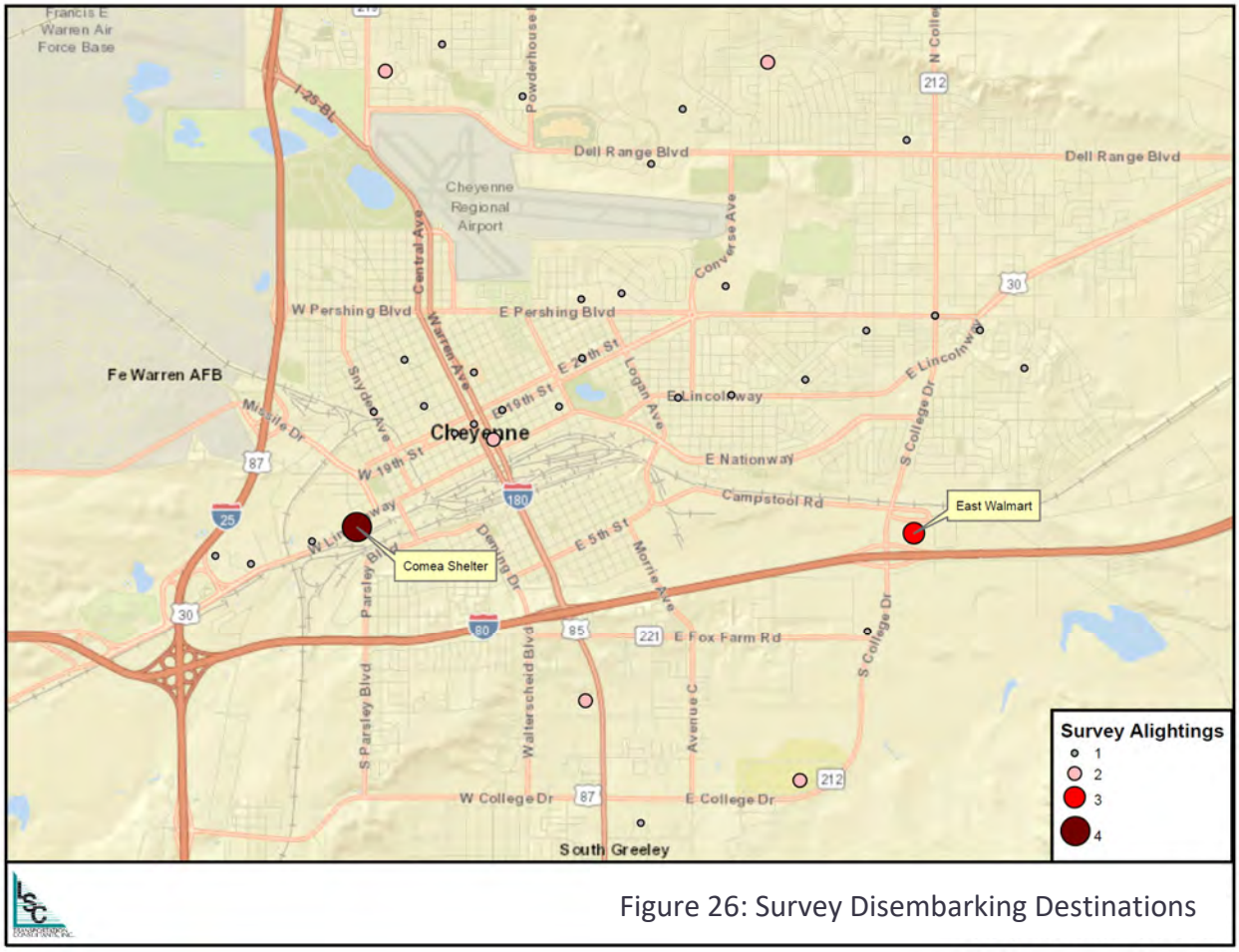
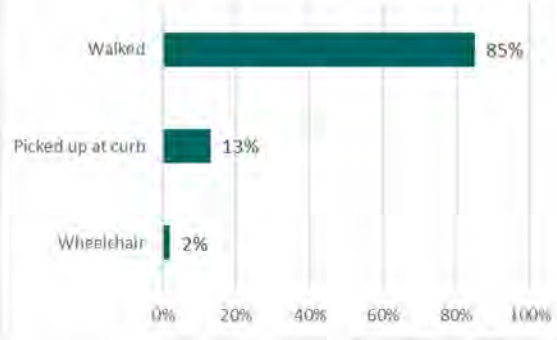


Figure 26: Survey Disembarking Destinations

Accessing the Bus Stop

The survey asked respondents how they accessed the bus stop where they boarded the bus. Most (85 percent) of respondents walked to the bus stop (see Figure 27). Since service is currently on-demand, some respondents answered that the bus picked them up at the curb, so they did not need to go to a bus stop.

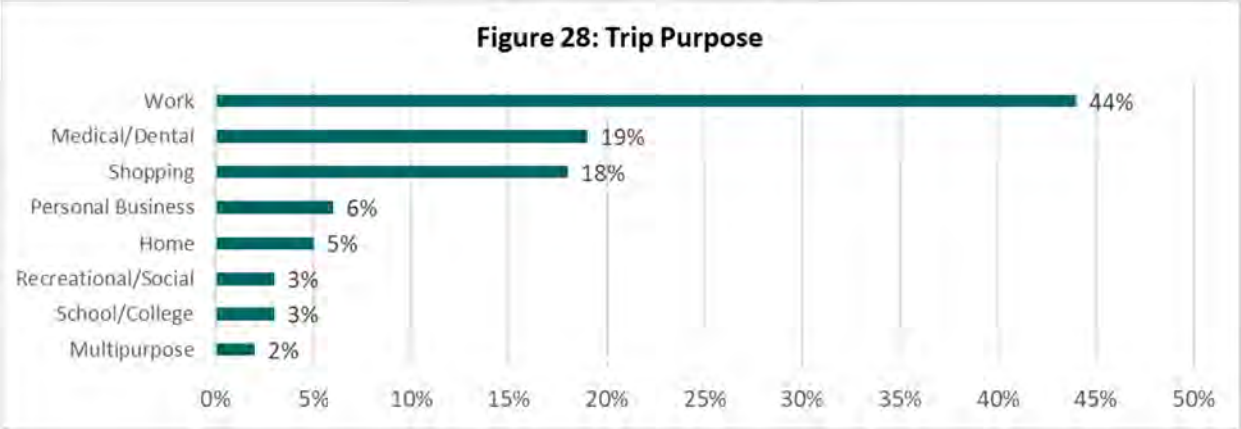
Figure 27: Method Used to Access the Bus Stop



Trip Purpose

Most respondents' trips were made to work locations, followed by medical/dental trips and shopping trips (see Figure 28). Unlike the results from the community survey presented earlier in this chapter, multi-purpose trips were not common.

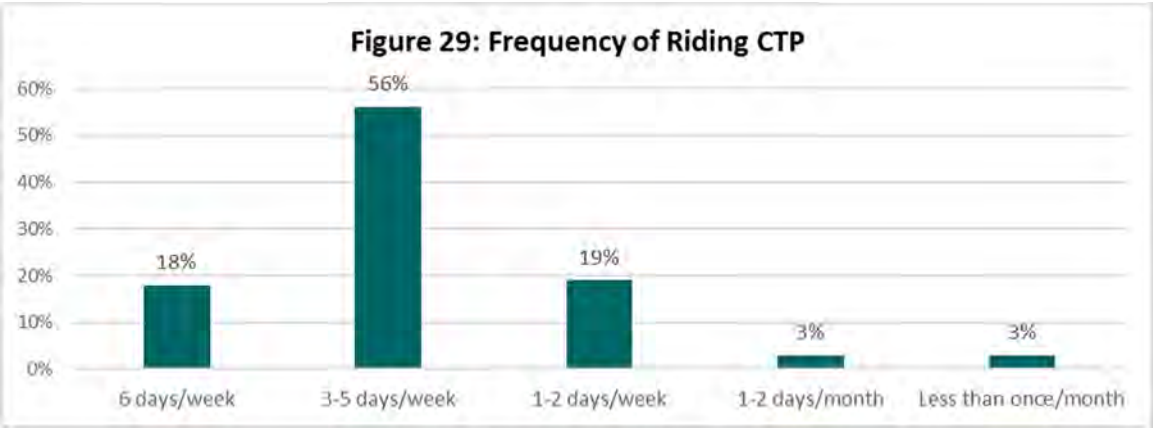
Figure 28: Trip Purpose



Frequency of Riding CTP

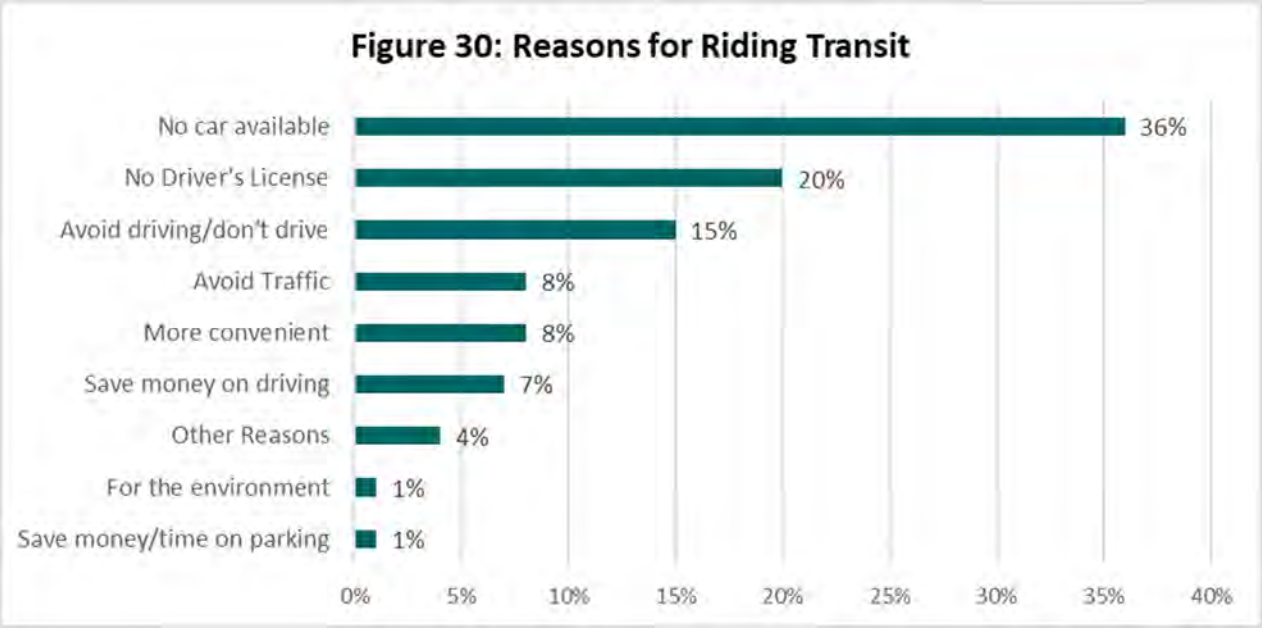
Most respondents are regular CTP riders. Over half (56 percent) stated that they ride CTP three to five days per week, another 18 percent stated that they ride six or more days per week, and another 19 percent ride one to two days per week (see Figure 29).

Figure 29: Frequency of Riding CTP



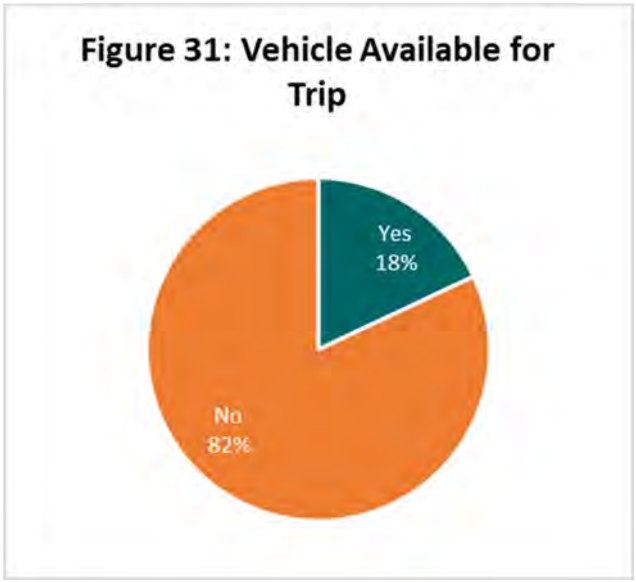
Reasons for Riding Transit

Respondents most frequently said that they ride transit because they do not have a car available to them (Figure 30). Not having a driver's license and an inability to drive were also common responses. This indicates that regular riders are likely to be captive riders, rather than choice riders. Other write-in reasons for riding transit included specific disabilities.



Vehicle Available for Trip

Over 80 percent of respondents did not have a vehicle available for their transit trip (Figure 31), which also indicates that they are likely to be captive riders, rather than choice riders.

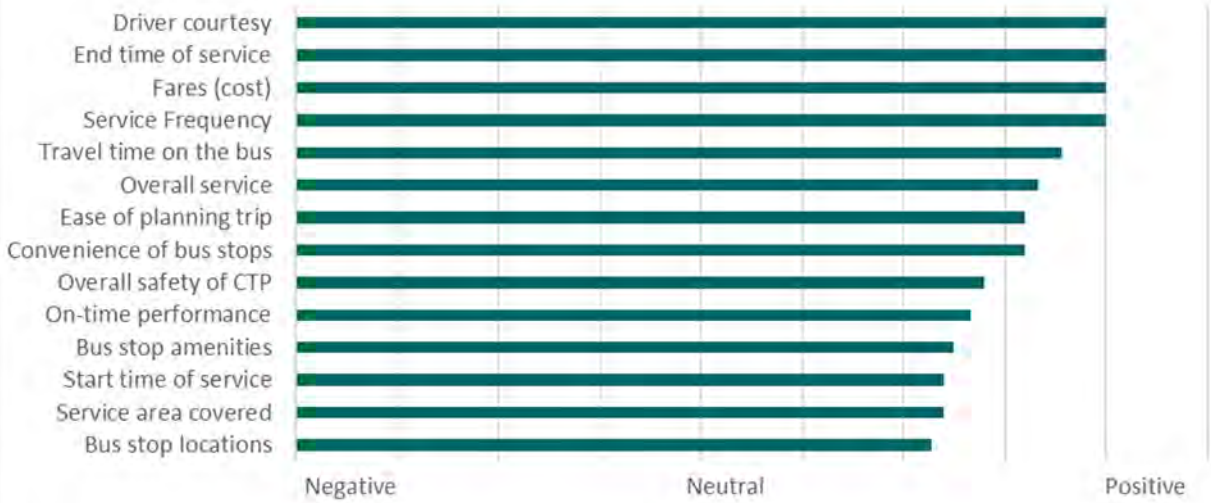


Experience with CTP

Satisfaction with CTP Services

Respondents were asked a variety of questions about CTP's service characteristics and how satisfied they were with each one. Responses were largely positive across the board (Figure 32). Respondents were most satisfied with driver courtesy, CTP's overall safety, and CTP's overall service. The lowest-ranked characteristics were bus stop amenities, convenience of bus stops, and on-time performance, although these scores were also relatively high.

Figure 32: Satisfaction with CTP Service Characteristics

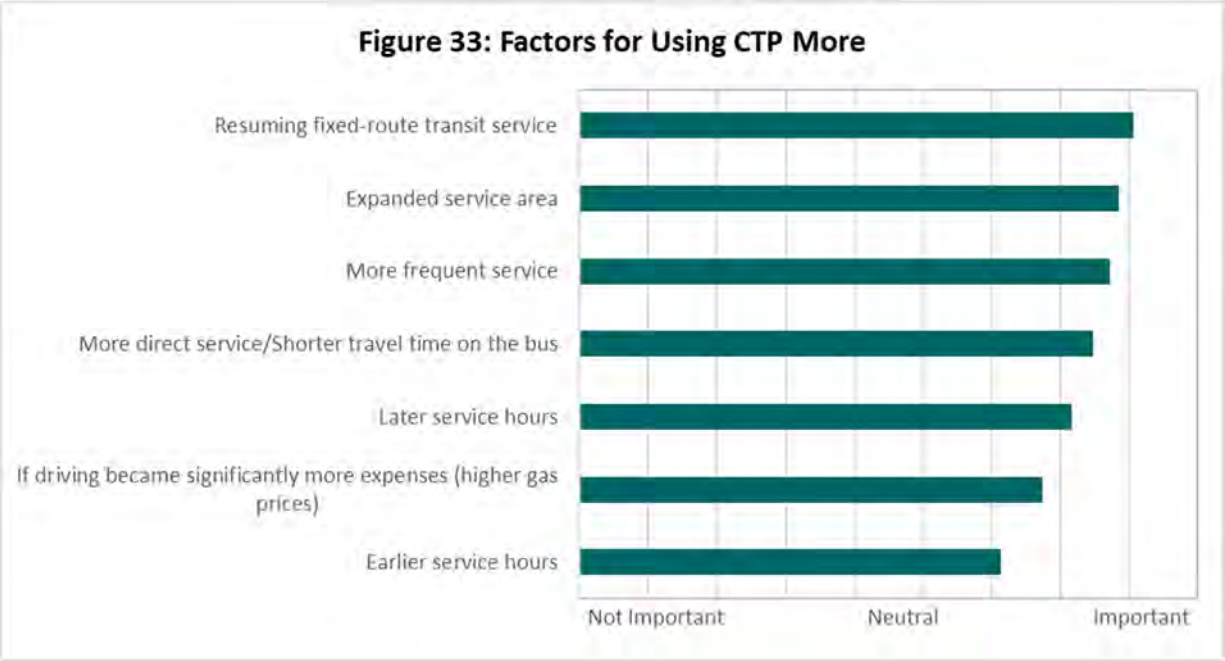


Desire for Service Outside of Service Area

Respondents were asked if there were other places in Cheyenne that they wished to travel to but could not since they were outside of CTP's service area. Most people (65 percent) who answered this question stated that they did not have any demand for other service areas. However, some people wrote in suggestions of places they would like to travel to, which included the soccer park on North Ridge Road and Storey Boulevard, destinations on Happy Jack Road, and the north end of town.

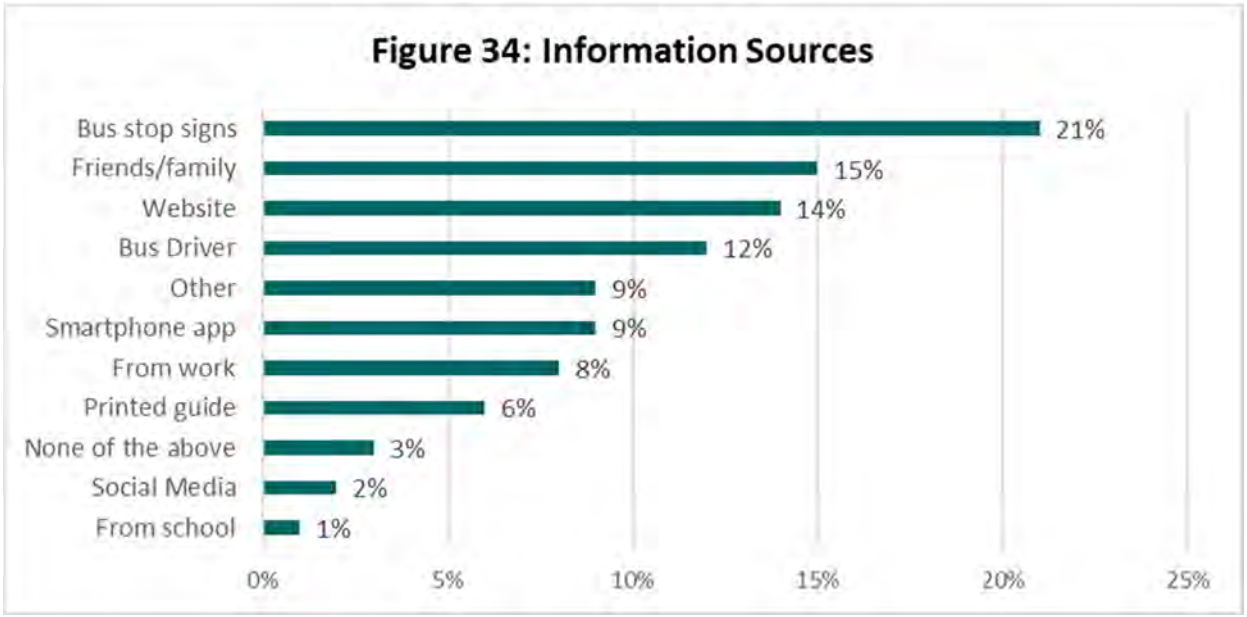
Factors for Using CTP More

Respondents were asked which factors would make them more likely to use CTP. The highest-ranked responses were resuming fixed-route transit service, more frequent service, and later service hours (Figure 33). However, all response options were rated as relatively important by respondents.



Information Sources About CTP Services

Respondents were asked how they access information about CTP services. Bus stop signs were the highest answer, followed by friends and family and CTP's website (Figure 34). Other write-in responses included calling the office for information and receiving information from doctors or nurses.

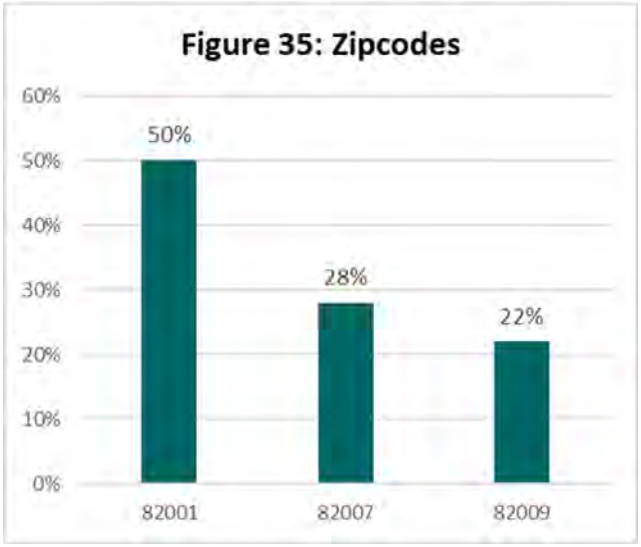


Demographics

Zip Codes

Most respondents indicated that they live in zip code 82001, which covers most of Cheyenne (Figure 35). Zip code 82009 includes the northern part of Cheyenne and the rural areas to the north of Cheyenne and represents 22 percent of respondents. Zip code 82007 includes rural areas to the south of Cheyenne and accounts for 28 percent of survey respondents.

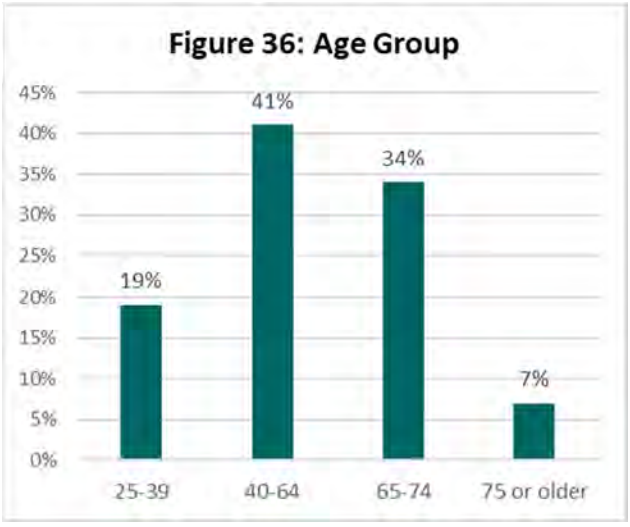
In Laramie County, about 39 percent of residents live in 82001, one percent live in 82005, 24 percent live in 82007, and 37 percent live in 82009.



Age

Respondents were most likely to be between 40 and 74 years old, which represents 75 percent of respondents (Figure 36). One-fifth of respondents are between 25 and 39 years old, and less than 10 percent are 75 years or old. There were no respondents in the under 25 category who responded to the survey.

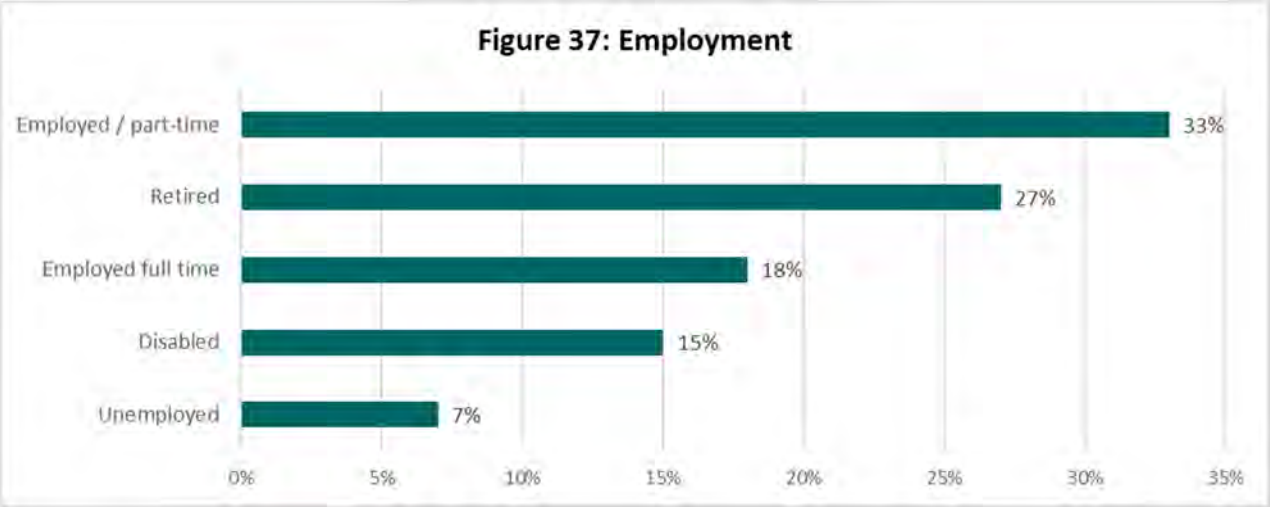
According to the U.S. Census, of the total population of Cheyenne, about 8 percent are between the age 19 to 24, 21 percent are between the age of 25 and 39, 24 percent are between the age of 40 and 59, 17 percent are between the age of 60 and 74, and 7 percent are age 75 or older.



Employment

Survey respondents were most likely to be employed part-time (33 percent), followed by retired (27 percent) and employed full-time (18 percent), as shown in Figure 37.

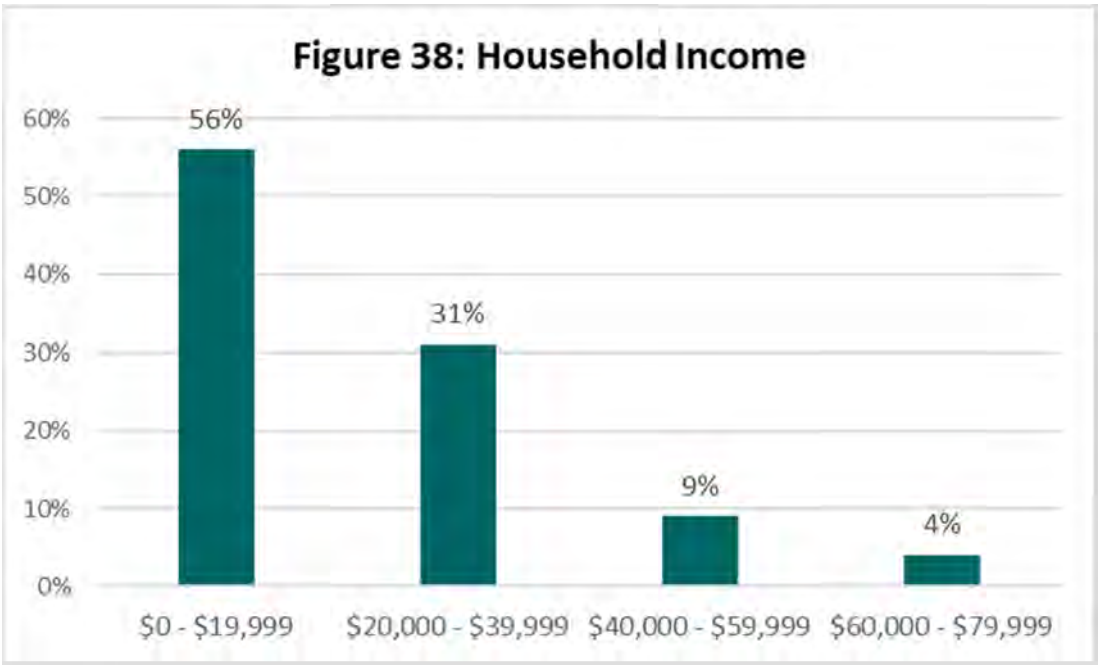
As noted earlier, in Cheyenne about 3 percent of residents are unemployed.



Household Income

Most survey respondents had household incomes of less than $20,000 (56 percent), followed by incomes of $20,000 to $39,999 (31 percent), as shown in Figure 38.

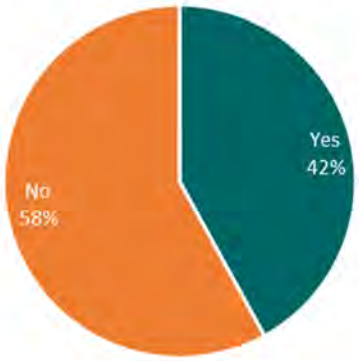
According to the U.S. Census, in Cheyenne, about 11 percent of households earn less than $15,000; seven percent earn between $15,000 and $25,000; six percent earn between $25,000 and $35,000; 10 percent earn between $35,000 and $50,000; 21 precent earn between $50,000 and $75,000; and 29 percent earn over $100,000.



License

When asked if they had a valid driver's license, most respondents indicated that they do not have a license (58 percent), while 42 percent of respondents said they do have a license (Figure 39).

Figure 39: Driver's License



Additional Comments

Survey respondents left some additional comments, some of which were thankful to CTP and its staff:

> *"Dispatchers are very patient and courteous."*

Some respondents suggested service improvements, such as better access to food banks and later service during the day:

> *"I need a better way to access food banks, especially St. John's."*

> *"Service ends too early in the day."*

Another respondent commented that there is some confusion about on-demand pickup times:

> *"The difference between the notification of the time to be picked up varies drastically with the actual pickup time, which makes it hard for me to be at the bus stop on time and causes me anxiety."*

ADDITIONAL OUTREACH EFFORTS

Project Website

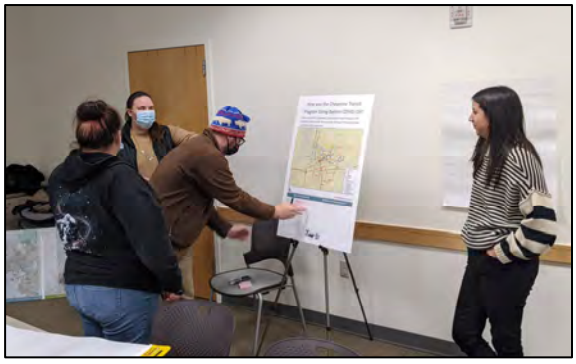
A project website was created and hosted on the MPO's webpage (see Figure 40).[2] It served as a central site for all project related information, including project goals and background information, as well as publicizing opportunities for public feedback. Throughout the planning process, it was the location for posting the Interim Reports and deliverables. Interim Reports #1 and #2 were posted on the website with opportunities to provide feedback and input. A video was recorded describing the proposed service changes and a combined online/in-person community meeting was held August 31, 2022 to present the proposed service changes and receive community feedback.

Figure 40: Project Website

Community Open House Meeting

As part of the planning process, two community open houses were held. An initial community open house meeting was held at the Laramie County Library on Wednesday, January 19, 2022. Approximately 20 people attended the meeting (Figure 41). The purpose was to discuss ideas for the Cheyenne Transit Program and reshaping the vision for future transit service in Cheyenne.

Figure 41: Community Open House Meeting



The room was set up with four different stations, allowing participants to move about, provide input, and engage with staff. The four stations asked participants:

- How was the Cheyenne Transit Program doing before COVID-19?
- Where do you need to go?
- I would use transit more or I would start using transit if...

[2] https://www.plancheyenne.org/project/2022-cheyenne-transit-development-plan/

- My vision for future transit service in Cheyenne….

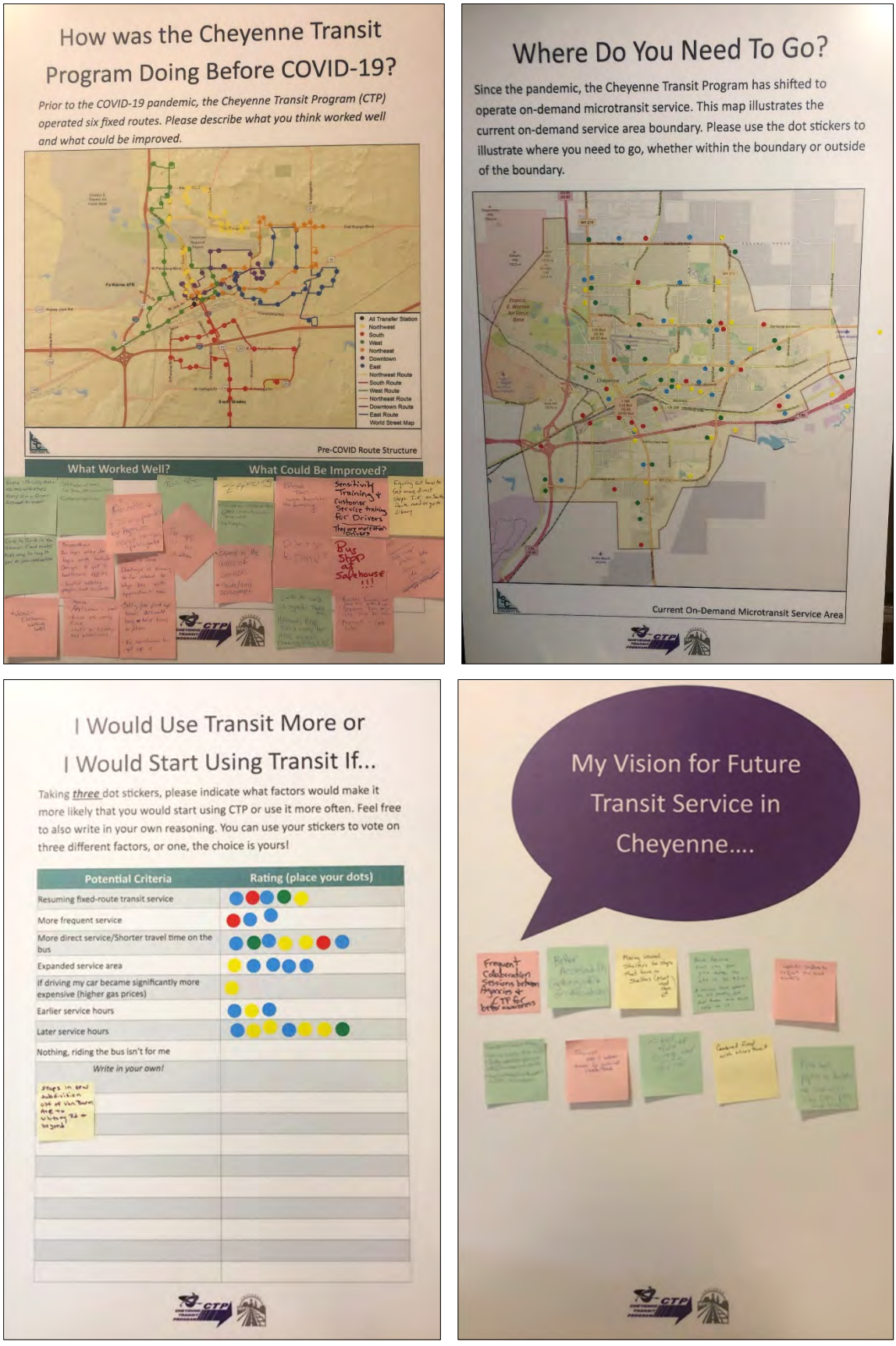
As shown in Figure 42 (on the following page), key takeaways from the community open house meeting included:

- When asked what they liked most about the previous fixed-route system, participants mentioned the flexibility of fixed-route service with route times and set schedules without the need to request a ride, as well as the mobile app with bus tracking.
- When asked what could be improved on the previous fixed-route system, participants mentioned extending service operating hours, improving efficiency, providing more direct service, and making it easier to transfer between routes.
- Participants indicated the majority of destinations they need to reach are located within the current CTP on-demand service area.
- Participants indicated they would most like to see later service hours and more direct service/shorter travel time on the bus.

In terms of their future transit vision, participants indicated they would like to see improved accessibility/mobility, faster service, improved bus stop amenities, and greater collaboration.

A second community open house was held August 30, 2022. The purpose of this open house was to present the service options that were being considered for the TDP and to obtain feedback form the community. This was held as a hybrid meeting with an option to participate at the City Administration office or by Zoom. The meeting was publicized using flyers and posters. Approximately 15 people participated, either in-person or on-line.

Figure 42: Community Open House Feedback



Interaction with Elected Officials and MPO Committees

The project team reached out to elected officials in the study area, including the Mayor of Cheyenne, Cheyenne City Council Members, and Laramie County Commissioners, to discuss the transportation needs of their constituents and to invite their participation into the planning effort.

The project team made a presentation to the Cheyenne MPO Technical Committee at their February 16, 2022 and May 25, 2022 meetings. The presentations included a discussion of the project background and goals, reviewed the project approach and schedule, and presented key findings to date. Similar presentations were given to the Citizens' Advisory Committee at their meetings on February 17 and May 25, 2022. The Transit Advisory Board received a presentation at their meeting July 20, 2022.

During December 2022 and January 2023, presentations were given to the MPO Committees, the City Planning Commission, and the County Planning Commission. Each recommended approval of the TDP.

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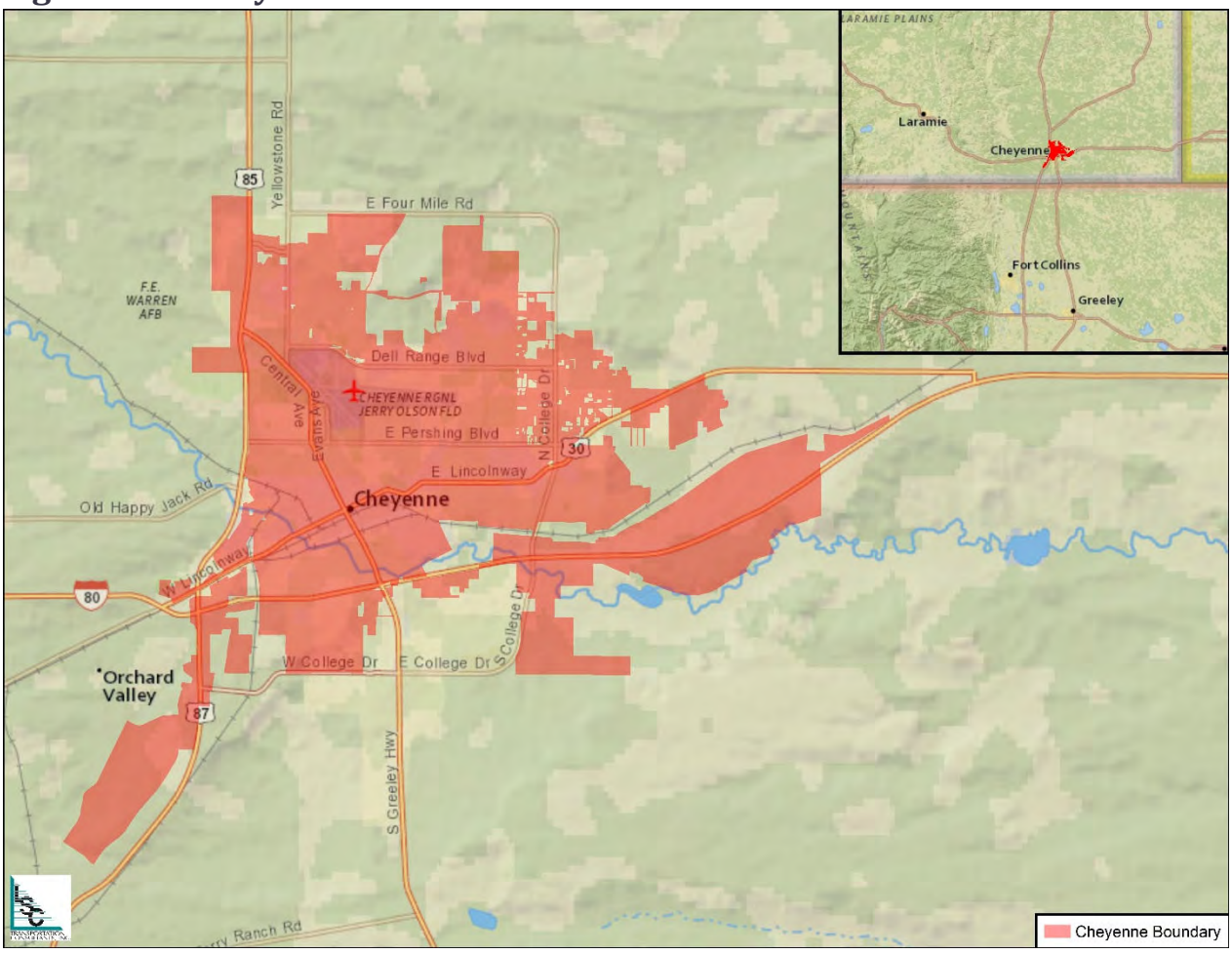
INTRODUCTION

This chapter presents the community conditions, demographics, and select local travel patterns for Cheyenne, Wyoming (WY). Cheyenne is in southern Wyoming just north of the Wyoming-Colorado border. As shown in Figure 43, much of the city is located to the northeast of the Interstate 25 (I-25) – Interstate 80 (I-80) junction with F.E. Warren Air Force Base (AFB) to the northwest of this junction. Other major roadways in the area include Interstate 180 (I-180), US Highway 87, US Highway 212, and US Highway 90.

Figure 43: Study Area



The demographic analysis was done by block group, which is a census-defined boundary. These boundaries do not necessarily denote neighborhoods or communities, but rather act as a standardized means for analysis.

DEMOGRAPHIC CHARACTERISTICS

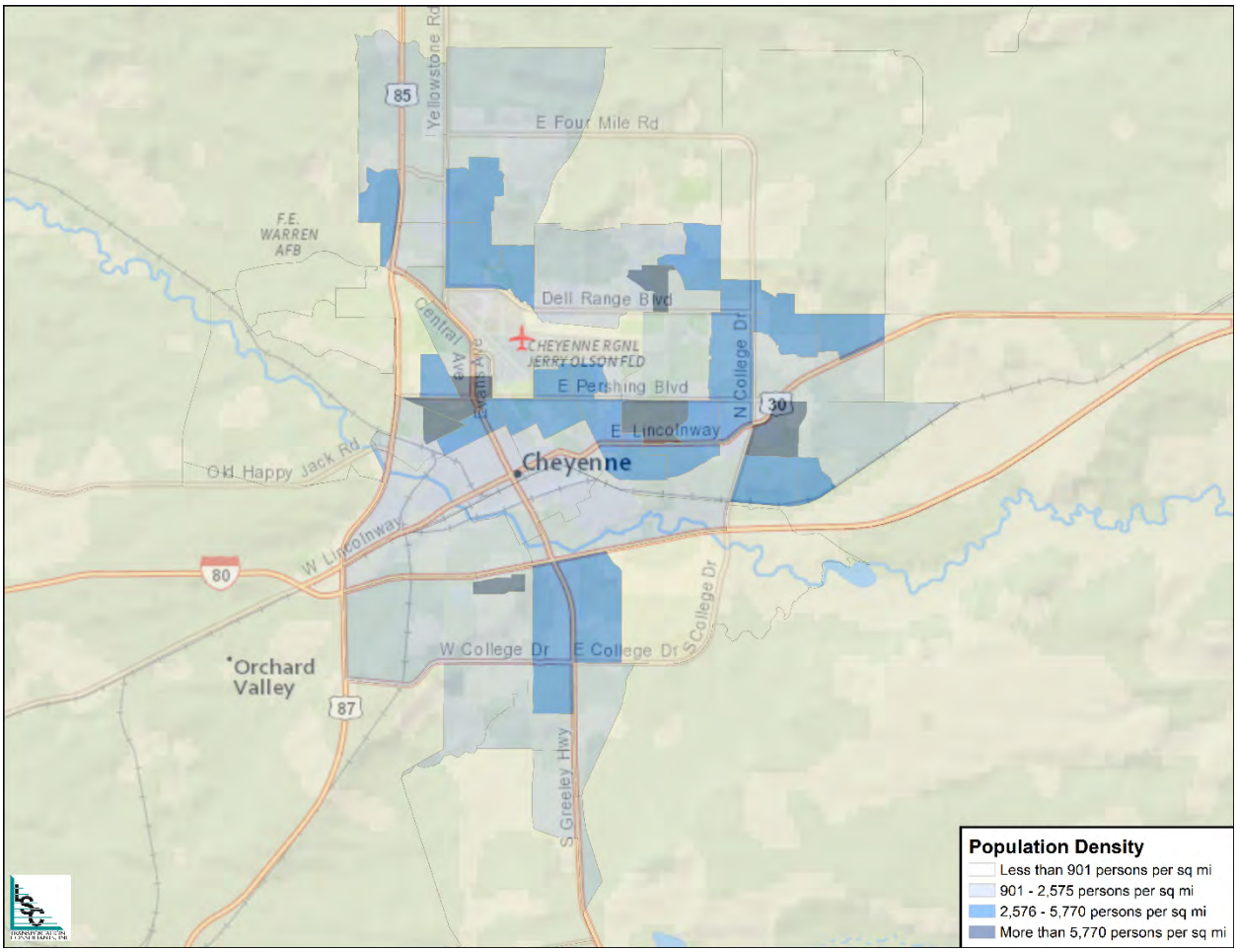
Demographics

Unless noted otherwise, all data listed in this chapter are from the 2015-2019 U.S. Census American Community Survey (2019 ACS) five-year estimates. According to the 2019 ACS, the total population of Laramie County was 98,320.

Population Density

Population density is used to determine where population is concentrated. Density is shown as the average in each census block group, even though populations may not be evenly distributed throughout each block group. Transit is generally more successful in areas with greater concentrations of population. As shown in Figure 44, the areas with the highest density are along Pershing Boulevard, including just north of downtown, the residential area just south of Cheyenne's Veteran Affairs Medical Hospital, and further east along Pershing Boulevard and College Drive. Additional pockets of high population density include the southern side of the I-80 – I-180 junction and north of Dell Range Boulevard on the eastern side of the city.

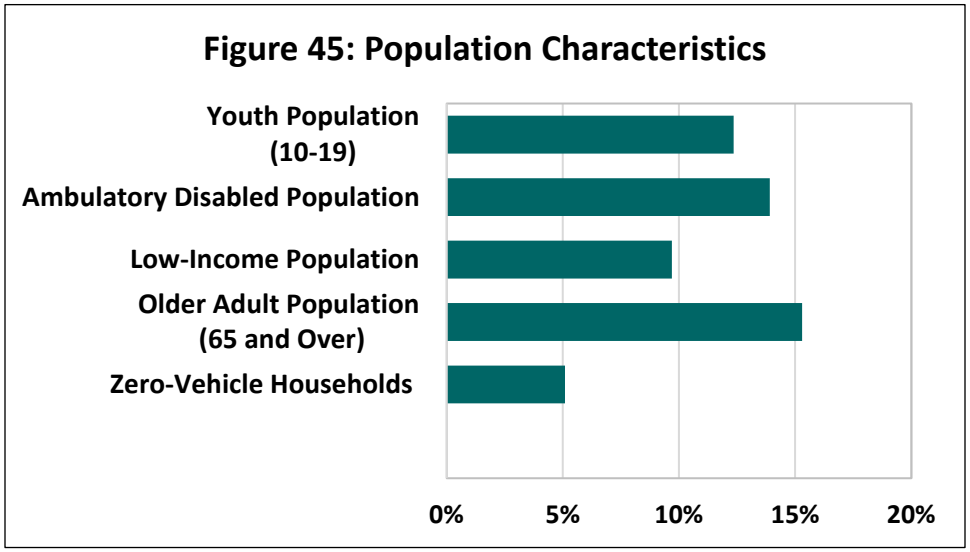
Figure 44: Population Density



Transit-Dependent Population Characteristics

This section provides information on the individuals considered by the transportation profession to be dependent upon public transit. The four types of limitations that preclude people from driving are physical limitations, financial limitations, legal limitations, and self-imposed limitations. Physical limitations may include permanent disabilities (i.e., frailty, blindness, paralysis, or developmental disabilities) to temporary disabilities (i.e., acute illnesses and head injuries). Financial limitations include people who are unable to purchase or rent a vehicle. Legal limitations include being too young to drive or having no driver's license. Self-imposed limitations refer to people who choose not to own or drive a vehicle (some or all the time) for reasons other than those listed in the first three categories.

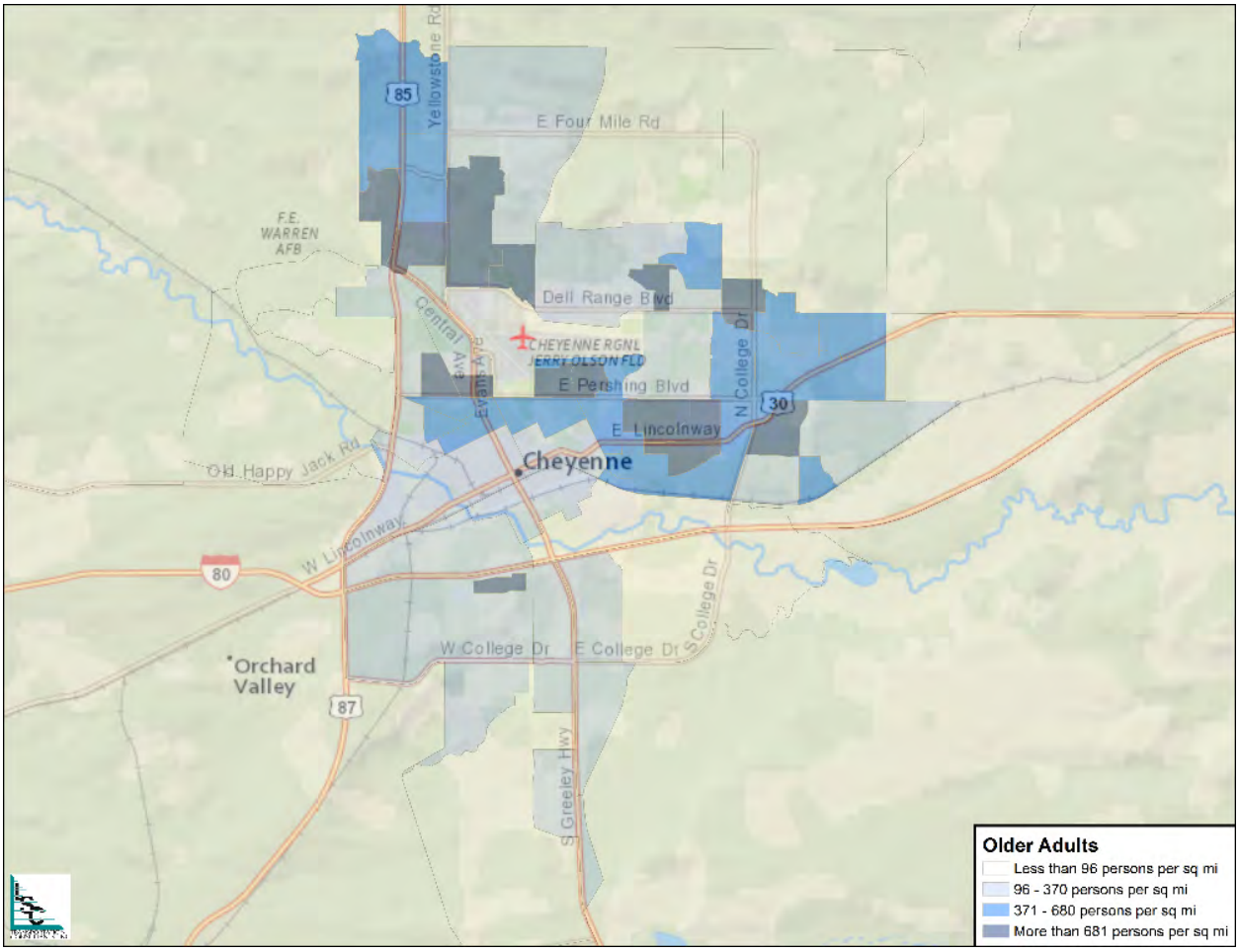
The U.S. Census is generally capable of providing information about the first three categories of limitation. The fourth category of limitation represents a relatively small portion of transit ridership in areas with low density. Figure 45 shows a summary of the transit-dependent population characteristics. Although ambulatory disabled and low-income population data are included in the 2019 ACS, they are only available at the tract level and were apportioned to the block group level based on the population of the block group compared to the total population in the tract. A more detailed table can be found in Appendix C.



Older-Adult Population

The older-adult population, defined by the U.S. Census Bureau as people 65 years of age or older, represents a significant number of the national transit-dependent population and represents 15.3 percent of the total population in the county. As shown in Figure 46, the areas with the highest density are along Pershing Boulevard as well as the area north of the airport and east of the AFB, to the northwest of College Drive and Dell Range Blvd, and southwest of the I-80 – I-180 junction.

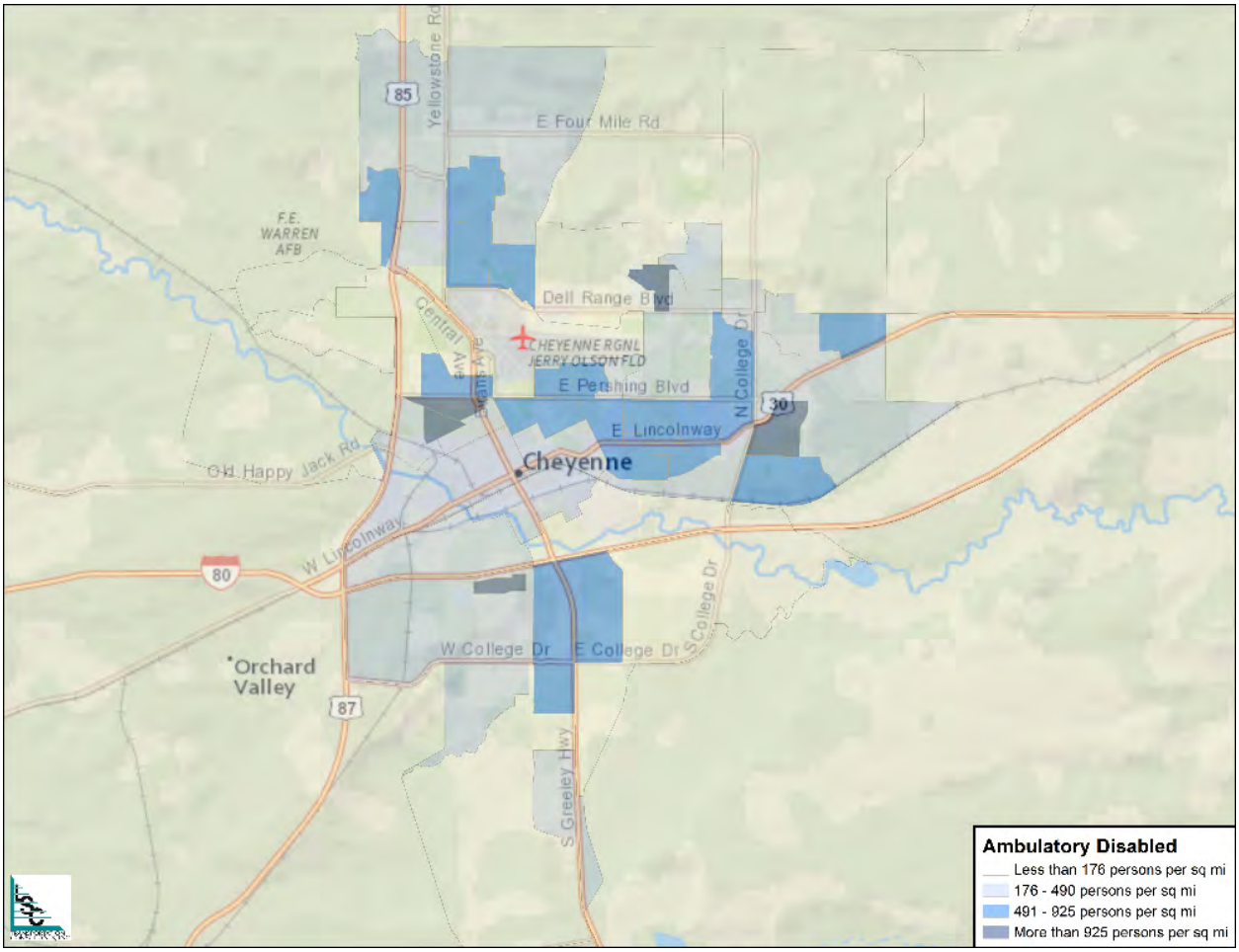
Figure 46: Density of Older Adults



Population of Persons with an Ambulatory Disability

An individual is classified as having an "ambulatory disability" if they have serious difficulty walking or climbing stairs. Approximately 14 percent of the population in the county has some type of ambulatory disability. As shown in Figure 47, the areas with the highest density of persons with an ambulatory disability are located at the east and west ends of Pershing Boulevard, as well as southwest of the I-80 – I-180 junction, and to the northwest of College Drive and Dell Range Boulevard.

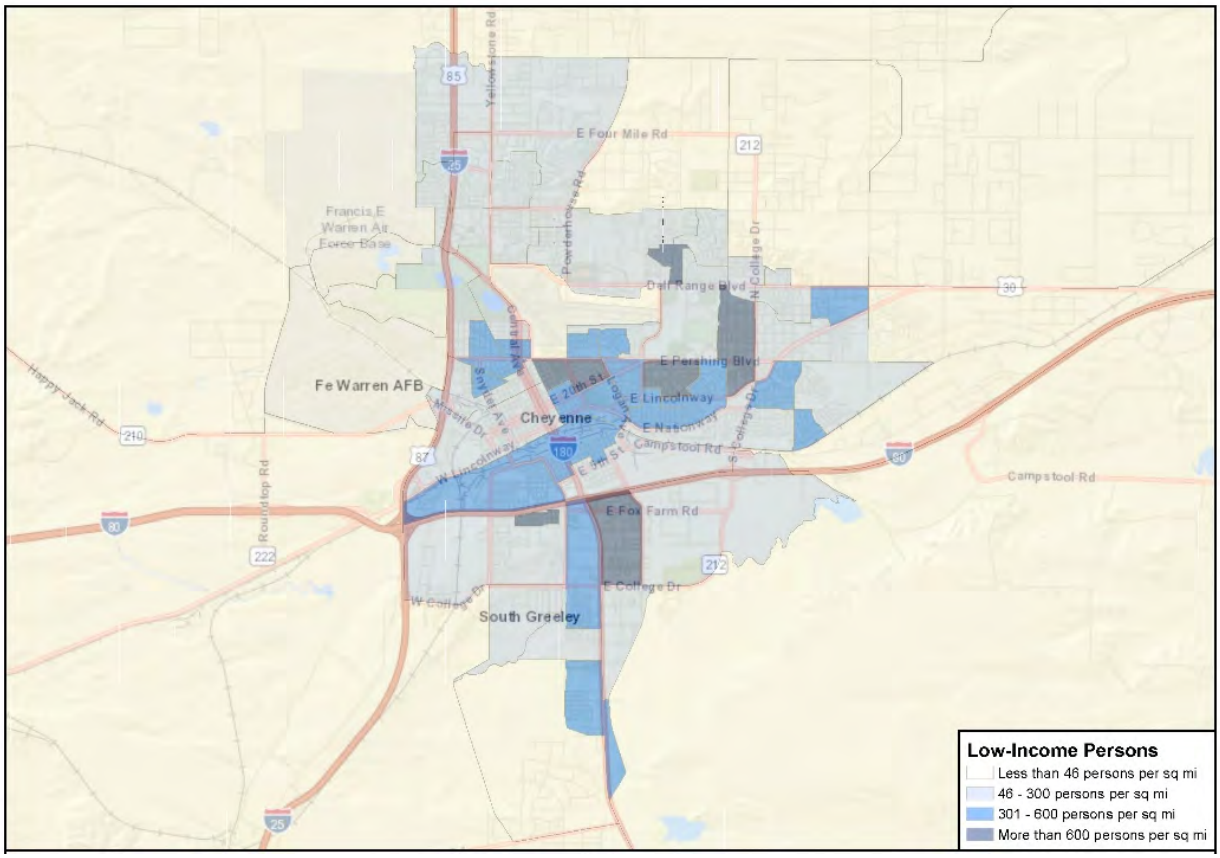
Figure 47: Density of Persons with an Ambulatory Disability



Low-Income Population

Low-income population, as defined by the Federal Transit Administration, includes persons whose household income is at or below the Department of Health and Human Services' poverty guidelines. The low-income population, listed in the tables and maps, includes people who are living below the poverty line using the Census Bureau's poverty threshold. Approximately 9.7 percent of the population of the county are considered low income. As shown in Figure 48, the areas with the highest density are along Pershing Boulevard, northwest of College Drive and Dell Range Boulevard, southeast of the I-80 – I-180 junction, as well as a small pocket southwest of the I-80 – I-180 junction.

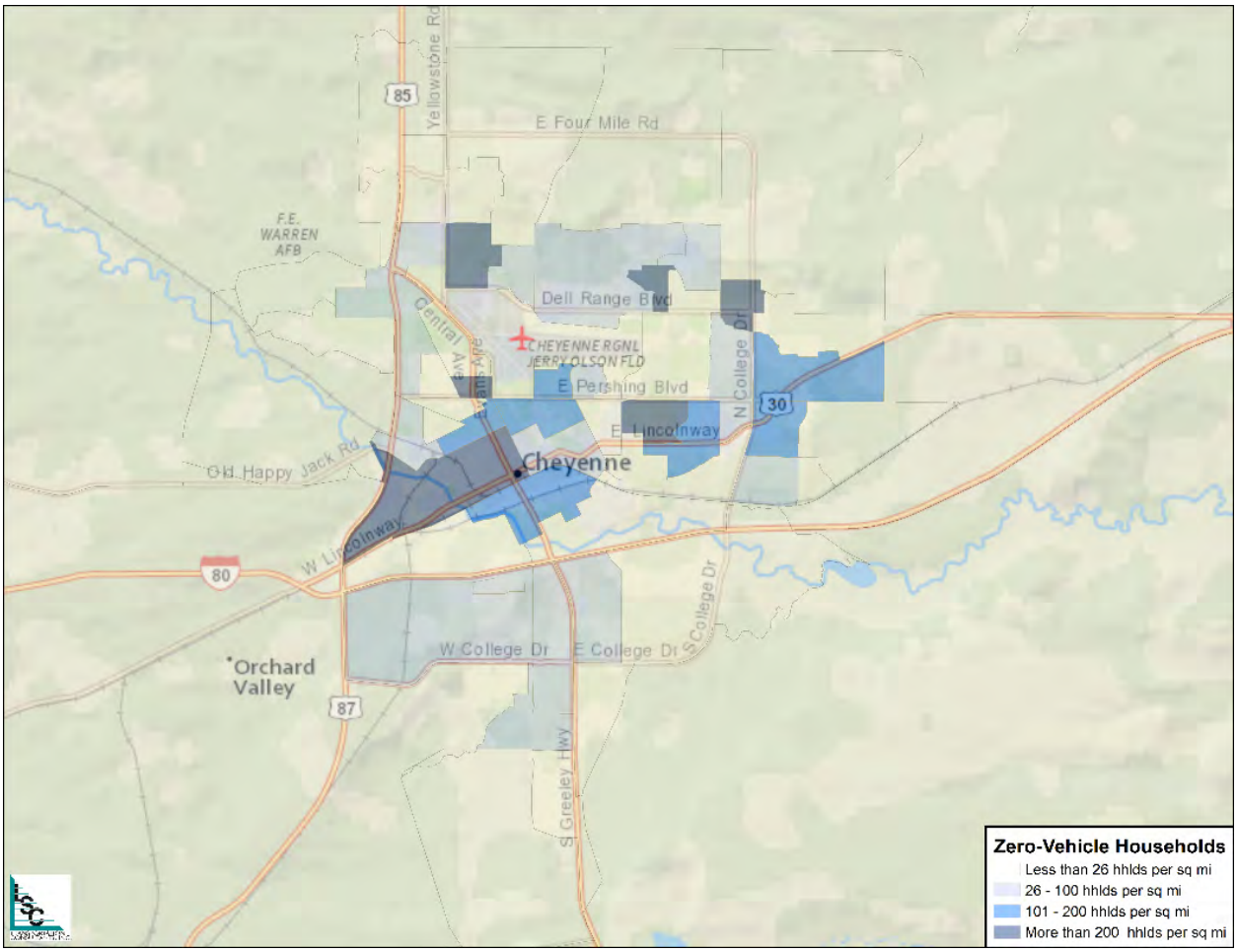
Figure 48: Density of Low-Income Persons



Zero-Vehicle Households

Individuals residing in zero-vehicle households are generally transit-dependent, as they do not have access to a private vehicle. Approximately five percent of households in the county reported having no vehicle available for use. The density of zero-vehicle households for the study area is shown in Figure 49. The ranges for the density of zero-vehicle households are quite low due to the size of the block groups, combined with the small number of zero-vehicle households in the study area. The areas with the highest density are mainly in downtown Cheyenne, with some additional pockets to the north of town, the residential area just south of the Cheyenne's Veterans Affairs Medical Center, and at College Drive and Dell Range Boulevard.

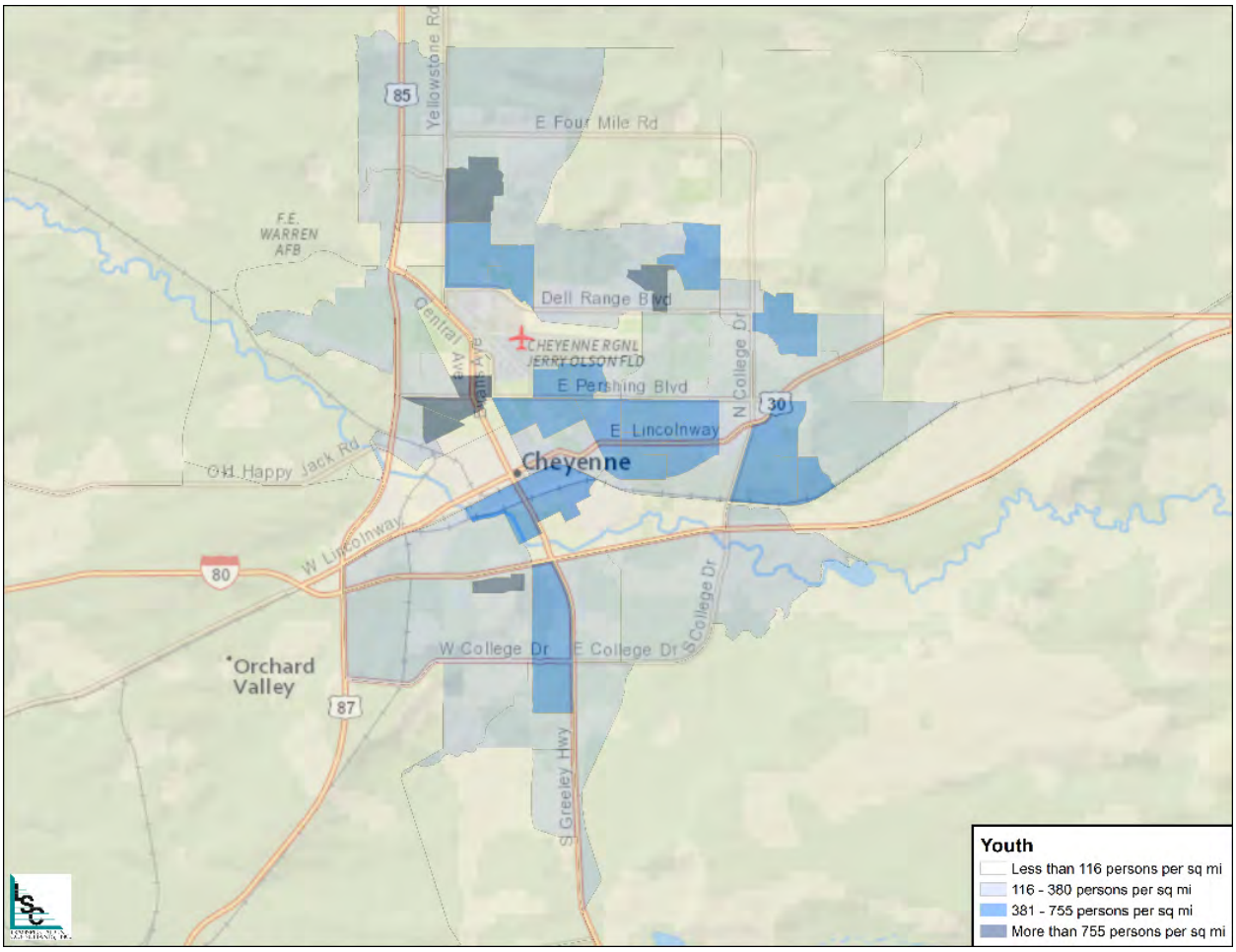
Figure 49: Density of Zero-Vehicle Households



Youth Population

The population density of youth (10-19 years of age) for the study area is shown in Figure 50. Approximately 12.4 percent of the population of the study area are youth. The areas with the highest density of youth are just north of downtown Cheyenne, southwest of the I-80 – I-180 junction, southwest of Yellowstone Road and Four Mile Road, as well as northwest of College Drive and Dell Range Boulevard.

Figure 50: Density of Youth



COMMUNITY ECONOMIC CHARACTERISTICS

As shown in Table 4, according to the 2019 ACS, Cheyenne has a total civilian labor force of 50,972 with 1,773 being unemployed (3.5 percent). This is slightly more than the 2019 ACS five-year average unemployment for Wyoming (three percent) and is comparable to the rate for Laramie County (3.3 percent). The unemployment rate for Cheyenne is 5.4 percent which is more than that of Wyoming (4.5 percent) and slightly higher than Laramie County (5.1 percent).

Table 4: Employment Statistics in Cheyenne, WY		
	Estimate	Percent
Population 16 years and over	50,972	
In labor force	34,244	67.2%
Civilian labor force	32,986	64.7%
Employed	31,213	61.2%
Unemployed	1,773	3.5%
Armed Forces	1,258	2.5%
Not in labor force	16,728	32.8%
Unemployment Rate	5.4%	
Source: US Census Bureau, American Community Survey, 2019		

Employment Sectors

Table 5 shows the available 2019 ACS employment information for Cheyenne by employment sector. The employment numbers reflect a five-year average and may not accurately reflect current conditions. The Educational Services sector is the largest sector, accounting for approximately 24.5 percent of employment. The second highest industry sector is Retail Trade (14.3 percent). Public Administration was the third highest sector, reporting approximately 12 percent of employees.

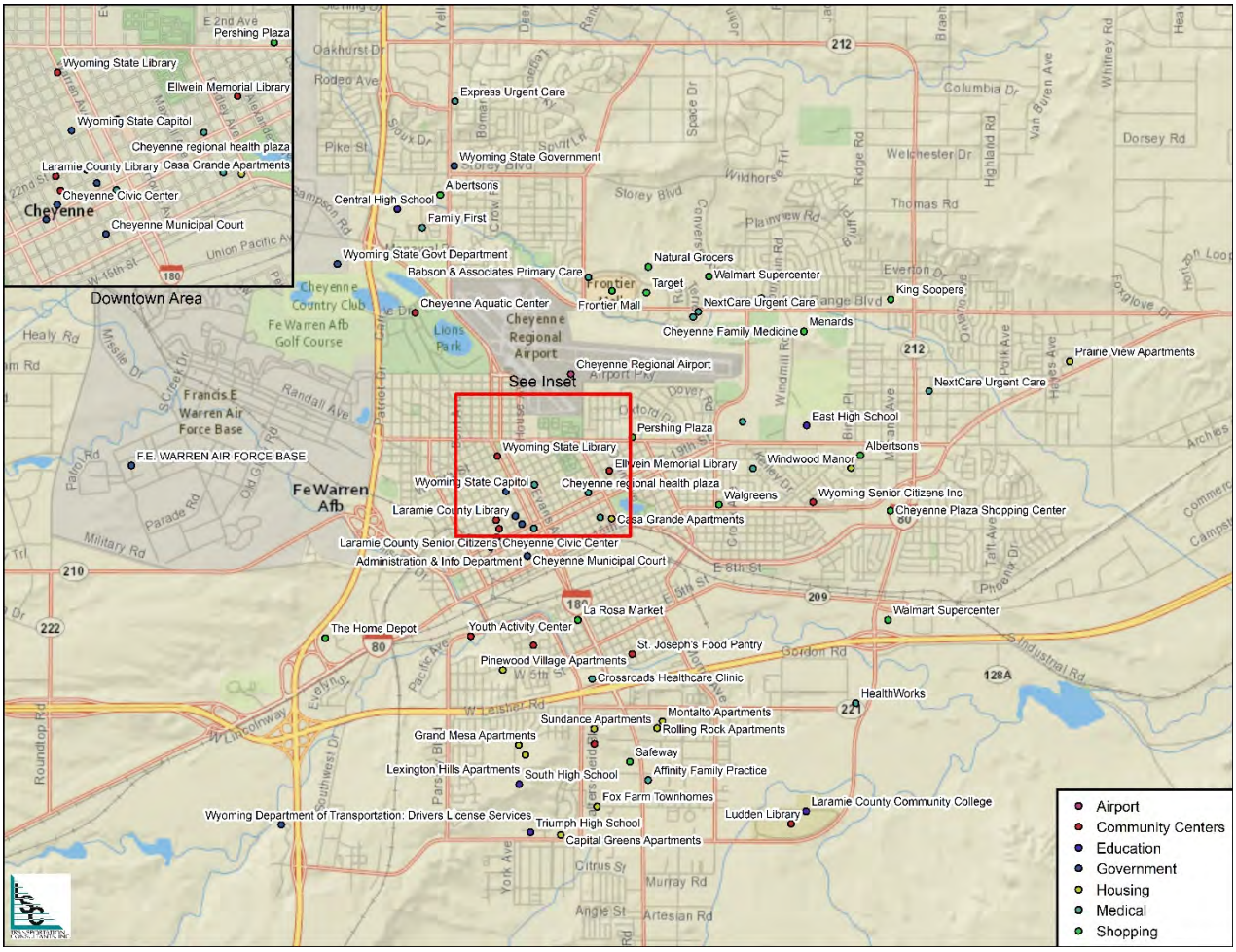
Table 5: Employment by Industry		
Industry	Total	%
Educational Services, Health Care, and Social Assistance	7,653	24.5%
Retail trade	4,465	14.3%
Public administration	3,733	12.0%
Accommodation, Arts, and Recreation	2,854	9.1%
Professional and Business Services	2,354	7.5%
Transportation and Warehousing	2,123	6.8%
Construction	1,882	6.0%
Finance and Insurance	1,661	5.3%
Other Services	1,453	4.7%
Manufacturing	1,198	3.8%
Agriculture	699	2.2%
Information	660	2.1%
Wholesale trade	478	1.5%
Total Employed	31,213	
Source: US Census Bureau, American Community Survey, 2019; LSC 2022.		

Major Employers and Activity Centers

Major transit activity centers are important in terms of land use, trip generation, and the ability to be served by public transit. Activity centers are locations that are typically shown to generate transit trips because they are prime origins or prime destinations and they generally include a wide variety of land uses including shopping/retail areas, commercial, hospital, or education centers. There is no set formula that is used to derive a list of activity centers, as the process is subjective.

Figure 51 shows locations of possible transit generators in Cheyenne. Places that have been identified as possible transit generators include Laramie County Community College, Walmart, Cheyenne Regional Airport, F.E. Warren AFB, Cheyenne Regional Health Plaza, Laramie County Library, and the Cheyenne Aquatic Center.

Figure 51: Activity Centers



TRAVEL PATTERNS

Work Transportation Mode

The 2019 ACS yields information about the means of transportation to work for Cheyenne's employed residents. Table 6 shows the number of people in Cheyenne's workforce and their modes of travel. These data were tabulated for employees 16 years of age and older who were employed when the ACS was completed. Most employees drive alone to work (26,390 people or 86.2 percent). Carpooling (10.4 percent) was the next highest mode of transportation to work. There were only 184 employees (0.6 percent) who reported using public transportation. Out of Cheyenne's workforce, 1,048 people reported that they worked from home, requiring no mode of transportation to work. These employees were not included when calculating the above percentages.

Table 6: Means of Transportation to Work

	Cheyenne	
Means of Transportation	Workers	Percent
Drove Alone	26,390	86.2%
Carpooled	3,194	10.4%
Public Transportation	184	0.6%
Other Means	477	1.6%
Walked	370	1.2%
Total	30,615	100%

Note: Workers 16 years and over; those who worked at home are not included.
Public Transportation excludes Taxi Cabs

Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

According to the 2019 ACS, the mean commute time for Cheyenne residents was 14.3 minutes. Figure 52 shows the travel time to work for Cheyenne residents. The most frequent response for residents' travel time to work was 10 to 14 minutes (34 percent of the respondents), followed by 15 to 19 minutes and less than 10 minutes (each with 26 percent of the respondents).

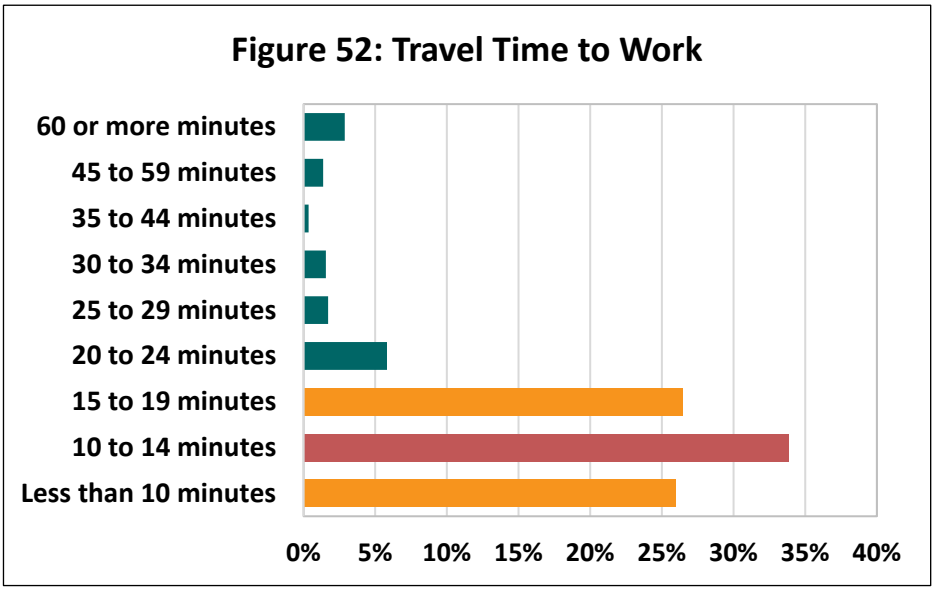
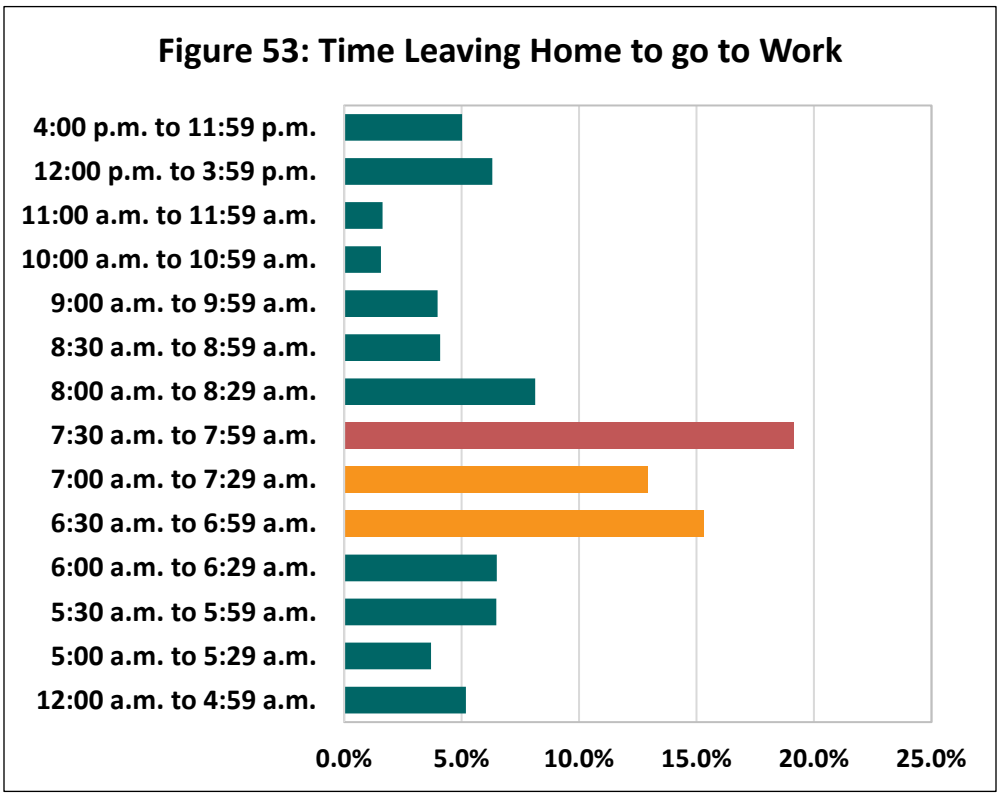


Figure 53 shows the time ranges for Cheyenne residents leaving home to go to work. The most frequent response was between 7:30 and 7:59 a.m., with 19.1 percent of the total responses. The next most frequent response was between 6:30 and 6:59 a.m. with 15.3 percent, followed by the period between 7:00 and 7:29 a.m. with 12.9 percent of total responses.



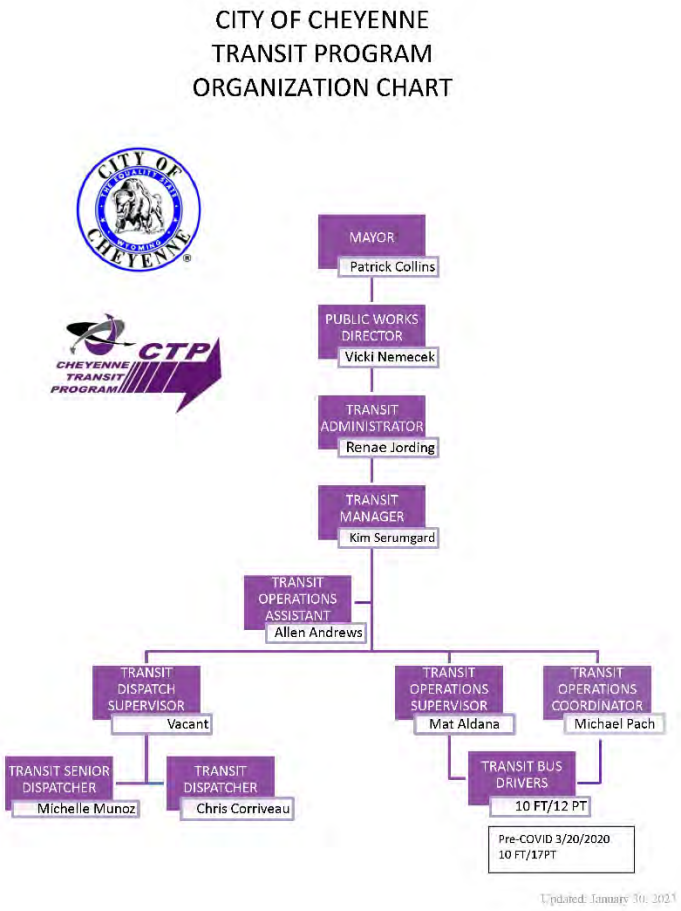
INTRODUCTION

This chapter provides an overview and analysis of the Cheyenne Transit Program (CTP), the public transit service for Cheyenne, WY. An overall description of available services, both pre-COVID-19 pandemic and current, is provided followed by a detailed analysis of ridership trends and performance. The information presented in this chapter will form the basis for identifying possible improvements to public transit in the coming years.

ORGANIZATIONAL STRUCTURE

CTP is operated through the City of Cheyenne. The Transit Administrator reports to the Public Works Director, who in turn reports to the Mayor. The full CTP Organizational Chart is shown in Figure 54.

Figure 54: CTP Organizational Chart



SYSTEM, SERVICE TYPE, AND ROUTE PERFORMANCE

This section outlines services that CTP provides. Prior to the COVID-19 pandemic, CTP provided fixed-route bus service with an ADA complementary paratransit service for persons with disabilities who were unable to use the fixed-route system. When the COVID-19 pandemic began, CTP switched from offering fixed-route services to offering on-demand microtransit services to better meet the needs of travelers. This section outlines systemwide performance since 2014, fixed-route services pre-pandemic, ADA services pre-pandemic, and current on-demand services. This section also reviews other services provided and fares charged.

System-Level Statistics

CTP's ridership has been declining steadily since 2014 (see Figure 55). In 2014, CTP ridership was nearly 300,000, and had fallen to just over 160,000 in 2019. As ridership fell, CTP also reduced the level of service provided: vehicle hours and vehicle miles both began declining in 2017 (see Table 7). Demand response vehicle hours and miles rose in 2020 after the pandemic began.

Figure 55: Unlinked Passenger Trips by Year

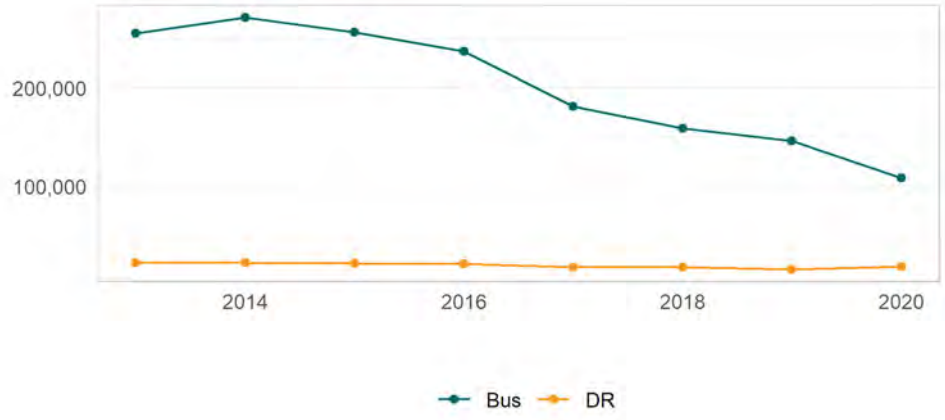


Table 7: Annual Ridership, Hours, and Miles						
	Unlinked Passenger Trips		Vehicle Revenue Hours		Vehicle Revenue Miles	
Year	#	Percent Change	#	Percent Change	#	Percent Change
Fixed Route						
2013	255,877		22,333		326,604	
2014	271,822	6.2%	23,896	7.0%	315,145	-3.5%
2015	257,094	-5.4%	26,142	9.4%	322,156	2.2%
2016	237,218	-7.7%	26,665	2.0%	328,221	1.9%
2017	181,295	-23.6%	26,718	0.2%	328,286	0.0%
2018	158,950	-12.3%	25,809	-3.4%	306,936	-6.5%
2019	146,166	-8.0%	21,966	-14.9%	296,541	-3.4%
2020	108,045	-26.1%	16,254	-26.0%	260,350	-12.2%
Demand Response						
2013	22,204		8,565		121,797	-53.2%
2014	22,149	-0.2%	9,678	13.0%	140,046	15.0%
2015	21,644	-2.3%	10,538	8.9%	132,046	-5.7%
2016	21,029	-2.8%	10,162	-3.6%	122,181	-7.5%
2017	17,999	-14.4%	9,680	-4.7%	112,411	-8.0%
2018	17,837	-0.9%	9,454	-2.3%	110,960	-1.3%
2019	15,355	-13.9%	8,445	-10.7%	103,142	-7.0%
2020	18,585	21.0%	12,724	50.7%	134,570	30.5%

Fixed-Route Services (pre-COVID)

Service Summary

CTP operated six fixed routes prior to the COVID-19 pandemic. These are the Downtown, Northwest, East, West, South, and Northeast routes (see the system map in Figure 56). Most routes operated in a one-direction loop. All routes operated once per hour on weekdays from 6:00 a.m. until 7:00 p.m. and on Saturdays from 10:00 a.m. until 5:00 p.m. (see full operational details in Table 8). There is no Sunday service available. These routes were in operation until April 2020 when the service switched to on-demand. CTP offers a live bus tracking service, available to riders at https://cheyennetransit.ridesystems.net/routes, and also available as Apple or Google Play smartphone applications.

Figure 56: CTP System Map

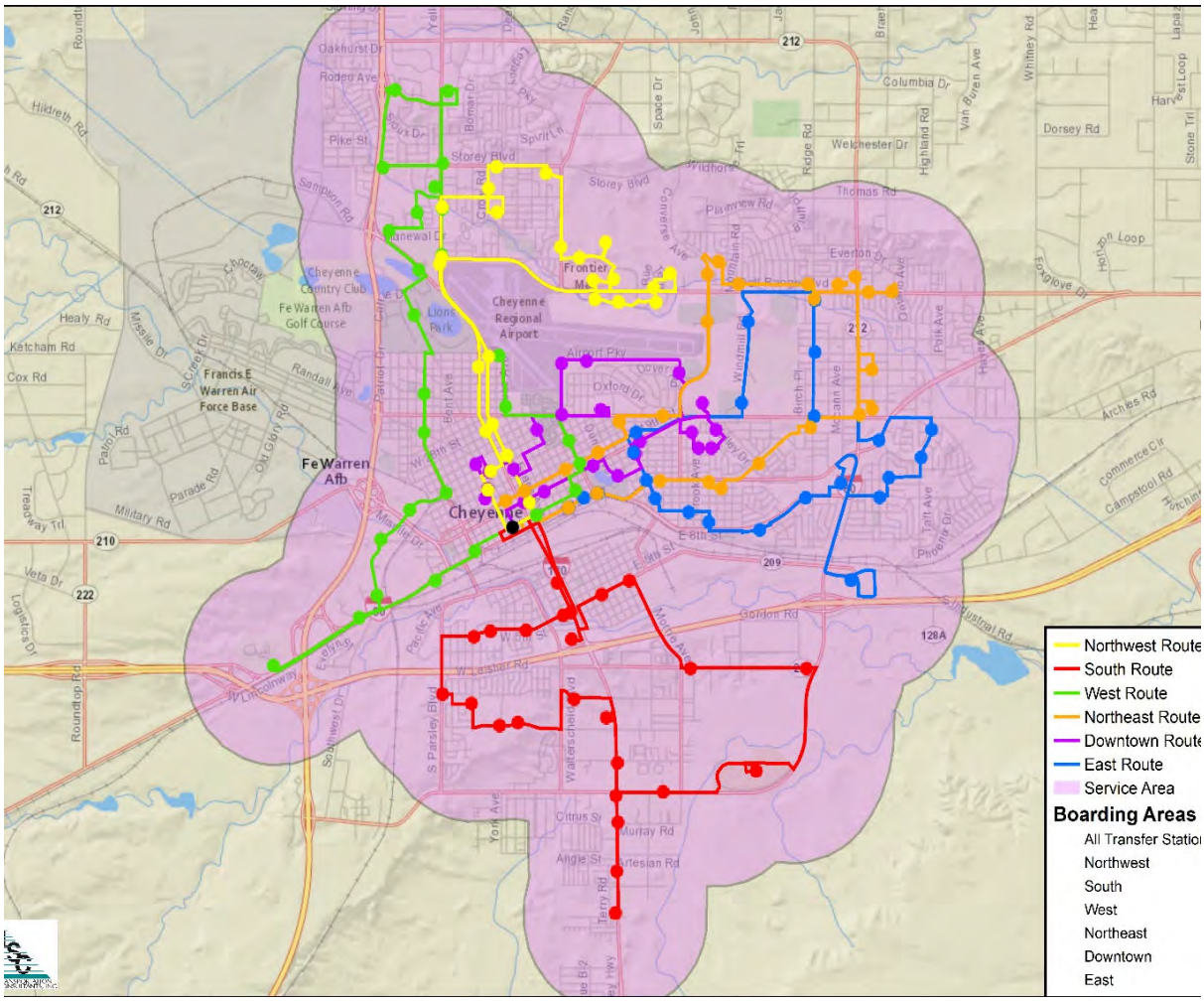


Table 8 shows the operational characteristics for each route. The Northeast and East routes serve the greatest population, each serving over 11,000 people within one-quarter mile of stops along the route. The West route serves the most jobs, at over 13,000 jobs within one-quarter mile of bus stops. The downtown transfer station is the most popular stop for every route, indicating that many people either use the routes to access downtown or transfer at the hub.

Table 8: CTP Fixed-Route Service Characteristics in 2020 (pre-COVID)

Route	Service Description	Population Within ¼ Mile	Jobs Within ¼ Mile	Top Stops (2019)
Northeast – Orange	Connects the downtown transfer station with housing and the post office	11,800	7,200	Transfer Station East Albertsons Cheyenne Housing
Northwest – Yellow	Connects the downtown transfer station with Walmart, Frontier Mall, and the library – East Side	6,200	9,800	Transfer Station Walmart 411/615 Storey
South – Red	Connects the downtown transfer station with the VFW, Boys & Girls Club, and Pinewood Village	6,400	3,300	Transfer Station Safeway Allison & Desmet
West – Green	Connects the downtown transfer station with the Airport, Old West Museum, and Comea Shelter	9,500	13,300	Transfer Station Comea Shelter Westland and Old Happy Jack
East – Blue	Connects the downtown transfer station with Goodwill and apartment buildings	11,100	5,700	Transfer Station East Walmart Goodwill
Downtown - Purple	Connects the downtown transfer station with the VA Hospital, CRMC East, CRMC West, and the Library – East Side	7,000	8,900	Transfer Station Burke High Rise Department of Family Services

Source: Population & Jobs, Remix 2022

Performance

Average daily weekday boardings are shown for stops along each route in Table 9. The downtown transfer station is a major boarding station for each route, making up for 50 to 75 percent of boardings on each route. Boardings are distributed relatively evenly along other stops, with a few exceptions for major boarding locations, such as Walmart on the Northwest route, the Comea Shelter on the West route, the Walmart on the East route, and Safeway, King Soopers, and the Department of Family Services to some extent as well.

Route profiles showing characteristics by route; boardings by stop; and strengths, weaknesses, and opportunities for each route are available in Appendix D.

Table 9: Top Boardings by Stop, January 2020 (Average Daily Boardings)

Stop	On	Percent
Northeast Route		
Transfer Station	112	49.6%
Lincolnway and Big Horn	6	2.7%
Lincolnway and Hot	7	3.1%
Cheyenne Health Care	6	2.7%
East Albertsons	15	6.6%
College and Pershing	6	2.7%
Ocean Loop and Dell	8	3.5%
Gregg Way and College	4	1.8%
King Soopers	15	6.6%
Cheyenne Housing	9	4.0%
King Aurthur and Camelot	5	2.2%
Post Office	8	3.5%
20th Str and Pebrican	4	1.8%
20th St and Warren	4	1.8%
20th and Capitol	5	2.2%
Northwest Route		
Transfer Station	141	49.0%
Warren and E 25th St	5	1.7%
Warren and E 7th Ave	5	1.7%
BLM Building	5	1.7%
604 Shoshoni	5	1.7%
411/615 Storey	7	2.4%
Prairie and Powderhouse	8	2.8%
Kohl (cutout)	5	1.7%
Driftwood and Stillwater	4	1.4%
Rue Terre and Bluegrass	4	1.4%
Walmart	56	19.4%
Target	6	2.1%
Frontier Mall	5	1.7%
Central and 7th Ave	4	1.4%
Central and 29th St	4	1.4%
Library - East Side	10	3.5%
East Route		
Transfer Station	100	56.8%
Lincolnway and Maxwell	3	1.7%
Logan Ave and 12th St	6	3.4%
10th St and Crook	4	2.3%
Goodwill	9	5.1%
East Walmart	20	11.4%
Chey. Station Apartments	9	5.1%
Greenway and Lincolnway	9	5.1%
Ridge and Pershing	3	1.7%
Lincolnway and Russell	3	1.7%

Stop	On	Percent
South Route		
Transfer Station	133	53.6%
Central & 9th St	4	1.6%
Central & 5th St	6	2.4%
City County Health	4	1.6%
5th St. & Van Lennen	3	1.2%
Fox Farm & Ave C-1	7	2.8%
Fox Farm & Ave D	11	4.4%
LCCC	7	2.8%
S Greeley & College	7	2.8%
VFW Post 4343	7	2.8%
S Greeley & Murray	3	1.2%
S Greeley & Prosser	5	2.0%
Safeway	17	6.9%
Allison & Desmet	5	2.0%
Cribbon & Gopp	3	1.2%
Jefferson & Parsley	4	1.6%
Pinewood Village	4	1.6%
5th St. & O'Neil	6	2.4%
5th St. & Capitol	5	2.0%
West Route		
Transfer Station	123	55.2%
North Albertsons	4	1.8%
Snyder and Randall	5	2.2%
Snyder and 24th St	6	2.7%
Westland and Old Happy Jack	7	3.1%
1700 Westland	5	2.2%
Lincolnway and Fleishchli Pkwy	4	1.8%
Comea Shelter	54	24.2%
Snyder and Lincolnway	4	1.8%
Downtown Route		
Transfer Station	125	72.3%
19th St and Central Ave	2	1.2%
19th St and Evans	3	1.7%
Dunn and Alexander	2	1.2%
Logan and 18th St	2	1.2%
VA Hospital	6	3.5%
CRMC East	3	1.7%
Holy Trinity Manor	3	1.7%
Department of Family Services	7	4.0%
Peak Wellness	5	2.9%
CRMC West	4	2.3%
Pioneer and 25th St	2	1.2%
Burke High Rise	4	2.3%

Note: Stops with less than 1 percent of total ridership are not included in this table.

The Northwest and South routes had the highest ridership in January 2020 (see Figure 57). The East and Downtown routes had the lowest ridership, but they have the best on-time performance of all the routes (see Figure 58). The Northwest route struggled the most with on-time performance, which may be due to its higher ridership.

Figure 57: Fixed Route Total Ridership

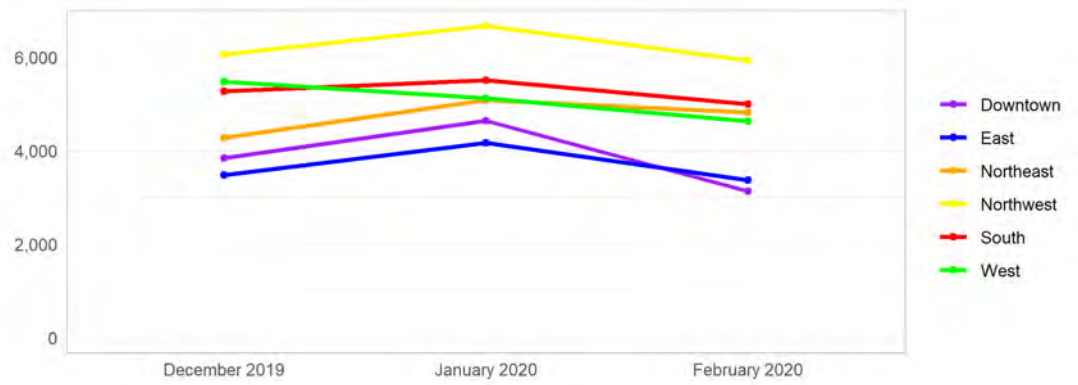


Figure 58: On-Time Performance By Route

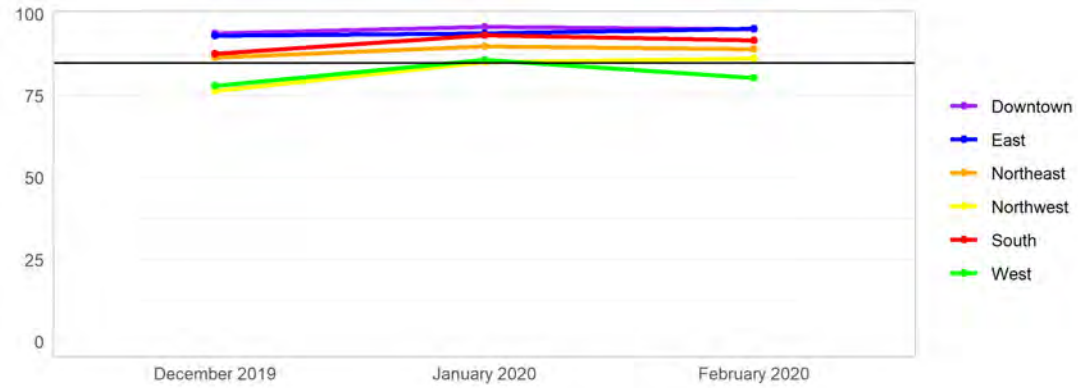


Table 10 shows the estimated cost per hour, cost per mile, and cost per passenger for each route. The total cost per route was estimated using the cost allocation method described later in this chapter. Annual revenue miles by route were extracted from Remix and annual revenue hours were estimated from the service schedule. Passengers per route were estimated from ridership from December 2019 through February 2020 and calibrated to actual 2019 ridership.

Table 10: Estimated Cost Per Hour, Mile, and Passenger by Route			
Route	Cost Per Hour	Cost Per Mile	Cost Per Passenger
Northwest	$57.90	$4.41	$6.71
South	$60.53	$3.83	$8.31
West	$60.44	$3.85	$8.59
Northeast	$56.95	$4.67	$8.70
Downtown	$54.36	$5.68	$10.15
East	$59.36	$4.06	$11.66
Systemwide	**$58.25**	**$4.32**	**$8.75**

Notes:
Cost was estimated using the Cost Allocation method explained later in detail.
Annual revenue miles are from Remix.
Annual passengers were extrapolated from ridership numbers from December 2019 – February 2020 and were calibrated to actual 2019 ridership.

Table 11 lists transit travel times by transit between major stops, and Table 12 shows auto travel times between the same locations. There are some trips that simply could not be made on transit, including trips from the Laramie County Community College (LCCC) to the Cheyenne Housing Department, Cheyenne Station Apartments, Walmart on Dell Range, King Soopers, and the Department of Family Services. A trip is considered not possible when Google Maps does not offer a transit trip between the stated origin and destination. In addition, some transit trips have very different travel times in each direction; for example, traveling from the transfer station to LCCC takes about 20 minutes, while traveling in the opposite direction takes 50 minutes.

Table 12 shows auto travel times as well as the ratio between transit travel times and auto travel times. The highest ratios (trips where transit travel times are significantly higher than auto travel times) are highlighted in red. The lowest ratios (trips where transit travel times are most similar to auto travel times) are highlighted in green.

Table 11: CTP Travel Times, Transfer Requirements, and Service Headways

Origin Stop \ Destination Stop	Transfer Station	LCCC	Cheyenne Housing	Cheyenne Station Apt.	Walmart (Dell Range)	E. Walmart (Campstool)	Comea Shelter	King Soopers	Safeway	Dept. Family Services	Library
Transfer Station		19	28	24	27	22	38	28	29	8	41
LCCC	49		72	68	61	86	45	69	17	60	57
Cheyenne Housing	19	52		57	12	55	36	5	62	17	18
Cheyenne Station Apt.	31	83	10		29	39	74	11	93	22	49
Walmart (Dell Range)	25	55	70	60		58	39	20	65	18	17
E. Walmart (Campstool)	44	35	23	13	42		87	24	45	35	53
Comea Shelter	9	40	46	45	48	40		46	47	19	19
King Soopers	25	54	5	59	53	57	38		64	19	20
Safeway	37	31	60	57	50	50	33	58		50	46
Dept. Family Services	11	48	53	37	50	35	21	45	58		4
Library	9	29	38	33	37	32	29	38	38	4	

Trip requires a transfer

Table 12: Auto Travel Times and Ratio of Transit Travel Time to Auto Travel Times

Origin Stop	Destination Stop: Transfer Station	LCCC	Cheyenne Housing	Cheyenne Station Apt.	Walmart (Dell Range)	E. Walmart (Campstool)	Comea Shelter	King Soopers	Safeway	Dept. Family Services	Library
Transfer Station		9 *2.1*	10 *2.8*	10 *2.4*	10 *2.7*	9 *2.4*	3 *12.7*	11 *2.5*	6 *4.8*	2 *4.0*	3 *13.7*
LCCC	9 *5.4*		10 *7.2*	7 *9.7*	13 *4.7*	6 *14.3*	10 *4.5*	9 *7.7*	6 *2.8*	11 *5.5*	11 *5.2*
Cheyenne Housing	11 *1.7*	9 *5.8*		6 *9.5*	5 *2.4*	8 *6.9*	12 *3.0*	2 *2.5*	11 *5.6*	11 *1.5*	11 *1.6*
Cheyenne Station Apt.	10 *3.1*	7 *11.9*	6 *1.7*		10 *2.9*	6 *6.5*	11 *6.7*	5 *2.2*	9 *10.3*	8 *2.8*	12 *4.1*
Walmart (Dell Range)	10 *2.5*	12 *4.6*	5 *14.0*	9 *6.7*		12 *4.8*	12 *3.3*	6 *3.3*	13 *5.0*	11 *1.6*	10 *1.7*
E. Walmart (Campstool)	9 *4.9*	6 *5.8*	9 *2.6*	6 *2.2*	13 *3.2*		10 *8.7*	8 *3.0*	8 *5.6*	9 *3.9*	11 *4.8*
Comea Shelter	3 *3.0*	10 *4.0*	12 *3.8*	11 *4.1*	12 *4.0*	10 *4.0*		11 *4.2*	7 *6.7*	5 *3.8*	3 *6.3*
King Soopers	11 *2.3*	8 *6.8*	2 *2.5*	4 *14.8*	6 *8.8*	7 *8.1*	12 *3.2*		10 *6.4*	11 *1.7*	11 *1.8*
Safeway	6 *6.2*	6 *5.2*	11 *5.5*	9 *6.3*	13 *3.8*	8 *6.3*	7 *4.7*	11 *5.3*		9 *5.6*	9 *5.1*
Dept. Family Services	4 *2.8*	10 *4.8*	11 *4.8*	7 *5.3*	10 *5.0*	9 *3.9*	5 *4.2*	11 *4.1*	9 *6.4*		2 *2.0*
Library	3 3.0	11 2.6	11 3.5	11 3.0	11 3.4	11 2.9	4 7.3	10 3.8	7 5.4	2 2.0	

8.5 Typical Auto Travel Time in Minutes — *4.9* Ratio of Transit Travel Time to Auto Travel Time

ADA Services (pre-COVID-19)

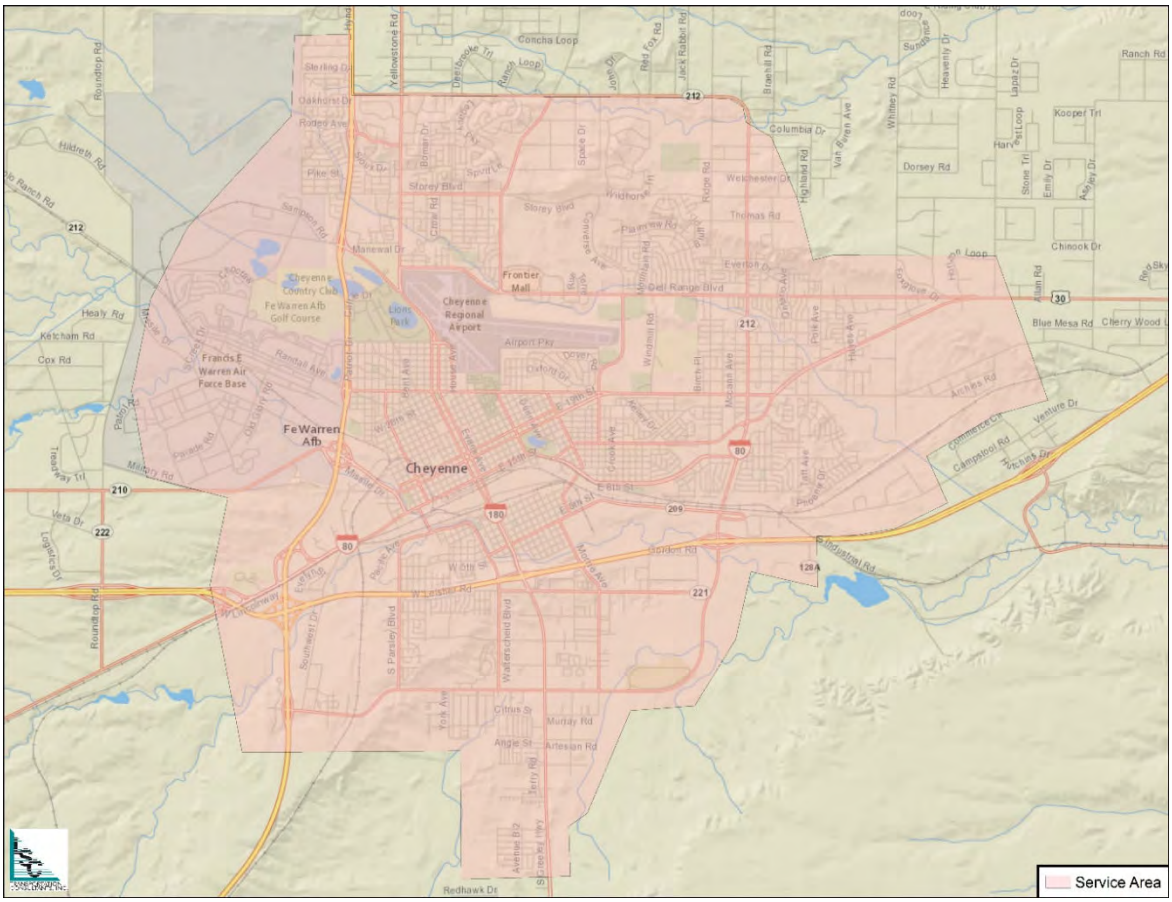
CTP offered an ADA service for qualified riders who are unable to ride fixed-route services. Riders must qualify to be eligible to use this service, as the fixed-route service is the preferred method of service delivery. Reasons that a person may not be able to ride fixed-route service include being incapable of traveling to bus stops, board buses, or understand how to use the system. Once a person is approved for the program, they may make reservations to use the system.

On-Demand Services (COVID-19)

Service Summary

Due to the COVID-19 pandemic and subsequent shutdown, CTP stopped operating its fixed-route services in April 2020 and began operating a free curb-to-curb on-demand microtransit service. The service remained free through September 2021 and began charging a fare on October 4, 2021. The service is operated by CTP operators using CTP vehicles and technology from SPARE Labs. CTP's contract with SPARE Labs will finish in fall 2022, with the option for renewal for five years. By using this new software, CTP has been able to combine general public and paratransit trips, resulting in cost and vehicle savings and improving efficiency. Rides can be scheduled through the Apple and Google Play smartphone applications or by calling the agency. Figure 59 shows the current on-demand service area.

Figure 59: On-Demand Service Area



Performance

On-demand ridership by services is shown in Figure 60. There were about 3,500 monthly CTP riders during each month of the first half of 2021. The ADA service saw around 1,500 riders per month. Most scheduled trips were completed, although about 20 percent of trips were cancelled from January 2021 to May 2021 (see Figure 61). One of the reasons for cancellation in March 2021, April 2021, and May 2021 was a lack of CTP drivers. CTP, like many transit agencies across the country, is facing a driver shortage as a result of the pandemic and is having difficulty recruiting and retaining transit operators.

Figure 60: On-Demand Ridership by Service

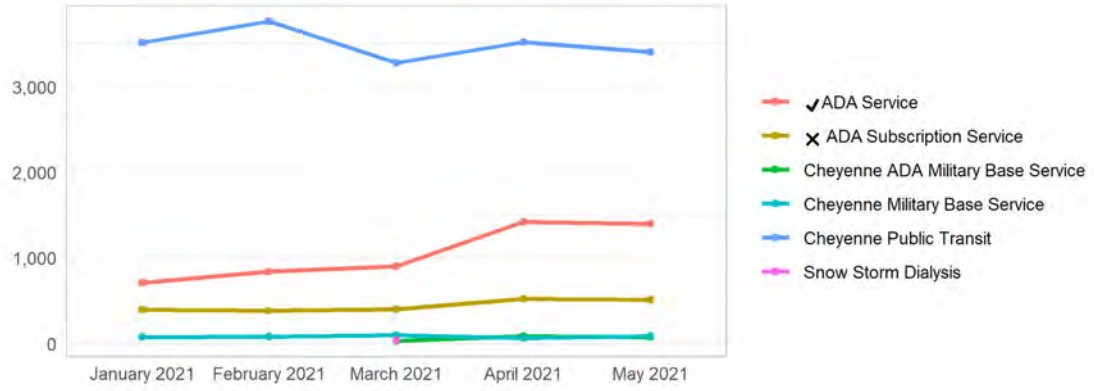
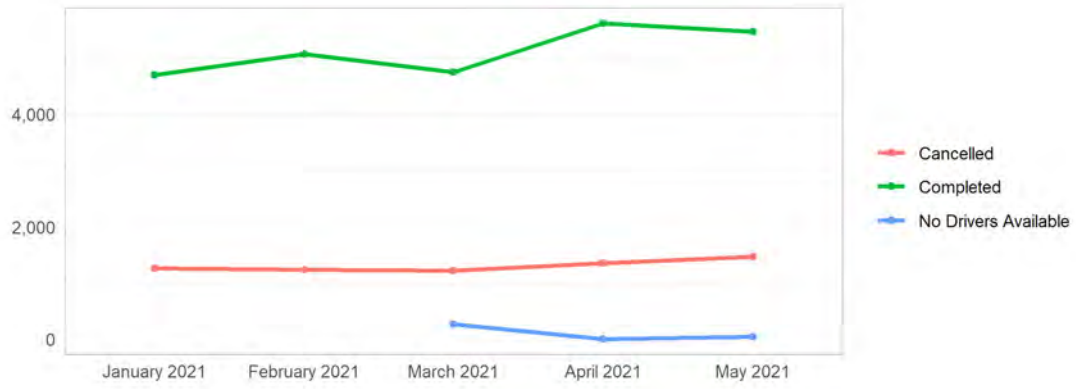


Figure 61: On-Demand Trip Requests by Status



The average trip distance was 3.2 miles, although military base trips were likely to be longer than that (see Figure 62). The average duration of each trip was 11 minutes, again with military trips having a longer duration (see Figure 63).

Figure 62: Trip Distance by Service

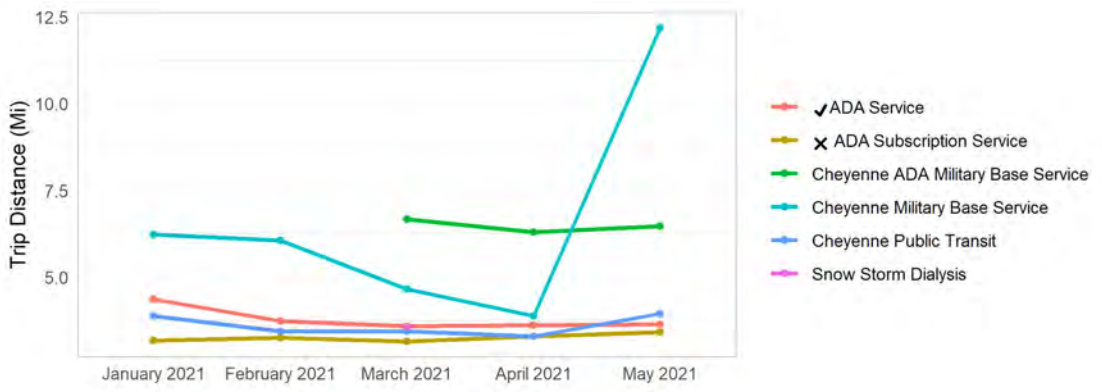
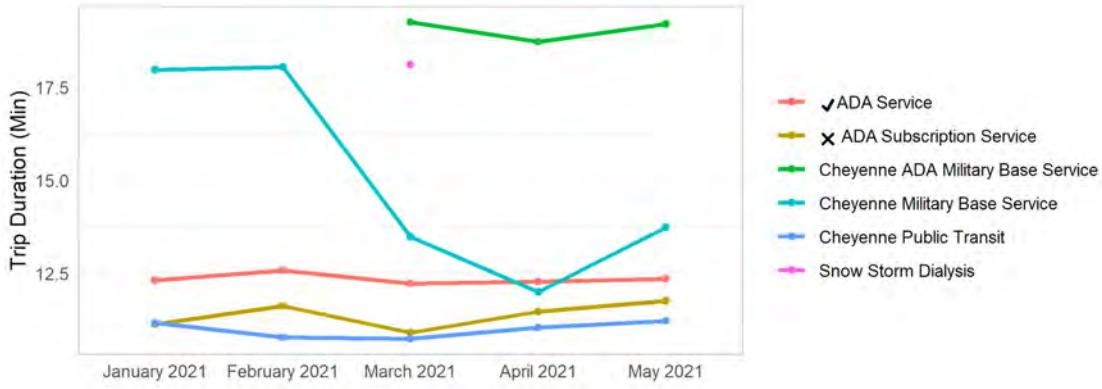
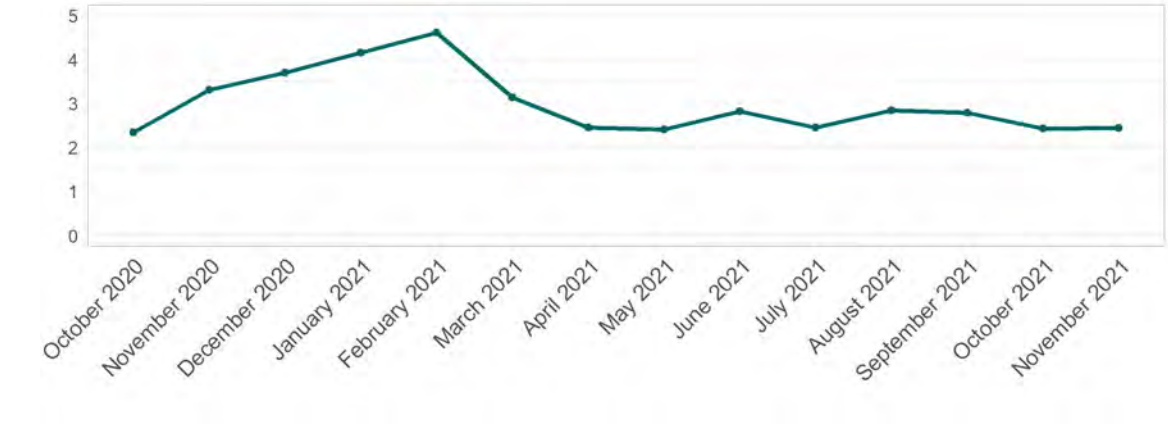


Figure 63: Trip Duration by Service



Passengers per hour peaked in February 2021 around 4.6 passengers per hour and has declined since (see Figure 64).

Figure 64: On-Demand Passengers per Hour



Common pick-up locations for on-demand transit trips are shown in Figure 65. Locations with the highest demand for pick-ups include the downtown transfer station, the Comea Shelter, and the North Walmart. For this pick-up and drop-off analysis, the month of May 2021 was used as a typical month and stops with an average of at least one passenger per day (or 25 pickups per month) are shown.

Figure 65: On-Demand Pick-Up Locations

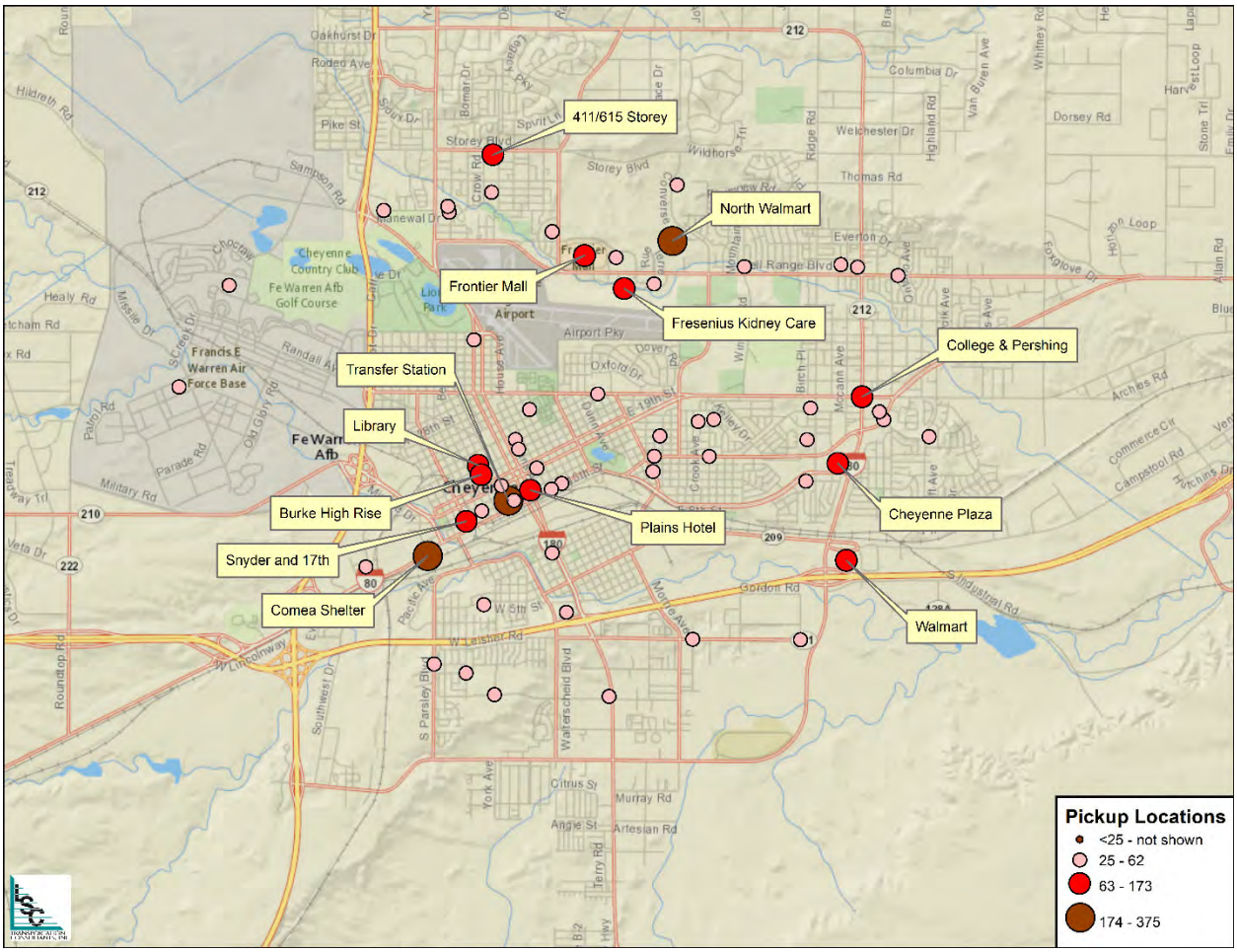
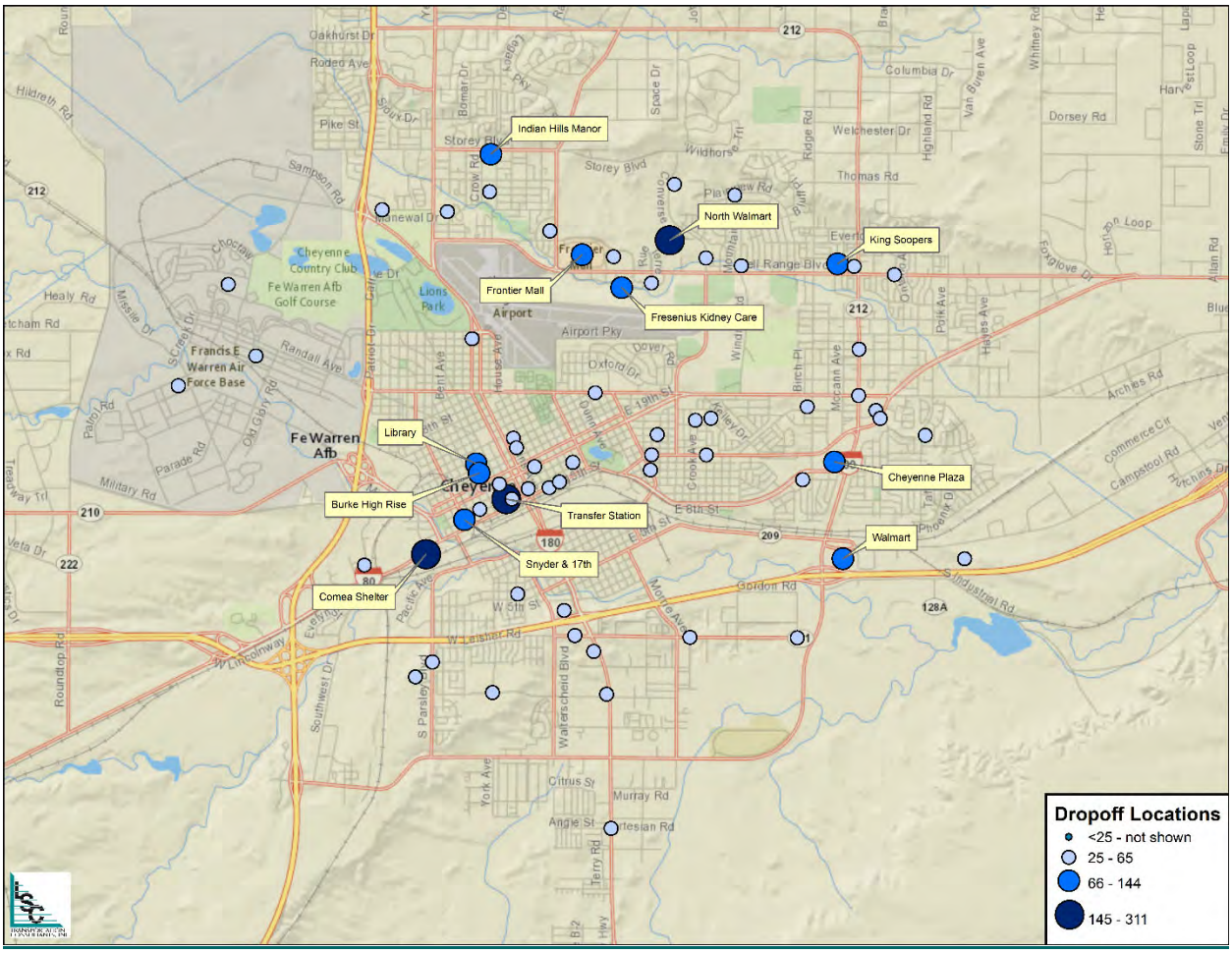


Figure 66 shows common drop-off locations. The most popular drop-off locations are again the downtown transfer center, the Comea Shelter, and the North Walmart. These maps are quite similar, indicating that many people are likely to take two-way trips using on-demand transit services.

In FY 2021, the cost per passenger for on-demand services was $33.87, the cost per hour was $78.95, and the cost per mile was $5.25 (see Table 13). CTP's financials are reviewed below.

Table 13: CTP Financial Analysis, On-Demand Services, FY 2021	
Cost per Hour	$78.95
Cost per Mile	$5.25
Cost per Passenger	$33.87
Source: CTP FY 2018-2021 Cost Allocation	

Figure 66: On-Demand Drop-Off Locations



Other Regional Services

- Greyhound operates out of Cheyenne. Greyhound's bus station is located at Interstate 25 and West College Drive. Greyhound buses connect directly to Wheatland, Douglas, and Casper to the north; Laramie and Rawlins to the west; and Fort Collins, Greeley, and Denver to the south.
- Airport shuttles offer bus trips to/from Cheyenne and the Denver International Airport. Companies offering this service include Groome Transportation and ABC Shuttle.
- Uber/Lyft also operate in Cheyenne as taxi services.

Fares

Fares by category are shown in Table 14. The current regular fare for a one-way trip on CTP (for both fixed-route and on-demand service) is $1.50. With fares for on-demand service resumed as of October 4, 2021, there are no discounted fares; however, grant funds allow passengers 60 years of age and older who have a current CTP issued senior ID card to ride free with a voluntary contribution encouraged. CTP will currently accept "1-RIDE" farebox passes but will not accept other farebox passes. CTP will accept punch cards but will not restart punch card sales until fixed-route service is restored.

Prior to the pandemic, students were able to ride at a reduced rate of $1.25. Seniors and children were able to ride for free, although seniors were encouraged to donate the fare. CTP had a half-fare pass program designed for seniors over 60, Medicare recipients, and persons with disabilities. In addition, 22-ride and 31-day passes were available for use only on fixed-route services. Transfers on the system were free. Fares for ADA services were $3.00 per one-way trip.

Table 14: CTP Fares & Passes Available for Fixed-Route Service

Fares	
Regular Fare	$1.50
Students under 18	$1.25
Children (5 and under)	Free
Transfer	Free
Seniors (60 and over)	Suggested donation of $1.50
Half-fare pass program: • Seniors over 60 • Medicare recipients • Persons with Disabilities • Veterans with Disabilities	$0.75
Passes (Only valid on fixed-route service)	
31-Day Pass	$45
Student 31-Day Pass	$37.50
22-Ride Pass	$30
Student 22-Ride Pass	$25

COST ALLOCATION MODEL AND FINANCIAL ANALYSIS

The financial analysis provides an overview of the current budget and budget trends for CTP. This includes an analysis of the current and recent budgets to determine how costs and revenues have been changing in recent years. A cost allocation model is presented in this chapter, which will be used to estimate the costs for future services. A revenue analysis is also presented to project revenues available to CTP in years going forward based on current funding sources.

Budget Overview and Performance

This section reviews CTP's actual expenditures and revenues from FY 2018 to FY 2021, as well as the FY 2022 planned budget. Table 15 shows cost and revenues from FY 2018 to FY 2022.

Table 15: CTP Five-Year Costs and Revenues

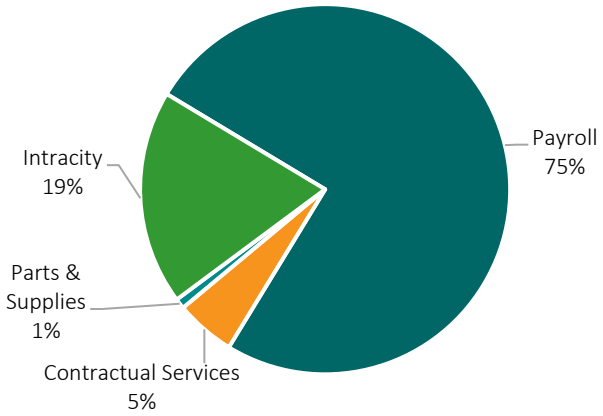
Costs	FY 2018 (Actual)	FY 2019 (Actual)	FY 2020 (Actual)	FY 2021 (Actual)	FY 2022 (Budget)
Payroll	$1,381,438	$1,437,174	$1,451,383	$1,438,417	$1,716,854
Contractual Services	$68,602	$57,216	$88,666	$130,844	$119,212
Parts & Supplies	$5,217	$10,187	$11,790	$7,759	$20,500
Intra City	$386,471	$256,228	$257,557	$228,918	$429,310
Capital	$542,112	$109,805	$37,243	$1,904	$611,982
Total	$2,383,841	$1,870,608	$1,846,639	$1,807,843	$2,897,858
Revenue	**FY 2018 (Actual)**	**FY 2019 (Actual)**	**FY 2020 (Actual)**	**FY 2021 (Actual)**	**FY 2022 (Budget)**
Federal	$1,352,113	$474,910	$1,095,350	$1,482,920	$2,400,913
State	$228,155	$116,928	$75,988	$272,889	$116,601
Local	$81,375	$61,031	$104,160	$83,816	$83,816
Transportation Program Income	$153,887	$155,364	$112,567	$145	$0
General Fund & Reserves	$300,000	$615,275	$645,000	$0	$296,028
Other	$16,107	$5,357	$3,797	$401	$500
Total	$2,131,637	$1,428,866	$2,036,861	$1,840,171	$2,897,858
Deficit	$252,204	$441,743	-$190,222	-$32,328	$0.44

Source: CTP FY 2018-2022 Budget Breakdown

Operating Expenses

Three-quarters of CTP's expected operating expenses in FY 2022 are for payroll expenses (Figure 67). These payroll expenses include administrative salaries and bus driver salaries. Intracity expenses, which include fuel and fleet labor and parts, accounts for nearly 20 percent of expenses. Other parts, supplies, and contractual services make up the remainder.

Figure 67: Operating Cost Breakdown, FY 2022 Budget



Payroll

Compensation and benefits are the largest cost item for CTP. This category represents the personnel costs for staff, which includes bus operators and maintainers, supervisors, and administrators. This includes both direct wages and salaries as well as benefits and insurance.

Intracity

Intracity expenses include fuel and fleet labor and parts.

Contractual Services

This category includes mostly administrative costs, including dues and subscriptions, computer and telecommunications costs, utilities, insurance, and other professional services. This accounts for five percent of CTP's operating expenses.

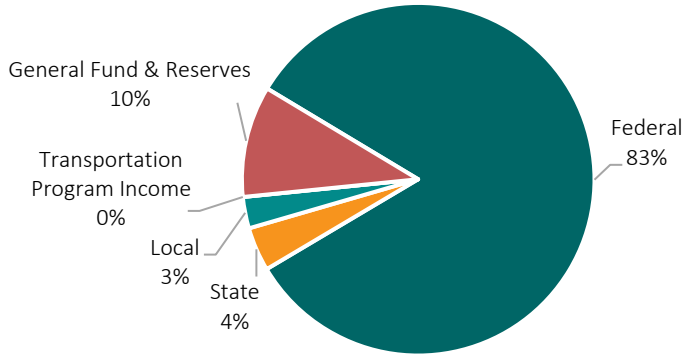
Parts & Supplies

This small category includes mostly office supplies and accounts for one percent of CTP's budgeted operating expenses.

Revenue Sources

The majority of CTP's expected revenue in FY 2022 comes from federal sources at 83 percent, with general fund and reserves, state, and local sources making up the remainder (Figure 68).

Figure 68: Revenue Breakdown, FY 2022 Budget



Federal Sources

Federal sources are the funding that CTP receives from the Federal Transit Administration. These include the Federal Transportation Grant and III-B (Older Americans Act) Federal Grants. Federal funding accounts for 83 percent of CTP's funding.

State Sources

The State of Wyoming, through the Wyoming Department of Transportation, provides Section 5311 funds to transit agencies serving rural districts. A small amount of other state grants is included in CTP's FY 2022 budget. State sources represent four percent of CTP funding.

Local Sources

Laramie County provides a subsidy to CTP, accounting for three percent of CTP's budgeted revenue.

Directly Generated Funds

Transportation program income represents fares that are directly generated through services. Because of the COVID-19 pandemic, no fare revenue was collected in FY 2021. However, CTP began charging fares in October of 2021, so some fare revenue was received in FY 2022.

Financial Performance

The financial performance analysis examines operating costs, fare revenue, vehicle revenue hours, vehicle revenue miles, and ridership to determine how efficiently CTP's services have operated over time. Table 16 presents these findings for CTP services as a whole from FY 2018 until FY 2022. Table 17 and Table 18 present this information for fixed-route and demand-response/on-demand services through 2021, respectively. Overall, CTP's cost per hour, cost per mile, and cost per passenger have steadily increased from FY 2018 to FY 2022. Fare revenues per hour, mile, and passenger have varied more, rising in FY 2019 but decreasing in FY 2020. Cost per passenger and subsidy per passenger spiked in FY 2021 when the number of passengers was down because of the COVID-19 pandemic and CTP did not charge fares.

Table 16: CTP Financial Analysis, All Services					
Base Data	FY 2018 (Actual)	FY 2019 (Actual)	FY 2020 (Actual)	FY 2021 (Actual)	FY 2022 (Budget)
Operating Cost	$1,607,834	$1,619,945	$1,666,324	$1,799,774	$2,285,876
Directly Generated Revenue	$153,887	$155,364	$112,567	$145	$0
Revenue Hours	35,263	30,411	28,975	22,796	23,519
Revenue Miles	417,896	399,683	394,920	342,556	304,112
Unlinked Ridership	176,787	161,521	126,630	53,144	
Analysis	FY 2018 (Actual)	FY 2019 (Actual)	FY 2020 (Actual)	FY 2021 (Actual)	FY 2022 (Budget)
Cost per Hour	$45.60	$53.27	$57.51	$78.95	$97.19
Cost per Mile	$3.85	$4.05	$4.22	$5.25	$7.52
Cost per Passenger	$9.09	$10.03	$13.16	$33.87	
Fare Revenue per Hour	$4.36	$5.11	$3.88	$0.01	$0
Fare Revenue per Mile	$0.37	$0.39	$0.29	$0.00	$0
Fare Revenue per Passenger	$0.87	$0.96	$0.89	$0.00	$0
Subsidy per Passenger	$8.22	$9.07	$12.27	$33.86	
Farebox Recovery	9.57%	9.59%	6.76%	0.01%	0%

Source: CTP FY 2018-2021 Cost Allocation

Table 17 shows performance metrics for fixed-route services from FY 2018 until FY 2021. Fare revenue metrics are not shown because they are not broken out by service. Fixed-route costs per hour, mile, and passenger increased from FY 2018 until FY 2020, although fixed-route costs per hour, mile, and passenger remain lower than on-demand costs per hour, mile, and passenger.

Table 17: CTP Financial Analysis, Fixed-Route Services				
Base Data	FY 2018	FY 2019	FY 2020	FY 2021*
Operating Cost	$964,700	$937,786	$999,795	$0
Revenue Hours	25,809	21,966	16,254	-
Revenue Miles	306,936	296,541	260,350	-
Unlinked Ridership	158,950	146,166	108,045	-
Analysis	FY 2018	FY 2019	FY 2020	FY 2021*
Cost per Hour	$37.38	$42.69	$61.51	-
Cost per Mile	$3.14	$3.16	$3.84	-
Cost per Passenger	$6.07	$6.42	$9.25	-

** Note: Fixed-Route Service did not operate in FY 2021 due to the COVID-19 pandemic.*
Source: CTP FY 2018-2021 Cost Allocation

Table 18 shows financial performance metrics for demand-response and on-demand services from FY 2018 until FY 2021. FY 2018-2019 includes demand response services only, FY 2020 includes both demand response and on-demand services, and FY 2021 shows on-demand services only. Fare revenue metrics are not shown because they are not broken out by service. Cost metrics are more

variable, peaking in FY 2019 but decreasing to FY 2020 before increasing in FY 2021. Cost per passenger fell to its lowest level in FY 2021, although cost per hour remained high.

Table 18: CTP Financial Analysis, Demand Response and On-Demand Services

Base Data	FY 2018	FY 2019	FY 2020	FY 2021
Operating Cost	$643,134	$682,159	$666,529	$1,799,774
Revenue Hours	9,454	8,445	12,724	22,796
Revenue Miles	110,960	103,142	134,570	342,556
Unlinked Ridership	17,837	15,355	18,585	53,144
Analysis	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
Cost per Hour	$68.03	$80.78	$52.38	$78.95
Cost per Mile	$5.80	$6.61	$4.95	$5.25
Cost per Passenger	$36.06	$44.43	$35.86	$33.87

Source: CTP FY 2018-2021 Cost Allocation

Cost Allocation Model

The cost allocation model is used to determine unit costs for providing service in order to project future costs for the current service and determine the cost of potential new and enhanced services. The cost allocation model presented here is a three-variable cost model that is based on hourly cost factors, mileage-based cost factors, and peak vehicle-based cost factors. The hourly cost factors are primarily wages and benefits which are divided by the revenue hours to determine unit costs per revenue hour. Mileage-based costs include fuel and maintenance costs and are divided by the number of revenue miles to determine the unit cost per revenue mile. Fixed and facility costs, along with administration, are based on the size of the peak fleet. A fixed-cost factor is used to distribute these costs. Capital costs are not included as part of the cost allocation model.

Table 19 shows the cost allocation based on FY 2019 actual costs, which includes both fixed-route and demand-response services. Table 20 uses the per-hour cost, per-mile cost, and fixed cost factor to estimate costs for each route. The South and West routes are the most expensive, while the Downtown and Northeast routes are the least expensive. Table 21 shows the cost allocation based on the FY 2022 budget, which includes estimates for on-demand services only.

Table 19: Cost Allocation Based on FY 2019 Actuals				
	Allocated To			
Account	Vehicle Hours	Vehicle Miles	Fixed Cost	Total
Payroll	$909,400	$0	$527,774	$1,437,174
Contractual Services	$0	$8,047	$49,168	$57,216
Parts & Supplies	$0	$91	$10,096	$10,187
Intra city	$0	$255,711	$517	$256,228
Total Operating Costs	$909,400	$263,849	$587,555	$1,760,804
			Fixed-Cost	
Total Hours/Miles	30,411	399,683	Factor	
Cost per	$29.90	$0.66	1.50	
Source: CTP, 2022. LSC, 2022.				

Table 20: Estimated Route Costs, 2019						
Route	Annual Revenue Miles	Annual Revenue Hours	Annual Hourly Cost	Annual Mile Cost	Fixed Cost Factor	Total Route Cost
Northwest	48,091	3,660	$109,462	$31,747	1.50	$211,926
South	57,810	3,660	$109,462	$38,163	1.50	$221,554
West	57,480	3,660	$109,462	$37,945	1.50	$221,227
Northeast	44,612	3,660	$109,462	$29,451	1.50	$208,479
Downtown	35,044	3,660	$109,462	$23,134	1.50	$199,000
East	53,508	3,660	$109,462	$35,323	1.50	$217,292
Source: Annual Revenue Miles from Remix						

Table 21: Cost Allocation Based on FY 2022 Budget (Demand Response Only)				
	Allocated To			
Account	Vehicle Hours	Vehicle Miles	Fixed Cost	Total
Payroll	$970,161	$189,334	$557,359	$1,716,854
Contractual Services	$0	$2,000	$117,212	$119,212
Parts & Supplies	$0	$3,500	$17,000	$20,500
Intra city	$0	$327,838	$101,472	$429,310
Total	$970,161	$522,672	$793,043	$2,285,876
			Fixed-Cost	
Total Hours/Miles	23,519	304,112	Factor	
Cost Per	$41.25	$1.72	1.53	
Source: CTP, 2022. LSC, 2022.				

PEER COMPARISON

A peer analysis can help an agency understand the size, scope, and operating statistics in comparison to other similar agencies. While no two transit agencies are identical, it can be helpful to compare metrics across systems that operate in similar environments, such as service areas with similar populations or agencies providing a similar number of rides each year. This analysis can offer insights into funding mechanisms, overall operations, challenges, and opportunities.

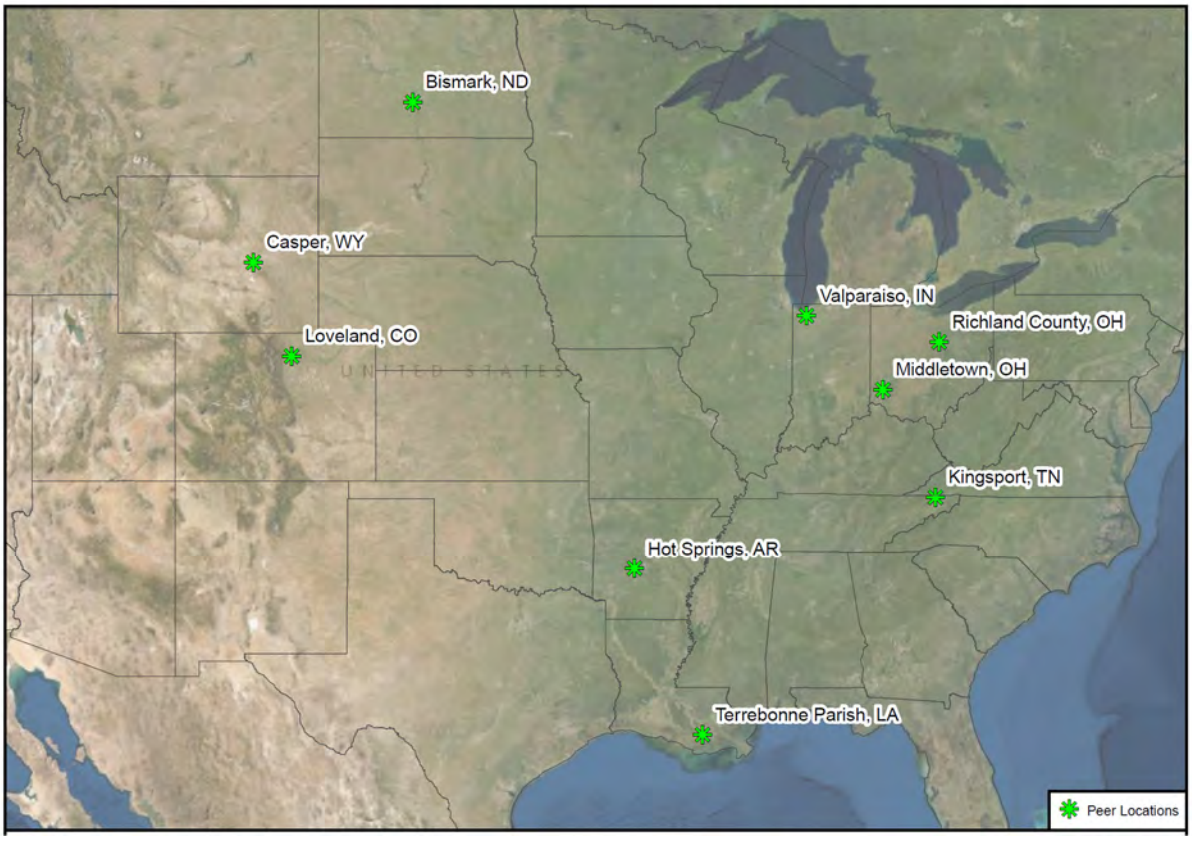
Selected Peers

Peers for this analysis were chosen based on similar service area populations, similar annual ridership, and similar region of the country. The selected peers are:

- City of Casper provides transit services in Casper, Wyoming. The LINK service provides six fixed-route lines, while the ASSIST program offers door-to-door demand-response services. ASSIST provides rides to the general public, but rides must be scheduled two to three days in advance.
- Bis-Man Transit Board provides transit services in the Bismarck, Mandan, and Lincoln communities of North Dakota. The Capital Area Transit (CAT) services provide six fixed routes and they also offer paratransit services. Paratransit services are available only to those who qualify. West River Transit provides curb-to-curb service in the rural areas of Bismarck.
- Richland County Transit provides nine fixed-route bus lines in Richland County, Ohio. They also provide a dial-a-ride/grocery shuttle service that is available to the general public.
- Valpo provides transit services in Valparaiso, Indiana. The V-Line provides four deviated fixed-route bus lines. ChicaGO Dash and the South Shore Connect Shuttle are express commuter services traveling to Chicago, Illinois and South Bend, Indiana. Opportunity Enterprises, Inc., provides transportation services for persons with disabilities, and Porter County Aging and Community Services provides transportation for seniors.
- Hot Springs Intracity Transit provides transit services in Hot Springs, Arkansas. They provide three fixed-route bus services as well as paratransit services to those who qualify.
- Kingsport Area Transit Service provides transit services in Kingsport, Tennessee, including six fixed routes and dial-a-ride services for seniors or persons with disabilities. Dial-a-ride services must be scheduled one day in advance.
- Good Earth Transit provides transit services in Terrebonne Parish, Louisiana. They provide six fixed routes and paratransit services for those who are eligible. Terrebonne Council on Aging provides transportation services to seniors.
- Middletown Transit System provides transit services in Middletown, Ohio. They provide four fixed routes and an evening shuttle service after the fixed routes stop service.
- City of Loveland Transit provides five fixed-route services in Loveland, Colorado. FLEX services provide regional services between Fort Collins and Boulder, Colorado. Paratransit services are available for those who are eligible.

Figure 69 shows the locations of selected peers. Table 22 shows selected peers and some key characteristics.[1] CTP falls roughly in the middle of the selected peers in terms of annual ridership in 2019.

Figure 69: Location of Selected Peers



[1] Source: NTD, 2019.

Table 22: Selected Peers

Agency	Location	Service Area Population	Population Density *(Pop per Sq. Mile)*	Maximum Vehicles	Annual Ridership, 2019
City of Casper	Casper, WY	57,561	2,113	13	213,403
Bis-Man Transit Board *West River Transit*	Bismarck, ND	99,142	2,849	26 *20*	211,147 *33,251*
Richland County Transit	Mansfield, OH	75,354	2,439	16	195,495
Valpo *Opportunity Enterprises, Inc.* *Porter County Aging and Community Services*	Valparaiso, IN	31,730	1,983	14 *15* *8*	176,849 *83,813* *25,353*
Hot Springs Intracity Transit	Hot Springs, AR	55,121	1,467	4	168,627
Kingsport Area Transit Service	Kingsport, TN	53,374	988	13	160,937
Good Earth Transit *Terrebonne Council on Aging*	Houma, LA	82,803	1,453	11 *25*	151,878 *58,611*
Middletown Transit System	Middletown, OH	49,490	2,475	5	145,176
City of Loveland Transit	Loveland, CO	66,930	2,092	8	118,236
Average		**63,501**	**1,984**	**12**	**171,305**
Cheyenne Transit Program	**Cheyenne, WY**	**59,466**	**3,304**	**14**	**161,521**

Note: Italicized agencies provide demand response services only.

Source: NTD, Annual Data Tables, 2020

Performance Measures

CTP's cost effectiveness and service efficiency were evaluated against the average of the peer agencies. Table 23 shows each measure and CTP's relative performance compared to the peers. CTP's fixed-route services outperform peer agencies on cost per trip, cost per revenue hour, and revenue hours per capita; underperforms peers on passengers per revenue hours and fare revenue per passenger trip; and has similar performance to peers on passengers per capita and farebox recovery ratio. CTP's demand-response services outperform peers on fare revenue per passenger trip but underperform peers on most other metrics.

Table 23: Performance Measures for Fixed-Route Services, 2019			
Fixed-Route	Peer Average (2019)	CTP Metric (2019)	Relative Performance
Cost per Passenger Trip	$9.80	$6.40	Outperforms peer average
Cost per Revenue Hour	$79.60	$42.70	Outperforms peer average
Passengers per Revenue Hour	8.7	6.7	Underperforms peer average
Passengers per Capita	2.42	2.46	Similar performance to peer average
Revenue Hours per Capita	0.29	0.37	Outperforms peer average
Farebox Recovery Ratio	0.11	0.10	Similar performance to peer average
Fare Revenue per Passenger Trip	$0.89	$0.64	Underperforms peer average
Demand Response			
Cost per Passenger Trip	$28	$44	Underperforms peer average
Cost per Revenue Hour	$57	$80	Underperforms peer average
Passengers per Revenue Hour	2.2	1.8	Underperforms peer average
Passengers per Capita	0.35	0.26	Underperforms peer average
Revenue Hours per Capita	0.15	0.14	Similar performance to peer average
Farebox Recovery Ratio	0.07	0.07	Similar performance to peer average
Fare Revenue per Passenger Trip	$2.15	$3.00	Outperforms peer average

The following figures illustrate CTP and peer performance for some of the key metric, with fixed-route metrics shown on the left and demand-response metrics shown on the right. CTP's fixed-route cost per passenger of $6 falls below the peer average of $10 (Figure 70), while CTP's demand-response cost per passenger of $44 is higher than the peer average of $28 (Figure 71).

Figure 70: Fixed Route Cost per Passenger

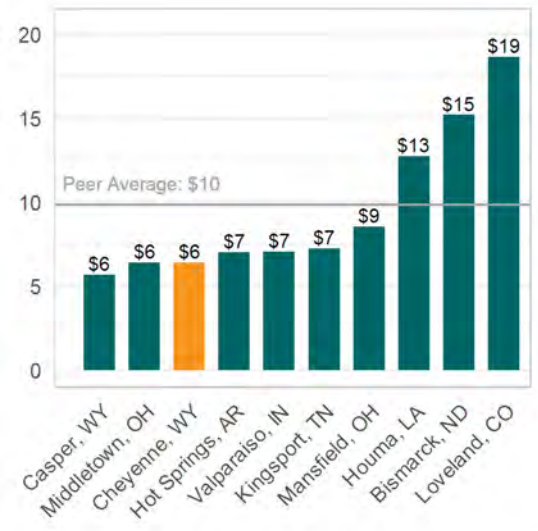
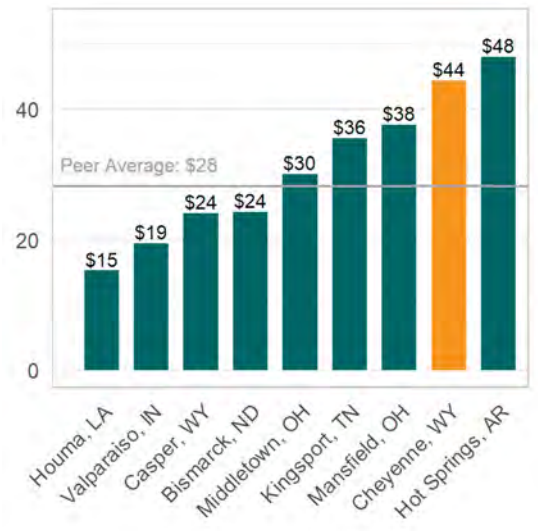


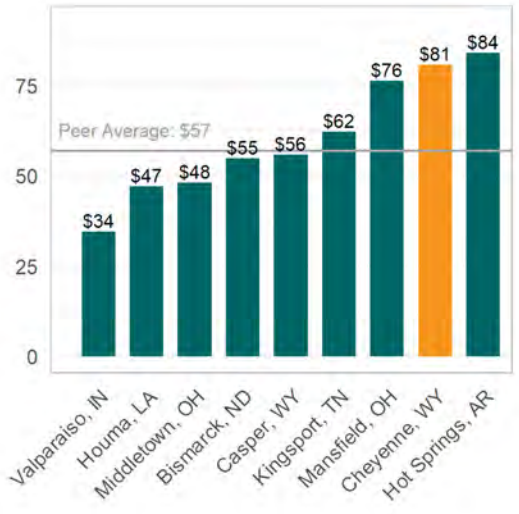
Figure 71: Demand Response Cost per Passenger



CTP had the lowest fixed-route cost per hour of all selected peers at $43, compared to the peer average of $80 (Figure 72). CTP's demand response cost per hour of $81 is higher than almost all of the other selected peers (Figure 73).

Figure 72: Fixed Route Cost per Hour

Figure 73: Demand Response Cost per Hour



CTP's fixed-route passengers per hour are lower than most selected peers, at 6.7 compared to the peer average of 8.7 (Figure 76). CTP's demand-response passengers per hour is closer to the peer average (Figure 77).

Figure 74: Fixed Route Passengers per Hour

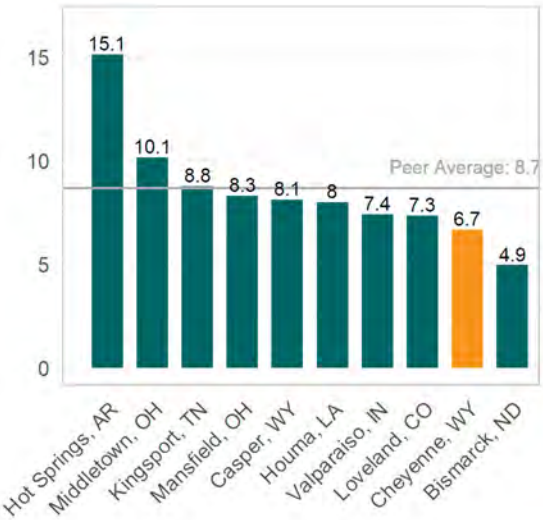
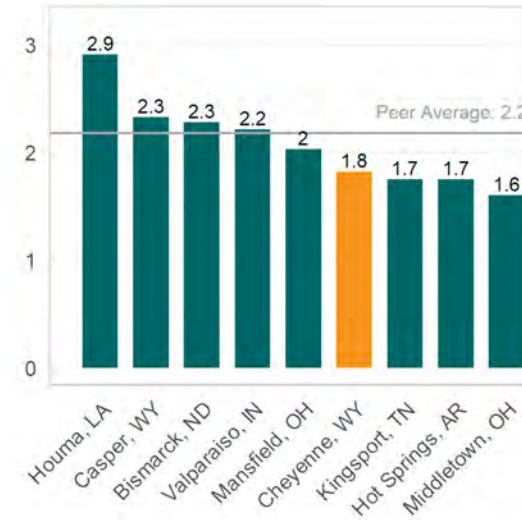


Figure 75: Demand Response Passengers per Hour



CTP's Farebox Recovery Ratio is similar to peers for both its fixed route and demand-response services (Figure 76 and Figure 77).

Figure 76: Fixed Route Farebox Recovery Ratio

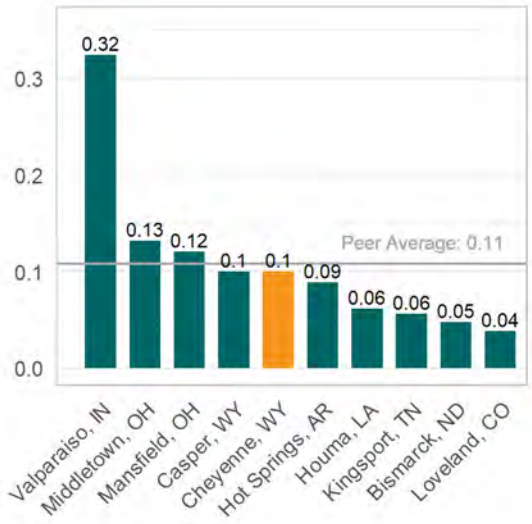
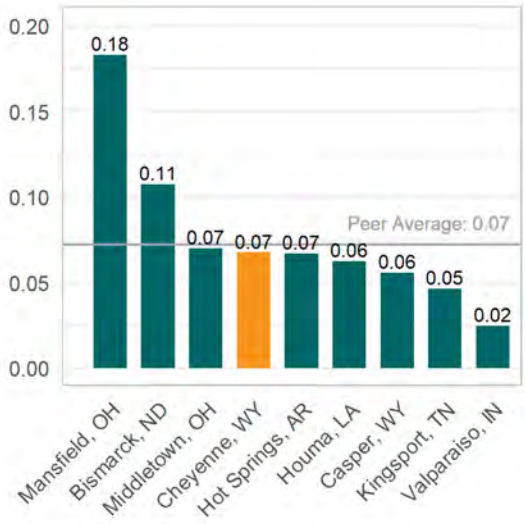


Figure 77: Demand Response Farebox Recovery Ratio



EXISTING SERVICE STANDARDS

The 2013 Five Year Transit Development Plan recommended several select performance and safety standards. These are reviewed here with a summary of the most recent performance.

Service Performance Standards

Farebox Recovery

The recommended farebox recovery ratio was 15 percent for fixed-route service and eight percent for curb-to-curb/demand-response service. The most recent data show the farebox recovery for fixed-route service was about 10 percent and about seven percent for demand-response service, both below the recommended standard.

Productivity

The recommended productivity standard for fixed-route service was 12.0 passengers per revenue hour and 3.0 passengers per revenue hour for demand-response service. Data for 2019 indicated productivity levels of about 6.7 passengers per revenue hour for fixed-route service and 1.8 passengers per revenue hour for demand-response service. Both services were well below the recommended standard. This may indicate a need for a different model of service delivery or a review of the standards.

Service Efficiency

The 2013 plan recommended that operating costs should not exceed the Consumer Price Increase (CPI) for the region. This standard likely meant that annual cost increases should not exceed the regional CPI. This measure has not been tracked.

On-Time Performance

The recommended on-time performance standard was that 95 percent of all vehicle-trips are completed on time. From December 2019 – February 2020, the only time period for which there is on-time performance data, the Downtown route was the only route to meet this standard. Table 24 shows on-time performance by route. This data is the average of stop on-time performance, as trip-level data is not available.

Table 24: On-Time Performance

Route	On-Time Performance Average
Downtown	95.1%
East	94.3%
Northeast	88.7%
Northwest	82.7%
South	91.1%
West	81.6%
Average	88.5%

Note: Based on data from December 2019 – February 2020.

Safety Standards

Accident Rate

The recommended standard for accidents was to have no more than one accident per 100,000 miles of service. No recommendation was provided for the type of accidents to be tracked. It may be assumed that the tracking and reporting should be the same as that required for the National Transit Database.

Incident Rate

The recommend standard for incidents was to have no more than one incident per 100,000 miles of service. However, no definition of the incidents to be tracked was provided in the plan.

Workers' Compensation Claims

The recommended standard for Workers' Compensation Insurance claims was less than 2.5 claims per 100,000 hours worked.

Maintenance Standards

Road Calls

The recommended standard for road calls was to be 10,000 miles or more between road calls.

Preventive Maintenance

The 2013 plan recommended that the standard should be completion of all vehicle preventive maintenance within ten percent of the schedule mileage.

INVENTORY OF EXISTING AMENITIES

Bus Stops

The CTP system comprises 148 total stops, including the Downtown Transfer Station. Each route has between 22 and 27 stops, of which less than half include a bus shelter (see photos of stops like these in Figure 78). Of the total transit network stops, 43 percent are sheltered (see photos of stops like these in Figure 79). The Northwest route has the highest proportion of sheltered stops, while the Northeast route has the lowest (see Table 25).

Bus stops with shelters have a locked trash can attached to each shelter. Each shelter also has an ADA landing pad, which were constructed with American Recovery and Reinvestment Act (ARRA) funds and approved by the FTA. Bike racks are not included in any of CTP's bus stops. While CTP does not install benches at a stop without a shelter, the City of Cheyenne contracts with a company called Creative Outdoor Advertising to place benches throughout the city and at some CTP bus stops.

Table 25: Share of CTP Stops with Shelters

Route	Stops with shelter / trash can / ADA landing pad	Stops with bike rack	Total stops	Share with shelter / trash can / ADA landing pad	Share with bike racks
Downtown	9	0	22	41%	0%
East	10	0	23	43%	0%
Northeast	9	0	26	35%	0%
Northwest	12	0	25	48%	0%
South	10	0	24	42%	0%
West	12	0	27	44%	0%
Total	**63**	**0**	**148**	**43%**	**0%**

Source: Cheyenne Transit Program

Figure 78: Examples of Bus Stops Without Shelters in Cheyenne

Figure 79: Examples of Sheltered Bus Stops Across Cheyenne

Downtown Transfer Station

All six CTP routes converge at the Downtown Transfer Station located at 17th Street and Carey Avenue (Figure 80). The station is located on the northeast corner of the Cheyenne Municipal Parking Garage. It includes restrooms for passengers and drivers and the CTP driver office. The entire block of 17th Street adjacent to the transfer station consists of designated bus boarding areas, which offer covered and uncovered seating for passengers.

Figure 80: Downtown Transfer Station

Source: Google Maps, left

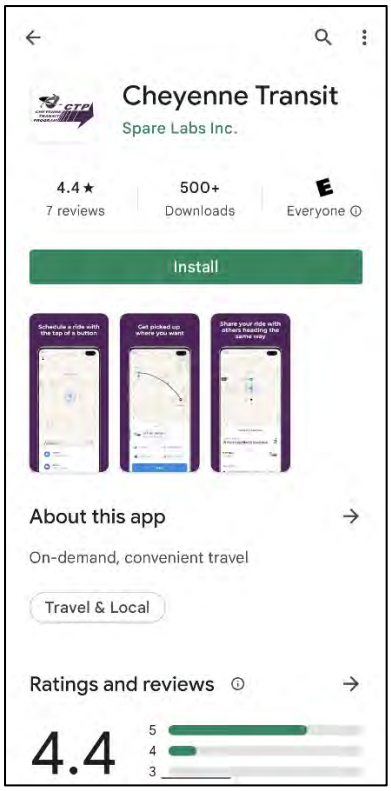
Transit Technology

CTP contracts with Spare Labs to manage paratransit and microtransit services. The company provides the ride matching software platform for the services, which includes the app (Figure 81) and the onboard interface for drivers to know who to pick up and where.

For fixed-route service operations, CTP contracts with Ride Systems, a platform that shows passengers the real-time locations of buses, route schedules, and stop announcements. It also includes an administrative portal that allows dispatchers to assign buses to routes for the day, see real-time locations of fixed-route and paratransit vehicles, and run reports on attributes such as passenger counts. CTP has continued the contract with Ride Systems despite not using the software since pausing fixed-route operations. Ride Systems has since merged with TransLoc.

CTP uses REI (Radio Engineering Ind.) video-surveillance equipment and some Seon cameras on newer vehicles to record activity on buses. All cameras have removable hard drives that record while the vehicle is turned on. When a crash or incident occurs, CTP removes hard drives to review video footage and replaces them with a spare.

Figure 81: Spare Labs Android App



CTP uses a vehicle inspections and maintenance program called Whip Around to monitor the condition of the fleet. Drivers use the software, either through a phone app or web interface, to complete a pre-trip inspection that documents the condition of the bus at the beginning of each shift. The inspection asks operators to verify the working status of vehicle parts and photograph the sides of the vehicle. At the end of the day, drivers complete another post-trip inspection to note any issues with the vehicle. When they note issues such as a headlight being out or the lift not working, Whip Around automatically creates a work order. This platform creates a simple system for CTP to track maintenance needs and the condition of the vehicle fleet.

CAPITAL INVENTORY

Vehicle Fleet

CTP owns and maintains 23 vehicles, most of which are mid-size 12-20 passenger cutaways (as seen in Table 26 and Figure 82). The largest transit vehicle carries 27 passengers. CTP also owns a pickup truck with a plow for facility maintenance. Vehicles are, on average, 8.3 years old. CTP staff plan to replace 17 of the vehicles within the next four years using mainly Federal Transit Administration funds and some funds from the City of Cheyenne.

Table 26: Vehicle Fleet by Age and Replacement Year

Vehicle	Vehicle Year	Age	Replacement Year
Chevy Eldorado AeroTech	2006	16	2023
Ford Goshen GCII	2009	13	2022
Ford Goshen GCII	2009	13	2022
Ford Goshen GCII	2010	12	2022
Ford Eldorado AeroTech Bus	2011	11	2022
Ford Eldorado AeroTech Bus	2011	11	2023
Ford Eldorado AeroTech Bus	2011	11	2022
3/4 Ton Pickup with Snow Plow - 9172	2011	11	2024
Ford Eldorado AeroTech Bus	2012	10	2022
Ford Starcraft Allstar XL Bus - 9173	2013	9	2023
Ford Starcraft Allstar XL Bus - 9174	2013	9	2023
Dodge Cargo Van	2013	9	n/a
Chevy Glaval Titan II Bus - 9175	2015	7	2024
Chevy Glaval Titan II Bus - 9176	2015	7	2024
Chevy Elkhart ECII - 9178	2016	6	2025
Chevy Elkhart ECII - 9179	2016	6	2025
Chevy Elkhart ECII - 9180	2016	6	2026
Chevy Elkhart ECII - 9181	2016	6	2026
Chevy Starcraft AllStar27 - 9182	2018	4	n/a
Chevy Starcraft AllStar27 - 9183	2018	4	n/a
Chevy Starcraft AllStar22 - 9184	2018	4	n/a
Chevy Starcraft AllStar27 - 9185	2018	4	n/a
Ford Transit Van	2020	2	n/a

Source: Cheyenne Transit Program

CTP is not currently pursuing fleet electrification, given the current lack of electric versions of the midsize buses in use. However, as reliable, proven models enter the market within the next five to 10 years, this may be an option.

Figure 82: CTP Vehicle Fleet Inside CTP Bus Garage

Facilities

Cheyenne Transit Bus Garage/Storage and Operations Facility

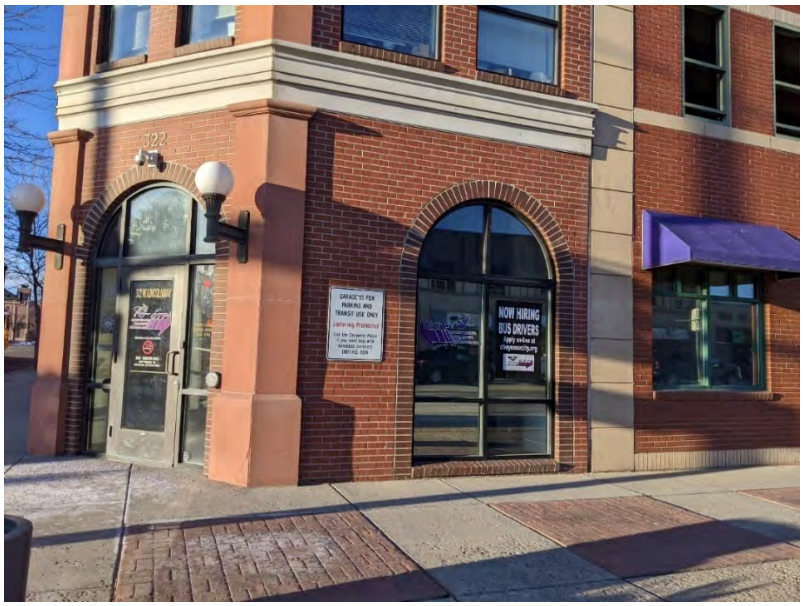
CTP's storage, operations, and maintenance facility is located at 2617 Old Happy Jack Road (Figure 83). The building stores the vehicle fleet. Fleet maintenance is in the building to the west of the garage.

Figure 83: CTP Bus Garage

Cheyenne Transit Program Office

The Cheyenne Transit Program Office is located on the southwest corner of the Cheyenne Municipal Parking Garage (opposite the Downtown Transfer Station) on Lincolnway and Pioneer Avenue. This office hosts the administrative activities and CTP staff offices (Figure 84).

Figure 84: Current Cheyenne Transit Program Office



Due to size constraints of the space in the garage, CTP purchased a different site using FTA funds. The building is a former Union Pacific Railroad facility located at 1800 Westland Road, which is closer to the maintenance facility and will provide additional space (Figure 85).

Figure 85: Future CTP Office

Chapter 6

EVALUATION OF NEEDED CHANGES OR EXPANSION IN SERVICES & AMENITIES

INTRODUCTION

This chapter examines potential for transit service within Cheyenne. This is done through fixed-route, ADA, and demand-response modeling techniques. Spatial analysis is also used to examine where there may be gaps in CTP's service.

TRANSIT NEEDS AND DEMAND ANALYSIS

A key step in developing and evaluating transit plans is a careful analysis of the mobility needs of various segments of the population and potential transit riders. There are several factors that affect demand, not all of which can be forecast. This chapter presents an analysis of the demand for transit services in the study area based upon standard estimation techniques. One of these methodologies is taken from *TCRP Report 161: Methods for Forecasting Demand and Quantifying Need for Rural Passenger Transportation*[1] and provides a tool to estimate potential demand. All of the estimates use the demographic and community conditions data discussed in Chapter III of this report. These methodologies are standard approaches to estimate transit needs and demand.

The transit demand identified in this chapter will be used with information obtained through surveys to identify and evaluate various transit service options. Demand estimation is an important task in developing any transportation plan, and the following models and formulas were used to quantify transit needs and demand in the study area:

- Mobility Gap Analysis
- Greatest Transit Needs Index
- Fixed-Route Demand Model (2019)
- Latent Fixed-Route Demand Model
- ADA Demand
- General Public Demand-Response Model

Data were taken from the 2015-2019 U.S. Census American Community Survey (2019 ACS) five-year estimates for all population groups. Each of these approaches helps to show the patterns that are likely to arise regarding transit needs within the study area. Estimating demand for transit services is not an exact science and therefore must be carefully evaluated.

[1] National Academies of Sciences, Engineering, and Medicine 2013. *Methods for Forecasting Demand and Quantifying Need for Rural Passenger Transportation.* Washington, DC: The National Academics Press. http://doi.org/10.17226/22618.

Mobility Gap Need

The mobility gap methodology is used to identify the amount of service required to provide equal mobility to households that have access to vehicles and those that do not. The National Household Travel Survey (NHTS)[2] provides data that allow for calculations to be made relating to trip rates. Separate trip rates are generated for various regions throughout the United States to help account for locational inequities. Trip rates are also separated by general density and other factors such as age. This methodology was updated using the most recent NHTS data available (2017).

Wyoming is part of Division Eight, the Mountain Region. The trip rate for zero-vehicle households in the Mountain Region was determined to be 3.9 daily trips. For households with at least one vehicle, the trip rate was 5.1 daily trips. The mobility gap is calculated by subtracting the daily trip rate of zero-vehicle households from the daily trip rate of households with at least one vehicle. Thus, the mobility gap is represented as 1.2 household trips per day. This mobility gap is lower than the national average of 1.4.

To calculate the transit need for each census block group in the study area, the number of zero-vehicle households is multiplied by the mobility gap number. Table 27 shows this information broken out by block group. In total, 2,425 daily trips need to be provided by transit to make up for the gap in mobility. Assuming these trips happen on weekdays rather than weekends, this calculates to an annual transit need of 606,300 trips.

However, this methodology comes from TCRP Report 161, which explains that mobility gaps are typically much higher than the number of trips actually provided by transit. They estimate that about 20 percent of these trips will be filled by transit, which comes out to 121,260 trips. The full results are available in Appendix E.

Table 27: Mobility Gap Transit Need

Census Tract	Census Block Group	Total Households	Zero-Vehicle Households	Mobility Gap	Transit Need (Daily Trips)
2	2	678	104	1.2	125
3	2	1,069	96	1.2	115
6	3	876	95	1.2	114
7	1	785	382	1.2	458
13	2	984	201	1.2	241
15.02	3	947	139	1.2	167
	Totals	39,683	**2,021**	**1.2**	**2,425**
				Annual Demand (by Weekdays):	**606,300**
				20 Percent of Annual Demand:	**121,260**

Source: US Census Bureau, American Community Survey 2019, LSC 2022

[2] U.S. Department of Transportation, Federal Highway Administration, 2017 National Household Travel Survey. http://nhts.ornl.gov

Greatest Transit Needs Index

The "greatest transit need" is defined as those areas in the study area with the highest density of zero-vehicle households, older adults, people with ambulatory disabilities, and low-income populations. This information will be used in the development of service options and the identification of appropriate service constraints.

The U.S. Census Bureau's American Community Survey (ACS) data were used to calculate the greatest transit need. The categories used for calculation were zero-vehicle households, older adult population, ambulatory disability population, and low-income population.

Using these categories, LSC developed a transit need index to determine the greatest transit need. The density of the population for each U.S. Census block group within each category was calculated, placed in numerical order, and divided into four segments. Four segments were chosen to reflect a reasonable range, with each segment containing an approximately equal number of U.S. Census block groups to provide equal representation. Census block groups in the segment with the lowest densities were given a score of one, the next lowest densities a score of two, and so on, with the highest score of four.

This scoring was repeated for each of the categories (zero-vehicle households, older adult population, ambulatory disability population, and low-income population). After each of the census block groups was scored for the four categories, all of the scores were added to achieve an overall score. The scores range from four (lowest need) to 16 (highest need). As shown in Figure 86, the greatest transit needs are to the east of Cheyenne's downtown. Table 28 shows the scores for each individual measure in the top-scoring block groups. The full results are available in Appendix E.

Figure 86: Greatest Transit Needs Index

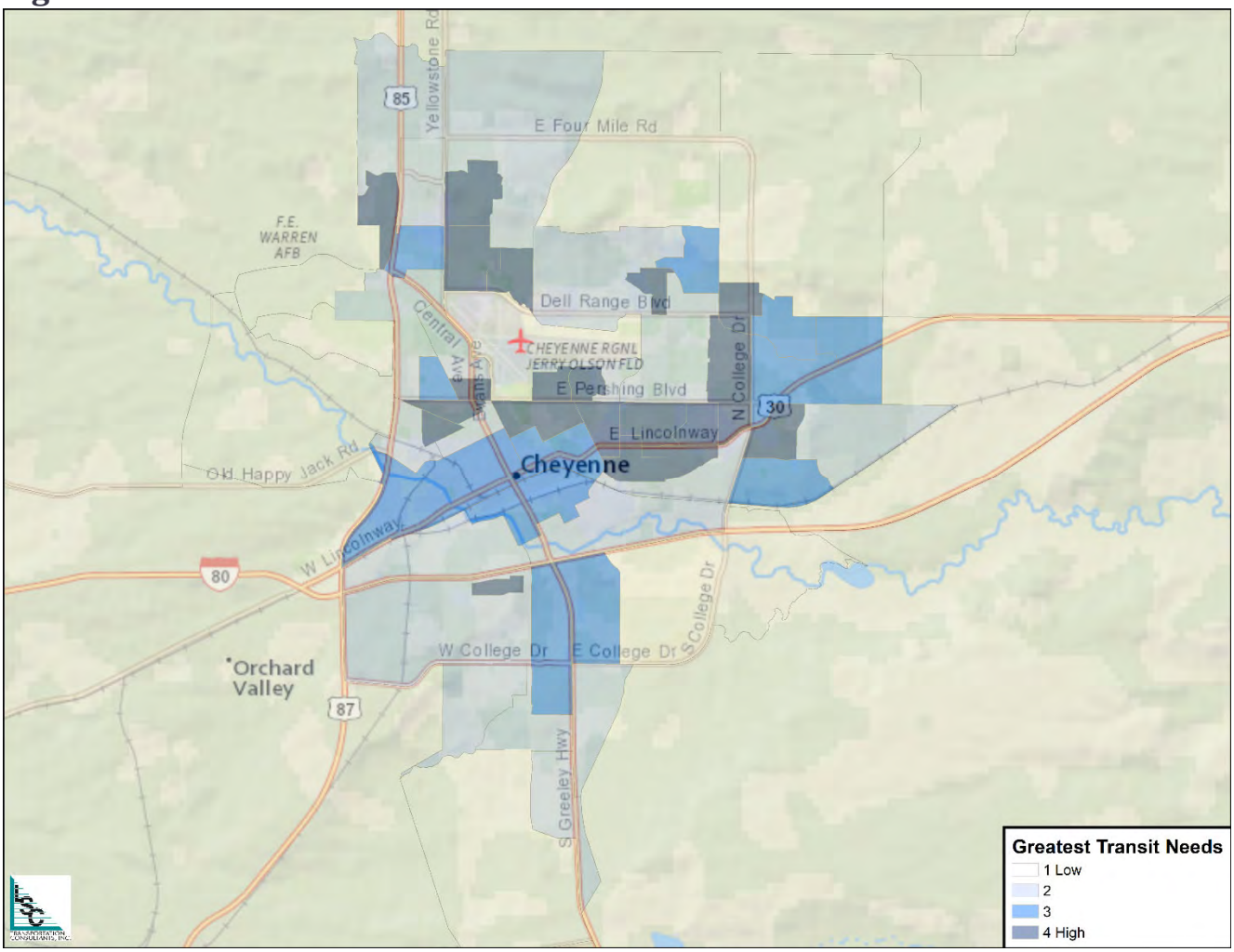


Table 28: Greatest Transit Needs Index

Census Tract	Census Block Group	Total Population	Land Area (sq. miles)	Total Households	Zero-Vehicle Households			Older Adult Population (65 and Over)			Ambulatory Disabled Population			Low-Income Population			Overall Score	Final
					#	Density	Rank	#	Density	Rank	#	Density	Rank	#	Density	Rank	(4-16)	(1-4)
3	1	961	0.1	363	9	89	2	136	1,342	4	132	1,305	4	146	1,438	4	14	4
5.01	4	2,517	0.3	1,022	32	102	2	483	1,537	4	417	1,328	4	151	481	3	13	4
6	1	1,892	0.4	771	73	179	2	407	997	4	262	642	3	206	504	3	12	4
	2	999	0.3	448	0	0	1	156	610	3	138	542	3	109	425	3	10	4
	3	1,836	0.3	876	95	299	4	391	1,229	4	254	799	3	200	627	3	14	4
	4	1,242	0.2	582	0	0	1	146	612	3	172	721	3	135	566	3	10	4
7	2	1,248	0.3	580	34	102	2	180	540	3	205	615	3	254	762	4	12	4
8	2	752	0.2	353	19	123	2	120	778	3	95	615	3	56	360	2	10	4
	3	626	0.1	263	5	35	1	119	827	4	79	548	3	46	321	2	10	4
9	3	794	0.1	307	31	290	3	82	766	3	89	828	3	58	543	3	12	4
10	2	1,076	0.1	487	0	0	1	94	630	3	147	986	4	52	349	2	10	4
	3	915	0.1	327	0	0	1	73	678	3	125	1,161	4	44	411	2	10	4
12	2	1,295	0.3	527	0	0	1	334	1,046	4	223	698	3	68	212	2	10	4
13	1	2,061	0.4	836	0	0	1	377	910	4	339	817	3	99	240	2	10	4
	2	1,599	0.4	984	201	489	4	428	1,040	4	263	639	3	77	188	2	13	4
	3	1,164	0.3	530	16	61	1	258	984	4	191	729	3	56	214	2	10	4
14.01	3	1,458	0.2	608	31	200	3	149	962	4	196	1,268	4	102	658	3	14	4
15.01	3	1,247	0.2	639	69	283	3	188	771	3	109	447	2	65	267	2	10	4
15.02	2	2,316	0.6	972	26	45	1	385	664	3	388	669	3	357	615	3	10	4

Fixed-Route Demand Model (2019)

To evaluate potential changes to CTP's fixed-route service, LSC created a fixed-route demand model based on household vehicle ownership, average walking distance to bus stops, and frequency of service. The basic approach is described in the paper *Demand Estimating Model for Transit Route and System Planning in Small Urban Areas, Transportation Research Board, 730, 1979*. While this is an older paper, it continues to serve as a good methodology to estimate transit demand in small urban areas.

In developing service options, the size and demand density of each block group must be considered. The percentage of households with transit access was determined by the number of households within a quarter-mile of bus stops. Census block groups located entirely within a quarter-mile show 100 percent transit access. The fixed-route demand model reflects the 2019 ACS data for Cheyenne and was calibrated to the 2019 CTP ridership data.

As shown in Table 29, the model generated 503 daily trips and approximately 126,000 linked annual trips. Since the Downtown Transfer Station accounts for a significant amount of ridership on each route, an additional number of transfers was estimated and added to the linked trips to approximate unlinked trips. The full results are available in Appendix E.

Table 29: Fixed-Route Demand

Census Tract	Census Block Group	Total Households	Number of Households With: 0 Auto	Number of Households With: 1 Auto	Percent of Households with Transit Access	Households Served by Transit: 0 Auto	Households Served by Transit: 1 Auto	Daily Transit Trips: 0 Auto	Daily Transit Trips: 1 Auto	Daily Number of Trips
2	2	678	104	334	85%	88	284	13	11	23
4.02	2	1,008	34	364	100%	34	363	5	14	19
	3	1,018	41	501	87%	36	436	5	16	21
5.01	4	1,022	32	331	99%	32	328	5	12	17
6	1	771	73	206	97%	71	200	10	7	18
	3	876	95	284	100%	95	284	14	11	24
7	1	785	382	199	89%	338	176	49	7	56
	2	580	34	322	100%	34	322	5	12	17
	3	661	39	336	98%	38	329	6	12	18
12	3	496	29	312	97%	28	304	4	11	15
13	2	984	201	512	94%	188	479	27	18	45
14.02	2	749	68	320	71%	49	228	7	9	16
15.01	3	639	69	269	96%	66	258	10	10	19
15.02	2	972	26	442	95%	25	419	4	16	19
	3	947	139	434	58%	81	254	12	9	21
					Estimated Daily Ridership:					**503**
					Estimated Annual Linked Ridership:					**126,339**
					Transfers					**37,902**
					Estimated Annual Unlinked Ridership:					**164,241**

Source: U.S. Census Bureau, American Community Survey, 2014-2019 Five Year Estimates, LSC 2022

Latent Fixed-Route Demand Model

The Fixed-Route Demand Model above was adjusted to envision a scenario in which every household in Cheyenne had access to transit with 30-minute headways to estimate latent demand for transit. Other assumptions were held the same. Table 30 shows the estimated ridership in this model for the top block groups and the total for the region. The model generated nearly 1,500 daily trips and over 350,000 linked annual trips. Transfers were again added since the Downtown Transfer Station accounts for a significant amount of ridership on each route. The full results are available in Appendix E.

Table 30: Potential Fixed-Route Demand

Census Tract	Census Block Group	Total Households	Number of Household With:		Percent of Households with Transit Access	Number of Households Served by Transit		Daily Transit Trips		Daily Number of Trips
			0 Auto	1 Auto		0 Auto	1 Auto	0 Auto	1 Auto	
2	2	678	104	334	100%	104	334	35	22	57
	3	870	10	255	100%	10	255	3	17	20
3	2	1,069	96	299	100%	96	299	32	20	52
4.02	1	487	12	287	100%	12	287	4	19	23
	2	1,008	34	364	100%	34	364	11	24	36
	3	1,018	41	501	100%	41	501	14	33	47
5.01	4	1,022	32	331	100%	32	331	11	22	33
6	1	771	73	206	100%	73	206	25	14	38
	3	876	95	284	100%	95	284	32	19	51
7	1	785	382	199	100%	382	199	129	13	142
	2	580	34	322	100%	34	322	11	21	33
	3	661	39	336	100%	39	336	13	22	35
9	1	317	44	146	100%	44	146	15	10	25
10	4	369	31	217	100%	31	217	10	14	25
12	3	496	29	312	100%	29	312	10	21	30
13	2	984	201	512	100%	201	512	68	34	102
14.02	2	749	68	320	100%	68	320	23	21	44
15.01	3	639	69	269	100%	69	269	23	18	41
15.02	2	972	26	442	100%	26	442	9	29	38
	3	947	139	434	100%	139	434	47	29	76
20	1	1,465	30	326	100%	30	326	10	22	32
					Estimated Daily Ridership:					**1,426**
					Estimated Annual Linked Ridership:					**357,859**
					Transfers					**107,358**
					Estimated Annual Unlinked Ridership:					**465,217**

Source: U.S. Census Bureau, American Community Survey, 2014-2019 Five Year Estimates, LSC 2022

Demand for ADA Trips

The Transit Cooperative Research Program (TCRP) has also published guidelines for estimating ADA/paratransit ridership demand in the report *Improving ADA Complementary Paratransit Demand Estimation*.[3] The tool estimates the total ridership using the service area population, base fare for ADA/paratransit rides, conditional trip determination status, percent of the population below the poverty line, and the effective on-time window for ADA paratransit trips. This tool predicts annual ADA ridership of 28,300, which is 0.44 riders per capita in Cheyenne.

Table 31: TCRP Report #119 ADA Demand Estimation

	Results
Predicted Annual Ridership per Capita	0.44
Predicted Annual Ridership	28,382

General Public Demand-Response Model

Most fixed-route ridership estimates are based on 2019, the last time that the fixed-route service was running. To get a better understanding of current ridership demand, the existing demand-response ridership from January 2021 until May 2021 was aggregated by pick-up location to existing block groups. This was then used to estimate what the total demand would be for one year. Table 32 shows the block groups with the highest estimated ridership demand. The total demand for one year is estimated to be just over 57,000 trips. The full results are available in Appendix E.

[3] National Academies of Sciences, Engineering, and Medicine 2007. *Improving ADA Complementary Paratransit Demand Estimation*. Washington, DC: The National Academies Press. https://doi.org/10.17226/23146.

Table 32: Demand Response Ridership			
Census Tract	Census Block Group	Ridership Demand (Jan 2021 - May 2021)	Est. Annual Ridership Demand
2	3	507	1,217
3	2	662	1,589
4.02	1	848	2,035
	3	625	1,500
5.01	2	424	1,018
	4	425	1,020
6	1	429	1,030
	2	474	1,138
	3	425	1,020
	4	442	1,061
7	1	6,395	15,348
	3	1,045	2,508
13	2	888	2,131
14.01	3	443	1,063
14.02	2	3,146	7,550
15.01	3	439	1,054
15.02	2	474	1,138
	3	760	1,824
		Total	**57,055**

FIRST AND LAST MILE GAP ANALYSIS

Gaps in CTP Service

The recent *Connect 2045: Cheyenne Area Transportation Master Plan* completed in 2020 identified several geographic areas in which the Cheyenne Transportation Program could bolster bus service. The public indicated through comments to the planning team that CTP could improve transit service downtown; around Laramie County Community College; around the shopping area at Dell Range Boulevard and Ridge Road; and around the area with the Cheyenne Country Club, Cheyenne Aquatic Center, and Cheyenne Botanic Gardens.

The plan recommended expanding route coverage in areas with significant forecasted population and employment growth such as southwest, southeast, and east Cheyenne. Noted service gaps include the northwest corner of the city, which has a high concentration of older adults (a growing share of the city's residents), and lack of connection to major employers such as the Walmart Distribution Center, Crete Carrier Corporation, Sierra Trading Post, Echostar, and Magpul Industries.

The Connect 2045 plan also suggested an interregional transit route that would circle the periphery of the city to connect riders to current routes without needing to travel downtown to transfer. This indicates that some current riders traveling across the city take the closest route, then transfer at the

Downtown Transfer Station to another route. There may be an opportunity for microtransit to offer additional connectivity once CTP resumes fixed-route service. Continuing the curb-to-curb service as an option for all Cheyenne residents may offer a first- and last-mile solution for the fixed-route system. It could connect more riders on the Cheyenne periphery to fixed-route service and shorten trips that are geographically close but would take longer on the fixed-route bus system.

Bicycle and Pedestrian Network

Cheyenne's bicycle and pedestrian infrastructure quality varies across the city. While sidewalks are generally present throughout downtown Cheyenne, sidewalk gaps are common in outlying neighborhoods. As discussed in the 2010 *Cheyenne Metropolitan Area Pedestrian Plan*, strengths of the pedestrian network include comfortable residential streets for people walking and rolling, grade-separated trail crossings, and pedestrian countdown signals. However, sidewalks are less comfortable along high-volume roadways, and the pedestrian network includes difficult crossings and discontinuous sidewalks.

A major asset of Cheyenne's bicycle and pedestrian network is the Greater Cheyenne Greenway, a 10-foot-wide multiuse path that meanders around the city through the park system. It offers a safe and accessible recreation corridor for people walking and biking. The Greenway consists of over 40 miles of paths and continues to expand as Cheyenne completes pathway system gaps.

Aside from the Greenway and other shared-use trails, Cheyenne's on-street bike infrastructure is limited. Certain roads throughout the city are marked for shared use with people biking. The 2012 *Cheyenne Area On-Street Bicycle Plan and Greenway Plan* proposed a future bikeway network for the city and included a list of specific bicycle infrastructure projects including greenways, bike lanes, buffered bike lanes, shared lanes, bicycle boulevards, and shoulder bikeways.

As Cheyenne continues to design and construct new bicycle and pedestrian infrastructure throughout the city, special attention should be given to connecting active transportation facilities to the CTP fixed-route transit network. Filling these gaps will make it easier for residents to not only move around their own neighborhoods but also to reach bus stops, and thus access the entire city. The following sections will examine specific gaps in the pedestrian and bicycle network as they relate to the transit network.

CTP Connectivity to Pedestrian Facilities

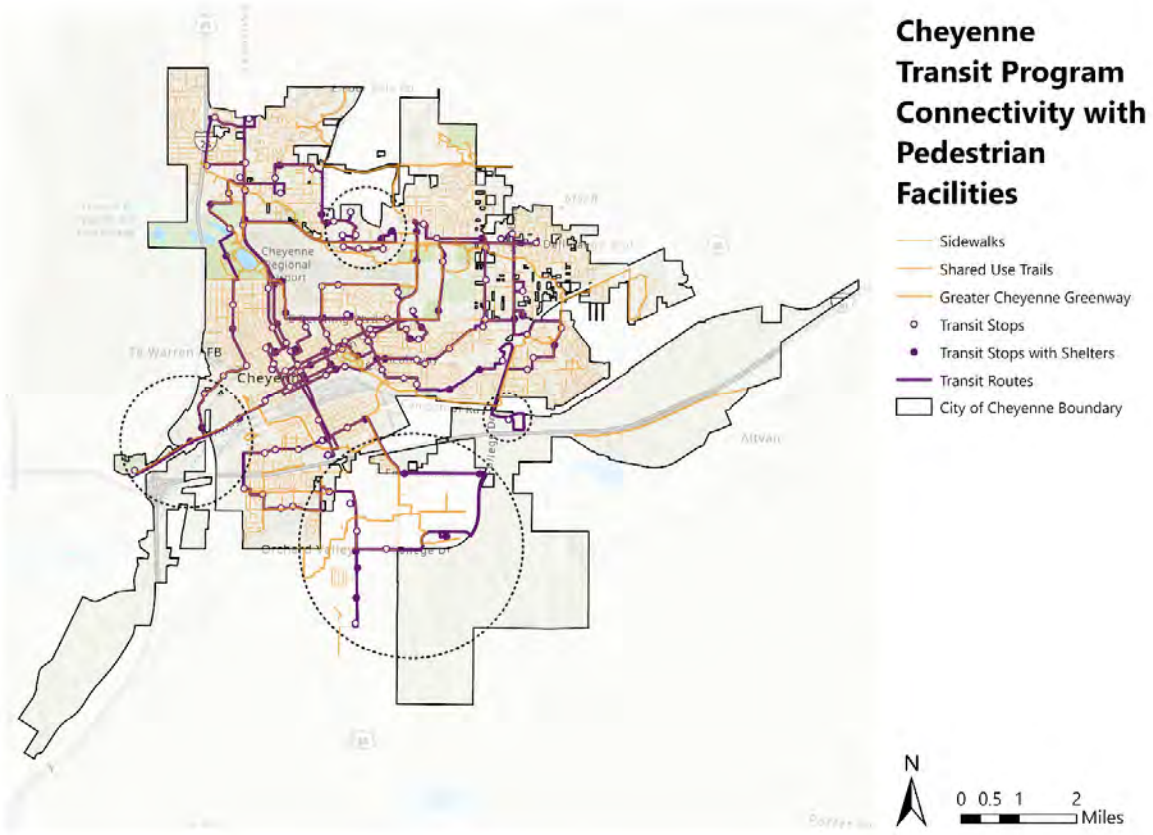
As seen in Figure 87, areas with poor sidewalk connectivity (shown as dashed line circles) include the following:

- Neighborhoods in South Greeley along the southeast portion of the South route
- The south portion of the East route by the Walmart
- Around the Frontier Mall, Lowes, and Walmart on the Northwest route
- The shopping area along the west side of the West route

Notably, three of these areas are commercial shopping areas with large-scale retailers, generally designed to be car accessible. Improving pedestrian facilities in the parking lots around these stores and creating pathways between stores could enable transit users to walk between stores rather than having to re-board the bus.

The neighborhoods along the southeast portion of the South route are predominantly lower-income mobile-home communities. Building out sidewalks in these neighborhoods could improve accessibility in South Cheyenne and better connect residents to downtown.

Figure 87: CTP Connectivity to Pedestrian Facilities



CTP Connectivity to Bicycle Facilities

As seen in Figure 88 areas with poor bicycle connectivity (shown as dashed line circles) include the following:

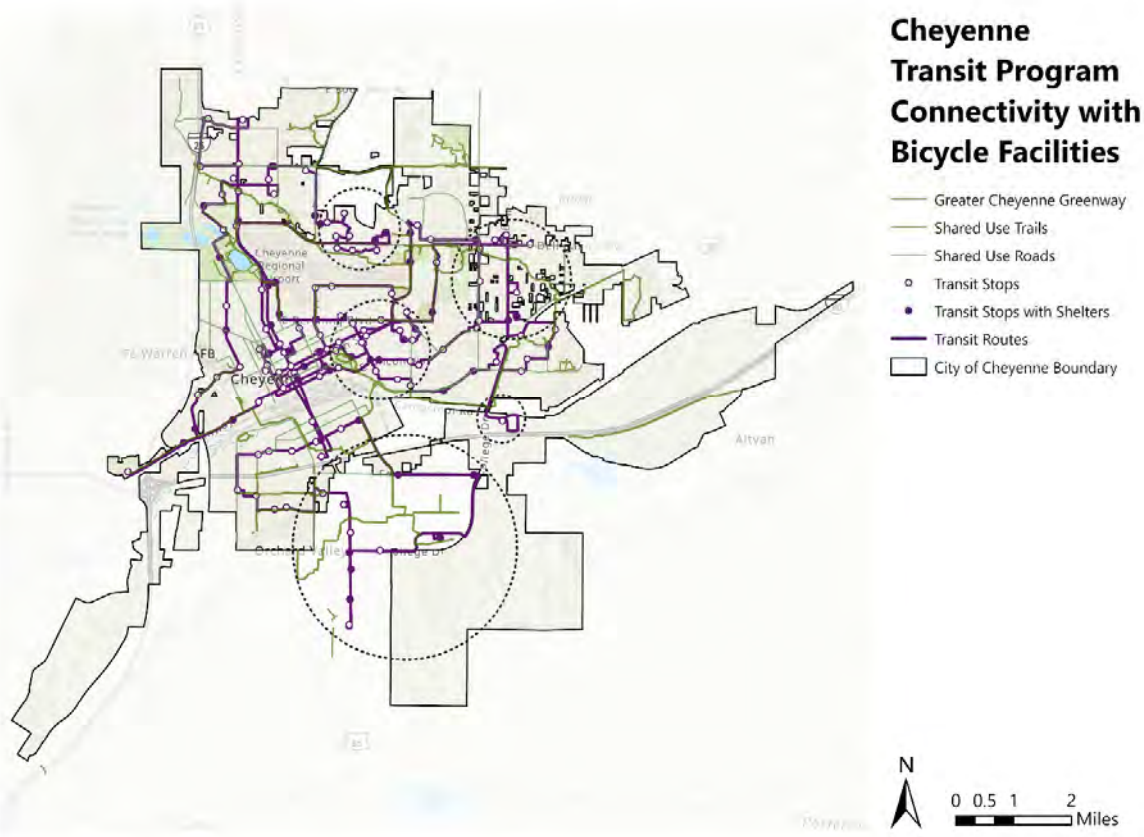
- Northeast of Holliday Park
- Neighborhoods in South Greeley along the southeast portion of the South route
- The south portion of the East route by the Walmart
- Around the Frontier Mall, Lowes, and Wal-Mart on the Northwest route

- Northeast Cheyenne

Similar to the pedestrian network gaps, the same three shopping areas lack bicycle facilities that connect them with the transit system and the rest of Cheyenne. Creating better bikeway linkages with the Greater Cheyenne Greenway would enable residents to bike to shopping areas from other neighborhoods or for nearby residents to bike to transit stops.

Enhancing bikeway infrastructure in the neighborhoods northeast of Holliday Park and in Northeast Cheyenne could also capture additional transit riders by providing first- and last-mile connections to the fixed-route bus network. Ultimately, establishing new sidewalks and bike facilities around transit stops improves accessibility in those areas while also increasing comfort and connectivity for users of the bus network.

Figure 88: CTP Connectivity to Bicycle Facilities



Ridesharing, Technology, and Community Partnership Opportunities

Ridesharing, technology solutions, and community partnerships may offer opportunities to reduce first-mile and last-mile transit gaps. Transportation network companies (TNCs) Uber and Lyft operate their ridesharing services in Cheyenne. When tested locally, both companies had several vehicles operating at any given time. While these services may compete with transit operations by replacing

transit trips and drawing users off transit, they also offer an opportunity to supplement transit operations.

CTP could partner with these companies to capture additional transit riders by transporting outlying residents to transit stops that they wouldn't otherwise be able to access. This partnership could take the form of subsidized Uber or Lyft fares for trips from outside of the CTP service area to transit stops. The companies would then receive more ride requests, and these trips would be shorter, which would make drivers available sooner for new requests. These companies could also show CTP as an option when users are considering transportation options in the apps. Finally, Cheyenne could request that these companies share their origin and destination data so that CTP tailor their routes to serve the locations with the most demand.

Figure 89: Bird Electric Scooters in Cheyenne

Bird, the electric scooter share company, also operates in Cheyenne (Figure 89). Cheyenne could form a similar data-sharing agreement and partnership with Bird to discount rides to CTP stops.

Other potential partnerships for CTP to pursue include the following:

- Expand service and/or offering discounted fares to local hotels, educational institutions, businesses, and major employers in exchange for funding contributions to the transit system.
- Work with the Planning Department to incentivize housing and commercial development near transit.
- Coordinate with local community groups to cross-promote and enhance the CTP brand.

Strategies to expand and enhance transit service in areas with transit gaps, complete the bicycle and pedestrian network around bus stops to improve comfort and connectivity, and work with other transportation companies and community organizations will each grow local awareness of the CTP system and increase ridership and access to destinations around Cheyenne.

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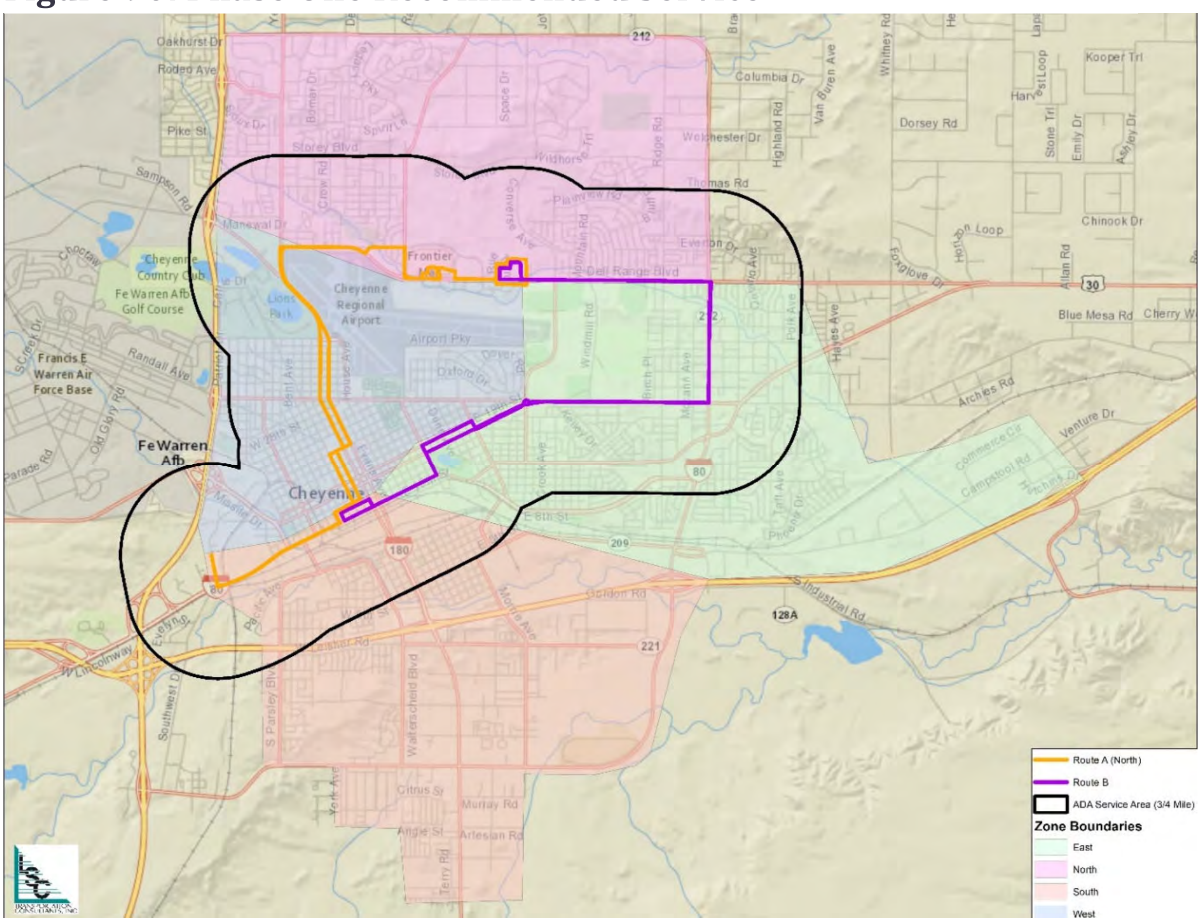
INTRODUCTION

After reviewing multiple transit service options, the various options were revised and organized into three phases. The analysis of preliminary service options, presented as Interim Report #2, is included as Appendix F. LSC presented the service scenarios for the three phases to the community and further refined each based-on community input. The proposed schedule is to implement Phase One in 2023, Phase Two in 2024, and Phase Three in 2025. Actual implementation may be adjusted based on availability of funding, vehicles, and personnel. Initial changes could be delayed or subsequent phases accelerated.

PHASE ONE SERVICE PLAN

Figure 90 shows the proposed service under Phase One. The recommended plan combines fixed-route service and microtransit, restoring fixed-route service in phases. The routes are similar to CTP's previous routes, with modifications to better service identified demand and improve operational efficiency.

Figure 90: Phase One Recommended Service



Route A (Orange) will operate from the transit facility to downtown via Lincoln Way and then to Frontier Mall using Warren and Central between downtown and Dell Range Boulevard. Route A will serve Frontier Mall and end at the north Walmart. Route B (Purple) will operate between downtown and the north Walmart via Lincoln Way, Pershing Boulevard, College Drive, and Dell Range Boulevard. Transfers will be possible between the two routes in downtown and at the north Walmart. Each route has a round-trip travel time of one hour, so service will be provided hourly in each direction.
Phase One establishes four microtransit zones that have been identified to provide coverage throughout the community. Microtransit, or real-time, on-demand service, extends coverage beyond areas served by the previous routes, reaching all of Cheyenne.

CTP will continue to provide complementary paratransit service to eligible users within three-quarters of a mile of the fixed-route system. For trips outside the complementary paratransit service area, microtransit service will fill transportation needs of all users.

Table 33 shows the operating characteristics and costs of Phase One.

Table 33: Phase One Service Plan

Service Description	Annual Rev-Hours	Annual Rev-Miles	Peak FR Vehicles	Peak On-Demand Vehicles	Annual Operating Cost	Estimated Annual Passenger-Trips	Passengers per Hour	Cost per Passenger	Population within 1/4 mile	Jobs within 1/4 mile
Route A (Orange)	3,640	48,266	1	-	$ 233,168	29,705	8.2	$ 7.85	4,900	11,700
Route B (Purple)	3,640	47,065	1	-	$ 231,102	25,382	7.0	$ 9.10	6,300	4,400
North Zone	3,640	44,457	-	1	$ 226,616	6,040	1.7	$ 37.52	12,500	6,200
West Zone	3,640	44,457	-	1	$ 226,616	6,617	1.8	$ 34.25	8,600	11,700
East Zone	3,640	44,457	-	1	$ 226,616	4,213	1.2	$ 53.79	16,200	4,500
South Zone	3,640	44,457	-	1	$ 226,616	2,801	0.8	$ 80.92	13,800	6,300
Paratransit Service	3,640	36,400		1	$ 212,758	5,000	1.4	$ 42.55		
Fixed Cost					$ 793,043					
Total	21,840	309,558	2	5	$ 2,376,533	79,757	3.7	$ 29.80	11,200*	16,100*

Source: LSC 2022

PHASE TWO SERVICE PLAN

In Phase Two, CTP will add two additional routes, Route C (Blue), to serve the east Walmart and Route D (Red) to serve the area south of I-80 as shown in Figure 91. Route C will operate from downtown along Lincoln Way, on College Drive to Pershing Boulevard, serving the area east of College Drive and then to the east Walmart. This route will provide hourly service to the south side of Cheyenne, the College, and the east Walmart. The route will follow Ames Avenue and Deming Drive from downtown to East Jefferson and South Greeley. The route will then follow College Drive to the college and the east Walmart. Transfers to other routes will be possible in downtown and at the east Walmart. Each of the four fixed-routes will operate hourly service and microtransit will continue to cover the areas outside the fixed-route coverage. Complementary paratransit will be extended to the areas served by Routes C and D. Table 34 shows the operating characteristics and costs of Phase Two.

Figure 91: Phase Two Proposed Service

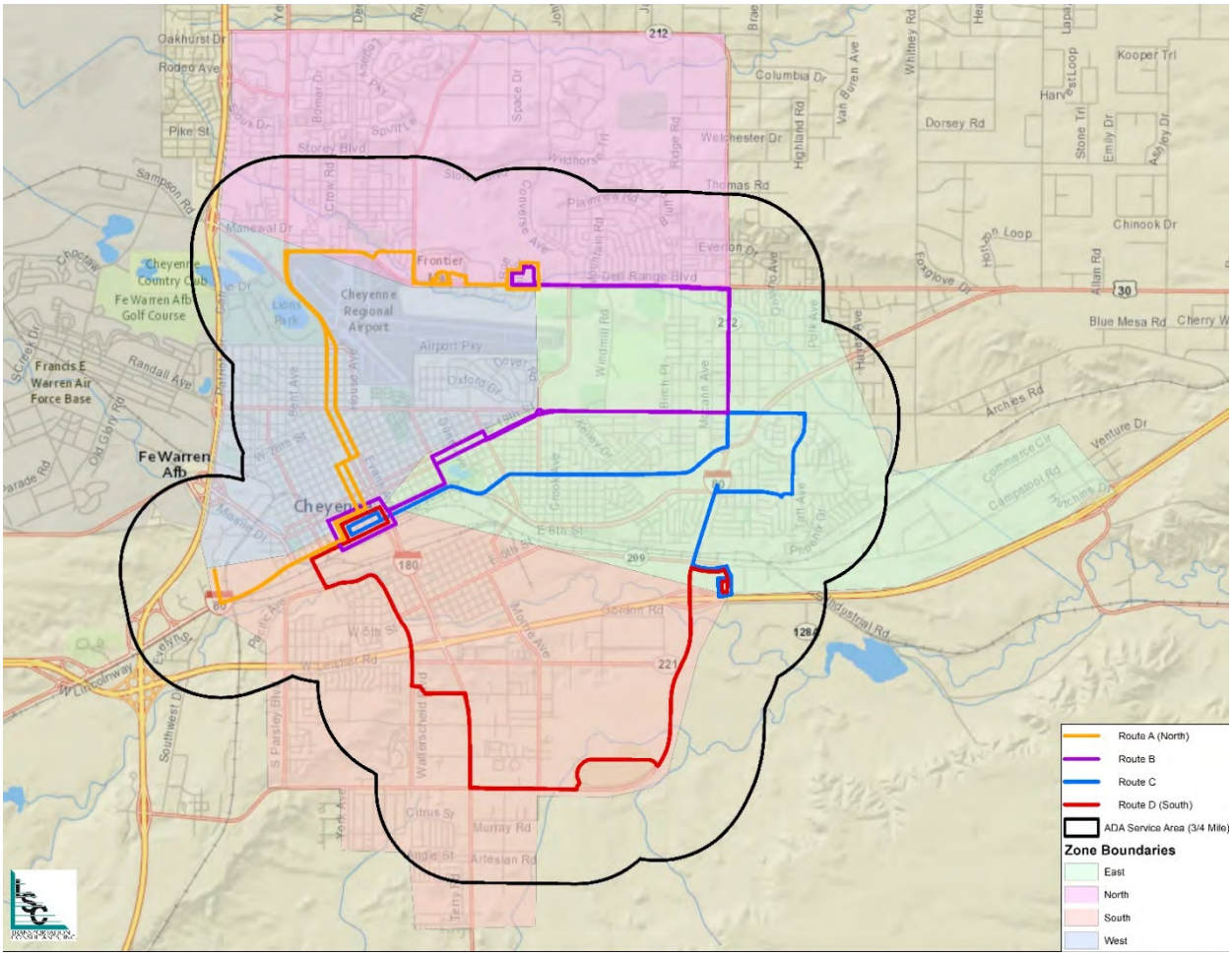


Table 34: Phase Two Service Plan

Service Description	Annual Rev-Hours	Annual Rev-Miles	Peak FR Vehicles	Peak On-Demand Vehicles	Annual Operating Cost	Estimated Annual Passenger-Trips	Passengers per Hour	Cost per Passenger	Population within 1/4 mile	Jobs within 1/4 mile
Route A (Orange)	3,640	48,266	1	-	$ 233,168	29,705	8.2	$ 7.85	4,900	11,700
Route B (Purple)	3,640	47,065	1	-	$ 231,102	25,382	7.0	$ 9.10	6,300	4,400
Route C (Blue)	3,640	53,908	1	-	$ 242,872	15,414	4.2	$ 15.76	900	2,900
Route D (Red/South)	3,640	44,457	1	-	$ 226,616	25,711	7.1	$ 8.81	7,100	4,000
North Zone	3,640	44,457	-	1	$ 226,616	6,040	1.7	$ 37.52	12,500	6,200
West Zone	3,640	44,457	-	1	$ 226,616	6,617	1.8	$ 34.25	8,600	11,700
East Zone	3,640	44,457	-	1	$ 226,616	2,528	0.7	$ 89.65	16,200	4,500
South Zone	3,640	44,457	-	1	$ 226,616	3,361	0.9	$ 67.43	13,800	6,300
Paratransit Service	7,280	72,800		2	$ 425,516	8,500	1.2	$ 50.06		
Fixed Cost					$ 793,043					
Total	29120	371,524	4	6	$ 3,058,779	123,257	4.2	$ 24.82	19,200*	23,000*

Source: LSC 2022

PHASE THREE SERVICE PLAN

Phase Three will extend service later in the evening and on Sundays. Microtransit will operate the extended service. The fixed-route service will stop at 6:00 p.m. on weekdays and will not operate on Sundays. CTP would not operate complementary paratransit service outside the service hours of the fixed-route service. The microtransit system would provide all evening and Sunday transportation. Table 35 shows the operating characteristics and costs of Phase Three.

Table 35: Phase Three Service Plan

Service Description	Annual Rev-Hours	Annual Rev-Miles	Peak FR Vehicles	Peak On-Demand Vehicles	Annual Operating Cost	Estimated Annual Passenger-Trips	Passengers per Hour	Cost per Passenger	Population within 1/4 mile	Jobs within 1/4 mile
Route A (Orange)	3,640	48,266	1	-	$ 233,168	29,705	8.2	$ 7.85	4,900	11,700
Route B (Purple)	3,640	47,065	1	-	$ 231,102	25,098	6.9	$ 9.21	6,300	4,400
Route C (Blue)	3,640	53,908	1	-	$ 242,872	15,414	4.2	$ 15.76	900	2,900
Route D (Red/South)	3,640	44,457	1	-	$ 226,616	25,711	7.1	$ 8.81	7,100	4,000
North Zone	5,012	61,213	-	1	$ 312,032	7,247	1.4	$ 43.05	12,500	6,200
West Zone	5,012	61,213	-	1	$ 312,032	7,940	1.6	$ 39.30	8,600	11,700
East Zone	5,012	61,213	-	1	$ 312,032	5,056	1.0	$ 61.72	16,200	4,500
South Zone	5,012	61,213	-	1	$ 312,032	3,921	0.8	$ 79.59	13,800	6,300
Paratransit Service	8,008	80,080	0	2	$ 468,068	8,500	1.1	$ 55.07		
Fixed Cost					$ 793,043					
Total	34,608	438,551	4	6	$ 3,442,998	128,592	3.7	$ 26.77	19,200*	23,000*

Source: LSC 2022

FUTURE ENHANCEMENTS

A future service enhancement may be to add additional vehicles on the fixed-route service to increase the frequency of service to every 30 minutes on one or more routes. This should be implemented based on future levels of demand and available funding. Performance monitoring, as described later in this chapter, should include passenger counts, productivity on individual routes, and the cost per passenger-trip for individual routes.

SERVICE PLAN SUMMARY

Table 36 presents the financial plan for the proposed operations. The recommended services will be implemented over the first seven years with service continuing in future years.

Table 36: Ten-Year Operating Financial Plan

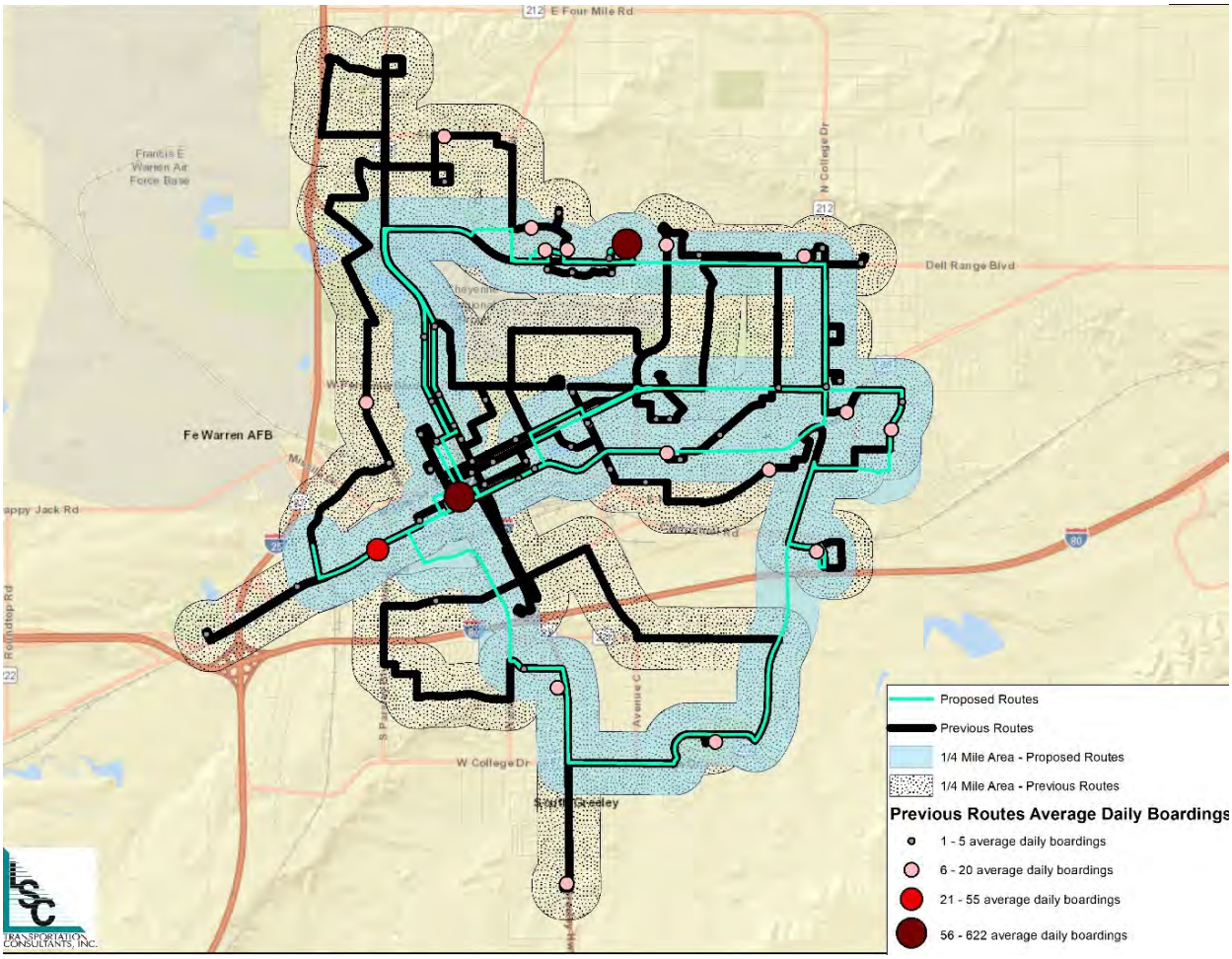
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
OPERATING EXPENSES										
Phase 1										
Fixed Costs	$793,043	$832,695	$874,330	$918,046	$963,949	$1,012,146	$1,062,753	$1,115,891	$1,171,686	$1,230,270
Fixed-Route Service (Routes A and B)	$464,270	$487,484	$511,858	$537,451	$564,323	$592,539	$622,166	$653,275	$685,938	$720,235
Microtransit Service	$906,462	$951,785	$999,374	$1,049,343	$1,101,810	$1,156,901	$1,214,746	$1,275,483	$1,339,257	$1,406,220
Complementary Paratransit Service	$212,758	$223,396	$234,566	$246,294	$258,609	$271,539	$285,116	$299,372	$314,340	$330,057
Phase 2										
Route C		$242,526	$254,652	$267,385	$280,754	$294,792	$309,531	$325,008	$341,258	$358,321
Route D		$237,947	$249,844	$262,336	$275,453	$289,226	$303,687	$318,871	$334,815	$351,556
Increased Complementary Paratransit Service		$223,396	$234,566	$246,294	$258,609	$271,539	$285,116	$299,372	$314,340	$330,057
Phase 3										
Evening and Sunday Microtransit Service			$376,688	$395,522	$415,298	$436,063	$457,866	$480,760	$504,798	$530,038
Operating Expenses Subtotal	**$2,376,533**	**$3,199,228**	**$3,735,877**	**$3,922,671**	**$4,118,805**	**$4,324,745**	**$4,540,982**	**$4,768,032**	**$5,006,433**	**$5,256,755**
OPERATING REVENUES										
Federal	$1,148,267	$1,182,714	$1,218,196	$1,254,742	$1,292,384	$1,331,156	$1,371,090	$1,412,223	$1,454,590	$1,498,227
State	$116,000	$119,480	$123,064	$126,756	$130,559	$134,476	$138,510	$142,665	$146,945	$151,354
Local/Fares	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000
General Fund	$1,032,267	$1,817,034	$2,314,617	$2,461,173	$2,615,862	$2,779,114	$2,951,382	$3,133,143	$3,324,898	$3,527,174
Operating Revenues Subtotal	**$2,376,533**	**$3,199,228**	**$3,735,877**	**$3,922,671**	**$4,118,805**	**$4,324,745**	**$4,540,982**	**$4,768,032**	**$5,006,433**	**$5,256,755**

A 50% federal share was estimated for operations.
Fare revenue is assumed to be constant
Note: Assumes a five percent annual inflation rate for expenses and three percent fo Federal and State grants.

Source: LSC, 2022.

Figure 92 shows the proposed routes compared with the previous fixed-route service. The proposed plan will restore fixed-route service to most of the areas previously served and to the vast majority of stops which had passenger activity in the past. Those few stops that will no longer be served by fixed-routes will be served by the microtransit service. Fixed-route service will be restored to about 97 percent of the passenger who previously used designated stops on the fixed-route system.

Figure 92: Comparison of Proposed Routes and Previous Routes



By combining microtransit service with the fixed-routes the overall transit service in Cheyenne will improve. Those areas with high demand will again have fixed-route service while many areas that had no service will now have microtransit service. Areas of low demand that do not support fixed-route service will have service provided on-demand. Phases One through Four expand coverage well beyond the previous fixed-route system service area with the incorporation of the microtransit service.

CAPITAL PROJECTS

Fleet

Current Fleet

The Cheyenne Transit Program owns and maintains 22 vehicles, most of which are mid-size 12-20 passenger cutaways (as seen in Chapter 5, Table 26). Their largest transit vehicle carries 27 passengers. They also recently purchased three new Ford Transit vans for microtransit and paratransit services. The fleet includes a pickup truck with plow for facility maintenance. The average age of the vehicle fleet is 7.3 years.

CTP's current plan is to replace 14 of the vehicles within the next four years using mainly Federal Transit Administration funds and some city funds. This section alters this course of action based on the service plan.

New Fleet Needs Under Service Plan

The phases of CTP's service plan, outlined previously, will continue to provide microtransit service within four zones and slowly reimplement fixed-route service, from two to four routes over the next 10 years. CTP's post-pandemic shift toward providing more microtransit service than fixed-route will alter the fleet mix from primarily body-on-chassis/cutaway vehicles to more vans for microtransit and paratransit.

One van/paratransit vehicle will serve each of the four microtransit zones, with one extra needed for paratransit and one spare. One body-on-chassis/cutaway vehicle will serve each fixed-route, with one spare needed. Table 37 shows vehicle requirements under each phase, compared to the current fleet.

Table 37: Fleet Needs

Vehicle Type		FY 2023 FY 2024 Phase 1: 2 Routes, 4 Zones	FY 2025 FY 2026 Phase 2: 3 Routes, 4 Zones	FY 2027 FY 2028 Phase 3: 4 Routes, 4 Zones	FY 2029 - FY 2032 Phase 4: 4 Routes, 4 Zones
Cutaway/body-on-chassis	In service	2	4	4	4
	Spare	1	1	1	1
Van/paratransit	In service	5	6	6	6
	Spare	1	1	1	1
Pickup/snow		1	1	1	1
TOTAL		**10**	**13**	**13**	**13**
CURRENT FLEET: 22					

As illustrated by Table 37, the current fleet is somewhat bloated compared to future fleet requirements. Fehr & Peers reviewed CTP's existing fleet, ages of vehicles, typical replacement benchmarks, and fleet needs as outlined in the service plan. Table 39 shows each vehicle in CTP's current and future fleet throughout the next 10 years (future fleet highlighted in blue cells). For each

vehicle, the table identifies the vehicle type, vehicle year, suggested plan for the vehicle, and year to enact that plan. It adds future vehicle types needed to operate service shown in Table 38.

Table 39 assumes replacement/retirement years for each vehicle based on vehicle type. For cutaways/body-on-chassis vehicles, the FTA required minimum useful life is 5 years, and the benchmark useful life is 10 years. This analysis assumes that these vehicles will be replaced after 10 years. For vans/paratransit vehicles, the FTA required minimum useful life is 4 years, and the benchmark useful life is 8 years. This analysis assumes that these vehicles will be replaced after 5 years.

This analysis recommends that CTP retire vehicles that have already passed their assumed replacement years (shown in red text in Table 39). For vans/paratransit vehicles, that includes one vehicle in the existing fleet. CTP plans to purchase three additional vans in FY 2023. For cutaways, the analysis recommends keeping the four most-recently purchased vehicles, retiring two to five vehicles, and transferring the remaining vehicles to another local transit agency (transfers shown in blue text in Table 39). Under the service plan, CTP will not need these cutaways to maintain fixed-route service, but cannot sell them. The price of cutaway vehicles has rapidly escalated in recent years, so other agencies may have a need for them.

The costs shown in Table 38 are reflected in the overall capital expenses and revenue shown in Table 26. The costs are considerable in FY 2028 due to the convergence of replacement needs. Depending on the condition of the vehicle fleet in that year, this plan recommends that if possible, CTP spread these vehicle replacements over the following years with fewer expenses to more evenly distribute costs.

Table 38: Vehicle Needs and Costs

Vehicle Type		FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Cutaway/ body-on-chassis	Quantity			1							
	Cost ($160k each)			$160,000							
Van/ paratransit	Quantity	3	1	4			3				
	Cost ($95k each)	$285,000	$95,000	$380,000			$285,000				
Pickup/ snow plow	Quantity		1								
	Cost ($80k each)		$80,000								
Cutaway/ body-on-chassis (electric)	Quantity						4				
	Cost ($250k each)						$1,000,000				
Van/ paratransit (electric)	Quantity							1	3		
	Cost ($130k each)							$130,000	$390,000		
ANNUAL COST		**$285,000**	**$175,000**	**$540,000**	**$ -**	**$ -**	**$1,285,000**	**$130,000**	**$390,000**	**$ -**	**$ -**

Table 39: Recommended Plan for Current and Future Fleet					
Fleet	Vehicle Description	Type	Vehicle Year	Plan	Plan Year
Current	Chevy Eldorado AeroTech	Cutaway/body-on-chassis	2006	Retire	2016
Current	Ford Goshen GCII	Cutaway/body-on-chassis	2009	Retire	2019
Current	Ford Eldorado AeroTech Bus - 9168	Cutaway/body-on-chassis	2011	Retire or transfer	2021
Current	Ford Eldorado AeroTech Bus - 9169	Cutaway/body-on-chassis	2011	Retire or transfer	2021
Current	Ford Eldorado AeroTech Bus - 9170	Cutaway/body-on-chassis	2011	Retire or transfer	2021
Current	Ford Starcraft Allstar XL Bus - 9173	Cutaway/body-on-chassis	2013	Transfer	2023
Current	Ford Starcraft Allstar XL Bus - 9174	Cutaway/body-on-chassis	2013	Transfer	2023
Current	3/4 Ton Pickup with Snow Plow - 9172	Pickup/snow plow	2011	Replace	2024
Current	Chevy Glaval Tital II Bus - 9175	Cutaway/body-on-chassis	2015	Transfer	2025
Current	Chevy Glaval Tital II Bus - 9176	Cutaway/body-on-chassis	2015	Transfer	2025
Current	Chevy Elkhart ECII - 9178	Cutaway/body-on-chassis	2016	Transfer	2026
Current	Chevy Elkhart ECII - 9179	Cutaway/body-on-chassis	2016	Transfer	2026
Current	Chevy Elkhart ECII - 9180	Cutaway/body-on-chassis	2016	Transfer	2026
Current	Chevy Elkhart ECII - 9181	Cutaway/body-on-chassis	2016	Transfer	2026
Current	Chevy Starcraft AllStar27 - 9182	Cutaway/body-on-chassis	2018	Replace	2028
Current	Chevy Starcraft AllStar27 - 9183	Cutaway/body-on-chassis	2018	Replace	2028
Current	Chevy Starcraft AllStar22 - 9184	Cutaway/body-on-chassis	2018	Replace	2028
Current	Chevy Starcraft AllStar27 - 9185	Cutaway/body-on-chassis	2018	Replace	2028
Current	Dodge Cargo Van	Van/paratransit	2013	Retire	2018
Current	Ford Transit Van	Van/paratransit	2020	Replace	2025
Current	Ford Transit Van	Van/paratransit	2020	Replace	2025
Current	Ford Transit Van	Van/paratransit	2020	Replace	2025
Future	Van	Van/paratransit	2023	Replace	2028
Future	Van	Van/paratransit	2023	Replace	2028
Future	Van	Van/paratransit	2023	Replace	2028
Future	Pickup	Pickup/snow plow	2024	Replace	2034
Future	Van	Van/paratransit	2024	Replace	2029
Future	Van	Van/paratransit	2025	Replace	2030
Future	Van	Van/paratransit	2025	Replace	2030
Future	Van	Van/paratransit	2025	Replace	2030
Future	Cutaway	Cutaway/body-on-chassis	2027	Replace	2037
Future	Van	Van/paratransit	2028	Replace	2033
Future	Van	Van/paratransit	2028	Replace	2033
Future	Van	Van/paratransit	2028	Replace	2033
Future	Cutaway (electric)	Cutaway/body-on-chassis	2028	Replace	2038
Future	Cutaway (electric)	Cutaway/body-on-chassis	2028	Replace	2038
Future	Cutaway (electric)	Cutaway/body-on-chassis	2028	Replace	2038
Future	Cutaway (electric)	Cutaway/body-on-chassis	2028	Replace	2040
Future	Van (electric)	Van/paratransit	2029	Replace	2034
Future	Van (electric)	Van/paratransit	2030	Replace	2035
Future	Van (electric)	Van/paratransit	2030	Replace	2035
Future	Van (electric)	Van/paratransit	2030	Replace	2035

Electrification

As shown in Tables 38 and 39 there are significant replacement needs in 2028. over multiple years. This plan assumes that CTP will transition at least half of their fleet to electric vehicles within the 10-year period, as estimated by CTP's Fleet Maintenance Manager. These electric transit vehicles currently cost 40-50% more than the traditional fossil fuel-powered versions of the same vehicles, but will likely become more price-competitive in the next few years as technology advances (therefore, forecasted costs may be overly conservative). Federal subsidies and match ratios are better for EVs than for traditional fossil-fuel powered vehicles, at around 92% FTA/8% local, versus 80% FTA/20% local. They also have lower operational and maintenance costs.

The purchase of these vehicles will also require that CTP install electric vehicle charging stations, the cost of which is reflected in Tables 38 and 39 . Assuming that CTP leads the charge to electrify their fleet prior to any other City divisions, this will be their financial responsibility.

Electric vans and cutaways are compatible with Level 2 and Level 3 charging stations. Level 2 chargers cost as low as $3,000 up to $10,000 and can use typical utility installations. Level 3 charging stations cost around $25,000, including installation. This analysis assumes $3,000 per charger.

Due to the assumed vehicle replacement needs in FY 2028, Tables 38 and 39 shows the purchase of Level 2 chargers in the same year. If CTP chooses to spread out these vehicle purchases across subsequent years, they can delay charging station purchases in tandem.

Bus Stop Improvements

The Cheyenne Transit Program system includes 148 total bus stops, including the Downtown Transit Station. Each route has between 22 and 27 stops, of which less than half are covered by a bus shelter. Of the total transit network stops, 43% are sheltered. Sheltered bus stops like those in Figure 93 also have an attached trash can and ADA landing pad, which were constructed with American Recovery and Reinvestment Act (ARRA) funds and approved by the FTA. None of CTP's stops feature bike racks. While CTP will not install benches without a shelter at their stops, a company called Creative Outdoor Advertising has a contract with the City of Cheyenne to place benches throughout the city and at some CTP bus stops.

CTP staff plan to relocate 10 shelters in the next two years assumes this will cost $100,000 spread across two years. This plan also assumes continuing costs of around $15,000 over the following eight years to include refurbishing and replacing bus stops as they age, and installing new shelters and trash cans each year at key stops throughout the city.

Figure 93: Example of Sheltered Bus Stop in Cheyenne (Source: Fehr & Peers)

New Downtown Transfer Point

All six Cheyenne Transit Program routes converge at the Downtown Transfer Station located at 17th Street and Carey Avenue. The station is located on the northeast corner of the Cheyenne Municipal Parking Garage. It includes restrooms for passengers and drivers and the CTP Driver Office. The entire block of 17th Street adjacent to the transfer station consists of designated bus boarding areas, which offer some covered and some uncovered seating for passengers.

At the time this plan was under development, it was determined that the existing transfer station would not be suitable in the long term due to conflicts between transit vehicles and passenger vehicles entering and existing the municipal garage. As a result, CTP undertook an evaluation of alternative locations in downtown Cheyenne for a new transfer point. When assessing candidate locations, CTP made the following considerations:

- Whether a location is in a walkable portion of downtown and proximate to key destinations.
- The sidewalk network in the area surrounding the location (i.e., sidewalk connectivity, width, and surface quality).
- Presence of a sidewalk furniture zone between the sidewalk and the curb where a curbside bus stop could include a landing pad, bench, shelter, and sign pole.

Since the initial stages on reintroducing fixed route service would feature two routes, these routes can be served by an interim downtown transfer point. Looking ahead to years 3-10, adding more routes would likely require a more robust off-street transfer center. To provide consistency of service, this analysis identifies two candidate locations in the downtown core. These locations feature the necessary curbside requirements for an accessible bus stop.

The two locations are: 611 W 19th Street and the southeast corner of 19th Street and Capitol Avenue.

Curbside Transfer Point

611 W 19th Street

611 W 19th Street, located on the southwest corner of 19th Street and O'Neil Avenue, has sidewalk connections on both 19th Street and O'Neil Avenue, 110 feet of curb face on 19th Street and 75 feet of available curb face on O'Neil Avenue, and an approximately eight-foot-wide sidewalk furniture zone along both roadways (Figure 94). The location would require initial design work, landscaping, and addition of two concrete landing pads, bus stop signs, shelters, and benches to accommodate two bus stops. It is assumed that signage and benches can be relocated from the existing transfer center and that only shelters would need to be acquired in Phase 1, along with a trash receptacle and bicycle rack.

Figure 94: 611 W 19th Street along 19th Street (Source: Fehr & Peers)

19th Street and Capitol Avenue

As discussed in the following section on Phase 2, the southeast corner of 19th Street and Capitol Avenue is another location that could host a downtown transfer point (Figure 95). This location has good sidewalk connectivity, is centrally located, and is along the proposed route alignments. There is approximately 100 feet of curb length on both 19th Street and Capitol Avenue where a bus stop could be located. From back of curb to lot line, the sidewalk is approximately 14 feet wide along both roadways, which provides ample room for addition of concrete landing pads, benches, shelters, and signage. As with 611 W 19th Street, it is assumed that benches and signage would be relocated from the existing transfer center.

Figure 95: 19th Street and Capitol Avenue (Source: Fehr & Peers)

Cost Estimate

It is assumed that for Phase 1, the cost of establishing a curbside transfer point that serves both initial routes will be the same at either location (Table 40).

Table 40: Cost Estimate for Transfer Point

Item	Unit	Unit Cost	Quantity	Total
Landing Pad	SY	$300	28	$8,400
Bus Shelter	EA	$13,000	2	$26,000
Trash Receptacle	EA	$1,500	1	$1,500
Bicycle Rack	EA	$1,500	1	$1,500
Design Services				$10,000
Escalation				15%
			Total:	$43,010

Mobility Hubs

What is a Mobility Hub?

Mobility hubs are places where people can make seamless connections between multiple transportation options. Mobility hubs offer visibility to – and connection between – public transit and other mobility services that in turn support sustainability, connectivity, and reduce dependence on private vehicles. Mobility hubs can also help reduce congestion due to community growth. Building a hub in one location of the city can help alleviate congestion elsewhere as the benefits from mobility hub services and amenities are felt throughout the network. While individual hubs can form a cohesive network, the design and accommodations at each hub location will vary based on the unique transportation needs of the area.

Possible Mobility Hub Amenities

Mobility hub amenities can be tailored to specific modes (e.g., electric vehicle charging or bicycle parking) or be more general (e.g., travel information kiosks or passenger restrooms). Mobility hubs support and connect to major transportation modes like fixed route transit, microtransit, pedestrian routes, and existing bicycle facilities. Amenities can also provide useful travel information aimed at enhancing the transportation experience, such as information on local restaurants, shops, and hotels. Potential mobility hub amenities (by mobility hub type) include:

- Parking and Charging
  - Surface parking lots
  - Electric vehicle (EV) charging
  - Structured parking
- Multi-modal Amenities
  - Transit service/stops
  - Bus stop enhancements
  - Seating, waiting area, and/or shelter
  - Real time travel and trip planning information
  - Robust visitor information
  - Scooter or bike share parking
  - Car share
  - Taxi/ride hailing loading zones
  - Access infrastructure, including crosswalks, sidewalks, and bikeways
  - Bike racks/secure bike lockers

Certain amenities like bike parking are easier to implement quickly, whereas other amenities like vehicle parking are typically thought of as long-term strategies. Figure 96 illustrates possible mobility hub elements.

Figure 96: Mobility Hub Elements (Source: Fehr & Peers)

Mobility Hubs for North and East Walmarts

For all phases of the service plan, the Walmart on the north side of Cheyenne off of Dell Range Boulevard will have two routes, Route A and B, connecting onsite. It is recommended that a mobility hub be established on or adjacent to the Walmart that provides space for the two fixed route buses, as well as space for a microtransit vehicle, along with bus shelters, passenger information kiosk, scooter parking, bike racks, and connectivity to nearby sidewalks and pedestrian routes.
For Phase 3 and 4 of the plan, the east Walmart in eastern/southeastern Cheyenne on Livingston Avenue and Campstool Road will have two routes, Route C and D, connecting onsite. Similar to the north Walmart, it is recommended that a mobility hub be established at the east Walmart with similar amenities.

In other small cities, Walmart has generally been amenable to considering transit facilities to be developed on or adjacent to its property, as Walmart understands the benefits of transit passengers shopping there.

Cost Implications for 10-Year Capital Financial Plan

A cost of $50,000 each has been estimated for developing the two mobility hubs. This cost would include planning and design, minimal concrete site work for load/unload areas, the cost of one large or two standard bus shelters, signage, striping, passenger information kiosk, bike racks, and scooter

parking. The cost does not include any parking lot development, but there may be an opportunity to work with Walmart to allow for a small amount (5-10 spaces) of day use park-and-ride at no cost.

New Administrative Facility and Mobility Hub

The Cheyenne Transit Program Office is located on the southwest corner of the Cheyenne Municipal Parking Garage (opposite the Downtown Transfer Station) on Lincolnway and Pioneer Avenue. This office hosts their administrative activities and CTP staff offices. Due to size constraints of the space in the garage, they purchased a different site using FTA funds. The building is a former Union Pacific Railroad facility located at 1800 Westland Road, which is closer to their maintenance facility and will allow for additional space.

There are no remaining purchase costs, but there will be move-in costs, design and remodel costs to add a public restroom and reconfigure the space, and technology costs to relocate radio and internet antennas.

The new facility will serve as an intermodal hub, providing opportunities for connections to intercity bus service, private transportation services, transportation network companies, and personal automobiles.

CAPITAL IMPROVEMENT PLAN

10-Year Capital Plan

The 10-year capital plan for the Cheyenne Transit Program is shown below in Table 41.

Revenue Sources

The recently passed Bipartisan Infrastructure Law provides new and/or expanded funding opportunities for capital projects through a variety of programs including:

- Bus and Bus Facilities Competitive Grants
- Bus and Bus Facilities Formula Grants (5339)
- Charging and Fueling Infrastructure Grants
- Low or No Emission Bus Grants
- Urbanized Area Formula Grants (Sec 5307)
- Surface Transportation Block Grant (STBG)
- Local and Regional Project Assistance Grants (RAISE)

It is recommended that CTP work with the MPO and WYDOT to prepare for and apply for these programs, as appropriate to help support the various capital project identified herein. More information on the Bipartisan Infrastructure Law can be found at https://www.transportation.gov/bipartisan-infrastructure-law/bipartisan-infrastructure-law-grant-programs.

Table 41: 10-Year Capital Plan										
Capital Expenses										
Category	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**FY 2032**
Fleet Replacements	$285,000	$175,000	$540,000	$ -	$ -	$1,285,000	$130,000	$390,000	$ -	$ -
Charging Stations	$ -	$ -	$ -	$ -	$ -	$12,000	$3,000	$9,000	$ -	$ -
Bus Stop Relocation & Improvements	$50,000	$50,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000
Downtown Transfer Point	$45,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Mobility Hubs	$ -	$50,000	$ -	$50,000	$ -	$ -	$ -	$ -	$ -	$ -
New Administrative Facility Moving Costs	$15,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
New Administrative Facility Remodel Costs	$35,000	$15,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ANNUAL COST	**$430,000**	**$290,000**	**$555,000**	**$390,000**	**$340,000**	**$1,312,000**	**$148,000**	**$414,000**	**$15,000**	**$15,000**
Capital Revenues										
Category	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**FY 2032**
Local Match	$60,200	$40,600	$77,700	$54,600	$47,600	$183,680	$20,720	$57,960	$2,100	$2,100
State Grants	$4,300	$2,900	$5,550	$3,900	$3,400	$13,120	$1,480	$4,140	$150	$150
Federal Transportation Grant	$365,500	$246,500	$471,750	$331,500	$289,000	$1,115,200	$125,800	$351,900	$12,750	$12,750
ANNUAL REVENUE	**$430,000**	**$290,000**	**$555,000**	**$390,000**	**$340,000**	**$1,312,000**	**$148,000**	**$414,000**	**$15,000**	**$15,000**

FARES

The recommended fare structure is shown in Table 42. The recommendation is for the fixed-route service to operate without a fare and microtransit will have a fare of $1.50 for all passengers. Over the last several years, communities have implemented zero-fare systems to encourage ridership, simplify passenger boarding, and remove financial barriers to frequent use. Examples of communities that have recently implemented zero-fare systems include Missoula, Montana and Corvallis, Oregon. Other communities, such as Logan, Utah, have operated as zero-fare systems for many years.

Table 42: Recommended CTP Fares

Fixed-Route and Complementary Paratransit Fares	
Fixed-Route Service	Free
Complementary Paratransit	Free
Transfer	Free
Microtransit Service	
All Passengers	$1.50

One of the greatest benefits of zero-fare service is an increase in ridership. Systems which have implemented a zero-fare program have experienced increases in ridership from about 40 to 70 percent. Part of this is that many users cannot afford to pay the fare often and limit their use of transit when a fare is required. Eliminating fares means transit becomes more convenient, as passengers do not need the correct fare amount or do not need to purchase a pass. A second benefit is the reduction in operating cost for collecting fares. The major expense to purchase fare boxes is no longer required and there are not costs associated with cash handling to protect against theft. Passenger boarding is faster which results in faster travel times for the bus. Another advantage is that disagreements between drivers and passengers are typically related to fare payment. A zero-fare system eliminates this possibility.

Keeping a fare for microtransit on-demand service provides an incentive for passengers to use the fixed-route service. Microtransit is a premium service offered to meet needs beyond the fixed-route service and payment of a fare is appropriate.

Fare revenue is a small part of the total revenue for CPT. Fare revenue was only about six percent of the total operating revenue in 2020, the last year that fixed-route service was operated for a full year. Many passengers do not pay the full fare, using discount fares, transfers, and passes. The reduction in fare revenue will be offset by the other advantages of moving to zero-fare for the fixed-route service.

PERFORMANCE MONITORING

An important element of any transit service plan is to monitor the performance of the service and to make adjustments as needed to improve service efficiency and effectiveness. The 2013 Five Year Transit Development Plan recommended several select performance and safety standards. These were reviewed during development of this plan and recommendations are made for a continuing performance monitoring program. The review of the previous recommendations found that a number of the measures were not tracked.

CTP should monitor each of the recommended performance indicators monthly and complete a review of performance annually. The performance review completed annually should be used to revise the service as needed to meet transportation needs while using resources in the most cost-effective manner.

Recommended Performance Standards

Performance standards are recommended for service monitoring and identification of needs for corrective measures to improve performance. The goal is to have efficient and effective use of community resources to provide transportation services in Cheyenne.

Passenger Boardings

Passenger boarding should be monitored for each service and for each route in the fixed-route system. Passenger boardings should be reported monthly and annually. The unlinked passenger trips are reported to the National Transit Database and the Federal Transit Administration.

Service Productivity

Productivity measured in passenger-boardings per revenue-hour should be monitored monthly and annually. This is a measure of efficiency in service delivery. The productivity should be reported for each service component and for each route in the fixed-route service. The recommended service standards are 2.0 passengers per revenue-hour for microtransit and complementary paratransit and 8 passengers per revenue-hour for fixed-route service. Individual routes should maintain an annual productivity of 6.5 passengers per revenue-hour or greater. Routes that fail to meet the minimum productivity standards should be analyzed in detail to determine appropriate actions to either improve the productivity or replace the fixed-route with an alternate form of service delivery.

On-Time Performance

The previously recommended on-time performance standard was that 95 percent of all vehicle-trips are completed on time. The standard was not met. This measure of service reliability is one of the most important service characteristics for transit users. Proposed changes to the routes will improve reliability. The recommended standard is to continue the goal of 95 percent of all vehicle-trips completed on time.

Cost per Revenue-Hour

This measure should be monitored and compared annually with peer transit systems. No recommendation is made for a specific standard as the costs include numerous variables outside the control of the transit agency. However, CTP should ensure that increases in operating costs are comparable to the other peer systems and not excessive.

Cost per Passenger-Trip

The annual cost per passenger-trip should be monitored and reported for each service and for each route. Costs among the different services and routes should be compared to ensure that financial resources are being used for the most cost-effective services. A specific standard is not recommended, but this measure should be tracked to determine if the allocation of financial resources should be adjusted.

Additional Performance Measures

From time to time, CTP may want to monitor additional performance measures to focus on specific needs or issues. For example, if CTP begins to experience difficulties with vehicle reliability, miles between road calls, missed trips because of lack of vehicles, and completion of preventive maintenance may all be tracked. Other measures would be selected depending on the specific items to be addressed.

Performance Reporting

CTP should prepare a monthly report for the Transit Board presenting the performance measures and comparison to the performance standards. This should be reported each month for the current month and for the year-to-date. CTP should also consider creating an on-line "dashboard" to inform the community of current performance and the use of resources provided by the community.

Appendix A

CHEYENNE COMMUNITY TRANSPORTATION SURVEY

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CHEYENNE COMMUNITY TRANSPORTATION SURVEY

Please take a few minutes to answer the following questions about your public transportation needs. Your answers will help identify the transportation needs of Cheyenne residents and will be key input in the 2022 Cheyenne Transit Development Plan. ***Thanks for your help! Please complete the survey only once, either paper OR online, by Friday, February 4th, 2022.***

To return the survey, you may:
Fill it out **online** at: https://www.surveymonkey.com/r/cheyennetransit or scan the QR code.
Email scanned copy to: LSC@LSCTrans.com
Drop off in person at: Cheyenne MPO Office, 615 W. 20th St., Cheyenne, WY 82001
Mail response to: LSC Transportation Consultants, Inc., PO Box 5875, Tahoe City, CA 96145

Existing Transportation Options

1. Which of the following types of transportation does your household currently use and how often?

	6-7 Days/week	3-5 Days/week	1-2 Days/week	1-3 Days/month	Less than once/month	Never
Your personal vehicle	☐	☐	☐	☐	☐	☐
Borrow a vehicle	☐	☐	☐	☐	☐	☐
Ride with a friend/relative	☐	☐	☐	☐	☐	☐
Walk	☐	☐	☐	☐	☐	☐
Bicycle	☐	☐	☐	☐	☐	☐
Taxi / Uber / Lyft	☐	☐	☐	☐	☐	☐
Cheyenne Transit Program (CTP)	☐	☐	☐	☐	☐	☐
Carpool / Vanpool	☐	☐	☐	☐	☐	☐

Experience with the Cheyenne Transit Program (CTP)

2. If you use CTP, why do you ride? *(Please select your top reason.)*
☐ Avoid traffic ☐ Avoid driving ☐ No driver's license ☐ No car available ☐ Save money/time on parking
☐ Save money on driving ☐ More convenient ☐ For the environment ☐ Other *(Please specify)* _____

3. If you use CTP, what is the main purpose of your trip? *(Please select one response.)*
☐ Work ☐ Medical / Dental ☐ Shopping ☐ Recreation / Social ☐ School / College
☐ Personal Business ☐ Multipurpose ☐ Other *(Please specify)* _____

4. If you use CTP, please rank the following characteristics for CTP services on a scale of 1 (Poor) to 5 (Excellent).

	1 - Low	2	3 - Neutral	4	5 - High	No Opinion
Service Frequency	☐	☐	☐	☐	☐	☐
Start Time of Service / End Time of Service	☐	☐	☐	☐	☐	☐
Service Area Covered	☐	☐	☐	☐	☐	☐
Safety	☐	☐	☐	☐	☐	☐
Convenience of Bus Stops	☐	☐	☐	☐	☐	☐
On-Time Performance	☐	☐	☐	☐	☐	☐
Travel Time on the Bus	☐	☐	☐	☐	☐	☐
Driver Courtesy	☐	☐	☐	☐	☐	☐
Ease in Planning Trip (Schedule, Web, Phone Information)	☐	☐	☐	☐	☐	☐
Overall Satisfaction	☐	☐	☐	☐	☐	☐

5. If you do not use CTP, why not?

_____

6. What factors would make it more likely that you would use CTP or use it more often?

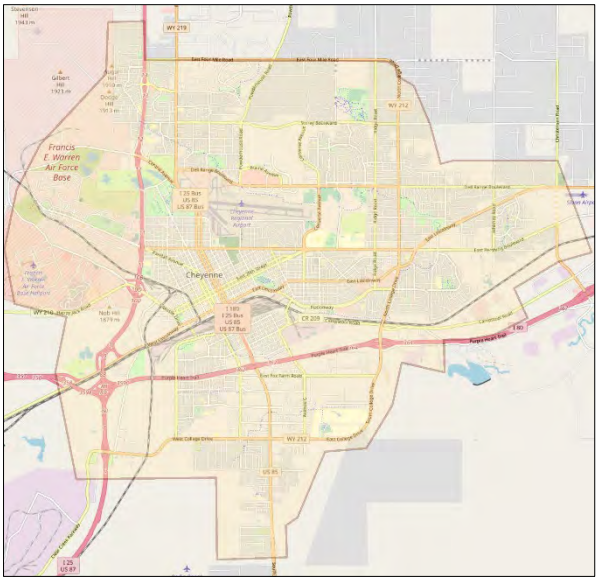
	1 - Low	2	3 - Neutral	4	5 - High	No Opinion
Resuming fixed-route transit service	☐	☐	☐	☐	☐	☐
More frequent service	☐	☐	☐	☐	☐	☐
More direct service / Shorter travel time on the bus	☐	☐	☐	☐	☐	☐
Expanded service area	☐	☐	☐	☐	☐	☐
If driving my car became significantly more expensive (higher gas prices)	☐	☐	☐	☐	☐	☐
Earlier service hours	☐	☐	☐	☐	☐	☐
Later service hours	☐	☐	☐	☐	☐	☐
Nothing, riding the bus isn't for me	☐	☐	☐	☐	☐	☐

7. **Since the COVID-19 pandemic, CTP has been providing curb-to-curb on-demand transit service rather than fixed-route transit service. This map illustrates the service area of CTP's current on-demand service. To use the service, riders can schedule a trip through the Cheyenne Transit app or by calling a scheduler for assistance.**
Are there areas outside of CTP's current on-demand service area that you would use public transit to reach?

☐ No

☐ Yes, *please specify:* _____

_____



Transportation Needs

8. **Do you ever need a ride and not have one?**

☐ Yes ☐ No

a. **If yes, to where?** ☐ Work ☐ Medical/Dental ☐ Shopping ☐ Recreation/Social ☐ School/College ☐ Personal Business ☐ Multipurpose ☐ Other *(Please specify)* _____

b. **If yes, how often do you need a ride and not have one?**

☐ 4-6 days/week ☐ 1-3 days/week ☐ 1-3 days/month ☐ Less than once/month

9. **If you or another member of your household currently work outside your home, how do you travel to work?** *(Check all that apply)* ☐ Drive alone or with family ☐ Carpool ☐ Taxi ☐ Uber/Lyft ☐ Walk ☐ Bike ☐ CTP ☐ Other *(Please specify)*: _____

10. **Do you or a household member who needs transportation have a disability, health concern, or other issue that makes travel difficult?** ☐ No ☐ Yes *(please specify – e.g. I use a wheelchair)* _____

Demographic Questions

11. **What is your zip code?** _____

12. **What is your age?** ☐ Under 18 ☐ 19–24 ☐ 25-39 ☐ 40-59 ☐ 60-74 ☐ 75 or older

13. **Are you:** *(Check all that apply)*

☐ Employed Full-Time ☐ Employed Part-Time ☐ Unemployed ☐ Disabled ☐ Retired
☐ Student – College ☐ Student – High School ☐ Other *(Please specify)* _____

14. **What is your total annual HOUSEHOLD income?** *(Include all income from all household members)*

☐ Less than $19,999 per year ☐ $20,000-$39,999 per year ☐ $40,000-$59,999 per year
☐ $60,000-$79,999 per year ☐ $80,000-$99,999 per year ☐ $100,000 or more per year

15. **Including <u>yourself</u>, how many people, age 10 and over, live in your household?**

☐ One ☐ Two ☐ Three ☐ Four ☐ Five ☐ Six or more

16. **Including <u>yourself</u>, how many people living in your household have a valid driver's license?**

☐ None ☐ One ☐ Two ☐ Three ☐ Four ☐ Five ☐ Six or more

17. **How many operating vehicles are available to your household?** ☐ None ☐ 1 ☐ 2 ☐ 3 or more

Additional Comments

18. **Please provide any additional comments about public transit service improvements you would like to see or any other unmet transportation needs you or members of your household have.**

_____

_____

19. **If you'd like to receive updates about the Cheyenne Transit Development Plan, please provide your email address:** *(Your email address will remain confidential and will not be shared)*

_____

Thank you!

ENCUESTA DE TRANSPORTE A LA COMUNIDAD DE CHEYENNE

Por favor tome unos minutos para responder las siguientes preguntas sobre sus necesidades de transporte público. Sus respuestas ayudarán a identificar las necesidades de transporte de los residentes de Cheyenne y serán un aporte clave en el Plan de Desarrollo de Transporte Público de Cheyenne 2022. ***¡Gracias por su ayuda! Por favor complete esta encuesta solo una vez, ya sea en papel o en línea, antes del Viernes 4 de Febrero de 2022.***

Para devolver la encuesta, puede:

Llenarla en línea en: https://www.surveymonkey.com/r/cheyennetransit-spanish

Mandar por email una copia escaneada a: LSC@LSCTrans.com

Dejarla en persona a: Cheyenne MPO Office, 615 W. 20th St., Cheyenne, WY 82001

Mandar por correo su respuesta a: LSC Transportation Consultants, Inc., PO Box 5875, Tahoe City, CA 96145

Opciones de Transporte Actuales

1. ¿Cuál de los siguientes medios de transporte utiliza actualmente su hogar y con qué frecuencia?

	6-7 Días/ semana	3-5 Días/ week	1-2 Días/ semana	1-3 Días/mes	Menos de una vez /mes	Nunca
Su vehículo personal	☐	☐	☐	☐	☐	☐
Tomar prestado un vehículo	☐	☐	☐	☐	☐	☐
Viajar con un amigo/familiar	☐	☐	☐	☐	☐	☐
Caminar	☐	☐	☐	☐	☐	☐
Bicicleta	☐	☐	☐	☐	☐	☐
Taxi / Uber / Lyft	☐	☐	☐	☐	☐	☐
Programa de Transporte Público de Cheyenne (CTP)	☐	☐	☐	☐	☐	☐
Auto compartido con otros (carpool) / Vanpool	☐	☐	☐	☐	☐	☐

Experiencia con el Programa de Transporte Público de Cheyenne (CTP)

2. Si usted usa CTP, ¿por qué lo usa? *(Seleccione su motivo principal.)*

☐ Evitar tráfico ☐ Evitar manejar ☐ No tengo licencia de conducir ☐ No tengo auto disponible

☐ Ahorrar dinero/tiempo en estacionar ☐ Ahorrar dinero en manejar ☐ Más conveniente

☐ Por el medio ambiente ☐ Otro *(Por favor especifique)* _____

3. Si usted usa CTP, ¿Cuál es el motivo principal de su viaje? (*Por favor seleccione una respuesta.)*

☐ Trabajo ☐ Médico / Dentista ☐ Comprar ☐ Recreación / Social ☐ Escuela / Universidad

☐ Asuntos Personales ☐ Motivos Múltiples ☐ Otro *(Por favor especifique)* _____

4. Si usted usa CTP, clasifique las siguientes características de los servicios de CTP en una escala de 1 (deficiente) a 5 (excelente).

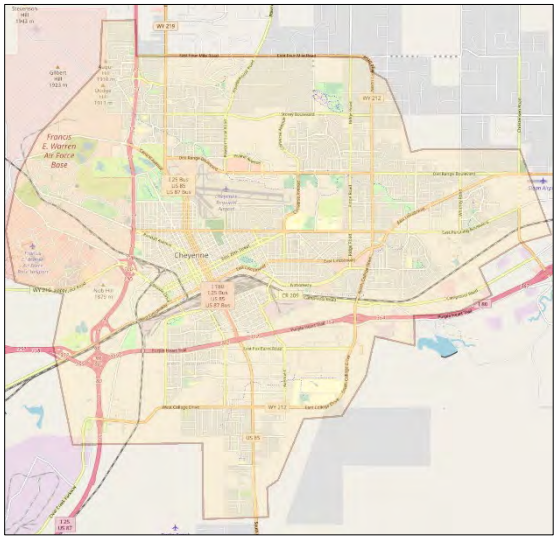
	1 - Bajo	2	3 - Neutral	4	5 - Alto	Sin Opinión
Frequencia del servicio	☐	☐	☐	☐	☐	☐
Tiempo de Comienzo del Servicio / Tiempo Final del Servicio	☐	☐	☐	☐	☐	☐
Área Cubierta de Servicio	☐	☐	☐	☐	☐	☐
Seguridad	☐	☐	☐	☐	☐	☐
Conveniencia de las Paradas de Autobús	☐	☐	☐	☐	☐	☐
Desempeño a Tiempo	☐	☐	☐	☐	☐	☐
Tiempo de Viaje del Autobús	☐	☐	☐	☐	☐	☐
Cortesía del Conductor	☐	☐	☐	☐	☐	☐
Facilidad en la Planificación del Viaje (Horario, Web, Información Telefónica)	☐	☐	☐	☐	☐	☐
Satisfacción General	☐	☐	☐	☐	☐	☐

5. Si usted no usa CTP, ¿por qué no? _____

6. ¿Qué factores harían más probable que usted usara CTP o lo usara con más frecuencia?

	1 - Bajo	2	3 - Neutral	4	5 - Alto	Sin Opinion
Reanudación del servicio de transporte público de ruta fija	☐	☐	☐	☐	☐	☐
Más servicio frequente	☐	☐	☐	☐	☐	☐
Más servicio directo / tiempos de viajes en el autobús mas cortos	☐	☐	☐	☐	☐	☐
Área de servicio expandida	☐	☐	☐	☐	☐	☐
Si conducir mi auto se volviera significativamente más costoso (precios de gasolina más altos)	☐	☐	☐	☐	☐	☐
Horas de servicio más temprano	☐	☐	☐	☐	☐	☐
Horas de servicio más tarde	☐	☐	☐	☐	☐	☐
Nada, viajar en autobús no es para mí	☐	☐	☐	☐	☐	☐

7. **Desde la pandemia de COVID-19, CTP ha estado brindando un servicio de transporte público a pedido de banqueta-a-banqueta en lugar de un servicio de transporte público de ruta fija. Este mapa ilustra el área actual de servicio del servicio a pedido de CTP. Para usar el servicio, los pasajeros pueden programar un viaje a través de la aplicación Cheyenne Transit o llamando a un programador para obtener ayuda.**



¿Hay áreas fuera del área actual de servicio a pedido de CTP a las que usted usaría el transporte público para llegar?

☐ No

☐ Si, *por favor especifique*_____

_____

Necesidades de Transporte

8. **¿Alguna vez necesita viajar y no tiene como hacerlo?**

☐ Si ☐ No

a. **Si responde si, ¿dónde?**

☐ Trabajo ☐ Médico / Dentista ☐ Comprar ☐ Recreación / Social ☐ Escuela / Universidad

☐ Asuntos Personales ☐ Motivos Múltiples ☐ Otro *(Por favor especifique)*_____

b. **Si responde si, ¿qué tan seguido necesita viajar y no tiene como hacerlo?**

☐ 4-6 días/semana ☐ 1-3 días/semana ☐ 1-3 días/mes ☐ Menos de una vez al mes

9. **Si usted u otro miembro de su hogar trabaja actualmente fuera de su hogar, ¿cómo viaja al trabajo?** *(Marque todas las que apliquen)*

☐ Manejar solo o con familia ☐ En auto compartido con otros (carpool) ☐ Taxi ☐ Uber/Lyft

☐ Caminando ☐ En bicicleta ☐ CTP ☐ Otro *(Por favor especifique)*: _____

10. **¿Usted o un miembro del hogar que necesita transporte tiene una discapacidad, un problema de salud u otro problema que dificulte su viaje?**

☐ No ☐ Si *(por favor especifique – por ejemplo:.yo uso una silla de ruedas)* _____

Preguntas Demográficas

11. **¿Cuál es su código postal?** _____

12. **¿Cuál es tu edad?** ☐ Menos de 18 ☐ 19–24 ☐ 25-39 ☐ 40-59 ☐ 60-74 ☐ 75 o mayor

13. **Está usted:** *(Marque todas las que apliquen)* ☐ Trabajando tiempo completo ☐ Trabajando tiempo parcial

☐ No Trabajando ☐ Discapacitado ☐ Jubilado ☐ Estudiando – Universidad

☐ Estudiando – Escuela Secundaria ☐ Otro *(Por favor especifique)* _____

14. **¿Cuál es el ingreso anual total de su hogar?** *(Incluya el ingreso de todos los aquellos que viven en su casa)*

☐ Menos de $19,999 al año ☐ $20,000-$39,999 al año ☐ $40,000-$59,999 al año

☐ $60,000-$79,999 al año ☐ $80,000-$99,999 al año ☐ $100,000 o más al año

15. **Incluido <u>usted</u>, ¿cuántas personas, que tengan 10 años de edad o más, viven en su casa?**

☐ Una ☐ Dos ☐ Tres ☐ Cuatro ☐ Cinco ☐ Seis o más

16. **Incluido <u>usted</u>, ¿Cuántas personas que viven en su hogar tienen una licencia de conducir válida?**

☐ Ninguna ☐ Una ☐ Dos ☐ Tres ☐ Cuatro ☐ Cinco ☐ Seis o más

17. **¿Cuántos vehículos operativos hay disponibles para su hogar?** ☐ Ninguno ☐ 1 ☐ 2 ☐ 3 o más

Comentarios Adicionales

18. **Por favor proporcione cualquier comentario adicional sobre las mejoras en el servicio de transporte público que le gustaría ver o cualquier otra necesidad de transporte no satisfecha que usted o los miembros de su hogar tengan.**

_____

_____

19. **Si desea recibir actualizaciones sobre el Plan de Desarrollo de Transporte Público de Cheyenne, proporcione su dirección de correo electrónico:** *(Su dirección de correo electrónico permanecerá confidencial y no será compartida)*

_____

¡Gracias!

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Cheyenne Transit Program Onboard Bus Survey

Scan the QR Code to complete this survey online

Have you ridden CTP in the past two weeks? ☐ Yes ☐ No

Please tell us about your current/most recent CTP…

1 What time did you board this bus? _____ ☐AM ☐PM

2 Where did you board the bus? (*Street address/nearest intersection*)

_____

3. How did you get to the bus stop for this bus?

☐ Walked ☐ Bicycled ☐ Taxi or Uber/Lyft ☐ Drove car
☐ Got a ride/dropped off ☐ Other (*specify*) _____

4. What is the <u>main</u> purpose of your bus trip today? *(check one)*

☐ Work ☐ Medical/Dental ☐ Shopping
☐ Recreational / Social ☐ School / College
☐ Personal Business ☐ Restaurant/Bar
☐ Multi-purpose ☐ Other *(specify)* _____

5. Where will you exit the bus? (*Street address/nearest intersection*)

_____

6. How often do you ride the bus?

☐ 6 Days/Week ☐ 1-3 Days/Month
☐ 3-5 Days/Week ☐ Less than once/Month
☐ 1-2 Days/Week ☐ First Time

7. What are your <u>top 3</u> reasons for taking the bus?

☐ Avoid Traffic ☐ No Driver's License
☐ Avoid Driving/Don't Drive ☐ No Car Available
☐ More Convenient ☐ Save Money on Driving
☐ Save money/time on parking ☐ For the environment

8. Was a car available for you to use on this trip? ☐ Yes ☐ No

Please tell us about your experience with CTP

9. Please rate your impression of the <u>existing</u> CTP service using a scale of 1 to 5, with 1 being very poor and 5 being very good.

(*Mark a number box for each*)	*Very Poor* 1	2	*Neutral* 3	4	*Very Good* 5
Service frequency					
Start time of service					
End time of service					
Service area covered					
Overall safety of CTP					
Convenience of bus stops					
On-time performance					
Travel time on the bus					
Driver courtesy					
Fares (cost)					
Ease of planning trip (Schedule, Web, Phone Information)					
Bus stop amenities					
Bus stop locations					
Overall service					

10. Are there areas outside of CTP's current on-demand service area that you would use public transit to reach?

_____

11. What factors would make it more likely that you would use CTP more often on a scale of 1 to 5, with 1 being low and 5 being high?

(*Mark a number box for each*)	*Low* 1	2	*Neutral* 3	4	*High* 5
Resuming fixed-route transit service					
More frequent service					
More direct service / Shorter travel time on the bus					
Expanded service area					
If driving my car became significantly more expensive (higher gas prices)					
Earlier service hours					
Later service hours					

12. How do you get information about CTP?

(Check all that apply)

☐ Website ☐ From School ☐ Friends/Family
☐ From Work ☐ Printed Guide ☐ Bus Stop Signs
☐ Social Media ☐ Bus Driver ☐ Smartphone App
☐ Other *(specify)* _____

Please tell us about yourself

13. What is the zipcode of your residence?

__ __ __ __ __

14. What best describes your occupation? *(Check all that apply)*

☐ Employed full-time ☐ Employed part-time ☐ Retired
☐ Student in grade K-8 ☐ H.S. student ☐ College student
☐ Unemployed ☐ Other *(list)* _____

15. Do you have a driver's license? ☐ Yes ☐ No

16. What is your age group? ☐ Under 18 ☐ 19-24
☐ 25-39 ☐ 40-64 ☐ 65 - 74 ☐ 75 or older

17. What best describes your annual household income?

☐ $0-$19,999 ☐ $20,000-$39,999 ☐ $40,000-$59,999
☐ $60,000-$79,999 ☐ $80,000-$99,999 ☐ $100,000 or more

Any additional comments?

18. Please share any additional comments about the Cheyenne Transit Program.

19. If you'd like to receive updates about the Cheyenne Transit Development Plan, please provide your email address. Your email address will remain confidential and will not be shared.

Please return this survey to the collection envelope on the bus or to the driver. Thank you!

El Programa de Transporte Público de Cheyenne (CTP) está actualmente trabajando para mejorar los servicios de transporte público en Cheyenne. Por favor tome un momento para ayudarnos a aprender más sobre sus necesidades de viaje para planificar mejores servicios futuros. ¡Gracias!

1. ¿Ha usado CTP en las últimas dos semanas?
    - Si
    - No

Para esta serie de preguntas, por favor reflexione en su viaje más reciente en CTP (solo su último viaje, no múltiples).

2. ¿A qué hora abordó el autobús? Por favor especifique la hora.
    Hora _____ AM/PM

3. ¿Dónde abordó el autobús? (Dirección de la calle/intersección más cercana)

4. ¿Cómo llegó a la parada de autobús?
    - Caminé
    - Bicicleta
    - Taxi o Uber/Lyft
    - Manejé auto
    - Me llevaron/dejaron
    - Otro (por favor especifique)

5. ¿Cuál es/fue el motivo principal de su viaje en autobús?
    - Trabajo
    - Médico / Dentista
    - Comprar
    - Recreación / Social
    - Escuela / Universidad
    - Asuntos personales
    - Restaurante/Bar
    - Motivos múltiples
    - Otro (por favor especifique)

6. ¿Dónde se bajará/bajó del autobús? (Dirección de la calle/intersección más cercana)

7. ¿Qué tan seguido usa el autobús?
    - 6 días/semana
    - 3-5 días/semana
    - 1-2 días/semana
    - 1-3 días/mes
    - Menos de una vez al mes
    - Primera vez

8. ¿Cuáles son sus 3 razones principales para tomar el autobús? (Por favor seleccione solo tres respuestas)

- Evitar tráfico
- No tengo licencia de conducir
- Evitar manejar/no manejo
- No tengo auto disponible
- Más conveniente
- Ahorrar dinero en manejar
- Ahorrar dinero/tiempo en estacionar
- Por el medio ambiente
- Otro (por favor especifique)

9. ¿Había un automóvil disponible para que lo usara en este viaje?
    - Si
    - No

10. Por favor califique su impresión del actual servicio de CTP utilizando una escala del 1 al 5, siendo 1 muy deficiente y 5 muy bueno.

1 – Muy Deficiente 2 3 - Neutral 4 5 – Muy Bueno Sin Opinión

Frequencia del servicio
Tiempo de Comienzo del Servicio
Tiempo Final del Servicio
Area de servicio cubierta
Seguridad en general del CTP
Comodidad de las paradas de autobús
Desempeño a Tiempo
Tiempo de Viaje del Autobús
Cortesía del Conductor
Tarifas (costo)
Facilidad en la Planificación del Viaje (Horario, Web, Información Telefónica)
Amenidades de las paradas de autobús
Ubicaciones de las paradas de autobús
Servicio en general

11. ¿Hay áreas fuera del área de servicio a pedido actual (On-Demand Service) de CTP a las que usaría el transporte público para llegar?

12.v1 ¿Qué factores harían más probable que usara CTP con mayor frecuencia en una escala del 1 al 5, siendo 1 bajo y 5 alto?

12.v2 ¿Qué factores harían más probable que comenzara a usar CTP o que usara CTP con más frecuencia en una escala del 1 al 5, siendo 1 bajo y 5 alto?

1 - Bajo 2 3 - Neutral 4 5 - Alto Sin opinion

Reanudación del servicio de transporte público de ruta fija
Servicio más frequente
Service más directo / tiempos de viajes en el autobús más cortos

Área de servicio expandida
Si conducir mi auto se volviera significativamente más costoso (precios de gasolina más altos)
Horas de servicio más temprano
Horas de servicio más tarde

13.v1 ¿Cómo obtiene información sobre CTP? (Marque todas las que apliquen)
13.v2 ¿Cómo obtiene actualmente o cómo obtuvo anteriormente información sobre CTP? (Marque todas las que apliquen)

- Sitio web
- De la escuela
- Amigos/familia
- Del trabajo
- Guía impresa
- Señaléticas en las paradas de autobús
- Redes sociales
- Conductor del autobús
- Aplicación en el celular
- Otro (por favor especifique)
- Ninguna de las anteriores

15. Si anteriormente usaba el CTP y ya no lo usa, explique por qué ya no usa transporte público.

19. ¿Cuál es el código postal de su residencia?
Código Postal de 5 dígitos _____

20. ¿Qué describe mejor su ocupación?

- Trabajando tiempo completo
- Trabajando tiempo parcial
- Jubilado
- Estudiante en grado K-8
- Estudiante de Escuela Secundaria
- Estudiante de Universidad
- No Trabajando
- Otro (por favor especifique)

21. ¿Tiene una licencia de conducir?

- Si
- No

22. ¿Cuál es tu grupo de edad?

- Menos de 18
- 19-24
- 25-39
- 40-64
- 65-74
- 75 o mayor

23. ¿Qué describe mejor los ingresos anuales de su hogar?

- $0 - $19,999
- $20,000 - $39,999
- $40,000 - $59,999
- $60,000 - $79,999
- $80,000 - $99,999
- $100,000 o más

24. Por favor comparta cualquier comentario adicional sobre el Programa de Transporte Público de Cheyenne.

25. Si desea recibir actualizaciones sobre el Plan de Desarrollo de Transporte Público de Cheyenne, proporcione su dirección de correo electrónico. (Su dirección de correo electrónico permanecerá confidencial y no se compartirá).

Appendix C

DEMOGRAPHIC SUMMARY TABLES

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Estimated Population Characteristics in the Study Area

Census Tract	Census Block Group	Total Population	Land Area (sq. miles)	Total Households	Zero-Vehicle Households		Older Adult Population (65 and Over)		Youth Population (10-19)		Ambulatory Disabled Population		Low-Income Population	
					#	%	#	%	#	%	#	%	#	%
2	1	1,287	1.16	533	0	0.0%	93	7.2%	50	3.9%	160	12.5%	304	23.6%
	2	1,580	0.65	678	104	15.3%	109	6.9%	296	18.7%	197	12.5%	373	23.6%
	3	1,924	1.11	870	10	1.1%	312	16.2%	173	9.0%	240	12.5%	454	23.6%
3	1	961	0.10	363	9	2.5%	136	14.2%	151	15.7%	132	13.8%	146	15.2%
	2	3,108	2.20	1,069	96	9.0%	322	10.4%	522	16.8%	428	13.8%	471	15.2%
4.01	1	1,286	0.78	486	18	3.7%	159	12.4%	207	16.1%	166	12.9%	174	13.5%
	2	597	0.48	201	19	9.5%	46	7.7%	67	11.2%	77	12.9%	81	13.5%
	3	680	0.61	221	14	6.3%	163	24.0%	80	11.8%	88	12.9%	92	13.5%
	4	1,110	3.46	345	21	6.1%	119	10.7%	96	8.6%	144	12.9%	150	13.5%
	5	1,598	0.66	562	8	1.4%	146	9.1%	160	10.0%	207	12.9%	216	13.5%
4.02	1	1,397	2.94	487	12	2.5%	82	5.9%	422	30.2%	251	18.0%	239	17.1%
	2	2,884	0.73	1,008	34	3.4%	268	9.3%	241	8.4%	518	18.0%	493	17.1%
	3	2,345	0.74	1,018	41	4.0%	257	11.0%	302	12.9%	421	18.0%	401	17.1%
5.01	1	2,063	0.99	775	0	0.0%	224	10.9%	318	15.4%	342	16.6%	124	6.0%
	2	936	0.51	375	0	0.0%	241	25.7%	80	8.5%	155	16.6%	56	6.0%
	3	1,684	0.38	518	15	2.9%	140	8.3%	228	13.5%	279	16.6%	101	6.0%
	4	2,517	0.31	1,022	32	3.1%	483	19.2%	167	6.6%	417	16.6%	151	6.0%
	5	892	0.16	306	0	0.0%	70	7.8%	121	13.6%	148	16.6%	54	6.0%
6	1	1,892	0.41	771	73	9.5%	407	21.5%	264	14.0%	262	13.9%	206	10.9%
	2	999	0.26	448	0	0.0%	156	15.6%	126	12.6%	138	13.9%	109	10.9%
	3	1,836	0.32	876	95	10.8%	391	21.3%	227	12.4%	254	13.9%	200	10.9%
	4	1,242	0.24	582	0	0.0%	146	11.8%	136	11.0%	172	13.9%	135	10.9%
7	1	1,576	1.38	785	382	48.7%	217	13.8%	40	2.5%	259	16.4%	321	20.4%
	2	1,248	0.33	580	34	5.9%	180	14.4%	177	14.2%	205	16.4%	254	20.4%
	3	1,130	0.44	661	39	5.9%	135	11.9%	65	5.8%	186	16.4%	230	20.4%
8	1	423	0.21	191	0	0.0%	85	20.1%	52	12.3%	53	12.6%	31	7.4%
	2	752	0.15	353	19	5.4%	120	16.0%	59	7.8%	95	12.6%	56	7.4%
	3	626	0.14	263	5	1.9%	119	19.0%	78	12.5%	79	12.6%	46	7.4%
9	1	602	0.68	317	44	13.9%	141	23.4%	86	14.3%	67	11.2%	44	7.3%
	2	450	0.44	276	8	2.9%	133	29.6%	37	8.2%	50	11.2%	33	7.3%
	3	794	0.11	307	31	10.1%	82	10.3%	110	13.9%	89	11.2%	58	7.3%
	4	913	0.16	434	0	0.0%	128	14.0%	19	2.1%	102	11.2%	67	7.3%
10	1	528	0.33	283	27	9.5%	87	16.5%	54	10.2%	72	13.7%	26	4.8%
	2	1,076	0.15	487	0	0.0%	94	8.7%	154	14.3%	147	13.7%	52	4.8%
	3	915	0.11	327	0	0.0%	73	8.0%	169	18.5%	125	13.7%	44	4.8%
	4	644	0.20	369	31	8.4%	92	14.3%	18	2.8%	88	13.7%	31	4.8%
11	1	631	0.72	205	0	0.0%	13	2.1%	30	4.8%	55	8.7%	5	0.8%
	2	1,275	3.56	175	0	0.0%	0	0.0%	222	17.4%	111	8.7%	10	0.8%
	3	550	0.70	159	0	0.0%	6	1.1%	142	25.8%	48	8.7%	4	0.8%
12	1	1,650	1.27	652	0	0.0%	517	31.3%	270	16.4%	284	17.2%	86	5.2%
	2	1,295	0.32	527	0	0.0%	334	25.8%	101	7.8%	223	17.2%	68	5.2%
	3	808	0.32	496	29	5.8%	298	36.9%	0	0.0%	139	17.2%	42	5.2%
	4	909	0.53	342	0	0.0%	221	24.3%	75	8.3%	157	17.2%	48	5.2%
13	1	2,061	0.41	836	0	0.0%	377	18.3%	375	18.2%	339	16.4%	99	4.8%
	2	1,599	0.41	984	201	20.4%	428	26.8%	206	12.9%	263	16.4%	77	4.8%
	3	1,164	0.26	530	16	3.0%	258	22.2%	190	16.3%	191	16.4%	56	4.8%
	4	3,379	2.69	1,338	0	0.0%	646	19.1%	526	15.6%	555	16.4%	163	4.8%
14.01	1	1,345	1.03	445	0	0.0%	253	18.8%	214	15.9%	181	13.5%	94	7.0%
	2	1,302	0.36	536	18	3.4%	210	16.1%	228	17.5%	175	13.5%	91	7.0%
	3	1,458	0.15	608	31	5.1%	149	10.2%	182	12.5%	196	13.5%	102	7.0%
14.02	1	752	3.35	303	0	0.0%	274	36.4%	101	13.4%	96	12.7%	58	7.7%
	2	1,919	1.54	749	68	9.1%	451	23.5%	205	10.7%	244	12.7%	148	7.7%
15.01	1	1,661	0.37	612	0	0.0%	209	12.6%	167	10.1%	145	8.7%	87	5.2%
	2	2,609	5.85	996	44	4.4%	375	14.4%	189	7.2%	228	8.7%	136	5.2%
	3	1,247	0.24	639	69	10.8%	188	15.1%	84	6.7%	109	8.7%	65	5.2%
15.02	1	1,049	0.32	386	0	0.0%	127	12.1%	100	9.5%	176	16.8%	162	15.4%
	2	2,316	0.58	972	26	2.7%	385	16.6%	141	6.1%	388	16.8%	357	15.4%
	3	1,718	0.93	947	139	14.7%	382	22.2%	197	11.5%	288	16.8%	265	15.4%
19.01	1	1,715	29.85	652	27	4.1%	299	17.4%	221	12.9%	210	12.2%	75	4.4%
	2	2,571	68.70	939	6	0.6%	432	16.8%	350	13.6%	315	12.2%	112	4.4%
	3	802	486.87	341	0	0.0%	137	17.1%	76	9.5%	98	12.2%	35	4.4%
19.02	1	999	268.33	448	9	2.0%	192	19.2%	55	5.5%	149	15.0%	58	5.9%
	2	1,972	196.36	845	11	1.3%	413	20.9%	239	12.1%	295	15.0%	115	5.9%
	3	1,216	530.69	365	13	3.6%	177	14.6%	261	21.5%	182	15.0%	71	5.9%
20	1	4,091	116.44	1,465	30	2.0%	260	6.4%	537	13.1%	425	10.4%	340	8.3%
	2	1,459	548.58	564	10	1.8%	372	25.5%	216	14.8%	151	10.4%	121	8.3%
	3	1,869	167.51	666	14	2.1%	338	18.1%	326	17.4%	194	10.4%	156	8.3%
	4	2,434	221.24	814	39	4.8%	170	7.0%	369	15.2%	253	10.4%	203	8.3%
9808.01	1	0	1.37	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Totals	98,320	2,686	39,683	2,021	5.1%	15,047	15.3%	12,147	12.4%	13,678	13.9%	9,532	9.7%

Source: US Census Bureau, American Community Survey 2019, LSC 2022

Travel Time to Work

Travel Time	Workers	Percent
Less than 10 minutes	7,956	26%
10 to 14 minutes	10,370	34%
15 to 19 minutes	8,094	26%
20 to 24 minutes	1,784	6%
25 to 29 minutes	524	2%
30 to 34 minutes	477	2%
35 to 44 minutes	109	0%
45 to 59 minutes	420	1%
60 or more minutes	881	3%
Total:	30,615	100%
Mean travel time to work (minutes):	14.3	

Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates.

Time Leaving Home to go to Work

Time Ranges	Workers	Percent
12:00 a.m. to 4:59 a.m.	1,587	5.2%
5:00 a.m. to 5:29 a.m.	1,133	3.7%
5:30 a.m. to 5:59 a.m.	1,985	6.5%
6:00 a.m. to 6:29 a.m.	1,991	6.5%
6:30 a.m. to 6:59 a.m.	4,689	15.3%
7:00 a.m. to 7:29 a.m.	3,953	12.9%
7:30 a.m. to 7:59 a.m.	5,861	19.1%
8:00 a.m. to 8:29 a.m.	2,491	8.1%
8:30 a.m. to 8:59 a.m.	1,253	4.1%
9:00 a.m. to 9:59 a.m.	1,220	4.0%
10:00 a.m. to 10:59 a.m.	480	1.6%
11:00 a.m. to 11:59 a.m.	502	1.6%
12:00 p.m. to 3:59 p.m.	1,932	6.3%
4:00 p.m. to 11:59 p.m.	1,538	5.0%
Total:	30,615	100%

Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates.

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Appendix D

ROUTE PROFILES

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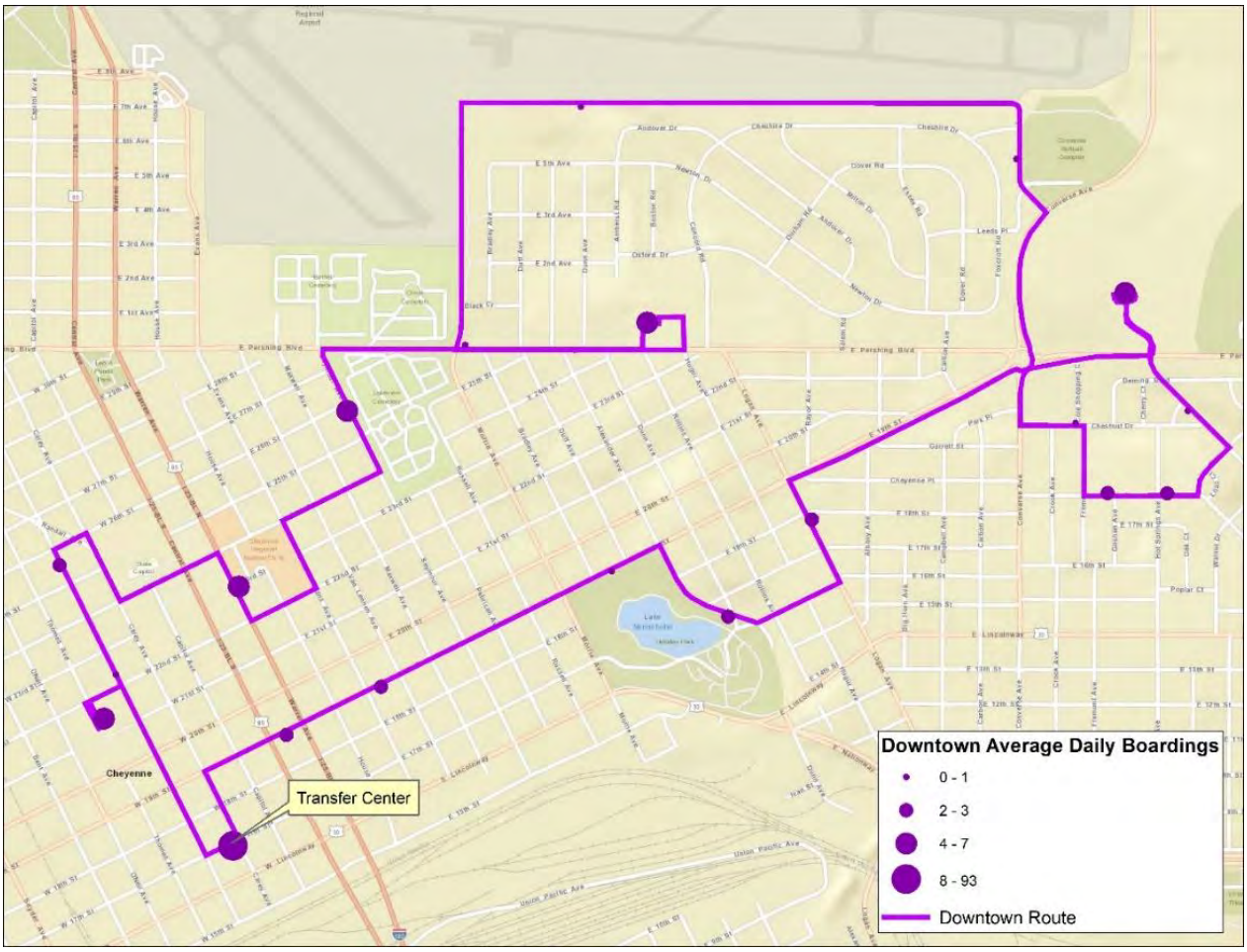
Downtown - Purple

Connects the downtown transfer station with the VA Hospital, CRMC East, CRMC West, and the Library – East Side



Service Summary

- Mon-Fri: 6am – 7pm
- Saturday: 10am-5pm
- Sunday: No Service
- Headway: 60 minutes
- Requires 1 peak bus to operate

Serves (within ¼ mile):

- 7,000 people
- 8,900 jobs

Strengths

- Strong on-time performance.

Weaknesses

- One-way loop is inconvenient for riders who need to make a bi-directional trip.
- Low Saturday ridership.

On-time Performance

December 2019 – February 2020

Est. Annual Ridership: 19,600

Avg Daily Weekday Ridership: 73

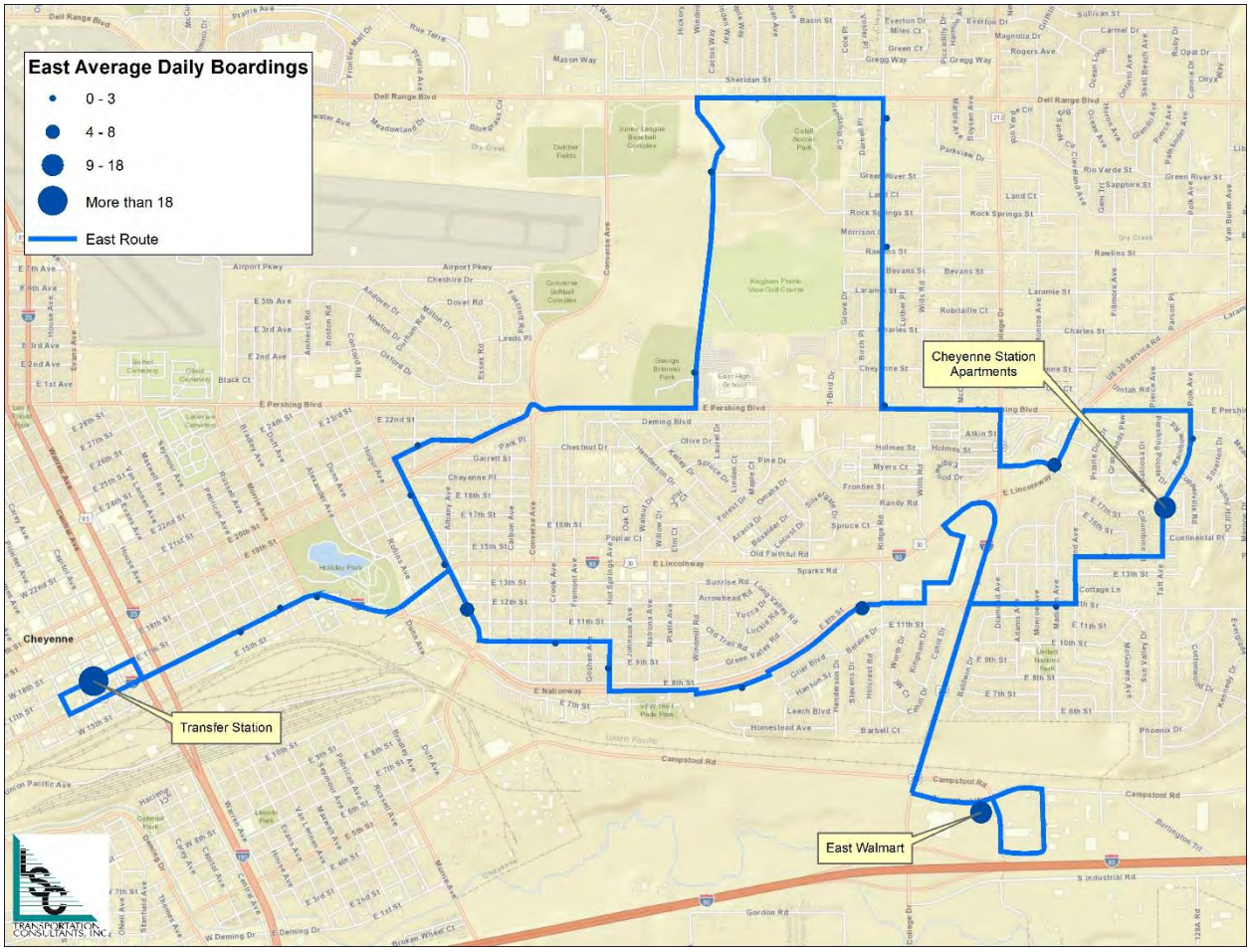
Avg Daily Saturday Ridership: 23

Annual Cost: $199,000

Note: Ridership calculated from Dec 2019 – Feb 2020

East - Blue

Connects the downtown transfer station with Goodwill and apartment buildings



Service Summary

- Mon-Fri: 6am – 7pm
- Saturday: 10am-5pm
- Sunday: No Service
- Headway: 60 minutes
- Requires 1 peak bus to operate

Serves (within ¼ mile):

- 11,100 people
- 5,700 jobs

Strengths

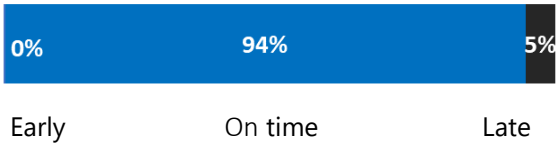
- Strong on-time performance.

Weaknesses

- One-way loop is inconvenient for riders who need to make a bi-directional trip.

On-time Performance

December 2019 – February 2020



Est. Annual Ridership: 18,600

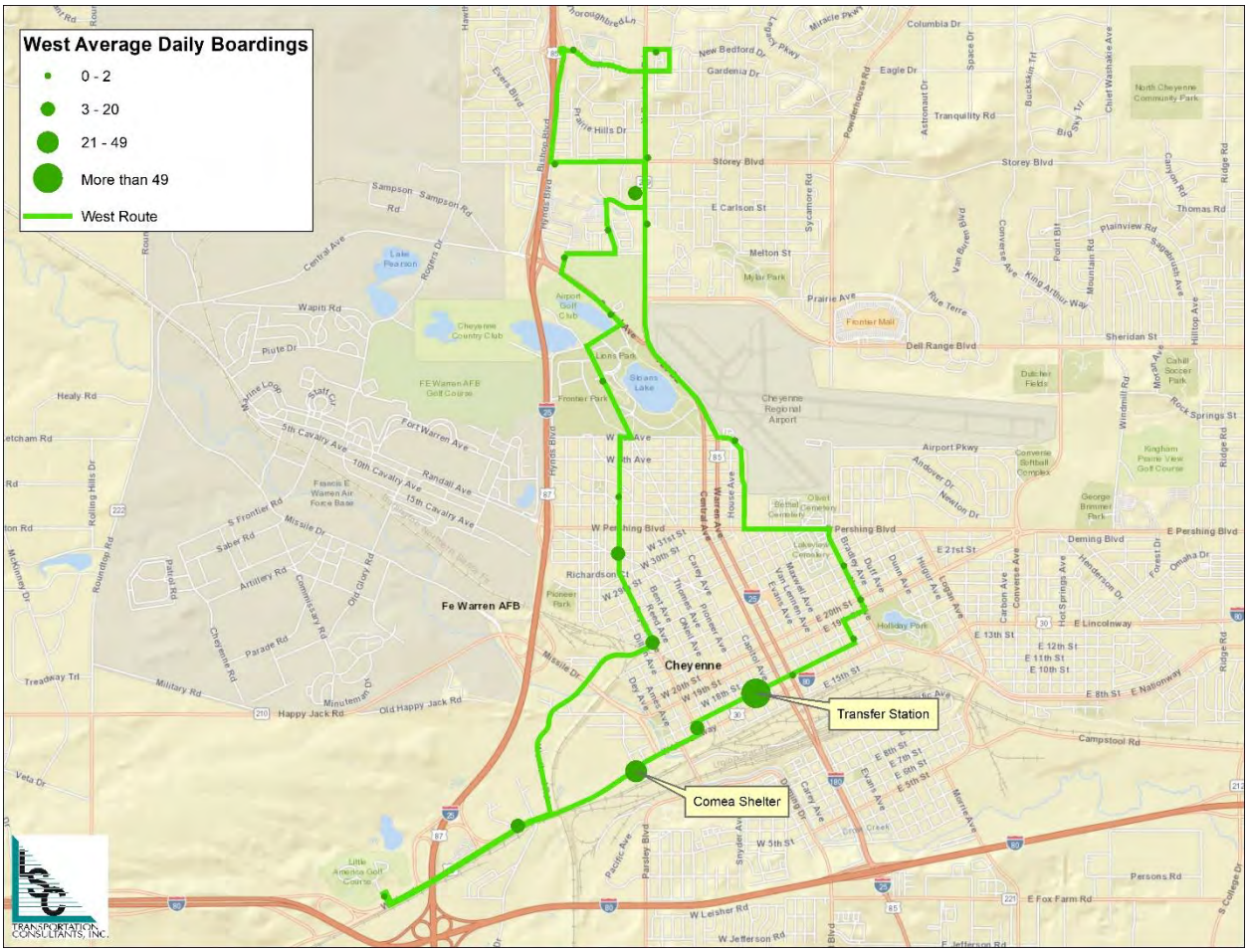
Avg Daily Weekday Ridership: 66

Avg Daily Saturday Ridership: 38

Annual Cost: $217,300

West - Green

Connects the downtown transfer station with the Airport, Old West Museum, and Comea Shelter



Service Summary

- Mon-Fri: 6am – 7pm
- Saturday: 10am-5pm
- Sunday: No Service
- Headway: 60 minutes
- Requires 1 peak bus to operate

Serves (within ¼ mile):

- 9,500 people
- 13,300 jobs

Strengths

- Relatively high ridership.
- Strong Saturday ridership.

Weaknesses

- One-way loop is inconvenient for riders who need to make a bi-directional trip.
- Frequent late arrivals.

On-time Performance

December 2019 – February 2020

Est. Annual Ridership: 25,700

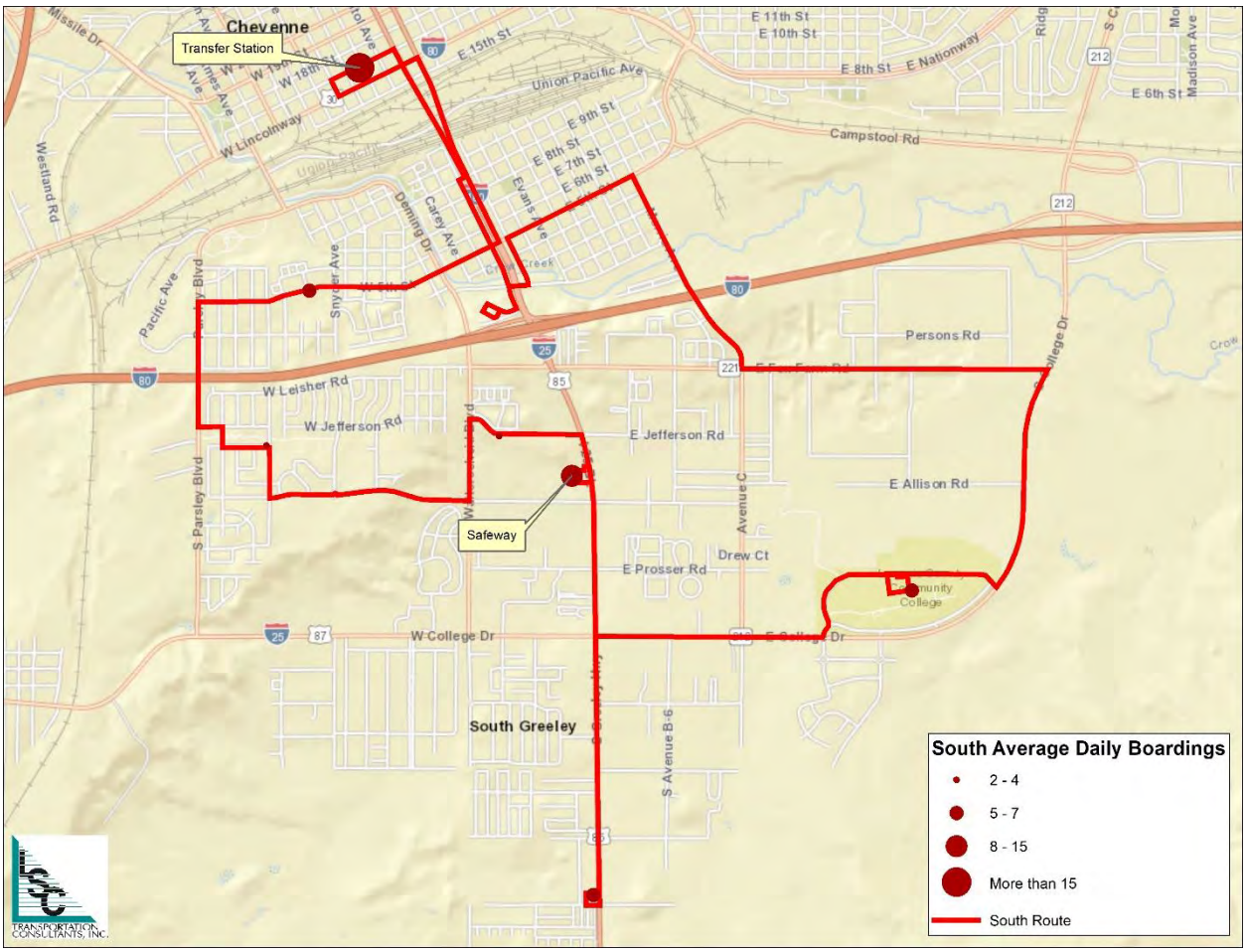
Avg Daily Weekday Ridership: 93

Avg Daily Saturday Ridership: 48

Annual Cost: $221,200

South - Red

Connects the downtown transfer station with the VFW, Boys & Girls Club, and Pinewood Village



Service Summary

- Mon-Fri: 6am – 7pm
- Saturday: 10am-5pm
- Sunday: No Service
- Headway: 60 minutes
- Requires 1 peak bus to operate

Serves (within ¼ mile):

- 6,400 people
- 3,300 jobs

Strengths

- Relatively high ridership.
- Strong on-time performance.

Weaknesses

- One-way loop is inconvenient for riders who need to make a bi-directional trip.

On-time Performance

December 2019 – February 2020

Est. Annual Ridership: 26,700

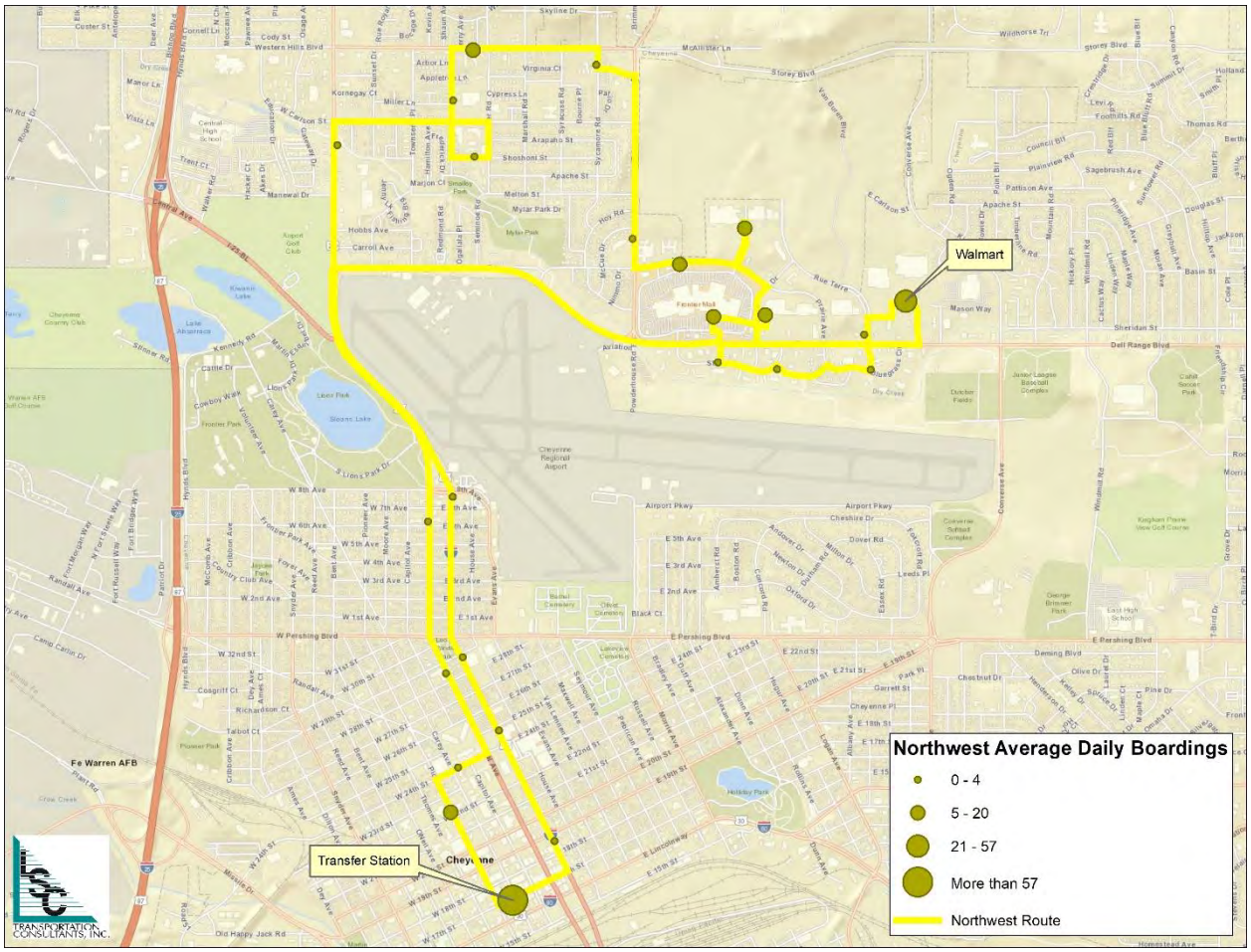
Avg Daily Weekday Ridership: 98

Avg Daily Saturday Ridership: 38

Annual Cost: $221,600

Northwest - Yellow

Connects the downtown transfer station with Walmart, Frontier Mall, and the Library – East Side



Service Summary

- Mon-Fri: 6am – 7pm
- Saturday: 10am-5pm
- Sunday: No Service
- Headway: 60 minutes
- Requires 1 peak bus to operate

Serves (within ¼ mile):

- 6,200 people
- 9,800 jobs

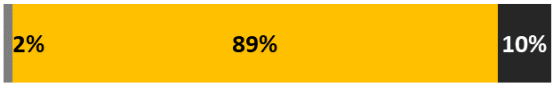
Strengths

- Highest ridership of all routes.
- Strong ridership on both weekdays and Saturdays

Weaknesses

- One-way loop is inconvenient for riders who need to make a bi-directional trip.
- Frequent late arrivals.

On-time Performance



Early | On time | Late

Est. Annual Ridership: 31,600

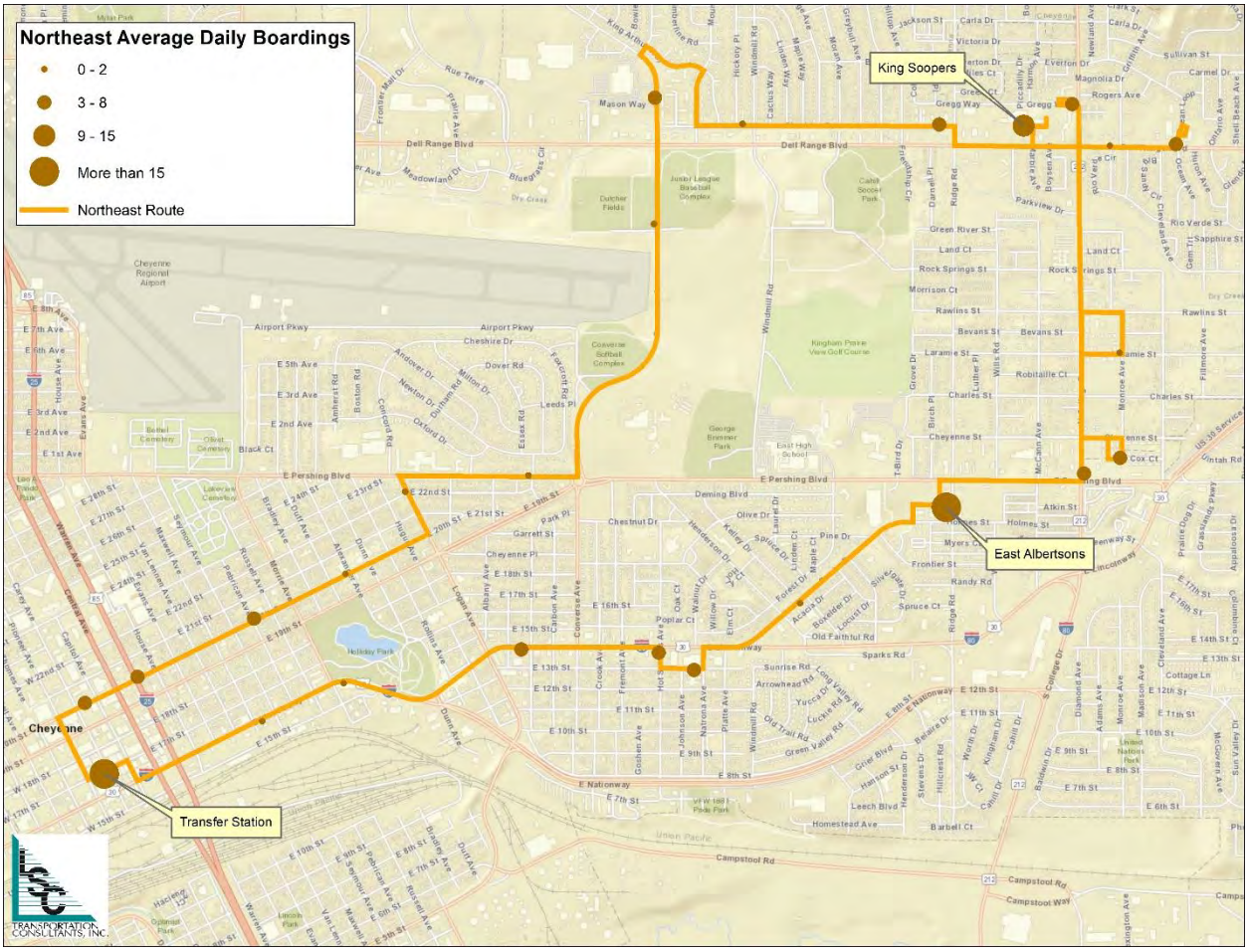
Avg Daily Weekday Ridership: 113

Avg Daily Saturday Ridership: 62

Annual Cost: $211,900

Northeast - Orange

Connects the downtown transfer station with housing and the post office



Service Summary

- Mon-Fri: 6am – 7pm
- Saturday: 10am-5pm
- Sunday: No Service
- Headway: 60 minutes
- Requires 1 peak bus to operate

Serves (within ¼ mile):

- 11,800 people
- 7,200 jobs

Strengths

- Strong on-time performance.

Weaknesses

- One-way loop is inconvenient for riders who need to make a bi-directional trip.

On-time Performance

December 2019 – February 2020

Early | On time | Late

Est. Annual Ridership: 24,000

Avg Daily Weekday Ridership: 88

Avg Daily Saturday Ridership: 35

Annual Cost: $208,500

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Appendix E

DEMAND MODELS TABLE

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Table 1: Mobility Gap Transit Need

Census Tract	Census Block Group	Total Households	Zero-Vehicle Households	Mobility Gap	Transit Need (Daily Trips)
2	1	533	0	1.2	0
	2	678	104	1.2	125
	3	870	10	1.2	12
3	1	363	9	1.2	11
	2	1,069	96	1.2	115
4.01	1	486	18	1.2	22
	2	201	19	1.2	23
	3	221	14	1.2	17
	4	345	21	1.2	25
	5	562	8	1.2	10
4.02	1	487	12	1.2	14
	2	1,008	34	1.2	41
	3	1,018	41	1.2	49
5.01	1	775	0	1.2	0
	2	375	0	1.2	0
	3	518	15	1.2	18
	4	1,022	32	1.2	38
	5	306	0	1.2	0
6	1	771	73	1.2	88
	2	448	0	1.2	0
	3	876	95	1.2	114
	4	582	0	1.2	0
7	1	785	382	1.2	458
	2	580	34	1.2	41
	3	661	39	1.2	47
8	1	191	0	1.2	0
	2	353	19	1.2	23
	3	263	5	1.2	6
9	1	317	44	1.2	53
	2	276	8	1.2	10
	3	307	31	1.2	37
	4	434	0	1.2	0
10	1	283	27	1.2	32
	2	487	0	1.2	0
	3	327	0	1.2	0
	4	369	31	1.2	37
11	1	205	0	1.2	0
	2	175	0	1.2	0
	3	159	0	1.2	0

12	1	652	0	1.2	0
	2	527	0	1.2	0
	3	496	29	1.2	35
	4	342	0	1.2	0
13	1	836	0	1.2	0
	2	984	201	1.2	241
	3	530	16	1.2	19
	4	1,338	0	1.2	0
14.01	1	445	0	1.2	0
	2	536	18	1.2	22
	3	608	31	1.2	37
14.02	1	303	0	1.2	0
	2	749	68	1.2	82
15.01	1	612	0	1.2	0
	2	996	44	1.2	53
	3	639	69	1.2	83
15.02	1	386	0	1.2	0
	2	972	26	1.2	31
	3	947	139	1.2	167
19.01	1	652	27	1.2	32
	2	939	6	1.2	7
	3	341	0	1.2	0
19.02	1	448	9	1.2	11
	2	845	11	1.2	13
	3	365	13	1.2	16
20	1	1,465	30	1.2	36
	2	564	10	1.2	12
	3	666	14	1.2	17
	4	814	39	1.2	47
9808.01	1	0	0	1.2	0
	Totals	**39,683**	**2,021**	**1.2**	**2,425**
			Annual Demand (by Weekdays):		**606,300**
			20 Percent of Annual Demand:		**121,260**

Source: US Census Bureau, American Community Survey 2019, LSC 2022

Table 2: Greatest Transit Needs Index

Census Tract	Census Block Group	Total Population	Land Area (sq. miles)	Total Households	Zero-Vehicle Households			Older Adult Population (65 and Over)			Ambulatory Disabled Population			Low-Income Population			Overall Score	Final
					#	Density	Rank	#	Density	Rank	#	Density	Rank	#	Density	Rank	(4-16)	(1-4)
2	1	1,287	1.2	533	0	0.0	1	93	80.0	1	160	137.9	1	304	261.1	2	5	2
	2	1,580	0.7	678	104	159.1	2	109	166.7	2	197	301.2	2	373	570.1	3	9	3
	3	1,924	1.1	870	10	9.0	1	312	282.0	2	240	216.7	2	454	410.2	2	7	2
3	1	961	0.1	363	9	88.8	2	136	1,342.3	4	132	1,305.3	4	146	1,438.2	4	14	4
	2	3,108	2.2	1,069	96	43.6	1	322	146.2	1	428	194.2	2	471	214.0	2	6	2
4.01	1	1,286	0.8	486	18	23.1	1	159	204.3	2	166	213.8	2	174	223.5	2	7	2
	2	597	0.5	201	19	39.2	1	46	94.9	1	77	159.4	1	81	166.7	2	5	2
	3	680	0.6	221	14	23.1	1	163	268.9	2	88	145.1	1	92	151.7	1	5	2
	4	1,110	3.5	345	21	6.1	1	119	34.4	1	144	41.5	1	150	43.4	1	4	1
	5	1,598	0.7	562	8	12.1	1	146	220.1	2	207	311.7	2	216	325.8	2	7	2
4.02	1	1,397	2.9	487	12	4.1	1	82	27.9	1	251	85.4	1	239	81.3	1	4	1
	2	2,884	0.7	1,008	34	46.6	1	268	367.1	2	518	709.6	3	493	675.6	3	9	3
	3	2,345	0.7	1,018	41	55.1	1	257	345.3	2	421	565.8	3	401	538.7	3	9	3
5.01	1	2,063	1.0	775	0	0.0	1	224	227.2	2	342	347.0	2	124	125.7	1	6	2
	2	936	0.5	375	0	0.0	1	241	469.6	3	155	302.5	2	56	109.5	1	7	2
	3	1,684	0.4	518	15	39.0	1	140	364.3	2	279	726.7	3	101	263.2	2	8	3
	4	2,517	0.3	1,022	32	101.8	2	483	1,536.9	4	417	1,328.3	4	151	481.0	3	13	4
	5	892	0.2	306	0	0.0	1	70	436.6	2	148	922.6	4	54	334.1	2	9	3
6	1	1,892	0.4	771	73	178.9	2	407	997.3	4	262	642.3	3	206	504.1	3	12	4
	2	999	0.3	448	0	0.0	1	156	610.4	3	138	541.5	3	109	425.0	3	10	4
	3	1,836	0.3	876	95	298.6	4	391	1,228.8	4	254	799.4	3	200	627.4	3	14	4
	4	1,242	0.2	582	0	0.0	1	146	611.9	3	172	721.2	3	135	566.0	3	10	4
7	1	1,576	1.4	785	382	277.2	3	217	157.4	1	259	188.0	2	321	232.8	2	8	3
	2	1,248	0.3	580	34	102.0	2	180	540.0	3	205	615.4	3	254	762.2	4	12	4
	3	1,130	0.4	661	39	88.8	2	135	307.6	2	186	423.2	2	230	524.1	3	9	3
8	1	423	0.2	191	0	0.0	1	85	412.5	2	53	258.7	2	31	151.6	1	6	2
	2	752	0.2	353	19	123.2	2	120	778.3	3	95	614.7	3	56	360.2	2	10	4
	3	626	0.1	263	5	34.8	1	119	827.1	4	79	548.4	3	46	321.3	2	10	4

9	1	602	0.7	317	44	65.0	2	141	208.3	2	67	99.3	1	44	65.1	1	6	2
	2	450	0.4	276	8	18.3	1	133	303.8	2	50	114.7	1	33	75.3	1	5	2
	3	794	0.1	307	31	289.5	3	82	765.9	3	89	827.9	3	58	543.0	3	12	4
	4	913	0.2	434	0	0.0	1	128	776.9	3	102	618.6	3	67	405.7	2	9	3
10	1	528	0.3	283	27	82.4	2	87	265.5	2	72	220.1	2	26	77.9	1	7	2
	2	1,076	0.1	487	0	0.0	1	94	630.4	3	147	985.6	4	52	349.1	2	10	4
	3	915	0.1	327	0	0.0	1	73	678.2	3	125	1,161.1	4	44	411.2	2	10	4
	4	644	0.2	369	31	155.3	2	92	460.7	2	88	440.5	2	31	156.0	1	7	2
11	1	631	0.7	205	0	0.0	1	13	18.0	1	55	75.6	1	5	7.1	1	4	1
	2	1,275	3.6	175	0	0.0	1	0	-	1	111	31.0	1	10	2.9	1	4	1
	3	550	0.7	159	0	0.0	1	6	8.6	1	48	68.2	1	4	6.4	1	4	1
12	1	1,650	1.3	652	0	0.0	1	517	406.7	2	284	223.6	2	86	67.9	1	6	2
	2	1,295	0.3	527	0	0.0	1	334	1,045.7	4	223	698.4	3	68	212.2	2	10	4
	3	808	0.3	496	29	91.2	2	298	937.4	4	139	437.8	2	42	133.0	1	9	3
	4	909	0.5	342	0	0.0	1	221	419.5	2	157	297.2	2	48	90.3	1	6	2
13	1	2,061	0.4	836	0	0.0	1	377	909.9	4	339	817.4	3	99	240.1	2	10	4
	2	1,599	0.4	984	201	488.6	4	428	1,040.4	4	263	638.8	3	77	187.6	2	13	4
	3	1,164	0.3	530	16	61.0	1	258	983.6	4	191	729.2	3	56	214.2	2	10	4
	4	3,379	2.7	1,338	0	0.0	1	646	239.8	2	555	206.1	2	163	60.5	1	6	2
14.01	1	1,345	1.0	445	0	0.0	1	253	246.2	2	181	176.3	2	94	91.5	1	6	2
	2	1,302	0.4	536	18	50.1	1	210	584.6	3	175	488.3	3	91	253.4	2	9	3
	3	1,458	0.2	608	31	200.2	3	149	962.3	4	196	1,268.4	4	102	658.3	3	14	4
14.02	1	752	3.4	303	0	0.0	1	274	81.8	1	96	28.6	1	58	17.3	1	4	1
	2	1,919	1.5	749	68	44.2	1	451	293.1	2	244	158.8	1	148	96.2	1	5	2
15.01	1	1,661	0.4	612	0	0.0	1	209	569.2	3	145	395.2	2	87	236.1	2	8	3
	2	2,609	5.9	996	44	7.5	1	375	64.1	1	228	39.0	1	136	23.3	1	4	1
	3	1,247	0.2	639	69	282.8	3	188	770.6	3	109	446.5	2	65	266.8	2	10	4
15.02	1	1,049	0.3	386	0	0.0	1	127	394.9	2	176	546.7	3	162	502.5	3	9	3
	2	2,316	0.6	972	26	44.8	1	385	663.7	3	388	669.3	3	357	615.1	3	10	4
	3	1,718	0.9	947	139	149.0	2	382	409.4	2	288	308.7	2	265	283.7	2	8	3
19.01	1	1,715	29.8	652	27	0.9	1	299	10.0	1	210	7.0	1	75	2.5	1	4	1
	2	2,571	68.7	939	6	0.1	1	432	6.3	1	315	4.6	1	112	1.6	1	4	1

	3	802	486.9	341	0	0.0	1	137	0.3	1	98	0.2	1	35	0.1	1	4	1
19.02	1	999	268.3	448	9	0.0	1	192	0.7	1	149	0.6	1	58	0.2	1	4	1
	2	1,972	196.4	845	11	0.1	1	413	2.1	1	295	1.5	1	115	0.6	1	4	1
	3	1,216	530.7	365	13	0.0	1	177	0.3	1	182	0.3	1	71	0.1	1	4	1
20	1	4,091	116.4	1,465	30	0.3	1	260	2.2	1	425	3.6	1	340	2.9	1	4	1
	2	1,459	548.6	564	10	0.0	1	372	0.7	1	151	0.3	1	121	0.2	1	4	1
	3	1,869	167.5	666	14	0.1	1	338	2.0	1	194	1.2	1	156	0.9	1	4	1
	4	2,434	221.2	814	39	0.2	1	170	0.8	1	253	1.1	1	203	0.9	1	4	1
9808.01	1	-	1.4	-	0	0.0	1	0	-	1	-	-	1	-	-	1	4	1

Table 3: Fixed-Route Demand

Census Tract	Census Block Group	Total Households	Number of Households With:		Percent of Households with Transit Access	Number of Households Served by Transit		Daily Transit Trips		Daily Number of Trips
			0 Auto	1 Auto		0 Auto	1 Auto	0 Auto	1 Auto	
2	1	533	0	170	39%	0	67	0	2	2
	2	678	104	334	85%	88	284	13	11	23
	3	870	10	255	63%	6	162	1	6	7
3	1	363	9	59	100%	9	59	1	2	4
	2	1069	96	299	50%	48	151	7	6	13
4.01	1	486	18	115	41%	7	47	1	2	3
	2	201	19	56	24%	5	14	1	1	1
	3	221	14	57	80%	11	46	2	2	3
	4	345	21	26	0%	0	0	0	0	0
	5	562	8	157	48%	4	75	1	3	3
4.02	1	487	12	287	35%	4	101	1	4	4
	2	1008	34	364	100%	34	363	5	14	19
	3	1018	41	501	87%	36	436	5	16	21
5.01	1	775	0	279	28%	0	77	0	3	3
	2	375	0	73	72%	0	53	0	2	2
	3	518	15	85	69%	10	59	2	2	4
	4	1022	32	331	99%	32	328	5	12	17
	5	306	0	56	38%	0	21	0	1	1
6	1	771	73	206	97%	71	200	10	7	18
	2	448	0	108	100%	0	108	0	4	4
	3	876	95	284	100%	95	284	14	11	24
	4	582	0	221	100%	0	221	0	8	8
7	1	785	382	199	89%	338	176	49	7	56
	2	580	34	322	100%	34	322	5	12	17
	3	661	39	336	98%	38	329	6	12	18
8	1	191	0	37	91%	0	34	0	1	1
	2	353	19	99	99%	19	98	3	4	6
	3	263	5	66	56%	3	37	0	1	2
9	1	317	44	146	36%	16	52	2	2	4
	2	276	8	166	89%	7	147	1	5	7
	3	307	31	78	100%	31	78	4	3	7
	4	434	0	129	100%	0	129	0	5	5
10	1	283	27	118	49%	13	58	2	2	4
	2	487	0	170	97%	0	165	0	6	6
	3	327	0	52	100%	0	52	0	2	2
	4	369	31	217	100%	31	217	4	8	13
11	1	205	0	35	0%	0	0	0	0	0
	2	175	0	14	0%	0	0	0	0	0
	3	159	0	14	0%	0	0	0	0	0

12	1	652	0	122	5%	0	6	0	0	0
	2	527	0	84	64%	0	53	0	2	2
	3	496	29	312	97%	28	304	4	11	15
	4	342	0	27	67%	0	18	0	1	1
13	1	836	0	211	86%	0	182	0	7	7
	2	984	201	512	94%	188	479	27	18	45
	3	530	16	11	52%	8	6	1	0	1
	4	1338	0	262	12%	0	32	0	1	1
14.01	1	445	0	93	78%	0	73	0	3	3
	2	536	18	82	75%	13	61	2	2	4
	3	608	31	98	98%	30	96	4	4	8
14.02	1	303	0	32	1%	0	0	0	0	0
	2	749	68	320	71%	49	228	7	9	16
15.01	1	612	0	124	94%	0	116	0	4	4
	2	996	44	47	2%	1	1	0	0	0
	3	639	69	269	96%	66	258	10	10	19
15.02	1	386	0	134	64%	0	86	0	3	3
	2	972	26	442	95%	25	419	4	16	19
	3	947	139	434	58%	81	254	12	9	21
19.01	1	652	27	98	0%	0	0	0	0	0
	2	939	6	182	0%	0	0	0	0	0
	3	341	0	58	0%	0	0	0	0	0
19.02	1	448	9	49	0%	0	0	0	0	0
	2	845	11	76	0%	0	0	0	0	0
	3	365	13	37	0%	0	0	0	0	0
20	1	1465	30	326	0%	0	2	0	0	0
	2	564	10	82	0%	0	0	0	0	0
	3	666	14	132	0%	0	0	0	0	0
	4	814	39	72	0%	0	0	0	0	0
9808.01	1	0	0	0	50%	0	0	0	0	0
					Estimated Daily Ridership:					**503**
					Estimated Annual Linked Ridership:					**126,339**
					Transfers					**37,902**
					Estimated Annual Unlinked Ridership:					**164,241**

Source: U.S. Census Bureau, American Community Survey, 2014-2019 Five Year Estimates, LSC 2022

Table 4: Potential Fixed-Route Demand

Census Tract	Census Block Group	Total Households	Number of Household With:		Percent of Households with Transit Access	Number of Households Served by Transit		Daily Transit Trips		Daily Number of Trips
			0 Auto	1 Auto		0 Auto	1 Auto	0 Auto	1 Auto	
2	1	533	0	170	100%	0	170	0	11	11
	2	678	104	334	100%	104	334	35	22	57
	3	870	10	255	100%	10	255	3	17	20
3	1	363	9	59	100%	9	59	3	4	7
	2	1,069	96	299	100%	96	299	32	20	52
4.01	1	486	18	115	100%	18	115	6	8	14
	2	201	19	56	100%	19	56	6	4	10
	3	221	14	57	100%	14	57	5	4	8
	4	345	21	26	100%	21	26	7	2	9
	5	562	8	157	100%	8	157	3	10	13
4.02	1	487	12	287	100%	12	287	4	19	23
	2	1,008	34	364	100%	34	364	11	24	36
	3	1,018	41	501	100%	41	501	14	33	47
5.01	1	775	0	279	100%	0	279	0	18	18
	2	375	0	73	100%	0	73	0	5	5
	3	518	15	85	100%	15	85	5	6	11
	4	1,022	32	331	100%	32	331	11	22	33
	5	306	0	56	100%	0	56	0	4	4
6	1	771	73	206	100%	73	206	25	14	38
	2	448	0	108	100%	0	108	0	7	7
	3	876	95	284	100%	95	284	32	19	51
	4	582	0	221	100%	0	221	0	15	15
7	1	785	382	199	100%	382	199	129	13	142
	2	580	34	322	100%	34	322	11	21	33
	3	661	39	336	100%	39	336	13	22	35
8	1	191	0	37	100%	0	37	0	2	2
	2	353	19	99	100%	19	99	6	7	13
	3	263	5	66	100%	5	66	2	4	6
9	1	317	44	146	100%	44	146	15	10	25
	2	276	8	166	100%	8	166	3	11	14
	3	307	31	78	100%	31	78	10	5	16
	4	434	0	129	100%	0	129	0	9	9
10	1	283	27	118	100%	27	118	9	8	17
	2	487	0	170	100%	0	170	0	11	11
	3	327	0	52	100%	0	52	0	3	3
	4	369	31	217	100%	31	217	10	14	25
11	1	205	0	35	100%	0	35	0	2	2
	2	175	0	14	100%	0	14	0	1	1
	3	159	0	14	100%	0	14	0	1	1

12	1	652	0	122	100%	0	122	0	8	8
	2	527	0	84	100%	0	84	0	6	6
	3	496	29	312	100%	29	312	10	21	30
	4	342	0	27	100%	0	27	0	2	2
13	1	836	0	211	100%	0	211	0	14	14
	2	984	201	512	100%	201	512	68	34	102
	3	530	16	11	100%	16	11	5	1	6
	4	1,338	0	262	100%	0	262	0	17	17
14.01	1	445	0	93	100%	0	93	0	6	6
	2	536	18	82	100%	18	82	6	5	11
	3	608	31	98	100%	31	98	10	6	17
14.02	1	303	0	32	100%	0	32	0	2	2
	2	749	68	320	100%	68	320	23	21	44
15.01	1	612	0	124	100%	0	124	0	8	8
	2	996	44	47	100%	44	47	15	3	18
	3	639	69	269	100%	69	269	23	18	41
15.02	1	386	0	134	100%	0	134	0	9	9
	2	972	26	442	100%	26	442	9	29	38
	3	947	139	434	100%	139	434	47	29	76
19.01	1	652	27	98	100%	27	98	9	6	16
	2	939	6	182	100%	6	182	2	12	14
	3	341	0	58	100%	0	58	0	4	4
19.02	1	448	9	49	100%	9	49	3	3	6
	2	845	11	76	100%	11	76	4	5	9
	3	365	13	37	100%	13	37	4	2	7
20	1	1,465	30	326	100%	30	326	10	22	32
	2	564	10	82	100%	10	82	3	5	9
	3	666	14	132	100%	14	132	5	9	13
	4	814	39	72	100%	39	72	13	5	18
9808.01	1	0	0	0	100%	0	0	0	0	0
					Estimated Daily Ridership:					**1,426**
					Estimated Annual Linked Ridership:					**357,859**
					Transfers					**107,358**
					Estimated Annual Unlinked Ridership:					**465,217**

Source: U.S. Census Bureau, American Community Survey, 2014-2019 Five Year Estimates, LSC 2022

Table 5: Demand Response Ridership

Census Tract	Census Block Group	Ridership Demand (Jan 2021 - May 2021)	Est. Annual Ridership Demand
2	1	203	487
	2	259	622
	3	507	1,217
3	1	61	146
	2	662	1,589
4.01	1	73	175
	2	99	238
	3	78	187
	4	1	2
	5	120	288
4.02	1	848	2,035
	2	298	715
	3	625	1,500
5.01	1	213	511
	2	424	1,018
	3	8	19
	4	425	1,020
	5	1	2
6	1	429	1,030
	2	474	1,138
	3	425	1,020
	4	442	1,061
7	1	6,395	15,348
	2	227	545
	3	1,045	2508
8	1	9	22
	2	198	475
	3	94	226
9	1	54	130
	2	138	331
	3	13	31
	4	156	374
10	1	38	91
	2	139	334
	3	143	343
	4	210	504
11	1	1	2
	2	234	562
	3	63	151
12	1	57	137
	2	153	367
	3	252	605

	4	35	84
13	1	119	286
	2	888	2,131
	3	130	312
	4	70	168
14.01	1	270	648
	2	89	214
	3	443	1,063
14.02	1	1	2
	2	3,146	7,550
15.01	1	199	478
	2	25	60
	3	439	1,054
15.02	1	53	127
	2	474	1,138
	3	760	1,824
19.01	1	1	2
	2	1	2
	3	1	2
19.02	1	65	156
	2	1	2
	3	1	2
20	1	230	552
	2	1	2
	3	1	2
	4	1	2
9808.01	1	35	84
		Total	**57,055**

Appendix F

SERVICES ALTERNATIVES

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Appendix F

SERVICE ALTERNATIVES

INTRODUCTION

The Cheyenne Transit Program (CTP) is taking an active approach in planning to meet the transportation needs of its community. This report presents five scenario options for transit service in Cheyenne, which will allow decision makers to make informed and accurate changes to improve the quality of transit services for residents of Cheyenne.

This is the second of two Interim Reports to be completed as part of this study, included as Appendix F in the final report. This Interim Report outlines five potential transit scenarios. All scenarios include some fixed-routes services and on-demand zones, although the number of fixed routes, service frequencies, and service hours vary from scenario to scenario. This chapter presents the transit service alternatives and considerations associated with implementing them.

TYPES OF TRANSIT SERVICE

The term "transit service" encompasses a wide range of service options. Traditionally, people think of transit service as buses operating on a strict schedule. A number of other transit-service options exist, such as demand-response, flex-route, commuter transportation, rideshare, and alternative service-delivery models. To help understand the options and the terminology used in this chapter, LSC has prepared an overview of the different types of transit services.

Fixed-Route Service

Fixed-route service fits the popular description of a transit system with transit vehicles operating on specified routes and following set schedules. Specific bus stops are typically identified for the locations where passengers will be picked up and dropped off. Routes are usually laid out in either a radial or grid pattern.

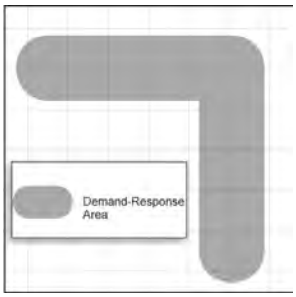
Fixed-route service is particularly convenient for passengers without disabilities and non-elderly passengers. Research has shown that fixed-route passengers are willing to walk up to one-quarter mile to reach a bus stop. The advantages of fixed-route service are that it can be provided at a relatively low cost on a per-passenger-trip basis, schedule reliability is high since buses do not deviate from their routes, service does not require advance reservations, and service is easy to understand. However, individuals with mobility impairments may have difficulty accessing a fixed-route system.

The Americans with Disabilities Act (ADA) requires that communities with fixed-route transit service also provide complementary paratransit service that operates, at a minimum, in a three-quarter-mile radius of each fixed route. Paratransit service is typically much costlier to operate than fixed-route service because of the service's characteristics. Fixed routes are established to meet the highest-demand travel patterns, while paratransit service must serve many origins and destinations in

a dispersed pattern. Therefore, fixed-route operations lack the flexibility to meet the needs of passengers with any special requirements in low-density areas.

Prior to the COVID-19 pandemic, CTP operated fixed-route service. Fixed-route service will likely be an aspect of CTP's service in the future. The public survey showed a desire for a return to some level of fixed-route service. There is high enough demand along some corridors to justify running a fixed route, which can better serve some of the demand that is currently being served by on-demand services.

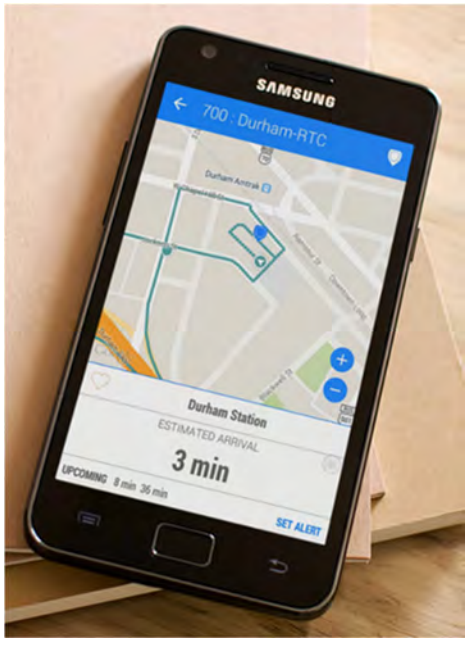
Demand-Response Service



Demand-response transit service, frequently termed dial-a-ride, is characterized as door-to-door transit service scheduled by a dispatcher. With demand-response service, reservations are typically required in advance, although some immediate requests may be filled if time permits and if the service is particularly needed.

The concept of demand-response service was originally developed in the early 1970s as an alternate form of public transportation. The original efforts proved to be more expensive than envisioned and did not attract the ridership that was forecast. As a result, demand-response transit has been used almost exclusively in this country for elderly and disabled passengers. However, many communities are beginning to recognize the advantages of demand-response service for low-density areas with low levels of transit demand. Improved technology has led to improvements in dispatching and scheduling which has increased the efficiency of demand-response service and allows for real-time dispatching.

Microtransit Service



Microtransit is a relatively new term and can be difficult to define. For the purposes of this study, microtransit is defined as a publicly- or privately-operated, ride-hailing form of transportation which employs on-demand dynamic-route transportation technology to serve multiple passengers in the same vehicle along a route that can either be fixed or flexible.

Microtransit companies, such as Spare Labs, Transloc, and Via, serve passengers using dynamically-generated routes, and may expect passengers to make their way to and from common pick-up or drop-off points. Vehicles can range from large SUVs to vans to shuttle buses. Microtransit can also be called dynamic shuttles or private flexible transit. It should also be noted that some existing microtransit programs have used public agency vehicles and drivers. The primary difference between microtransit and a route-deviation or demand-response service is that microtransit employs technology that has only recently been available. Microtransit includes the use of software and smartphone technology which:

1. Allows the passenger to reserve a ride directly (without the use of a dispatcher)
2. Provides the driver with pick-up and drop-off assignments in real time
3. Calculates the most efficient route between passenger pick-ups/drop offs

General routes and schedules are followed, but these can be modified as passenger demands evolve. Microtransit services will typically use vans instead of larger buses but will cost more per passenger trip than a fixed-route service. The hope is that technology will allow microtransit programs to carry more passengers than a traditional demand-response service for a lower cost.

During the COVID-19 pandemic, CTP transitioned to microtransit service in response to significant losses in demand for public transportation. Microtransit services are presented as an option in each scenario to serve lower-demand areas and provide connections to the fixed-route bus system. Microtransit will also be combined with ADA paratransit services that complement each proposed fixed route.

TRANSIT SERVICE ALTERNATIVES

A variety of transportation service alternatives have been developed based on the demographic and community conditions analysis in Interim Report #1, along with the survey results and input from CTP staff. Five service alternatives were developed and are presented here. Table F-1 presents a summary of the characteristics of each scenario.

Cost estimates for the presented transit service alternatives are based on CTP's cost allocation model developed for Interim Report #1 and inflated to 2022 dollars. Capital costs and requirements for vehicles, bus stops, etcetera will be presented once the recommended transit services have been selected.

Annual ridership was estimated using potential fixed-route and demand-response models developed in Interim Report #1. Ridership estimates were lowered to be in line with continued reduced ridership due to the COVID-19 pandemic.

Table F-1: Scenario Comparison

	Existing 2021	Scenario	1	2	3	4	5
		# Fixed Rts	4	3	2	2	4
		# Zones	4	4	4	4	4
Operating Parameters							
Peak Vehicles in Operation	15-16		8	7	6	8	8
Annual Revenue Hours	22,796		29,120	25,480	21,840	28,392	25,088
Annual Vehicle Miles	342,556		374,059	320,151	273,158	358,957	322,266
Annual Operating Cost (Millions)	$1.89		$1.99	$1.82	$1.66	$1.95	$1.81
Annual Ridership	53,144		117,000	103,000	81,000	103,000	107,000
Performance Measures							
Passengers per Vehicle Hour	2.3		4.0	4.1	3.7	3.6	4.3
Cost per Passenger Trip	$35.56		$17.00	$17.62	$20.41	$18.94	$16.86
Population Within Fixed-Route Service Area*	--		16,500	15,600	10,800	10,800	16,500
Jobs Within Fixed-Route Service Area*	--		15,700	15,700	14,400	14,400	15,700

* Within 1/4 mile walk of the fixed routes.

Passengers per hour, cost per passenger, and annual operating cost by scenario are presented in Figure 1,

Figure 2, and Figure 3, respectively.

Figure 1: Passengers per Vehicle Hour by Scenario

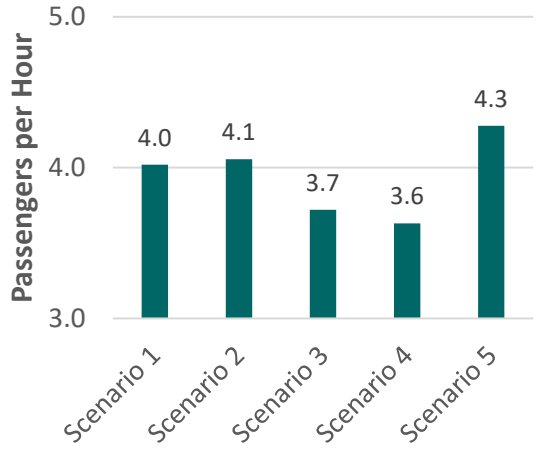


Figure 2: Cost per Passenger by Scenario

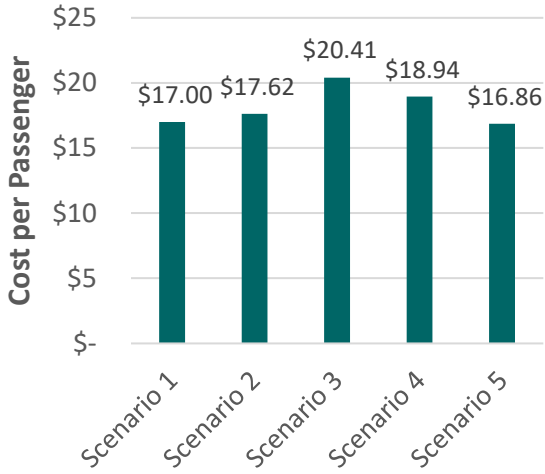
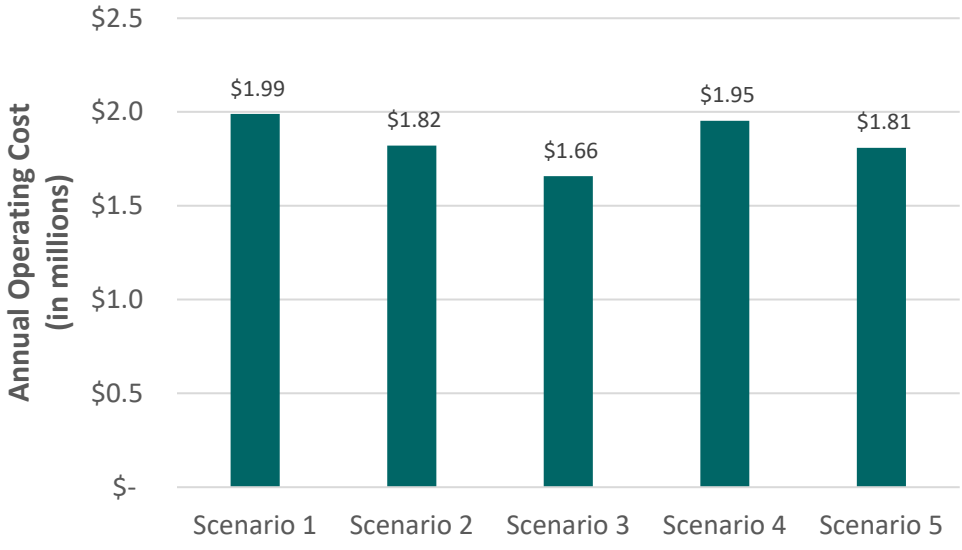


Figure 3: Annual Operating Cost by Scenario



Scenario 1: Four Fixed Routes and Four On-Demand Zones

The first potential scenario provides the greatest coverage throughout Cheyenne. The four fixed routes cover the areas of largest demand, and four on-demand zones provide extra coverage. This scenario assumes the same service hours as in 2019, which is 6:00 a.m. until 7:00 p.m. on weekdays and 10:00 a.m. until 5:00 p.m. on Saturdays, with no Sunday service. Each fixed route operates once per hour, and each fixed route has a runtime of 60 minutes. Figure 4 shows the map of the routes and zones. On-demand vehicles would also serve ADA paratransit needs, which would be included within ¾ mile of each fixed route.

Descriptions of each fixed route are below:

- Route A (orange/north) begins service at the CTP bus facility; travels along Lincolnway to provide service to the Comea Shelter; travels through downtown serving the library, the medical center, and other downtown attractions; and connects with the Frontier Mall and the Walmart along Dell Range Boulevard.
- Route B (purple) begins service downtown and travels along Lincolnway to 19th Street; then travels east along Pershing Boulevard to College Drive; jogs over to Ridge Road and then turns onto Dell Range Boulevard, meeting Route A at Walmart. Route A and Route B can be interlined.
- Route C (red/south) begins service downtown, goes south along Ames Avenue, and goes through neighborhoods along Deming Drive and Walterscheid Boulevard. It turns on Allison Drive and serves the Safeway, then cuts down to College Drive to serve the Laramie County Community College. It then travels north to the east Walmart.
- Route D (blue) begins service downtown and travels along Lincolnway, serves the residential area to the east along Taft, and then comes down to the east Walmart, where it meets Route C. Route C and Route D can also be interlined.

Descriptions of each zone are below:

- The North Zone is a demand-response zone for residents living north of Dell Range Boulevard. The North Zone connects residents to Route A and Route B at the Frontier Mall and at the Dell Range Walmart.
- The West Zone is a demand-response zone for residents living east of I-25, south of Dell Range, north of I-80 and 20th Street, and east of Converse Avenue. The zone connects with fixed-route services downtown.
- The East Zone is a demand-response zone for residents living to the east of Converse Avenue, south of Dell Range Boulevard and 20th Street, east of approximately Campfire Trail, and north of Campstool Road. It will connect riders to the fixed-route system at the east Walmart and many points along Route B and Route D.
- The South Zone is a demand-response zone for residents living south of Campstool Road. It will connect with the fixed-route services at Laramie County Community College, downtown, and at the east Walmart.

Figure 4: Scenario 1 Map

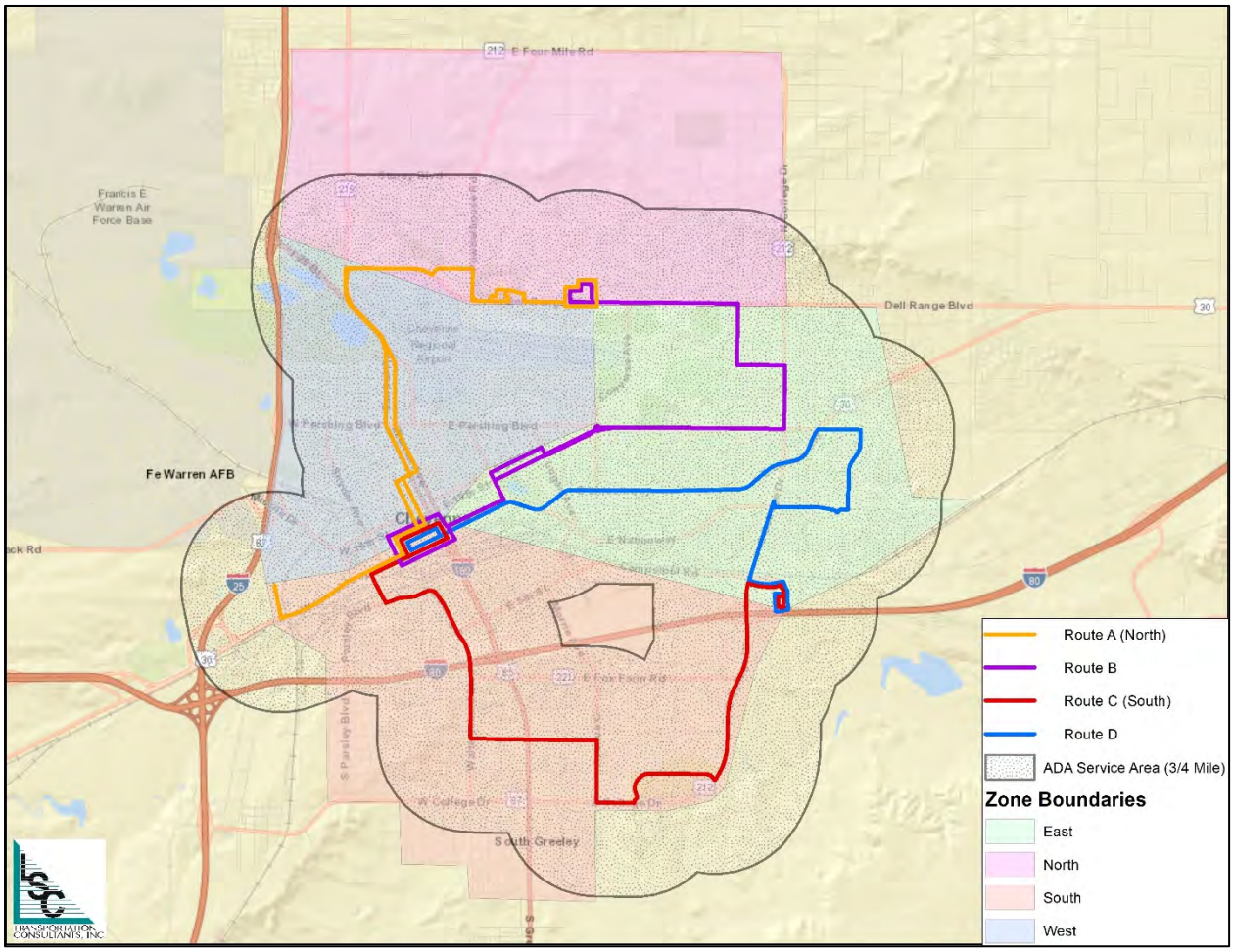


Table F-2 provides operating characteristics for Scenario 1. The total cost of this scenario would be about $1.9 million, slightly higher than the FY 2021 budget.

Table F-2: Scenario 1 Operating Characteristics

Route/Zone	Service Frequency	Route Length/ Area	Number of Peak Vehicles	Est. Annual Revenue Hours	Est. Annual Vehicle Miles	Est. Annual Operating Cost
Route A (Orange/North)	60 min.	13.3 mi.	1	3,640	48,300	$164,100
Route B (Purple)	60 min.	12.9 mi.	1	3,640	47,100	$163,200
Route C (Red/South)	60 min.	14.8 mi.	1	3,640	53,900	$168,500
Route D (Blue)	60 min.	12.9 mi.	1	3,640	47,000	$163,100
North Zone		7.8 sq. mi.	1	3,640	44,500	$161,200
West Zone		4.6 sq. mi.	1	3,640	44,500	$161,200
East Zone		5.0 sq. mi.	1	3,640	44,500	$161,200
South Zone		7.7 sq. mi.	1	3,640	44,500	$161,200
Fixed Cost						$685,400
Total			**8**	**29,120**	**374,100**	**$1,989,100**

Table F-3 shows estimated ridership numbers for Scenario 1. Scenario 1 would generate about 117,000 trips total, with four passengers per hour and an average cost per passenger of $17.00.

Table F-3: Scenario 1 Estimated Ridership

Route/Zone	Estimated Annual Passenger Trips	Passengers per Vehicle Hour	Cost per Passenger	Population within ¼ mile	Jobs within ¼ mile
Route A (Orange/North)	26,700	7.3	$6.20	4,900	11,700
Route B (Purple)	27,900	7.7	$5.90	6,300	4,400
Route C (Red/South)	16,500	4.5	$10.20	900	2,900
Route D (Blue)	26,300	7.2	$6.20	7,100	4,000
North Zone	6,000	1.7	$26.70	12,500	6,200
West Zone	6,600	1.8	$24.40	8,600	11,700
East Zone	4,200	1.2	$38.30	16,200	4,500
South Zone	2,800	0.8	$57.60	13,800	6,300
Total	**117,000**	**4.0**	**$17.00**	**16,500***	**15,700***

** Within the fixed-route service area*

Scenario 2: Three Fixed Routes and Four On-Demand Zones

Scenario 2 provides similar coverage as Scenario 1 but removes Route C (Red/South) which is expected to be the lowest-performing route. The southern portion of Cheyenne will be served by on-demand service in its place. The other routes, zones, and parameters stay the same as Scenario 1.

There are a few options available to ensure that the south is still served by high-quality transit service that work for the most popular stops. The South Zone will connect with other zones downtown as well as at the east Walmart. To facilitate easy access for the Laramie County Community College and easy transfers, the on-demand vehicle could have a semi-fixed schedule, departing the Community College at the top of every hour.

Figure 5: Scenario 2 Map

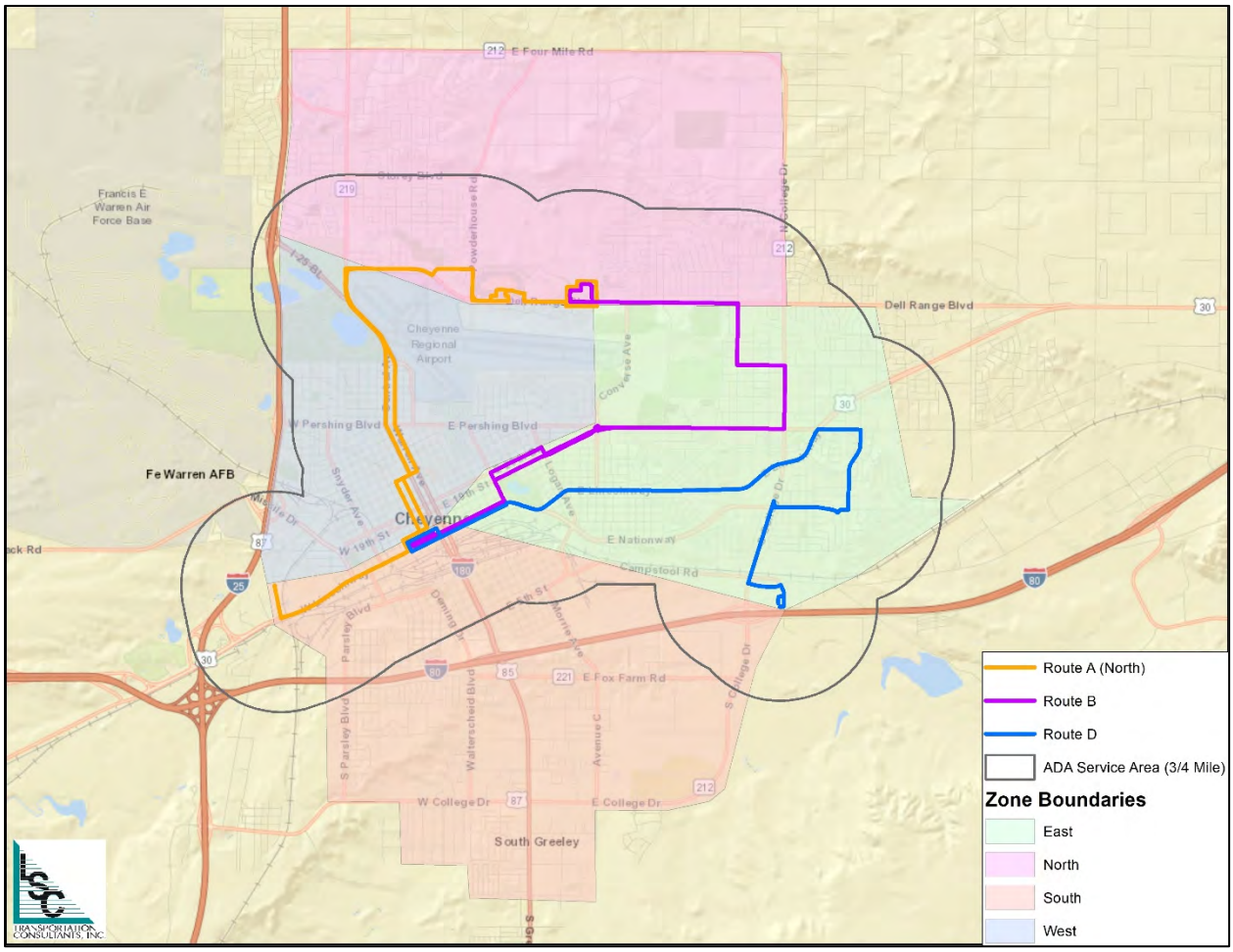


Table F-4 provides operating characteristics for Scenario 2. The total cost of this scenario would be about $1.8 million, slightly higher than the FY 2021 budget.

Table F-4: Scenario 2 Operating Characteristics

Route/Zone	Service Frequency	Route Length/ Area	Number of Peak Vehicles	Est. Annual Revenue Hours	Est. Annual Vehicle Miles	Est. Annual Operating Cost
Route A (Orange/North)	60 min.	13.3 mi.	1	3,640	48,300	$164,100
Route B (Purple)	60 min.	12.9 mi.	1	3,640	47,100	$163,200
Route D (Blue)	60 min.	12.9 mi.	1	3,640	47,000	$163,100
North Zone		7.8 sq. mi.	1	3,640	44,500	$161,200
West Zone		4.6 sq. mi.	1	3,640	44,500	$161,200
East Zone		5.0 sq. mi.	1	3,640	44,500	$161,200
South Zone		7.7 sq. mi.	1	3,640	44,500	$161,200
Fixed Cost						$685,400
Total			**7**	**25,480**	**320,200**	**$1,820,700**

Table F-5 shows estimated ridership numbers for Scenario 2. Scenario 2 would generate about 103,000 trips total, with 4.1 passengers per hour and an average cost per passenger of $17.60.

Table F-5: Scenario 2 Estimated Ridership

Route/Zone	Estimated Annual Passenger Trips	Passengers per Vehicle Hour	Cost per Passenger	Population within ¼ mile	Jobs within ¼ mile
Route A (Orange/North)	26,700	7.3	$6.20	4,900	11,700
Route B (Purple)	27,900	8.3	$5.90	6,300	4,400
Route D (Blue)	26,300	7.2	$6.20	7,100	4,000
North Zone	6,000	1.7	$26.70	12,500	6,200
West Zone	6,600	1.8	$24.40	8,600	11,700
East Zone	4,200	1.2	$38.30	16,200	4,500
South Zone	5,600	0.8	$28.80	13,800	6,300
Total	**103,300**	**4.1**	**$17.60**	**15,600***	**15,700***

** Within the fixed-route service area*

Scenario 3: Two Fixed Routes and Four On-Demand Zones

Scenario 3 focuses fixed-route coverage on the northern portion of town with the yellow and purple routes, removing both the red (eastern) and blue (southern) routes. The southern and eastern portions of Cheyenne would be served by on-demand service. The other zones and parameters stay the same.

The Southern zone would have the same options available as in Scenario 2, including connecting to other zones downtown and at the east Walmart, as well as having coordinated stop times at the Laramie County Community College.

Figure 6: Scenario 3 Map

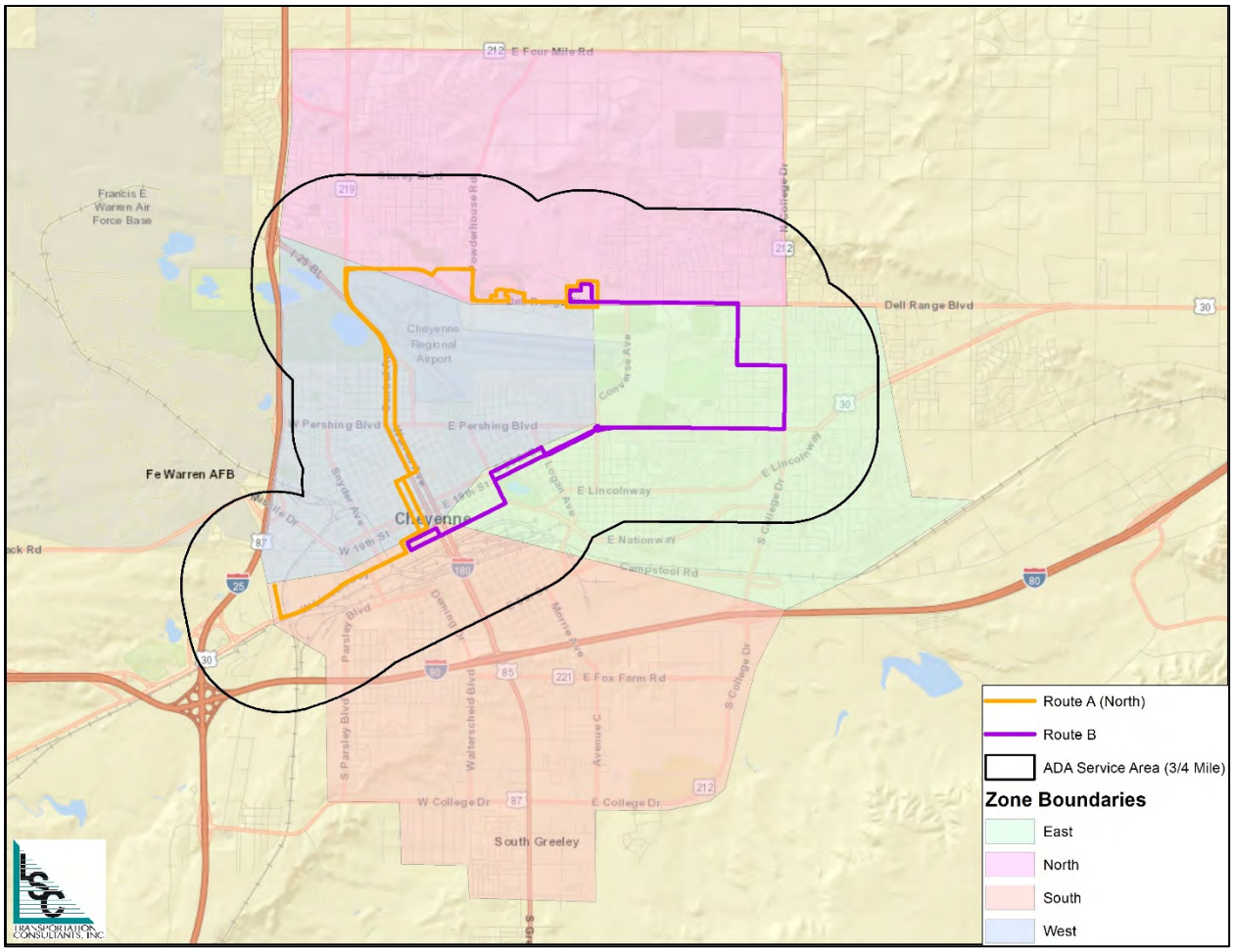


Table F-6 provides operating characteristics for Scenario 3. The total cost of this scenario would be about $1.6 million, similar to the FY 2019 budget.

Table F-6: Scenario 3 Operating Characteristics

Route/Zone	Service Frequency	Route Length/ Area	Number of Vehicles	Est. Annual Revenue Hours	Est. Annual Vehicle Miles	Est. Annual Operating Cost
Route A (Orange/North)	60 min.	13.3 mi.	1	3,640	48,300	$164,100
Route B (Purple)	60 min.	12.9 mi.	1	3,640	47,100	$163,200
North Zone		7.8 sq. mi.	1	3,640	44,500	$161,200
West Zone		4.6 sq. mi.	1	3,640	44,500	$161,200
East Zone		5.0 sq. mi.	1	3,640	44,500	$161,200
South Zone		7.7 sq. mi.	1	3,640	44,500	$161,200
Fixed Cost						$685,400
Total			**6**	**21,840**	**273,200**	**$1,657,500**

Table F-7 shows estimated ridership numbers for Scenario 3. Scenario 3 would generate about 81,200 trips total, with 3.7 passengers per hour and an average cost per passenger of $20.40.

Table F-7: Scenario 3 Estimated Ridership

Route/Zone	Estimated Annual Passenger Trips	Passengers per Vehicle Hour	Cost per Passenger	Population within ¼ mile	Jobs within ¼ mile
Route A (Orange/North)	26,700	7.3	$6.20	4,900	11,700
Route B (Purple)	27,900	8.3	$5.90	6,300	4,400
North Zone	6,000	1.7	$26.70	12,500	6,200
West Zone	6,600	1.8	$24.40	8,600	11,700
East Zone	8,400	1.2	$19.10	16,200	4,500
South Zone	5,600	0.8	$28.80	13,800	6,300
Total	**81,200**	**3.7**	**$20.40**	**10,800***	**14,400***

** Within the fixed-route service area*

Scenario 4: Two Fixed Routes with Half-Hour Service and Four On-Demand Zones

Scenario 4's routes and zones are the same as Scenario 3, except that the Yellow and Purple routes would have service provided every half hour by operating two buses on each of these routes. This is possibly a plan element that can be phased in as demand necessitates it. The southern and eastern portions of Cheyenne would be served by on-demand service. Other parameters remain the same.

The Southern zone would have the same options available as in Scenario 2, including connecting to other zones downtown and at the east Walmart, as well as having coordinated stop times at the Laramie County Community College.

Figure 7: Scenario 4 Map

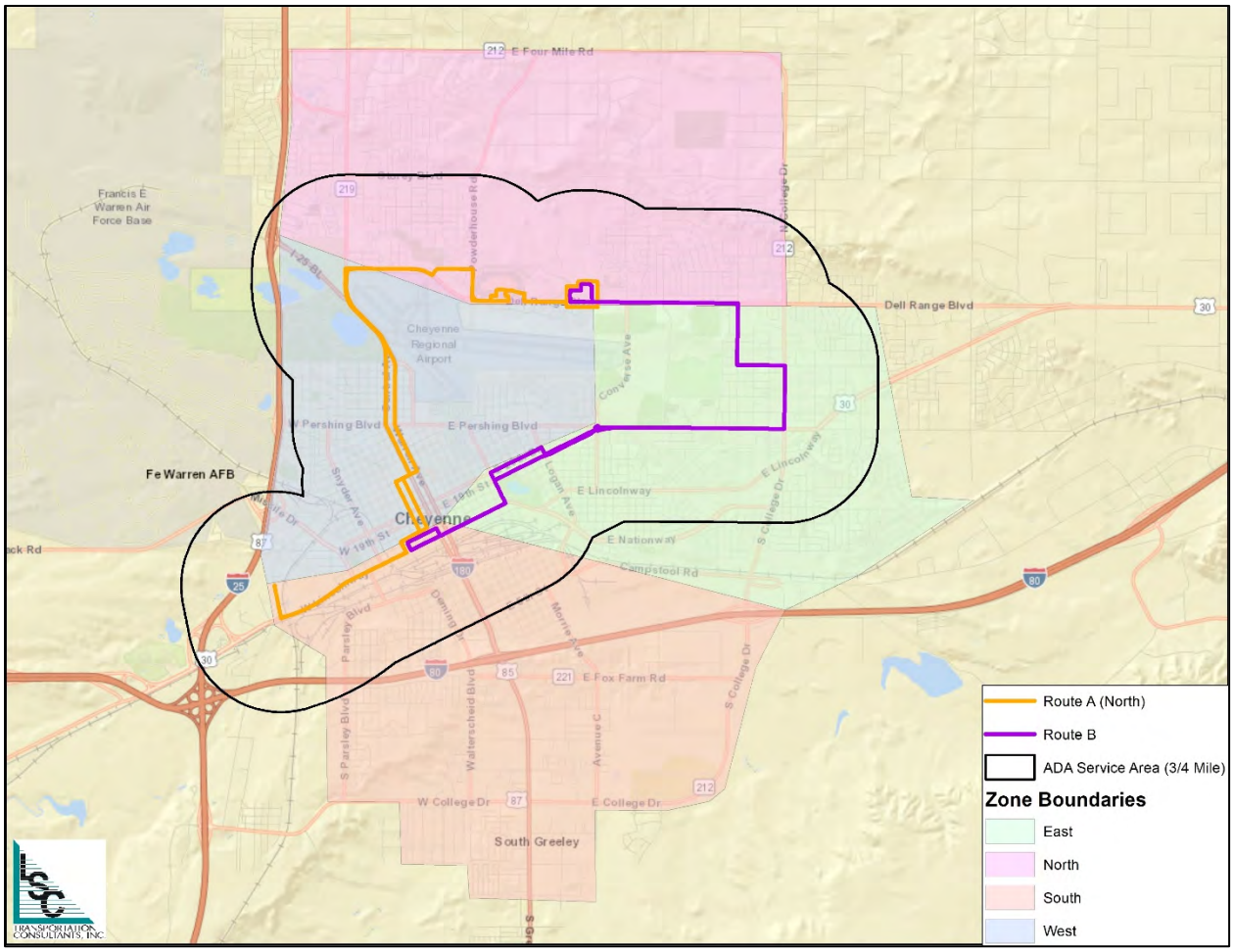


Table F-8 provides operating characteristics for Scenario 4. The total cost of this scenario would be about $1.9 million, slightly higher than the FY 2021 budget.

Table F-8: Scenario 4 Operating Characteristics

Route/Zone	Service Frequency	Route Length/ Area	Number of Vehicles	Est. Annual Revenue Hours	Est. Annual Vehicle Miles	Est. Annual Operating Cost
Route A (Orange/North)	30 min.	13.3 mi.	2	6,916	91,706	$311,800
Route B (Purple)	30 min.	12.9 mi.	2	6,916	89,424	$310,100
North Zone		7.8 sq. mi.	1	3,640	44,500	$161,200
West Zone		4.6 sq. mi.	1	3,640	44,500	$161,200
East Zone		5.0 sq. mi.	1	3,640	44,500	$161,200
South Zone		7.7 sq. mi.	1	3,640	44,500	$161,200
Fixed Cost						$685,400
Total			**8**	**28,400**	**359,000**	**$1,952,100**

Table F-9 shows estimated ridership numbers for Scenario 4. Scenario 4 would generate about 92,000 trips total, with 3.2 passengers per hour and a cost per passenger of $20.20.

Table F-9: Scenario 4 Estimated Ridership

Route/Zone	Estimated Annual Passenger Trips	Passengers per Vehicle Hour	Cost per Passenger	Population within ¼ mile	Jobs within ¼ mile
Route A (Orange/North)	37,000	5.4	$8.36	4,900	11,700
Route B (Purple)	39,000	5.6	$7.94	6,300	4,400
North Zone	6,000	1.7	$26.70	12,500	6,200
West Zone	6,600	1.8	$24.40	8,600	11,700
East Zone	8,400	2.3	$19.10	16,200	4,500
South Zone	5,600	1.5	$28.80	13,800	6,300
Total	**92,100**	**3.2**	**$21.20**	**10,800***	**14,400***

** Within the fixed-route service area*

Scenario 5: Four Fixed Routes and Four On-Demand Zones with Limited Service Hours

Scenario 5 includes the same routes and zones as Scenario 1, but with limited service hours. Service hours would be 7:00 a.m. until 6:00 p.m., removing one hour of service on each end of the service period each weekday. This saves operating time during times of day when ridership is relatively low, which results in an overall lower cost.

Figure 8: Scenario 5 Map

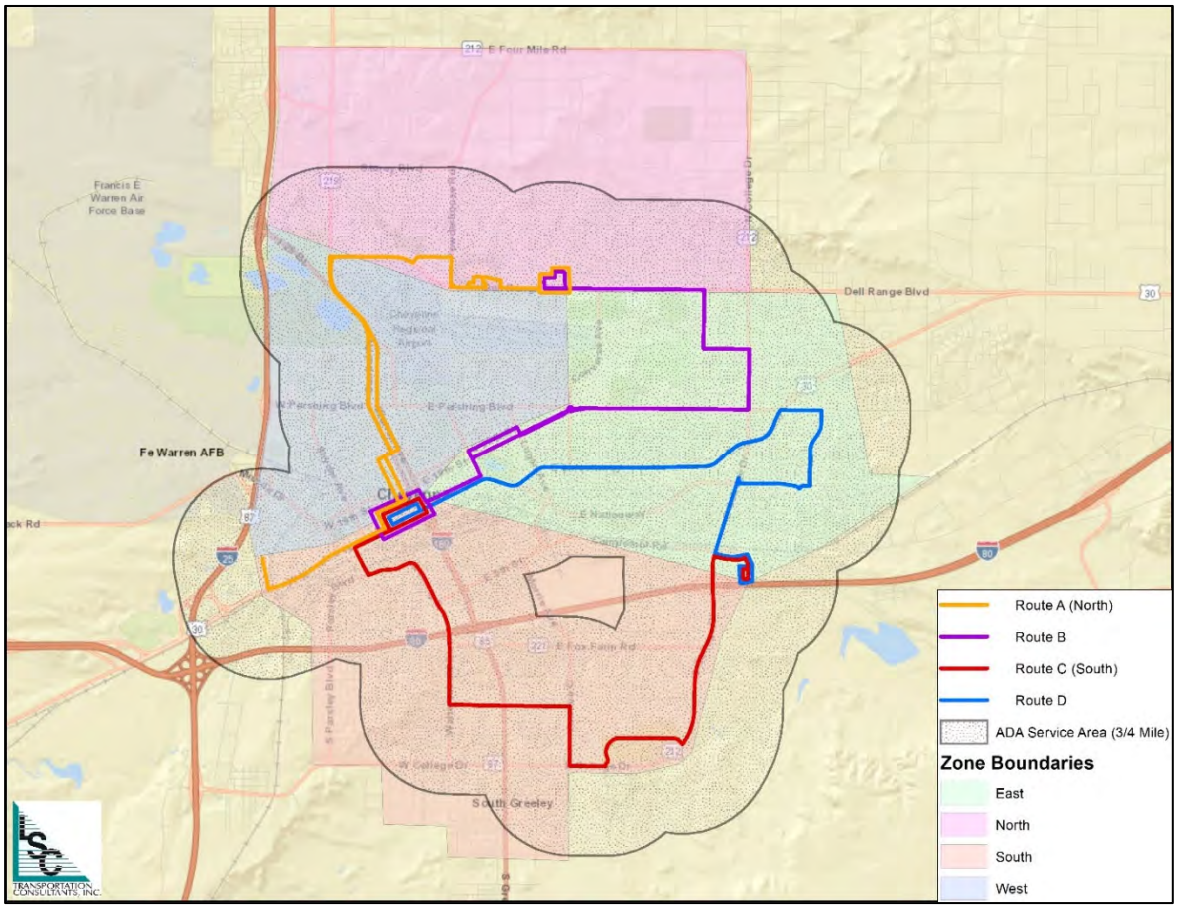


Table F-10 provides operating characteristics for Scenario 5. The total cost of this scenario would be about $1.8 million, similar to the FY 2021 budget, and about $200,000 less than Scenario 1.

Table F-10: Scenario 5 Operating Characteristics

Route/Zone	Service Frequency	Route Length/ Area	Number of Peak Vehicles	Est. Annual Revenue Hours	Est. Annual Vehicle Miles	Est. Annual Operating Cost
Route A (Orange/North)	60 min.	13.3 mi.	1	3,100	41,600	$141,400
Route B (Purple)	60 min.	12.9 mi.	1	3,100	40,500	$140,600
Route C (Red/South)	60 min.	14.8 mi.	1	3,100	46,400	$145,100
Route D (Blue)	60 min.	12.9 mi.	1	3,100	40,500	$140,600
North Zone		7.8 sq. mi.	1	3,100	38,300	$138,900
West Zone		4.6 sq. mi.	1	3,100	38,300	$138,900
East Zone		5.0 sq. mi.	1	3,100	38,300	$138,900
South Zone		7.7 sq. mi.	1	3,100	38,300	$138,900
Fixed Cost						$685,400
Total			**8**	**25,090**	**322,300**	**$1,808,600**

Table F-11 shows estimated ridership numbers for Scenario 5. Scenario 5 would generate about 107,000 trips total, with 4.3 passengers per hour and a cost per passenger of $16.20.

Table F-11: Scenario 5 Estimated Ridership					
Route/Zone	Estimated Annual Passenger Trips	Passengers per Vehicle Hour	Cost per Passenger	Population within ¼ mile	Jobs within ¼ mile
Route A (Orange/North)	24,000	7.7	$5.90	4,900	11,700
Route B (Purple)	25,100	8.0	$5.60	6,300	4,400
Route C (Red/South)	14,900	4.7	$9.80	900	2,900
Route D (Blue)	23,700	7.5	$5.90	7,100	4,000
North Zone	6,000	1.9	$22.00	12,500	6,200
West Zone	6,600	2.1	$21.00	8,600	11,700
East Zone	4,200	1.3	$33.00	16,200	4,500
South Zone	2,800	0.9	$49.60	13,800	6,300
Total	**107,300**	**4.3**	**$16.90**	**16,500***	**15,700***
** Within the fixed-route service area*					

SUMMARY AND DISCUSSION

Based upon the analysis presented above, the Study Team has the following conclusions:

- All the alternatives would significantly increase ridership from the existing level, increase the productivity (passenger trips per vehicle hour) and reduce the cost per passenger trip. This indicates that at least some level of fixed-route service is warranted in Cheyenne.
- Microtransit service in each scenario should be focused on providing trips within the designated zone and connections to the fixed-route system. Trips between zones should generally be made by transfers to the fixed-route system or to the microtransit vehicle serving the destination zone.
- Scenarios 1 and 5 provide fixed-route service that is within a convenient five-minute walk of the highest number of Cheyenne residents. Scenario 2 serves only slightly fewer residents, while Scenarios 3 and 4 serve only roughly 2/3 of the residents with fixed-route service that would be served by Scenarios 1 and 5.
- Of the scenarios, the most productive is Scenario 5 at 4.3 passenger trips per vehicle hour of service. This reflects that dropping the earliest and latest service hours improves the overall productivity of the service. However, it also reduces overall ridership by roughly 10 percent.
- Scenario 2 is the second-most productive at 4.1 passenger trips per vehicle hour of service. This reflects that dropping Route C (Red/South) serving the southern portion of Cheyenne from the service plan improves the overall productivity of the system. The low effectiveness of this southern route is also indicated in the route-by-route productivity shown in Table 3, above, indicating that this route (at 4.5 passengers per vehicle hour) is substantially less productive than the other three routes (around 7.5).
- The most cost-effective scenario (Scenario 5) has a relatively low cost of $16.90 per passenger-trip). However, this would eliminate service in the 6:00 a.m. to 7:00 a.m. and the 6:00 p.m. to 7:00 p.m. hours.
- The option with 30-minute service (Scenario 4) has the second highest cost per passenger trip at $18.94 and the lowest productivity at 3.6 passenger trips per vehicle hour. This

scenario appears not to be warranted until ridership levels increase beyond those identified in this analysis.

- The second-most cost-effective option (Scenario 1) is also the most expensive option.
- Scenarios 1 and 5 may require additional space for buses at a downtown transfer point or a new central transfer point near downtown. It may also be possible to limit the number of buses at the transfer point in the schedule.
- Use of microtransit for trips that can be served on the fixed-route system: This could be through fare policy or restriction of trips within ¾ mile of a fixed-route to eligible complementary paratransit passengers only.
- Phased implementation may be appropriate. Performance should be monitored with thresholds identified of adding new service such as an additional fixed-route, additional microtransit vehicles, or higher fixed-route frequency.

Beyond the conclusion that some level of fixed-route service (at least two or three routes) is warranted and that half-hourly fixed-route service is less effective than hourly service, this analysis reflects the tradeoffs associated with varying extent of fixed-route service as well as varying hours of service.

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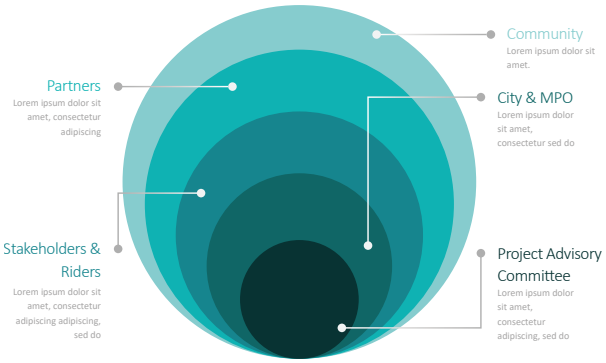
Cheyenne Transit Program

2022 TRANSIT DEVELOPMENT PLAN

Cheyenne is a growing community with lots of new development, and with that comes an expectation for efficient and easy-to-use transit. There is increasing community interest in transit. The Cheyenne Transit Program (CTP) is starting to move more people, and riders want the freedom to go out and about again and interact with their neighbors and community. The pandemic has been challenging, but it is important to plan beyond COVID-19. This plan is important to determine how CTP can provide the best possible service with the available resources.

Involvement



The **2022 Transit Development Plan,** led by the City of Cheyenne and the Cheyenne Metropolitan Planning Origination (CMPO), provides an opportunity to examine changes in the community, including the impacts of the COVID-19 pandemic, and find ways to serve the community's transit needs better. The plan emphasizes the efficient use of available resources, recognizes funding limitations and potential new funding sources, incorporates new concepts for transit service delivery, and provides flexibility for implementation. This plan evaluates current and future transportation needs and the possibility of increased transit service options. A summary of the issues, the process, and transit service scenarios are presented below, with details in the plan itself.

Goals

Develop a renewed vision that creates new enthusiasm for public transportation.

Grow ridership and improve overall efficiency and cost-effectiveness.

Improve speed of service delivery.

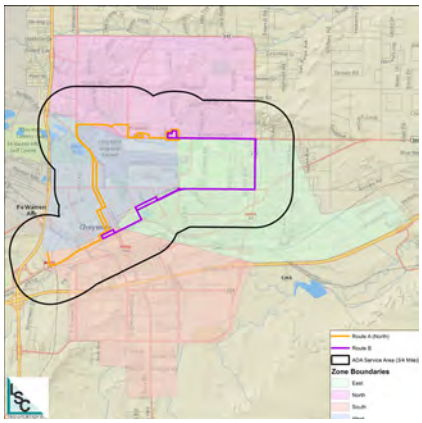
Build upon existing microtransit successes.

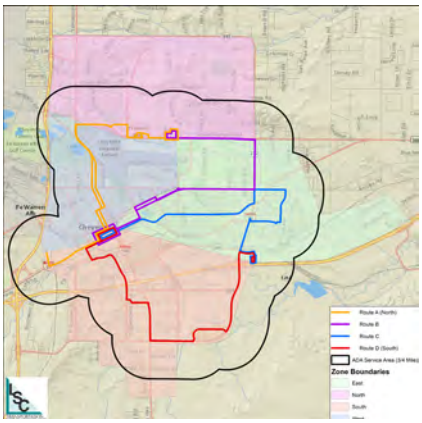
Deliver near-, short-, and long-term recommendations with an eye towards practical, flexible, and implementable solutions.

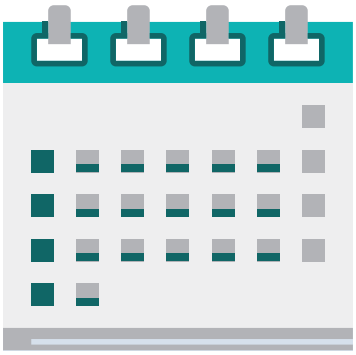
Engage the entire community, including underrepresented populations, in the planning process.

Detail infrastructure and capital needs.

Recommended Phased Service







Evenings & Sunday Service

Phase 1

Fixed-Route & Microtransit

- The recommended plan combines fixed route service and microtransit, restoring fixed-route service in phases.
- The routes are similar to previous routes, with modifications to better service identified demand and improve operational efficiency

Phase 2

More Fixed-Routes

- Adds two additional routes, Route C (Blue), to serve the east Walmart and Route D (Red) to serve the area south of I-80
- Each of the four fixed routes will operate hourly service and microtransit will continue to cover the areas outside the fixed-route coverage.
- Complementary paratransit will be extended to the areas served by Routes C and D

Phase 3

Extends Service

- Extends service later in the evening and on Sundays via microtransit
- Microtransit system would provide all evening and Sunday service
- Complementary paratransit service operates during the same time as fixed-route service (until 6:00 pm on weekdays and no service on Sundays)
- Complementary paratransit service outside the service hours of the fixed-route service

Recomended Fares

Fares

Fixed-Route & Microtransit

Regular Cash Fare	$1.00
Youth 6 to 16	Free
Children 5 and under *(accompanied by an adult)*	Free
Seniors (60 and over)	Free
Complementary Paratransit	$2.00
Half-fare pass program: • Persons with Disabilities • Veterans with Disabilities	$0.50

Passes

Valid on fixed-route & microtransit service only

31-Day Pass	$33.00
College Student 31-Day Pass	$25.00
22-Ride Punch Pass	$16.00

Your Input is Requested as we work to Improve the Cheyenne Transit Program!

Please join us for a community open house to discuss your ideas for the Cheyenne Transit Program as we reshape the vision for future transit service in Cheyenne.

Location: Laramie County Library (2200 Pioneer Ave.), Willow Room

Date/Time: Wednesday, January 19, 2022, 5-6:30 p.m.

Project Background:

The Cheyenne Metropolitan Planning Organization and the City of Cheyenne's Transit Program are currently underway on an important project called the 2022 Transit Development Plan. This plan is focused on how to improve transit services within Cheyenne, including fixed route, microtransit, and ADA paratransit services. This analysis will lead to recommendations for program and service design improvements for overall system efficiency and operational effectiveness. The final plan will reflect community needs and priorities, recognize funding limitations and identify potential new funding sources, emphasize efficient use of available resources, and incorporate new concepts for transit service delivery.

We Need Your Input!

Please join us for a community open house to discuss your ideas about the Cheyenne Transit Program and help shape the vision for future transit service in Cheyenne.

Location: Laramie County Library (2200 Pioneer Ave.), Willow Room

Date/Time: Wednesday, January 19, 2022, 5-6:30 p.m.

CTP
CHEYENNE TRANSIT PROGRAM

Community Meeting Ad – Website Version

Save the Date!

Please join us for a community open house to discuss your ideas for the Cheyenne Transit Program as we reshape the vision for future transit service in Cheyenne.

Location: Laramie County Library (2200 Pioneer Ave.), Willow Room

Date/Time: Wednesday, January 19, 2022, 5-6:30 p.m.

Proposed Cheyenne Transit Service Changes Community Meeting

Join us on August 31st at 10:00 am to discuss proposed changes to Cheyenne Transit Service.

Where: Room 104 @ at the City Building (2101 O'Neil Ave)

Meeting will also be held via zoom: Meeting ID: 848 7253 3274

For more information, see the Transit Development Plan web page:

https://www.plancheyenne.org/project/2022-cheyenne-transit-development-plan/

Scan for zoom meeting link

Scan for Transit Development Plan web page

We want to hear from you!

The Cheyenne Metropolitan Planning Organization and the City of Cheyenne's Transit Program (CTP) are currently underway on an important project called the 2022 Transit Development Plan (TDP).
This plan is focused on how to improve CTP's transit services within Cheyenne, including fixed route, microtransit, and ADA paratransit services. This analysis will lead to recommendations for program and service design improvements for overall system efficiency and operational effectiveness.

Please visit our project website (link/ QR code below) to review the Draft Transit Development Plan, watch a short presentation on the project, and provide comments:

https://www.plancheyenne.org/project/2022-cheyenne-transit-development-plan/